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General Electric Company (GE) submits the following study to the US Environmental Protection Agency pursuant to Section 8(e) of the Toxic Substances Control Act (TSCA).

Study Number 95-2424 by Huntington Life Sciences, Inc.

A subcronic (3-month) toxicology study of Ultranox® XR-2677 in the rat via oral gavage administration Volume I and II.

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Please do not hesitate to contact me if you have any questions, (413) 448-4853.

Stephen F. Austin, Manager
Chemical Regulatory Programs

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Huntingdon
Life Sciences

STUDY NO. 96-2459

A SUBCHRONIC (3-MONTH) TOXICITY STUDY OF ULTRANOX®XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

Final Report

VOLUME I OF II

Submitted to: GE Specialty Chemicals
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Huntingdon
Life Sciences

STUDY NO. 96-2459

A SUBCHRONIC (3-MONTH) TOXICITY STUDY

OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

ABSTRACT

This study, conducted for GE Specialty Chemicals, was designed to assess the potential subchronic toxicity of Ultranox® XR-2677 when administered orally, via gavage, to 120 Sprague-Dawley CD® rats (20/sex/group) at dose levels of 30, 90, and 270 mg/kg/day for a period of at least 90 days. Control animals (20/sex) received the vehicle (corn oil) at the same dose volume as administered to the treated animals.

Physical observations and body weight and food consumption measurements were performed on all animals pretest and at selected intervals during the treatment period. Ophthalmoscopic examinations were performed on all animals pretest and at study termination. Hematology and clinical chemistry were performed on 10 animals/sex/group at study termination.

After at least 90 days of treatment, all survivors were sacrificed, selected organs were weighed and organ/body weight and organ/brain weight ratios calculated. Complete macroscopic postmortem examinations were performed on all animals and histopathological evaluation of selected tissues were conducted on all animals in the control and high-dose groups. In addition, histopathological evaluation was performed on the kidneys, livers, lungs and stomachs of all animals in the low- and mid-dose groups.

Analysis of preliminary mixes confirmed that the preparation procedure used for this study produced homogeneous mixtures and that the test material was stable in the vehicle, under storage conditions used in this study, for at least seven days. Analyses conducted during the treatment period confirmed that dose solutions of appropriate concentrations were administered.

Three animals died during the study: one low-dose (30 mg/kg/day) male on Day 51, one mid-dose (90 mg/kg/day) male on Day 6, and one high-dose (270 mg/kg/day) female on Day 12. The death of the high-dose female was due to gavage error. Cause of death was not determined for the other two animals, but was not considered to be test material-related in the absence of a dose relationship.

There were no abnormal clinical signs or ocular abnormalities that were attributable to test material administration.

There were no adverse effects of test material on mean body weight or body weight gain in any treated group; There were slight increases in mean body weight and body weight gain in the mid- (90 mg/kg/day) and high-dose (270 mg/kg/day) males that were correlated with increased food consumption in these animals.

There were dose-related increases at termination in prothrombin time (PT) and activated partial thromboplastin time (APTT) that were more pronounced in males than females. Among the males, mean APTT values were increased, compared to control values, 30%, 55% and 96% in the low- (30 mg/kg/day), mid- (90 mg/kg/day) and high-dose (270 mg/kg/day) groups, respectively. Mean PT values were increased 26%, 58% and 91% compared to control values in males dosed with 30, 90, and 270 mg/kg/day, respectively. In females, APTT was increased 38% in the mid-dose (90 mg/kg/day) group and 64% in the high-dose (270 mg/kg/day) group; PT was increased 13% in the high-dose group only.

There were no toxicologically significant changes in clinical chemistry parameters.

There were statistically significant increases, compared to control values, in absolute liver weight and liver/body weight and liver/brain weight ratios of males and females in all dose groups (30, 90, and 270 mg/kg/day). These increases correlated with microscopic evidence of centrilobular hypertrophy and indicate a metabolic adaptation to the test material. There were slight, statistically significant increases in absolute kidney weight and kidney/brain weight ratio of the mid- (90 mg/kg/day) and high-dose (270 mg/kg/day) males which were attributed to the increased body weights in these groups.

There were no postmortem macroscopic changes that were considered treatment-related. Test material-related changes were observed microscopically in the liver and forestomach of treated animals. In the liver, centrilobular hepatocellular hypertrophy was seen in rats in all dose groups (30, 90 and 270 mg/kg/day). Microscopic changes in the forestomach were limited to males and females in the high-dose (270 mg/kg/day) group and consisted of edema of the lamina propria; slight, diffuse thickening of the mucosa with associated hyperkeratosis; focal thickening of the squamous mucosa-limiting ridge; and a slight increase in the incidence of acute/subacute inflammation.

In conclusion, for males treated with Ultranox®XR-2677, there were increases in activated partial thromboplastin time (APTT) and prothrombin time (PT) at all dose levels (30, 90 and 270 mg/kg/day); absolute and relative liver weights were increased at all dose levels (30, 90 and 270 mg/kg/day); and there were microscopic findings of centrilobular hepatocellular hypertrophy at all dose levels (30, 90 and 270 mg/kg/day). Changes in the forestomach were seen in males treated with 270 mg/kg/day. Based on these findings, a no observed effect level (NOEL) and a no observed adverse effect level (NOAEL) were not established for test material when administered via oral gavage to male rats for at least 90 days under the conditions of this study.

In females treated with Ultranox® XR-2677, APTT was elevated in animals treated with 90 and 270 mg/kg/day and PT was increased in animals treated with 270 mg/kg/day. At all dose levels (30, 90, and 270 mg/kg/day), there were increases in absolute and relative liver weights and microscopic findings of centrilobular hepatocellular hypertrophy. Changes in the forestomach were seen in females treated with 270 mg/kg/day. Based on these findings, a no observed effect level (NOEL) was not established for test material when administered via oral gavage to female rats for at least 90 days under the conditions of this study. Since the increases in liver weights and the microscopic changes in the liver were considered to be the result of metabolic adaptation to the test material, the no observed adverse effect level (NOAEL) for Ultranox® XR-2677 when administered to female rats via oral gavage for at least 90 days under the conditions of this study was 30 mg/kg/day.

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8EHQ-0197-13867

Huntingdon Life Sciences

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ABSTRACT

This study, conducted for GE Specialty Chemicals, was designed to assess the potential subchronic toxicity of Ultranox® XR-2677 when administered orally, via gavage, to 120 Sprague-Dawley CD® rats (20/sex/group) at dose levels of 30, 90, and 120 mg/kg/day for a period of at least 90 days. Control animals (20/sex) received the vehicle (corn oil) at the same dose volume as administered to the treated animals.

Physical observations and body weight and food consumption measurements were performed on all animals pretest and at selected intervals during the treatment period. Ophthalmoscopic examinations were performed on all animals pretest and at study termination. Hematology and clinical chemistry were performed on 10 animals/sex/group at study termination.

After at least 90 days of treatment, all survivors were sacrificed, selected organs were weighed and organ/body weight and organ/brain weight ratios calculated. Complete macroscopic postmortem examinations were performed on all animals and histopathological evaluation of selected tissues were conducted on all animals in the control and high-dose groups. In addition, histopathological evaluation was performed on the kidneys, livers, lungs and stomachs of all animals in the low- and mid-dose groups.

Analysis of preliminary mixes confirmed that the preparation procedure used for this study produced homogeneous mixtures and that the test material was stable in the vehicle, under storage conditions used in this study, for at least seven days. Analyses conducted during the treatment period confirmed that dose solutions of appropriate concentrations were administered.

Three animals died during the study: one low-dose (30 mg/kg/day) male on Day 51, one mid-dose (90 mg/kg/day) male on Day 6, and one high-dose (270 mg/kg/day) female on Day 12. The death of the high-dose female was due to gavage error. Cause of death was not determined for the other two animals, but was not considered to be test material-related in the absence of a dose relationship.

There were no abnormal clinical signs or ocular abnormalities that were attributable to test material administration.

There were no adverse effects of test material on mean body weight or body weight gain in any treated group; There were slight increases in mean body weight and body weight gain in the mid- (90 mg/kg/day) and high-dose (270 mg/kg/day) males that were correlated with increased food consumption in these animals.

There were dose-related increases at termination in prothrombin time (PT) and activated partial thromboplastin time (APTT) that were more pronounced in males than females. Among the males, mean APTT values were increased, compared to control values, 30%, 55% and 96% in the low- (30 mg/kg/day), mid- (90 mg/kg/day) and high-dose (270 mg/kg/day) groups, respectively. Mean PT values were increased 26%, 58% and 91% compared to control values in males dosed with 30, 90, and 270 mg/kg/day, respectively. In females, APTT was increased 38% in the mid-dose (90 mg/kg/day) group and 64% in the high-dose (270 mg/kg/day) group; PT was increased 13% in the high-dose group only.

There were no toxicologically significant changes in clinical chemistry parameters.

There were statistically significant increases, compared to control values, in absolute liver weight and liver/body weight and liver/brain weight ratios of males and females in all dose groups (30, 90, and 270 mg/kg/day). These increases correlated with microscopic evidence of centrilobular hypertrophy and indicate a metabolic adaptation to the test material. There were slight, statistically significant increases in absolute kidney weight and kidney/brain weight ratio of the mid- (90 mg/kg/day) and high-dose (270 mg/kg/day) males which were attributed to the increased body weights in these groups.

There were no postmortem macroscopic changes that were considered treatment-related. Test material-related changes were observed microscopically in the liver and forestomach of treated animals. In the liver, centrilobular hepatocellular hypertrophy was seen in rats in all dose groups (30, 90 and 270 mg/kg/day). Microscopic changes in the forestomach were limited to males and females in the high-dose (270 mg/kg/day) group and consisted of edema of the lamina propria; slight, diffuse thickening of the mucosa with associated hyperkeratosis; focal thickening of the squamous mucosa-limiting ridge; and a slight increase in the incidence of acute/subacute inflammation.

In conclusion, for males treated with Ultranox® XR-2677, there were increases in activated partial thromboplastin time (APTT) and prothrombin time (PT) at all dose levels (30, 90 and 270 mg/kg/day); absolute and relative liver weights were increased at all dose levels (30, 90 and 270 mg/kg/day); and there were microscopic findings of centrilobular hepatocellular hypertrophy at all dose levels (30, 90 and 270 mg/kg/day). Changes in the forestomach were seen in males treated with 270 mg/kg/day. Based on these findings, a no observed effect level (NOEL) and a no observed adverse effect level (NOAEL) were not established for test material when administered via oral gavage to male rats for at least 90 days under the conditions of this study.

In females treated with Ultranox® XR-2677, APTT was elevated in animals treated with 90 and 270 mg/kg/day and PT was increased in animals treated with 270 mg/kg/day. At all dose levels (30, 90, and 270 mg/kg/day), there were increases in absolute and relative liver weights and microscopic findings of centrilobular hepatocellular hypertrophy. Changes in the forestomach were seen in females treated with 270 mg/kg/day. Based on these findings, a no observed effect level (NOEL) was not established for test material when administered via oral gavage to female rats for at least 90 days under the conditions of this study. Since the increases in liver weights and the microscopic changes in the liver were considered to be the result of metabolic adaptation to the test material, the no observed adverse effect level (NOAEL) for Ultranox® XR-2677 when administered to female rats via oral gavage for at least 90 days under the conditions of this study was 30 mg/kg/day.

I. INTRODUCTION:

This study, conducted for GE Specialty Chemicals, was designed to assess the potential subchronic toxicity of Ultranox®XR-2677 when administered orally, via gavage, to Sprague-Dawley CD® rats at dose levels of 30, 90, and 270 mg/kg/day for a period of at least 90 days.

This study was designed to meet or exceed the requirements of FDA (United States Food and Drug Administration): Toxicological Principles for the Safety Assessment of Direct Food Additives and Color Additives Used in Food, 1986, Appendix II page 19 "Subchronic Oral Toxicity Studies"; OECD (Organization for Economic Cooperation and Development) Test Guideline No. 408 "Subchronic Oral Toxicity - Rodent" Adopted 12 May 1981; TSCA (Toxic Substances Control Act): Health Effects Testing Guidelines; published by the Office of Toxic Substances; Office of Pesticides and Toxic Substances, United States Environmental Protection Agency, Subchronic Oral Toxicity Study, section 798.2650; published September 27, 1985 and amended on May 16, 1989.

This study was conducted in compliance with Part 58 of 21 CFR (FDA Good Laboratory Practice Standards); OECD Principles of Good Laboratory Practices (C(81)30 (Final) Annex 2); Part 792 of 40 CFR (EPA Good Laboratory Practices - TSCA).

This study complied with all appropriate parts of the Animal Welfare Act regulations: 9 CFR Parts 1 and 2 Final Rules, Federal Register, Volume 54, No. 168, August 31, 1989, pp. 36112-36163 effective October 30, 1989 and 9 CFR Part 3 Animal Welfare Standards; Final Rule, Federal Register, Volume 56, No. 32, February 15, 1991, pp. 6426-6505 effective March 18, 1991.

II. MATERIALS AND METHODS (cont.):

J. Test Material Administration (cont.):

Analyses of Dose Suspensions:	Analyses to determine stability, homogeneity and concentration of the test material with carriers under conditions of this study were performed. Results of these analyses are presented in Appendix K.
Homogeneity:	Prior to initiation of the study, batches of low-concentration and high-concentration dose suspensions were prepared. Three samples each from the top, middle and bottom portion of each mixture were taken for analysis.
Stability:	Duplicate samples of the low- and high-concentration dose suspensions were assayed 4, 7, and 14 days after preparation.
Confirmation Analysis:	All three dose levels were assayed weekly for the first month (one sample per concentration was taken and two subsamples analyzed). Subsequent assays were performed on batches prepared for Weeks 5 and 6 (all dose levels), Week 7 (control and low-dose level), and Weeks 8, 9 and 13 (all dose levels).

page 2-8?

II. MATERIALS AND METHODS (cont.):

J. Test Material Administration (cont.):

Preparation of Dose Suspensions:	Appropriate amounts of test material were suspended in the vehicle weekly to yield dose levels of 30, 90, and 270 mg/kg/day at a constant dose volume of 5 mL/kg/dose. Individual doses were adjusted by most recent weekly body weight. Control animals were administered the vehicle at the same dose volume.
Dose Volume:	5 mL/kg/dose
Frequency:	Daily (7 days per week) through the day prior to necropsy.
Duration:	90 days
Dates of Treatment:	19 June to 17 or 18 September 1996

K. Observations:

For Mortality and Gross Signs of Toxicologic or Pharmacologic Effects:	Animals were examined twice daily, once in the morning and once in the afternoon.
Detailed Physical Examination for Signs of Local or Systemic Toxicity, Pharmacologic Effects and Palpation for Tissue Masses:	(Methodology and References, Appendix A)
	Pretest and weekly thereafter.

L. Ophthalmoscopic Examination: (Methodology and References, Appendix A)

Pretest and Study Termination

II. MATERIALS AND METHODS (cont.):

M. **Body Weight:** (Methodology and References, Appendix A)

Twice pretest, weekly during treatment and terminally (after fasting).

N. **Food Consumption:** (Methodology and References, Appendix A)

Weekly, beginning one week prior to treatment.

O. **Laboratory Studies:** (Methodology and References, Appendix A)

Blood was obtained via venipuncture of the orbital sinus (retrobulbar venous plexus) under light CO_2/O_2 anesthesia. Rats were fasted overnight prior to blood collection.

Number of Animals: 80 (10/sex/group)

Parameter Evaluated	Time Interval
Hematology:	
hemoglobin concentration hematocrit erythrocyte count reticulocyte count[1] platelet count mean corpuscular volume mean corpuscular hemoglobin mean corpuscular hemoglobin concentration prothrombin time activated partial thromboplastin time total and differential leukocyte counts erythrocyte morphology	Termination (Month 3) 18 September 1996

[1]Smears were prepared but counts were not made as other hematology parameters indicated no abnormalities.

II. MATERIALS AND METHODS (cont.):

O. Laboratory Studies (cont.):

Parameter Evaluated	Time Interval
Clinical Chemistry:	
aspartate aminotransferase alanine aminotransferase alkaline phosphatase blood urea nitrogen fasting glucose total protein albumin globulin (calculated) A/G ratio (calculated) creatinine total bilirubin sodium potassium chloride calcium inorganic phosphorus gamma-glutamyl transferase	Termination (Month 3) 18 September 1996

P. Postmortem:

Animals Found Dead or Killed at Scheduled Sacrifice Intervals:

Complete macroscopic postmortem examinations were performed on all animals. The macroscopic postmortem examination included examination of the external surface and all orifices; the external surfaces of the brain and spinal cord; the organs and tissues of the cranial, thoracic, abdominal and pelvic cavities and neck; and the remainder of the carcass. Animals were fasted prior to scheduled sacrifices.

The macroscopic observations were transcribed from hand-written necropsy sheets to the Xybion computer system. Data for individual animals were printed and then verified.

II. MATERIALS AND METHODS (cont.):

P. Postmortem (cont.):

Terminal Sacrifice:	18 and 19 September 1996
Number of Animals:	158 animals (up to 20/sex/group)
Sacrifice Method:	Exsanguination following carbon dioxide inhalation.
Sacrifice Order:	A necropsy schedule was established to ensure that approximately equal numbers of males and females were examined on each day of necropsy and that examination of animals of both sexes were performed at similar times of the day throughout the necropsy period. In addition, animals were sacrificed in the following order: one rat each was selected from the control, high-, mid-, and low-dose groups and sacrificed in that order. This sequence was repeated until all animals were sacrificed.

II. MATERIALS AND METHODS (cont.):

P. Postmortem (cont.):

Organs Weighed and Organ/Body Weight and Organ/Brain Weight Ratios Calculated: (Methodology and References, Appendix A)

The following organs were weighed for all animals at the scheduled sacrifice intervals. Prior to weighing, the organs were carefully dissected and properly trimmed to remove adipose and other contiguous tissues in a uniform manner. Organs were weighed as soon as possible after dissection in order to avoid drying. Paired organs were weighed together.

adrenal glands
brain
kidneys
testes with epididymides
liver
ovaries
thymus
spleen

Tissues Preserved and Examined Histopathologically:

All tissues listed on pages 15 and 16 were preserved for all animals and examined for all animals in the control and high-dose groups. In addition, the kidneys, livers, lungs, stomachs and gross lesions of all animals in the low- and mid-dose groups were preserved and examined.

II. MATERIALS AND METHODS (cont.):

P. Postmortem (cont.):

Tissues Preserved and Examined Histopathologically (cont.):[2]

adrenal glands (2)
aorta (thoracic)
bone (sternum, femur)
bone marrow (sternum, femur)
brain (medulla/pons, cerebrum and cerebellum)
epididymides (2)
esophagus
eyes with optic nerve (2)
heart
intestine
 cecum
 colon
 duodenum
 ileum
 jejunum
 rectum
kidneys (2)
lacrimal gland (2)
liver (2 sections)
lungs (with mainstem bronchi - 2)
lymph nodes (mesenteric, mediastinal)
mammary gland (inguinal)
nerve (sciatic)
ovaries (2)
pancreas
pituitary gland
prostate gland
salivary glands (submandibular - 2)
seminal vesicles (2)
skeletal muscle (*Biceps femoris*)
spinal cord (cervical, thoracic)
spleen
stomach
testes (2)

[2]Number in parentheses indicates number of organs/sections preserved/examined.

II. MATERIALS AND METHODS (cont.):

P. Postmortem (cont.):

Tissues Preserved and Examined Histopathologically (cont.):[2]	thymic region thyroid/parathyroid glands (2) trachea urinary bladder uterus (corpus and cervix uteri) vagina Zymbal's gland (2) gross lesions tissue masses
Microscopic Examination Procedure:	Histopathologic observations were recorded as direct computer entry by the pathologist using the Xybion computer system. Microscopic data for individual animals were reviewed by the pathologist for consistency following completion of slide reading, individual slides were reread when necessary and appropriate edits were made.
Preservatives:	10% neutral buffered formalin (eyes were placed in glutaraldehyde/paraformaldehyde initially and then retained in 10% formalin). Lungs and urinary bladder were infused with formalin to insure fixation.
Stain:	Hematoxylin and Eosin

[2]Number in parentheses indicates number of organs/sections preserved/examined.

II. MATERIALS AND METHODS (cont.):

P. Postmortem (cont.):

Processing: After fixation, the preserved tissues and organs were routinely processed, embedded in paraffin, cut at a microtome setting of 4-7 microns, mounted on glass slides, stained with hematoxylin and eosin and examined by light microscopy.

Q. Statistical Analysis: (Methodology and References, Appendix A)

Body weight, body weight change, body weight change from Week 0, food consumption, hematology and clinical chemistry parameters, terminal organ and body weights and organ/body weight and organ/brain weight ratios were analyzed. Mean values of all dose groups were compared to control at each time interval. Statistically significant differences from control are indicated in the appendices.

R. Protocol Deviations: The following protocol deviations occurred during the study but were not considered to have compromised the validity or integrity of the study:

1. The body weight range of the males at study initiation was 193.0 - 241.8 grams and not 140 - 200 grams.

2. Week 1 physical observations were not performed for Animal No. 3021.

II. MATERIALS AND METHODS (cont.):

R. Protocol Deviations (cont.):

3. Animal No. 3021 received the test material for 87 days and not at least 90 days.

4. Stability analyses were performed on both the low- and high-dose suspensions.

5. Week 4 assay of the low-dose level for confirmation of concentration was not within ±10% of nominal (desired) concentration.

6. Although not required by protocol, assays for confirmation of concentration were performed on batches prepared for Weeks 5 and 6 (all dose levels), Week 7 (control and low-dose level), and Week 9 (all dose levels).

7. The Group IV animals received a total volume of 8.33 mL/kg on Day 18 instead of 5.0 mL/kg. This consisted of 5.0 mL/kg of the Group III dosing suspension which was administered in error, and 3.33 mL/kg of the Group IV dosing suspension which was administered to yield the correct concentration.

III. RESULTS AND DISCUSSION:

A. Analytical Results (Appendix K):

Analysis of preliminary mixes confirmed that the preparation procedure used for this study produced homogeneous mixtures and that the test material was stable in the vehicle, under storage conditions used in this study, for at least seven days. Analyses conducted during the treatment period confirmed that dose solutions of appropriate concentration were administered.

Mean analytical concentrations, expressed as percent of nominal (desired) concentrations were as follows:

GROUP	NOMINAL CONCENTRATION (mg/mL)	ANALYTICAL CONCENTRATION (% of Nominal)
II	6.0	92.7
III	18.0	96.6
IV	54.0	98.9

B. Mortality (Appendix B):

There were three deaths during the study: one low-dose (30 mg/kg/day) male on Day 51, one mid-dose (90 mg/kg/day) male on Day 6, and one high-dose (270 mg/kg/day) female on Day 12. Macroscopic examination revealed that the esophagus of the high-dose female was perforated and death was attributed to gavage error. The cause of death could not be determined for the other two animals that died, but, in the absence of a dose relationship, they were not considered to be test material-related. The mid-dose male that died on Day 6 was replaced on study.

III. RESULTS AND DISCUSSION:

C. Physical Observations (Appendix C):

There were no abnormal clinical signs that were considered test material-related. Impaired limbs was noted in one high-dose (270 mg/kg/day) male (Animal No. 4002) in Week 13. This was attributed to head trauma since there was macroscopic and microscopic evidence of cranial hemorrhage in this animal. Other findings were the type commonly seen in laboratory rats or occurred sporadically and were not dose-related.

D. Ophthalmoscopic Examinations (Appendix D):

There were no ocular abnormalities attributable to test material administration.

E. Body Weights (Figure 1; Appendix E):

There were no adverse effects of test material on mean body weight or body weight gain in any treated group (dose levels of 30, 90 and 270 mg/kg/day). There were slight increases in mean body weight and body weight gain in males treated with XR-2677, but body weight gain is generally not considered evidence of toxicity. Mean body weight gain in the mid-(90 mg/kg/day) and high-dose (270 mg/kg/day) males was statistically significantly increased compared to control values at most intervals in the study, while mean body weight in the mid- and high-dose males was statistically significantly increased compared to control values at several intervals during the last 4 weeks of the study. At Week 13, the percentage increase in mean body weight compared to control mean body weight was 3.8%, 7.9% and 8.0% in the low-, mid-. and high-dose males, respectively.

III. RESULTS AND DISCUSSION:

E. Body Weights (cont.):

Mean body weight and body weight gain in the treated females (dose levels of 30, 90 and 270 mg/kg/day) were generally comparable to the control values throughout the study. At Week 13, mean body weights of the treated females were within ± 3% of the control mean body weight.

F. Food Consumption (Figure 2; Appendix E):

There was no evidence of a toxic effect of test material on food consumption values. There were slight increases in food consumption values in the mid- (90 mg/kg/day) and high-dose (270 mg/kg/day) males and these values were statistically significantly increased compared to control values at several intervals throughout the study. The increase in food consumption correlated with increased weight gain in the mid- and high-dose males. The only statistically significant differences in food consumption between the treated female groups and the control group were slight decreases for the mid- (90 mg/kg/day) and high-dose (270 mg/kg/day) groups in Week 5.

G. Clinical Laboratory Studies:

1. Hematology (Appendices F and G):

There were dose-related increases at termination in prothrombin time (PT) and activated partial thromboplastin time (APTT) in animals treated with XR-2677. These increases were more pronounced in males than females.

Among the treated males, mean APTT values were increased, compared to control values, 30%, 55% and 96% in low- (30 mg/kg/day), mid- (90 mg/kg/day) and high-dose (270 mg/kg/day) males,

III. RESULTS AND DISCUSSION:

G. Clinical Laboratory Studies (cont.):

1. Hematology (cont.):

respectively. These increases were statistically significant in all dose groups. Mean PT values were increased 26%, 58% and 91% compared to control values in males dosed with 30, 90, and 270 mg/kg/day, respectively, although only the increases in the mid- and high-dose groups were statistically significant compared to the control values.

The effect of test material on PT and APTT values in the females was not as marked as in the males. There were statistically significant increases in APTT values, compared to control values, of 38% and 64% in the mid- (90 mg/kg/day) and high-dose (270 mg/kg/day) females, respectively. PT values were statistically significantly increased only in the high-dose females and the percentage increase was only 15% compared to the control value.

In addition to the increases in PT and APTT values, there were several changes in hematology values of the treated females. Compared to the control value, there was a slight, but statistically significant, decrease in hemoglobin concentration of the high-dose (270 mg/kg/day) females. Since the decrease in hemoglobin concentration was slight and was not accompanied by significant changes in hematocrit or red blood cell count, this finding was not considered toxicologically significant. Platelet count was slightly increased in the mid- (90 mg/kg/day) and high-dose (270 mg/kg/day) females compared to platelet count in the control group. However, all counts in the treated

III. RESULTS AND DISCUSSION:

G. Clinical Laboratory Studies (cont.):

1. Hematology (cont.):

females were considered within the normal range and these increases were not considered toxicologically significant.

2. Clinical Chemistry (Appendix H):

There were very slight, but statistically significant, increases, compared to control values, in total protein of all treated female groups (30, 90 and 270 mg/kg/day). There were also statistically significant increases in albumin levels in the mid- and high-dose females and in globulin levels in the low- and mid-dose females. These changes were not considered toxicologically significant since all values were within the normal range for these parameters.

The statistically significant changes in bilirubin concentration in the low- and mid-dose females were very slight and not considered toxicologically significant.

Clinical chemistry values for males at all dose levels (30, 90 and 270 mg/kg/day) were comparable to control values.

H. Terminal Organ and Body Weights, Organ/Body Weight and Organ/Brian Weight Ratios (Appendix I):

There were statistically significant increases, compared to control values, in absolute liver weight and liver to body weight and liver to brain weight ratios of males and females in all treated groups (30, 90 and 270 mg/kg/day). There was no evidence of hepatic toxicity based on clinical chemistry evaluations; however, these changes in liver weights correlated with microscopic findings of centrilobular

III. RESULTS AND DISCUSSION:

H. Terminal Organ and Body Weights, Organ/Body Weight and Organ/Brian Weight Ratios (cont.):

hepatocellular hypertrophy in males and females at all dose levels. Centrilobular hepatocellular hypertrophy is normally associated with proliferation of the endoplasmic reticulum and suggests that the increased liver weights are the result of metabolic adaptation to the test material and are not indicative of a toxic effect of the test material.

Compared to control values, there were slight, but statistically significant, increases in the absolute weight of the kidney and the kidney to brain weight ratio of the mid- (90 mg/kg/day) and high-dose (270 mg/kg/day) males. This was attributed to the increased body weights in these treatment groups since kidney to body weight ratios were not statistically significantly different from the control values.

There were two other statistically significant organ weight changes in the high-dose males that were also attributed to increased body weight in this group: absolute adrenal weight was slightly increased and the testes/epididymes to body weight ratio was slightly decreased. Neither of these changes was considered toxicologically significant.

I. Pathology (Appendix J):

1. Macroscopic:

There were few macroscopic changes observed at necropsy. The macroscopic changes either showed similar incidence

III. RESULTS AND DISCUSSION:

I. Pathology (cont.):

1. Macroscopic (cont.):

between the control and the treated groups, or otherwise occurred sporadically. There were no macroscopic changes considered treatment-related among the treated males and females of this study.

2. Microscopic:[3]

Treatment-related changes were observed in the liver and forestomach of treated animals. In the liver centrilobular hepatocellular hypertrophy was seen in rats given 30 mg/kg/day (Group II, Males,6/20; Females, 15/20), 90 mg/kg/day (Group III, Males, 13/21; Females, 20/20), or 270 mg/kg/day (Group IV, Males, 16/20; Females, 20/20) of the test material for three months. Microscopically, affected centrilobular hepatocytes were enlarged and had an increased amount of granular eosinophilic cytoplasm.

Microscopic changes in the forestomach were limited to male and female rats in the 270 mg/kg/day dosage group (Group IV) and consisted of edema of the lamina propria (Males, 6/20; Females, 2/20), slight, diffuse thickening of the mucosa (hyperplasia, squamous cell) with associated hyperkeratosis (Males, 10/20; Females, 4/20), focal thickening of the squamous mucosa-limiting ridge (Males, 1/20; Females, 3/20) and a slight increase in the incidence of acute/subacute inflammation (Males, 4/20).

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[3]Dr. Teofilo Saulog performed the microscopic pathology evaluations for this study. Dr. Fred Morris peer-reviewed the slides for the liver and stomach.

IV. CONCLUSION:

In males treated with Ultranox®XR-2677, there were increases in activated partial thromboplastin time (APTT) and prothrombin time (PT) at all dose levels (30, 90 and 270 mg/kg/day); absolute and relative liver weights were increased at all dose levels (30, 90 and 270 mg/kg/day); and there were microscopic findings of centrilobular hepatocellular hypertrophy at all dose levels (30, 90 and 270 mg/kg/day). Changes in the forestomach were seen in males treated with 270 mg/kg/day. Based on these findings, a no observed effect level (NOEL) was not established for test material when administered via oral gavage to male rats for at least 90 days under the conditions of this study. The increases in APTT and PT were considered adverse effects of the test material and a no observed adverse effect level (NOAEL) for Ultranox®XR-2677 was not established.

In females treated with Ultranox®XR-2677, APTT was elevated in animals treated with 90 and 270 mg/kg/day and PT was increased in animals treated with 270 mg/kg/day. At all dose levels (30, 90, and 270 mg/kg/day), there were increases in absolute and relative liver weights and microsocpic findings of centrilobular hepatocellular hypertrophy. Changes in the forestomach were seen in females treated with 270 mg/kg/day. Based on these findings, a no observed effect level (NOEL) was not established for test material when administered via oral gavage to female rats for at least 90 days under the conditions of this study. Since the increases in liver weights and the microscopic changes in the liver were considered to be the result of metabolic adaptation to the test material, the no observed adverse effect level (NOAEL) for Ultranox®XR-2677 when administered to female rats via oral gavage for at least 90 days under the conditions of this study was 30 mg/kg/day.

V. SIGNATURES:

Rosemary C. Mandella, Ph.D., D.A.B.T.
Study Director

6 Jan 97
Date

Teofilo M. Saulog, D.V.M.
Pathologist

6 Jan 97
Date

Carol S. Auletta, B.A., D.A.B.T.
Director of Toxicology

6 Jan 97
Date

Ward R. Richter, D.V.M., M.S., A.C.V.P.
Vice President, Research

6 Jan 97
Date

F 1-1

Figure 1

A Subchronic (3-Month) Toxicity Study

of Ultranox®XR-2677 in the Rat via Oral Gavage Administration

Group Mean Body Weights - Males

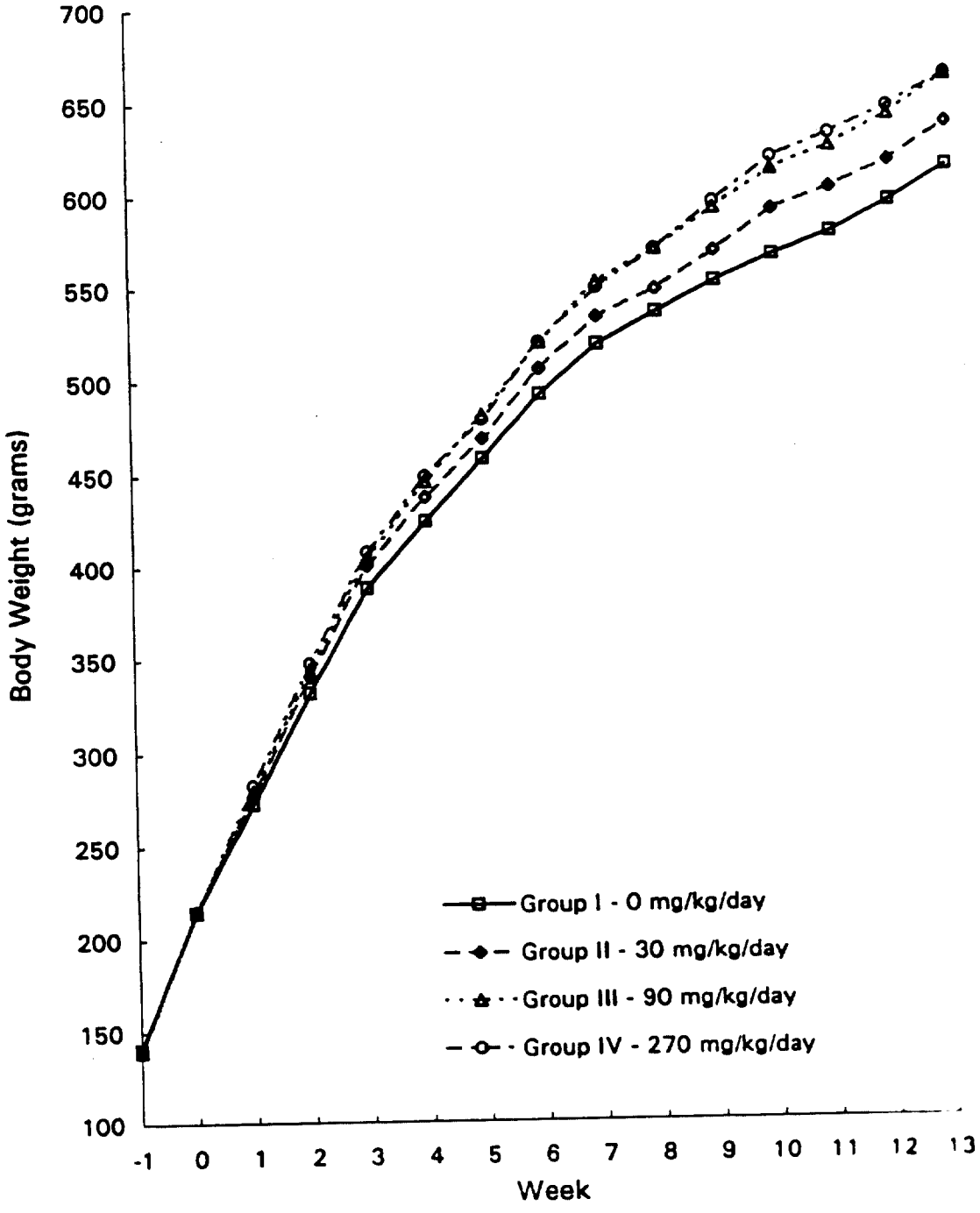


Figure 1 (cont.)
A Subchronic (3-Month) Toxicity Study
of Ultranox®XR-2677 in the Rat via Oral Gavage Administration

Group Mean Body Weights - Females

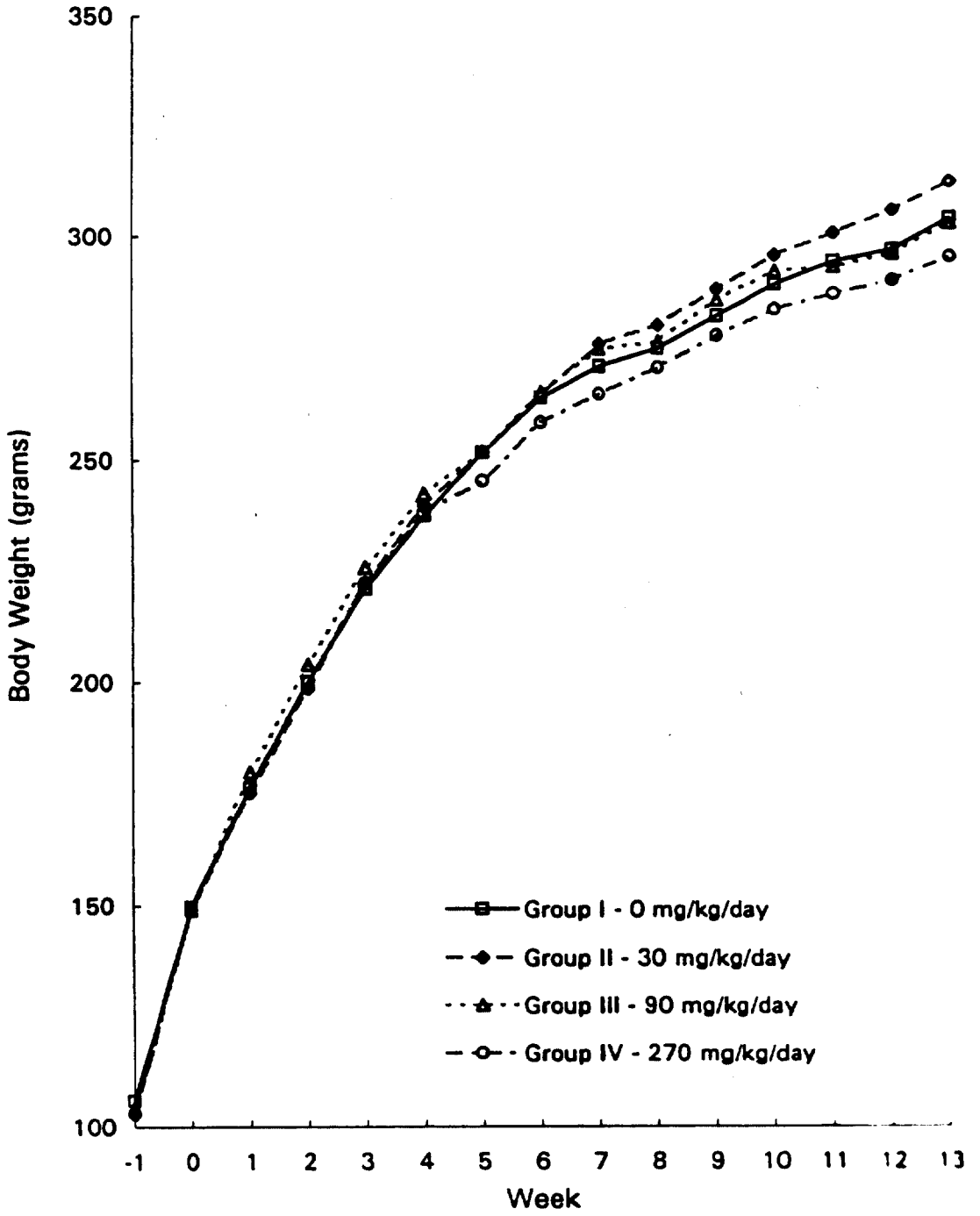


Figure 2

A Subchronic (3-Month) Toxicity Study

of Ultranox® XR-2677 in the Rat via Oral Gavage Administration

Group Mean Food Consumption - Males

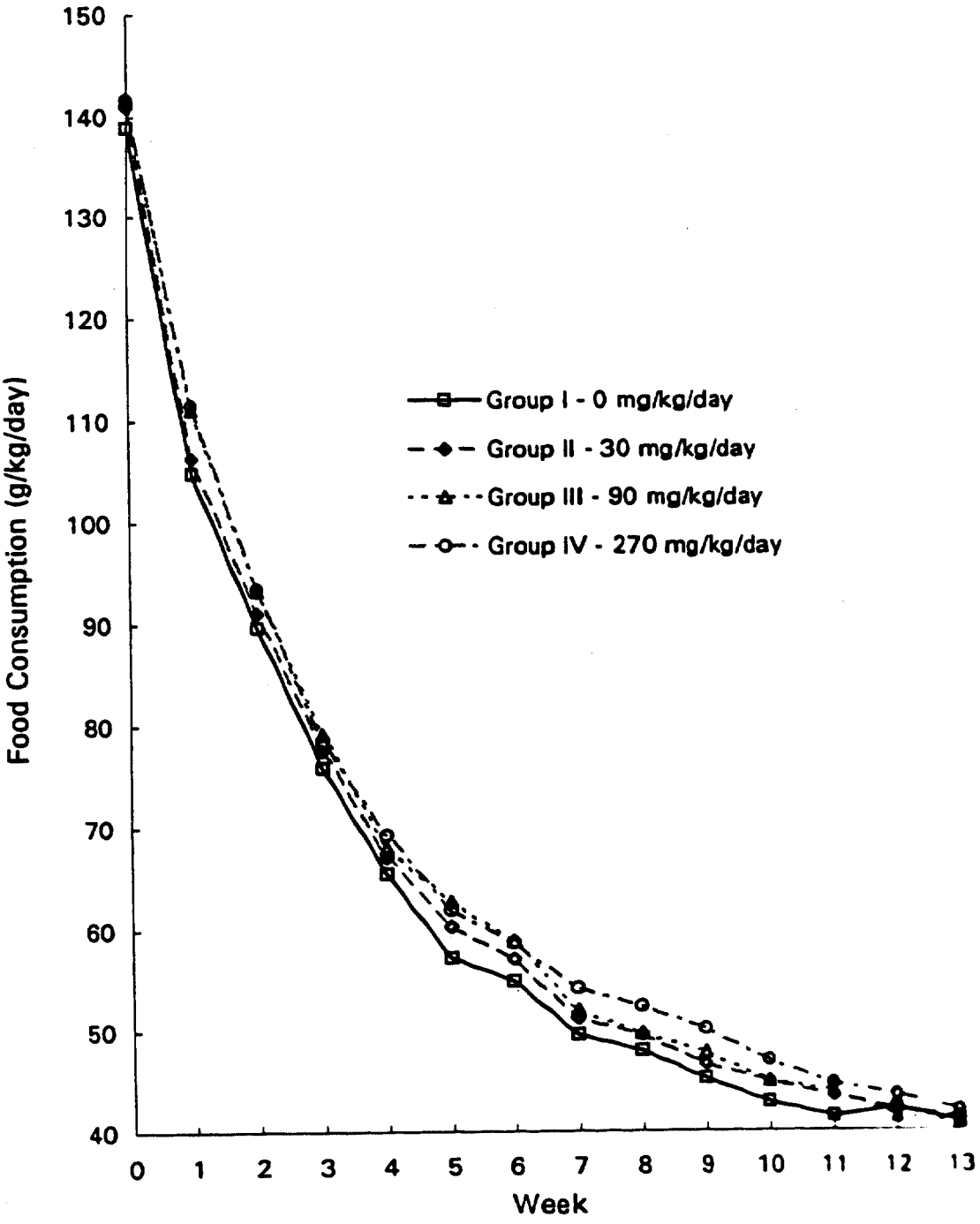
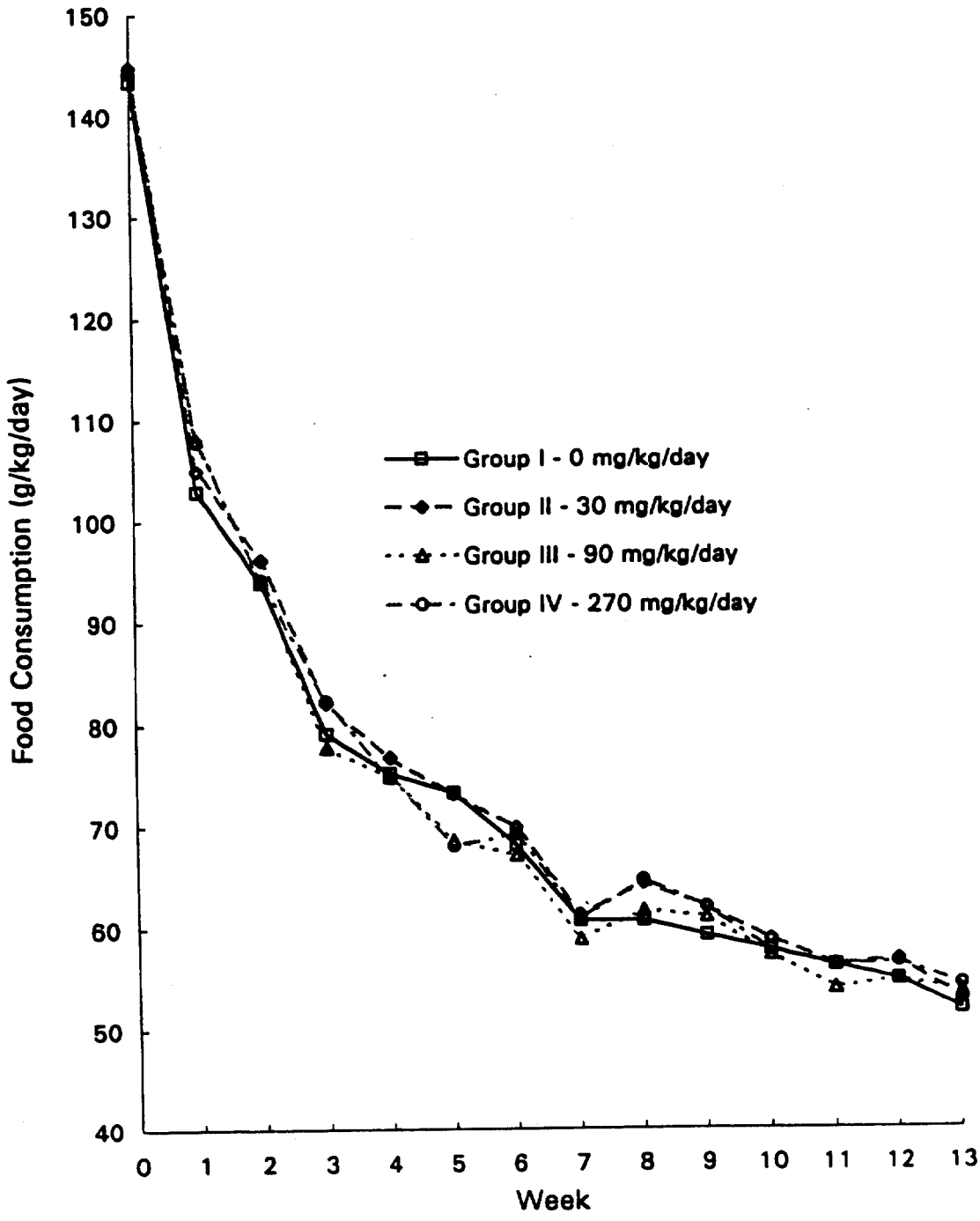


Figure 2 (cont.)
A Subchronic (3-Month) Toxicity Study
of Ultranox® XR-2677 in the Rat via Oral Gavage Administration

Group Mean Food Consumption - Females



Appendix A
A Subchronic (3-Month) Toxicity Study
of Ultranox® XR-2677 in the Rat via Oral Gavage Administration

Methodology and References - General

Parameter	Reference or Description
Physical Examination	
Behavior:	aggressiveness, increased or decreased activity.
Respiration:	nasal discharge and rales.
Ocular:	chromodacryorrhea, excessive lacrimation and percent opacity.
Appearance:	alopecia, ano-genital staining and general condition.
Gastrointestinal:	abdominal shape and fecal consistency. Palpation for tissue masses.
Other:	includes any unusual observation not included above.
Ophthalmoscopic Examination	Lids, lacrimal apparatus and conjunctiva examined grossly, cornea, anterior chamber, lens, iris, vitreous humor, retina and optic disc examined by indirect ophthalmoscopy. Mydriafair 1% was used to induce mydriasis.
Body Weight	Sartorius Universal Electronic Toploading Balance, Model U3600.
Food Consumption	Sartorius Universal Electronic Toploading Balance, Model U3600. Feed was available *ad libitum* 7 days/week. Animals were presented with full feeders weighing 570 grams (includes weight of feed, jar and lid). After 6 days feeders were reweighed and resulting weight was subtracted from the full feeder weight. Resulting value = g/6 days (g/interval). $g/kg/day = \frac{g/interval}{average\ body\ weight\ (kg)} \div 6\ Days$ $Average\ BW = \frac{Previous\ BW + Current\ BW}{2}$
Terminal Body Weight (TBW)	Ohaus B 5000. Represents a fasted body weight measured just prior to necropsy.
Organ Weights	Mettler AK-160

Appendix A (cont.)
A Subchronic (3-Month) Toxicity Study
of Ultranox® XR-2677 in the Rat via Oral Gavage Administration

Methodology and References - Hematology

Abbr	Parameter	Specimen	Reporting Units	Reference or Description
HGB	Hemoglobin Concentration	Whole Blood	g/dL	Technicon® H-1™ Hematology System, Miles, Inc.
HCT	Hematocrit	Whole Blood	%	Technicon® H-1™ Hematology System, Miles, Inc.
RBC	Erythrocyte Count	Whole Blood	10^6/microliter (mil/μL)	Technicon® H-1™ Hematology System, Miles, Inc.
PLT	Platelet Count	Whole Blood	10^3/microliter (thous/μL)	Technicon® H-1™ Hematology System, Miles Inc.
MCV	Mean Corpuscular Volume	Whole Blood	fL	Technicon® H-1™ Hematology System, Miles Inc.
MCH	Mean Corpuscular Hemoglobin	Whole Blood	pg	Technicon® H-1™ Hematology System, Miles Inc.
MCHC	Mean Corpuscular Hemoglobin Concentration	Whole Blood	g/dL	Technicon® H-1™ Hematology System, Miles Inc.
PT	Prothrombin Time	Plasma	seconds	Photo-optical clot detection system, COAG-A-MATE X2. Organon Teknika Corp.
APTT	Activated Partial Thromboplastin Time	Plasma	seconds	Photo-optical clot detection system, COAG-A-MATE X2. Organon Teknika Corp.

Appendix A (cont.)
A Subchronic (3-Month) Toxicity Study
of Ultranox® XR-2677 in the Rat via Oral Gavage Administration

Methodology and References - Hematology (cont.)

Abbr	Parameter	Specimen	Reporting Units	Reference or Description
WBC	Total Leukocyte Count	Whole Blood	10^3/microliter (thous/μL)	Technicon® H-1™ Hematology System, Miles Inc.
	Differential Leukocytes	Whole Blood	% WBC	Technicon® H-1™ Hematology System, Miles Inc.
	Erythrocyte Morhphology	Whole Blood		Henry, John Bernard, M.D. *Clinical Diagnosis and Management by Laboratory Methods*. 18th Edition. W.B. Saunders Co., 1991. pp. 590-597.
	Absolute Lymphocytes	Whole Blood	10^3/microliter (thous/μL)	Calculated value. Technicon® H-1™ Hematology System, Miles Inc.
	Absolute Segmented Neutrophils	Whole Blood	10^3/microliter (thous/μL)	Calculated value. Technicon® H-1™ Hematology System, Miles Inc.

When a questionable differential leukocyte value was obtained, manual procedures (Ibid, Henry, John Bernard, M.D.) were performed for verification. In addition, absolute values were manually calculated using the following formula: WBC X [Neut. or Lymph] ÷ 100 = Absolute value.

Appendix A (cont.)
A Subchronic (3-Month) Toxicity Study
of Ultranox® XR-2677 in the Rat via Oral Gavage Administration

Methodology and References - Clinical Chemistry

Abbr	Parameter	Specimen	Reporting Units	Reference or Description
AST	Aspartate Aminotrans-ferase	Serum	IU/L	Hitachi 717, Boehringer Mannheim Diagnostics Automatic Analyzer; (Kinetic) Modified IFCC Technique.
ALT	Alanine Aminotrans-ferase	Serum	IU/L	Hitachi 717, Boehringer Mannheim Diagnostics Automatic Analyzer; (Kinetic) Modified IFCC Technique.
ALKP	Alkaline Phosphatase	Serum	IU/L	Hitachi 717, Boehringer Mannheim Diagnostics Automatic Analyzer; (AMP Buffer) Modified Bessey-Lowry-Brock Technique.
BUN	Blood Urea Nitrogen	Serum	mg/dL	Hitachi 717, Boehringer Mannheim Diagnostics Automatic Analyzer; Modified Urease Technique.
CREAT	Creatinine	Serum	mg/dL	Hitachi 717, Boehringer Mannheim Diagnostics Automatic Analyzer; Jaffe Reaction - (Kinetic) Alkaline Picrate.
GLU	Glucose	Serum	mg/dL	Hitachi 717, Boehringer Mannheim Diagnostics Automatic Analyzer; Hexokinase Method.
T PROT	Total Protein	Serum	g/dL	Hitachi 717, Boehringer Mannheim Diagnostics Automatic Analyzer; Biuret Technique.

Appendix A (cont.)
A Subchronic (3-Month) Toxicity Study
of Ultranox® XR-2677 in the Rat via Oral Gavage Administration

Methodology and References - Clinical Chemistry (cont.)

Abbr	Parameter	Specimen	Reporting Units	Reference or Description
ALB	Albumin	Serum	g/dL	Hitachi 717, Boehringer Mannheim Diagnostics Automatic Analyzer; Bromocresol Green Method.
GLOB	Globulin	Serum	g/dL	Calculated value. Hitachi 717, Boehringer Mannheim Diagnostics Automatic Analyzer.
A/G	Albumin/ Globulin Ratio	-	-	Calculated value. Hitachi 717, Boehringer Mannheim Diagnostics Automatic Analyzer.
T BILI	Total Bilirubin	Serum	mg/dL	Hitachi 717, Boehringer Mannheim Diagnostics Automatic Analyzer; Modified Jendrassik and Grof Method.
Na^+	Sodium	Serum	mEq/L	Hitachi 717, Boehringer Mannheim Diagnostics Automatic Analyzer; Ion Selective Electrode.
K^+	Potassium	Serum	mEq/L	Hitachi 717, Boehringer Mannheim Diagnostics Automatic Analyzer; Ion Selective Electrode.
Cl^-	Chloride	Serum	mEq/L	Hitachi 717, Boehringer Mannheim Diagnostics Automatic Analyzer; Ion Selective Electrode.
Ca^{++}	Calcium	Serum	mg/dL	Hitachi 717, Boehringer Mannheim Diagnostics Automatic Analyzer; Cresolphthalein Complexone Method.

Methodology and References - Clinical Chemistry (cont.)

Abbr	Parameter	Specimen	Reporting Units	Reference or Description
PHOS	Inorganic Phosphorus	Serum	mg/dL	Hitachi 717, Boehringer Mannheim Diagnostics Automatic Analyzer; Phosphomolybdate-UV Method.
GGT	Gamma-Glutamyl Transferase	Serum	IU/L	Hitachi 717, Boehringer Mannheim Diagnostics Automatic Analyzer; (Kinetic) Szasz, G.

Appendix A (cont.)
A Subchronic (3-Month) Toxicity Study
of Ultranox®XR-2677 in the Rat via Oral Gavage Administration

Methodology and References - Statistical Analysis

Reference or Description

Parameters analyzed statistically: body weight, body weight change, body weight change from Week 0, food consumption, hematology, and clinical chemistry values, and terminal organ and body weight values, organ/body weight and organ/brain weight ratios.

Statistical evaluation was not performed when the standard deviation for the control group or more than one group was zero, due to lack of variance. If a standard deviation for one treated group was zero, or when N (number of animals) was less than or equal to two animals for any treated group, the remaining groups were tested using the same procedures outlined on the following page. If the N (number of animals) for the control group was less than or equal to two animals, no statistics are presented due to lack of variance.

MULTIPLE GROUP ANALYSIS STAT SYMBOL			STATISTICAL STATEMENT
No Sig	p≤0.05	p≤0.01	
	Parametric		
A-			No statistical differences among the means (parametric ANOVA).
	A	A+	The means differ significantly (parametric ANOVA).
L-			The response is not linearly related to the dose levels.
	L	L+	The response is linearly related to the dose levels.
	Q	Q+	The response shows a lack of fit.
	*	**	Significantly different from control (Dunnett's).

Methodology and References - Statistical Analysis (cont.)

Reference or Description

MULTIPLE GROUP ANALYSIS STAT SYMBOL			STATISTICAL STATEMENT
No Sig	p≤0.05	p≤0.01	
Nonparametric			
K-			No statistical differences among the means (Kruskal-Wallis, nonparametric).
	K	K+	The means differ significantly (Kruskal-Wallis nonparametric).
J-			There is not an ordered response to dosage.
	J	J+	There is an ordered response to dosage.
	*	**	Significantly different from control (Dunn's Rank Sum).
NT			Not tested due to lack of variance.

Statistical evaluation of equality of means was made by the appropriate one way analysis of variance technique, followed by a multiple comparison procedure if needed. First, Bartlett's test was performed to determine if groups had equal variance. If the variances were equal, parametric procedures were used; if not, nonparametric procedures were used. The parametric procedures were the standard one way ANOVA using the F distribution to assess significance. If significant differences among the means were indicated, Dunnett's test was used to determine which means were significantly different from the control. If a nonparametric procedure for testing equality of means was needed, the Kruskal-Wallis test was used, and if differences were indicated a summed rank test (Dunn) was used to determine which treatments differed from control.

A statistical test for trend in the dose levels was also performed. In the parametric case (i.e., equal variance) standard regression techniques with a test for trend and lack of fit were used. In the nonparametric case Jonckheere's test for monotonic trend was used.

The test for equal variance (Bartlett's) was conducted at the 1%, two-sided risk level. All other statistical tests were conducted at the 5% and 1%, two-sided risk level.

Methodology and References - Statistical Analysis (cont.)

Reference or Description

References for these techniques are Snedecor, G.W., and Cochran, W.G., *Statistical Methods*. 6th edition, Iowa State University Press (1967); Hollander, M. and Wolfe, D.A., *Nonparametric Statistical Methods*. John Wiley and Sons, New York (1973); Dunnett, C.W., *J. Am. Sta. Assn*. Vol. 50 (1955) and *Biometrics*. Vol. 20 (1964).

Bartlett's Test	pp. 296-298	S&C
ANOVA	pp. 277-279	S&C
Dunnett's	pp. 1096-1121	D
	pp. 482-491	Bio
Kruskal-Wallis	pp. 114-116	H&W
Summed Rank Test (Dunn)	p. 131	H&W
Regression Analysis		
Trend	pp. 135-153	S&C
Lack of Fit	pp. 456-459	S&C
Jonckheere's Statistic	pp. 120-123	H&W

Appendix B
A Subchronic (3-Month) Toxicity Study
of Ultranox® XR-2677 in the Rat via Oral Gavage Administration

Animal Termination History

Males				Females			
Animal Number	Date of Death	Type of Death[a]	Days on Test[b]	Animal Number	Date of Death	Type of Death[a]	Days on Test[b]
Group I - 0 mg/kg/day							
1001	18 Sep 96	T	92	1501	18 Sep 96	T	92
1002	18 Sep 96	T	92	1502	18 Sep 96	T	92
1003	18 Sep 96	T	92	1503	18 Sep 96	T	92
1004	18 Sep 96	T	92	1504	18 Sep 96	T	92
1005	18 Sep 96	T	92	1505	18 Sep 96	T	92
1006	18 Sep 96	T	92	1506	18 Sep 96	T	92
1007	18 Sep 96	T	92	1507	18 Sep 96	T	92
1008	18 Sep 96	T	92	1508	18 Sep 96	T	92
1009	18 Sep 96	T	92	1509	18 Sep 96	T	92
1010	18 Sep 96	T	92	1510	18 Sep 96	T	92
1011	19 Sep 96	T	93	1511	19 Sep 96	T	93
1012	19 Sep 96	T	93	1512	19 Sep 96	T	93
1013	19 Sep 96	T	93	1513	19 Sep 96	T	93
1014	19 Sep 96	T	93	1514	19 Sep 96	T	93
1015	19 Sep 96	T	93	1515	19 Sep 96	T	93
1016	19 Sep 96	T	93	1516	19 Sep 96	T	93
1017	19 Sep 96	T	93	1517	19 Sep 96	T	93
1018	19 Sep 96	T	93	1518	19 Sep 96	T	93
1019	19 Sep 96	T	93	1519	19 Sep 96	T	93
1020	19 Sep 96	T	93	1520	19 Sep 96	T	93

[a]F = Found Dead, T = Terminal Sacrifice.
[b]Animals were not dosed on the day of terminal sacrifice and received the test material one day less than the number of Days on Test.

Appendix B (cont.)
A Subchronic (3-Month) Toxicity Study
of Ultranox® XR-2677 in the Rat via Oral Gavage Administration

Animal Termination History

Males				Females			
Animal Number	Date of Death	Type of Death[a]	Days on Test[b]	Animal Number	Date of Death	Type of Death[a]	Days on Test[b]
Group II - 30 mg/kg/day							
2001	18 Sep 96	T	92	2501	18 Sep 96	T	92
2002	8 Aug 96	F	51	2502	18 Sep 96	T	92
2003	18 Sep 96	T	92	2503	18 Sep 96	T	92
2004	18 Sep 96	T	92	2504	18 Sep 96	T	92
2005	18 Sep 96	T	92	2505	18 Sep 96	T	92
2006	18 Sep 96	T	92	2506	18 Sep 96	T	92
2007	18 Sep 96	T	92	2507	18 Sep 96	T	92
2008	18 Sep 96	T	92	2508	18 Sep 96	T	92
2009	18 Sep 96	T	92	2509	18 Sep 96	T	92
2010	18 Sep 96	T	92	2510	18 Sep 96	T	92
2011	18 Sep 96	T	92	2511	19 Sep 96	T	93
2012	19 Sep 96	T	93	2512	19 Sep 96	T	93
2013	19 Sep 96	T	93	2513	19 Sep 96	T	93
2014	19 Sep 96	T	93	2514	19 Sep 96	T	93
2015	19 Sep 96	T	93	2515	19 Sep 96	T	93
2016	19 Sep 96	T	93	2516	19 Sep 96	T	93
2017	19 Sep 96	T	93	2517	19 Sep 96	T	93
2018	19 Sep 96	T	93	2518	19 Sep 96	T	93
2019	19 Sep 96	T	93	2519	19 Sep 96	T	93
2020	19 Sep 96	T	93	2520	19 Sep 96	T	93

[a]F = Found Dead, T = Terminal Sacrifice.
[b]Animals were not dosed on the day of terminal sacrifice and received the test material one day less than the number of Days on Test.

Appendix B (cont.)
A Subchronic (3-Month) Toxicity Study
of Ultranox®XR-2677 in the Rat via Oral Gavage Administration

Animal Termination History

Males				Females			
Animal Number	Date of Death	Type of Death[a]	Days on Test[b]	Animal Number	Date of Death	Type of Death[a]	Days on Test[b]
Group III - 90 mg/kg/day							
3001	18 Sep 96	T	92	3501	18 Sep 96	T	92
3002	18 Sep 96	T	92	3502	18 Sep 96	T	92
3003	18 Sep 96	T	92	3503	18 Sep 96	T	92
3004	18 Sep 96	T	92	3504	18 Sep 96	T	92
3005	18 Sep 96	T	92	3505	18 Sep 96	T	92
3006	18 Sep 96	T	92	3506	18 Sep 96	T	92
3007	18 Sep 96	T	92	3507	18 Sep 96	T	92
3008	18 Sep 96	T	92	3508	18 Sep 96	T	92
3009	18 Sep 96	T	92	3509	18 Sep 96	T	92
3010[c]	24 Jun 96	F	6	3510	18 Sep 96	T	92
3011	19 Sep 96	T	93	3511	19 Sep 96	T	93
3012	19 Sep 96	T	93	3512	19 Sep 96	T	93
3013	19 Sep 96	T	93	3513	19 Sep 96	T	93
3014	19 Sep 96	T	93	3514	19 Sep 96	T	93
3015	19 Sep 96	T	93	3515	19 Sep 96	T	93
3016	19 Sep 96	T	93	3516	19 Sep 96	T	93
3017	19 Sep 96	T	93	3517	19 Sep 96	T	93
3018	19 Sep 96	T	93	3518	19 Sep 96	T	93
3019	19 Sep 96	T	93	3519	19 Sep 96	T	93
3020	19 Sep 96	T	93	3520	19 Sep 96	T	93
3021[c]	18 Sep 96	T	87				

[a]F = Found Dead, T = Terminal Sacrifice.
[b]Animals were not dosed on the day of terminal sacrifice and received the test material one day less than the number of Days on Test.
[c]Animal No. 3010 was found dead on Test Day 6 and was replaced on study with Animal No. 3021.

Appendix B (cont.)
A Subchronic (3-Month) Toxicity Study
of Ultranox® XR-2677 in the Rat via Oral Gavage Administration

Animal Termination History

Males				Females			
Animal Number	Date of Death	Type of Death[a]	Days on Test[b]	Animal Number	Date of Death	Type of Death[a]	Days on Test[b]
Group IV - 270 mg/kg/day							
4001	18 Sep 96	T	92	4501	18 Sep 96	T	92
4002	18 Sep 96	T	92	4502	18 Sep 96	T	92
4003	18 Sep 96	T	92	4503	18 Sep 96	T	92
4004	18 Sep 96	T	92	4504	18 Sep 96	T	92
4005	18 Sep 96	T	92	4505	18 Sep 96	T	92
4006	18 Sep 96	T	92	4506	18 Sep 96	T	92
4007	18 Sep 96	T	92	4507	18 Sep 96	T	92
4008	18 Sep 96	T	92	4508	18 Sep 96	T	92
4009	18 Sep 96	T	92	4509	30 Jun 96	F	12
4010	18 Sep 96	T	92	4510	18 Sep 96	T	92
4011	19 Sep 96	T	93	4511	18 Sep 96	T	92
4012	19 Sep 96	T	93	4512	19 Sep 96	T	93
4013	19 Sep 96	T	93	4513	19 Sep 96	T	93
4014	19 Sep 96	T	93	4514	19 Sep 96	T	93
4015	19 Sep 96	T	93	4515	19 Sep 96	T	93
4016	19 Sep 96	T	93	4516	19 Sep 96	T	93
4017	19 Sep 96	T	93	4517	19 Sep 96	T	93
4018	19 Sep 96	T	93	4518	19 Sep 96	T	93
4019	19 Sep 96	T	93	4519	19 Sep 96	T	93
4020	19 Sep 96	T	93	4520	19 Sep 96	T	93

[a]F = Found Dead, T = Terminal Sacrifice.
[b]Animals were not dosed on the day of terminal sacrifice and received the test material one day less than the number of Days on Test.

Appendix C
A Subchronic (3-Month) Toxicity Study
of Ultranox® XR-2677 in the Rat via Oral Gavage Administration

Physical Observations
Preface

Number of animals examined represents the total number of animals observed and/or animals which were found dead, died accidentally, were killed in a moribund condition or at a scheduled sacrifice for a given interval. If more than one degree was noted in data for different locations, the most extreme degree was presented (i.e., slight lacrimation, right eye and moderate lacrimation, left eye were recorded, moderate lacrimation was presented in the report).

For summarization purposes, descriptive comments [i.e., location of alopecia, scab(s) and sore(s), etc.] are not presented in this appendix. These data are contained in the study raw data if needed.

Appendix C (cont.)
A Subchronic (3-Month) Toxicity Study
of Ultranox® XR-2677 in the Rat via Oral Gavage Administration

Summary of In-Life Physical Observations - Males

	Week:	-1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
Number of Animals Examined	I	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
	II	20	20	20	20	20	20	20	20	20	20	19	19	19	19	19
	III	20	20	19	20	20	20	20	20	20	20	20	20	20	20	20
	IV	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
Normal																
Within Normal Limits	I	20	20	18	18	16	17	14	15	16	17	16	17	15	15	16
	II	20	20	18	18	15	17	16	16	17	16	15	17	14	16	17
	III	19	20	19	20	17	18	17	18	19	19	19	18	18	17	17
	IV	20	20	20	19	17	18	17	18	18	18	16	15	13	19	17
Dead																
Found Dead	I	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	II	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
	III	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	IV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
General Appearance																
Red Exudate (General)	I	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
	II	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	III	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	IV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dermal-General																
Scabs	I	0	0	0	1	2	1	2	1	1	0	0	0	0	0	0
	II	0	0	1	1	3	0	0	0	0	0	0	0	0	0	0
	III	1	0	0	0	3	2	1	1	0	0	0	0	0	0	0
	IV	0	0	0	0	1	0	1	1	0	0	0	0	0	0	0
Alopecia - Extremities/Snout	I	0	0	2	2	2	2	4	3	2	2	2	2	2	3	1
	II	0	0	0	0	2	2	4	4	3	2	2	1	1	1	1
	III	0	0	0	0	0	0	2	1	1	1	1	1	1	1	1
	IV	0	0	0	1	1	1	2	2	2	2	2	2	2	1	1
Black/Brown Stains Snout	I	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	II	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	III	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	IV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Ulceration - Cervical	I	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0
	II	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	III	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	IV	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0
Ulceration	I	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	II	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	III	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	IV	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0
Alopecia - General	I	0	0	0	0	0	0	2	1	1	0	0	0	0	0	0
	II	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	III	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	IV	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0

Appendix C (cont.)
A Subchronic (3-Month) Toxicity Study
of Ultranox® XR-2677 in the Rat via Oral Gavage Administration

Summary of In-Life Physical Observations - Males

	Week:	-1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
Number of Animals Examined	I	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
	II	20	20	20	20	20	20	20	20	20	20	19	19	19	19	19
	III	20	20	19	20	20	20	20	20	20	20	20	20	20	20	20
	IV	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
Dermal-General (cont.)																
Yellow Ano-Genital Staining	I	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0
	II	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0
	III	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0
	IV	0	0	0	0	0	0	0	0	0	0	2	3	4	0	1
Ocular																
Lacrimation - Unilateral	I	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
	II	0	0	0	0	0	0	0	0	0	0	0	0	2	1	1
	III	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
	IV	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0
Chromodacryorrhea - Unilateral	I	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
	II	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0
	III	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1
	IV	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
Lacrimation - Bilateral	I	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0
	II	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0
	III	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	IV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chromodacryorrhea - Bilateral	I	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
	II	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0
	III	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
	IV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exophthalmos - Unilateral	I	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	II	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	III	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	IV	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1
Oral/Buccal																
Incisors Broken/Missing	I	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	II	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	III	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
	IV	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
Incisors Maloccluded	I	0	0	0	0	0	0	1	1	1	1	1	1	1	2	2
	II	0	0	1	1	1	1	0	0	0	1	1	1	1	1	1
	III	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2
	IV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Oral Sore	I	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
	II	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
	III	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
	IV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Appendix C (cont.)
A Subchronic (3-Month) Toxicity Study
of Ultranox® XR-2677 in the Rat via Oral Gavage Administration

Summary of In-Life Physical Observations - Males

	Week:	-1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
Number of Animals Examined	I	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
	II	20	20	20	20	20	20	20	20	20	20	19	19	19	19	19
	III	20	20	19	20	20	20	20	20	20	20	20	20	20	20	20
	IV	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
Oral/Buccal (cont.)																
Nasal Discharge - Red	I	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	II	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0
	III	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	IV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Excessive Salivation	I	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	II	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	III	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	IV	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
Respiratory																
Rales - Moist	I	0	0	0	0	0	0	0	0	0	0	1	0	1	1	1
	II	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
	III	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	IV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Labored Breathing	I	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
	II	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	III	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	IV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Miscellaneous																
Decreased Fecal Volume	I	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0
	II	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	III	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
	IV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Limb(s) Appear Impaired	I	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	II	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	III	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	IV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Mass(es)	I	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	II	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	III	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	IV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Appendix C (cont.)
A Subchronic (3-Month) Toxicity Study
of Ultranox® XR-2677 in the Rat via Oral Gavage Administration

Summary of In-Life Physical Observations - Females

	Week:	-1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
Number of Animals Examined	I	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
	II	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
	III	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
	IV	20	20	20	20	19	19	19	19	19	19	19	19	19	19	19
Normal																
Within Normal Limits	I	20	20	20	20	19	20	19	18	18	18	17	17	18	19	19
	II	20	20	20	19	20	19	19	18	17	18	17	17	16	16	16
	III	20	20	20	19	18	18	19	19	19	19	19	19	19	18	19
	IV	20	20	20	20	19	19	19	18	18	19	19	17	17	17	17
Dead																
Found Dead	I	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	II	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	III	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	IV	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
General Appearance																
Ears Swollen/Red - Bilateral	I	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	II	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2
	III	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1
	IV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dermal-General																
Scabs	I	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	II	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	III	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
	IV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Alopecia - Extremities/Snout	I	0	0	0	0	0	0	1	1	1	1	2	2	1	1	1
	II	0	0	0	0	0	1	1	2	3	2	3	3	3	3	3
	III	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1
	IV	0	0	0	0	0	0	0	1	1	0	0	1	1	1	1
Black/Brown Stains Snout	I	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	II	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
	III	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	IV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Alopecia - General	I	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	II	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	III	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
	IV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Appendix C (cont.)
A Subchronic (3-Month) Toxicity Study
of Ultranox® XR-2677 in the Rat via Oral Gavage Administration

Summary of In-Life Physical Observations - Females

	Week:	-1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
Number of Animals Examined	I	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
	II	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
	III	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
	IV	20	20	20	20	19	19	19	19	19	19	19	19	19	19	19
Ocular																
Lacrimation - Unilateral	I	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0
	II	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	III	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	IV	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0
Chromodacryorrhea - Unilateral	I	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0
	II	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	III	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	IV	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
Oral/Buccal																
Incisors Broken/Missing	I	0	0	0	0	1	0	0	0	0	1	1	1	1	0	0
	II	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	III	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
	IV	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1

Appendix C (cont.)
A Subchronic (3-Month) Toxicity Study
of Ultranox® XR-2677 in the Rat via Oral Gavage Administration

Individual In-Life Physical Observations - Males

Animal Number	Observations	Week of Study	- 1 0	1 2	3 4	5 6	7 8	9 10	11 12	13
Group I - 0 mg/kg/day										
1001	Within Normal Limits		P P			P P	P P	P P	P P	P
	Scabs			P P	P P					
	Alopecia - Extremities/Snout		2	2 2	2 2					
	Alopecia - General				2					
1002	Within Normal Limits		P P	P P			P	P P	P P	P
	Scabs					P				
	Ulceration - Cervical				P P	P				
	Alopecia - General				2	2 2				
1003	Within Normal Limits		P P	P P	P P		P	P P	P P	P
	Alopecia - Extremities/Snout				2	2				
	Mass(es)									1
1004	Within Normal Limits		P P	P P	P P	P P	P P	P P	P P	P
1005	Within Normal Limits		P P	P P	P P	P P	P P	P P	P P	P
1006	Within Normal Limits		P P	P P	P P	P P	P P	P	P P	P
	Rales - Moist							P		
1007	Within Normal Limits		P P	P P	P P	P P	P P	P P	P P	P
1008	Within Normal Limits		P P	P P	P P	P P	P P	P P	P P	P
1009	Within Normal Limits		P P							P
	Alopecia - Extremities/Snout			2 2	2 2	2 2	2 2	2 2	2 2	
1010	Within Normal Limits		P P	P P	P P	P P	P P	P P	P P	P
1011	Within Normal Limits		P P	P P	P	P P	P P	P P	P P	P
	Scabs				P					
1012	Within Normal Limits		P P	P P	P P	P P	P P	P P	P P	P
1013	Within Normal Limits		P P	P P	P P	P P	P P	P P	P P	P
1014	Within Normal Limits		P P	P P	P					
	Lacrimation - Unilateral					2				
	Chromodacryorrhea - Unilateral					P				
	Incisors Malocculded					P	P P	P P	P P	P
1015	Within Normal Limits		P P	P P	P P					P
	Scabs					P	P			
	Alopecia - Extremities/Snout					2	2 2	2 2	2 2	
1016	Within Normal Limits		P P	P P	P P	P P	P P	P P	P	
	Red Exudate (General)								2	
	Alopecia - Extremities/Snout								2	2 2
	Yellow Ano-Genital Staining								2	2
	Rales - Moist								P	P P
	Labored Breathing								P	
	Decreased Fecal Volume								P	P
1017	Within Normal Limits		P P	P P	P P	P P	P P	P P	P P	P
1018	Within Normal Limits		P P	P P	P P	P P	P P	P P	P P	P
1019	Within Normal Limits		P P	P P	P P	P P	P P	P P	P	
	Lacrimation - Bilateral								2	2
	Chromodacryorrhea - Bilateral								P	P P
	Incisors Malocculded									P
	Oral Sore								P	
1020	Within Normal Limits		P P	P P	P P	P P	P P	P P	P P	P

Key: 1=Slight; 2=Moderate; 3=Marked; P=Present

Appendix C (cont.)
A Subchronic (3-Month) Toxicity Study
of Ultranox®XR-2677 in the Rat via Oral Gavage Administration

Individual In-Life Physical Observations - Males

Animal Number	Observations	Week of Study	-1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
Group II - 30 mg/kg/day																	
2001	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
2002	Within Normal Limits		P	P	P	P											
	Found Dead																P
	Alopecia - Extremities/Snout						2	2	2	2	2						
2003	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P		P	P
	Nasal Discharge - Red														P		
2004	Within Normal Limits		P	P	P	P	P	P						P	P	P	P
	Alopecia - Extremities/Snout								2	2	2	2	2				
	Nasal Discharge - Red												P				
2005	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P		P	P
	Lacrimation - Unilateral														2		
	Chromodacryorrhea - Unilateral														P		
2006	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
2007	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
2008	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
2009	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
2010	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
2011	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
2012	Within Normal Limits		P	P													
	Scabs				P	P	P										
	Alopecia - Extremities/Snout						2	2	2	2	2	2	2	2	2	2	2
	Rales - Moist															P	
2013	Within Normal Limits		P	P	P	P		P	P	P	P	P	P	P	P	P	P
	Scabs						P										
2014	Within Normal Limits		P	P	P	P	P	P	P	P	P						
	Lacrimation - Unilateral														2	2	2
	Chromodacryorrhea - Unilateral														P	P	
	Lacrimation - Bilateral											2	2	2			
	Chromodacryorrhea - Bilateral											P	P	P			
	Incisors Maloccluded											P	P	P	P	P	P
	Oral Sore											P	P				
2015	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
2016	Within Normal Limits		P	P	P	P		P	P	P	P	P	P	P	P	P	P
	Scabs						P										
2017	Within Normal Limits		P	P					P	P	P	P	P	P	P	P	P
	Incisors Maloccluded				P	P	P	P									
2018	Within Normal Limits		P	P	P	P	P	P	P	P	P	P		P			P
	Yellow Ano-Genital Staining												2		1	1	
2019	Within Normal Limits		P	P	P	P	P	P			P	P	P	P	P	P	P
	Alopecia - Extremities/Snout								2	2							
2020	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P

Key: 1=Slight; 2=Moderate; 3=Marked; P=Present

Appendix C (cont.)
A Subchronic (3-Month) Toxicity Study
of Ultranox® XR-2677 in the Rat via Oral Gavage Administration

Individual In-Life Physical Observations - Males

Animal Number	Observations	Week of Study	-1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
Group III - 90 mg/kg/day																	
3001	Within Normal Limits		P	P	P	P		P	P	P	P	P	P	P	P	P	P
	Scabs						P										
3002	Within Normal Limits		P	P	P	P			P	P	P	P	P	P			
	Scabs						P	P									
	Alopecia - Extremities/Snout								2								
	Lacrimation - Unilateral															2	
	Chromodacryorrhea - Unilateral															P	P
	Incisors Maloccluded																P
	Oral Sore															P	
	Decreased Fecal Volume															P	
3003	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
3004	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P	P		
	Chromodacryorrhea - Bilateral															P	
	Incisors Maloccluded															P	P
3005	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
3006	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
3007	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
3008	Within Normal Limits		P	P	P	P	P	P							P	P	P
	Alopecia - Extremities/Snout								2	2	2	2	2	2			
	Incisors Broken/Missing											P					
3009	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
3021	Within Normal Limits		P	P		P						P	P	P	P	P	P
	Scabs						P	P	P	P							
3011	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
3012	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P		P	P	P
	Yellow Ano-Genital Staining													1			
3013	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
3014	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
3015	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
3016	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
3017	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P			
	Alopecia - Extremities/Snout														2	2	2
	Lacrimation - Unilateral															2	
	Chromodacryorrhea - Unilateral															P	
3018	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
3019	Within Normal Limits			P	P	P	P	P	P	P	P	P	P	P		P	P
	Scabs		P												2		
	Yellow Ano-Genital Staining																
3020	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P

Key: 1=Slight; 2=Moderate; 3=Marked; P=Present

Appendix C (cont.)
A Subchronic (3-Month) Toxicity Study
of Ultranox® XR-2677 in the Rat via Oral Gavage Administration

Individual In-Life Physical Observations - Males

Animal Number	Observations	Week of Study	- 1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
Group IV - 270 mg/kg/day																	
4001	Within Normal Limits		P	P	P												
	Alopecia - Extremities/Snout					2	2	2	2	2	2	2	2	2	2	2	2
	Exophthalmos - Unilateral												P	P	P	P	P
4002	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P			P	
	Black/Brown Stains Snout																1
	Yellow Ano-Genital Staining													1	1		2
	Limb(s) Appear Impaired																P
4003	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
4004	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P		P	P
	Lacrimation - Unilateral														2		
	Chromodacryorrhea - Unilateral														P		
4005	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P		P	P
	Yellow Ano-Genital Staining														2		
4006	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
4007	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
4008	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
4009	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P			P	P
	Yellow Ano-Genital Staining													1	2		
	Lacrimation - Unilateral														2		
	Excessive Salivation														P		
4010	Within Normal Limits		P	P	P	P		P	P	P	P	P	P	P	P	P	P
	Scabs						P										
4011	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P	P	P	
	Incisors Malocculded																P
4012	Within Normal Limits		P	P	P	P	P	P	P	P	P	P				P	P
	Alopecia - Extremities/Snout												2	2	2		
4013	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
4014	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
4015	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
4016	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P		P	P
	Yellow Ano-Genital Staining														1		
4017	Within Normal Limits		P	P	P	P							P	P	P	P	P
	Scabs								P	P							
	Alopecia - Extremities/Snout								2	2	2	2					
	Ulceration - Cervical						P	P	P	P							
	Ulceration						P	P	P	P							
	Alopecia - General										2						
4018	Within Normal Limits		P	P	P	P	P	P		P	P	P			P	P	P
	Yellow Ano-Genital Staining												2	2			
	Incisors Broken/Missing								P								
4019	Within Normal Limits		P	P	P	P	P	P	P	P	P	P		P	P	P	P
	Yellow Ano-Genital Staining												2				
4020	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P

Key: 1=Slight; 2=Moderate; 3=Marked; P=Present

Appendix C (cont.)
A Subchronic (3-Month) Toxicity Study
of Ultranox®XR-2677 in the Rat via Oral Gavage Administration

Individual In-Life Physical Observations - Females

Animal Number	Observations	Week of Study	-1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
Group I - 0 mg/kg/day																	
1501	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
1502	Within Normal Limits		P	P	P	P		P	P	P	P	P	P	P	P	P	P
	Incisors Broken/Missing						P										
1503	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
1504	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
1505	Within Normal Limits		P	P	P	P	P	P	P							P	P
	Lacrimation - Unilateral									2	2	2					
	Chromodacryorrhea - Unilateral									P	P	P					
	Incisors Broken/Missing											P	P	P	P		
1506	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
1507	Within Normal Limits		P	P	P	P	P	P	P	P	P						
	Alopecia - Extremities/Snout											2	2	2	2	3	3
1508	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
1509	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
1510	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
1511	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
1512	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
1513	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
1514	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
1515	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
1516	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
1517	Within Normal Limits		P	P	P	P	P	P				P			P	P	P
	Alopecia - Extremities/Snout								2	2	2		2	2			
1518	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
1519	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
1520	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P

Key: 1=Slight; 2=Moderate; 3=Marked; P=Present

Appendix C (cont.)
A Subchronic (3-Month) Toxicity Study
of Ultranox® XR-2677 in the Rat via Oral Gavage Administration

Individual In-Life Physical Observations - Females

Animal Number	Observations	Week of Study	-1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
Group II - 30 mg/kg/day																	
2501	Within Normal Limits		P	P	P	P	P	P	P	P		P	P	P	P	P	P
	Alopecia - Extremities/Snout										2						
2502	Within Normal Limits		P	P	P		P	P	P	P	P	P	P	P	P	P	P
	Black/Brown Stains Snouts					1											
2503	Within Normal Limits		P	P	P	P	P	P	P	P	P	P					
	Alopecia - Extremities/Snout												2	2	2	2	2
2504	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
2505	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
2506	Within Normal Limits		P	P	P	P	P	P	P								
	Alopecia - Extremities/Snout									2	2	2	2	2	2	2	2
2507	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
2508	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
2509	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
2510	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
2511	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
2512	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
2513	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
2514	Within Normal Limits		P	P	P	P	P										P
	Ears Swollen/Red - Bilateral							3	3	3	3	3	3	3	3	3	2
	Alopecia - Extremities/Snout																
2515	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
2516	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
2517	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
2518	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
2519	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
2520	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P			
	Ears Swollen/Red - Bilateral														P	P	P

Key: 1=Slight; 2=Moderate; 3=Marked; P=Present

Appendix C (cont.)
A Subchronic (3-Month) Toxicity Study
of Ultranox® XR-2677 in the Rat via Oral Gavage Administration

Individual In-Life Physical Observations - Females

Animal Number	Observations	Week of Study	-1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
Group III - 90 mg/kg/day																	
3501	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
3502	Within Normal Limits		P	P	P	P	P							P	P	P	P
	Ears Swollen/Red - Bilateral							2	2	2	2	2	2	2	2	2	2
	Alopecia - Extremities/Snout																
3503	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
3504	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
3505	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
3506	Within Normal Limits		P	P	P			P	P	P	P	P	P	P	P	P	P
	Scabs					P											
	Alopecia - General						2	2									
3507	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
3508	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
3509	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P	P		P
	Incisors Broken/Missing															P	
3510	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
3511	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
3512	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
3513	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
3514	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
3515	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
3516	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
3517	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
3518	Within Normal Limits		P	P	P	P		P	P	P	P	P	P	P	P	P	P
	Scabs						P										
3519	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
3520	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P

Key: 1=Slight; 2=Moderate; 3=Marked; P=Present

Appendix C (cont.)
A Subchronic (3-Month) Toxicity Study
of Ultranox® XR-2677 in the Rat via Oral Gavage Administration

Individual In-Life Physical Observations - Females

Animal Number	Observations	Week of Study	-1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
Group IV - 270 mg/kg/day																	
4501	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
4502	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
4503	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P			P	P
	Lacrimation - Unilateral													2	2		
	Chromodacryorrhea - Unilateral														P		
4504	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
4505	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
4506	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
4507	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
4508	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
4509	Within Normal Limits		P	P	P	P											
	Found Dead					P											
4510	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
4511	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
4512	Within Normal Limits		P	P	P	P	P	P	P			P	P				
	Alopecia - Extremities/Snout									2	2			2	2	2	2
4513	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
4514	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
4515	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
4516	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P	P		
	Incisors Broken/Missing															P	P
4517	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
4518	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
4519	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
4520	Within Normal Limits		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P

Key: 1=Slight; 2=Moderate; 3=Marked; P=Present

Appendix D
A Subchronic (3-Month) Toxicity Study
of Ultranox® XR-2677 in the Rat via Oral Gavage Administration

Ophthalmology
Preface

Ophthalmoscopic examinations were performed as follows: Pretest - Week 0 and Termination - Week 13. Only animals which were within normal limits at the pretest examination were placed on test.

Appendix D (cont.)

LIONEL F. RUBIN, V.M.D.
1116 SAINT ANDREWS ROAD
BRYN MAWR, PENNSYLVANIA 19010
TELEPHONE (610) 520-9430

Pretest

June 17, 1996

Huntingdon Life Sciences, Inc.
Mettlers Road, Box 2360
East Millstone, NJ 08875-2360

Re: study G-24 96-2459

Ophthalmoscopic examination of study G-24 96-2459 pretest rats was performed June 17, 1996. Rats with ocular abnormalities were identified and should be withdrawn from inclusion in the study if convenient.

Lionel F. Rubin, V. M. D.

Appendix D (cont.)

LIONEL F. RUBIN, V.M.D.
1116 SAINT ANDREWS ROAD
BRYN MAWR, PENNSYLVANIA 19010
TELEPHONE (610) 520-9430

Termination

September 18, 1996

Huntingdon Life Sciences, Inc.
Mettlers Road, Box 2360
East Millstone, NJ 08875-2360

Re: study G-24 96-2459

Ophthalmoscopic examination of study G-24 96-2459 rats was performed September 17, 1996 (week 13). There is no indication of dose or compound related ocular disease. In my opinion, none of the ocular abnormalities is attributable to the administration of the test compound..

Lionel F. Rubin, V. M. D.

Appendix D (cont.)
A Subchronic (3-Month) Toxicity Study
of Ultranox® XR-2677 in the Rat via Oral Gavage Administration

Summary of Ophthalmoscopic Examinations - Males

	Week:	0	13
Number of Animals Examined	I	20	20
	II	20	19
	III	20	20
	IV	20	20
Normal			
Within Normal Limits	I	20	19
	II	20	18
	III	20	19
	IV	20	18
Ocular			
Focal Retinopathy	I	0	0
	II	0	0
	III	0	1
	IV	0	1
Conjunctivitis	I	0	1
	II	0	1
	III	0	0
	IV	0	0
Glaucoma	I	0	0
	II	0	0
	III	0	0
	IV	0	1

Appendix D (cont.)
A Subchronic (3-Month) Toxicity Study
of Ultranox® XR-2677 in the Rat via Oral Gavage Administration

Summary of Ophthalmoscopic Examinations - Females

	Week:	0	13
Number of Animals Examined	I	20	20
	II	20	20
	III	20	20
	IV	20	19
Normal			
Within Normal Limits	I	20	19
	II	20	20
	III	20	20
	IV	20	17
Ocular			
Focal Retinopathy	I	0	0
	II	0	0
	III	0	0
	IV	0	1
Conjunctivitis	I	0	1
	II	0	0
	III	0	0
	IV	0	1

Appendix D (cont.)
A Subchronic (3-Month) Toxicity Study
of Ultranox® XR-2677 in the Rat via Oral Gavage Administration

Individual Ophthalmoscopic Examinations - Males

Animal Number	Observations	Week of Study	1 0	1 3
Group I - 0 mg/kg/day				
1001	Within Normal Limits		P	P
1002	Within Normal Limits		P	P
1003	Within Normal Limits		P	P
1004	Within Normal Limits		P	P
1005	Within Normal Limits		P	P
1006	Within Normal Limits		P	P
1007	Within Normal Limits		P	P
1008	Within Normal Limits		P	P
1009	Within Normal Limits		P	P
1010	Within Normal Limits		P	P
1011	Within Normal Limits		P	P
1012	Within Normal Limits		P	P
1013	Within Normal Limits		P	P
1014	Within Normal Limits		P	P
1015	Within Normal Limits		P	P
1016	Within Normal Limits		P	P
1017	Within Normal Limits		P	P
1018	Within Normal Limits		P	P
1019	Within Normal Limits Conjunctivitis		P	3
1020	Within Normal Limits		P	P

Key: 1=Right; 2=Left; 3=Both; P=Present

Individual Ophthalmoscopic Examinations - Males

Animal Number	Observations	Week of Study	1 0 3
Group II - 30 mg/kg/day			
2001	Within Normal Limits		P P
2002	Within Normal Limits		P
2003	Within Normal Limits		P P
2004	Within Normal Limits		P P
2005	Within Normal Limits		P P
2006	Within Normal Limits		P P
2007	Within Normal Limits		P P
2008	Within Normal Limits		P P
2009	Within Normal Limits		P P
2010	Within Normal Limits		P P
2011	Within Normal Limits		P P
2012	Within Normal Limits		P P
2013	Within Normal Limits		P P
2014	Within Normal Limits Conjunctivitis		P 2
2015	Within Normal Limits		P P
2016	Within Normal Limits		P P
2017	Within Normal Limits		P P
2018	Within Normal Limits		P P
2019	Within Normal Limits		P P
2020	Within Normal Limits		P P

Key: 1=Right; 2=Left; 3=Both; P=Present

Appendix D (cont.)
A Subchronic (3-Month) Toxicity Study
of Ultranox® XR-2677 in the Rat via Oral Gavage Administration

Individual Ophthalmoscopic Examinations - Males

Animal Number	Observations	Week of Study	1 0	1 3
Group III - 90 mg/kg/day				
3001	Within Normal Limits		P	P
3002	Within Normal Limits		P	P
3003	Within Normal Limits		P	P
3004	Within Normal Limits		P	P
3005	Within Normal Limits		P	P
3006	Within Normal Limits		P	P
3007	Within Normal Limits		P	P
3008	Within Normal Limits		P	P
3009	Within Normal Limits Focal Retinopathy		P	 1
3021	Within Normal Limits		P	P
3011	Within Normal Limits		P	P
3012	Within Normal Limits		P	P
3013	Within Normal Limits		P	P
3014	Within Normal Limits		P	P
3015	Within Normal Limits		P	P
3016	Within Normal Limits		P	P
3017	Within Normal Limits		P	P
3018	Within Normal Limits		P	P
3019	Within Normal Limits		P	P
3020	Within Normal Limits		P	P

Key: 1=Right; 2=Left; 3=Both; P=Present

Appendix D (cont.)
A Subchronic (3-Month) Toxicity Study
of Ultranox® XR-2677 in the Rat via Oral Gavage Administration

Individual Ophthalmoscopic Examinations - Males

Animal Number	Observations	Week of Study	1 0	1 3
Group IV - 270 mg/kg/day				
4001	Within Normal Limits		P	
	Glaucoma			2
4002	Within Normal Limits		P	P
4003	Within Normal Limits		P	P
4004	Within Normal Limits		P	P
4005	Within Normal Limits		P	P
4006	Within Normal Limits		P	P
4007	Within Normal Limits		P	P
4008	Within Normal Limits		P	P
4009	Within Normal Limits		P	
	Focal Retinopathy			1
4010	Within Normal Limits		P	P
4011	Within Normal Limits		P	P
4012	Within Normal Limits		P	P
4013	Within Normal Limits		P	P
4014	Within Normal Limits		P	P
4015	Within Normal Limits		P	P
4016	Within Normal Limits		P	P
4017	Within Normal Limits		P	P
4018	Within Normal Limits		P	P
4019	Within Normal Limits		P	P
4020	Within Normal Limits		P	P

Key: 1=Right; 2=Left; 3=Both; P=Present

Individual Ophthalmoscopic Examinations - Females

Animal Number	Observations	Week of Study	1 0	1 3
Group I - 0 mg/kg/day				
1501	Within Normal Limits		P	P
1502	Within Normal Limits		P	P
1503	Within Normal Limits		P	P
1504	Within Normal Limits		P	P
1505	Within Normal Limits		P	P
1506	Within Normal Limits		P	P
1507	Within Normal Limits		P	P
1508	Within Normal Limits		P	P
1509	Within Normal Limits		P	P
1510	Within Normal Limits		P	P
1511	Within Normal Limits		P	P
1512	Within Normal Limits		P	P
1513	Within Normal Limits		P	P
1514	Within Normal Limits		P	P
1515	Within Normal Limits		P	P
1516	Within Normal Limits		P	P
1517	Within Normal Limits		P	P
1518	Within Normal Limits Conjunctivitis		P	 1
1519	Within Normal Limits		P	P
1520	Within Normal Limits		P	P

Key: 1=Right; 2=Left; 3=Both; P=Present

Appendix D (cont.)
A Subchronic (3-Month) Toxicity Study
of Ultranox® XR-2677 in the Rat via Oral Gavage Administration

Individual Ophthalmoscopic Examinations - Females

Animal Number	Observations	Week of Study	1 0 3
Group II - 30 mg/kg/day			
2501	Within Normal Limits		P P
2502	Within Normal Limits		P P
2503	Within Normal Limits		P P
2504	Within Normal Limits		P P
2505	Within Normal Limits		P P
2506	Within Normal Limits		P P
2507	Within Normal Limits		P P
2508	Within Normal Limits		P P
2509	Within Normal Limits		P P
2510	Within Normal Limits		P P
2511	Within Normal Limits		P P
2512	Within Normal Limits		P P
2513	Within Normal Limits		P P
2514	Within Normal Limits		P P
2515	Within Normal Limits		P P
2516	Within Normal Limits		P P
2517	Within Normal Limits		P P
2518	Within Normal Limits		P P
2519	Within Normal Limits		P P
2520	Within Normal Limits		P P

Key: 1=Right; 2=Left; 3=Both; P=Present

Appendix D (cont.)
A Subchronic (3-Month) Toxicity Study
of Ultranox® XR-2677 in the Rat via Oral Gavage Administration

Individual Ophthalmoscopic Examinations - Females

Animal Number	Observations	Week of Study	1 0	1 3
Group III - 90 mg/kg/day				
3501	Within Normal Limits		P	P
3502	Within Normal Limits		P	P
3503	Within Normal Limits		P	P
3504	Within Normal Limits		P	P
3505	Within Normal Limits		P	P
3506	Within Normal Limits		P	P
3507	Within Normal Limits		P	P
3508	Within Normal Limits		P	P
3509	Within Normal Limits		P	P
3510	Within Normal Limits		P	P
3511	Within Normal Limits		P	P
3512	Within Normal Limits		P	P
3513	Within Normal Limits		P	P
3514	Within Normal Limits		P	P
3515	Within Normal Limits		P	P
3516	Within Normal Limits		P	P
3517	Within Normal Limits		P	P
3518	Within Normal Limits		P	P
3519	Within Normal Limits		P	P
3520	Within Normal Limits		P	P

Key: 1=Right; 2=Left; 3=Both; P=Present

Appendix D (cont.)
A Subchronic (3-Month) Toxicity Study
of Ultranox® XR-2677 in the Rat via Oral Gavage Administration

Individual Ophthalmoscopic Examinations - Females

Animal Number	Observations	Week of Study	1 0 3
Group IV - 270 mg/kg/day			
4501	Within Normal Limits		P P
4502	Within Normal Limits		P P
4503	Within Normal Limits Conjunctivitis		P 2
4504	Within Normal Limits		P P
4505	Within Normal Limits		P P
4506	Within Normal Limits		P P
4507	Within Normal Limits		P P
4508	Within Normal Limits		P P
4509	Within Normal Limits		P
4510	Within Normal Limits		P P
4511	Within Normal Limits		P P
4512	Within Normal Limits		P P
4513	Within Normal Limits		P P
4514	Within Normal Limits		P P
4515	Within Normal Limits		P P
4516	Within Normal Limits		P P
4517	Within Normal Limits		P P
4518	Within Normal Limits Focal Retinopathy		P 1
4519	Within Normal Limits		P P
4520	Within Normal Limits		P P

Key: 1=Right; 2=Left; 3=Both; P=Present

Appendix E
A Subchronic (3-Month) Toxicity Study
of Ultranox®XR-2677 in the Rat via Oral Gavage Administration

Body Weight, Change in Body Weight,
Body Weight Change From Week 0, and Food Consumption Values
Preface

When N (number of animals) is less than 20, a value was not available due to death of an animal, excessive feed spillage or technical problem (see individual values for an explanation of missing data).

Key to codes presented on individual data pages

S = Spillage
T = Technical problem

Calculations:

Weight Change (expressed in grams) = current body weight - previous body weight.

Actual grams/interval (g/int) = weight of feed, jar and lid (570 grams) - weight of feed, jar and lid after 6 days.

Actual grams/kilograms/day (g/kg/day) = [actual grams per interval ÷ average or current body weight (kilograms)] ÷ 6 days.

Average body weight = (previous body weight + current body weight)/2.

Change grams/interval (g/int) = current grams per interval - previous grams per interval.

Weight Change from Week 0 = current body weight - Week 0 body weight. (Body Weight Gain)

See Methodology and References (Appendix A) for further explanation.

NOTE: Body weight and feeder weight data are collected to one decimal place. Weights are rounded and presented to the nearest whole number. Rounded values are used in calculations of means and statistical analyses.

A key to statistical symbols is presented in Appendix A, Methodology and References - Statistical Analyses, page A-7.

APPENDIX E (cont.)
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

BODY WEIGHT IN GRAMS
MALES
DOSE LEVEL: MG/KG/DAY

STAT SYMBOL:	WEEK		0.0000	30.0000	90.0000	270.0000
A-L-	-1	MEAN	140.7	140.5	139.7	139.9
		S.D.	7.6	7.8	6.7	6.5
		N	20	20	20	20
A-L-	0	MEAN	214.6	215.2	214.7	214.6
		S.D.	9.4	10.7	10.6	10.2
		N	20	20	20	20
A-L-	1	MEAN	273.3	277.7	279.8	282.9
		S.D.	13.4	14.9	15.7	16.6
		N	20	20	20	20
A-L	2	MEAN	331.9	340.8	343.8	347.8
		S.D.	17.0	22.1	21.1	23.2
		N	20	20	20	20
A-L-	3	MEAN	388.0	400.4	404.7	408.0
		S.D.	21.5	30.4	25.0	29.6
		N	20	20	20	20
A-L	4	MEAN	424.8	438.0	446.4	449.1
		S.D.	25.3	37.5	30.8	33.8
		N	20	20	20	20
A-L-	5	MEAN	458.3	469.0	481.4	479.0
		S.D.	28.2	43.5	33.6	37.7
		N	20	20	20	20
A-L-	6	MEAN	492.3	506.1	520.3	520.2
		S.D.	29.6	51.2	39.9	44.8
		N	20	20	20	20
A-L-	7	MEAN	519.1	533.7	552.2	549.4
		S.D.	31.7	57.2	45.1	49.4
		N	20	20	20	20
A-L	8	MEAN	536.0	548.4	570.3	570.3
		S.D.	33.8	58.5	48.3	53.5
		N	20	19	20	20
AL	9	MEAN	552.5	569.1	592.5 *	595.7 *
		S.D.	39.1	58.1	53.3	59.2
		N	20	19	20	20

APPENDIX E (cont.)
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

BODY WEIGHT IN GRAMS
MALES
DOSE LEVEL: MG/KG/DAY

STAT SYMBOL:	WEEK		0.0000	30.0000	90.0000	270.0000
AL	10	MEAN	566.7	591.5	613.4 *	619.5 *
		S.D.	49.2	64.1	58.0	62.5
		N	20	19	20	20
AL	11	MEAN	578.9	603.2	625.6 *	632.2 *
		S.D.	49.4	65.5	61.9	64.1
		N	20	19	20	20
AL	12	MEAN	595.4	617.2	642.2	646.2 *
		S.D.	45.9	69.0	65.9	67.9
		N	20	19	20	20
A-L	13	MEAN	614.2	637.5	662.8	663.4
		S.D.	47.6	72.5	68.7	70.8
		N	20	19	20	20

APPENDIX E (cont.)
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

BODY WEIGHT IN GRAMS
FEMALES
DOSE LEVEL: MG/KG/DAY

STAT SYMBOL:	WEEK		0.0000	30.0000	90.0000	270.0000
A-L-	-1	MEAN	106.0	102.9	104.4	103.1
		S.D.	7.0	6.0	5.9	5.7
		N	20	20	20	20
A-L-	0	MEAN	149.6	149.0	149.0	148.8
		S.D.	9.2	8.7	8.7	8.7
		N	20	20	20	20
A-L-	1	MEAN	176.4	175.3	179.9	176.9
		S.D.	12.7	12.3	10.2	12.1
		N	20	20	20	20
A-L-	2	MEAN	200.2	198.7	204.0	200.2
		S.D.	18.2	16.3	15.1	15.4
		N	20	20	20	19
A-L-	3	MEAN	221.1	222.6	226.0	222.4
		S.D.	20.0	18.9	19.5	23.6
		N	20	20	20	19
A-L-	4	MEAN	237.6	240.0	242.5	238.2
		S.D.	23.4	19.4	23.7	21.7
		N	20	20	20	19
A-L-	5	MEAN	251.7	251.8	252.0	245.3
		S.D.	25.6	22.3	20.3	23.4
		N	20	20	20	19
A-L-	6	MEAN	264.0	264.7	265.2	258.5
		S.D.	27.2	26.1	23.2	23.8
		N	20	20	20	19
A-L-	7	MEAN	271.0	275.9	274.8	264.8
		S.D.	26.3	28.4	22.4	23.9
		N	20	20	20	19
A-L-	8	MEAN	275.0	280.1	276.5	270.7
		S.D.	27.8	29.5	21.1	24.1
		N	20	20	20	19
A-L-	9	MEAN	282.2	288.2	285.9	277.9
		S.D.	28.5	29.4	21.9	25.8
		N	20	20	20	19

APPENDIX E (cont.)
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

BODY WEIGHT IN GRAMS
FEMALES
DOSE LEVEL: MG/KG/DAY

STAT SYMBOL:	WEEK		0.0000	30.0000	90.0000	270.0000
A-L-	10	MEAN	289.3	296.0	292.4	283.7
		S.D.	29.0	31.3	24.6	26.6
		N	20	20	20	19
A-L-	11	MEAN	294.6	301.1	293.3	287.2
		S.D.	27.7	31.9	22.5	26.8
		N	20	20	20	19
A-L-	12	MEAN	297.4	306.3	296.3	290.4
		S.D.	31.1	32.7	21.1	27.1
		N	20	20	20	19
A-L-	13	MEAN	304.6	312.8	303.3	295.7
		S.D.	32.4	32.8	22.5	26.7
		N	20	20	20	19

APPENDIX E (cont.)
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

CHANGE IN BODY WEIGHT IN GRAMS
MALES
DOSE LEVEL: MG/KG/DAY

STAT SYMBOL:	WEEK		0.0000	30.0000	90.0000	270.0000
A-L-	0	MEAN	73.9	74.7	75.1	74.7
		S.D.	6.8	5.2	6.0	5.7
		N	20	20	20	20
					*	**
A+L+	1	MEAN	58.7	62.5	65.1	68.3
		S.D.	7.3	8.5	7.0	8.1
		N	20	20	20	20
A-L-	2	MEAN	58.6	63.1	64.1	64.9
		S.D.	6.1	9.7	7.7	7.9
		N	20	20	20	20
A-L-	3	MEAN	56.1	59.7	60.9	60.2
		S.D.	8.6	9.9	6.6	8.2
		N	20	20	20	20
A-L-	4	MEAN	36.9	37.6	41.8	41.2
		S.D.	7.3	8.9	8.6	6.8
		N	20	20	20	20
A-L-	5	MEAN	33.5	31.0	35.0	29.9
		S.D.	6.6	7.9	7.1	7.9
		N	20	20	20	20
						*
AL	6	MEAN	34.1	37.1	38.9	41.2
		S.D.	5.3	8.5	8.5	9.3
		N	20	20	20	20
A-L-	7	MEAN	26.8	27.6	31.9	29.2
		S.D.	6.3	7.8	6.4	7.1
		N	20	20	20	20
K-J	8	MEAN	16.9	14.5	18.1	20.9
		S.D.	5.0	10.4	4.8	7.6
		N	20	19	20	20
K-J	9	MEAN	16.6	20.7	22.2	25.4
		S.D.	18.6	12.6	7.1	7.5
		N	20	19	20	20
K-J	10	MEAN	14.2	22.4	20.9	23.8
		S.D.	18.1	8.6	5.6	6.5
		N	20	19	20	20

APPENDIX E (cont.)
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

CHANGE IN BODY WEIGHT IN GRAMS
MALES
DOSE LEVEL: MG/KG/DAY

STAT SYMBOL:	WEEK		0.0000	30.0000	90.0000	270.0000
K-J-	11	MEAN	12.3	11.7	12.2	12.7
		S.D.	29.6	6.4	14.0	5.9
		N	20	19	20	20
A-L-	12	MEAN	16.5	13.9	16.7	14.0
		S.D.	8.2	8.5	8.2	7.1
		N	20	19	20	20
A-L-	13	MEAN	18.9	20.4	20.6	17.3
		S.D.	7.5	6.0	6.6	8.3
		N	20	19	20	20

APPENDIX E (cont.)
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

CHANGE IN BODY WEIGHT IN GRAMS
FEMALES
DOSE LEVEL: MG/KG/DAY

STAT SYMBOL:	WEEK		0.0000	30.0000	90.0000	270.0000
A-L-	0	MEAN	43.6	46.1	44.6	45.7
		S.D.	7.1	5.9	6.4	6.2
		N	20	20	20	20
A-L-	1	MEAN	26.8	26.4	31.0	28.1
		S.D.	6.4	6.5	5.7	6.9
		N	20	20	20	20
A-L-	2	MEAN	23.8	23.4	24.1	22.9
		S.D.	8.2	5.4	8.2	6.9
		N	20	20	20	19
A-L-	3	MEAN	20.9	23.9	22.0	22.3
		S.D.	9.7	8.4	8.0	11.2
		N	20	20	20	19
A-L-	4	MEAN	16.6	17.5	16.5	15.8
		S.D.	7.9	6.8	7.3	5.1
		N	20	20	20	19
AL+	5	MEAN	14.1	11.8	9.6	7.1 *
		S.D.	6.2	6.9	8.6	9.3
		N	20	20	20	19
A-L-	6	MEAN	12.3	13.0	13.2	13.3
		S.D.	8.4	6.5	7.4	6.7
		N	20	20	20	19
A-L-	7	MEAN	7.1	11.2	9.6	6.3
		S.D.	4.7	8.6	7.3	7.2
		N	20	20	20	19
A-L-	8	MEAN	4.0	4.2	1.7	5.9
		S.D.	6.7	6.7	5.8	6.2
		N	20	20	20	19
A-L-	9	MEAN	7.2	8.1	9.4	7.2
		S.D.	5.1	4.9	3.9	4.0
		N	20	20	20	19
A-L-	10	MEAN	7.1	7.9	6.6	5.7
		S.D.	5.0	5.7	5.5	5.2
		N	20	20	20	19

APPENDIX E (cont.)

A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

CHANGE IN BODY WEIGHT IN GRAMS
FEMALES
DOSE LEVEL: MG/KG/DAY

STAT SYMBOL:	WEEK		0.0000	30.0000	90.0000	270.0000
A-L-	11	MEAN	5.3	5.1	0.9	3.5
		S.D.	5.6	7.7	6.1	5.2
		N	20	20	20	19
A-L-	12	MEAN	2.8	5.3	3.0	3.2
		S.D.	5.6	5.0	5.2	5.1
		N	20	20	20	19
A-L-	13	MEAN	7.2	6.5	7.0	5.3
		S.D.	4.0	6.9	5.4	5.4
		N	20	20	20	19

APPENDIX E (cont.)
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

BODY WEIGHT CHANGE FROM WEEK 0
MALES
DOSE LEVEL: MG/KG/DAY

STAT SYMBOL:	WEEK		0.0000	30.0000	90.0000	270.0000
					*	**
A+L+	1	MEAN	58.7	62.5	65.1	68.3
		S.D.	7.3	8.5	7.0	8.1
		N	20	20	20	20
					*	**
A+L+	2	MEAN	117.3	125.6	129.1	133.2
		S.D.	11.5	16.4	13.3	14.7
		N	20	20	20	20
					*	*
AL	3	MEAN	173.4	185.3	190.0	193.4
		S.D.	18.1	25.6	18.2	21.4
		N	20	20	20	20
					*	*
AL	4	MEAN	210.2	222.9	231.7	234.5
		S.D.	22.2	32.8	24.8	26.1
		N	20	20	20	20
A-L-	5	MEAN	243.7	253.9	266.7	264.4
		S.D.	26.1	38.9	28.8	30.5
		N	20	20	20	20
A-L	6	MEAN	277.7	290.9	305.6	305.6
		S.D.	27.8	47.0	34.7	37.7
		N	20	20	20	20
A-L	7	MEAN	304.5	318.5	337.5	334.8
		S.D.	31.0	53.4	40.0	42.3
		N	20	20	20	20
					*	*
AL	8	MEAN	321.4	333.6	355.6	355.7
		S.D.	33.3	54.2	43.7	46.7
		N	20	19	20	20
					*	*
AL	9	MEAN	337.9	354.4	377.8	381.1
		S.D.	39.4	54.0	48.8	52.4
		N	20	19	20	20
					*	*
AL+	10	MEAN	352.1	376.7	398.7	404.9
		S.D.	49.7	60.1	53.5	56.0
		N	20	19	20	20
					*	*
AL+	11	MEAN	364.3	388.5	410.9	417.6
		S.D.	48.9	61.6	57.7	57.5
		N	20	19	20	20

APPENDIX E (cont.)

A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

BODY WEIGHT CHANGE FROM WEEK 0
MALES
DOSE LEVEL: MG/KG/DAY

STAT SYMBOL:	WEEK		0.0000	30.0000	90.0000	270.0000
					*	*
AL	12	MEAN	380.8	402.4	427.5	431.6
		S.D.	45.6	65.1	62.0	61.4
		N	20	19	20	20
					*	*
AL	13	MEAN	399.6	422.8	448.1	448.8
		S.D.	47.4	68.5	65.3	64.8
		N	20	19	20	20

APPENDIX E (cont.)
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

BODY WEIGHT CHANGE FROM WEEK 0
FEMALES
DOSE LEVEL: MG/KG/DAY

STAT SYMBOL:	WEEK		0.0000	30.0000	90.0000	270.0000
A-L-	1	MEAN	26.8	26.4	31.0	28.1
		S.D.	6.4	6.5	5.7	6.9
		N	20	20	20	20
A-L-	2	MEAN	50.6	49.7	55.1	51.2
		S.D.	12.4	9.8	9.5	11.8
		N	20	20	20	19
A-L-	3	MEAN	71.5	73.6	77.0	73.4
		S.D.	15.5	12.8	14.1	20.0
		N	20	20	20	19
A-L-	4	MEAN	88.0	91.1	93.5	89.2
		S.D.	17.7	13.3	18.2	18.2
		N	20	20	20	19
A-L-	5	MEAN	102.1	102.8	103.1	96.3
		S.D.	20.4	16.7	15.4	19.0
		N	20	20	20	19
A-L-	6	MEAN	114.4	115.8	116.2	109.5
		S.D.	21.9	20.5	18.7	19.3
		N	20	20	20	19
A-L-	7	MEAN	121.4	127.0	125.8	115.8
		S.D.	20.6	23.0	19.0	19.8
		N	20	20	20	19
A-L-	8	MEAN	125.4	131.2	127.5	121.7
		S.D.	21.8	24.1	17.2	20.0
		N	20	20	20	19
A-L-	9	MEAN	132.6	139.2	136.9	128.9
		S.D.	22.4	24.1	18.5	21.4
		N	20	20	20	19
A-L-	10	MEAN	139.7	147.1	143.5	134.7
		S.D.	23.3	25.5	20.4	21.8
		N	20	20	20	19
A-L-	11	MEAN	145.0	152.1	144.3	138.2
		S.D.	21.8	27.0	19.0	22.1
		N	20	20	20	19

APPENDIX E (cont.)
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

BODY WEIGHT CHANGE FROM WEEK 0
FEMALES
DOSE LEVEL: MG/KG/DAY

STAT SYMBOL:	WEEK		0.0000	30.0000	90.0000	270.0000
A-L-	12	MEAN	147.8	157.4	147.3	141.4
		S.D.	25.0	27.7	16.9	22.3
		N	20	20	20	19
A-L-	13	MEAN	155.0	163.9	154.3	146.7
		S.D.	26.3	27.6	17.9	22.3
		N	20	20	20	19

APPENDIX E (cont.)
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

% DIFFERENCE FROM MEAN CONTROL BODY WEIGHT
MALES
DOSE LEVEL: MG/KG/DAY

WEEK		0.0000	30.0000	90.0000	270.0000
-1	% DIFF	0.0	-0.1	-0.7	-0.6
	N	20	20	20	20
0	% DIFF	0.0	0.3	0.0	0.0
	N	20	20	20	20
1	% DIFF	0.0	1.6	2.4	3.5
	N	20	20	20	20
2	% DIFF	0.0	2.7	3.6	4.8
	N	20	20	20	20
3	% DIFF	0.0	3.2	4.3	5.2
	N	20	20	20	20
4	% DIFF	0.0	3.1	5.1	5.7
	N	20	20	20	20
5	% DIFF	0.0	2.3	5.0	4.5
	N	20	20	20	20
6	% DIFF	0.0	2.8	5.7	5.7
	N	20	20	20	20
7	% DIFF	0.0	2.8	6.4	5.8
	N	20	20	20	20
8	% DIFF	0.0	2.3	6.4	6.4
	N	20	19	20	20
9	% DIFF	0.0	3.0	7.2	7.8
	N	20	19	20	20
10	% DIFF	0.0	4.4	8.2	9.3
	N	20	19	20	20
11	% DIFF	0.0	4.2	8.1	9.2
	N	20	19	20	20
12	% DIFF	0.0	3.7	7.9	8.5
	N	20	19	20	20
13	% DIFF	0.0	3.8	7.9	8.0
	N	20	19	20	20

APPENDIX E (cont.)
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

% DIFFERENCE FROM MEAN CONTROL BODY WEIGHT
FEMALES
DOSE LEVEL: MG/KG/DAY

WEEK		0.0000	30.0000	90.0000	270.0000
-1	% DIFF	0.0	-2.9	-1.5	-2.7
	N	20	20	20	20
0	% DIFF	0.0	-0.4	-0.4	-0.5
	N	20	20	20	20
1	% DIFF	0.0	-0.6	2.0	0.3
	N	20	20	20	20
2	% DIFF	0.0	-0.7	1.9	0.0
	N	20	20	20	19
3	% DIFF	0.0	0.7	2.2	0.6
	N	20	20	20	19
4	% DIFF	0.0	1.0	2.1	0.3
	N	20	20	20	19
5	% DIFF	0.0	0.0	0.1	-2.5
	N	20	20	20	19
6	% DIFF	0.0	0.3	0.5	-2.1
	N	20	20	20	19
7	% DIFF	0.0	1.8	1.4	-2.3
	N	20	20	20	19
8	% DIFF	0.0	1.9	0.5	-1.6
	N	20	20	20	19
9	% DIFF	0.0	2.1	1.3	-1.5
	N	20	20	20	19
10	% DIFF	0.0	2.3	1.1	-1.9
	N	20	20	20	19
11	% DIFF	0.0	2.2	-0.4	-2.5
	N	20	20	20	19
12	% DIFF	0.0	3.0	-0.4	-2.4
	N	20	20	20	19
13	% DIFF	0.0	2.7	-0.4	-2.9
	N	20	20	20	19

APPENDIX E (cont.)
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

FOOD CONSUMPTION G/KG/DAY
MALES
DOSE LEVEL: MG/KG/DAY

STAT SYMBOL:	WEEK		0.0000	30.0000	90.0000	270.0000
A-L-	0	MEAN	138.9	141.0	141.8	141.7
		S.D.	6.4	5.2	5.3	4.8
		N	20	20	20	20
A+L+Q	1	MEAN	104.8	106.3	111.1 **	111.5 **
		S.D.	5.7	5.5	5.7	3.8
		N	19	18	19	20
AL	2	MEAN	89.7	91.1	93.3 *	93.5 *
		S.D.	4.4	5.5	3.9	3.1
		N	20	19	19	19
A-L-	3	MEAN	75.9	77.6	79.2	78.3
		S.D.	4.3	5.0	3.8	3.0
		N	20	18	19	19
AL+	4	MEAN	65.5	67.1	68.0	69.3 *
		S.D.	4.8	3.9	3.2	3.2
		N	18	19	17	20
K+J+	5	MEAN	57.2	60.3	62.7 **	61.9 *
		S.D.	5.9	4.6	3.2	2.6
		N	19	18	19	19
A+L+Q	6	MEAN	54.9	57.1	58.9 **	58.7 **
		S.D.	3.9	4.0	3.0	2.2
		N	20	19	20	19
A+L+	7	MEAN	49.6	51.2	52.0	54.2 **
		S.D.	3.6	3.8	3.3	4.9
		N	20	19	20	20
AL+	8	MEAN	48.0	49.6	49.7	52.4 *
		S.D.	4.0	6.1	2.8	4.1
		N	20	17	19	19
KJ+	9	MEAN	45.2	46.6	47.8	50.1 *
		S.D.	6.0	7.5	2.4	3.6
		N	20	17	18	20
A+L+	10	MEAN	42.8	44.9	44.9	47.0 **
		S.D.	4.0	3.3	2.3	3.9
		N	18	18	19	19

APPENDIX E (cont.)
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

FOOD CONSUMPTION G/KG/DAY
MALES
DOSE LEVEL: MG/KG/DAY

STAT SYMBOL:	WEEK		0.0000	30.0000	90.0000	270.0000
K-J	11	MEAN	41.4	43.4	43.9	44.6
		S.D.	10.0	4.8	2.7	2.8
		N	20	17	19	19
A-L-	12	MEAN	42.2	42.1	41.3	43.5
		S.D.	4.1	4.3	5.4	3.3
		N	20	18	20	19
A-L-	13	MEAN	40.8	41.2	40.7	41.9
		S.D.	3.8	3.2	3.2	2.9
		N	20	18	20	19

APPENDIX E (cont.)

A SUBCHRONIC (3-MONTH) TOXICITY STUDY OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

FOOD CONSUMPTION G/KG/DAY
FEMALES
DOSE LEVEL: MG/KG/DAY

STAT SYMBOL:	WEEK		0.0000	30.0000	90.0000	270.0000
A-L-	0	MEAN	143.4	144.8	144.4	144.3
		S.D.	8.0	7.2	8.7	9.6
		N	20	20	20	20
A-L-	1	MEAN	102.9	105.0	108.1	107.9
		S.D.	6.1	8.6	5.9	7.0
		N	18	19	15	18
A-L-	2	MEAN	93.9	96.2	94.0	94.2
		S.D.	8.0	7.9	7.0	6.0
		N	20	16	14	17
A-L-	3	MEAN	79.1	82.2	77.8	82.3
		S.D.	4.9	5.1	7.0	7.2
		N	17	18	13	15
A-L-	4	MEAN	75.2	76.8	74.9	74.8
		S.D.	3.0	5.1	6.8	6.4
		N	18	19	14	16
					*	*
A+L+	5	MEAN	73.3	73.2	68.6	68.1
		S.D.	4.1	3.6	6.7	6.8
		N	20	19	17	16
A-L-	6	MEAN	68.2	69.9	67.2	69.2
		S.D.	5.2	3.8	7.1	4.7
		N	20	20	18	17
A-L-	7	MEAN	60.7	61.3	58.9	60.9
		S.D.	3.7	4.3	5.9	4.6
		N	18	19	19	18
A-L-	8	MEAN	60.7	64.4	61.7	64.7
		S.D.	5.6	3.9	7.0	5.3
		N	19	20	19	18
A-L-	9	MEAN	59.2	62.0	61.1	62.0
		S.D.	4.6	5.0	6.0	5.1
		N	18	18	19	19
K-J-	10	MEAN	57.8	58.8	57.3	57.7
		S.D.	3.3	7.3	7.7	4.6
		N	20	20	17	19

APPENDIX E (cont.)
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

FOOD CONSUMPTION G/KG/DAY
FEMALES
DOSE LEVEL: MG/KG/DAY

STAT SYMBOL:	WEEK		0.0000	30.0000	90.0000	270.0000
A-L-	11	MEAN	56.2	56.3	54.0	56.1
		S.D.	5.5	4.7	6.6	7.1
		N	20	20	19	19
K-J-	12	MEAN	54.8	56.8	54.8	56.5
		S.D.	2.6	4.6	6.9	6.3
		N	20	20	20	19
K-J-	13	MEAN	51.9	52.9	53.6	54.3
		S.D.	2.6	4.1	8.2	4.8
		N	20	20	19	19

APPENDIX E (cont.)

A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: -1

DOSE LEVEL = 0.0000 MG/KG/DAY

MALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE
	G	G	G/INT	G/KG/DAY	G/INT
1001	134				
1002	144				
1003	145				
1004	151				
1005	154				
1006	136				
1007	137				
1008	137				
1009	153				
1010	132				
1011	130				
1012	137				
1013	135				
1014	136				
1015	138				
1016	136				
1017	151				
1018	138				
1019	138				
1020	152				

NO. OF ANIMALS 20

MEAN 140.7

STD. DEV. 7.6

APPENDIX E (cont.)

A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: -1

DOSE LEVEL = 30.0000 MG/KG/DAY

MALES

ANIMAL NO.	WEIGHT G	WEIGHT CHANGE G	FOOD CONSUMPTION ACTUAL G/INT	ACTUAL G/KG/DAY	CHANGE G/INT
2001	149				
2002	148				
2003	144				
2004	129				
2005	158				
2006	146				
2007	132				
2008	134				
2009	144				
2010	153				
2011	139				
2012	141				
2013	129				
2014	135				
2015	137				
2016	139				
2017	135				
2018	141				
2019	133				
2020	143				

NO. OF ANIMALS 20

MEAN 140.5

STD. DEV. 7.8

APPENDIX E (cont.)

A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX®XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: -1

DOSE LEVEL = 90.0000 MG/KG/DAY

MALES

ANIMAL NO.	WEIGHT G	WEIGHT CHANGE G	FOOD CONSUMPTION ACTUAL G/INT	ACTUAL G/KG/DAY	CHANGE G/INT
3001	151				
3002	142				
3003	137				
3004	137				
3005	142				
3006	136				
3007	148				
3008	146				
3009	134				
3021	135				
3011	152				
3012	143				
3013	131				
3014	131				
3015	137				
3016	130				
3017	147				
3018	142				
3019	133				
3020	139				

NO. OF ANIMALS 20

MEAN 139.7

STD. DEV. 6.7

APPENDIX E (cont.)

A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: -1

DOSE LEVEL = 270.0000 MG/KG/DAY

MALES

ANIMAL NO.	WEIGHT G	WEIGHT CHANGE G	FOOD CONSUMPTION ACTUAL G/INT	ACTUAL G/KG/DAY	CHANGE G/INT
4001	145				
4002	149				
4003	129				
4004	134				
4005	138				
4006	141				
4007	134				
4008	137				
4009	138				
4010	150				
4011	147				
4012	134				
4013	133				
4014	135				
4015	148				
4016	140				
4017	141				
4018	150				
4019	143				
4020	132				
NO. OF ANIMALS	20				
MEAN	139.9				
STD. DEV.	6.5				

APPENDIX E (cont.)

A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: -1

DOSE LEVEL = 0.0000 MG/KG/DAY

FEMALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE
	G	G	G/INT	G/KG/DAY	G/INT
1501	102				
1502	111				
1503	95				
1504	114				
1505	109				
1506	99				
1507	100				
1508	105				
1509	112				
1510	116				
1511	99				
1512	109				
1513	101				
1514	104				
1515	95				
1516	105				
1517	112				
1518	110				
1519	102				
1520	120				

NO. OF ANIMALS 20

MEAN 106.0

STD. DEV. 7.0

APPENDIX E (cont.)
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: -1

DOSE LEVEL = 30.0000 MG/KG/DAY

FEMALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE
	G	G	G/INT	G/KG/DAY	G/INT
2501	95				
2502	101				
2503	96				
2504	104				
2505	95				
2506	114				
2507	110				
2508	109				
2509	97				
2510	105				
2511	107				
2512	112				
2513	101				
2514	103				
2515	100				
2516	100				
2517	99				
2518	94				
2519	107				
2520	108				

NO. OF ANIMALS 20

MEAN 102.9

STD. DEV. 6.0

APPENDIX E (cont.)

A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: -1

DOSE LEVEL = 90.0000 MG/KG/DAY

FEMALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE
	G	G	G/INT	G/KG/DAY	G/INT
3501	95				
3502	109				
3503	111				
3504	102				
3505	92				
3506	110				
3507	109				
3508	100				
3509	114				
3510	107				
3511	102				
3512	108				
3513	103				
3514	102				
3515	101				
3516	112				
3517	103				
3518	108				
3519	102				
3520	97				

NO. OF ANIMALS 20

MEAN 104.4

STD. DEV. 5.9

APPENDIX E (cont.)
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: -1

DOSE LEVEL = 270.0000 MG/KG/DAY

FEMALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE
	G	G	G/INT	G/KG/DAY	G/INT
4501	103				
4502	103				
4503	107				
4504	105				
4505	104				
4506	102				
4507	101				
4508	95				
4509	101				
4510	102				
4511	93				
4512	102				
4513	102				
4514	110				
4515	105				
4516	108				
4517	97				
4518	95				
4519	118				
4520	108				

NO. OF ANIMALS 20

MEAN 103.1

STD. DEV. 5.7

APPENDIX E (cont.)

A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 0

DOSE LEVEL = 0.0000 MG/KG/DAY

MALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE
	G	G	G/INT	G/KG/DAY	G/INT
1001	210	76	152	147.3	
1002	220	76	151	138.3	
1003	221	76	158	143.9	
1004	226	75	155	137.0	
1005	234	80	156	134.0	
1006	211	75	141	135.4	
1007	208	71	153	147.8	
1008	213	76	154	146.7	
1009	223	70	146	129.4	
1010	197	65	136	137.8	
1011	205	75	138	137.3	
1012	218	81	156	146.5	
1013	217	82	155	146.8	
1014	215	79	150	142.5	
1015	202	64	133	130.4	
1016	205	69	139	135.9	
1017	228	77	156	137.2	
1018	218	80	150	140.4	
1019	215	77	147	138.8	
1020	206	54	134	124.8	
NO. OF ANIMALS	20	20	20	20	
MEANS	214.6	73.9	148.0	138.9	
STD. DEV.	9.4	6.8	8.2	6.4	

APPENDIX E (cont.)
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 0

DOSE LEVEL = 30.0000 MG/KG/DAY

MALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE
	G	G	G/INT	G/KG/DAY	G/INT
2001	229	80	159	140.2	
2002	223	75	147	132.1	
2003	219	75	151	138.7	
2004	196	67	131	134.4	
2005	242	84	168	140.0	
2006	217	71	148	135.9	
2007	205	73	144	142.4	
2008	207	73	144	140.8	
2009	228	84	161	144.3	
2010	221	68	147	131.0	
2011	209	70	148	141.8	
2012	213	72	146	137.5	
2013	200	71	137	138.8	
2014	219	84	153	144.1	
2015	211	74	153	146.6	
2016	215	76	157	147.8	
2017	215	80	149	141.9	
2018	213	72	159	149.7	
2019	204	71	150	148.4	
2020	217	74	156	144.4	
NO. OF ANIMALS	20	20	20	20	
MEANS	215.2	74.7	150.4	141.0	
STD. DEV.	10.7	5.2	8.4	5.2	

APPENDIX E (cont.)

A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX®XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 0

DOSE LEVEL = 90.0000 MG/KG/DAY

MALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE
	G	G	G/INT	G/KG/DAY	G/INT
3001	235	84	167	144.2	
3002	215	73	145	135.4	
3003	216	79	154	145.4	
3004	218	81	160	150.2	
3005	216	74	144	134.1	
3006	208	72	151	146.3	
3007	227	79	154	136.9	
3008	220	74	154	140.3	
3009	213	79	152	146.0	
3021	193	58	136	138.2	
3011	225	73	151	133.5	
3012	219	76	152	140.0	
3013	198	67	138	139.8	
3014	206	75	141	139.5	
3015	213	76	152	144.8	
3016	202	72	139	139.6	
3017	230	83	168	148.5	
3018	222	80	166	152.0	
3019	210	77	142	138.0	
3020	208	69	150	144.1	
NO. OF ANIMALS	20	20	20	20	
MEANS	214.7	75.1	150.8	141.8	
STD. DEV.	10.6	6.0	9.4	5.3	

APPENDIX E (cont.)

A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 0

DOSE LEVEL = 270.0000 MG/KG/DAY

MALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE
	G	G	G/INT	G/KG/DAY	G/INT
4001	215	70	147	136.1	
4002	228	79	165	145.9	
4003	200	71	139	140.8	
4004	208	74	141	137.4	
4005	217	79	145	136.2	
4006	221	80	157	144.6	
4007	211	77	155	149.8	
4008	213	76	149	141.9	
4009	219	81	160	149.4	
4010	229	79	167	146.9	
4011	223	76	154	138.7	
4012	209	75	149	144.8	
4013	202	69	137	136.3	
4014	205	70	141	138.2	
4015	215	67	147	135.0	
4016	209	69	149	142.3	
4017	224	83	164	149.8	
4018	233	83	162	141.0	
4019	217	74	149	138.0	
4020	194	62	137	140.1	
NO. OF ANIMALS	20	20	20	20	
MEANS	214.6	74.7	150.7	141.7	
STD. DEV.	10.2	5.7	9.5	4.8	

APPENDIX E (cont.)

A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 0

DOSE LEVEL = 0.0000 MG/KG/DAY

FEMALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE
	G	G	G/INT	G/KG/DAY	G/INT
1501	143	41	109	148.3	
1502	144	33	105	137.3	
1503	136	41	95	137.1	
1504	152	38	119	149.1	
1505	160	51	111	137.5	
1506	145	46	106	144.8	
1507	142	42	104	143.3	
1508	154	49	117	150.6	
1509	162	50	126	153.3	
1510	158	42	117	142.3	
1511	154	55	110	144.9	
1512	153	44	117	148.9	
1513	139	38	103	143.1	
1514	149	45	101	133.1	
1515	144	49	109	152.0	
1516	136	31	92	127.2	
1517	158	46	108	133.3	
1518	168	58	133	159.5	
1519	139	37	106	146.6	
1520	156	36	113	136.5	
NO. OF ANIMALS	20	20	20	20	
MEANS	149.6	43.6	110.1	143.4	
STD. DEV.	9.2	7.1	9.7	8.0	

APPENDIX E (cont.)

A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 0

DOSE LEVEL = 30.0000 MG/KG/DAY

FEMALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE
	G	G	G/INT	G/KG/DAY	G/INT
2501	141	46	108	152.5	
2502	133	32	93	132.5	
2503	136	40	99	142.2	
2504	145	41	105	140.6	
2505	141	46	101	142.7	
2506	153	39	104	129.8	
2507	156	46	116	145.4	
2508	161	52	124	153.1	
2509	139	42	98	138.4	
2510	144	39	110	147.3	
2511	159	52	117	146.6	
2512	158	46	117	144.4	
2513	154	53	120	156.9	
2514	153	50	109	141.9	
2515	147	47	115	155.2	
2516	152	52	116	153.4	
2517	145	46	102	139.3	
2518	143	49	103	144.9	
2519	163	56	114	140.7	
2520	156	48	117	147.7	
NO. OF ANIMALS	20	20	20	20	
MEANS	149.0	46.1	109.4	144.8	
STD. DEV.	8.7	5.9	8.5	7.2	

APPENDIX E (cont.)
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX®XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 0

DOSE LEVEL = 90.0000 MG/KG/DAY

FEMALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE
	G	G	G/INT	G/KG/DAY	G/INT
3501	138	43	95	135.9	
3502	155	46	108	136.4	
3503	158	47	114	141.3	
3504	144	42	114	154.5	
3505	134	42	99	146.0	
3506	155	45	112	140.9	
3507	164	55	124	151.4	
3508	140	40	99	137.5	
3509	157	43	115	141.5	
3510	144	37	101	134.1	
3511	149	47	99	131.5	
3512	153	45	112	143.0	
3513	152	49	113	147.7	
3514	146	44	107	143.8	
3515	151	50	109	144.2	
3516	142	30	104	136.5	
3517	141	38	105	143.4	
3518	159	51	130	162.3	
3519	160	58	126	160.3	
3520	137	40	110	156.7	
NO. OF ANIMALS	20	20	20	20	
MEANS	149.0	44.6	109.8	144.4	
STD. DEV.	8.7	6.4	9.4	8.7	

APPENDIX E (cont.)
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX®XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 0

DOSE LEVEL = 270.0000 MG/KG/DAY

FEMALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE
	G	G	G/INT	G/KG/DAY	G/INT
4501	146	43	100	133.9	
4502	157	54	120	153.8	
4503	154	47	124	158.4	
4504	162	57	127	158.6	
4505	151	47	103	134.6	
4506	143	41	99	134.7	
4507	134	33	97	137.6	
4508	141	46	108	152.5	
4509	144	43	104	141.5	
4510	158	56	110	141.0	
4511	138	45	108	155.8	
4512	155	53	120	155.6	
4513	146	44	109	146.5	
4514	153	43	103	130.5	
4515	142	37	96	129.6	
4516	152	44	110	141.0	
4517	136	39	102	145.9	
4518	142	47	109	153.3	
4519	162	44	114	135.7	
4520	159	51	116	144.8	
NO. OF ANIMALS	20	20	20	20	
MEANS	148.8	45.7	109.0	144.3	
STD. DEV.	8.7	6.2	8.9	9.6	

APPENDIX E (cont.)

A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 1

DOSE LEVEL = 0.0000 MG/KG/DAY

MALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE	WT. CHG. FROM WEEK 0
	G	G	G/INT	G/KG/DAY	G/INT	
1001	276	66	161	110.4	9	66
1002	280	60	158	105.3	7	60
1003	277	56	S	S	S	56
1004	284	58	154	100.7	-1	58
1005	299	65	161	100.7	5	65
1006	278	67	156	106.3	15	67
1007	260	52	157	111.8	4	52
1008	278	65	170	115.4	16	65
1009	281	58	146	96.6	0	58
1010	256	59	147	108.2	11	59
1011	257	52	137	98.8	-1	52
1012	272	54	155	105.4	-1	54
1013	290	73	171	112.4	16	73
1014	280	65	161	108.4	11	65
1015	262	60	148	106.3	15	60
1016	254	49	136	98.8	-3	49
1017	286	58	156	101.2	0	58
1018	275	57	158	106.8	8	57
1019	274	59	152	103.6	5	59
1020	246	40	128	94.4	-6	40
NO. OF ANIMALS	20	20	19	19	19	20
MEANS	273.3	58.7	153.3	104.8	5.8	58.7
STD. DEV.	13.4	7.3	11.0	5.7	7.0	7.3

S = SPILLAGE

APPENDIX E (cont.)

A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 1

DOSE LEVEL = 30.0000 MG/KG/DAY

MALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE	WT. CHG. FROM
	G	G	G/INT	G/KG/DAY	G/INT	WEEK 0
2001	288	59	158	101.9	-1	59
2002	281	58	145	95.9	-2	58
2003	285	66	159	105.2	8	66
2004	254	58	136	100.7	5	58
2005	313	71	185	111.1	17	71
2006	283	66	153	102.0	5	66
2007	277	72	166	114.8	22	72
2008	277	70	158	108.8	14	70
2009	296	68	166	105.6	5	68
2010	277	56	152	101.7	5	56
2011	274	65	157	108.4	9	65
2012	264	51	146	102.0	0	51
2013	257	57	140	102.1	3	57
2014	300	81	181	116.2	28	81
2015	273	62	S	S	S	62
2016	277	62	160	108.4	3	62
2017	282	67	156	104.6	7	67
2018	254	41	S	S	S	41
2019	265	61	154	109.5	4	61
2020	276	59	168	113.6	12	59
S = SPILLAGE						
NO. OF ANIMALS	20	20	18	18	18	20
MEANS	277.7	62.5	157.8	106.3	8.0	62.5
STD. DEV.	14.9	8.5	12.6	5.5	8.0	8.5

APPENDIX E (cont.)

A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 1

DOSE LEVEL = 90.0000 MG/KG/DAY

MALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE	WT. CHG. FROM
	G	G	G/INT	G/KG/DAY	G/INT	WEEK 0
3001	313	78	179	108.9	12	78
3002	281	66	165	110.9	20	66
3003	279	63	161	108.4	7	63
3004	283	65	165	109.8	5	65
3005	282	66	160	107.1	16	66
3006	273	65	164	113.7	13	65
3007	301	74	172	108.6	18	74
3008	279	59	159	106.2	5	59
3009	282	69	170	114.5	18	69
3021	248	55	168	127.0	32	55
3011	285	60	151	98.7	0	60
3012	280	61	161	107.5	9	61
3013	244	46	144	108.6	6	46
3014	276	70	172	118.9	31	70
3015	284	71	170	114.0	18	71
3016	269	67	162	114.6	23	67
3017	299	69	S	S	S	69
3018	291	69	173	112.4	7	69
3019	277	67	162	110.9	20	67
3020	269	61	157	109.7	7	61
S = SPILLAGE						
NO. OF ANIMALS	20	20	19	19	19	20
MEANS	279.8	65.1	163.9	111.1	14.1	65.1
STD. DEV.	15.7	7.0	8.2	5.7	8.9	7.0

APPENDIX E (cont.)

A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 1

DOSE LEVEL = 270.0000 MG/KG/DAY

MALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE	WT. CHG. FROM
	G	G	G/INT	G/KG/DAY	G/INT	WEEK 0
4001	277	62	159	107.7	12	62
4002	302	74	175	110.1	10	74
4003	267	67	151	107.8	12	67
4004	273	65	159	110.2	18	65
4005	283	66	158	105.3	13	66
4006	291	70	169	110.0	12	70
4007	275	64	162	111.1	7	64
4008	278	65	164	111.3	15	65
4009	301	82	188	120.5	28	82
4010	303	74	186	116.5	19	74
4011	297	74	175	112.2	21	74
4012	261	52	157	111.3	8	52
4013	265	63	160	114.2	23	63
4014	274	69	166	115.5	25	69
4015	295	80	165	107.8	18	80
4016	281	72	165	112.2	16	72
4017	300	76	184	117.0	20	76
4018	304	71	173	107.4	11	71
4019	287	70	166	109.8	17	70
4020	243	49	146	111.4	9	49
NO. OF ANIMALS	20	20	20	20	20	20
MEANS	282.9	68.3	166.4	111.5	15.7	68.3
STD. DEV.	16.6	8.1	11.1	3.8	5.8	8.1

APPENDIX E (cont.)

A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 1

DOSE LEVEL = 0.0000 MG/KG/DAY

FEMALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE	WT. CHG. FROM WEEK 0
	G	G	G/INT	G/KG/DAY	G/INT	
1501	161	18	95	104.2	-14	18
1502	166	22	96	103.2	-9	22
1503	161	25	91	102.1	-4	25
1504	176	24	S	S	S	24
1505	180	20	98	96.1	-13	20
1506	182	37	109	111.1	3	37
1507	171	29	95	101.2	-9	29
1508	173	19	96	97.9	-21	19
1509	192	30	117	110.2	-9	30
1510	191	33	S	S	S	33
1511	180	26	103	102.8	-7	26
1512	180	27	112	112.1	-5	27
1513	167	28	91	99.1	-12	28
1514	167	18	90	94.9	-11	18
1515	167	23	95	101.8	-14	23
1516	161	25	86	96.5	-6	25
1517	184	26	98	95.5	-10	26
1518	211	43	132	116.1	-1	43
1519	170	31	97	104.6	-9	31
1520	188	32	106	102.7	-7	32
S = SPILLAGE						
NO. OF ANIMALS	20	20	18	18	18	20
MEANS	176.4	26.8	100.4	102.9	-8.8	26.8
STD. DEV.	12.7	6.4	11.3	6.1	5.4	6.4

APPENDIX E (cont.)
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 1

DOSE LEVEL = 30.0000 MG/KG/DAY

FEMALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE	WT. CHG. FROM WEEK 0
	G	G	G/INT	G/KG/DAY	G/INT	
2501	164	23	102	111.5	-6	23
2502	158	25	92	105.4	-1	25
2503	157	21	87	99.0	-12	21
2504	161	16	90	98.0	-15	16
2505	165	24	89	96.9	-12	24
2506	174	21	87	88.7	-17	21
2507	189	33	116	112.1	0	33
2508	196	35	S	S	S	35
2509	161	22	97	107.8	-1	22
2510	171	27	100	105.8	-10	27
2511	183	24	96	93.6	-21	24
2512	188	30	112	107.9	-5	30
2513	193	39	123	118.2	3	39
2514	183	30	111	110.1	2	30
2515	179	32	111	113.5	-4	32
2516	189	37	115	112.4	-1	37
2517	165	20	100	107.5	-2	20
2518	171	28	106	112.5	3	28
2519	179	16	90	87.7	-24	16
2520	180	24	107	106.2	-10	24
S = SPILLAGE						
NO. OF ANIMALS	20	20	19	19	19	20
MEANS	175.3	26.4	101.6	105.0	-7.0	26.4
STD. DEV.	12.3	6.5	11.0	8.6	8.1	6.5

APPENDIX E (cont.)

A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX®XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 1

DOSE LEVEL = 90.0000 MG/KG/DAY

FEMALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE	WT. CHG. FROM
	G	G	G/INT	G/KG/DAY	G/INT	WEEK 0
3501	160	22	94	105.1	-1	22
3502	179	24	S	S	S	24
3503	188	30	112	107.9	-2	30
3504	171	27	106	112.2	-8	27
3505	169	35	102	112.2	3	35
3506	191	36	106	102.1	-6	36
3507	191	27	102	95.8	-22	27
3508	171	31	103	110.4	4	31
3509	182	25	107	105.2	-8	25
3510	182	38	111	113.5	10	38
3511	178	29	100	101.9	1	29
3512	192	39	S	S	S	39
3513	179	27	109	109.8	-4	27
3514	182	36	S	S	S	36
3515	195	44	113	108.9	4	44
3516	169	27	S	S	S	27
3517	171	30	97	103.6	-8	30
3518	194	35	124	117.1	-6	35
3519	187	27	S	S	S	27
3520	167	30	106	116.2	-4	30
S = SPILLAGE						
NO. OF ANIMALS	20	20	15	15	15	20
MEANS	179.9	31.0	106.1	108.1	-3.1	31.0
STD. DEV.	10.2	5.7	7.3	5.9	7.5	5.7

APPENDIX E (cont.)

A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 1

DOSE LEVEL = 270.0000 MG/KG/DAY

FEMALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE	WT. CHG. FROM
	G	G	G/INT	G/KG/DAY	G/INT	WEEK 0
4501	163	17	95	102.5	-5	17
4502	190	33	123	118.2	3	33
4503	184	30	110	108.5	-14	30
4504	199	37	122	112.7	-5	37
4505	185	34	108	107.1	5	34
4506	170	27	95	101.2	-4	27
4507	150	16	94	110.3	-3	16
4508	170	29	105	112.5	-3	29
4509	170	26	100	106.2	-4	26
4510	187	29	104	100.5	-6	29
4511	173	35	S	S	S	35
4512	191	36	123	118.5	3	36
4513	165	19	101	108.3	-8	19
4514	169	16	87	90.1	-16	16
4515	174	32	102	107.6	6	32
4516	183	31	103	102.5	-7	31
4517	162	26	102	114.1	0	26
4518	180	38	111	114.9	2	38
4519	187	25	111	106.0	-3	25
4520	185	26	S	S	S	26
S = SPILLAGE						
NO. OF ANIMALS	20	20	18	18	18	20
MEANS	176.9	28.1	105.3	107.9	-3.3	28.1
STD. DEV.	12.1	6.9	10.1	7.0	5.9	6.9

APPENDIX E (cont.)
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX®XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 2

DOSE LEVEL = 0.0000 MG/KG/DAY

MALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE	WT. CHG. FROM
	G	G	G/INT	G/KG/DAY	G/INT	WEEK 0
1001	333	57	169	92.5	8	123
1002	334	54	159	86.3	1	114
1003	341	64	168	90.6	T	120
1004	351	67	169	88.7	15	125
1005	355	56	158	80.5	-3	121
1006	336	58	156	84.7	0	125
1007	316	56	166	96.1	9	108
1008	337	59	172	93.2	2	124
1009	343	62	163	87.1	17	120
1010	307	51	152	90.0	5	110
1011	309	52	143	84.2	6	104
1012	328	56	163	90.6	8	110
1013	358	68	184	94.7	13	141
1014	339	59	163	87.8	2	124
1015	329	67	174	98.1	26	127
1016	318	64	159	92.7	23	113
1017	344	58	162	85.7	6	116
1018	336	61	171	93.3	13	118
1019	334	60	160	87.7	8	119
1020	289	43	144	89.7	16	83
T = TECHNICAL PROBLEM						
NO. OF ANIMALS	20	20	20	20	19	20
MEANS	331.9	58.6	162.8	89.7	9.2	117.3
STD. DEV.	17.0	6.1	9.8	4.4	7.8	11.5

APPENDIX E (cont.)
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 2

DOSE LEVEL = 30.0000 MG/KG/DAY

MALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE	WT. CHG. FROM
	G	G	G/INT	G/KG/DAY	G/INT	WEEK 0
2001	353	65	163	84.8	5	124
2002	347	66	163	86.5	18	124
2003	346	61	162	85.6	3	127
2004	310	56	137	81.0	1	114
2005	383	70	194	92.9	9	141
2006	350	67	169	89.0	16	133
2007	345	68	182	97.5	16	140
2008	352	75	178	94.3	20	145
2009	380	84	189	93.2	23	152
2010	317	40	144	80.8	-8	96
2011	339	65	171	93.0	14	130
2012	328	64	163	91.8	17	115
2013	310	53	156	91.7	16	110
2014	378	78	204	100.3	23	159
2015	329	56	S	S	S	118
2016	339	62	172	93.1	12	124
2017	346	64	167	88.6	11	131
2018	311	57	163	96.2	T	98
2019	321	56	162	92.2	8	117
2020	331	55	180	98.8	12	114

T = TECHNICAL PROBLEM

S = SPILLAGE

NO. OF ANIMALS	20	20	19	19	18	20
MEANS	340.8	63.1	169.4	91.1	12.0	125.6
STD. DEV.	22.1	9.7	16.2	5.5	8.0	16.4

APPENDIX E (cont.)

A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 2

DOSE LEVEL = 90.0000 MG/KG/DAY

MALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE	WT. CHG. FROM
	G	G	G/INT	G/KG/DAY	G/INT	WEEK 0
3001	386	73	188	89.7	9	151
3002	341	60	162	86.8	-3	126
3003	347	68	176	93.7	15	131
3004	344	61	174	92.5	9	126
3005	357	75	169	88.2	9	141
3006	337	64	172	94.0	8	129
3007	370	69	190	94.4	18	143
3008	340	61	165	88.9	6	120
3009	356	74	189	98.7	19	143
3021	309	61	159	95.2	-9	116
3011	345	60	164	86.8	13	120
3012	340	60	168	90.3	7	121
3013	296	52	S	S	S	98
3014	346	70	183	98.1	11	140
3015	361	77	189	97.7	19	148
3016	326	57	171	95.8	9	124
3017	371	72	200	99.5	T	141
3018	352	61	182	94.3	9	130
3019	328	51	169	93.1	7	118
3020	324	55	169	95.0	12	116

T = TECHNICAL PROBLEM

S = SPILLAGE

NO. OF ANIMALS	20	20	19	19	18	20
MEANS	343.8	64.1	175.7	93.3	9.3	129.1
STD. DEV.	21.1	7.7	11.4	3.9	7.0	13.3

APPENDIX E (cont.)

A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 2

DOSE LEVEL = 270.0000 MG/KG/DAY

MALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE	WT. CHG. FROM
	G	G	G/INT	G/KG/DAY	G/INT	WEEK 0
4001	335	58	172	93.7	13	120
4002	377	75	193	94.7	18	149
4003	325	58	160	90.1	9	125
4004	341	68	160	86.9	1	133
4005	352	69	173	90.8	15	135
4006	358	67	182	93.5	13	137
4007	342	67	176	95.1	14	131
4008	344	66	176	94.3	12	131
4009	375	74	S	S	S	156
4010	362	59	192	96.2	6	133
4011	367	70	186	93.4	11	144
4012	316	55	169	97.6	12	107
4013	324	59	166	93.9	6	122
4014	331	57	162	89.3	-4	126
4015	359	64	180	91.7	15	144
4016	345	64	180	95.8	15	136
4017	382	82	204	99.7	20	158
4018	377	73	184	90.1	11	144
4019	351	64	180	94.0	14	134
4020	292	49	154	96.0	8	98
S = SPILLAGE						
NO. OF ANIMALS	20	20	19	19	19	20
MEANS	347.8	64.9	176.3	93.5	11.0	133.2
STD. DEV.	23.2	7.9	12.8	3.1	5.7	14.7

APPENDIX E (cont.)

A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 2

DOSE LEVEL = 0.0000 MG/KG/DAY

FEMALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE	WT. CHG. FROM
	G	G	G/INT	G/KG/DAY	G/INT	WEEK 0
1501	177	16	91	89.7	-4	34
1502	191	25	107	99.9	11	47
1503	177	16	86	84.8	-5	41
1504	224	48	134	111.7	T	72
1505	201	21	105	91.9	7	41
1506	208	26	117	100.0	8	63
1507	197	26	104	94.2	9	55
1508	192	19	100	91.3	4	38
1509	218	26	117	95.1	0	56
1510	224	33	130	104.4	T	66
1511	201	21	109	95.4	6	47
1512	198	18	112	98.8	0	45
1513	195	28	105	96.7	14	56
1514	179	12	83	80.0	-7	30
1515	185	18	90	85.2	-5	41
1516	182	21	97	94.3	11	46
1517	210	26	95	80.4	-3	52
1518	245	34	139	101.6	7	77
1519	185	15	93	87.3	-4	46
1520	214	26	116	96.2	10	58

T = TECHNICAL PROBLEM

NO. OF ANIMALS	20	20	20	20	18	20
MEANS	200.2	23.8	106.5	93.9	3.3	50.6
STD. DEV.	18.2	8.2	15.7	8.0	6.8	12.4

APPENDIX E (cont.)

A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 2

DOSE LEVEL = 30.0000 MG/KG/DAY

FEMALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE	WT. CHG. FROM
	G	G	G/INT	G/KG/DAY	G/INT	WEEK 0
2501	189	25	S	S	S	48
2502	175	17	88	88.1	-4	42
2503	170	13	86	87.7	-1	34
2504	186	25	98	94.1	8	41
2505	188	23	S	S	S	47
2506	197	23	91	81.8	4	44
2507	212	23	S	S	S	56
2508	218	22	S	S	S	57
2509	179	18	93	91.2	-4	40
2510	188	17	114	105.8	14	44
2511	208	25	105	89.5	9	49
2512	221	33	130	105.9	18	63
2513	222	29	137	110.0	14	68
2514	213	30	115	96.8	4	60
2515	201	22	107	93.9	-4	54
2516	217	28	116	95.2	1	65
2517	181	16	103	99.2	3	36
2518	193	22	113	103.5	7	50
2519	203	24	106	92.5	16	40
2520	212	32	122	103.7	15	56
S = SPILLAGE						
NO. OF ANIMALS	20	20	16	16	16	20
MEANS	198.7	23.4	107.8	96.2	6.3	49.7
STD. DEV.	16.3	5.4	14.7	7.9	7.6	9.8

APPENDIX E (cont.)

A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 2

DOSE LEVEL = 90.0000 MG/KG/DAY

FEMALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE	WT. CHG. FROM WEEK 0
	G	G	G/INT	G/KG/DAY	G/INT	
3501	186	26	92	88.6	-2	48
3502	201	22	96	84.2	T	46
3503	214	26	113	93.7	1	56
3504	189	18	S	S	S	45
3505	189	20	112	104.3	10	55
3506	221	30	118	95.5	12	66
3507	238	47	131	101.8	29	74
3508	192	21	101	92.7	-2	52
3509	203	21	98	84.8	-9	46
3510	202	20	S	S	S	58
3511	195	17	100	89.4	0	46
3512	220	28	S	S	S	67
3513	210	31	110	94.3	1	58
3514	221	39	S	S	S	75
3515	210	15	104	85.6	-9	59
3516	184	15	S	S	S	42
3517	191	20	102	93.9	5	50
3518	212	18	126	103.4	2	53
3519	217	30	S	S	S	57
3520	185	18	109	103.2	3	48
NO. OF ANIMALS	20	20	14	14	13	20
MEANS	204.0	24.1	108.0	94.0	3.2	55.1
STD. DEV.	15.1	8.2	11.3	7.0	9.9	9.5

T = TECHNICAL PROBLEM

S = SPILLAGE

APPENDIX E (cont.)

A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 2

DOSE LEVEL = 270.0000 MG/KG/DAY

FEMALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE	WT. CHG. FROM WEEK 0
	G	G	G/INT	G/KG/DAY	G/INT	
4501	181	18	86	83.3	-9	35
4502	211	21	113	93.9	-10	54
4503	202	18	S	S	S	48
4504	221	22	122	96.8	0	59
4505	212	27	114	95.7	6	61
4506	188	18	95	88.5	0	45
4507	162	12	85	90.8	-9	28
4508	210	40	123	107.9	18	69
4509	ANIMAL EXPIRED					
4510	207	20	105	88.8	1	49
4511	193	20	106	96.5	T	55
4512	218	27	117	95.4	-6	63
4513	186	21	103	97.8	2	40
4514	191	22	S	S	S	38
4515	195	21	98	88.5	-4	53
4516	211	28	117	99.0	14	59
4517	186	24	103	98.7	1	50
4518	216	36	119	100.2	8	74
4519	215	28	112	92.9	1	53
4520	198	13	100	87.0	T	39
NO. OF ANIMALS	19	19	17	17	15	19
MEANS	200.2	22.9	106.9	94.2	0.9	51.2
STD. DEV.	15.4	6.9	11.6	6.0	8.1	11.8

T = TECHNICAL PROBLEM

S = SPILLAGE

APPENDIX E (cont.)
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 3

DOSE LEVEL = 0.0000 MG/KG/DAY

MALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE	WT. CHG. FROM
	G	G	G/INT	G/KG/DAY	G/INT	WEEK 0
1001	395	62	169	77.4	0	185
1002	389	55	156	71.9	-3	169
1003	389	48	164	74.9	-4	168
1004	413	62	168	73.3	-1	187
1005	407	52	159	69.6	1	173
1006	398	62	150	68.1	-6	187
1007	360	44	164	80.9	-2	152
1008	404	67	176	79.2	4	191
1009	391	48	159	72.2	-4	168
1010	374	67	168	82.2	16	177
1011	357	48	140	70.1	-3	152
1012	384	56	167	78.2	4	166
1013	428	70	185	78.5	1	211
1014	399	60	173	78.1	10	184
1015	385	56	178	83.1	4	183
1016	374	56	163	78.5	4	169
1017	387	43	160	73.0	-2	159
1018	403	67	177	79.8	6	185
1019	391	57	165	75.9	5	176
1020	331	42	136	73.1	-8	125
NO. OF ANIMALS	20	20	20	20	20	20
MEANS	388.0	56.1	163.9	75.9	1.1	173.4
STD. DEV.	21.5	8.6	12.1	4.3	5.7	18.1

APPENDIX E (cont.)
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 3

DOSE LEVEL = 30.0000 MG/KG/DAY

MALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE	WT. CHG. FROM WEEK 0
	G	G	G/INT	G/KG/DAY	G/INT	
2001	408	55	168	73.6	5	179
2002	410	63	162	71.3	-1	187
2003	404	58	162	72.0	0	185
2004	364	54	145	71.7	8	168
2005	447	64	199	79.9	5	205
2006	402	52	160	70.9	-9	185
2007	410	65	180	79.5	-2	205
2008	424	72	181	77.7	3	217
2009	463	83	215	85.0	26	235
2010	362	45	146	71.7	2	141
2011	402	63	170	76.5	-1	193
2012	386	58	166	77.5	3	173
2013	363	53	167	82.7	11	163
2014	455	77	215	86.0	11	236
2015	386	57	S	S	S	175
2016	398	59	178	80.5	6	183
2017	413	67	174	76.4	7	198
2018	359	48	170	84.6	7	146
2019	374	53	166	79.6	4	170
2020	378	47	S	S	S	161
S = SPILLAGE						
NO. OF ANIMALS	20	20	18	18	18	20
MEANS	400.4	59.7	173.6	77.6	4.7	185.3
STD. DEV.	30.4	9.9	19.5	5.0	7.2	25.6

APPENDIX E (cont.)
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 3

DOSE LEVEL = 90.0000 MG/KG/DAY

MALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE	WT. CHG. FROM
	G	G	G/INT	G/KG/DAY	G/INT	WEEK 0
3001	445	59	183	73.4	-5	210
3002	404	63	178	79.6	16	189
3003	406	59	170	75.3	-6	190
3004	405	61	172	76.5	-2	187
3005	429	72	189	80.2	20	213
3006	391	54	181	82.9	9	183
3007	438	68	184	75.9	-6	211
3008	406	66	177	79.1	12	186
3009	421	65	190	81.5	1	208
3021	372	63	174	85.2	15	179
3011	402	57	165	73.6	1	177
3012	396	56	167	75.6	-1	177
3013	342	46	S	S	S	144
3014	407	61	178	78.8	-5	201
3015	434	73	198	83.0	9	221
3016	392	66	187	86.8	16	190
3017	434	63	195	80.7	-5	204
3018	406	54	178	78.3	-4	184
3019	385	57	163	76.2	-6	175
3020	378	54	173	82.1	4	170

S = SPILLAGE

NO. OF ANIMALS	20	20	19	19	19	20
MEANS	404.7	60.9	179.1	79.2	3.3	190.0
STD. DEV.	25.0	6.6	9.8	3.8	9.0	18.2

APPENDIX E (cont.)

A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 3

DOSE LEVEL = 270.0000 MG/KG/DAY

MALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE	WT. CHG. FROM
	G	G	G/INT	G/KG/DAY	G/INT	WEEK 0
4001	395	60	168	76.7	-4	180
4002	449	72	201	81.1	8	221
4003	382	57	157	74.0	-3	182
4004	406	65	170	75.9	10	198
4005	409	57	163	71.4	-10	192
4006	426	68	182	77.4	0	205
4007	398	56	175	78.8	-1	187
4008	401	57	171	76.5	-5	188
4009	432	57	191	78.9	T	213
4010	427	65	195	82.4	3	198
4011	439	72	190	78.6	4	216
4012	357	41	167	82.7	-2	148
4013	382	58	172	81.2	6	180
4014	392	61	164	75.6	2	187
4015	428	69	187	79.2	7	213
4016	406	61	181	80.3	1	197
4017	443	61	202	81.6	-2	219
4018	438	61	184	75.3	0	205
4019	416	65	184	80.0	4	199
4020	333	41	S	S	S	139
NO. OF ANIMALS	20	20	19	19	18	20
MEANS	408.0	60.2	179.2	78.3	1.0	193.4
STD. DEV.	29.6	8.2	13.1	3.0	5.1	21.4

T = TECHNICAL PROBLEM

S = SPILLAGE

APPENDIX E (cont.)

A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 3

DOSE LEVEL = 0.0000 MG/KG/DAY

FEMALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE	WT. CHG. FROM WEEK 0
	G	G	G/INT	G/KG/DAY	G/INT	
1501	180	3	82	76.6	-9	37
1502	208	17	90	75.2	-17	64
1503	187	10	77	70.5	-9	51
1504	228	4	S	S	S	76
1505	235	34	107	81.8	2	75
1506	236	28	107	80.3	-10	91
1507	233	36	109	84.5	5	91
1508	205	13	95	79.8	-5	51
1509	228	10	92	68.8	-25	66
1510	247	23	117	82.8	-13	89
1511	220	19	S	S	S	66
1512	221	23	S	S	S	68
1513	219	24	103	82.9	-2	80
1514	202	23	88	77.0	5	53
1515	219	34	96	79.2	6	75
1516	206	24	89	76.5	-8	70
1517	233	23	101	76.0	6	75
1518	268	23	134	87.1	-5	100
1519	218	33	101	83.5	8	79
1520	228	14	110	83.0	-6	72
S = SPILLAGE						
NO. OF ANIMALS	20	20	17	17	17	20
MEANS	221.1	20.9	99.9	79.1	-4.5	71.5
STD. DEV.	20.0	9.7	13.8	4.9	9.2	15.5

APPENDIX E (cont.)

A SUBCHRONIC (3-MONTH) TOXICITY STUDY.

OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 3

DOSE LEVEL = 30.0000 MG/KG/DAY

FEMALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE	WT. CHG. FROM WEEK 0
	G	G	G/INT	G/KG/DAY	G/INT	
2501	212	23	100	83.1	T	71
2502	189	14	79	72.3	-9	56
2503	191	21	S	S	S	55
2504	206	20	92	78.2	-6	61
2505	218	30	94	77.2	T	77
2506	224	27	101	80.0	10	71
2507	230	18	102	76.9	T	74
2508	230	12	S	S	S	69
2509	191	12	85	76.6	-8	52
2510	222	34	109	88.6	-5	78
2511	222	14	100	77.5	-5	63
2512	251	30	122	86.2	-8	93
2513	248	26	116	82.3	-21	94
2514	225	12	103	78.4	-12	72
2515	228	27	111	86.2	4	81
2516	248	31	123	88.2	7	96
2517	209	28	102	87.2	-1	64
2518	221	28	105	84.5	-8	78
2519	246	43	120	89.1	14	83
2520	240	28	117	86.3	-5	84

T = TECHNICAL PROBLEM

S = SPILLAGE

NO. OF ANIMALS	20	20	18	18	15	20
MEANS	222.6	23.9	104.5	82.2	-3.5	73.6
STD. DEV.	18.9	8.4	12.4	5.1	9.0	12.8

APPENDIX E (cont.)

A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 3

DOSE LEVEL = 90.0000 MG/KG/DAY

FEMALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE	WT. CHG. FROM
	G	G	G/INT	G/KG/DAY	G/INT	WEEK 0
3501	203	17	92	78.8	0	65
3502	209	8	81	65.9	-15	54
3503	227	13	99	74.8	-14	69
3504	209	20	S	S	S	65
3505	207	18	92	77.4	-20	73
3506	247	26	111	79.1	-7	92
3507	264	26	103	68.4	-28	100
3508	218	26	S	S	S	78
3509	225	22	S	S	S	68
3510	217	15	S	S	S	73
3511	225	30	94	74.6	-6	76
3512	243	23	S	S	S	90
3513	233	23	103	77.5	-7	81
3514	245	24	125	89.4	T	99
3515	240	30	101	74.8	-3	89
3516	202	18	92	79.4	T	60
3517	205	14	94	79.1	-8	64
3518	232	20	122	91.6	-4	73
3519	263	46	S	S	S	103
3520	205	20	S	S	S	68
NO. OF ANIMALS	20	20	13	13	11	20
MEANS	226.0	22.0	100.7	77.8	-10.2	77.0
STD. DEV.	19.5	8.0	12.5	7.0	8.3	14.1

T = TECHNICAL PROBLEM

S = SPILLAGE

APPENDIX E (cont.)

A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX®XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 3

DOSE LEVEL = 270.0000 MG/KG/DAY

FEMALES

ANIMAL NO.	WEIGHT G	WEIGHT CHANGE G	FOOD CONSUMPTION ACTUAL G/INT	G/KG/DAY	CHANGE G/INT	WT. CHG. FROM WEEK 0
4501	185	4	79	71.9	-7	39
4502	246	35	S	S	S	89
4503	234	32	S	S	S	80
4504	250	29	122	86.3	0	88
4505	237	25	103	76.5	-11	86
4506	196	8	S	S	S	53
4507	184	22	93	89.6	8	50
4508	219	9	107	83.1	-16	78
4510	231	24	99	75.3	-6	73
4511	210	17	95	78.6	-11	72
4512	251	33	118	83.9	1	96
4513	200	14	106	91.5	3	54
4514	212	21	99	81.9	T	59
4515	216	21	96	77.9	-2	74
4516	240	29	117	86.5	0	88
4517	197	11	103	89.6	0	61
4518	267	51	134	92.5	15	125
4519	233	18	93	69.2	-19	71
4520	218	20	S	S	S	59
NO. OF ANIMALS	19	19	15	15	14	19
MEANS	222.4	22.3	104.3	82.3	-3.2	73.4
STD. DEV.	23.6	11.2	13.8	7.2	9.2	20.0

T = TECHNICAL PROBLEM

S = SPILLAGE

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APPENDIX E (cont.)

A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 4

DOSE LEVEL = 0.0000 MG/KG/DAY

MALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE	WT. CHG. FROM WEEK 0
	G	G	G/INT	G/KG/DAY	G/INT	
1001	441	46	172	68.6	3	231
1002	416	27	S	S	S	196
1003	426	37	158	64.6	-6	205
1004	454	41	154	59.2	-14	228
1005	440	33	151	59.4	-8	206
1006	428	30	141	56.9	-9	217
1007	388	28	161	71.7	-3	180
1008	437	33	158	62.6	-18	224
1009	429	38	154	62.6	-5	206
1010	406	32	172	73.5	4	209
1011	391	34	137	61.1	-3	186
1012	427	43	167	68.6	0	209
1013	474	46	180	66.5	-5	257
1014	425	26	S	S	S	210
1015	435	50	180	73.2	2	233
1016	412	38	162	68.7	-1	207
1017	428	41	155	63.4	-5	200
1018	444	41	174	68.5	-3	226
1019	437	46	162	65.2	-3	222
1020	358	27	135	65.3	-1	152
S = SPILLAGE						
NO. OF ANIMALS	20	20	18	18	18	20
MEANS	424.8	36.9	159.6	65.5	-4.2	210.2
STD. DEV.	25.3	7.3	13.4	4.8	5.6	22.2

APPENDIX E (cont.)

A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 4

DOSE LEVEL = 30.0000 MG/KG/DAY

MALES

ANIMAL NO.	WEIGHT G	WEIGHT CHANGE G	FOOD CONSUMPTION ACTUAL G/INT	ACTUAL G/KG/DAY	CHANGE G/INT	WT. CHG. FROM WEEK 0
2001	446	38	164	64.0	-4	217
2002	446	36	160	62.3	-2	223
2003	434	30	152	60.5	-10	215
2004	394	30	132	58.0	-13	198
2005	496	49	190	67.2	-9	254
2006	435	33	161	64.1	1	218
2007	447	37	179	69.6	-1	242
2008	474	50	184	68.3	3	267
2009	505	42	206	70.9	-9	277
2010	397	35	150	65.9	4	176
2011	450	48	176	68.9	6	241
2012	414	28	160	66.7	-6	201
2013	388	25	152	67.5	-15	188
2014	514	59	212	72.9	-3	295
2015	421	35	164	67.7	T	210
2016	433	35	182	73.0	4	218
2017	455	42	175	67.2	1	240
2018	384	25	154	69.1	-16	171
2019	416	42	167	70.5	1	212
2020	411	33	S	S	S	194
NO. OF ANIMALS	20	20	19	19	18	20
MEANS	438.0	37.6	169.5	67.1	-3.8	222.9
STD. DEV.	37.5	8.9	19.8	3.9	6.9	32.8

T = TECHNICAL PROBLEM

S = SPILLAGE

APPENDIX E (cont.)

A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 4

DOSE LEVEL = 90.0000 MG/KG/DAY

MALES

ANIMAL NO.	WEIGHT G	WEIGHT CHANGE G	FOOD CONSUMPTION ACTUAL G/INT	FOOD CONSUMPTION ACTUAL G/KG/DAY	CHANGE G/INT	WT. CHG. FROM WEEK 0
3001	491	46	179	63.7	-4	256
3002	449	45	177	69.2	-1	234
3003	449	43	162	63.2	-8	233
3004	449	44	175	68.3	3	231
3005	477	48	190	69.9	1	261
3006	427	36	173	70.5	-8	219
3007	495	57	187	66.8	3	268
3008	448	42	184	71.8	7	228
3009	470	49	190	71.1	0	257
3021	425	53	S	S	S	232
3011	450	48	170	66.5	5	225
3012	425	29	157	63.7	-10	206
3013	372	30	S	S	S	174
3014	448	41	173	67.4	-5	242
3015	485	51	197	71.5	-1	272
3016	432	40	179	72.4	-8	230
3017	478	44	S	S	S	248
3018	435	29	162	64.2	-16	213
3019	414	29	154	64.2	-9	204
3020	409	31	167	70.7	-6	201
S = SPILLAGE						
NO. OF ANIMALS	20	20	17	17	17	20
MEANS	446.4	41.8	175.1	68.0	-3.4	231.7
STD. DEV.	30.8	8.6	12.2	3.2	6.2	24.8

APPENDIX E (cont.)

A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 4

DOSE LEVEL = 270.0000 MG/KG/DAY

MALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE	WT. CHG. FROM WEEK 0
	G	G	G/INT	G/KG/DAY	G/INT	
4001	435	40	166	66.7	-2	220
4002	488	39	197	70.1	-4	260
4003	418	36	157	65.4	0	218
4004	447	41	171	66.8	1	239
4005	448	39	166	64.6	3	231
4006	482	56	188	69.0	6	261
4007	439	41	172	68.5	-3	228
4008	444	43	172	67.9	1	231
4009	480	48	195	71.3	4	261
4010	460	33	189	71.0	-6	231
4011	484	45	191	69.0	1	261
4012	392	35	160	71.2	-7	183
4013	416	34	166	69.3	-6	214
4014	432	40	172	69.6	8	227
4015	479	51	182	66.9	-5	264
4016	453	47	193	74.9	12	244
4017	490	47	194	69.3	-8	266
4018	471	33	178	65.3	-6	238
4019	462	46	186	70.6	2	245
4020	362	29	163	78.2	T	168
T = TECHNICAL PROBLEM						
NO. OF ANIMALS	20	20	20	20	19	20
MEANS	449.1	41.2	177.9	69.3	-0.5	234.5
STD. DEV.	33.8	6.8	12.9	3.2	5.5	26.1

APPENDIX E (cont.)

A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 4

DOSE LEVEL = 0.0000 MG/KG/DAY

FEMALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE	WT. CHG. FROM WEEK 0
	G	G	G/INT	G/KG/DAY	G/INT	
1501	199	19	87	76.5	5	56
1502	221	13	98	76.1	8	77
1503	207	20	84	71.1	7	71
1504	252	24	S	S	S	100
1505	251	16	106	72.7	-1	91
1506	251	15	115	78.7	8	106
1507	254	21	109	74.6	0	112
1508	224	19	102	79.3	7	70
1509	254	26	109	75.4	17	92
1510	253	6	112	74.7	-5	95
1511	241	21	107	77.4	T	87
1512	230	9	S	S	S	77
1513	224	5	99	74.5	-4	85
1514	217	15	92	73.2	4	68
1515	223	4	92	69.4	-4	79
1516	211	5	90	71.9	1	75
1517	260	27	110	74.4	9	102
1518	301	33	134	78.5	0	133
1519	234	16	101	74.5	0	95
1520	245	17	115	81.0	5	89
NO. OF ANIMALS	20	20	18	18	17	20
MEANS	237.6	16.6	103.4	75.2	3.4	88.0
STD. DEV.	23.4	7.9	12.2	3.0	5.8	17.7

T = TECHNICAL PROBLEM

S = SPILLAGE

APPENDIX E (cont.)
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 4

DOSE LEVEL = 30.0000 MG/KG/DAY

FEMALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE	WT. CHG. FROM WEEK 0
	G	G	G/INT	G/KG/DAY	G/INT	
2501	224	12	95	72.6	-5	83
2502	206	17	84	70.9	5	73
2503	205	14	90	75.8	T	69
2504	221	15	95	74.2	3	76
2505	245	27	104	74.9	10	104
2506	236	12	96	69.6	-5	83
2507	253	23	113	78.0	11	97
2508	255	25	124	85.2	T	94
2509	216	25	S	S	S	77
2510	233	11	104	76.2	-5	89
2511	245	23	98	70.0	-2	86
2512	260	9	119	77.6	-3	102
2513	277	29	133	84.4	17	123
2514	250	25	102	71.6	-1	97
2515	240	12	116	82.6	5	93
2516	266	18	118	76.5	-5	114
2517	231	22	109	82.6	7	86
2518	231	10	102	75.2	-3	88
2519	257	11	115	76.2	-5	94
2520	249	9	126	85.9	9	93

T = TECHNICAL PROBLEM

S = SPILLAGE

NO. OF ANIMALS	20	20	19	19	17	20
MEANS	240.0	17.5	107.5	76.8	1.9	91.1
STD. DEV.	19.4	6.8	13.2	5.1	7.0	13.3

APPENDIX E (cont.)

A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 4

DOSE LEVEL = 90.0000 MG/KG/DAY

FEMALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE	WT. CHG. FROM
	G	G	G/INT	G/KG/DAY	G/INT	WEEK 0
3501	224	21	98	76.5	6	86
3502	227	18	90	68.8	9	72
3503	252	25	107	74.5	8	94
3504	222	13	111	85.8	T	78
3505	229	22	102	78.0	10	95
3506	259	12	109	71.8	-2	104
3507	296	32	133	79.2	30	132
3508	232	14	S	S	S	92
3509	235	10	84	60.9	T	78
3510	225	8	S	S	S	81
3511	242	17	103	73.5	9	93
3512	251	8	S	S	S	98
3513	250	17	S	S	S	98
3514	258	13	S	S	S	112
3515	259	19	105	70.1	4	108
3516	209	7	83	67.3	-9	67
3517	222	17	98	76.5	4	81
3518	245	13	117	81.8	-5	86
3519	296	33	S	S	S	136
3520	216	11	106	83.9	T	79
NO. OF ANIMALS	20	20	14	14	11	20
MEANS	242.5	16.5	103.3	74.9	5.8	93.5
STD. DEV.	23.7	7.3	13.0	6.8	10.2	18.2

T = TECHNICAL PROBLEM

S = SPILLAGE

APPENDIX E (cont.)

A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 4

DOSE LEVEL = 270.0000 MG/KG/DAY

FEMALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE	WT. CHG. FROM
	G	G	G/INT	G/KG/DAY	G/INT	WEEK 0
4501	204	19	91	78.0	12	58
4502	263	17	S	S	S	106
4503	242	8	100	70.0	T	88
4504	273	23	133	84.8	11	111
4505	254	17	100	67.9	-3	103
4506	215	19	87	70.6	T	72
4507	196	12	95	83.3	2	62
4508	236	17	104	76.2	-3	95
4510	247	16	102	71.1	3	89
4511	231	21	101	76.3	6	93
4512	262	11	111	72.1	-7	107
4513	221	21	104	82.3	-2	75
4514	227	15	S	S	S	74
4515	233	17	96	71.3	0	91
4516	250	10	105	71.4	-12	98
4517	222	25	108	85.9	5	86
4518	274	7	109	67.2	-25	132
4519	243	10	97	67.9	4	81
4520	233	15	S	S	S	74

T = TECHNICAL PROBLEM

S = SPILLAGE

NO. OF ANIMALS	19	19	16	16	14	19
MEANS	238.2	15.8	102.7	74.8	-0.6	89.2
STD. DEV.	21.7	5.1	10.3	6.4	9.6	18.2

APPENDIX E (cont.)

A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 5

DOSE LEVEL = 0.0000 MG/KG/DAY

MALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE	WT. CHG. FROM
	G	G	G/INT	G/KG/DAY	G/INT	WEEK 0
1001	479	38	165	59.8	-7	269
1002	441	25	150	58.3	T	221
1003	464	38	159	59.6	1	243
1004	484	30	152	54.0	-2	258
1005	464	24	150	55.3	-1	230
1006	463	35	144	53.9	3	252
1007	413	25	157	65.3	-4	205
1008	466	29	140	51.7	-18	253
1009	474	45	165	60.9	11	251
1010	449	43	145	56.5	-27	252
1011	423	32	99	40.5	-38	218
1012	454	27	138	52.2	-29	236
1013	517	43	179	60.2	-1	300
1014	456	31	S	S	S	241
1015	477	42	183	66.9	3	275
1016	449	37	133	51.5	-29	244
1017	463	35	162	60.6	7	235
1018	479	35	165	59.6	-9	261
1019	466	29	158	58.3	-4	251
1020	384	26	138	62.0	3	178

T = TECHNICAL PROBLEM

S = SPILLAGE

NO. OF ANIMALS	20	20	19	19	18	20
MEANS	458.3	33.5	151.7	57.2	-7.8	243.7
STD. DEV.	28.2	6.6	18.6	5.9	14.2	26.1

APPENDIX E (cont.)

A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 5

DOSE LEVEL = 30.0000 MG/KG/DAY

MALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE	WT. CHG. FROM
	G	G	G/INT	G/KG/DAY	G/INT	WEEK 0
2001	470	24	159	57.9	-5	241
2002	472	26	151	54.8	-9	249
2003	465	31	152	56.4	0	246
2004	419	25	124	50.8	-8	223
2005	528	32	182	59.2	-8	286
2006	459	24	152	56.7	-9	242
2007	479	32	173	62.3	-6	274
2008	510	36	174	58.9	-10	303
2009	558	53	204	64.0	-2	330
2010	422	25	153	62.3	3	201
2011	486	36	S	S	S	277
2012	451	37	154	59.3	-6	238
2013	411	23	154	64.2	2	211
2014	561	47	211	65.4	-1	342
2015	447	26	166	63.7	2	236
2016	464	31	164	60.9	-18	249
2017	485	30	159	56.4	-16	270
2018	416	32	170	70.8	16	203
2019	439	23	159	62.0	-8	235
2020	438	27	S	S	S	221
S = SPILLAGE						
NO. OF ANIMALS	20	20	18	18	18	20
MEANS	469.0	31.0	164.5	60.3	-4.6	253.9
STD. DEV.	43.5	7.9	20.0	4.6	7.8	38.9

APPENDIX E (cont.)

A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 5

DOSE LEVEL = 90.0000 MG/KG/DAY

MALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE	WT. CHG. FROM
	G	G	G/INT	G/KG/DAY	G/INT	WEEK 0
3001	526	35	175	57.4	-4	291
3002	482	33	175	62.7	-2	267
3003	475	26	160	57.7	-2	259
3004	481	32	172	61.6	-3	263
3005	521	44	180	60.1	-10	305
3006	459	32	171	64.3	-2	251
3007	534	39	186	60.3	-1	307
3008	479	31	182	65.4	-2	259
3009	516	46	194	65.6	4	303
3021	473	48	188	69.8	T	280
3011	479	29	173	62.1	3	254
3012	460	35	160	60.3	3	241
3013	401	29	S	S	S	203
3014	485	37	175	62.5	2	279
3015	525	40	187	61.7	-10	312
3016	474	42	182	67.0	3	272
3017	505	27	189	64.1	T	275
3018	478	43	173	63.2	11	256
3019	439	25	153	59.8	-1	229
3020	436	27	168	66.3	1	228

T = TECHNICAL PROBLEM

S = SPILLAGE

NO. OF ANIMALS	20	20	19	19	17	20
MEANS	481.4	35.0	175.9	62.7	-0.6	266.7
STD. DEV.	33.6	7.1	10.8	3.2	5.0	28.8

APPENDIX E (cont.)
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 5

DOSE LEVEL = 270.0000 MG/KG/DAY

MALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE	WT. CHG. FROM WEEK 0
	G	G	G/INT	G/KG/DAY	G/INT	
4001	462	27	163	60.6	-3	247
4002	502	14	177	59.6	-20	274
4003	446	28	158	61.0	1	246
4004	474	27	161	58.3	-10	266
4005	480	32	159	57.1	-7	263
4006	523	41	192	63.7	4	302
4007	472	33	164	60.0	-8	261
4008	464	20	168	61.7	-4	251
4009	517	37	190	63.5	-5	298
4010	492	32	187	65.5	-2	263
4011	511	27	173	58.0	-18	288
4012	409	17	149	62.0	-11	200
4013	450	34	164	63.1	-2	248
4014	458	26	165	61.8	-7	253
4015	514	35	188	63.1	6	299
4016	483	30	188	67.0	-5	274
4017	528	38	193	63.2	-1	304
4018	503	32	184	63.0	6	270
4019	508	46	189	64.9	3	291
4020	384	22	S	S	S	190
S = SPILLAGE						
NO. OF ANIMALS	20	20	19	19	19	20
MEANS	479.0	29.9	174.3	61.9	-4.4	264.4
STD. DEV.	37.7	7.9	14.0	2.6	7.2	30.5

APPENDIX E (cont.)

A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 5

DOSE LEVEL = 0.0000 MG/KG/DAY

FEMALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE	WT. CHG. FROM
	G	G	G/INT	G/KG/DAY	G/INT	WEEK 0
1501	204	5	94	77.8	7	61
1502	231	10	103	76.0	5	87
1503	216	9	87	68.6	3	80
1504	278	26	131	82.4	T	126
1505	272	21	114	72.7	8	112
1506	259	8	109	71.2	-6	114
1507	278	24	117	73.3	8	136
1508	230	6	97	71.2	-5	76
1509	264	10	105	67.6	-4	102
1510	266	13	109	70.0	-3	108
1511	249	8	101	68.7	-6	95
1512	247	17	111	77.6	T	94
1513	244	20	110	78.3	11	105
1514	232	15	99	73.5	7	83
1515	240	17	99	71.3	7	96
1516	233	22	93	69.8	3	97
1517	273	13	111	69.4	1	115
1518	316	15	135	72.9	1	148
1519	241	7	105	73.7	4	102
1520	261	16	121	79.7	6	105

T = TECHNICAL PROBLEM

NO. OF ANIMALS	20	20	20	20	18	20
MEANS	251.7	14.1	107.6	73.3	2.6	102.1
STD. DEV.	25.6	6.2	12.1	4.1	5.4	20.4

APPENDIX E (cont.)
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 5

DOSE LEVEL = 30.0000 MG/KG/DAY

FEMALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE	WT. CHG. FROM
	G	G	G/INT	G/KG/DAY	G/INT	WEEK 0
2501	238	14	101	72.9	6	97
2502	213	7	90	71.6	6	80
2503	210	5	S	S	S	74
2504	227	6	93	69.2	-2	82
2505	262	17	109	71.7	5	121
2506	251	15	103	70.5	7	98
2507	265	12	113	72.7	0	109
2508	253	-2	112	73.5	-12	92
2509	226	10	104	78.4	T	87
2510	245	12	107	74.6	3	101
2511	246	1	101	68.6	3	87
2512	283	23	123	75.5	4	125
2513	283	6	122	72.6	-11	129
2514	261	11	116	75.7	14	108
2515	256	16	108	72.6	-8	109
2516	283	17	122	74.1	4	131
2517	240	9	101	71.5	-8	95
2518	242	11	99	69.8	-3	99
2519	278	21	114	71.0	-1	115
2520	273	24	132	84.3	6	117

T = TECHNICAL PROBLEM

S = SPILLAGE

NO. OF ANIMALS	20	20	19	19	18	20
MEANS	251.8	11.8	108.9	73.2	0.7	102.8
STD. DEV.	22.3	6.9	10.9	3.6	7.0	16.7

APPENDIX E (cont.)

A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX®XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 5

DOSE LEVEL = 90.0000 MG/KG/DAY

FEMALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE	WT. CHG. FROM WEEK 0
	G	G	G/INT	G/KG/DAY	G/INT	
3501	233	9	92	67.1	-6	95
3502	240	13	85	60.7	-5	85
3503	265	13	113	72.9	6	107
3504	240	18	S	S	S	96
3505	232	3	94	68.0	-8	98
3506	271	12	114	71.7	5	116
3507	297	1	101	56.8	-32	133
3508	237	5	S	S	S	97
3509	238	3	82	57.8	-2	81
3510	236	11	99	71.6	T	92
3511	257	15	100	66.8	-3	108
3512	270	19	118	75.5	T	117
3513	261	11	99	64.6	T	109
3514	276	18	116	72.4	T	130
3515	272	13	100	62.8	-5	121
3516	224	15	S	S	S	82
3517	235	13	106	77.3	8	94
3518	248	3	112	75.7	-5	89
3519	277	-19	114	66.3	T	117
3520	231	15	106	79.0	0	94
NO. OF ANIMALS	20	20	17	17	12	20
MEANS	252.0	9.6	103.0	68.6	-3.9	103.1
STD. DEV.	20.3	8.6	10.8	6.7	10.2	15.4

T = TECHNICAL PROBLEM

S = SPILLAGE

APPENDIX E (cont.)
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 5

DOSE LEVEL = 270.0000 MG/KG/DAY

FEMALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE	WT. CHG. FROM WEEK 0
	G	G	G/INT	G/KG/DAY	G/INT	
4501	210	6	84	67.6	-7	64
4502	268	5	S	S	S	111
4503	254	12	103	69.2	3	100
4504	278	5	114	69.0	-19	116
4505	252	-2	94	61.9	-6	101
4506	219	4	S	S	S	76
4507	196	0	76	64.6	-19	62
4508	240	4	100	70.0	-4	99
4510	281	34	122	77.0	20	123
4511	248	17	100	69.6	-1	110
4512	274	12	110	68.4	-1	119
4513	224	3	97	72.7	-7	78
4514	231	4	91	66.2	T	78
4515	235	2	88	62.7	-8	93
4516	262	12	110	71.6	5	110
4517	235	13	108	78.8	0	99
4518	262	-12	79	49.1	-30	120
4519	255	12	107	71.6	10	93
4520	236	3	S	S	S	77
NO. OF ANIMALS	19	19	16	16	15	19
MEANS	245.3	7.1	98.9	68.1	-4.3	96.3
STD. DEV.	23.4	9.3	13.0	6.8	12.2	19.0

T = TECHNICAL PROBLEM

S = SPILLAGE

APPENDIX E (cont.)

A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 6

DOSE LEVEL = 0.0000 MG/KG/DAY

MALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE	WT. CHG. FROM WEEK 0
	G	G	G/INT	G/KG/DAY	G/INT	
1001	522	43	166	55.3	1	312
1002	477	36	144	52.3	-6	257
1003	496	32	160	55.6	1	275
1004	516	32	147	49.0	-5	290
1005	499	35	156	54.0	6	265
1006	504	41	140	48.3	-4	293
1007	448	35	149	57.7	-8	240
1008	499	33	149	51.5	9	286
1009	503	29	164	56.0	-1	280
1010	483	34	163	58.3	18	286
1011	455	32	146	55.4	47	250
1012	488	34	153	54.1	15	270
1013	550	33	172	53.7	-7	333
1014	473	17	128	45.9	T	258
1015	516	39	179	60.1	-4	314
1016	484	35	169	60.4	36	279
1017	501	38	166	57.4	4	273
1018	516	37	168	56.3	3	298
1019	502	36	163	56.1	5	287
1020	414	30	143	59.7	5	208

T = TECHNICAL PROBLEM

NO. OF ANIMALS	20	20	20	20	19	20
MEANS	492.3	34.1	156.3	54.9	6.1	277.7
STD. DEV.	29.6	5.3	12.8	3.9	14.5	27.8

APPENDIX E (cont.)
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 6

DOSE LEVEL = 30.0000 MG/KG/DAY

MALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE	WT. CHG. FROM
	G	G	G/INT	G/KG/DAY	G/INT	WEEK 0
2001	509	39	176	59.9	17	280
2002	506	34	159	54.2	8	283
2003	500	35	156	53.9	4	281
2004	454	35	127	48.5	3	258
2005	566	38	180	54.8	-2	324
2006	495	36	148	51.7	-4	278
2007	522	43	187	62.3	14	317
2008	558	48	170	53.1	-4	351
2009	613	55	205	58.4	1	385
2010	446	24	153	58.8	0	225
2011	530	44	168	55.1	T	321
2012	486	35	163	58.0	9	273
2013	437	26	145	57.0	-9	237
2014	615	54	215	60.9	4	396
2015	478	31	165	59.5	-1	267
2016	503	39	170	58.6	6	288
2017	522	37	167	55.3	8	307
2018	444	28	168	65.1	-2	231
2019	467	28	161	59.2	2	263
2020	470	32	S	S	S	253
NO. OF ANIMALS	20	20	19	19	18	20
MEANS	506.1	37.1	167.5	57.1	3.0	290.9
STD. DEV.	51.2	8.5	20.1	4.0	6.6	47.0

T = TECHNICAL PROBLEM

S = SPILLAGE

APPENDIX E (cont.)

A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 6

DOSE LEVEL = 90.0000 MG/KG/DAY

MALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE	WT. CHG. FROM
	G	G	G/INT	G/KG/DAY	G/INT	WEEK 0
3001	561	35	175	53.7	0	326
3002	523	41	179	59.4	4	308
3003	507	32	163	55.3	3	291
3004	515	34	168	56.2	-4	297
3005	567	46	179	54.8	-1	351
3006	499	40	172	59.8	1	291
3007	596	62	207	61.1	21	369
3008	513	34	186	62.5	4	293
3009	563	47	208	64.3	14	350
3021	507	34	180	61.2	-8	314
3011	530	51	179	59.1	6	305
3012	491	31	161	56.4	1	272
3013	429	28	162	65.1	T	231
3014	527	42	173	57.0	-2	321
3015	565	40	187	57.2	0	352
3016	505	31	177	60.3	-5	303
3017	553	48	187	58.9	-2	323
3018	517	39	174	58.3	1	295
3019	471	32	162	59.3	9	261
3020	467	31	157	58.0	-11	259

T = TECHNICAL PROBLEM

NO. OF ANIMALS	20	20	20	20	19	20
MEANS	520.3	38.9	176.8	58.9	1.6	305.6
STD. DEV.	39.9	8.5	13.8	3.0	7.4	34.7

APPENDIX E (cont.)
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX®XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 6

DOSE LEVEL = 270.0000 MG/KG/DAY

MALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE	WT. CHG. FROM WEEK 0
	G	G	G/INT	G/KG/DAY	G/INT	
4001	504	42	174	60.0	11	289
4002	550	48	190	60.2	13	322
4003	479	33	156	56.2	-2	279
4004	516	42	164	55.2	3	308
4005	521	41	167	55.6	8	304
4006	584	61	198	59.6	6	363
4007	517	45	180	60.7	16	306
4008	508	44	167	57.3	-1	295
4009	552	35	178	55.5	-12	333
4010	530	38	188	61.3	1	301
4011	541	30	180	57.0	7	318
4012	436	27	146	57.6	-3	227
4013	486	36	163	58.0	-1	284
4014	498	40	174	60.7	9	293
4015	566	52	188	58.0	0	351
4016	532	49	192	63.1	4	323
4017	576	48	195	58.9	2	352
4018	551	48	186	58.8	2	318
4019	552	44	193	60.7	4	335
4020	404	20	S	S	S	210
S = SPILLAGE						
NO. OF ANIMALS	20	20	19	19	19	20
MEANS	520.2	41.2	177.8	58.7	3.5	305.6
STD. DEV.	44.8	9.3	14.4	2.2	6.5	37.7

APPENDIX E (cont.)

A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX®XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 6

DOSE LEVEL = 0.0000 MG/KG/DAY

FEMALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE	WT. CHG. FROM WEEK 0
	G	G	G/INT	G/KG/DAY	G/INT	
1501	218	14	91	71.9	-3	75
1502	243	12	100	70.3	-3	99
1503	225	9	82	62.0	-5	89
1504	274	-4	99	59.8	-32	122
1505	277	5	102	61.9	-12	117
1506	276	17	114	71.0	5	131
1507	281	3	105	62.6	-12	139
1508	246	16	103	72.1	6	92
1509	278	14	106	65.2	1	116
1510	291	25	120	71.8	11	133
1511	252	3	95	63.2	-6	98
1512	269	22	123	79.5	12	116
1513	253	9	108	72.4	-2	114
1514	241	9	99	69.8	0	92
1515	245	5	94	64.6	-5	101
1516	243	10	90	63.0	-3	107
1517	292	19	111	65.5	0	134
1518	339	23	140	71.2	5	171
1519	269	28	114	74.5	9	130
1520	267	6	112	70.7	-9	111
NO. OF ANIMALS	20	20	20	20	20	20
MEANS	264.0	12.3	105.4	68.2	-2.2	114.4
STD. DEV.	27.2	8.4	13.2	5.2	9.9	21.9

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APPENDIX E (cont.)

A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX®XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 6

DOSE LEVEL = 30.0000 MG/KG/DAY

FEMALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE	WT. CHG. FROM WEEK 0
	G	G	G/INT	G/KG/DAY	G/INT	
2501	249	11	97	66.4	-4	108
2502	213	0	77	60.3	-13	80
2503	219	9	87	67.6	T	83
2504	243	16	98	69.5	5	98
2505	288	26	123	74.5	14	147
2506	261	10	101	65.8	-2	108
2507	271	6	109	67.8	-4	115
2508	274	21	116	73.4	4	113
2509	240	14	105	75.1	1	101
2510	258	13	107	70.9	0	114
2511	260	14	103	67.9	2	101
2512	298	15	126	72.3	3	140
2513	308	25	129	72.8	7	154
2514	271	10	112	70.2	-4	118
2515	261	5	103	66.4	-5	114
2516	301	18	124	70.8	2	149
2517	251	11	107	72.6	6	106
2518	248	6	99	67.3	0	105
2519	293	15	120	70.1	6	130
2520	287	14	127	75.6	-5	131
T = TECHNICAL PROBLEM						
NO. OF ANIMALS	20	20	20	20	19	20
MEANS	264.7	13.0	108.5	69.9	0.7	115.8
STD. DEV.	26.1	6.5	13.8	3.8	6.0	20.5

APPENDIX E (cont.)

A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 6

DOSE LEVEL = 90.0000 MG/KG/DAY

FEMALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE	WT. CHG. FROM WEEK 0
	G	G	G/INT	G/KG/DAY	G/INT	
3501	250	17	97	66.9	5	112
3502	252	12	80	54.2	-5	97
3503	278	13	104	63.8	-9	120
3504	254	14	112	75.6	T	110
3505	257	25	106	72.3	12	123
3506	287	16	117	69.9	3	132
3507	319	22	124	67.1	23	155
3508	249	12	97	66.5	T	109
3509	253	15	90	61.1	8	96
3510	246	10	S	S	S	102
3511	268	11	99	62.9	-1	119
3512	282	12	S	S	S	129
3513	256	-5	91	58.7	-8	104
3514	293	17	124	72.6	8	147
3515	279	7	101	61.1	1	128
3516	222	-2	77	57.5	T	80
3517	248	13	104	71.8	-2	107
3518	261	13	112	73.3	0	102
3519	303	26	131	75.3	17	143
3520	246	15	114	79.7	8	109

T = TECHNICAL PROBLEM

S = SPILLAGE

NO. OF ANIMALS	20	20	18	18	15	20
MEANS	265.2	13.2	104.4	67.2	4.0	116.2
STD. DEV.	23.2	7.4	14.8	7.1	9.0	18.7

APPENDIX E (cont.)

A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX®XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 6

DOSE LEVEL = 270.0000 MG/KG/DAY

FEMALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE	WT. CHG. FROM
	G	G	G/INT	G/KG/DAY	G/INT	WEEK 0
4501	225	15	90	69.0	6	79
4502	281	13	S	S	S	124
4503	277	23	112	70.3	9	123
4504	282	4	115	68.5	1	120
4505	275	23	109	68.9	15	124
4506	228	9	86	64.1	T	85
4507	200	4	86	72.4	10	66
4508	251	11	106	72.0	6	110
4510	285	4	119	70.1	-3	127
4511	258	10	105	69.2	5	120
4512	287	13	115	68.3	5	132
4513	243	19	103	73.5	6	97
4514	249	18	95	66.0	4	96
4515	260	25	112	75.4	24	118
4516	282	20	120	73.5	10	130
4517	241	6	102	71.4	-6	105
4518	272	10	87	54.3	8	130
4519	265	10	109	69.9	2	103
4520	251	15	S	S	S	92

T = TECHNICAL PROBLEM

S = SPILLAGE

NO. OF ANIMALS	19	19	17	17	16	19
MEANS	258.5	13.3	104.2	69.2	6.4	109.5
STD. DEV.	23.8	6.7	11.5	4.7	6.9	19.3

APPENDIX E (cont.)

A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 7

DOSE LEVEL = 0.0000 MG/KG/DAY

MALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE	WT. CHG. FROM
	G	G	G/INT	G/KG/DAY	G/INT	WEEK 0
1001	551	29	154	47.8	-12	341
1002	504	27	133	45.2	-11	284
1003	533	37	154	49.9	-6	312
1004	540	24	143	45.1	-4	314
1005	513	14	148	48.7	-8	279
1006	531	27	140	45.1	0	320
1007	477	29	153	55.1	4	269
1008	518	19	127	41.6	-22	305
1009	531	28	155	50.0	-9	308
1010	515	32	157	52.4	-6	318
1011	482	27	137	48.7	-9	277
1012	511	23	148	49.4	-5	293
1013	584	34	166	48.8	-6	367
1014	503	30	149	50.9	21	288
1015	552	36	176	54.9	-3	350
1016	515	31	158	52.7	-11	310
1017	516	15	149	48.8	-17	288
1018	544	28	166	52.2	-2	326
1019	528	26	155	50.2	-8	313
1020	433	19	139	54.7	-4	227
NO. OF ANIMALS	20	20	20	20	20	20
MEANS	519.1	26.8	150.4	49.6	-5.9	304.5
STD. DEV.	31.7	6.3	11.8	3.6	8.5	31.0

APPENDIX E (cont.)
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 7

DOSE LEVEL = 30.0000 MG/KG/DAY

MALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE	WT. CHG. FROM WEEK 0
	G	G	G/INT	G/KG/DAY	G/INT	
2001	529	20	166	53.3	-10	300
2002	529	23	150	48.3	-9	306
2003	524	24	145	47.2	-11	305
2004	480	26	120	42.8	-7	284
2005	597	31	162	46.4	-18	355
2006	528	33	151	49.2	3	311
2007	557	35	185	57.2	-2	352
2008	598	40	169	48.7	-1	391
2009	656	43	201	52.8	-4	428
2010	466	20	147	53.7	-6	245
2011	564	34	165	50.3	-3	355
2012	511	25	154	51.5	-9	298
2013	462	25	153	56.7	8	262
2014	650	35	194	51.1	-21	431
2015	509	31	168	56.7	3	298
2016	530	27	159	51.3	-11	315
2017	552	30	160	49.7	-7	337
2018	464	20	150	55.1	-18	251
2019	480	13	146	51.4	-15	276
2020	487	17	S	S	S	270
S = SPILLAGE						
NO. OF ANIMALS	20	20	19	19	19	20
MEANS	533.7	27.6	160.3	51.2	-7.3	318.5
STD. DEV.	57.2	7.8	18.6	3.8	7.7	53.4

APPENDIX E (cont.)

A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 7

DOSE LEVEL = 90.0000 MG/KG/DAY

MALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE	WT. CHG. FROM
	G	G	G/INT	G/KG/DAY	G/INT	WEEK 0
3001	595	34	163	47.0	-12	360
3002	563	40	170	52.2	-9	348
3003	537	30	160	51.1	-3	321
3004	544	29	154	48.5	-14	326
3005	608	41	171	48.5	-8	392
3006	526	27	160	52.0	-12	318
3007	636	40	197	53.3	-10	409
3008	538	25	173	54.9	-13	318
3009	595	32	192	55.3	-16	382
3021	540	33	169	53.8	-11	347
3011	565	35	171	52.1	-8	340
3012	522	31	154	50.7	-7	303
3013	449	20	162	61.5	0	251
3014	559	32	157	48.2	-16	353
3015	603	38	179	51.1	-8	390
3016	545	40	168	53.3	-9	343
3017	588	35	177	51.7	-10	358
3018	550	33	177	55.3	3	328
3019	494	23	144	49.7	-18	284
3020	487	20	145	50.7	-12	279
NO. OF ANIMALS	20	20	20	20	20	20
MEANS	552.2	31.9	167.2	52.0	-9.7	337.5
STD. DEV.	45.1	6.4	13.7	3.3	5.2	40.0

APPENDIX E (cont.)

A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX®XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 7

DOSE LEVEL = 270.0000 MG/KG/DAY

MALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE	WT. CHG. FROM
	G	G	G/INT	G/KG/DAY	G/INT	WEEK 0
4001	532	28	166	53.4	-8	317
4002	592	42	206	60.1	16	364
4003	504	25	150	50.9	-6	304
4004	538	22	150	47.4	-14	330
4005	555	34	163	50.5	-4	338
4006	628	44	192	52.8	-6	407
4007	541	24	161	50.7	-19	330
4008	523	15	153	49.5	-14	310
4009	586	34	179	52.4	1	367
4010	556	26	181	55.6	-7	327
4011	574	33	175	52.3	-5	351
4012	464	28	157	58.1	11	255
4013	515	29	156	51.9	-7	313
4014	527	29	164	53.3	-10	322
4015	595	29	183	52.5	-5	380
4016	562	30	189	57.6	-3	353
4017	612	36	197	55.3	2	388
4018	575	24	180	53.3	-6	342
4019	585	33	190	55.7	-3	368
4020	423	19	175	70.5	T	229

T = TECHNICAL PROBLEM

NO. OF ANIMALS	20	20	20	20	19	20
MEANS	549.4	29.2	173.4	54.2	-4.6	334.8
STD. DEV.	49.4	7.1	16.5	4.9	8.1	42.3

APPENDIX E (cont.)

A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 7

DOSE LEVEL = 0.0000 MG/KG/DAY

FEMALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE	WT. CHG. FROM WEEK 0
	G	G	G/INT	G/KG/DAY	G/INT	
1501	223	5	89	67.3	-2	80
1502	261	18	99	65.5	-1	117
1503	230	5	78	57.1	-4	94
1504	278	4	S	S	S	126
1505	280	3	95	56.9	-7	120
1506	282	6	95	56.8	-19	137
1507	285	4	99	58.3	-6	143
1508	252	6	92	61.6	-11	98
1509	284	6	100	59.3	-6	122
1510	300	9	S	S	S	142
1511	269	17	100	64.0	5	115
1512	275	6	98	60.0	-25	122
1513	257	4	93	60.8	-15	118
1514	255	14	92	61.8	-7	106
1515	256	11	94	62.5	0	112
1516	251	8	85	57.4	-5	115
1517	297	5	98	55.5	-13	139
1518	345	6	123	59.9	-17	177
1519	268	-1	97	60.2	-17	129
1520	272	5	111	68.6	-1	116
S = SPILLAGE						
NO. OF ANIMALS	20	20	18	18	18	20
MEANS	271.0	7.1	96.6	60.7	-8.4	121.4
STD. DEV.	26.3	4.7	9.5	3.7	7.9	20.6

APPENDIX E (cont.)

A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 7

DOSE LEVEL = 30.0000 MG/KG/DAY

FEMALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE	WT. CHG. FROM WEEK 0
	G	G	G/INT	G/KG/DAY	G/INT	
2501	255	6	92	60.8	-5	114
2502	227	14	81	61.4	4	94
2503	229	10	S	S	S	93
2504	255	12	95	63.6	-3	110
2505	279	-9	88	51.7	-35	138
2506	272	11	94	58.8	-7	119
2507	274	3	93	56.9	-16	118
2508	275	1	100	60.7	-16	114
2509	237	-3	88	61.5	-17	98
2510	272	14	100	62.9	-7	128
2511	272	12	92	57.6	-11	113
2512	303	5	99	54.9	-27	145
2513	333	25	120	62.4	-9	179
2514	288	17	102	60.8	-10	135
2515	282	21	108	66.3	5	135
2516	323	22	129	68.9	5	171
2517	269	18	106	67.9	-1	124
2518	263	15	96	62.6	-3	120
2519	307	14	106	58.9	-14	144
2520	303	16	116	65.5	-11	147
S = SPILLAGE						
NO. OF ANIMALS	20	20	19	19	19	20
MEANS	275.9	11.2	100.3	61.3	-9.4	127.0
STD. DEV.	28.4	8.6	11.9	4.3	10.3	23.0

APPENDIX E (cont.)

A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 7

DOSE LEVEL = 90.0000 MG/KG/DAY

FEMALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE	WT. CHG. FROM WEEK 0
	G	G	G/INT	G/KG/DAY	G/INT	
3501	259	9	88	57.6	-9	121
3502	256	4	70	45.9	-10	101
3503	275	-3	93	56.1	-11	117
3504	264	10	104	66.9	-8	120
3505	267	10	93	59.2	-13	133
3506	297	10	99	56.5	-18	142
3507	316	-3	85	44.6	-39	152
3508	259	10	87	57.1	-10	119
3509	267	14	87	55.8	-3	110
3510	259	13	91	60.1	T	115
3511	287	19	100	60.1	1	138
3512	298	16	109	62.6	T	145
3513	274	18	94	59.1	3	122
3514	311	18	112	61.8	-12	165
3515	300	21	102	58.7	1	149
3516	236	14	86	62.6	9	94
3517	252	4	S	S	S	111
3518	263	2	104	66.2	-8	104
3519	302	-1	113	62.3	-18	142
3520	253	7	100	66.8	-14	116

T = TECHNICAL PROBLEM

S = SPILLAGE

NO. OF ANIMALS	20	20	19	19	17	20
MEANS	274.8	9.6	95.6	58.9	-9.4	125.8
STD. DEV.	22.4	7.3	10.8	5.9	10.7	19.0

APPENDIX E (cont.)

A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 7

DOSE LEVEL = 270.0000 MG/KG/DAY

FEMALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE	WT. CHG. FROM WEEK 0
	G	G	G/INT	G/KG/DAY	G/INT	
4501	225	0	82	60.7	-8	79
4502	270	-11	111	67.2	T	113
4503	287	10	103	60.9	-9	133
4504	301	19	111	63.5	-4	139
4505	276	1	98	59.3	-11	125
4506	229	1	80	58.4	-6	86
4507	211	11	78	63.3	-8	77
4508	263	12	99	64.2	-7	122
4510	282	-3	90	52.9	-29	124
4511	273	15	97	60.9	-8	135
4512	291	4	100	57.7	-15	136
4513	246	3	91	62.0	-12	100
4514	262	13	87	56.8	-8	109
4515	274	14	113	70.5	1	132
4516	287	5	101	59.2	-19	135
4517	246	5	97	66.4	-5	110
4518	275	3	86	52.4	-1	133
4519	275	10	96	59.3	-13	113
4520	259	8	S	S	S	100
NO. OF ANIMALS	19	19	18	18	17	19
MEANS	264.8	6.3	95.6	60.9	-9.5	115.8
STD. DEV.	23.9	7.2	10.5	4.6	7.0	19.8

T = TECHNICAL PROBLEM

S = SPILLAGE

APPENDIX E (cont.)

A SUBCHRONIC (3-MONTH) TOXICITY STUDY

OF ULTRANOX®XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,

BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 8

DOSE LEVEL = 0.0000 MG/KG/DAY

MALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE	WT. CHG. FROM
	G	G	G/INT	G/KG/DAY	G/INT	WEEK 0
1001	575	24	159	47.1	5	365
1002	521	17	141	45.9	8	301
1003	550	17	153	47.1	-1	329
1004	559	19	142	43.1	-1	333
1005	529	16	162	51.8	14	295
1006	549	18	135	41.7	-5	338
1007	486	9	154	53.3	1	278
1008	525	7	123	39.3	-4	312
1009	549	18	151	46.6	-4	326
1010	533	18	163	51.8	6	336
1011	498	16	142	48.3	5	293
1012	522	11	144	46.5	-4	304
1013	598	14	170	47.9	4	381
1014	513	10	135	44.3	-14	298
1015	576	24	180	53.2	4	374
1016	539	24	165	52.2	7	334
1017	532	16	151	48.0	2	304
1018	569	25	171	51.2	5	351
1019	546	18	157	48.7	2	331
1020	450	17	139	52.5	0	244
NO. OF ANIMALS	20	20	20	20	20	20
MEANS	536.0	16.9	151.9	48.0	1.5	321.4
STD. DEV.	33.8	5.0	14.4	4.0	6.0	33.3

APPENDIX E (cont.)

A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX®XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 8

DOSE LEVEL = 30.0000 MG/KG/DAY

MALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE	WT. CHG. FROM WEEK 0
	G	G	G/INT	G/KG/DAY	G/INT	
2001	550	21	172	53.1	6	321
2002	ANIMAL EXPIRED					
2003	536	12	146	45.9	1	317
2004	496	16	124	42.3	4	300
2005	621	24	176	48.2	14	379
2006	541	13	155	48.3	4	324
2007	581	24	193	56.5	8	376
2008	617	19	177	48.6	8	410
2009	676	20	201	50.3	0	448
2010	479	13	154	54.3	7	258
2011	584	20	169	49.1	4	375
2012	522	11	152	49.0	-2	309
2013	459	-3	149	53.9	-4	259
2014	630	-20	123	32.0	-71	411
2015	529	20	177	56.8	9	318
2016	544	14	162	50.3	3	329
2017	572	20	159	47.2	-1	357
2018	485	21	161	56.6	11	272
2019	498	18	S	S	S	294
2020	499	12	S	S	S	282
S = SPILLAGE						
NO. OF ANIMALS	19	19	17	17	17	19
MEANS	548.4	14.5	161.8	49.6	0.1	333.6
STD. DEV.	58.5	10.4	20.8	6.1	18.9	54.2

APPENDIX E (cont.)

A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX®XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 8

DOSE LEVEL = 90.0000 MG/KG/DAY

MALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE	WT. CHG. FROM
	G	G	G/INT	G/KG/DAY	G/INT	WEEK 0
3001	614	19	154	42.5	-9	379
3002	580	17	172	50.2	2	365
3003	558	21	155	47.2	-5	342
3004	558	14	151	45.7	-3	340
3005	635	27	173	46.4	2	419
3006	546	20	161	50.1	1	338
3007	660	24	203	52.2	6	433
3008	548	10	164	50.3	-9	328
3009	620	25	193	52.9	1	407
3021	559	19	173	52.5	4	366
3011	579	14	163	47.5	-8	354
3012	537	15	158	49.7	4	318
3013	463	14	S	S	S	265
3014	583	24	170	49.6	13	377
3015	624	21	180	48.9	1	411
3016	565	20	171	51.4	3	363
3017	606	18	184	51.4	7	376
3018	565	15	174	52.0	-3	343
3019	503	9	151	50.5	7	293
3020	503	16	156	52.5	11	295
NO. OF ANIMALS	20	20	19	19	19	20
MEANS	570.3	18.1	168.7	49.7	1.3	355.6
STD. DEV.	48.3	4.8	14.2	2.8	6.3	43.7

S = SPILLAGE

APPENDIX E (cont.)

A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 8

DOSE LEVEL = 270.0000 MG/KG/DAY

MALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE	WT. CHG. FROM WEEK 0
	G	G	G/INT	G/KG/DAY	G/INT	
4001	556	24	175	53.6	9	341
4002	623	31	213	58.4	7	395
4003	506	2	135	44.6	-15	306
4004	557	19	161	49.0	11	349
4005	574	19	171	50.5	8	357
4006	660	32	197	51.0	5	439
4007	566	25	168	50.6	7	355
4008	547	24	161	50.2	8	334
4009	609	23	187	52.2	8	390
4010	569	13	S	S	S	340
4011	587	13	181	52.0	6	364
4012	476	12	152	53.9	-5	267
4013	544	29	175	55.1	19	342
4014	546	19	169	52.5	5	341
4015	618	23	165	45.3	-18	403
4016	595	33	201	57.9	12	386
4017	633	21	188	50.3	-9	409
4018	595	20	196	55.8	16	362
4019	607	22	188	52.6	-2	390
4020	437	14	156	60.5	-19	243
S = SPILLAGE						
NO. OF ANIMALS	20	20	19	19	19	20
MEANS	570.3	20.9	175.7	52.4	2.8	355.7
STD. DEV.	53.5	7.6	19.2	4.1	11.1	46.7

APPENDIX E (cont.)

A SUBCHRONIC (3-MONTH) TOXICITY STUDY

OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 8

DOSE LEVEL = 0.0000 MG/KG/DAY

FEMALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE	WT. CHG. FROM
	G	G	G/INT	G/KG/DAY	G/INT	WEEK 0
1501	229	6	94	69.3	5	86
1502	259	-2	105	67.3	6	115
1503	243	13	83	58.5	5	107
1504	283	5	S	S	S	131
1505	286	6	87	51.2	-8	126
1506	280	-2	99	58.7	4	135
1507	290	5	103	59.7	4	148
1508	258	6	102	66.7	10	104
1509	296	12	110	63.2	10	134
1510	305	5	106	58.4	T	147
1511	271	2	95	58.6	-5	117
1512	269	-6	98	60.0	0	116
1513	260	3	104	67.1	11	121
1514	254	-1	91	59.6	-1	105
1515	256	0	87	56.6	-7	112
1516	249	-2	81	54.0	-4	113
1517	289	-8	92	52.3	-6	131
1518	359	14	128	60.6	5	191
1519	274	6	98	60.3	1	135
1520	290	18	121	71.8	10	134

T = TECHNICAL PROBLEM

S = SPILLAGE

NO. OF ANIMALS	20	20	19	19	18	20
MEANS	275.0	4.0	99.2	60.7	2.2	125.4
STD. DEV.	27.8	6.7	12.0	5.6	6.3	21.8

APPENDIX E (cont.)

A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 8

DOSE LEVEL = 30.0000 MG/KG/DAY

FEMALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE	WT. CHG. FROM WEEK 0
	G	G	G/INT	G/KG/DAY	G/INT	
2501	260	5	98	63.4	6	119
2502	219	-8	80	59.8	-1	86
2503	230	1	93	67.5	T	94
2504	261	6	106	68.5	11	116
2505	293	14	106	61.8	18	152
2506	264	-8	98	60.9	4	111
2507	285	11	104	62.0	11	129
2508	283	8	109	65.1	9	122
2509	248	11	107	73.5	19	109
2510	285	13	119	71.2	19	141
2511	281	9	97	58.5	5	122
2512	305	2	114	62.5	15	147
2513	332	-1	133	66.7	13	178
2514	281	-7	101	59.2	-1	128
2515	286	4	112	65.7	4	139
2516	333	10	127	64.5	-2	181
2517	277	8	109	66.5	3	132
2518	264	1	101	63.9	5	121
2519	313	6	114	61.3	8	150
2520	302	-1	120	66.1	4	146
T = TECHNICAL PROBLEM						
NO. OF ANIMALS	20	20	20	20	19	20
MEANS	280.1	4.2	107.4	64.4	7.9	131.2
STD. DEV.	29.5	6.7	12.1	3.9	6.6	24.1

APPENDIX E (cont.)

A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 8

DOSE LEVEL = 90.0000 MG/KG/DAY

FEMALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE	WT. CHG. FROM
	G	G	G/INT	G/KG/DAY	G/INT	WEEK 0
3501	266	7	96	61.0	8	128
3502	267	11	83	52.9	13	112
3503	289	14	112	66.2	19	131
3504	263	-1	104	65.8	0	119
3505	270	3	106	65.8	13	136
3506	294	-3	100	56.4	1	139
3507	318	2	96	50.5	11	154
3508	258	-1	91	58.7	4	118
3509	263	-4	81	50.9	-6	106
3510	252	-7	94	61.3	3	108
3511	288	1	104	60.3	4	139
3512	292	-6	110	62.1	1	139
3513	270	-4	S	S	S	118
3514	308	-3	107	57.6	-5	162
3515	303	3	106	58.6	4	152
3516	244	8	98	68.1	12	102
3517	258	6	106	69.3	T	117
3518	271	8	125	78.0	21	112
3519	302	0	108	59.6	-5	142
3520	253	0	106	69.8	6	116

T = TECHNICAL PROBLEM

S = SPILLAGE

NO. OF ANIMALS	20	20	19	19	18	20
MEANS	276.5	1.7	101.7	61.7	5.8	127.5
STD. DEV.	21.1	5.8	10.3	7.0	7.9	17.2

APPENDIX E (cont.)

A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 8

DOSE LEVEL = 270.0000 MG/KG/DAY

FEMALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE	WT. CHG. FROM
	G	G	G/INT	G/KG/DAY	G/INT	WEEK 0
4501	236	11	92	66.5	10	90
4502	283	13	115	69.3	4	126
4503	287	0	100	58.1	-3	133
4504	312	11	131	71.2	20	150
4505	287	11	108	63.9	10	136
4506	234	5	85	61.2	5	91
4507	215	4	88	68.9	10	81
4508	271	8	109	68.0	10	130
4510	294	12	113	65.4	23	136
4511	274	1	100	60.9	3	136
4512	289	-2	104	59.8	4	134
4513	255	9	98	65.2	7	109
4514	262	0	94	59.8	7	109
4515	294	20	120	70.4	7	152
4516	286	-1	103	59.9	2	134
4517	252	6	108	72.3	11	116
4518	272	-3	88	53.6	2	130
4519	277	2	S	S	S	115
4520	264	5	110	70.1	T	105
NO. OF ANIMALS	19	19	18	18	17	19
MEANS	270.7	5.9	103.7	64.7	7.8	121.7
STD. DEV.	24.1	6.2	12.0	5.3	6.4	20.0

T = TECHNICAL PROBLEM

S = SPILLAGE

E-100
APPENDIX E (cont.)
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX®XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 9

DOSE LEVEL = 0.0000 MG/KG/DAY

MALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE	WT. CHG. FROM WEEK 0
	G	G	G/INT	G/KG/DAY	G/INT	
1001	598	23	160	45.5	1	388
1002	542	21	150	47.0	9	322
1003	490	-60	77	24.7	-76	269
1004	580	21	140	41.0	-2	354
1005	547	18	150	46.5	-12	313
1006	572	23	128	38.1	-7	361
1007	505	19	148	49.8	-6	297
1008	544	19	129	40.2	6	331
1009	561	12	143	42.9	-8	338
1010	552	19	159	48.8	-4	355
1011	513	15	140	46.2	-2	308
1012	548	26	149	46.4	5	330
1013	616	18	162	44.5	-8	399
1014	531	18	150	47.9	15	316
1015	604	28	174	49.2	-6	402
1016	566	27	166	50.1	1	361
1017	556	24	147	45.0	-4	328
1018	598	29	174	49.7	3	380
1019	565	19	159	47.7	2	350
1020	462	12	144	52.6	5	256
NO. OF ANIMALS	20	20	20	20	20	20
MEANS	552.5	16.6	147.5	45.2	-4.4	337.9
STD. DEV.	39.1	18.6	20.8	6.0	18.1	39.4

APPENDIX E (cont.)

A SUBCHRONIC (3-MONTH) TOXICITY STUDY

OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 9

DOSE LEVEL = 30.0000 MG/KG/DAY

MALES

ANIMAL NO.	WEIGHT G	WEIGHT CHANGE G	FOOD CONSUMPTION ACTUAL G/INT	G/KG/DAY	CHANGE G/INT	WT. CHG. FROM WEEK 0
2001	565	15	163	48.7	-9	336
2003	553	17	141	43.2	-5	334
2004	509	13	121	40.1	-3	313
2005	644	23	166	43.7	-10	402
2006	558	17	160	48.5	5	341
2007	606	25	187	52.5	-6	401
2008	650	33	182	47.9	5	443
2009	714	38	191	45.8	-10	486
2010	504	25	S	S	S	283
2011	605	21	169	47.4	0	396
2012	537	15	155	48.8	3	324
2013	501	42	152	52.8	3	301
2014	610	-20	80	21.5	-43	391
2015	552	23	176	54.3	-1	341
2016	566	22	161	48.3	-1	351
2017	592	20	160	45.8	1	377
2018	514	29	159	53.1	-2	301
2019	516	18	151	49.6	T	312
2020	517	18	S	S	S	300

T = TECHNICAL PROBLEM

S = SPILLAGE

NO. OF ANIMALS	19	19	17	17	16	19
MEANS	569.1	20.7	157.3	46.6	-4.6	354.4
STD. DEV.	58.1	12.6	26.1	7.5	11.4	54.0

APPENDIX E (cont.)

A SUBCHRONIC (3-MONTH) TOXICITY STUDY

OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 9

DOSE LEVEL = 90.0000 MG/KG/DAY

MALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE	WT. CHG. FROM WEEK 0
	G	G	G/INT	G/KG/DAY	G/INT	
3001	636	22	161	42.9	7	401
3002	611	31	177	49.5	5	396
3003	584	26	154	45.0	-1	368
3004	577	19	162	47.6	11	359
3005	668	33	172	44.0	-1	452
3006	564	18	162	48.6	1	356
3007	683	23	193	47.9	-10	456
3008	566	18	166	49.7	2	346
3009	657	37	200	52.2	7	444
3021	584	25	163	47.5	-10	391
3011	605	26	164	46.2	1	380
3012	554	17	159	48.6	1	335
3013	472	9	S	S	S	274
3014	607	24	170	47.6	0	401
3015	651	27	179	46.8	-1	438
3016	577	12	162	47.3	-9	375
3017	623	17	174	47.2	-10	393
3018	592	27	180	51.9	6	370
3019	520	17	S	S	S	310
3020	518	15	151	49.3	-5	310

S = SPILLAGE

NO. OF ANIMALS	20	20	18	18	18	20
MEANS	592.5	22.2	169.4	47.8	-0.3	377.8
STD. DEV.	53.3	7.1	12.8	2.4	6.4	48.8

E-103
APPENDIX E (cont.)
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 9

DOSE LEVEL = 270.0000 MG/KG/DAY

MALES

ANIMAL NO.	WEIGHT G	WEIGHT CHANGE G	FOOD CONSUMPTION ACTUAL G/INT	ACTUAL G/KG/DAY	CHANGE G/INT	WT. CHG. FROM WEEK 0
4001	588	32	180	52.4	5	373
4002	650	27	204	53.4	-9	422
4003	527	21	144	46.5	9	327
4004	583	26	154	45.0	-7	375
4005	603	29	164	46.4	-7	386
4006	704	44	209	51.1	12	483
4007	582	16	164	47.6	-4	371
4008	561	14	161	48.4	0	348
4009	638	29	184	49.2	-3	419
4010	591	22	195	56.0	T	362
4011	621	34	185	51.0	4	398
4012	495	19	148	50.8	-4	286
4013	569	25	166	49.7	-9	367
4014	564	18	159	47.7	-10	359
4015	645	27	169	44.6	4	430
4016	622	27	188	51.5	-13	413
4017	667	34	198	50.8	10	443
4018	617	22	180	49.5	-16	384
4019	635	28	188	50.5	0	418
4020	451	14	158	59.3	2	257

T = TECHNICAL PROBLEM

NO. OF ANIMALS	20	20	20	20	19	20
MEANS	595.7	25.4	174.9	50.1	-1.9	381.1
STD. DEV.	59.2	7.5	18.8	3.6	8.0	52.4

APPENDIX E (cont.)
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 9

DOSE LEVEL = 0.0000 MG/KG/DAY

FEMALES

ANIMAL NO.	WEIGHT G	WEIGHT CHANGE G	FOOD CONSUMPTION ACTUAL G/INT	ACTUAL G/KG/DAY	CHANGE G/INT	WT. CHG. FROM WEEK 0
1501	238	9	92	65.7	-2	95
1502	266	7	96	61.0	-9	122
1503	248	5	86	58.4	3	112
1504	281	-2	81	47.9	T	129
1505	291	5	103	59.5	16	131
1506	284	4	103	60.9	4	139
1507	291	1	95	54.5	-8	149
1508	265	7	95	60.5	-7	111
1509	311	15	114	62.6	4	149
1510	311	6	97	52.5	-9	153
1511	273	2	S	S	S	119
1512	282	13	106	64.1	8	129
1513	272	12	106	66.4	2	133
1514	258	4	89	57.9	-2	109
1515	268	12	88	56.0	1	124
1516	260	11	S	S	S	124
1517	305	16	102	57.2	10	147
1518	371	12	137	62.6	9	203
1519	278	4	96	58.0	-2	139
1520	291	1	103	59.1	-18	135

T = TECHNICAL PROBLEM

S = SPILLAGE

NO. OF ANIMALS	20	20	18	18	17	20
MEANS	282.2	7.2	99.4	59.2	0.0	132.6
STD. DEV.	28.5	5.1	12.5	4.6	8.5	22.4

APPENDIX E (cont.)
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 9

DOSE LEVEL = 30.0000 MG/KG/DAY

FEMALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE	WT. CHG. FROM
	G	G	G/INT	G/KG/DAY	G/INT	WEEK 0
2501	266	6	94	59.6	-4	125
2502	231	12	84	62.2	4	98
2503	237	7	S	S	S	101
2504	263	2	88	56.0	-18	118
2505	296	3	99	56.0	-7	155
2506	282	18	104	63.5	6	129
2507	291	6	103	59.6	-1	135
2508	290	7	117	68.1	8	129
2509	258	10	S	S	S	119
2510	297	12	109	62.4	-10	153
2511	281	0	105	62.3	8	122
2512	315	10	106	57.0	-8	157
2513	340	8	122	60.5	-11	186
2514	298	17	120	69.1	19	145
2515	294	8	120	69.0	8	147
2516	341	8	119	58.9	-8	189
2517	282	5	104	62.0	-5	137
2518	269	5	96	60.0	-5	126
2519	315	2	106	56.3	-8	152
2520	317	15	136	73.2	16	161
S = SPILLAGE						
NO. OF ANIMALS	20	20	18	18	18	20
MEANS	288.2	8.1	107.3	62.0	-0.9	139.2
STD. DEV.	29.4	4.9	13.1	5.0	10.0	24.1

APPENDIX E (cont.)

A SUBCHRONIC (3-MONTH) TOXICITY STUDY

OF ULTRANOX®XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 9

DOSE LEVEL = 90.0000 MG/KG/DAY

FEMALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE	WT. CHG. FROM
	G	G	G/INT	G/KG/DAY	G/INT	WEEK 0
3501	278	12	97	59.4	1	140
3502	277	10	94	57.6	11	122
3503	296	7	118	67.2	6	138
3504	278	15	113	69.6	9	134
3505	282	12	100	60.4	-6	148
3506	300	6	102	57.2	2	145
3507	337	19	117	59.5	21	173
3508	264	6	82	52.4	-9	124
3509	269	6	87	54.5	6	112
3510	264	12	95	61.4	1	120
3511	301	13	102	57.7	-2	152
3512	304	12	113	63.2	3	151
3513	276	6	100	61.1	T	124
3514	317	9	110	58.7	3	171
3515	308	5	96	52.4	-10	157
3516	251	7	S	S	S	109
3517	268	10	101	64.0	-5	127
3518	275	4	121	73.9	-4	116
3519	308	6	108	59.0	0	148
3520	264	11	111	71.6	5	127
NO. OF ANIMALS	20	20	19	19	18	20
MEANS	285.9	9.4	103.5	61.1	1.8	136.9
STD. DEV.	21.9	3.9	10.6	6.0	7.6	18.5

T = TECHNICAL PROBLEM

S = SPILLAGE

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APPENDIX E (cont.)
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 9

DOSE LEVEL = 270.0000 MG/KG/DAY

FEMALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE	WT. CHG. FROM
	G	G	G/INT	G/KG/DAY	G/INT	WEEK 0
4501	242	6	88	61.4	-4	96
4502	295	12	121	69.8	6	138
4503	293	6	95	54.6	-5	139
4504	316	4	115	61.0	-16	154
4505	293	6	111	63.8	3	142
4506	237	3	86	60.9	1	94
4507	214	-1	86	66.8	-2	80
4508	275	4	96	58.6	-13	134
4510	301	7	98	54.9	-15	143
4511	285	11	101	60.2	1	147
4512	301	12	104	58.8	0	146
4513	260	5	97	62.8	-1	114
4514	267	5	91	57.3	-3	114
4515	299	5	114	64.1	-6	157
4516	292	6	100	57.7	-3	140
4517	259	7	103	67.2	-5	123
4518	286	14	95	56.8	7	144
4519	288	11	120	70.8	T	126
4520	278	14	115	70.7	5	119

T = TECHNICAL PROBLEM

NO. OF ANIMALS	19	19	19	19	18	19
MEANS	277.9	7.2	101.9	62.0	-2.8	128.9
STD. DEV.	25.8	4.0	11.2	5.1	6.7	21.4

APPENDIX E (cont.)

A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX®XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 10

DOSE LEVEL = 0.0000 MG/KG/DAY

MALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE	WT. CHG. FROM
	G	G	G/INT	G/KG/DAY	G/INT	WEEK 0
1001	628	30	156	42.4	-4	418
1002	560	18	141	42.6	-9	340
1003	440	-50	S	S	S	219
1004	600	20	115	32.5	-25	374
1005	567	20	151	45.2	1	333
1006	590	18	128	36.7	0	379
1007	520	15	153	49.8	5	312
1008	564	20	135	40.6	6	351
1009	584	23	S	S	S	361
1010	573	21	149	44.1	-10	376
1011	534	21	136	43.3	-4	329
1012	562	14	144	43.2	-5	344
1013	635	19	166	44.2	4	418
1014	554	23	152	46.7	2	339
1015	629	25	168	45.4	-6	427
1016	568	2	134	39.4	-32	363
1017	579	23	145	42.6	-2	351
1018	623	25	170	46.4	-4	405
1019	548	-17	132	39.5	-27	333
1020	475	13	130	46.2	-14	269
S = SPILLAGE						
NO. OF ANIMALS	20	20	18	18	18	20
MEANS	566.7	14.2	144.7	42.8	-6.9	352.1
STD. DEV.	49.2	18.1	14.9	4.0	11.1	49.7

APPENDIX E (cont.)
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 10

DOSE LEVEL = 30.0000 MG/KG/DAY

MALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE	WT. CHG. FROM WEEK 0
	G	G	G/INT	G/KG/DAY	G/INT	
2001	587	22	163	47.2	0	358
2003	571	18	142	42.1	1	352
2004	530	21	117	37.5	-4	334
2005	665	21	164	41.8	-2	423
2006	578	20	153	44.9	-7	361
2007	625	19	179	48.5	-8	420
2008	679	29	170	42.6	-12	472
2009	752	38	186	42.3	-5	524
2010	522	18	152	49.4	T	301
2011	628	23	158	42.7	-11	419
2012	557	20	144	43.9	-11	344
2013	520	19	149	48.6	-3	320
2014	657	47	168	44.2	88	438
2015	571	19	159	47.2	-17	360
2016	591	25	162	46.7	1	376
2017	617	25	150	41.4	-10	402
2018	519	5	151	48.7	-8	306
2019	533	17	150	47.7	-1	329
2020	536	19	S	S	S	319

T = TECHNICAL PROBLEM

S = SPILLAGE

NO. OF ANIMALS	19	19	18	18	17	19
MEANS	591.5	22.4	156.5	44.9	-0.5	376.7
STD. DEV.	64.1	8.6	15.3	3.3	23.4	60.1

APPENDIX E (cont.)
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 10

DOSE LEVEL = 90.0000 MG/KG/DAY

MALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE	WT. CHG. FROM WEEK 0
	G	G	G/INT	G/KG/DAY	G/INT	
3001	660	24	154	39.6	-7	425
3002	641	30	172	45.8	-5	426
3003	606	22	153	42.9	-1	390
3004	597	20	157	44.6	-5	379
3005	694	26	176	43.1	4	478
3006	578	14	151	44.1	-11	370
3007	714	31	198	47.2	5	487
3008	583	17	167	48.4	1	363
3009	684	27	197	49.0	-3	471
3021	605	21	162	45.4	-1	412
3011	621	16	153	41.6	-11	396
3012	568	14	156	46.3	-3	349
3013	482	10	S	S	S	284
3014	624	17	162	43.9	-8	418
3015	678	27	181	45.4	2	465
3016	598	21	148	42.0	-14	396
3017	646	23	171	44.9	-3	416
3018	615	23	168	46.4	-12	393
3019	539	19	146	46.0	T	329
3020	534	16	144	45.6	-7	326
NO. OF ANIMALS	20	20	19	19	18	20
MEANS	613.4	20.9	164.0	44.9	-4.4	398.7
STD. DEV.	58.0	5.6	15.7	2.3	5.5	53.5

T = TECHNICAL PROBLEM

S = SPILLAGE

APPENDIX E (cont.)
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 10

DOSE LEVEL = 270.0000 MG/KG/DAY

MALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE	WT. CHG. FROM
	G	G	G/INT	G/KG/DAY	G/INT	WEEK 0
4001	605	17	170	47.5	-10	390
4002	679	29	206	51.7	2	451
4003	549	22	144	44.6	0	349
4004	602	19	152	42.8	-2	394
4005	627	24	167	45.3	3	410
4006	743	39	206	47.5	-3	522
4007	611	29	158	44.1	-6	400
4008	588	27	163	47.3	2	375
4009	653	15	157	40.5	-27	434
4010	611	20	S	S	S	382
4011	643	22	171	45.1	-14	420
4012	511	16	143	47.4	-5	302
4013	589	20	169	48.6	3	387
4014	582	18	159	46.2	0	377
4015	669	24	160	40.6	-9	454
4016	653	31	199	52.0	11	444
4017	695	28	202	49.4	4	471
4018	634	17	181	48.2	1	401
4019	670	35	185	47.3	-3	453
4020	475	24	157	56.5	-1	281
S = SPILLAGE						
NO. OF ANIMALS	20	20	19	19	19	20
MEANS	619.5	23.8	171.0	47.0	-2.8	404.9
STD. DEV.	62.5	6.5	20.1	3.9	8.2	56.0

APPENDIX E (cont.)
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 10

DOSE LEVEL = 0.0000 MG/KG/DAY

FEMALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE	WT. CHG. FROM WEEK 0
	G	G	G/INT	G/KG/DAY	G/INT	
1501	235	-3	84	59.2	-8	92
1502	276	10	101	62.1	5	132
1503	257	9	80	52.8	-6	121
1504	292	11	98	57.0	17	140
1505	298	7	102	57.7	-1	138
1506	292	8	99	57.3	-4	147
1507	303	12	100	56.1	5	161
1508	274	9	94	58.1	-1	120
1509	311	0	107	57.3	-7	149
1510	327	16	97	50.7	0	169
1511	278	5	100	60.5	T	124
1512	291	9	106	61.7	0	138
1513	280	8	103	62.2	-3	141
1514	272	14	99	62.3	10	123
1515	272	4	91	56.2	3	128
1516	269	9	89	56.1	T	133
1517	310	5	98	53.1	-4	152
1518	377	6	126	56.1	-11	209
1519	284	6	104	61.7	8	145
1520	288	-3	99	57.0	-4	132
T = TECHNICAL PROBLEM						
NO. OF ANIMALS	20	20	20	20	18	20
MEANS	289.3	7.1	98.9	57.8	-0.1	139.7
STD. DEV.	29.0	5.0	9.4	3.3	7.0	23.3

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APPENDIX E (cont.)
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX®XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 10

DOSE LEVEL = 30.0000 MG/KG/DAY

FEMALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE	WT. CHG. FROM
	G	G	G/INT	G/KG/DAY	G/INT	WEEK 0
2501	270	4	88	54.7	-6	129
2502	238	7	84	59.7	0	105
2503	243	6	119	82.6	T	107
2504	273	10	94	58.5	6	128
2505	299	3	96	53.8	-3	158
2506	290	8	97	56.5	-7	137
2507	294	3	97	55.3	-6	138
2508	315	25	133	73.3	16	154
2509	263	5	94	60.1	T	124
2510	298	1	107	59.9	-2	154
2511	292	11	102	59.3	-3	133
2512	324	9	105	54.8	-1	166
2513	356	16	117	56.0	-5	202
2514	309	11	107	58.8	-13	156
2515	305	11	114	63.4	-6	158
2516	353	12	111	53.3	-8	201
2517	285	3	95	55.8	-9	140
2518	273	4	88	54.1	-8	130
2519	321	6	97	50.8	-9	158
2520	319	2	106	55.6	-30	163

T = TECHNICAL PROBLEM

NO. OF ANIMALS	20	20	20	20	18	20
MEANS	296.0	7.9	102.6	58.8	-5.2	147.1
STD. DEV.	31.3	5.7	12.1	7.3	9.0	25.5

APPENDIX E (cont.)
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 10

DOSE LEVEL = 90.0000 MG/KG/DAY

FEMALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE	WT. CHG. FROM
	G	G	G/INT	G/KG/DAY	G/INT	WEEK 0
3501	284	6	84	49.8	-13	146
3502	284	7	T	T	T	129
3503	304	8	101	56.1	-17	146
3504	291	13	115	67.4	2	147
3505	282	0	91	53.8	-9	148
3506	306	6	99	54.5	-3	151
3507	357	20	133	63.9	16	193
3508	266	2	83	52.2	1	126
3509	274	5	82	50.3	-5	117
3510	267	3	91	57.1	-4	123
3511	303	2	87	48.0	-15	154
3512	309	5	107	58.2	-6	156
3513	282	6	S	S	S	130
3514	324	7	100	52.0	-10	178
3515	308	0	91	49.2	-5	157
3516	251	0	S	S	S	109
3517	270	2	91	56.4	-10	129
3518	290	15	127	74.9	6	131
3519	321	13	115	60.9	7	161
3520	275	11	112	69.3	1	138

T = TECHNICAL PROBLEM

S = SPILLAGE

NO. OF ANIMALS	20	20	17	17	17	20
MEANS	292.4	6.6	100.5	57.3	-3.8	143.5
STD. DEV.	24.6	5.5	15.5	7.7	8.6	20.4

APPENDIX E (cont.)

A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 10

DOSE LEVEL = 270.0000 MG/KG/DAY

FEMALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE	WT. CHG. FROM
	G	G	G/INT	G/KG/DAY	G/INT	WEEK 0
4501	244	2	82	56.2	-6	98
4502	308	13	124	68.5	3	151
4503	300	7	103	57.9	8	146
4504	318	2	118	62.0	3	156
4505	309	16	107	59.2	-4	158
4506	248	11	88	60.5	2	105
4507	218	4	80	61.7	-6	84
4508	272	-3	89	54.2	-7	131
4510	307	6	104	57.0	6	149
4511	289	4	96	55.7	-5	151
4512	301	0	98	54.3	-6	146
4513	265	5	91	57.8	-6	119
4514	278	11	87	53.2	-4	125
4515	309	10	98	53.7	-16	167
4516	295	3	90	51.1	-10	143
4517	263	4	95	60.7	-8	127
4518	285	-1	85	49.6	-10	143
4519	300	12	105	59.5	-15	138
4520	281	3	105	62.6	-10	122
NO. OF ANIMALS	19	19	19	19	19	19
MEANS	283.7	5.7	97.1	57.7	-4.8	134.7
STD. DEV.	26.6	5.2	11.7	4.6	6.6	21.8

APPENDIX E (cont.)

A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 11

DOSE LEVEL = 0.0000 MG/KG/DAY

MALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE	WT. CHG. FROM WEEK 0
	G	G	G/INT	G/KG/DAY	G/INT	
1001	639	11	157	41.3	1	429
1002	585	25	149	43.4	8	365
1003	527	87	171	58.9	T	306
1004	613	13	136	37.4	21	387
1005	569	2	155	45.5	4	335
1006	606	16	128	35.7	0	395
1007	540	20	156	49.1	3	332
1008	580	16	143	41.7	8	367
1009	594	10	144	40.7	T	371
1010	589	16	150	43.0	1	392
1011	552	18	143	43.9	7	347
1012	574	12	145	42.5	1	356
1013	655	20	168	43.4	2	438
1014	566	12	145	43.2	-7	351
1015	652	23	172	44.8	4	450
1016	479	-89	17	5.4	-117	274
1017	583	4	151	43.3	6	355
1018	642	19	166	43.7	-4	424
1019	551	3	109	33.1	-23	336
1020	482	7	140	48.8	10	276
T = TECHNICAL PROBLEM						
NO. OF ANIMALS	20	20	20	20	18	20
MEANS	578.9	12.3	142.3	41.4	-4.2	364.3
STD. DEV.	49.4	29.6	33.0	10.0	29.5	48.9

APPENDIX E (cont.)

A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 11

DOSE LEVEL = 30.0000 MG/KG/DAY

MALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE	WT. CHG. FROM WEEK 0
	G	G	G/INT	G/KG/DAY	G/INT	
2001	598	11	167	47.0	4	369
2003	589	18	145	41.7	3	370
2004	542	12	121	37.6	4	346
2005	675	10	156	38.8	-8	433
2006	587	9	147	42.1	-6	370
2007	648	23	183	47.9	4	443
2008	694	15	178	43.2	8	487
2009	769	17	177	38.8	-9	541
2010	529	7	146	46.3	-6	308
2011	624	-4	153	40.7	-5	415
2012	568	11	146	43.3	2	355
2013	535	15	150	47.4	1	335
2014	666	9	136	34.3	-32	447
2015	592	21	174	49.9	15	381
2016	603	12	158	44.1	-4	388
2017	632	15	155	41.4	5	417
2018	533	14	167	52.9	16	320
2019	538	5	S	S	S	334
2020	539	3	S	S	S	322
S = SPILLAGE						
NO. OF ANIMALS	19	19	17	17	17	19
MEANS	603.2	11.7	156.4	43.4	-0.5	388.5
STD. DEV.	65.5	6.4	16.4	4.8	10.9	61.6

APPENDIX E (cont.)

A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX®XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 11

DOSE LEVEL = 90.0000 MG/KG/DAY

MALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE	WT. CHG. FROM
	G	G	G/INT	G/KG/DAY	G/INT	WEEK 0
3001	673	13	162	40.5	8	438
3002	615	-26	140	37.2	-32	400
3003	629	23	161	43.5	8	413
3004	570	-27	137	39.1	-20	352
3005	723	29	180	42.3	4	507
3006	592	14	151	43.0	0	384
3007	734	20	192	44.2	-6	507
3008	598	15	163	46.0	-4	378
3009	700	16	196	47.2	-1	487
3021	620	15	166	45.2	4	427
3011	635	14	168	44.6	15	410
3012	583	15	159	46.0	3	364
3013	495	13	S	S	S	297
3014	643	19	171	45.0	9	437
3015	695	17	175	42.5	-6	482
3016	615	17	159	43.7	11	413
3017	664	18	179	45.5	8	434
3018	636	21	169	45.0	1	414
3019	551	12	155	47.4	9	341
3020	540	6	146	45.3	2	332
S = SPILLAGE						
NO. OF ANIMALS	20	20	19	19	19	20
MEANS	625.6	12.2	164.7	43.9	0.7	410.9
STD. DEV.	61.9	14.0	15.7	2.7	11.2	57.7

APPENDIX E (cont.)

A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 11

DOSE LEVEL = 270.0000 MG/KG/DAY

MALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE	WT. CHG. FROM WEEK 0
	G	G	G/INT	G/KG/DAY	G/INT	
4001	626	21	175	47.4	5	411
4002	702	23	188	45.4	-18	474
4003	560	11	141	42.4	-3	360
4004	610	8	155	42.6	3	402
4005	641	14	167	43.9	0	424
4006	750	7	193	43.1	-13	529
4007	614	3	155	42.2	-3	403
4008	602	14	159	44.5	-4	389
4009	662	9	171	43.3	14	443
4010	631	20	S	S	S	402
4011	649	6	161	41.5	-10	426
4012	525	14	151	48.6	8	316
4013	603	14	158	44.2	-11	401
4014	591	9	158	44.9	-1	386
4015	681	12	155	38.3	-5	466
4016	672	19	192	48.3	-7	463
4017	717	22	191	45.1	-11	493
4018	643	9	179	46.7	-2	410
4019	684	14	185	45.5	0	467
4020	480	5	143	49.9	-14	286
S = SPILLAGE						
NO. OF ANIMALS	20	20	19	19	19	20
MEANS	632.2	12.7	167.2	44.6	-3.8	417.6
STD. DEV.	64.1	5.9	16.8	2.8	8.0	57.5

APPENDIX E (cont.)

A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 11

DOSE LEVEL = 0.0000 MG/KG/DAY

FEMALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE	WT. CHG. FROM
	G	G	G/INT	G/KG/DAY	G/INT	WEEK 0
1501	245	10	87	60.4	3	102
1502	286	10	102	60.5	1	142
1503	260	3	82	52.9	2	124
1504	303	11	90	50.4	-8	151
1505	302	4	102	56.7	0	142
1506	298	6	97	54.8	-2	153
1507	297	-6	97	53.9	-3	155
1508	278	4	103	62.2	9	124
1509	320	9	110	58.1	3	158
1510	319	-8	98	50.6	1	161
1511	285	7	99	58.6	-1	131
1512	298	7	102	57.7	-4	145
1513	288	8	105	61.6	2	149
1514	277	5	98	59.5	-1	128
1515	278	6	67	40.6	-24	134
1516	268	-1	85	52.8	-4	132
1517	311	1	99	53.1	1	153
1518	381	4	126	55.4	0	213
1519	296	12	99	56.9	-5	157
1520	302	14	118	66.7	19	146
NO. OF ANIMALS	20	20	20	20	20	20
MEANS	294.6	5.3	98.3	56.2	-0.6	145.0
STD. DEV.	27.7	5.6	12.6	5.5	7.9	21.8

APPENDIX E (cont.)

A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 11

DOSE LEVEL = 30.0000 MG/KG/DAY

FEMALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE	WT. CHG. FROM WEEK 0
	G	G	G/INT	G/KG/DAY	G/INT	
2501	273	3	86	52.8	-2	132
2502	238	0	84	58.8	0	105
2503	247	4	94	63.9	-25	111
2504	285	12	96	57.3	2	140
2505	314	15	105	57.1	9	173
2506	290	0	95	54.6	-2	137
2507	295	1	97	54.9	0	139
2508	319	4	115	60.5	-18	158
2509	266	3	96	60.5	2	127
2510	328	30	128	68.2	21	184
2511	291	-1	93	53.2	-9	132
2512	324	0	94	48.4	-11	166
2513	362	6	123	57.1	6	208
2514	306	-3	99	53.7	-8	153
2515	304	-1	95	52.0	-19	157
2516	353	0	113	53.4	2	201
2517	294	9	96	55.3	1	149
2518	281	8	97	58.4	9	138
2519	321	0	96	49.8	-1	158
2520	330	11	111	57.0	5	174
NO. OF ANIMALS	20	20	20	20	20	20
MEANS	301.1	5.1	100.7	56.3	-1.9	152.1
STD. DEV.	31.9	7.7	11.6	4.7	10.7	27.0

APPENDIX E (cont.)
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 11

DOSE LEVEL = 90.0000 MG/KG/DAY

FEMALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE	WT. CHG. FROM
	G	G	G/INT	G/KG/DAY	G/INT	WEEK 0
3501	286	2	85	49.7	1	148
3502	281	-3	87	51.3	T	126
3503	300	-4	95	52.4	-6	142
3504	290	-1	104	59.7	-11	146
3505	292	10	96	55.7	5	158
3506	308	2	92	49.9	-7	153
3507	345	-12	85	40.4	-48	181
3508	270	4	84	52.2	1	130
3509	281	7	83	49.8	1	124
3510	268	1	92	57.3	1	124
3511	312	9	99	53.7	12	163
3512	312	3	S	S	S	159
3513	275	-7	83	49.7	T	123
3514	324	0	96	49.4	-4	178
3515	314	6	95	50.9	4	163
3516	254	3	91	60.1	T	112
3517	273	3	93	57.1	2	132
3518	298	8	129	73.1	2	139
3519	310	-11	105	55.5	-10	150
3520	272	-3	96	58.5	-16	135

T = TECHNICAL PROBLEM

S = SPILLAGE

NO. OF ANIMALS	20	20	19	19	16	20
MEANS	293.3	0.9	94.2	54.0	-4.6	144.3
STD. DEV.	22.5	6.1	10.7	6.6	13.5	19.0

APPENDIX E (cont.)

A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 11

DOSE LEVEL = 270.0000 MG/KG/DAY

FEMALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE	WT. CHG. FROM
	G	G	G/INT	G/KG/DAY	G/INT	WEEK 0
4501	245	1	82	55.9	0	99
4502	308	0	109	59.0	-15	151
4503	300	0	88	48.9	-15	146
4504	332	14	129	66.2	11	170
4505	307	-2	109	59.0	2	156
4506	252	4	91	60.7	3	109
4507	224	6	93	70.1	13	90
4508	281	9	93	56.1	4	140
4510	309	2	100	54.1	-4	151
4511	299	10	90	51.0	-6	161
4512	308	7	93	50.9	-5	153
4513	269	4	98	61.2	7	123
4514	275	-3	87	52.4	0	122
4515	307	-2	81	43.8	-17	165
4516	295	0	83	46.9	-7	143
4517	261	-2	99	63.0	4	125
4518	293	8	90	51.9	5	151
4519	299	-1	89	49.5	-16	137
4520	293	12	113	65.6	8	134
NO. OF ANIMALS	19	19	19	19	19	19
MEANS	287.2	3.5	95.6	56.1	-1.5	138.2
STD. DEV.	26.8	5.2	12.1	7.1	9.3	22.1

APPENDIX E (cont.)

A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX®XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 12

DOSE LEVEL = 0.0000 MG/KG/DAY

MALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE	WT. CHG. FROM
	G	G	G/INT	G/KG/DAY	G/INT	WEEK 0
1001	660	21	164	42.1	7	450
1002	591	6	139	39.4	-10	371
1003	564	37	170	51.9	-1	343
1004	623	10	132	35.6	-4	397
1005	582	13	150	43.4	-5	348
1006	616	10	135	36.8	7	405
1007	556	16	161	49.0	5	348
1008	590	10	136	38.7	-7	377
1009	610	16	142	39.3	-2	387
1010	606	17	156	43.5	6	409
1011	566	14	139	41.4	-4	361
1012	588	14	139	39.9	-6	370
1013	663	8	161	40.7	-7	446
1014	581	15	152	44.2	7	366
1015	666	14	172	43.5	0	464
1016	517	38	130	43.5	113	312
1017	600	17	142	40.0	-9	372
1018	660	18	162	41.5	-4	442
1019	573	22	134	39.7	25	358
1020	495	13	143	48.8	3	289
NO. OF ANIMALS	20	20	20	20	20	20
MEANS	595.4	16.5	148.0	42.2	5.7	380.8
STD. DEV.	45.9	8.2	13.3	4.1	26.5	45.6

APPENDIX E (cont.)
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 12

DOSE LEVEL = 30.0000 MG/KG/DAY

MALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE	WT. CHG. FROM
	G	G	G/INT	G/KG/DAY	G/INT	WEEK 0
2001	616	18	162	44.5	-5	387
2003	601	12	137	38.4	-8	382
2004	554	12	121	36.8	0	358
2005	687	12	162	39.6	6	445
2006	606	19	149	41.6	2	389
2007	661	13	177	45.1	-6	456
2008	715	21	172	40.7	-6	508
2009	791	22	180	38.5	3	563
2010	540	11	150	46.8	4	319
2011	638	14	158	41.7	5	429
2012	553	-15	111	33.0	-35	340
2013	540	5	145	45.0	-5	340
2014	684	18	163	40.2	27	465
2015	617	25	169	46.6	-5	406
2016	616	13	150	41.0	-8	401
2017	650	18	159	41.3	4	435
2018	553	20	166	51.0	-1	340
2019	552	14	150	45.9	T	348
2020	552	13	S	S	S	335
NO. OF ANIMALS	19	19	18	18	17	19
MEANS	617.2	13.9	154.5	42.1	-1.6	402.4
STD. DEV.	69.0	8.5	18.0	4.3	12.0	65.1

T = TECHNICAL PROBLEM

S = SPILLAGE

APPENDIX E (cont.)
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 12

DOSE LEVEL = 90.0000 MG/KG/DAY

MALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE	WT. CHG. FROM WEEK 0
	G	G	G/INT	G/KG/DAY	G/INT	
3001	686	13	159	39.0	-3	451
3002	609	-6	87	23.7	-53	394
3003	656	27	164	42.5	3	440
3004	583	13	108	31.2	-29	365
3005	748	25	179	40.6	-1	532
3006	609	17	148	41.1	-3	401
3007	754	20	175	39.2	-17	527
3008	604	6	160	44.4	-3	384
3009	720	20	195	45.8	-1	507
3021	642	22	164	43.3	-2	449
3011	656	21	168	43.4	0	431
3012	595	12	154	43.6	-5	376
3013	513	18	149	49.3	T	315
3014	658	15	162	41.5	-9	452
3015	727	32	183	42.9	8	514
3016	631	16	156	41.7	-3	429
3017	687	23	174	42.9	-5	457
3018	653	17	166	42.9	-3	431
3019	562	11	154	46.1	-1	352
3020	551	11	133	40.6	-13	343
T = TECHNICAL PROBLEM						
NO. OF ANIMALS	20	20	20	20	19	20
MEANS	642.2	16.7	156.9	41.3	-7.4	427.5
STD. DEV.	65.9	8.2	24.7	5.4	13.6	62.0

APPENDIX E (cont.)

A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 12

DOSE LEVEL = 270.0000 MG/KG/DAY

MALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE	WT. CHG. FROM
	G	G	G/INT	G/KG/DAY	G/INT	WEEK 0
4001	642	16	174	45.7	-1	427
4002	703	1	171	40.6	-17	475
4003	571	11	136	40.1	-5	371
4004	628	18	158	42.5	3	420
4005	660	19	161	41.3	-6	443
4006	783	33	198	43.1	5	562
4007	628	14	154	41.3	-1	417
4008	616	14	156	42.7	-3	403
4009	680	18	186	46.2	15	461
4010	651	20	S	S	S	422
4011	662	13	162	41.2	1	439
4012	530	5	142	44.9	-9	321
4013	614	11	161	44.1	3	412
4014	600	9	162	45.3	4	395
4015	689	8	153	37.2	-2	474
4016	690	18	188	46.0	-4	481
4017	737	20	184	42.2	-7	513
4018	649	6	172	44.4	-7	416
4019	702	18	188	45.2	3	485
4020	488	8	154	53.0	11	294
S = SPILLAGE						
NO. OF ANIMALS	20	20	19	19	19	20
MEANS	646.2	14.0	166.3	43.5	-0.9	431.6
STD. DEV.	67.9	7.1	16.7	3.3	7.3	61.4

APPENDIX E (cont.)
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX®XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 12

DOSE LEVEL = 0.0000 MG/KG/DAY

FEMALES

ANIMAL NO.	WEIGHT G	WEIGHT CHANGE G	FOOD CONSUMPTION ACTUAL G/INT	ACTUAL G/KG/DAY	CHANGE G/INT	WT. CHG. FROM WEEK 0
1501	242	-3	82	56.1	-5	99
1502	282	-4	98	57.5	-4	138
1503	268	8	87	54.9	5	132
1504	299	-4	90	49.8	0	147
1505	311	9	99	53.8	-3	151
1506	297	-1	99	55.5	2	152
1507	304	7	92	51.0	-5	162
1508	280	2	93	55.6	-10	126
1509	330	10	112	57.4	2	168
1510	318	-1	95	49.7	-3	160
1511	289	4	97	56.3	-2	135
1512	299	1	104	58.1	2	146
1513	283	-5	99	57.8	-6	144
1514	275	-2	92	55.6	-6	126
1515	278	0	85	51.0	18	134
1516	271	3	86	53.2	1	135
1517	320	9	104	54.9	5	162
1518	396	15	134	57.5	8	228
1519	302	6	100	55.7	1	163
1520	304	2	100	55.0	-18	148
NO. OF ANIMALS	20	20	20	20	20	20
MEANS	297.4	2.8	97.4	54.8	-0.9	147.8
STD. DEV.	31.1	5.6	11.3	2.6	7.3	25.0

APPENDIX E (cont.)

A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 12

DOSE LEVEL = 30.0000 MG/KG/DAY

FEMALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE	WT. CHG. FROM WEEK 0
	G	G	G/INT	G/KG/DAY	G/INT	
2501	280	7	91	54.9	5	139
2502	239	1	82	57.3	-2	106
2503	253	6	97	64.7	3	117
2504	290	5	97	56.2	1	145
2505	311	-3	97	51.7	-8	170
2506	289	-1	91	52.4	-4	136
2507	305	10	103	57.2	6	149
2508	333	14	120	61.3	5	172
2509	277	11	112	68.8	16	138
2510	330	2	121	61.3	-7	186
2511	293	2	96	54.8	3	134
2512	327	3	101	51.7	7	169
2513	374	12	124	56.2	1	220
2514	316	10	114	61.1	15	163
2515	311	7	100	54.2	5	164
2516	360	7	113	52.8	0	208
2517	302	8	98	54.8	2	157
2518	283	2	97	57.3	0	140
2519	327	6	103	53.0	7	164
2520	326	-4	106	53.9	-5	170
NO. OF ANIMALS	20	20	20	20	20	20
MEANS	306.3	5.3	103.2	56.8	2.5	157.4
STD. DEV.	32.7	5.0	11.1	4.6	6.3	27.7

APPENDIX E (cont.)
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 12

DOSE LEVEL = 90.0000 MG/KG/DAY

FEMALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE	WT. CHG. FROM
	G	G	G/INT	G/KG/DAY	G/INT	WEEK 0
3501	295	9	93	53.4	8	157
3502	287	6	95	55.8	8	132
3503	303	3	100	55.3	5	145
3504	293	3	110	62.9	6	149
3505	292	0	89	50.8	-7	158
3506	311	3	95	51.2	3	156
3507	340	-5	87	42.3	2	176
3508	269	-1	82	50.7	-2	129
3509	287	6	85	49.9	2	130
3510	267	-1	87	54.2	-5	123
3511	316	4	102	54.1	3	167
3512	307	-5	95	51.2	T	154
3513	283	8	104	62.1	21	131
3514	319	-5	100	51.8	4	173
3515	314	0	83	44.1	-12	163
3516	261	7	87	56.3	-4	119
3517	276	3	94	57.1	1	135
3518	313	15	135	73.6	6	154
3519	319	9	108	57.2	3	159
3520	273	1	101	61.8	5	136
T = TECHNICAL PROBLEM						
NO. OF ANIMALS	20	20	20	20	19	20
MEANS	296.3	3.0	96.6	54.8	2.5	147.3
STD. DEV.	21.1	5.2	12.2	6.9	6.9	16.9

APPENDIX E (cont.)

A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 12

DOSE LEVEL = 270.0000 MG/KG/DAY

FEMALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE	WT. CHG. FROM
	G	G	G/INT	G/KG/DAY	G/INT	WEEK 0
4501	248	3	82	55.4	0	102
4502	310	2	112	60.4	3	153
4503	303	3	93	51.4	5	149
4504	342	10	128	63.3	-1	180
4505	318	11	108	57.6	-1	167
4506	251	-1	81	53.7	-10	108
4507	231	7	88	64.5	-5	97
4508	288	7	101	59.2	8	147
4510	308	-1	97	52.4	-3	150
4511	300	1	97	54.0	7	162
4512	305	-3	99	53.8	6	150
4513	273	4	103	63.3	5	127
4514	288	13	91	53.9	4	135
4515	313	6	90	48.4	9	171
4516	292	-3	78	44.3	-5	140
4517	263	2	105	66.8	6	127
4518	287	-6	84	48.3	-6	145
4519	299	0	104	58.0	15	137
4520	299	6	116	65.3	3	140
NO. OF ANIMALS	19	19	19	19	19	19
MEANS	290.4	3.2	97.7	56.5	2.1	141.4
STD. DEV.	27.1	5.1	13.0	6.3	6.2	22.3

APPENDIX E (cont.)

A SUBCHRONIC (3-MONTH) TOXICITY STUDY

OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 13

DOSE LEVEL = 0.0000 MG/KG/DAY

MALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE	WT. CHG. FROM WEEK 0
	G	G	G/INT	G/KG/DAY	G/INT	
1001	683	23	154	38.2	-10	473
1002	615	24	147	40.6	8	395
1003	603	39	172	49.1	2	382
1004	640	17	135	35.6	3	414
1005	594	12	146	41.4	-4	360
1006	640	24	129	34.2	-6	429
1007	574	18	158	46.6	-3	366
1008	595	5	131	36.8	-5	382
1009	627	17	135	36.4	-7	404
1010	622	16	153	41.5	-3	425
1011	580	14	134	39.0	-5	375
1012	598	10	136	38.2	-3	380
1013	679	16	157	39.0	-4	462
1014	599	18	154	43.5	2	384
1015	693	27	170	41.7	-2	491
1016	544	27	141	44.3	11	339
1017	616	16	154	42.2	12	388
1018	685	25	167	41.4	5	467
1019	591	18	143	41.0	9	376
1020	506	11	138	46.0	-5	300
NO. OF ANIMALS	20	20	20	20	20	20
MEANS	614.2	18.9	147.7	40.8	-0.3	399.6
STD. DEV.	47.6	7.5	13.1	3.8	6.4	47.4

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APPENDIX E (cont.)
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 13

DOSE LEVEL = 30.0000 MG/KG/DAY

MALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE	WT. CHG. FROM WEEK 0
	G	G	G/INT	G/KG/DAY	G/INT	
2001	638	22	160	42.5	-2	409
2003	632	31	150	40.6	13	413
2004	572	18	120	35.5	-1	376
2005	715	28	159	37.8	-3	473
2006	621	15	153	41.6	4	404
2007	688	27	180	44.5	3	483
2008	742	27	167	38.2	-5	535
2009	819	28	186	38.5	6	591
2010	561	21	146	44.2	-4	340
2011	654	16	156	40.2	-2	445
2012	568	15	134	39.8	23	355
2013	557	17	141	42.8	-4	357
2014	712	28	166	39.6	3	493
2015	629	12	158	42.3	-11	418
2016	629	13	150	40.2	0	414
2017	666	16	155	39.3	-4	451
2018	570	17	167	49.6	1	357
2019	569	17	150	44.6	0	365
2020	571	19	S	S	S	354
S = SPILLAGE						
NO. OF ANIMALS	19	19	18	18	18	19
MEANS	637.5	20.4	155.4	41.2	0.9	422.8
STD. DEV.	72.5	6.0	15.5	3.2	7.5	68.5

APPENDIX E (cont.)

A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 13

DOSE LEVEL = 90.0000 MG/KG/DAY

MALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE	WT. CHG. FROM
	G	G	G/INT	G/KG/DAY	G/INT	WEEK 0
3001	701	15	153	36.8	-6	466
3002	622	13	115	31.1	28	407
3003	683	27	164	40.8	0	467
3004	604	21	139	39.0	31	386
3005	782	34	178	38.8	-1	566
3006	636	27	157	42.0	9	428
3007	779	25	180	39.1	5	552
3008	623	19	168	45.6	8	403
3009	742	22	182	41.5	-13	529
3021	664	22	163	41.6	-1	471
3011	674	18	172	43.1	4	449
3012	617	22	157	43.2	3	398
3013	529	16	140	44.8	-9	331
3014	682	24	162	40.3	0	476
3015	748	21	183	41.4	0	535
3016	664	33	175	45.0	19	462
3017	699	12	159	38.2	-15	469
3018	666	13	158	39.9	-8	444
3019	578	16	143	41.8	-11	368
3020	562	11	134	40.1	1	354
NO. OF ANIMALS	20	20	20	20	20	20
MEANS	662.8	20.6	159.1	40.7	2.2	448.1
STD. DEV.	68.7	6.6	17.9	3.2	12.4	65.3

APPENDIX E (cont.)

A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 13

DOSE LEVEL = 270.0000 MG/KG/DAY

MALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE	WT. CHG. FROM
	G	G	G/INT	G/KG/DAY	G/INT	WEEK 0
4001	660	18	163	41.7	-11	445
4002	701	-2	171	40.6	0	473
4003	590	19	141	40.5	5	390
4004	634	6	156	41.2	-2	426
4005	678	18	152	37.9	-9	461
4006	816	33	190	39.6	-8	595
4007	647	19	156	40.8	2	436
4008	638	22	160	42.5	4	425
4009	704	24	173	41.7	-13	485
4010	666	15	S	S	S	437
4011	672	10	156	39.0	-6	449
4012	545	15	142	44.0	0	336
4013	632	18	157	42.0	-4	430
4014	626	26	169	45.9	7	421
4015	702	13	148	35.5	-5	487
4016	713	23	186	44.2	-2	504
4017	769	32	205	45.4	21	545
4018	662	13	165	42.0	-7	429
4019	715	13	189	44.5	1	498
4020	498	10	139	47.0	-15	304
S = SPILLAGE						
NO. OF ANIMALS	20	20	19	19	19	20
MEANS	663.4	17.3	164.1	41.9	-2.2	448.8
STD. DEV.	70.8	8.3	18.1	2.9	8.3	64.8

APPENDIX E (cont.)
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX®XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 13

DOSE LEVEL = 0.0000 MG/KG/DAY

FEMALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE	WT. CHG. FROM WEEK 0
	G	G	G/INT	G/KG/DAY	G/INT	
1501	249	7	86	58.4	4	106
1502	285	3	86	50.6	-12	141
1503	275	7	84	51.6	-3	139
1504	302	3	85	47.1	-5	150
1505	322	11	101	53.2	2	162
1506	305	8	94	52.0	-5	160
1507	307	3	91	49.6	-1	165
1508	286	6	87	51.2	-6	132
1509	342	12	107	53.1	-5	180
1510	333	15	95	48.6	0	175
1511	293	4	89	51.0	-8	139
1512	305	6	94	51.9	-10	152
1513	292	9	97	56.2	-2	153
1514	275	0	85	51.5	-7	126
1515	284	6	90	53.4	5	140
1516	286	15	89	53.3	3	150
1517	330	10	95	48.7	-9	172
1518	405	9	124	51.6	-10	237
1519	307	5	93	50.9	-7	168
1520	308	4	100	54.5	0	152
NO. OF ANIMALS	20	20	20	20	20	20
MEANS	304.6	7.2	93.6	51.9	-3.8	155.0
STD. DEV.	32.4	4.0	9.4	2.6	5.0	26.3

APPENDIX E (cont.)

A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 13

DOSE LEVEL = 30.0000 MG/KG/DAY

FEMALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE	WT. CHG. FROM
	G	G	G/INT	G/KG/DAY	G/INT	WEEK 0
2501	287	7	85	50.0	-6	146
2502	253	14	90	61.0	8	120
2503	254	1	84	55.2	-13	118
2504	292	2	90	51.5	-7	147
2505	329	18	102	53.1	5	188
2506	299	10	102	57.8	11	146
2507	310	5	91	49.3	-12	154
2508	351	18	116	56.5	-4	190
2509	285	8	99	58.7	-13	146
2510	321	-9	84	43.0	-37	177
2511	306	13	103	57.3	7	147
2512	335	8	100	50.4	-1	177
2513	376	2	116	51.6	-8	222
2514	311	-5	96	51.0	-18	158
2515	312	1	97	51.9	-3	165
2516	371	11	109	49.7	-4	219
2517	310	8	97	52.8	-1	165
2518	286	3	88	51.6	-9	143
2519	333	6	101	51.0	-2	170
2520	335	9	108	54.5	2	179
NO. OF ANIMALS	20	20	20	20	20	20
MEANS	312.8	6.5	97.9	52.9	-5.3	163.9
STD. DEV.	32.8	6.9	9.7	4.1	10.7	27.6

APPENDIX E (cont.)
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX® XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 13

DOSE LEVEL = 90.0000 MG/KG/DAY

FEMALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE	WT. CHG. FROM
	G	G	G/INT	G/KG/DAY	G/INT	WEEK 0
3501	297	2	85	47.9	-8	159
3502	298	11	94	53.6	-1	143
3503	317	14	101	54.3	1	159
3504	304	11	111	62.0	1	160
3505	297	5	82	46.4	-7	163
3506	318	7	100	53.0	5	163
3507	347	7	99	48.0	12	183
3508	275	6	84	51.5	2	135
3509	285	-2	81	47.2	-4	128
3510	281	14	97	59.0	10	137
3511	322	6	84	43.9	-18	173
3512	310	3	96	51.9	1	157
3513	288	5	91	53.1	-13	136
3514	325	6	100	51.8	0	179
3515	314	0	77	40.9	-6	163
3516	259	-2	S	S	S	117
3517	285	9	96	57.0	2	144
3518	332	19	151	78.0	16	173
3519	330	11	110	56.5	2	170
3520	281	8	104	62.6	3	144
S = SPILLAGE						
NO. OF ANIMALS	20	20	19	19	19	20
MEANS	303.3	7.0	97.0	53.6	-0.1	154.3
STD. DEV.	22.5	5.4	16.3	8.2	8.2	17.9

APPENDIX E (cont.)
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX®XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

INDIVIDUAL BODY WEIGHTS, BODY WEIGHT CHANGE,
BODY WEIGHT CHANGE FROM WEEK 0 AND FOOD CONSUMPTION VALUES

WEEK #: 13

DOSE LEVEL = 270.0000 MG/KG/DAY

FEMALES

ANIMAL NO.	WEIGHT	WEIGHT CHANGE	FOOD CONSUMPTION ACTUAL		CHANGE	WT. CHG. FROM
	G	G	G/INT	G/KG/DAY	G/INT	WEEK 0
4501	260	12	93	61.0	11	114
4502	314	4	105	56.1	-7	157
4503	308	5	89	48.6	-4	154
4504	342	0	118	57.5	-10	180
4505	313	-5	89	47.0	-19	162
4506	249	-2	76	50.7	-5	106
4507	233	2	84	60.3	-4	99
4508	296	8	89	50.8	-12	155
4510	315	7	97	51.9	0	157
4511	312	12	96	52.3	-1	174
4512	309	4	95	51.6	-4	154
4513	284	11	102	61.0	-1	138
4514	286	-2	85	49.4	-6	133
4515	317	4	97	51.3	7	175
4516	305	13	98	54.7	20	153
4517	268	5	99	62.1	-6	132
4518	298	11	87	49.6	3	156
4519	309	10	104	57.0	0	147
4520	300	1	104	57.9	-12	141
NO. OF ANIMALS	19	19	19	19	19	19
MEANS	295.7	5.3	95.1	54.3	-2.6	146.7
STD. DEV.	26.7	5.4	9.5	4.8	8.8	22.3

Hematology Values
Preface

Abbreviation	Parameter	Reporting Units
HGB	Hemoglobin Concentration	g/dL
HCT	Hematocrit	percent
RBC	Erythrocyte Count	10^6/microliter (mil/μL)
PLT	Platelet Count	10^3/microliter (thous/μL)
MCV	Mean Corpuscular Volume	fL
MCH	Mean Corpuscular Hemoglobin	pg
MCHC	Mean Corpuscular Hemoglobin Concentration	g/dL
PT	Prothrombin Time	seconds
APTT	Activated Partial Thromboplastin Time	seconds
WBC	Total Leukocyte Count	10^3/microliter (thous/μL)

NOTE: When N (number of animals) presented on the mean tables is less than 10, refer to individual values for an explanation of the missing data.

A key to statistical symbols is presented in Appendix A, Methodology and References - Statistical Analyses, page A-7.

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Appendix F (cont.)
A Subchronic (3-Month) Toxicity Study
of Ultranox® XR-2677 in the Rat via Oral Gavage Administration

Mean Hematology Values
Termination - Males

	HGB g/dL	HCT %	RBC mil/uL	PLT thous/uL	MCV fL	MCH pg	MCHC g/dL	PT sec	APTT sec	WBC thous/uL
Stat Symbol:	A-L-	A-L-	A-L-	A-L-	A-L-	A-L-	A-L-	K+J+	K+J+	A-L-
Group I - 0 mg/kg/day										
Mean	15.1	46.9	8.63	812	54.4	17.5	32.2	10.0	24.0	14.18
S.D.	0.4	1.8	0.25	93	2.0	0.4	0.6	0.4	1.5	2.97
N	10	10	10	10	10	10	10	10	10	10
Group II - 30 mg/kg/day										
Mean	14.9	46.4	8.69	866	53.4	17.1	32.0	12.6	31.1*	14.54
S.D.	0.8	2.7	0.47	121	2.2	0.8	0.3	2.2	4.1	4.04
N	10	10	10	10	10	10	10	9	9	10
Group III - 90 mg/kg/day										
Mean	14.7	45.6	8.48	830	53.8	17.4	32.3	15.8**	37.3**	16.04
S.D.	0.8	2.0	0.46	127	2.0	0.8	0.5	3.9	10.5	4.36
N	10	10	10	10	10	10	10	10	10	10
Group IV - 270 mg/kg/day										
Mean	14.5	45.2	8.51	841	53.2	17.1	32.2	19.1**	47.0**	13.91
S.D.	0.6	1.9	0.47	140	1.5	0.5	0.2	4.9	17.6	2.11
N	10	10	10	10	10	10	10	10	10	10

Appendix F (cont.)
A Subchronic (3-Month) Toxicity Study
of Ultranox® XR-2677 in the Rat via Oral Gavage Administration

Mean Hematology Values
Termination - Females

	HGB g/dL	HCT %	RBC mil/uL	PLT thous/uL	MCV fL	MCH pg	MCHC g/dL	PT sec	APTT sec	WBC thous/uL
Stat Symbol:	K+J+	AL	A-L-	K+J+	A+L+	A+L+	A-L-	K+J+	A+L+Q	A-L-
Group I - 0 mg/kg/day										
Mean	14.6	45.3	7.82	650	58.0	18.7	32.3	9.6	19.2	9.64
S.D.	0.9	3.0	0.61	251	2.0	0.6	0.6	0.3	2.0	2.91
N	10	10	10	10	10	10	10	10	10	10
Group II - 30 mg/kg/day										
Mean	14.6	45.6	7.97	809	57.2	18.4	32.2	9.3	21.6	8.79
S.D.	0.4	1.6	0.36	195	1.4	0.6	0.6	0.2	2.2	2.36
N	10	10	10	10	10	10	10	10	10	10
Group III - 90 mg/kg/day										
				*					**	
Mean	14.0	43.7	7.72	903	56.6	18.2	32.1	9.7	26.5	9.30
S.D.	0.3	1.1	0.28	76	1.3	0.4	0.4	0.4	3.3	2.09
N	10	10	10	10	10	10	10	10	10	10
Group IV - 270 mg/kg/day										
	*			**	**	**		**	**	
Mean	13.9	43.3	7.89	951	54.9	17.6	32.0	11.0	31.4	8.49
S.D.	0.5	1.7	0.23	121	1.8	0.5	0.6	1.7	3.7	2.86
N	10	10	10	10	10	10	10	10	10	10

Appendix F (cont.)
A Subchronic (3-Month) Toxicity Study
of Ultranox® XR-2677 in the Rat via Oral Gavage Administration

Individual Hematology Values
Termination - Males

AN_NO	HGB g/dL	HCT %	RBC mil/uL	PLT thous/uL	MCV fL	MCH pg	MCHC g/dL	PT sec	APTT sec	WBC thous/uL
Group I - 0 mg/kg/day										
1001	14.4	44.3	8.41	776.	52.7	17.1	32.4	10.5	22.2	20.08
1002	15.1	47.0	8.32	908.	56.4	18.1	32.1	9.3	23.3	16.06
1003	15.3	49.1	8.83	874.	55.6	17.4	31.2	10.4	23.7	12.81
1004	15.4	49.0	8.68	750.	56.5	17.7	31.4	9.6	23.2	15.93
1005	15.6	47.1	8.74	602.	53.9	17.8	33.1	10.1	26.3	11.54
1006	15.0	46.0	8.83	780.	52.1	17.0	32.6	9.9	21.5	12.77
1007	15.3	47.6	9.00	800.	52.9	17.0	32.1	10.2	25.4	16.02
1008	14.3	43.5	8.36	853.	52.0	17.1	33.0	9.8	24.5	11.52
1009	15.1	47.8	8.31	895.	57.6	18.2	31.6	9.8	25.3	14.94
1010	15.5	47.9	8.80	884.	54.5	17.6	32.2	10.0	24.8	10.17
Mean	15.1	46.9	8.63	812.	54.4	17.5	32.2	10.0	24.0	14.18
S.D.	0.4	1.8	0.25	93.	2.0	0.4	0.6	0.4	1.5	2.97
N	10	10	10	10	10	10	10	10	10	10
Group II - 30 mg/kg/day										
2001	15.2	47.3	9.28	817.	51.0	16.4	32.2	11.1	27.5	20.54
2003	15.3	47.8	8.48	1108.	56.3	18.1	32.1	10.5	29.8	13.94
2004	14.8	46.9	8.72	822.	53.8	17.0	31.6	10.2	27.4	11.04
2005	15.0	47.8	9.21	805.	51.9	16.3	31.5	14.8	31.5	19.14
2006	15.9	50.4	9.27	883.	54.4	17.2	31.6	15.1	39.8	11.42
2007	15.6	48.3	9.00	802.	53.7	17.3	32.2	[a]	[a]	18.87
2008	12.9	40.3	8.12	914.	49.6	15.9	32.1	12.4	29.8	17.05
2009	14.8	45.6	8.28	683.	55.0	17.9	32.4	10.2	30.1	13.39
2010	14.3	44.7	8.49	813.	52.6	16.8	32.0	12.8	28.0	9.48
2011	14.7	45.3	8.08	1017.	56.0	18.2	32.5	15.9	35.6	10.57
Mean	14.9	46.4	8.69	866.	53.4	17.1	32.0	12.6	31.1	14.54
S.D.	0.8	2.7	0.47	121.	2.2	0.8	0.3	2.2	4.1	4.04
N	10	10	10	10	10	10	10	9	9	10

[a]Results not valid due to questionable sample integrity.

Appendix F (cont.)
A Subchronic (3-Month) Toxicity Study
of Ultranox® XR-2677 in the Rat via Oral Gavage Administration

Individual Hematology Values
Termination - Males

AN_NO	HGB g/dL	HCT %	RBC mil/uL	PLT thous/uL	MCV fL	MCH pg	MCHC g/dL	PT sec	APTT sec	WBC thous/uL
Group III - 90 mg/kg/day										
3001	14.1	44.2	8.45	731.	52.3	16.6	31.8	12.3	30.8	18.65
3002	14.8	47.2	8.87	766.	53.2	16.7	31.4	12.9	36.9	17.94
3003	14.7	45.7	8.66	979.	52.7	17.0	32.2	15.5	39.6	11.60
3004	14.3	44.3	8.15	919.	54.3	17.6	32.3	15.7	30.3	15.94
3005	15.0	45.9	8.00	946.	57.3	18.7	32.7	12.2	27.3	24.85
3006	16.5	49.6	8.89	719.	55.8	18.5	33.2	15.5	33.0	12.93
3007	15.1	47.1	9.19	626.	51.3	16.4	32.0	16.9	36.4	15.89
3008	13.6	42.3	7.69	765.	55.0	17.7	32.1	16.7	35.2	10.43
3009	14.5	45.1	8.25	856.	54.7	17.6	32.2	25.7	65.1	19.39
3021	14.5	44.2	8.63	997.	51.2	16.8	32.7	15.0	38.2	12.74
Mean	14.7	45.6	8.48	830.	53.8	17.4	32.3	15.8	37.3	16.04
S.D.	0.8	2.0	0.46	127.	2.0	0.8	0.5	3.9	10.5	4.36
N	10	10	10	10	10	10	10	10	10	10
Group IV - 270 mg/kg/day										
4001	14.2	44.0	8.50	859.	51.8	16.8	32.4	13.5	32.3	12.19
4002	14.3	44.2	8.13	645.	54.4	17.6	32.3	25.7	53.9	18.30
4003	15.4	47.8	9.20	805.	51.9	16.8	32.3	14.9	35.9	12.83
4004	15.4	48.2	8.96	970.	53.8	17.2	32.0	24.9	91.7	13.28
4005	14.6	46.1	8.87	798.	51.9	16.5	31.8	17.7	42.3	13.34
4006	14.2	43.7	8.15	845.	53.6	17.4	32.4	15.4	32.5	15.99
4007	13.9	43.0	7.75	682.	55.6	17.9	32.3	27.0	53.4	11.83
4008	14.9	46.7	8.99	796.	51.9	16.6	31.9	16.5	42.6	13.83
4009	13.9	43.1	8.30	1143.	51.9	16.8	32.3	16.2	36.4	15.67
4010	14.6	45.4	8.30	865.	54.8	17.6	32.2	19.2	49.4	11.86
Mean	14.5	45.2	8.52	841.	53.2	17.1	32.2	19.1	47.0	13.91
S.D.	0.6	1.9	0.47	140.	1.5	0.5	0.2	4.9	17.6	2.11
N	10	10	10	10	10	10	10	10	10	10

Individual Hematology Values
Termination - Females

AN_NO	HGB g/dL	HCT %	RBC mil/uL	PLT thous/uL	MCV fL	MCH pg	MCHC g/dL	PT sec	APTT sec	WBC thous/uL
Group I - 0 mg/kg/day										
1501	15.4	47.3	8.27	880.	57.1	18.6	32.5	9.0	16.0	11.37
1502	14.0	42.5	7.34	666.	58.0	19.1	33.0	9.5	18.0	12.26
1503	14.6	46.0	8.20	932.	56.2	17.8	31.7	9.3	18.6	14.23
1504	15.4	48.2	8.13	758.	59.4	18.9	31.9	9.8	19.4	8.64
1505	14.9	44.8	7.91	506.	56.7	18.8	33.2	9.9	18.9	11.26
1506	14.7	45.0	8.23	725.	54.6	17.8	32.6	9.2	18.5	6.39
1507	12.9	39.6	6.48	83.	61.1	19.8	32.5	10.0	20.4	6.37
1508	16.0	50.0	8.54	845.	58.5	18.7	32.0	9.9	18.1	11.56
1509	14.5	46.5	7.70	642.	60.3	18.8	31.2	9.4	21.2	5.67
1510	14.0	43.1	7.45	463.	57.8	18.8	32.5	9.6	23.2	8.62
Mean	14.6	45.3	7.82	650.	58.0	18.7	32.3	9.6	19.2	9.64
S.D.	0.9	3.0	0.61	251.	2.0	0.6	0.6	0.3	2.0	2.91
N	10	10	10	10	10	10	10	10	10	10
Group II - 30 mg/kg/day										
2501	15.1	46.3	8.42	847.	54.9	17.9	32.6	9.5	17.6	10.07
2502	14.1	43.6	7.45	507.	58.5	19.0	32.4	9.4	20.0	5.08
2503	14.9	48.3	8.29	868.	58.3	18.0	30.9	9.6	23.7	9.45
2504	14.9	46.4	8.21	782.	56.5	18.2	32.2	9.6	24.9	11.99
2505	14.5	45.4	8.18	972.	55.5	17.7	32.0	9.0	21.7	7.64
2506	14.3	43.8	7.58	1099.	57.8	18.9	32.7	9.1	24.1	6.44
2507	14.4	43.9	7.61	1032.	57.7	18.9	32.8	9.5	22.4	7.43
2508	14.9	47.3	8.33	775.	56.8	17.8	31.4	9.2	20.0	8.20
2509	14.3	44.6	7.88	617.	56.6	18.2	32.1	9.4	20.4	12.65
2510	15.0	46.2	7.76	593.	59.5	19.3	32.4	9.1	21.2	8.95
Mean	14.6	45.6	7.97	809.	57.2	18.4	32.2	9.3	21.6	8.79
S.D.	0.4	1.6	0.36	195.	1.4	0.6	0.6	0.2	2.2	2.36
N	10	10	10	10	10	10	10	10	10	10

Individual Hematology Values
Termination - Females

AN_NO	HGB g/dL	HCT %	RBC mil/uL	PLT thous/uL	MCV fL	MCH pg	MCHC g/dL	PT sec	APTT sec	WBC thous/uL
Group III - 90 mg/kg/day										
3501	13.6	42.1	7.27	913.	57.8	18.7	32.4	10.4	27.8	11.80
3502	14.1	44.2	7.96	1063.	55.5	17.8	32.0	9.7	24.2	12.77
3503	13.9	43.9	8.06	870.	54.5	17.3	31.7	9.6	20.9	10.31
3504	14.2	43.6	7.84	769.	55.6	18.1	32.5	9.5	24.5	9.36
3505	14.3	44.3	7.95	882.	55.7	18.0	32.3	9.4	26.5	9.47
3506	13.4	42.3	7.33	905.	57.8	18.3	31.8	8.8	23.3	6.70
3507	13.9	43.0	7.49	958.	57.4	18.6	32.4	10.1	28.3	9.25
3508	14.1	45.1	7.69	851.	58.6	18.4	31.4	10.0	32.1	6.67
3509	14.4	45.3	7.98	934.	56.7	18.0	31.7	9.6	29.9	9.85
3510	14.0	43.0	7.61	884.	56.4	18.4	32.6	9.6	27.2	6.82
Mean	14.0	43.7	7.72	903.	56.6	18.2	32.1	9.7	26.5	9.30
S.D.	0.3	1.1	0.28	76.	1.3	0.4	0.4	0.4	3.3	2.09
N	10	10	10	10	10	10	10	10	10	10
Group IV - 270 mg/kg/day										
4501	14.0	43.1	7.78	830.	55.5	18.0	32.4	10.2	28.4	12.85
4502	14.8	47.3	8.27	1003.	57.1	17.9	31.3	10.9	27.5	9.87
4503	13.9	44.3	8.00	1049.	55.3	17.4	31.5	15.5	38.2	8.02
4504	13.7	42.6	7.86	1005.	54.3	17.5	32.2	10.3	30.9	7.68
4505	13.8	42.9	7.98	891.	53.7	17.3	32.2	11.6	34.3	10.45
4506	13.7	41.9	8.24	758.	50.8	16.7	32.8	10.2	29.5	5.30
4507	13.2	42.1	7.73	821.	54.5	17.0	31.3	10.6	35.3	7.21
4508	14.3	44.5	7.79	1052.	57.2	18.3	32.0	10.9	31.1	5.03
4510	13.9	42.3	7.77	968.	54.4	17.9	32.9	10.2	26.6	12.65
4511	13.3	42.0	7.52	1136.	55.8	17.7	31.6	9.7	32.0	5.87
Mean	13.9	43.3	7.89	951.	54.9	17.6	32.0	11.0	31.4	8.49
S.D.	0.5	1.7	0.23	121.	1.8	0.5	0.6	1.7	3.7	2.86
N	10	10	10	10	10	10	10	10	10	10

Total and Differential Leukocyte Counts and Erythrocyte Morphology Preface

Differential leukocytes are expressed as percent total leukocytes (WBC) and as absolute values (thous/μL).

The following cells, when present, are identified and counted:

Abbreviation	Type of Cell
Neut	Neutrophil
Lymph	Lymphocyte
Mono	Monocyte
Eos	Eosinophil
Baso	Basophil
LUC	Large Unstained Cell
Atyp. Lymph.	Atypical lymphocyte
Band	Band cell
Blast	Blast cell
Meta	Metamyelocyte
Myelo	Myelocyte
NRBC	Nucleated red blood cell
Prolymph	Prolymphocyte

Remarkable erythrocyte or leukocyte morphology and any other comments are noted under "Other". Abbreviations used are:

Abbreviation	Cell Morphology	Range
Polychr.	Polychromasia	1+ = few
Poik.	Poikilocytosis	2+ = slight
		3+ = moderate
		4+ = marked

A key to statistical symbols is presented in Appendix A, Methodology and References - Statistical Analyses, page A-7.

A Subchronic (3-Month) Toxicity Study
of Ultranox® XR-2677 in the Rat via Oral Gavage Administration

Total and Differential Leukocyte Counts
and Erythrocyte Morphology
Termination - Males

Animal Number	Absolute Values (thous/μL) WBC	Neut	Lymph	Differential Count (% of total) Neut	Lymp	Mono	Eos	Bas	LUC	Other
STAT SYMBOL:	A-L-	A-L-	A-L-							
Group I - 0 mg/kg/day										
1001	20.08	2.28	16.70	11.3	83.2	1.9	0.5	0.5	2.6	1+ Poik.
1002	16.06	3.55	11.84	22.1	73.7	1.2	0.9	0.6	1.5	1+ Poik.
1003	12.81	3.04	9.36	23.7	73.1	1.3	0.5	0.6	0.8	1+ Poik.
1004	15.93	2.07	12.94	13.0	81.3	1.8	1.1	0.5	2.3	1+ Poik.
1005	11.54	1.32	9.49	11.5	82.2	1.5	0.6	0.5	3.8	1+ Poik.
1006	12.77	1.39	10.78	10.9	84.5	1.3	0.7	0.7	1.9	1+ Poik.; 1+ Polychr.
1007	16.02	2.37	13.04	14.8	81.4	0.7	0.7	0.6	1.8	1+ Poik.; 1+ Polychr.
1008	11.52	1.13	9.96	9.8	86.5	0.9	1.1	0.4	1.3	1+ Poik.
1009	14.94	1.73	12.64	11.6	84.6	0.9	0.9	0.5	1.4	1+ Polychr.
1010	10.17	1.60	8.20	15.8	80.7	1.4	0.7	0.3	1.1	1+ Poik.
MEAN	14.18	2.05	11.49							
S.D.	2.97	0.78	2.48							
N	10	10	10							
Group II - 30 mg/kg/day										
2001	20.54	4.69	14.19	22.8	69.1	3.0	1.4	0.7	2.9	1+ Poik.
2003	13.94	1.97	11.34	14.2	81.4	1.6	1.1	0.5	1.3	1+ Poik.
2004	11.04	1.36	8.98	12.3	81.4	1.2	0.8	0.6	3.8	1+ Poik.; 1+ Polychr.
2005	19.14	2.35	15.68	12.3	81.9	1.9	1.3	0.5	2.2	1+ Poik.; 1+ Polychr.
2006	11.42	1.16	9.88	10.1	86.6	1.0	0.7	0.6	1.1	1+ Poik.; 1+ Polychr.
2007	18.87	5.20	12.40	27.5	65.7	2.3	0.9	0.7	2.9	1+ Polychr.
2008	17.05	3.11	12.99	18.2	76.2	1.6	0.6	0.6	2.8	1+ Poik.; 1+ Polychr.
2009	13.39	1.79	10.72	13.4	80.1	3.0	1.1	0.5	2.0	1+ Poik.; 1+ Polychr.
2010	9.48	1.44	7.65	15.1	80.7	1.8	0.7	0.4	1.3	1+ Poik.; 1+ Polychr.
2011	10.57	1.63	8.42	15.4	79.7	1.6	0.9	0.4	1.9	1+ Poik.; 1+ Polychr.
MEAN	14.54	2.47	11.23							
S.D.	4.04	1.42	2.60							
N	10	10	10							

Total and Differential Leukocyte Counts
and Erythrocyte Morphology
Termination - Males (cont.)

Animal Number	Absolute Values (thous/μL) WBC	Neut	Lymph	Differential Count (% of total) Neut	Lymph	Mono	Eos	Baso	LUC	Other
STAT SYMBOL:	A-L-	A-L-	A-L-							
Group III - 90 mg/kg/day										
3001	18.65	1.53	16.15	8.2	86.6	1.6	0.5	0.6	2.4	1+ Poik.; 1+ Polychr.
3002	17.94	2.34	14.37	13.0	80.1	1.4	0.9	0.7	3.8	1+ Poik.; 1+ Polychr.
3003	11.60	1.18	9.96	10.1	85.9	1.2	0.9	0.5	1.4	1+ Poik.
3004	15.94	1.91	13.33	12.0	83.6	1.7	1.0	0.5	1.2	1+ Poik.
3005	24.85	2.51	21.15	10.1	85.1	1.5	0.6	0.9	1.9	1+ Poik.; 1+ Polychr.
3006	12.93	2.52	9.69	19.5	74.9	1.8	0.8	0.6	2.4	1+ Poik.
3007	15.89	1.83	12.95	11.5	81.5	2.0	1.1	0.7	3.2	1+ Poik.; 1+ Polychr.
3008	10.43	1.69	8.15	16.2	78.2	2.4	0.7	0.3	2.2	1+ Poik.; 1+ Polychr.
3009	19.39	3.48	14.70	17.9	75.8	2.1	0.7	0.7	2.7	1+ Poik.
3021	12.74	1.40	10.88	11.0	85.4	1.3	0.4	0.6	1.4	1+ Poik.; 1+ Polychr.
MEAN	16.04	2.04	13.13							
S.D.	4.36	0.68	3.79							
N	10	10	10							
Group IV - 270 mg/kg/day										
4001	12.19	2.18	9.30	17.9	76.3	1.9	0.6	0.5	2.8	1+ Poik.; 1+ Polychr.
4002	18.30	2.13	14.51	11.6	79.3	2.6	1.3	0.7	4.4	1+ Poik.
4003	12.83	1.82	10.27	14.1	80.0	2.1	0.9	0.6	2.3	1+ Poik.
4004	13.28	1.05	11.67	7.9	87.9	1.9	0.6	0.4	1.3	1+ Poik.; 1+ Polychr.
4005	13.34	1.97	10.64	14.8	79.8	1.3	2.9	0.4	0.9	1+ Poik.
4006	15.99	1.48	13.87	9.2	86.7	1.6	0.6	0.5	1.4	1+ Poik.; 1+ Polychr.
4007	11.83	2.64	8.59	22.3	72.6	1.7	0.6	0.4	2.3	1+ Poik.
4008	13.83	1.21	11.93	8.8	86.2	1.4	1.0	0.6	2.0	1+ Poik.; 1+ Polychr.
4009	15.67	1.87	13.16	11.9	83.9	1.7	0.5	0.5	1.4	1+ Poik.; 1+ Polychr.
4010	11.86	1.60	9.72	13.5	81.9	2.0	0.8	0.3	1.5	1+ Poik.; 1+ Polychr.
MEAN	13.91	1.80	11.37							
S.D.	2.11	0.48	2.01							
N	10	10	10							

G-4
Appendix G (cont.)
A Subchronic (3-Month) Toxicity Study
of Ultranox® XR-2677 in the Rat via Oral Gavage Administration

Total and Differential Leukocyte Counts
and Erythrocyte Morphology
Termination - Females

Animal Number	Absolute Values (thous/μL) WBC	Neut	Lymph	Differential Count (% of total) Neut	Lymp	Mon	Eos	Bas	LUC	Other
STAT SYMBOL:	A-L-	A-L-	A-L-							
Group I - 0 mg/kg/day										
1501	11.37	0.62	10.36	5.5	91.1	1.5	0.7	0.3	0.9	1+ Poik.; 1+ Polychr.
1502	12.26	1.42	10.30	11.5	84.0	1.9	0.7	0.4	1.4	1+ Poik.; 1+ Polychr.
1503	14.23	0.93	12.53	6.6	88.0	1.6	0.8	0.6	2.5	1+ Poik.
1504	8.64	0.82	7.23	9.5	83.6	2.7	0.5	0.5	3.1	1+ Poik.; 1+ Polychr.
1505	11.26	1.01	9.69	9.0	86.1	1.5	1.2	0.4	1.8	1+ Poik.; 1+ Polychr.
1506	6.39	0.79	5.39	12.4	84.3	1.6	0.5	0.3	0.9	1+ Poik.; 1+ Polychr.
1507	6.37	0.46	5.76	7.2	90.4	0.8	0.5	0.6	0.6	1+ Poik.; 1+ Polychr.
1508	11.56	0.58	10.56	5.1	91.4	1.2	0.7	0.5	1.2	1+ Poik.
1509	5.67	0.66	4.78	11.7	84.2	1.4	1.1	0.5	1.1	1+ Poik.; 1+ Polychr.
1510	8.62	1.02	7.15	11.9	82.9	1.7	1.8	0.5	1.1	1+ Poik.; 1+ Polychr.
MEAN	9.64	0.83	8.38							
S.D.	2.91	0.28	2.64							
N	10	10	10							
Group II - 30 mg/kg/day										
2501	10.07	1.10	8.54	10.9	84.8	1.5	0.7	0.4	1.7	1+ Poik.; 1+ Polychr.
2502	5.08	0.52	4.33	10.2	85.1	1.9	1.5	0.4	0.9	1+ Poik.; 1+ Polychr.
2503	9.45	0.84	8.23	8.9	87.1	1.4	0.6	0.4	1.5	1+ Poik.; 1+ Polychr.
2504	11.99	1.25	10.11	10.4	84.3	1.9	1.1	0.4	1.8	1+ Poik.; 1+ Polychr.
2505	7.64	0.40	6.93	5.2	90.7	1.8	0.7	0.4	1.2	1+ Poik.; 1+ Polychr.
2506	6.44	0.89	5.25	13.8	81.6	1.7	1.0	0.4	1.5	1+ Poik.; 1+ Polychr.
2507	7.43	0.56	6.60	7.6	88.8	1.7	0.8	0.4	0.8	1+ Poik.; 1+ Polychr.
2508	8.20	0.74	7.03	9.0	85.8	1.8	1.1	0.4	1.8	1+ Polychr.
2509	12.65	1.49	10.60	11.8	83.8	1.9	0.7	0.5	1.3	1+ Poik.; 1+ Polychr.
2510	8.95	1.01	7.53	11.3	84.2	2.0	0.9	0.5	1.1	1+ Poik.; 1+ Polychr.
MEAN	8.79	0.88	7.51							
S.D.	2.36	0.34	1.96							
N	10	10	10							

Appendix G (cont.)
A Subchronic (3-Month) Toxicity Study
of Ultranox® XR-2677 in the Rat via Oral Gavage Administration

Total and Differential Leukocyte Counts
and Erythrocyte Morphology
Termination - Females (cont.)

Animal Number	Absolute Values (thous/μL) WBC	Neut	Lymph	Differential Count (% of total) Neut	Lymp	Mon	Eos	Bas	LUC	Other
STAT SYMBOL:										
Group III - 90 mg/kg/day										
3501	11.80	0.69	10.47	5.8	88.7	1.6	1.2	0.4	2.2	1+ Poik.; 1+ Polychr.
3502	12.77	1.09	11.06	8.5	86.6	2.1	0.6	0.4	1.8	1+ Poik.; 1+ Polychr.
3503	10.31	1.27	8.59	12.3	83.3	1.5	0.7	0.5	1.7	1+ Poik.; 1+ Polychr.
3504	9.36	0.49	8.45	5.3	90.3	2.5	0.5	0.4	1.0	1+ Poik.; 1+ Polychr.
3505	9.47	0.84	8.14	8.9	85.9	2.3	0.6	0.4	2.0	1+ Poik.; 1+ Polychr.
3506	6.70	0.68	5.74	10.2	85.6	1.8	0.9	0.3	1.2	1+ Poik.; 1+ Polychr.
3507	9.25	0.69	8.06	7.5	87.1	1.8	1.5	0.4	1.8	1+ Poik.; 1+ Polychr.
3508	6.67	0.62	5.81	9.3	87.0	1.8	0.7	0.3	0.8	1+ Poik.; 1+ Polychr.
3509	9.85	0.70	8.60	7.1	87.3	1.8	1.3	0.3	2.2	1+ Poik.; 1+ Polychr.
3510	6.82	1.12	5.41	16.4	79.4	1.7	1.0	0.3	1.3	1+ Poik.; 1+ Polychr.
MEAN	9.30	0.82	8.03							
S.D.	2.09	0.25	1.91							
N	10	10	10							
Group IV - 270 mg/kg/day										
4501	12.85	0.55	11.93	4.3	92.9	1.0	0.4	0.4	1.1	1+ Poik.; 1+ Polychr.
4502	9.87	0.45	9.04	4.5	91.6	1.7	0.5	0.3	1.4	1+ Poik.; 1+ Polychr.
4503	8.02	1.03	6.54	12.8	81.5	3.2	0.5	0.4	1.6	1+ Poik.; 1+ Polychr.
4504	7.68	0.52	6.81	6.7	88.6	2.4	0.6	0.4	1.4	1+ Poik.; 1+ Polychr.
4505	10.45	0.91	8.93	8.7	85.5	3.0	0.8	0.4	1.6	1+ Poik.
4506	5.30	0.59	4.49	11.1	84.7	2.0	0.9	0.3	0.9	1+ Poik.; 1+ Polychr.
4507	7.21	0.49	6.42	6.7	89.0	2.4	0.5	0.2	1.1	1+ Poik.; 1+ Polychr.
4508	5.03	0.57	4.14	11.3	82.3	2.7	1.8	0.3	1.5	1+ Poik.; 1+ Polychr.
4510	12.65	0.94	11.00	7.5	87.0	3.2	0.3	0.6	1.5	1+ Poik.; 1+ Polychr.
4511	5.87	0.93	4.51	15.8	76.9	4.5	0.9	0.4	1.6	1+ Poik.; 1+ Polychr.
MEAN	8.49	0.70	7.38							
S.D.	2.86	0.22	2.75							
N	10	10	10							

Clinical Chemistry Values
Preface

Abbreviation	Parameter	Reporting Units
AST	Aspartate Aminotransferase (SGOT)	IU/L
ALT	Alanine Aminotransferase (SGPT)	IU/L
ALKP	Alkaline Phosphatase	IU/L
BUN	Blood Urea Nitrogen	mg/dL
CREAT	Creatinine	mg/dL
GLU	Fasting Glucose	mg/dL
T PROT	Total Protein	g/dL
ALB	Albumin	g/dL
GLOB	Globulin (calculated)	g/dL
A/G	Albumin/Globulin Ratio (calculated)	
T BILI	Total Bilirubin	mg/dL
Na^+	Sodium	mEq/L
K^+	Potassium	mEq/L
Cl^-	Chloride	mEq/L
Ca^{++}	Calcium	mg/dL
PHOS	Inorganic Phosphorus	mg/dL
GGT	Gamma-Glutamyl Transferase	IU/L

A key to statistical symbols is presented in Appendix A, Methodology and References - Statistical Analyses, page A-7.

H-2
Appendix H (cont.)
A Subchronic (3-Month) Toxicity Study
of Ultranox® XR-2677 in the Rat via Oral Gavage Administration

Mean Clinical Chemistry Values
Termination - Males

	AST IU/L	ALT IU/L	ALKP IU/L	BUN mg/dL	CREAT mg/dL	GLU mg/dL	T PROT g/dL	ALB g/dL	GLOB g/dL	A/G RATIO
Stat Symbol	A-L-	A-L-	K-J-	A-L-	A-L-	A-L-	A-L-	A-L-	A-L-	A-L-
Group I - 0 mg/kg/day										
Mean	82.	36.	116.	11.0	0.3	115.	6.4	4.0	2.4	1.6
S.D.	16.	5.	29.	1.6	0.0	9.	0.2	0.1	0.2	0.1
N	10	10	10	10	10	10	10	10	10	10
Group II - 30 mg/kg/day										
Mean	77.	40.	162.	11.4	0.3	128.	6.4	4.1	2.3	1.8
S.D.	11.	9.	70.	1.2	0.1	27.	0.3	0.2	0.3	0.2
N	10	10	10	10	10	10	10	10	10	10
Group III - 90 mg/kg/day										
Mean	79.	41.	114.	11.0	0.3	125.	6.4	4.1	2.3	1.8
S.D.	7.	8.	26.	1.9	0.0	14.	0.4	0.3	0.2	0.2
N	10	10	10	10	10	10	10	10	10	10
Group IV - 270 mg/kg/day										
Mean	83.	43.	119.	11.0	0.3	125.	6.5	4.2	2.3	1.8
S.D.	15.	8.	20.	2.0	0.1	15.	0.4	0.3	0.2	0.2
N	10	10	10	10	10	10	10	10	10	10

H-3
Appendix H (cont.)
A Subchronic (3-Month) Toxicity Study
of Ultranox® XR-2677 in the Rat via Oral Gavage Administration

Mean Clinical Chemistry Values
Termination - Females

	AST IU/L	ALT IU/L	ALKP IU/L	BUN mg/dL	CREAT mg/dL	GLU mg/dL	T PROT g/dL	ALB g/dL	GLOB g/dL	A/G RATIO
Stat Symbol	A-L-	K-J-	A-L	A-L-	A-L-	A-L-	A+L+Q+	A+L+	A+L-Q+	AL+
Group I - 0 mg/kg/day										
Mean	82.	34.	66.	14.5	0.4	131.	6.5	4.8	1.6	3.0
S.D.	20.	7.	23.	2.9	0.1	21.	0.3	0.3	0.1	0.3
N	10	10	10	10	10	10	10	10	10	10
Group II - 30 mg/kg/day										
							*		**	
Mean	74.	31.	58.	14.1	0.4	142.	6.9	4.9	1.9	2.6
S.D.	13.	3.	17.	2.6	0.1	27.	0.3	0.4	0.2	0.4
N	10	10	10	10	10	10	10	10	10	10
Group III - 90 mg/kg/day										
							**	**	*	
Mean	76.	33.	50.	13.2	0.4	131.	7.2	5.4	1.8	3.0
S.D.	12.	4.	16.	2.0	0.1	21.	0.3	0.3	0.2	0.4
N	10	10	10	10	10	10	10	10	10	10
Group IV - 270 mg/kg/day										
							**	**		
Mean	78.	39.	44.	13.7	0.4	119.	7.3	5.6	1.7	3.3
S.D.	15.	18.	18.	2.1	0.1	18.	0.4	0.4	0.2	0.5
N	10	10	10	10	10	10	10	10	10	10

Appendix H (cont.)
A Subchronic (3-Month) Toxicity Study
of Ultranox® XR-2677 in the Rat via Oral Gavage Administration

Mean Clinical Chemistry Values
Termination - Males

	T BILI mg/dL	NA+ mEq/L	K+ mEq/L	CL- mEq/L	CA++ mg/dL	PHOS mg/dL	GGT IU/L
Stat Symbol	A-L-	A-L-	A-L	A-L	A-L-	A-L-	NT
Group I - 0 mg/kg/day							
Mean	0.1	140.	5.9	95.	10.0	8.5	0.
S.D.	0.0	1.	0.3	2.	0.3	0.6	0.
N	10	10	10	10	10	10	10
Group II - 30 mg/kg/day							
Mean	0.1	139.	5.8	95.	10.3	8.9	0.
S.D.	0.1	1.	0.4	1.	0.4	0.8	0.
N	10	10	10	10	10	10	10
Group III - 90 mg/kg/day							
Mean	0.1	140.	5.6	95.	10.3	8.7	0.
S.D.	0.0	1.	0.5	2.	0.4	0.6	1.
N	10	10	10	10	10	10	10
Group IV - 270 mg/kg/day							
Mean	0.1	140.	5.5	94.	10.4	8.8	0.
S.D.	0.0	1.	0.4	1.	0.6	0.6	0.
N	10	10	10	10	10	10	10

Appendix H (cont.)
A Subchronic (3-Month) Toxicity Study
of Ultranox® XR-2677 in the Rat via Oral Gavage Administration

Mean Clinical Chemistry Values
Termination - Females

	T BILI mg/dL	NA+ mEq/L	K+ mEq/L	CL- mEq/L	CA++ mg/dL	PHOS mg/dL	GGT IU/L
Stat Symbol	A+L+	A-L-	A-L-	A-L-	A-L	A-L-	NT
Group I - 0 mg/kg/day							
Mean	0.1	138.	5.8	98.	10.3	7.3	0.
S.D.	0.1	2.	0.6	1.	0.3	1.5	0.
N	10	10	10	10	10	10	10
Group II - 30 mg/kg/day							
	*						
Mean	0.1	138.	5.7	97.	10.5	7.6	0.
S.D.	0.0	1.	0.3	2.	0.4	0.9	0.
N	10	10	10	10	10	10	10
Group III - 90 mg/kg/day							
	**						
Mean	0.0	138.	5.4	97.	10.5	7.3	0.
S.D.	0.1	1.	0.4	2.	0.3	1.3	0.
N	10	10	10	10	10	10	10
Group IV - 270 mg/kg/day							
Mean	0.1	138.	5.4	97.	10.6	7.2	0.
S.D.	0.0	1.	0.5	2.	0.4	0.7	0.
N	10	10	10	10	10	10	10

Appendix H (cont.)
A Subchronic (3-Month) Toxicity Study
of Ultranox® XR-2677 in the Rat via Oral Gavage Administration

Individual Clinical Chemistry Values
Termination - Males

Animal Number	AST IU/L	ALT IU/L	ALKP IU/L	BUN mg/dL	CREAT mg/dL	GLU mg/dL	T PROT g/dL	ALB g/dL	GLOB g/dL	A/G RATIO
Group I - 0 mg/kg/day										
1001	83.	40.	121.	9.9	0.3	110.	6.7	4.2	2.5	1.7
1002	74.	45.	119.	11.5	0.3	109.	6.7	4.1	2.6	1.6
1003	77.	33.	117.	11.6	0.4	116.	6.1	3.9	2.2	1.8
1004	82.	31.	156.	10.2	0.4	110.	6.1	3.7	2.4	1.5
1005	107.	44.	164.	9.7	0.3	104.	6.6	4.0	2.6	1.5
1006	113.	37.	128.	12.7	0.4	126.	6.6	3.9	2.7	1.4
1007	67.	30.	87.	11.6	0.3	107.	6.2	4.0	2.2	1.8
1008	73.	37.	69.	12.9	0.3	128.	6.2	3.9	2.3	1.7
1009	64.	32.	93.	11.7	0.3	129.	6.4	3.9	2.5	1.6
1010	80.	33.	109.	7.8	0.3	111.	6.2	4.0	2.2	1.8
Mean	82.	36.	116.	11.0	0.3	115.	6.4	4.0	2.4	1.6
S.D.	16.	5.	29.	1.6	0.0	9.	0.2	0.1	0.2	0.1
N	10	10	10	10	10	10	10	10	10	10
Group II - 30 mg/kg/day										
2001	98.	43.	246.	13.0	0.4	124.	7.1	4.4	2.7	1.6
2003	67.	34.	106.	10.1	0.3	139.	6.1	4.1	2.0	2.0
2004	59.	27.	126.	11.3	0.3	129.	6.2	4.0	2.2	1.8
2005	75.	41.	183.	11.5	0.5	193.	6.5	4.5	2.0	2.3
2006	75.	49.	209.	11.2	0.3	94.	6.4	4.2	2.2	1.9
2007	91.	59.	294.	12.8	0.3	118.	6.6	4.1	2.5	1.6
2008	74.	31.	104.	11.0	0.3	146.	6.4	3.9	2.5	1.6
2009	75.	38.	112.	12.7	0.3	112.	6.1	4.0	2.1	1.9
2010	74.	37.	81.	9.9	0.2	109.	6.4	4.0	2.4	1.7
2011	79.	39.	162.	10.1	0.3	115.	6.6	4.0	2.6	1.5
Mean	77.	40.	162.	11.4	0.3	128.	6.4	4.1	2.3	1.8
S.D.	11.	9.	70.	1.2	0.1	27.	0.3	0.2	0.3	0.2
N	10	10	10	10	10	10	10	10	10	10

Individual Clinical Chemistry Values
Termination - Males

Animal Number	AST IU/L	ALT IU/L	ALKP IU/L	BUN mg/dL	CREAT mg/dL	GLU mg/dL	T PROT g/dL	ALB g/dL	GLOB g/dL	A/G RATIO
Group III - 90 mg/kg/day										
3001	76.	39.	163.	11.6	0.4	136.	6.4	4.2	2.2	1.9
3002	84.	59.	81.	8.4	0.4	98.	6.7	4.4	2.3	1.9
3003	65.	39.	127.	11.9	0.3	147.	6.8	4.5	2.3	2.0
3004	75.	32.	75.	10.6	0.3	118.	6.1	3.9	2.2	1.8
3005	79.	33.	108.	7.8	0.3	119.	6.0	4.0	2.0	2.0
3006	78.	39.	115.	9.9	0.3	135.	5.9	3.9	2.0	1.9
3007	92.	41.	123.	14.1	0.3	129.	6.8	4.1	2.7	1.5
3008	81.	47.	101.	12.2	0.3	110.	5.9	3.5	2.4	1.5
3009	83.	44.	138.	11.8	0.3	134.	6.5	4.2	2.3	1.8
3021	79.	36.	113.	11.7	0.3	121.	6.7	4.4	2.3	1.9
Mean	79.	41.	114.	11.0	0.3	125.	6.4	4.1	2.3	1.8
S.D.	7.	8.	26.	1.9	0.0	14.	0.4	0.3	0.2	0.2
N	10	10	10	10	10	10	10	10	10	10
Group IV - 270 mg/kg/day										
4001	81.	42.	112.	12.3	0.4	121.	6.8	4.1	2.7	1.5
4002	114.	51.	96.	9.4	0.2	95.	6.0	3.7	2.3	1.6
4003	85.	58.	99.	8.2	0.4	141.	7.2	4.6	2.6	1.8
4004	95.	50.	120.	13.1	0.4	149.	6.6	4.4	2.2	2.0
4005	85.	43.	133.	9.2	0.3	121.	6.3	4.2	2.1	2.0
4006	89.	42.	134.	13.2	0.3	132.	6.7	4.5	2.2	2.0
4007	82.	35.	100.	8.2	0.3	110.	6.4	3.9	2.5	1.6
4008	61.	38.	105.	11.9	0.2	117.	6.9	4.5	2.4	1.9
4009	67.	34.	130.	12.4	0.4	128.	6.1	3.9	2.2	1.8
4010	70.	41.	160.	12.3	0.4	132.	6.3	4.3	2.0	2.1
Mean	83.	43.	119.	11.0	0.3	125.	6.5	4.2	2.3	1.8
S.D.	15.	8.	20.	2.0	0.1	15.	0.4	0.3	0.2	0.2
N	10	10	10	10	10	10	10	10	10	10

Appendix H (cont.)
A Subchronic (3-Month) Toxicity Study
of Ultranox® XR-2677 in the Rat via Oral Gavage Administration

Individual Clinical Chemistry Values
Termination - Females

Animal Number	AST IU/L	ALT IU/L	ALKP IU/L	BUN mg/dL	CREAT mg/dL	GLU mg/dL	T PROT g/dL	ALB g/dL	GLOB g/dL	A/G RATIO
Group I - 0 mg/kg/day										
1501	117.	45.	47.	18.1	0.3	100.	6.4	4.7	1.7	2.8
1502	76.	33.	102.	16.5	0.3	129.	6.7	5.1	1.6	3.2
1503	77.	27.	59.	15.9	0.5	96.	6.1	4.5	1.6	2.8
1504	84.	33.	100.	13.7	0.3	163.	6.5	4.8	1.7	2.8
1505	74.	29.	62.	15.0	0.4	143.	6.5	4.9	1.6	3.1
1506	109.	45.	67.	12.6	0.4	141.	6.6	5.0	1.6	3.1
1507	62.	30.	48.	17.9	0.4	148.	6.0	4.5	1.5	3.0
1508	70.	32.	85.	14.8	0.3	129.	6.2	4.5	1.7	2.6
1509	96.	40.	60.	8.2	0.3	138.	6.7	4.9	1.8	2.7
1510	55.	29.	31.	12.7	0.4	124.	7.1	5.5	1.6	3.4
Mean	82.	34.	66.	14.5	0.4	131.	6.5	4.8	1.6	3.0
S.D.	20.	7.	23.	2.9	0.1	21.	0.3	0.3	0.1	0.3
N	10	10	10	10	10	10	10	10	10	10
Group II - 30 mg/kg/day										
2501	79.	31.	60.	14.9	0.4	202.	6.9	5.3	1.6	3.3
2502	88.	33.	58.	19.0	0.5	155.	6.6	4.9	1.7	2.9
2503	82.	29.	78.	15.3	0.4	146.	6.6	4.6	2.0	2.3
2504	71.	35.	90.	14.4	0.3	105.	6.6	4.8	1.8	2.7
2505	61.	28.	37.	12.8	0.4	143.	7.1	5.3	1.8	2.9
2506	98.	36.	68.	15.7	0.5	126.	7.4	5.5	1.9	2.9
2507	59.	27.	39.	14.8	0.4	110.	7.1	5.2	1.9	2.7
2508	61.	30.	39.	12.6	0.3	152.	6.6	4.6	2.0	2.3
2509	80.	34.	53.	10.5	0.4	137.	6.7	4.5	2.2	2.0
2510	64.	28.	59.	10.5	0.4	144.	7.0	4.8	2.2	2.2
Mean	74.	31.	58.	14.1	0.4	142.	6.9	4.9	1.9	2.6
S.D.	13.	3.	17.	2.6	0.1	27.	0.3	0.4	0.2	0.4
N	10	10	10	10	10	10	10	10	10	10

Appendix H (cont.)
A Subchronic (3-Month) Toxicity Study
of Ultranox® XR-2677 in the Rat via Oral Gavage Administration

Individual Clinical Chemistry Values
Termination - Females

Animal Number	AST IU/L	ALT IU/L	ALKP IU/L	BUN mg/dL	CREAT mg/dL	GLU mg/dL	T PROT g/dL	ALB g/dL	GLOB g/dL	A/G RATIO
Group III - 90 mg/kg/day										
3501	75.	38.	43.	13.8	0.4	182.	6.9	5.2	1.7	3.1
3502	75.	33.	47.	14.7	0.4	139.	6.9	4.7	2.2	2.1
3503	92.	39.	44.	16.6	0.4	106.	7.0	5.3	1.7	3.1
3504	85.	35.	47.	13.2	0.4	136.	7.4	5.8	1.6	3.6
3505	83.	33.	77.	10.8	0.5	131.	7.3	5.7	1.6	3.6
3506	90.	32.	40.	14.8	0.5	129.	7.5	5.6	1.9	2.9
3507	67.	32.	84.	10.2	0.4	123.	6.9	5.0	1.9	2.6
3508	60.	33.	40.	11.1	0.3	118.	7.7	5.7	2.0	2.8
3509	58.	27.	42.	13.3	0.4	116.	7.4	5.5	1.9	2.9
3510	74.	27.	37.	13.6	0.4	125.	7.2	5.3	1.9	2.8
Mean	76.	33.	50.	13.2	0.4	131.	7.2	5.4	1.8	3.0
S.D.	12.	4.	16.	2.0	0.1	21.	0.3	0.3	0.2	0.4
N	10	10	10	10	10	10	10	10	10	10
Group IV - 270 mg/kg/day										
4501	95.	35.	80.	13.9	0.5	120.	7.5	5.7	1.8	3.2
4502	65.	28.	29.	11.3	0.4	91.	7.1	5.7	1.4	4.1
4503	83.	31.	71.	10.7	0.4	106.	7.3	5.6	1.7	3.3
4504	66.	33.	27.	14.3	0.4	158.	7.5	5.7	1.8	3.2
4505	85.	36.	33.	13.0	0.3	113.	7.1	5.2	1.9	2.7
4506	80.	34.	47.	13.6	0.4	110.	6.7	5.1	1.6	3.2
4507	74.	43.	30.	15.2	0.4	113.	7.3	5.8	1.5	3.9
4508	85.	37.	48.	17.9	0.4	127.	7.2	5.4	1.8	3.0
4510	98.	89.	43.	14.7	0.4	128.	7.2	5.2	2.0	2.6
4511	50.	26.	36.	12.1	0.3	121.	8.1	6.3	1.8	3.5
Mean	78.	39.	44.	13.7	0.4	119.	7.3	5.6	1.7	3.3
S.D.	15.	18.	18.	2.1	0.1	18.	0.4	0.4	0.2	0.5
N	10	10	10	10	10	10	10	10	10	10

Appendix H (cont.)
A Subchronic (3-Month) Toxicity Study
of Ultranox® XR-2677 in the Rat via Oral Gavage Administration

Individual Clinical Chemistry Values
Termination - Males

Animal Number	T BILI mg/dL	NA+ mEq/L	K+ mEq/L	CL- mEq/L	CA++ mg/dL	PHOS mg/dL	GGT IU/L
Group I - 0 mg/kg/day							
1001	0.1	139.	5.8	93.	9.8	8.4	0.
1002	0.1	139.	6.2	94.	9.4	9.5	0.
1003	0.1	141.	5.4	96.	10.1	9.1	0.
1004	0.1	138.	6.0	96.	10.1	8.0	0.
1005	0.1	141.	5.9	95.	10.2	8.5	0.
1006	0.1	141.	5.7	98.	10.2	8.8	0.
1007	0.1	141.	5.7	94.	10.2	7.9	0.
1008	0.0	139.	6.3	94.	9.4	8.7	0.
1009	0.1	141.	5.9	97.	10.2	7.6	0.
1010	0.1	141.	5.7	97.	10.0	8.3	0.
Mean	0.1	140.	5.9	95.	10.0	8.5	0.
S.D.	0.0	1.	0.3	2.	0.3	0.6	0.
N	10	10	10	10	10	10	10
Group II - 30 mg/kg/day							
2001	0.1	139.	5.8	95.	11.1	9.2	0.
2003	0.1	140.	6.1	95.	10.3	9.7	0.
2004	0.1	138.	6.5	95.	9.6	9.9	0.
2005	0.1	138.	5.3	94.	10.3	8.5	0.
2006	0.1	141.	5.7	95.	10.0	7.6	0.
2007	0.2	140.	5.3	95.	10.6	9.4	0.
2008	0.1	138.	6.2	94.	10.6	9.7	0.
2009	0.1	138.	5.8	93.	10.5	9.4	0.
2010	0.2	139.	5.9	95.	10.0	7.9	0.
2011	0.0	141.	5.7	95.	10.0	8.2	0.
Mean	0.1	139.	5.8	95.	10.3	8.9	0.
S.D.	0.1	1.	0.4	1.	0.4	0.8	0.
N	10	10	10	10	10	10	10

Appendix H (cont.)
A Subchronic (3-Month) Toxicity Study
of Ultranox® XR-2677 in the Rat via Oral Gavage Administration

Individual Clinical Chemistry Values
Termination - Males

Animal Number	T BILI mg/dL	NA+ mEq/L	K+ mEq/L	CL- mEq/L	CA++ mg/dL	PHOS mg/dL	GGT IU/L
Group III - 90 mg/kg/day							
3001	0.1	139.	6.6	93.	10.2	9.6	0.
3002	0.1	140.	5.8	96.	9.8	8.6	2.
3003	0.1	139.	5.8	93.	10.7	9.3	0.
3004	0.0	139.	5.8	98.	9.9	9.2	0.
3005	0.1	140.	5.5	95.	10.2	8.1	0.
3006	0.0	140.	5.3	98.	10.7	8.6	0.
3007	0.1	140.	5.6	95.	10.5	7.9	0.
3008	0.1	140.	5.4	95.	9.8	8.1	0.
3009	0.1	143.	4.5	93.	11.0	8.6	0.
3021	0.0	142.	5.9	97.	10.2	8.5	0.
Mean	0.1	140.	5.6	95.	10.3	8.7	0.
S.D.	0.0	1.	0.5	2.	0.4	0.6	1.
N	10	10	10	10	10	10	10
Group IV - 270 mg/kg/day							
4001	0.1	140.	5.5	92.	10.4	9.2	0.
4002	0.1	138.	5.1	92.	10.2	8.8	0.
4003	0.1	140.	5.5	94.	10.9	8.8	0.
4004	0.1	139.	5.1	94.	11.5	10.3	0.
4005	0.1	140.	5.3	93.	9.9	8.2	0.
4006	0.0	142.	6.5	94.	10.8	9.1	0.
4007	0.0	142.	5.0	97.	9.7	8.5	0.
4008	0.1	141.	5.8	94.	10.9	8.6	1.
4009	0.1	139.	5.3	95.	10.2	8.7	0.
4010	0.1	141.	5.4	94.	10.0	8.2	0.
Mean	0.1	140.	5.5	94.	10.4	8.8	0.
S.D.	0.0	1.	0.4	1.	0.6	0.6	0.
N	10	10	10	10	10	10	10

Appendix H (cont.)
A Subchronic (3-Month) Toxicity Study
of Ultranox® XR-2677 in the Rat via Oral Gavage Administration

Individual Clinical Chemistry Values
Termination - Females

Animal Number	T BILI mg/dL	NA+ mEq/L	K+ mEq/L	CL- mEq/L	CA++ mg/dL	PHOS mg/dL	GGT IU/L
Group I - 0 mg/kg/day							
1501	0.2	135.	6.5	97.	10.0	9.8	0.
1502	0.1	137.	6.8	98.	10.6	8.9	1.
1503	0.2	137.	6.2	98.	10.5	7.7	0.
1504	0.1	139.	5.8	97.	10.4	8.4	0.
1505	0.2	140.	5.8	96.	10.6	7.8	0.
1506	0.1	136.	5.8	98.	9.8	6.5	0.
1507	0.1	138.	5.2	100.	10.1	5.4	0.
1508	0.2	140.	5.0	99.	10.1	7.1	0.
1509	0.1	140.	5.4	98.	10.1	5.8	0.
1510	0.1	139.	5.7	95.	10.3	5.4	0.
Mean	0.1	138.	5.8	98.	10.3	7.3	0.
S.D.	0.1	2.	0.6	1.	0.3	1.5	0.
N	10	10	10	10	10	10	10
Group II - 30 mg/kg/day							
2501	0.1	137.	5.0	96.	10.9	9.5	0.
2502	0.1	137.	5.7	98.	9.8	7.5	1.
2503	0.1	138.	5.7	98.	10.7	8.9	0.
2504	0.1	138.	5.6	95.	10.3	7.6	0.
2505	0.1	138.	6.0	95.	10.9	7.5	0.
2506	0.1	138.	6.2	99.	10.8	7.3	0.
2507	0.1	138.	5.7	96.	10.9	6.9	0.
2508	0.0	139.	5.8	97.	10.3	6.7	0.
2509	0.1	138.	5.8	98.	9.9	6.7	0.
2510	0.0	136.	5.2	101.	10.4	7.5	0.
Mean	0.1	138.	5.7	97.	10.5	7.6	0.
S.D.	0.0	1.	0.3	2.	0.4	0.9	0.
N	10	10	10	10	10	10	10

Appendix H (cont.)
A Subchronic (3-Month) Toxicity Study
of Ultranox® XR-2677 in the Rat via Oral Gavage Administration

Individual Clinical Chemistry Values
Termination - Females

Animal Number	T BILI mg/dL	NA+ mEq/L	K+ mEq/L	CL- mEq/L	CA++ mg/dL	PHOS mg/dL	GGT IU/L
Group III - 90 mg/kg/day							
3501	0.1	136.	5.6	98.	10.4	10.3	0.
3502	0.0	137.	6.0	96.	10.1	7.3	1.
3503	0.1	137.	5.5	97.	10.3	5.9	0.
3504	0.1	138.	4.8	94.	10.5	6.5	0.
3505	0.1	139.	5.3	95.	10.7	7.2	0.
3506	0.0	139.	6.0	100.	10.8	8.4	0.
3507	0.0	139.	5.1	97.	10.1	6.7	0.
3508	0.0	138.	5.0	96.	10.8	7.4	0.
3509	0.0	139.	5.3	97.	11.0	6.9	0.
3510	0.0	135.	5.2	98.	10.2	6.3	0.
Mean	0.0	138.	5.4	97.	10.5	7.3	0.
S.D.	0.1	1.	0.4	2.	0.3	1.3	0.
N	10	10	10	10	10	10	10
Group IV - 270 mg/kg/day							
4501	0.1	137.	5.7	96.	11.0	8.6	0.
4502	0.1	139.	6.0	96.	10.3	7.2	0.
4503	0.1	139.	4.6	99.	10.9	7.1	0.
4504	0.1	137.	5.8	95.	10.7	7.4	0.
4505	0.1	138.	5.8	95.	10.8	7.2	0.
4506	0.1	139.	6.0	100.	10.0	7.0	0.
4507	0.1	139.	5.0	97.	10.5	6.0	0.
4508	0.1	139.	4.9	98.	10.3	6.4	0.
4510	0.1	136.	5.2	96.	10.6	7.7	0.
4511	0.1	138.	4.9	98.	11.3	7.6	1.
Mean	0.1	138.	5.4	97.	10.6	7.2	0.
S.D.	0.0	1.	0.5	2.	0.4	0.7	0.
N	10	10	10	10	10	10	10

Appendix I
A Subchronic (3-Month) Toxicity Study
of Ultranox®XR-2677 in the Rat via Oral Gavage Administration

Terminal Organ and Body Weights, Organ/Body Weight and Organ/Brain Weight Ratios
Preface

Key to Abbreviations:

G	=	Grams
WT	=	Weight
ORG/TBW	=	Organ/Terminal Body Weight Ratio
ORG/BRN	=	Organ/Brain Weight Ratio
TEST/EPID	=	Testes/epididymides

A key to statistical symbols is presented in Appendix A, Methodology and References - Statistical Analyses, page A-7.

APPENDIX I (CONT.)
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX®XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

TERMINAL ORGAN AND BODY WEIGHTS, ORGAN/BODY WEIGHT
AND ORGAN/BRAIN WEIGHT RATIOS
TERMINATION - MALES

MEAN VALUES

	TERMINAL BODY WT. (G)	BRAIN WT. (G)	BRAIN ORG/TBW (X 1000)	BRAIN ORG/BRN (X 1)	ADRENALS WT. (G)	ADRENALS ORG/TBW (X 10000)	ADRENALS ORG/BRN (X 100)
STAT SYMBOL:	A-L	A-L-	A-L-	NT	AL+	A-L-	A-L
GROUP I - 0 MG/KG/DAY							
MEAN	581.7	2.253	3.90	1.00	.0695	1.21	3.08
S.D.	46.6	.117	.37	.00	.0117	.25	.48
N	20	20	20	20	20	20	20
GROUP II - 30 MG/KG/DAY							
MEAN	605.0	2.293	3.82	1.00	.0696	1.16	3.04
S.D.	68.6	.143	.36	.00	.0134	.25	.61
N	19	19	19	19	19	19	19
GROUP III - 90 MG/KG/DAY							
MEAN	628.2	2.288	3.67	1.00	.0759	1.22	3.33
S.D.	65.4	.132	.34	.00	.0133	.23	.61
N	20	20	20	20	20	20	20
GROUP IV - 270 MG/KG/DAY					*		
MEAN	628.0	2.291	3.68	1.00	.0792	1.28	3.46
S.D.	68.8	.105	.39	.00	.0121	.25	.52
N	20	20	20	20	20	20	20

APPENDIX I (CONT.)
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX®XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

TERMINAL ORGAN AND BODY WEIGHTS, ORGAN/BODY WEIGHT
AND ORGAN/BRAIN WEIGHT RATIOS
TERMINATION - MALES

MEAN VALUES

	TERMINAL BODY WT. (G)	KIDNEYS WT. (G)	KIDNEYS ORG/TBW (X 1000)	KIDNEYS ORG/BRN (X 1)	LIVER WT. (G)	LIVER ORG/TBW (X 100)	LIVER ORG/BRN (X 1)
STAT SYMBOL:	A-L	A+L+	A-L-	A+L+Q+	A+L+Q+	A+L+Q+	A+L+Q+
GROUP I - 0 MG/KG/DAY							
MEAN	581.7	4.469	7.70	1.99	17.546	3.01	7.81
S.D.	46.6	.474	.74	.22	1.970	.20	.99
N	20	20	20	20	20	20	20
GROUP II - 30 MG/KG/DAY							
					**	**	**
MEAN	605.0	4.924	8.17	2.15	20.939	3.46	9.15
S.D.	68.6	.553	.68	.26	3.404	.35	1.51
N	19	19	19	19	19	19	19
GROUP III - 90 MG/KG/DAY							
		**		**	**	**	**
MEAN	628.2	5.237	8.34	2.29	21.390	3.40	9.36
S.D.	65.4	.745	.80	.27	3.047	.29	1.36
N	20	20	20	20	20	20	20
GROUP IV - 270 MG/KG/DAY							
		**		**	**	**	**
MEAN	628.0	5.165	8.27	2.25	22.463	3.57	9.80
S.D.	68.8	.581	.94	.20	3.212	.30	1.30
N	20	20	20	20	20	20	20

APPENDIX I (CONT.)
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX®XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

TERMINAL ORGAN AND BODY WEIGHTS, ORGAN/BODY WEIGHT
AND ORGAN/BRAIN WEIGHT RATIOS
TERMINATION - MALES

MEAN VALUES

	TERMINAL BODY WT. (G)	SPLEEN WT. (G)	SPLEEN ORG/TBW (X 1000)	SPLEEN ORG/BRN (X 10)	TEST/EPID WT. (G)	TEST/EPID ORG/TBW (X 1000)	TEST/EPID ORG/BRN (X 1)
STAT SYMBOL:	A-L	A-L	A-L-	A-L	K-J-	AL	K-J-
GROUP I - 0 MG/KG/DAY							
MEAN	581.7	.899	1.55	3.99	5.433	9.39	2.42
S.D.	46.6	.143	.28	.57	.458	.98	.22
N	20	20	20	20	20	20	20
GROUP II - 30 MG/KG/DAY							
MEAN	605.0	.914	1.52	4.00	5.317	8.86	2.32
S.D.	68.6	.085	.19	.45	.379	.84	.14
N	19	19	19	19	19	19	19
GROUP III - 90 MG/KG/DAY							
MEAN	628.2	.983	1.57	4.28	5.377	8.64	2.35
S.D.	65.4	.176	.23	.62	.374	1.00	.16
N	20	20	20	20	20	20	20
GROUP IV - 270 MG/KG/DAY							
MEAN	628.0	.991	1.58	4.32	5.228	8.41*	2.28
S.D.	68.8	.141	.18	.57	.738	1.51	.31
N	20	20	20	20	20	20	20

APPENDIX I (CONT.)
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX®XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

TERMINAL ORGAN AND BODY WEIGHTS, ORGAN/BODY WEIGHT
AND ORGAN/BRAIN WEIGHT RATIOS
TERMINATION - MALES

	MEAN VALUES			
	TERMINAL BODY WT. (G)	THYMUS WT. (G)	THYMUS ORG/TBW (X 10000)	THYMUS ORG/BRN (X 10)
STAT SYMBOL:	A-L	A-L-	A-L	A-L-
GROUP I - 0 MG/KG/DAY				
MEAN	581.7	.580	10.05	2.58
S.D.	46.6	.150	2.79	.68
N	20	20	20	20
GROUP II - 30 MG/KG/DAY				
MEAN	605.0	.537	8.86	2.35
S.D.	68.6	.149	2.15	.66
N	19	19	19	19
GROUP III - 90 MG/KG/DAY				
MEAN	628.2	.600	9.51	2.61
S.D.	65.4	.188	2.48	.73
N	20	20	20	20
GROUP IV - 270 MG/KG/DAY				
MEAN	628.0	.515	8.19	2.24
S.D.	68.8	.143	2.16	.59
N	20	20	20	20

APPENDIX I (CONT.)
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX®XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

TERMINAL ORGAN AND BODY WEIGHTS, ORGAN/BODY WEIGHT
AND ORGAN/BRAIN WEIGHT RATIOS
TERMINATION - FEMALES

MEAN VALUES

	TERMINAL BODY WT. (G)	BRAIN WT. (G)	BRAIN ORG/TBW (X 1000)	BRAIN ORG/BRN (X 1)	ADRENALS WT. (G)	ADRENALS ORG/TBW (X 10000)	ADRENALS ORG/BRN (X 100)
STAT SYMBOL:	A-L-	A-L-	A-L-	NT	A-L-	A-L-	A-L-
GROUP I - 0 MG/KG/DAY							
MEAN	284.0	2.005	7.11	1.00	.0731	2.58	3.64
S.D.	29.6	.101	.62	.00	.0109	.35	.48
N	20	20	20	20	20	20	20
GROUP II - 30 MG/KG/DAY							
MEAN	290.7	2.039	7.10	1.00	.0753	2.62	3.69
S.D.	32.6	.089	.86	.00	.0111	.45	.46
N	20	20	20	20	20	20	20
GROUP III - 90 MG/KG/DAY							
MEAN	281.7	2.012	7.19	1.00	.0794	2.82	3.95
S.D.	21.7	.100	.68	.00	.0144	.45	.76
N	20	20	20	20	20	20	20
GROUP IV - 270 MG/KG/DAY							
MEAN	275.2	2.040	7.47	1.00	.0751	2.76	3 69
S.D.	25.3	.106	.74	.00	.0087	.49	43
N	19	19	19	19	19	19	19

APPENDIX I (CONT.)
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX®XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

TERMINAL ORGAN AND BODY WEIGHTS, ORGAN/BODY WEIGHT
AND ORGAN/BRAIN WEIGHT RATIOS
TERMINATION - FEMALES

MEAN VALUES

	TERMINAL BODY WT. (G)	KIDNEYS WT. (G)	KIDNEYS ORG/TBW (X 1000)	KIDNEYS ORG/BRN (X 1)	LIVER WT. (G)	LIVER ORG/TBW (X 100)	LIVER ORG/BRN (X 1)
STAT SYMBOL:	A-L-	A-L-	A-L-	A-L-	A+L+Q+	A+L+Q+	A+L+Q+
GROUP I - 0 MG/KG/DAY							
MEAN	284.0	2.235	7.85	1.11	8.555	3.00	4.27
S.D.	29.6	.366	.74	.17	1.443	.23	.68
N	20	20	20	20	20	20	20
GROUP II - 30 MG/KG/DAY							
MEAN	290.7	2.372	8.21	1.16	9.957**	3.43**	4.88**
S.D.	32.6	.201	.76	.10	1.194	.28	.56
N	20	20	20	20	20	20	20
GROUP III - 90 MG/KG/DAY							
MEAN	281.7	2.278	8.09	1.13	10.449**	3.71**	5.21**
S.D.	21.7	.251	.73	.12	.857	.24	.51
N	20	20	20	20	20	20	20
GROUP IV - 270 MG/KG/DAY							
MEAN	275.2	2.174	7.92	1.07	11.775**	4.28**	5.78**
S.D.	25.3	.232	.66	.12	1.423	.35	.72
N	19	19	19	19	19	19	19

APPENDIX I (CONT.)
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX®XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

TERMINAL ORGAN AND BODY WEIGHTS, ORGAN/BODY WEIGHT
AND ORGAN/BRAIN WEIGHT RATIOS
TERMINATION - FEMALES

	MEAN VALUES						
	TERMINAL BODY WT. (G)	OVARIES WT. (G)	OVARIES ORG/TBW (X 10000)	OVARIES ORG/BRN (X 100)	SPLEEN WT. (G)	SPLEEN ORG/TBW (X 1000)	SPLEEN ORG/BRN (X 10)
STAT SYMBOL:	A-L-	A-L-	A-L-	A-L-	A-L-	A-L-	A-L-
GROUP I - 0 MG/KG/DAY							
MEAN	284.0	.1049	3.68	5.23	.518	1.82	2.58
S.D.	29.6	.0189	.46	.90	.090	.22	.41
N	20	20	20	20	20	20	20
GROUP II - 30 MG/KG/DAY							
MEAN	290.7	.1110	3.85	5.44	.538	1.85	2.64
S.D.	32.6	.0214	.73	1.04	.106	.30	.53
N	20	20	20	20	20	20	20
GROUP III - 90 MG/KG/DAY							
MEAN	281.7	.1045	3.71	5.20	.537	1.90	2.67
S.D.	21.7	.0263	.87	1.26	.107	.33	.50
N	20	20	20	20	20	20	20
GROUP IV - 270 MG/KG/DAY							
MEAN	275.2	.1133	4.10	5.55	.531	1.93	2.60
S.D.	25.3	.0236	.73	1.10	.074	.22	.34
N	19	19	19	19	19	19	19

APPENDIX I (CONT.)
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX®XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

TERMINAL ORGAN AND BODY WEIGHTS, ORGAN/BODY WEIGHT
AND ORGAN/BRAIN WEIGHT RATIOS
TERMINATION - FEMALES

	MEAN VALUES			
	TERMINAL BODY WT. (G)	THYMUS WT. (G)	ORG/TBW (X 1000)	ORG/BRN (X 10)
STAT SYMBOL:	A-L-	A-L-	A-L-	A-L-
GROUP I - 0 MG/KG/DAY				
MEAN	284.0	.355	1.25	1.77
S.D.	29.6	.111	.36	.54
N	20	20	20	20
GROUP II - 30 MG/KG/DAY				
MEAN	290.7	.350	1.20	1.72
S.D.	32.6	.087	.25	.45
N	20	20	20	20
GROUP III - 90 MG/KG/DAY				
MEAN	281.7	.361	1.28	1.79
S.D.	21.7	.095	.31	.44
N	20	20	20	20
GROUP IV - 270 MG/KG/DAY				
MEAN	275.2	.321	1.17	1.58
S.D.	25.3	.064	.26	.33
N	19	19	19	19

APPENDIX I (CONT.)
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX®XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

TERMINAL ORGAN AND BODY WEIGHTS, ORGAN/BODY WEIGHT
AND ORGAN/BRAIN WEIGHT RATIOS
TERMINATION - MALES

INDIVIDUAL VALUES

AN NO	TERMINAL BODY WT. (G)	BRAIN WT. (G)	BRAIN ORG/TBW (X 1000)	BRAIN ORG/BRN (X 1)	ADRENALS WT. (G)	ADRENALS ORG/TBW (X 10000)	ADRENALS ORG/BRN (X 100)
GROUP I - 0 MG/KG/DAY							
1001	645.4	2.115	3.28	1.00	.0680	1.05	3.22
1002	583.4	2.169	3.72	1.00	.0564	.97	2.60
1003	556.5	2.295	4.12	1.00	.0751	1.35	3.27
1004	597.5	2.267	3.79	1.00	.0698	1.17	3.08
1005	559.0	2.294	4.10	1.00	.0635	1.14	2.77
1006	605.2	2.131	3.52	1.00	.0636	1.05	2.98
1007	538.7	2.182	4.05	1.00	.0635	1.18	2.91
1008	567.1	2.410	4.25	1.00	.0616	1.09	2.56
1009	590.2	2.452	4.15	1.00	.0826	1.40	3.37
1010	584.1	2.255	3.86	1.00	.0823	1.41	3.65
1011	551.6	2.260	4.10	1.00	.0694	1.26	3.07
1012	576.8	2.271	3.94	1.00	.0690	1.20	3.04
1013	655.9	2.121	3.23	1.00	.0717	1.09	3.38
1014	568.8	1.993	3.50	1.00	.0644	1.13	3.23
1015	660.7	2.344	3.55	1.00	.0569	.86	2.43
1016	514.4	2.291	4.45	1.00	.0991	1.93	4.33
1017	582.5	2.259	3.88	1.00	.0695	1.19	3.08
1018	653.5	2.335	3.57	1.00	.0540	.83	2.31
1019	561.4	2.449	4.36	1.00	.0909	1.62	3.71
1020	481.1	2.170	4.51	1.00	.0586	1.22	2.70
MEAN	581.7	2.253	3.90	1.00	.0695	1.21	3.08
S.D.	46.6	.117	.37	.00	.0117	.25	.48
N	20	20	20	20	20	20	20
MIN.	481.1	1.993	3.23	1.00	.0540	.83	2.31
MAX.	660.7	2.452	4.51	1.00	.0991	1.93	4.33

APPENDIX I (CONT.)
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX®XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

TERMINAL ORGAN AND BODY WEIGHTS, ORGAN/BODY WEIGHT
AND ORGAN/BRAIN WEIGHT RATIOS
TERMINATION - MALES

INDIVIDUAL VALUES

AN NO	TERMINAL BODY WT. (G)	KIDNEYS WT. (G)	KIDNEYS ORG/TBW (X 1000)	KIDNEYS ORG/BRN (X 1)	LIVER WT. (G)	LIVER ORG/TBW (X 100)	LIVER ORG/BRN (X 1)
GROUP I - 0 MG/KG/DAY							
1001	645.4	4.783	7.41	2.26	20.539	3.18	9.71
1002	583.4	4.521	7.75	2.08	18.399	3.15	8.48
1003	556.5	3.991	7.17	1.74	16.499	2.96	7.19
1004	597.5	4.413	7.39	1.95	17.171	2.87	7.57
1005	559.0	4.731	8.46	2.06	14.600	2.61	6.36
1006	605.2	3.485	5.76	1.64	17.173	2.84	8.06
1007	538.7	4.341	8.06	1.99	15.822	2.94	7.25
1008	567.1	4.486	7.91	1.86	18.817	3.32	7.81
1009	590.2	5.053	8.56	2.06	17.452	2.96	7.12
1010	584.1	4.623	7.91	2.05	17.905	3.07	7.94
1011	551.6	3.569	6.47	1.58	14.543	2.64	6.43
1012	576.8	4.157	7.21	1.83	17.705	3.07	7.80
1013	655.9	5.021	7.66	2.37	19.570	2.98	9.23
1014	568.8	4.641	8.16	2.33	17.697	3.11	8.88
1015	660.7	4.905	7.42	2.09	21.166	3.20	9.03
1016	514.4	4.527	8.80	1.98	16.355	3.18	7.14
1017	582.5	4.185	7.18	1.85	19.844	3.41	8.78
1018	653.5	5.403	8.27	2.31	19.240	2.94	8.24
1019	561.4	4.428	7.89	1.81	16.348	2.91	6.68
1020	481.1	4.122	8.57	1.90	14.081	2.93	6.49
MEAN	581.7	4.469	7.70	1.99	17.546	3.01	7.81
S.D.	46.6	.474	.74	.22	1.970	.20	.99
N	20	20	20	20	20	20	20
MIN.	481.1	3.485	5.76	1.58	14.081	2.61	6.36
MAX.	660.7	5.403	8.80	2.37	21.166	3.41	9.71

APPENDIX I (CONT.)
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX®XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

TERMINAL ORGAN AND BODY WEIGHTS, ORGAN/BODY WEIGHT
AND ORGAN/BRAIN WEIGHT RATIOS
TERMINATION - MALES

INDIVIDUAL VALUES

AN NO	TERMINAL BODY WT. (G)	SPLEEN WT. (G)	SPLEEN ORG/TBW (X 1000)	SPLEEN ORG/BRN (X 10)	TEST/EPID WT. (G)	TEST/EPID ORG/TBW (X 1000)	TEST/EPID ORG/BRN (X 1)
GROUP I - 0 MG/KG/DAY							
1001	645.4	.754	1.17	3.57	5.557	8.61	2.63
1002	583.4	.842	1.44	3.88	5.681	9.74	2.62
1003	556.5	1.058	1.90	4.61	5.555	9.98	2.42
1004	597.5	1.148	1.92	5.06	6.178	10.34	2.73
1005	559.0	.936	1.67	4.08	5.357	9.58	2.34
1006	605.2	.898	1.48	4.21	4.968	8.21	2.33
1007	538.7	.879	1.63	4.03	5.859	10.88	2.69
1008	567.1	.811	1.43	3.37	5.232	9.23	2.17
1009	590.2	1.143	1.94	4.66	5.966	10.11	2.43
1010	584.1	.917	1.57	4.07	6.015	10.30	2.67
1011	551.6	.839	1.52	3.71	4.716	8.55	2.09
1012	576.8	.759	1.32	3.34	4.601	7.98	2.03
1013	655.9	.929	1.42	4.38	4.972	7.58	2.34
1014	568.8	.722	1.27	3.62	5.394	9.48	2.71
1015	660.7	.867	1.31	3.70	5.972	9.04	2.55
1016	514.4	1.125	2.19	4.91	4.893	9.51	2.14
1017	582.5	.986	1.69	4.36	5.719	9.82	2.53
1018	653.5	.722	1.10	3.09	5.154	7.89	2.21
1019	561.4	.977	1.74	3.99	5.667	10.09	2.31
1020	481.1	.662	1.38	3.05	5.212	10.83	2.40
MEAN	581.7	.899	1.55	3.99	5.433	9.39	2.42
S.D.	46.6	.143	.28	.57	.458	.98	.22
N	20	20	20	20	20	20	20
MIN.	481.1	.662	1.10	3.05	4.601	7.58	2.03
MAX.	660.7	1.148	2.19	5.06	6.178	10.88	2.73

APPENDIX I (CONT.)
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX®XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

TERMINAL ORGAN AND BODY WEIGHTS, ORGAN/BODY WEIGHT
AND ORGAN/BRAIN WEIGHT RATIOS
TERMINATION - MALES

		INDIVIDUAL VALUES		
	TERMINAL		THYMUS	
AN	BODY WT.	WT.	ORG/TBW	ORG/BRN
NO	(G)	(G)	(X 10000)	(X 10)
GROUP I - 0 MG/KG/DAY				
1001	645.4	.675	10.46	3.19
1002	583.4	.507	8.69	2.34
1003	556.5	.778	13.98	3.39
1004	597.5	.832	13.92	3.67
1005	559.0	.436	7.80	1.90
1006	605.2	.682	11.27	3.20
1007	538.7	.933	17.32	4.28
1008	567.1	.647	11.41	2.68
1009	590.2	.539	9.13	2.20
1010	584.1	.504	8.63	2.24
1011	551.6	.351	6.36	1.55
1012	576.8	.421	7.30	1.85
1013	655.9	.420	6.40	1.98
1014	568.8	.472	8.30	2.37
1015	660.7	.648	9.81	2.76
1016	514.4	.628	12.21	2.74
1017	582.5	.628	10.78	2.78
1018	653.5	.476	7.28	2.04
1019	561.4	.530	9.44	2.16
1020	481.1	.501	10.41	2.31
MEAN	581.7	.580	10.05	2.58
S.D.	46.6	.150	2.79	.68
N	20	20	20	20
MIN.	481.1	.351	6.36	1.55
MAX.	660.7	.933	17.32	4.28

APPENDIX I (CONT.)
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX®XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

TERMINAL ORGAN AND BODY WEIGHTS, ORGAN/BODY WEIGHT
AND ORGAN/BRAIN WEIGHT RATIOS
TERMINATION - MALES

INDIVIDUAL VALUES

AN NO	TERMINAL BODY WT. (G)	BRAIN WT. (G)	BRAIN ORG/TBW (X 1000)	BRAIN ORG/BRN (X 1)	ADRENALS WT. (G)	ADRENALS ORG/TBW (X 10000)	ADRENALS ORG/BRN (X 100)
GROUP II - 30 MG/KG/DAY							
2001	601.4	2.312	3.84	1.00	.0722	1.20	3.12
2003	593.2	2.253	3.80	1.00	.0662	1.12	2.94
2004	544.1	2.226	4.09	1.00	.0614	1.13	2.76
2005	673.8	2.290	3.40	1.00	.0488	.72	2.13
2006	586.5	2.297	3.92	1.00	.0817	1.39	3.56
2007	639.3	2.316	3.62	1.00	.0675	1.06	2.91
2008	696.6	2.353	3.38	1.00	.0677	.97	2.88
2009	782.2	2.414	3.09	1.00	.0759	.97	3.14
2010	526.0	2.284	4.34	1.00	.0609	1.16	2.67
2011	618.0	2.654	4.29	1.00	.0828	1.34	3.12
2012	547.4	2.279	4.16	1.00	.0727	1.33	3.19
2013	533.6	2.132	4.00	1.00	.0889	1.67	4.17
2014	683.4	2.280	3.34	1.00	.0918	1.34	4.03
2015	604.8	2.135	3.53	1.00	.0568	.94	2.66
2016	603.5	2.465	4.08	1.00	.0855	1.42	3.47
2017	640.2	2.421	3.78	1.00	.0455	.71	1.88
2018	540.1	1.994	3.69	1.00	.0780	1.44	3.91
2019	541.6	2.138	3.95	1.00	.0646	1.19	3.02
2020	538.4	2.318	4.31	1.00	.0528	.98	2.28
MEAN	605.0	2.293	3.82	1.00	.0696	1.16	3.04
S.D.	68.6	.143	.36	.00	.0134	.25	.61
N	19	19	19	19	19	19	19
MIN.	526.0	1.994	3.09	1.00	.0455	.71	1.88
MAX.	782.2	2.654	4.34	1.00	.0918	1.67	4.17

APPENDIX I (CONT.)
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX®XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

TERMINAL ORGAN AND BODY WEIGHTS, ORGAN/BODY WEIGHT
AND ORGAN/BRAIN WEIGHT RATIOS
TERMINATION - MALES

INDIVIDUAL VALUES

AN NO	TERMINAL BODY WT. (G)	KIDNEYS WT. (G)	KIDNEYS ORG/TBW (X 1000)	KIDNEYS ORG/BRN (X 1)	LIVER WT. (G)	LIVER ORG/TBW (X 100)	LIVER ORG/BRN (X 1)
GROUP II - 30 MG/KG/DAY							
2001	601.4	4.451	7.40	1.93	20.583	3.42	8.90
2003	593.2	4.566	7.70	2.03	18.099	3.05	8.03
2004	544.1	4.127	7.59	1.85	18.205	3.35	8.18
2005	673.8	5.107	7.58	2.23	25.259	3.75	11.03
2006	586.5	5.111	8.71	2.23	19.592	3.34	8.53
2007	639.3	5.447	8.52	2.35	22.464	3.51	9.70
2008	696.6	5.867	8.42	2.49	27.935	4.01	11.87
2009	782.2	5.520	7.06	2.29	24.264	3.10	10.05
2010	526.0	4.529	8.61	1.98	15.828	3.01	6.93
2011	618.0	5.214	8.44	1.96	20.887	3.38	7.87
2012	547.4	4.410	8.06	1.94	16.625	3.04	7.29
2013	533.6	4.526	8.48	2.12	17.645	3.31	8.28
2014	683.4	6.273	9.18	2.75	26.523	3.88	11.63
2015	604.8	4.728	7.82	2.21	20.908	3.46	9.79
2016	603.5	4.516	7.48	1.83	19.298	3.20	7.83
2017	640.2	4.648	7.26	1.92	22.497	3.51	9.29
2018	540.1	5.085	9.41	2.55	20.918	3.87	10.49
2019	541.6	4.878	9.01	2.28	23.072	4.26	10.79
2020	538.4	4.547	8.45	1.96	17.244	3.20	7.44
MEAN	605.0	4.924	8.17	2.15	20.939	3.46	9.15
S.D.	68.6	.553	.68	.26	3.404	.35	1.51
N	19	19	19	19	19	19	19
MIN.	526.0	4.127	7.06	1.83	15.828	3.01	6.93
MAX.	782.2	6.273	9.41	2.75	27.935	4.26	11.87

APPENDIX I (CONT.)
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX®XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

TERMINAL ORGAN AND BODY WEIGHTS, ORGAN/BODY WEIGHT
AND ORGAN/BRAIN WEIGHT RATIOS
TERMINATION - MALES

		INDIVIDUAL VALUES					
		SPLEEN			TEST/EPID		
AN NO	TERMINAL BODY WT. (G)	WT. (G)	ORG/TBW (X 1000)	ORG/BRN (X 10)	WT. (G)	ORG/TBW (X 1000)	ORG/BRN (X 1)
GROUP II - 30 MG/KG/DAY							
2001	601.4	.937	1.56	4.05	5.347	8.89	2.31
2003	593.2	.751	1.27	3.33	5.406	9.11	2.40
2004	544.1	.757	1.39	3.40	5.119	9.41	2.30
2005	673.8	.971	1.44	4.24	4.887	7.25	2.13
2006	586.5	.902	1.54	3.93	5.299	9.03	2.31
2007	639.3	.979	1.53	4.23	5.370	8.40	2.32
2008	696.6	.980	1.41	4.16	5.517	7.92	2.34
2009	782.2	1.021	1.31	4.23	5.705	7.29	2.36
2010	526.0	.842	1.60	3.69	5.022	9.55	2.20
2011	618.0	.920	1.49	3.47	6.025	9.75	2.27
2012	547.4	1.034	1.89	4.54	5.154	9.42	2.26
2013	533.6	.850	1.59	3.99	4.522	8.47	2.12
2014	683.4	.811	1.19	3.56	5.760	8.43	2.53
2015	604.8	.964	1.59	4.52	5.699	9.42	2.67
2016	603.5	.944	1.56	3.83	5.511	9.13	2.24
2017	640.2	.829	1.29	3.42	5.184	8.10	2.14
2018	540.1	.995	1.84	4.99	5.019	9.29	2.52
2019	541.6	.917	1.69	4.29	4.785	8.83	2.24
2020	538.4	.964	1.79	4.16	5.698	10.58	2.46
MEAN	605.0	.914	1.52	4.00	5.317	8.86	2.32
S.D.	68.6	.085	.19	.45	.379	.84	.14
N	19	19	19	19	19	19	19
MIN.	526.0	.751	1.19	3.33	4.522	7.25	2.12
MAX.	782.2	1.034	1.89	4.99	6.025	10.58	2.67

APPENDIX I (CONT.)
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX®XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

TERMINAL ORGAN AND BODY WEIGHTS, ORGAN/BODY WEIGHT
AND ORGAN/BRAIN WEIGHT RATIOS
TERMINATION - MALES

AN NO	TERMINAL BODY WT. (G)	INDIVIDUAL VALUES THYMUS WT. (G)	THYMUS ORG/TBW (X 10000)	THYMUS ORG/BRN (X 10)
GROUP II - 30 MG/KG/DAY				
2001	601.4	.677	11.26	2.93
2003	593.2	.769	12.96	3.41
2004	544.1	.610	11.21	2.74
2005	673.8	.513	7.61	2.24
2006	586.5	.379	6.46	1.65
2007	639.3	.606	9.48	2.62
2008	696.6	.498	7.15	2.12
2009	782.2	.796	10.18	3.30
2010	526.0	.474	9.01	2.08
2011	618.0	.314	5.08	1.18
2012	547.4	.355	6.49	1.56
2013	533.6	.321	6.02	1.51
2014	683.4	.625	9.15	2.74
2015	604.8	.695	11.49	3.26
2016	603.5	.485	8.04	1.97
2017	640.2	.705	11.01	2.91
2018	540.1	.522	9.66	2.62
2019	541.6	.417	7.70	1.95
2020	538.4	.449	8.34	1.94
MEAN	605.0	.537	8.86	2.35
S.D.	68.6	.149	2.15	.66
N	19	19	19	19
MIN.	526.0	.314	5.08	1.18
MAX.	782.2	.796	12.96	3.41

APPENDIX I (CONT.)
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX®XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

TERMINAL ORGAN AND BODY WEIGHTS, ORGAN/BODY WEIGHT
AND ORGAN/BRAIN WEIGHT RATIOS
TERMINATION - MALES

INDIVIDUAL VALUES

AN NO	TERMINAL BODY WT. (G)	BRAIN WT. (G)	BRAIN ORG/TBW (X 1000)	BRAIN ORG/BRN (X 1)	ADRENALS WT. (G)	ADRENALS ORG/TBW (X 10000)	ADRENALS ORG/BRN (X 100)
GROUP III - 90 MG/KG/DAY							
3001	666.1	2.101	3.15	1.00	.0708	1.06	3.37
3002	585.1	2.230	3.81	1.00	.0952	1.63	4.27
3003	649.6	2.134	3.29	1.00	.0829	1.28	3.88
3004	563.0	2.304	4.09	1.00	.0798	1.42	3.46
3005	741.7	2.566	3.46	1.00	.0643	.87	2.51
3006	594.9	2.275	3.82	1.00	.0719	1.21	3.16
3007	733.3	2.608	3.56	1.00	.0985	1.34	3.78
3008	584.6	2.285	3.91	1.00	.0708	1.21	3.10
3009	702.3	2.462	3.51	1.00	.0799	1.14	3.25
3011	645.1	2.317	3.59	1.00	.0656	1.02	2.83
3012	584.3	2.337	4.00	1.00	.0618	1.06	2.64
3013	505.2	2.161	4.28	1.00	.0658	1.30	3.04
3014	649.5	2.171	3.34	1.00	.0790	1.22	3.64
3015	715.7	2.312	3.23	1.00	.0710	.99	3.07
3016	629.7	2.258	3.59	1.00	.0965	1.53	4.27
3017	667.5	2.149	3.22	1.00	.0874	1.31	4.07
3018	632.8	2.309	3.65	1.00	.0593	.94	2.57
3019	550.9	2.231	4.05	1.00	.0945	1.72	4.24
3020	539.2	2.240	4.15	1.00	.0531	.98	2.37
3021	623.7	2.306	3.70	1.00	.0692	1.11	3.00
MEAN	628.2	2.288	3.67	1.00	.0759	1.22	3.33
S.D.	65.4	.132	.34	.00	.0133	.23	.61
N	20	20	20	20	20	20	20
MIN.	505.2	2.101	3.15	1.00	.0531	.87	2.37
MAX.	741.7	2.608	4.28	1.00	.0985	1.72	4.27

APPENDIX I (CONT.)
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX®XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

TERMINAL ORGAN AND BODY WEIGHTS, ORGAN/BODY WEIGHT
AND ORGAN/BRAIN WEIGHT RATIOS
TERMINATION - MALES

INDIVIDUAL VALUES

AN NO	TERMINAL BODY WT. (G)	KIDNEYS WT. (G)	KIDNEYS ORG/TBW (X 1000)	KIDNEYS ORG/BRN (X 1)	LIVER WT. (G)	LIVER ORG/TBW (X 100)	LIVER ORG/BRN (X 1)
GROUP III - 90 MG/KG/DAY							
3001	666.1	5.598	8.40	2.66	25.688	3.86	12.23
3002	585.1	4.451	7.61	2.00	18.919	3.23	8.48
3003	649.6	4.568	7.03	2.14	22.256	3.43	10.43
3004	563.0	4.812	8.55	2.09	18.281	3.25	7.93
3005	741.7	6.085	8.20	2.37	23.367	3.15	9.11
3006	594.9	5.044	8.48	2.22	18.643	3.13	8.19
3007	733.3	6.446	8.79	2.47	25.275	3.45	9.69
3008	584.6	4.896	8.37	2.14	19.706	3.37	8.62
3009	702.3	7.260	10.34	2.95	27.174	3.87	11.04
3011	645.1	5.187	8.04	2.24	19.286	2.99	8.32
3012	584.3	4.649	7.96	1.99	19.717	3.37	8.44
3013	505.2	4.618	9.14	2.14	19.152	3.79	8.86
3014	649.5	4.738	7.29	2.18	21.548	3.32	9.93
3015	715.7	5.443	7.61	2.35	23.373	3.27	10.11
3016	629.7	5.528	8.78	2.45	21.036	3.34	9.32
3017	667.5	6.030	9.03	2.81	26.697	4.00	12.42
3018	632.8	4.546	7.18	1.97	20.680	3.27	8.96
3019	550.9	5.183	9.41	2.32	19.459	3.53	8.72
3020	539.2	4.525	8.39	2.02	15.931	2.95	7.11
3021	623.7	5.141	8.24	2.23	21.621	3.47	9.38
MEAN	628.2	5.237	8.34	2.29	21.390	3.40	9.36
S.D.	65.4	.745	.80	.27	3.047	.29	1.36
N	20	20	20	20	20	20	20
MIN.	505.2	4.451	7.03	1.97	15.931	2.95	7.11
MAX.	741.7	7.260	10.34	2.95	27.174	4.00	12.42

APPENDIX I (CONT.)
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX®XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

TERMINAL ORGAN AND BODY WEIGHTS, ORGAN/BODY WEIGHT
AND ORGAN/BRAIN WEIGHT RATIOS
TERMINATION - MALES

INDIVIDUAL VALUES

AN NO	TERMINAL BODY WT. (G)	SPLEEN WT. (G)	SPLEEN ORG/TBW (X 1000)	SPLEEN ORG/BRN (X 10)	TEST/EPID WT. (G)	TEST/EPID ORG/TBW (X 1000)	TEST/EPID ORG/BRN (X 1)
GROUP III - 90 MG/KG/DAY							
3001	666.1	.974	1.46	4.64	4.456	6.69	2.12
3002	585.1	.845	1.44	3.79	5.772	9.86	2.59
3003	649.6	.866	1.33	4.06	5.054	7.78	2.37
3004	563.0	1.034	1.84	4.49	5.507	9.78	2.39
3005	741.7	1.401	1.89	5.46	5.788	7.80	2.26
3006	594.9	.916	1.54	4.03	5.990	10.07	2.63
3007	733.3	1.107	1.51	4.24	5.540	7.55	2.12
3008	584.6	.859	1.47	3.76	5.209	8.91	2.28
3009	702.3	1.328	1.89	5.39	5.434	7.74	2.21
3011	645.1	.976	1.51	4.21	5.486	8.50	2.37
3012	584.3	1.059	1.81	4.53	5.199	8.90	2.22
3013	505.2	.955	1.89	4.42	5.303	10.50	2.45
3014	649.5	.799	1.23	3.68	5.085	7.83	2.34
3015	715.7	.837	1.17	3.62	5.524	7.72	2.39
3016	629.7	.856	1.36	3.79	5.997	9.52	2.66
3017	667.5	1.080	1.62	5.03	5.568	8.34	2.59
3018	632.8	1.049	1.66	4.54	5.165	8.16	2.24
3019	550.9	.857	1.56	3.84	5.108	9.27	2.29
3020	539.2	.694	1.29	3.10	4.898	9.08	2.19
3021	623.7	1.161	1.86	5.03	5.461	8.76	2.37
MEAN	628.2	.983	1.57	4.28	5.377	8.64	2.35
S.D.	65.4	.176	.23	.62	.374	1.00	.16
N	20	20	20	20	20	20	20
MIN.	505.2	.694	1.17	3.10	4.456	6.69	2.12
MAX.	741.7	1.401	1.89	5.46	5.997	10.50	2.66

APPENDIX I (CONT.)
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX®XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

TERMINAL ORGAN AND BODY WEIGHTS, ORGAN/BODY WEIGHT
AND ORGAN/BRAIN WEIGHT RATIOS
TERMINATION - MALES

AN NO	TERMINAL BODY WT. (G)	INDIVIDUAL VALUES THYMUS WT. (G)	THYMUS ORG/TBW (X 10000)	THYMUS ORG/BRN (X 10)
GROUP III - 90 MG/KG/DAY				
3001	666.1	.457	6.86	2.18
3002	585.1	.623	10.65	2.79
3003	649.6	.809	12.45	3.79
3004	563.0	.462	8.21	2.01
3005	741.7	1.079	14.55	4.20
3006	594.9	.421	7.08	1.85
3007	733.3	.703	9.59	2.70
3008	584.6	.645	11.03	2.82
3009	702.3	.917	13.06	3.72
3011	645.1	.550	8.53	2.37
3012	584.3	.483	8.27	2.07
3013	505.2	.519	10.27	2.40
3014	649.5	.434	6.68	2.00
3015	715.7	.682	9.53	2.95
3016	629.7	.353	5.61	1.56
3017	667.5	.549	8.22	2.55
3018	632.8	.466	7.36	2.02
3019	550.9	.425	7.71	1.90
3020	539.2	.615	11.41	2.75
3021	623.7	.815	13.07	3.53
MEAN	628.2	.600	9.51	2.61
S.D.	65.4	.188	2.48	.73
N	20	20	20	20
MIN.	505.2	.353	5.61	1.56
MAX.	741.7	1.079	14.55	4.20

APPENDIX I (CONT.)
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX®XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

TERMINAL ORGAN AND BODY WEIGHTS, ORGAN/BODY WEIGHT
AND ORGAN/BRAIN WEIGHT RATIOS
TERMINATION - MALES

INDIVIDUAL VALUES

AN NO	TERMINAL BODY WT. (G)	BRAIN WT. (G)	BRAIN ORG/TBW (X 1000)	BRAIN ORG/BRN (X 1)	ADRENALS WT. (G)	ADRENALS ORG/TBW (X 10000)	ADRENALS ORG/BRN (X 100)
GROUP IV - 270 MG/KG/DAY							
4001	621.8	2.321	3.73	1.00	.0635	1.02	2.74
4002	661.5	2.326	3.52	1.00	.0851	1.29	3.66
4003	552.9	2.085	3.77	1.00	.0667	1.21	3.20
4004	597.0	2.165	3.63	1.00	.0839	1.41	3.88
4005	636.4	2.528	3.97	1.00	.0722	1.13	2.86
4006	772.0	2.365	3.06	1.00	.0692	.90	2.93
4007	614.7	2.344	3.81	1.00	.0761	1.24	3.25
4008	599.5	2.404	4.01	1.00	.0978	1.63	4.07
4009	660.2	2.437	3.69	1.00	.0924	1.40	3.79
4010	628.4	2.298	3.66	1.00	.0990	1.58	4.31
4011	641.6	2.269	3.54	1.00	.0742	1.16	3.27
4012	518.2	2.260	4.36	1.00	.0767	1.48	3.39
4013	599.9	2.196	3.66	1.00	.0984	1.64	4.48
4014	591.2	2.182	3.69	1.00	.0684	1.16	3.13
4015	673.0	2.317	3.44	1.00	.0609	.90	2.63
4016	680.4	2.371	3.48	1.00	.0946	1.39	3.99
4017	738.9	2.175	2.94	1.00	.0685	.93	3.15
4018	624.0	2.309	3.70	1.00	.0818	1.31	3.54
4019	679.8	2.257	3.32	1.00	.0736	1.08	3.26
4020	469.0	2.206	4.70	1.00	.0819	1.75	3.71
MEAN	628.0	2.291	3.68	1.00	.0792	1.28	3.46
S.D.	68.8	.105	.39	.00	.0121	.25	.52
N	20	20	20	20	20	20	20
MIN.	469.0	2.085	2.94	1.00	.0609	.90	2.63
MAX.	772.0	2.528	4.70	1.00	.0990	1.75	4.48

APPENDIX I (CONT.)
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX®XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

TERMINAL ORGAN AND BODY WEIGHTS, ORGAN/BODY WEIGHT
AND ORGAN/BRAIN WEIGHT RATIOS
TERMINATION - MALES

INDIVIDUAL VALUES

AN NO	TERMINAL BODY WT. (G)	KIDNEYS WT. (G)	KIDNEYS ORG/TBW (X 1000)	KIDNEYS ORG/BRN (X 1)	LIVER WT. (G)	LIVER ORG/TBW (X 100)	LIVER ORG/BRN (X 1)
GROUP IV - 270 MG/KG/DAY							
4001	621.8	5.129	8.25	2.21	22.265	3.58	9.59
4002	661.5	5.931	8.97	2.55	27.284	4.12	11.73
4003	552.9	3.890	7.04	1.87	19.393	3.51	9.30
4004	597.0	5.514	9.24	2.55	21.008	3.52	9.70
4005	636.4	5.288	8.31	2.09	20.881	3.28	8.26
4006	772.0	5.340	6.92	2.26	28.727	3.72	12.15
4007	614.7	5.005	8.14	2.14	19.048	3.10	8.13
4008	599.5	6.036	10.07	2.51	24.481	4.08	10.18
4009	660.2	6.270	9.50	2.57	23.680	3.59	9.72
4010	628.4	4.966	7.90	2.16	23.891	3.80	10.40
4011	641.6	4.703	7.33	2.07	23.092	3.60	10.18
4012	518.2	4.570	8.82	2.02	20.475	3.95	9.06
4013	599.9	4.863	8.11	2.21	19.222	3.20	8.75
4014	591.2	4.443	7.52	2.04	18.265	3.09	8.37
4015	673.0	5.510	8.19	2.38	22.393	3.33	9.66
4016	680.4	5.693	8.37	2.40	25.962	3.82	10.95
4017	738.9	5.186	7.02	2.38	25.411	3.44	11.68
4018	624.0	5.407	8.67	2.34	21.585	3.46	9.35
4019	679.8	4.931	7.25	2.18	25.701	3.78	11.39
4020	469.0	4.628	9.87	2.10	16.498	3.52	7.48
MEAN	628.0	5.165	8.27	2.25	22.463	3.57	9.80
S.D.	68.8	.581	.94	.20	3.212	.30	1.30
N	20	20	20	20	20	20	20
MIN.	469.0	3.890	6.92	1.87	16.498	3.09	7.48
MAX.	772.0	6.270	10.07	2.57	28.727	4.12	12.15

APPENDIX I (CONT.)
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX®XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

TERMINAL ORGAN AND BODY WEIGHTS, ORGAN/BODY WEIGHT
AND ORGAN/BRAIN WEIGHT RATIOS
TERMINATION - MALES

AN NO	TERMINAL BODY WT. (G)	INDIVIDUAL VALUES SPLEEN WT. (G)	SPLEEN ORG/TBW (X 1000)	SPLEEN ORG/BRN (X 10)	TEST/EPID WT. (G)	TEST/EPID ORG/TBW (X 1000)	TEST/EPID ORG/BRN (X 1)
GROUP IV - 270 MG/KG/DAY							
4001	621.8	.989	1.59	4.26	5.670	9.12	2.44
4002	661.5	1.278	1.93	5.49	5.095	7.70	2.19
4003	552.9	.816	1.48	3.91	5.315	9.61	2.55
4004	597.0	.902	1.51	4.17	4.622	7.74	2.13
4005	636.4	.978	1.54	3.87	5.219	8.20	2.06
4006	772.0	1.302	1.69	5.51	6.256	8.10	2.65
4007	614.7	1.023	1.66	4.36	5.363	8.72	2.29
4008	599.5	.994	1.66	4.13	5.616	9.37	2.34
4009	660.2	1.057	1.60	4.34	5.834	8.84	2.39
4010	628.4	.991	1.58	4.31	2.677	4.26	1.16
4011	641.6	.857	1.34	3.78	5.034	7.85	2.22
4012	518.2	.854	1.65	3.78	5.729	11.06	2.53
4013	599.9	1.139	1.90	5.19	4.605	7.68	2.10
4014	591.2	.799	1.35	3.66	4.821	8.15	2.21
4015	673.0	.945	1.40	4.08	5.662	8.41	2.44
4016	680.4	1.112	1.63	4.69	5.773	8.48	2.43
4017	738.9	1.021	1.38	4.69	5.395	7.30	2.48
4018	624.0	.828	1.33	3.59	4.860	7.79	2.10
4019	679.8	1.055	1.55	4.67	5.444	8.01	2.41
4020	469.0	.883	1.88	4.00	5.568	11.87	2.52
MEAN	628.0	.991	1.58	4.32	5.228	8.41	2.28
S.D.	68.8	.141	.18	.57	.738	1.51	.31
N	20	20	20	20	20	20	20
MIN.	469.0	.799	1.33	3.59	2.677	4.26	1.16
MAX.	772.0	1.302	1.93	5.51	6.256	11.87	2.65

APPENDIX I (CONT.)
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX®XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

TERMINAL ORGAN AND BODY WEIGHTS, ORGAN/BODY WEIGHT
AND ORGAN/BRAIN WEIGHT RATIOS
TERMINATION - MALES

		INDIVIDUAL VALUES		
	TERMINAL	THYMUS		
AN NO	BODY WT. (G)	WT. (G)	ORG/TBW (X 10000)	ORG/BRN (X 10)
GROUP IV - 270 MG/KG/DAY				
4001	621.8	.604	9.71	2.60
4002	661.5	.637	9.63	2.74
4003	552.9	.621	11.23	2.98
4004	597.0	.405	6.78	1.87
4005	636.4	.635	9.98	2.51
4006	772.0	.671	8.69	2.84
4007	614.7	.593	9.65	2.53
4008	599.5	.688	11.48	2.86
4009	660.2	.523	7.92	2.15
4010	628.4	.749	11.92	3.26
4011	641.6	.385	6.00	1.70
4012	518.2	.426	8.22	1.88
4013	599.9	.242	4.03	1.10
4014	591.2	.356	6.02	1.63
4015	673.0	.504	7.49	2.18
4016	680.4	.492	7.23	2.08
4017	738.9	.433	5.86	1.99
4018	624.0	.403	6.46	1.75
4019	679.8	.638	9.39	2.83
4020	469.0	.286	6.10	1.30
MEAN	628.0	.515	8.19	2.24
S.D.	68.8	.143	2.16	.59
N	20	20	20	20
MIN.	469.0	.242	4.03	1.10
MAX.	772.0	.749	11.92	3.26

APPENDIX I (CONT.)
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX®XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

TERMINAL ORGAN AND BODY WEIGHTS, ORGAN/BODY WEIGHT
AND ORGAN/BRAIN WEIGHT RATIOS
TERMINATION - FEMALES

INDIVIDUAL VALUES

AN NO	TERMINAL BODY WT. (G)	BRAIN WT. (G)	BRAIN ORG/TBW (X 1000)	BRAIN ORG/BRN (X 1)	ADRENALS WT. (G)	ADRENALS ORG/TBW (X 10000)	ADRENALS ORG/BRN (X 100)
GROUP I - 0 MG/KG/DAY							
1501	236.3	1.867	7.90	1.00	.0488	2.07	2.61
1502	270.2	1.974	7.31	1.00	.0645	2.39	3.27
1503	254.8	1.934	7.59	1.00	.0689	2.70	3.56
1504	283.4	1.824	6.44	1.00	.0654	2.31	3.59
1505	300.1	2.148	7.16	1.00	.0726	2.42	3.38
1506	281.9	2.135	7.57	1.00	.0832	2.95	3.90
1507	285.8	2.009	7.03	1.00	.0810	2.83	4.03
1508	260.9	2.009	7.70	1.00	.0850	3.26	4.23
1509	312.9	2.216	7.08	1.00	.0942	3.01	4.25
1510	309.9	2.075	6.70	1.00	.0740	2.39	3.57
1511	272.2	1.813	6.66	1.00	.0754	2.77	4.16
1512	288.6	1.973	6.84	1.00	.0713	2.47	3.61
1513	270.5	1.999	7.39	1.00	.0779	2.88	3.90
1514	263.5	1.964	7.45	1.00	.0628	2.38	3.20
1515	267.9	2.002	7.47	1.00	.0748	2.79	3.74
1516	258.3	2.090	8.09	1.00	.0760	2.94	3.64
1517	305.7	2.055	6.72	1.00	.0774	2.53	3.77
1518	377.9	2.007	5.31	1.00	.0872	2.31	4.34
1519	285.2	2.022	7.09	1.00	.0532	1.87	2.63
1520	293.8	1.977	6.73	1.00	.0693	2.36	3.51
MEAN	284.0	2.005	7.11	1.00	.0731	2.58	3.64
S.D.	29.6	.101	.62	.00	.0109	.35	.48
N	20	20	20	20	20	20	20
MIN.	236.3	1.813	5.31	1.00	.0488	1.87	2.61
MAX.	377.9	2.216	8.09	1.00	.0942	3.26	4.34

APPENDIX I (CONT.)
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX®XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

TERMINAL ORGAN AND BODY WEIGHTS, ORGAN/BODY WEIGHT
AND ORGAN/BRAIN WEIGHT RATIOS
TERMINATION - FEMALES

INDIVIDUAL VALUES

AN NO	TERMINAL BODY WT. (G)	KIDNEYS WT. (G)	KIDNEYS ORG/TBW (X 1000)	KIDNEYS ORG/BRN (X 1)	LIVER WT. (G)	LIVER ORG/TBW (X 100)	LIVER ORG/BRN (X 1)
GROUP I - 0 MG/KG/DAY							
1501	236.3	1.797	7.60	.96	6.668	2.82	3.57
1502	270.2	1.707	6.32	.86	6.689	2.48	3.39
1503	254.8	1.673	6.57	.87	6.979	2.74	3.61
1504	283.4	2.286	8.07	1.25	7.865	2.78	4.31
1505	300.1	2.157	7.19	1.00	8.536	2.84	3.97
1506	281.9	2.161	7.67	1.01	8.442	2.99	3.95
1507	285.8	2.279	7.97	1.13	9.549	3.34	4.75
1508	260.9	2.412	9.24	1.20	8.250	3.16	4.11
1509	312.9	2.694	8.61	1.22	9.491	3.03	4.28
1510	309.9	2.400	7.74	1.16	9.409	3.04	4.53
1511	272.2	2.001	7.35	1.10	8.028	2.95	4.43
1512	288.6	2.251	7.80	1.14	8.788	3.05	4.45
1513	270.5	2.146	7.93	1.07	8.063	2.98	4.03
1514	263.5	1.927	7.31	.98	7.326	2.78	3.73
1515	267.9	2.197	8.20	1.10	8.737	3.26	4.36
1516	258.3	1.940	7.51	.93	7.297	2.83	3.49
1517	305.7	2.324	7.60	1.13	9.692	3.17	4.72
1518	377.9	3.236	8.56	1.61	13.175	3.49	6.56
1519	285.2	2.458	8.62	1.22	8.985	3.15	4.44
1520	293.8	2.652	9.03	1.34	9.126	3.11	4.62
MEAN	284.0	2.235	7.85	1.11	8.555	3.00	4.27
S.D.	29.6	.366	.74	.17	1.443	.23	.68
N	20	20	20	20	20	20	20
MIN.	236.3	1.673	6.32	.86	6.668	2.48	3.39
MAX.	377.9	3.236	9.24	1.61	13.175	3.49	6.56

APPENDIX I (CONT.)
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX®XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

TERMINAL ORGAN AND BODY WEIGHTS, ORGAN/BODY WEIGHT
AND ORGAN/BRAIN WEIGHT RATIOS
TERMINATION - FEMALES

INDIVIDUAL VALUES

AN NO	TERMINAL BODY WT. (G)	OVARIES WT. (G)	OVARIES ORG/TBW (X 10000)	OVARIES ORG/BRN (X 100)	SPLEEN WT. (G)	SPLEEN ORG/TBW (X 1000)	SPLEEN ORG/BRN (X 10)
GROUP I - 0 MG/KG/DAY							
1501	236.3	.0849	3.59	4.55	.328	1.39	1.76
1502	270.2	.0746	2.76	3.78	.425	1.57	2.15
1503	254.8	.1061	4.16	5.49	.491	1.93	2.54
1504	283.4	.0843	2.97	4.62	.387	1.37	2.12
1505	300.1	.1059	3.53	4.93	.551	1.84	2.57
1506	281.9	.1232	4.37	5.77	.593	2.10	2.78
1507	285.8	.1171	4.10	5.83	.503	1.76	2.50
1508	260.9	.1026	3.93	5.11	.539	2.07	2.68
1509	312.9	.1312	4.19	5.92	.541	1.73	2.44
1510	309.9	.1018	3.28	4.91	.514	1.66	2.48
1511	272.2	.1183	4.35	6.53	.492	1.81	2.71
1512	288.6	.1032	3.58	5.23	.482	1.67	2.44
1513	270.5	.0884	3.27	4.42	.493	1.82	2.47
1514	263.5	.0918	3.48	4.67	.534	2.03	2.72
1515	267.9	.0910	3.40	4.55	.547	2.04	2.73
1516	258.3	.0836	3.24	4.00	.474	1.84	2.27
1517	305.7	.1138	3.72	5.54	.635	2.08	3.09
1518	377.9	.1531	4.05	7.63	.766	2.03	3.82
1519	285.2	.1034	3.63	5.11	.574	2.01	2.84
1520	293.8	.1192	4.06	6.03	.497	1.69	2.51
MEAN	284.0	.1049	3.68	5.23	.518	1.82	2.58
S.D.	29.6	.0189	.46	.90	.090	.22	.41
N	20	20	20	20	20	20	20
MIN.	236.3	.0746	2.76	3.78	.328	1.37	1.76
MAX.	377.9	.1531	4.37	7.63	.766	2.10	3.82

APPENDIX I (CONT.)
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX®XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

TERMINAL ORGAN AND BODY WEIGHTS, ORGAN/BODY WEIGHT
AND ORGAN/BRAIN WEIGHT RATIOS
TERMINATION - FEMALES

		INDIVIDUAL VALUES		
AN NO	TERMINAL BODY WT. (G)	THYMUS WT. (G)	ORG/TBW (X 1000)	ORG/BRN (X 10)
GROUP I - 0 MG/KG/DAY				
1501	236.3	.246	1.04	1.32
1502	270.2	.156	.58	.79
1503	254.8	.405	1.59	2.09
1504	283.4	.389	1.37	2.13
1505	300.1	.548	1.83	2.55
1506	281.9	.399	1.42	1.87
1507	285.8	.209	.73	1.04
1508	260.9	.376	1.44	1.87
1509	312.9	.292	.93	1.32
1510	309.9	.449	1.45	2.16
1511	272.2	.356	1.31	1.96
1512	288.6	.379	1.31	1.92
1513	270.5	.162	.60	.81
1514	263.5	.277	1.05	1.41
1515	267.9	.499	1.86	2.49
1516	258.3	.326	1.26	1.56
1517	305.7	.334	1.09	1.63
1518	377.9	.533	1.41	2.66
1519	285.2	.432	1.51	2.14
1520	293.8	.327	1.11	1.65
MEAN	284.0	.355	1.25	1.77
S.D.	29.6	.111	.36	.54
N	20	20	20	20
MIN.	236.3	.156	.58	.79
MAX.	377.9	.548	1.86	2.66

APPENDIX I (CONT.)
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX®XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

TERMINAL ORGAN AND BODY WEIGHTS, ORGAN/BODY WEIGHT
AND ORGAN/BRAIN WEIGHT RATIOS
TERMINATION - FEMALES

INDIVIDUAL VALUES

AN NO	TERMINAL BODY WT. (G)	BRAIN WT. (G)	BRAIN ORG/TBW (X 1000)	BRAIN ORG/BRN (X 1)	ADRENALS WT. (G)	ADRENALS ORG/TBW (X 10000)	ADRENALS ORG/BRN (X 100)
GROUP II - 30 MG/KG/DAY							
2501	263.9	2.112	8.00	1.00	.0677	2.57	3.21
2502	230.6	1.957	8.49	1.00	.0760	3.30	3.88
2503	235.9	1.978	8.38	1.00	.0677	2.87	3.42
2504	273.6	2.035	7.44	1.00	.0767	2.80	3.77
2505	300.6	2.016	6.71	1.00	.0791	2.63	3.92
2506	278.4	2.255	8.10	1.00	.1005	3.61	4.46
2507	282.6	2.105	7.45	1.00	.0793	2.81	3.77
2508	320.3	1.924	6.01	1.00	.0646	2.02	3.36
2509	255.1	2.022	7.93	1.00	.0710	2.78	3.51
2510	302.3	2.136	7.07	1.00	.0823	2.72	3.85
2511	281.9	2.131	7.56	1.00	.0799	2.83	3.75
2512	314.2	1.928	6.14	1.00	.0607	1.93	3.15
2513	357.0	1.930	5.41	1.00	.0867	2.43	4.49
2514	296.6	2.090	7.05	1.00	.0778	2.62	3.72
2515	292.1	2.028	6.94	1.00	.0634	2.17	3.13
2516	348.0	2.119	6.09	1.00	.0797	2.29	3.76
2517	289.8	1.911	6.59	1.00	.0491	1.69	2.57
2518	264.5	2.041	7.72	1.00	.0776	2.93	3.80
2519	311.7	1.998	6.41	1.00	.0851	2.73	4.26
2520	314.3	2.063	6.56	1.00	.0819	2.61	3.97
MEAN	290.7	2.039	7.10	1.00	.0753	2.62	3.69
S.D.	32.6	.089	.86	.00	.0111	.45	.46
N	20	20	20	20	20	20	20
MIN.	230.6	1.911	5.41	1.00	.0491	1.69	2.57
MAX.	357.0	2.255	8.49	1.00	.1005	3.61	4.49

APPENDIX I (CONT.)
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX®XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

TERMINAL ORGAN AND BODY WEIGHTS, ORGAN/BODY WEIGHT
AND ORGAN/BRAIN WEIGHT RATIOS
TERMINATION - FEMALES

INDIVIDUAL VALUES

AN NO	TERMINAL BODY WT. (G)	KIDNEYS WT. (G)	KIDNEYS ORG/TBW (X 1000)	KIDNEYS ORG/BRN (X 1)	LIVER WT. (G)	LIVER ORG/TBW (X 100)	LIVER ORG/BRN (X 1)
GROUP II - 30 MG/KG/DAY							
2501	263.9	2.197	8.33	1.04	9.184	3.48	4.35
2502	230.6	2.226	9.65	1.14	8.443	3.66	4.31
2503	235.9	1.880	7.97	.95	7.087	3.00	3.58
2504	273.6	2.260	8.26	1.11	9.112	3.33	4.48
2505	300.6	2.228	7.41	1.11	9.898	3.29	4.91
2506	278.4	2.536	9.11	1.12	10.171	3.65	4.51
2507	282.6	2.726	9.65	1.30	10.807	3.82	5.13
2508	320.3	2.451	7.65	1.27	10.027	3.13	5.21
2509	255.1	2.346	9.20	1.16	9.304	3.65	4.60
2510	302.3	2.396	7.93	1.12	10.170	3.36	4.76
2511	281.9	2.338	8.29	1.10	10.231	3.63	4.80
2512	314.2	2.221	7.07	1.15	9.979	3.18	5.18
2513	357.0	2.570	7.20	1.33	11.451	3.21	5.93
2514	296.6	2.674	9.02	1.28	11.690	3.94	5.59
2515	292.1	2.447	8.38	1.21	10.287	3.52	5.07
2516	348.0	2.579	7.41	1.22	12.621	3.63	5.96
2517	289.8	2.351	8.11	1.23	9.023	3.11	4.72
2518	264.5	2.121	8.02	1.04	9.969	3.77	4.88
2519	311.7	2.462	7.90	1.23	10.372	3.33	5.19
2520	314.3	2.425	7.72	1.18	9.306	2.96	4.51
MEAN	290.7	2.372	8.21	1.16	9.957	3.43	4.88
S.D.	32.6	.201	.76	.10	1.194	.28	.56
N	20	20	20	20	20	20	20
MIN.	230.6	1.880	7.07	.95	7.087	2.96	3.58
MAX.	357.0	2.726	9.65	1.33	12.621	3.94	5.96

APPENDIX I (CONT.)
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX®XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

TERMINAL ORGAN AND BODY WEIGHTS, ORGAN/BODY WEIGHT
AND ORGAN/BRAIN WEIGHT RATIOS
TERMINATION - FEMALES

INDIVIDUAL VALUES

AN NO	TERMINAL BODY WT. (G)	OVARIES WT. (G)	OVARIES ORG/TBW (X 10000)	OVARIES ORG/BRN (X 100)	SPLEEN WT. (G)	SPLEEN ORG/TBW (X 1000)	SPLEEN ORG/BRN (X 10)
GROUP II - 30 MG/KG/DAY							
2501	263.9	.0923	3.50	4.37	.470	1.78	2.23
2502	230.6	.1001	4.34	5.11	.424	1.84	2.17
2503	235.9	.1127	4.78	5.70	.443	1.88	2.24
2504	273.6	.0961	3.51	4.72	.433	1.58	2.13
2505	300.6	.1030	3.43	5.11	.467	1.55	2.32
2506	278.4	.1185	4.26	5.25	.503	1.81	2.23
2507	282.6	.1099	3.89	5.22	.532	1.88	2.53
2508	320.3	.0774	2.42	4.02	.458	1.43	2.38
2509	255.1	.1100	4.31	5.44	.546	2.14	2.70
2510	302.3	.1294	4.28	6.06	.591	1.96	2.77
2511	281.9	.1126	3.99	5.28	.499	1.77	2.34
2512	314.2	.0955	3.04	4.95	.450	1.43	2.33
2513	357.0	.1078	3.02	5.59	.743	2.08	3.85
2514	296.6	.1329	4.48	6.36	.813	2.74	3.89
2515	292.1	.1003	3.43	4.95	.514	1.76	2.53
2516	348.0	.1277	3.67	6.03	.618	1.78	2.92
2517	289.8	.1154	3.98	6.04	.561	1.94	2.94
2518	264.5	.0904	3.42	4.43	.497	1.88	2.44
2519	311.7	.1805	5.79	9.03	.694	2.23	3.47
2520	314.3	.1079	3.43	5.23	.513	1.63	2.49
MEAN	290.7	.1110	3.85	5.44	.538	1.85	2.64
S.D.	32.6	.0214	.73	1.04	.106	.30	.53
N	20	20	20	20	20	20	20
MIN.	230.6	.0774	2.42	4.02	.424	1.43	2.13
MAX.	357.0	.1805	5.79	9.03	.813	2.74	3.89

APPENDIX I (CONT.)
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX®XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

TERMINAL ORGAN AND BODY WEIGHTS, ORGAN/BODY WEIGHT
AND ORGAN/BRAIN WEIGHT RATIOS
TERMINATION - FEMALES

INDIVIDUAL VALUES

AN NO	TERMINAL BODY WT. (G)	THYMUS WT. (G)	THYMUS ORG/TBW (X 1000)	THYMUS ORG/BRN (X 10)
GROUP II - 30 MG/KG/DAY				
2501	263.9	.341	1.29	1.61
2502	230.6	.162	.70	.83
2503	235.9	.284	1.20	1.44
2504	273.6	.384	1.40	1.89
2505	300.6	.408	1.36	2.02
2506	278.4	.365	1.31	1.62
2507	282.6	.405	1.43	1.92
2508	320.3	.549	1.71	2.85
2509	255.1	.268	1.05	1.33
2510	302.3	.346	1.14	1.62
2511	281.9	.241	.85	1.13
2512	314.2	.268	.85	1.39
2513	357.0	.472	1.32	2.45
2514	296.6	.282	.95	1.35
2515	292.1	.367	1.26	1.81
2516	348.0	.427	1.23	2.02
2517	289.8	.364	1.26	1.90
2518	264.5	.409	1.55	2.00
2519	311.7	.346	1.11	1.73
2520	314.3	.302	.96	1.46
MEAN	290.7	.350	1.20	1.72
S.D.	32.6	.087	.25	.45
N	20	20	20	20
MIN.	230.6	.162	.70	.83
MAX.	357.0	.549	1.71	2.85

APPENDIX I (CONT.)
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX®XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

TERMINAL ORGAN AND BODY WEIGHTS, ORGAN/BODY WEIGHT
AND ORGAN/BRAIN WEIGHT RATIOS
TERMINATION - FEMALES

INDIVIDUAL VALUES

AN NO	TERMINAL BODY WT. (G)	BRAIN WT. (G)	BRAIN ORG/TBW (X 1000)	BRAIN ORG/BRN (X 1)	ADRENALS WT. (G)	ADRENALS ORG/TBW (X 10000)	ADRENALS ORG/BRN (X 100)
GROUP III - 90 MG/KG/DAY							
3501	280.7	1.878	6.69	1.00	.0612	2.18	3.26
3502	273.6	1.862	6.81	1.00	.0706	2.58	3.79
3503	292.2	2.110	7.22	1.00	.0747	2.56	3.54
3504	279.7	2.022	7.23	1.00	.0799	2.86	3.95
3505	276.9	2.223	8.03	1.00	.0739	2.67	3.32
3506	298.2	2.056	6.89	1.00	.0721	2.42	3.51
3507	322.9	2.155	6.67	1.00	.1007	3.12	4.67
3508	252.1	2.112	8.38	1.00	.0821	3.26	3.89
3509	261.4	2.060	7.88	1.00	.0805	3.08	3.91
3510	253.7	1.981	7.81	1.00	.0766	3.02	3.87
3511	300.0	1.870	6.23	1.00	.0966	3.22	5.17
3512	291.1	1.888	6.49	1.00	.0607	2.09	3.22
3513	272.8	1.968	7.21	1.00	.0698	2.56	3.55
3514	308.7	2.050	6.64	1.00	.0761	2.47	3.71
3515	293.0	2.087	7.12	1.00	.0883	3.01	4.23
3516	242.4	2.071	8.54	1.00	.0578	2.38	2.79
3517	263.8	1.996	7.57	1.00	.0671	2.54	3.36
3518	307.5	1.917	6.23	1.00	.1130	3.67	5.89
3519	301.5	1.986	6.59	1.00	.0901	2.99	4.54
3520	261.8	1.956	7.47	1.00	.0964	3.68	4.93
MEAN	281.7	2.012	7.19	1.00	.0794	2.82	3.95
S.D.	21.7	.100	.68	.00	.0144	.45	.76
N	20	20	20	20	20	20	20
MIN.	242.4	1.862	6.23	1.00	.0578	2.09	2.79
MAX.	322.9	2.223	8.54	1.00	.1130	3.68	5.89

APPENDIX I (CONT.)
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX®XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

TERMINAL ORGAN AND BODY WEIGHTS, ORGAN/BODY WEIGHT
AND ORGAN/BRAIN WEIGHT RATIOS
TERMINATION - FEMALES

INDIVIDUAL VALUES

AN NO	TERMINAL BODY WT. (G)	KIDNEYS WT. (G)	KIDNEYS ORG/TBW (X 1000)	KIDNEYS ORG/BRN (X 1)	LIVER WT. (G)	LIVER ORG/TBW (X 100)	LIVER ORG/BRN (X 1)
GROUP III - 90 MG/KG/DAY							
3501	280.7	1.802	6.42	.96	9.737	3.47	5.18
3502	273.6	2.070	7.57	1.11	9.783	3.58	5.25
3503	292.2	2.413	8.26	1.14	9.755	3.34	4.62
3504	279.7	2.125	7.60	1.05	10.575	3.78	5.23
3505	276.9	2.509	9.06	1.13	10.395	3.75	4.68
3506	298.2	2.584	8.67	1.26	11.317	3.80	5.50
3507	322.9	2.727	8.45	1.27	11.528	3.57	5.35
3508	252.1	2.185	8.67	1.03	10.450	4.15	4.95
3509	261.4	2.069	7.92	1.00	9.801	3.75	4.76
3510	253.7	2.354	9.28	1.19	10.565	4.16	5.33
3511	300.0	2.252	7.51	1.20	10.694	3.56	5.72
3512	291.1	2.123	7.29	1.12	10.960	3.77	5.81
3513	272.8	2.088	7.65	1.06	11.195	4.10	5.69
3514	308.7	2.317	7.51	1.13	11.271	3.65	5.50
3515	293.0	2.258	7.71	1.08	9.959	3.40	4.77
3516	242.4	2.042	8.42	.99	8.310	3.43	4.01
3517	263.8	2.007	7.61	1.01	9.709	3.68	4.86
3518	307.5	2.575	8.37	1.34	12.067	3.92	6.29
3519	301.5	2.722	9.03	1.37	11.011	3.65	5.54
3520	261.8	2.331	8.90	1.19	9.902	3.78	5.06
MEAN	281.7	2.278	8.09	1.13	10.449	3.71	5.21
S.D.	21.7	.251	.73	.12	.857	.24	.51
N	20	20	20	20	20	20	20
MIN.	242.4	1.802	6.42	.96	8.310	3.34	4.01
MAX.	322.9	2.727	9.28	1.37	12.067	4.16	6.29

APPENDIX I (CONT.)
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX®XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

TERMINAL ORGAN AND BODY WEIGHTS, ORGAN/BODY WEIGHT
AND ORGAN/BRAIN WEIGHT RATIOS
TERMINATION - FEMALES

INDIVIDUAL VALUES

AN NO	TERMINAL BODY WT. (G)	OVARIES WT. (G)	OVARIES ORG/TBW (X 10000)	OVARIES ORG/BRN (X 100)	SPLEEN WT. (G)	SPLEEN ORG/TBW (X 1000)	SPLEEN ORG/BRN (X 10)
GROUP III - 90 MG/KG/DAY							
3501	280.7	.0909	3.24	4.84	.319	1.14	1.70
3502	273.6	.1075	3.93	5.77	.525	1.92	2.82
3503	292.2	.1102	3.77	5.22	.517	1.77	2.45
3504	279.7	.1014	3.63	5.01	.441	1.58	2.18
3505	276.9	.0575	2.08	2.59	.515	1.86	2.32
3506	298.2	.1107	3.71	5.38	.732	2.45	3.56
3507	322.9	.1535	4.75	7.12	.799	2.47	3.71
3508	252.1	.1055	4.18	5.00	.417	1.65	1.97
3509	261.4	.1032	3.95	5.01	.537	2.05	2.61
3510	253.7	.1084	4.27	5.47	.488	1.92	2.46
3511	300.0	.0915	3.05	4.89	.614	2.05	3.28
3512	291.1	.0913	3.14	4.84	.463	1.59	2.45
3513	272.8	.1001	3.67	5.09	.564	2.07	2.87
3514	308.7	.0896	2.90	4.37	.540	1.75	2.63
3515	293.0	.1587	5.42	7.60	.631	2.15	3.02
3516	242.4	.0846	3.49	4.08	.576	2.38	2.78
3517	263.8	.0809	3.07	4.05	.439	1.66	2.20
3518	307.5	.0681	2.21	3.55	.509	1.66	2.66
3519	301.5	.1487	4.93	7.49	.589	1.95	2.97
3520	261.8	.1275	4.87	6.52	.526	2.01	2.69
MEAN	281.7	.1045	3.71	5.20	.537	1.90	2.67
S.D.	21.7	.0263	.87	1.26	.107	.33	.50
N	20	20	20	20	20	20	20
MIN.	242.4	.0575	2.08	2.59	.319	1.14	1.70
MAX.	322.9	.1587	5.42	7.60	.799	2.47	3.71

APPENDIX I (CONT.)
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX®XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

TERMINAL ORGAN AND BODY WEIGHTS, ORGAN/BODY WEIGHT
AND ORGAN/BRAIN WEIGHT RATIOS
TERMINATION - FEMALES

AN NO	TERMINAL BODY WT. (G)	INDIVIDUAL VALUES THYMUS WT. (G)	THYMUS ORG/TBW (X 1000)	THYMUS ORG/BRN (X 10)
GROUP III - 90 MG/KG/DAY				
3501	280.7	.344	1.23	1.83
3502	273.6	.291	1.06	1.56
3503	292.2	.357	1.22	1.69
3504	279.7	.398	1.42	1.97
3505	276.9	.387	1.40	1.74
3506	298.2	.347	1.16	1.69
3507	322.9	.533	1.65	2.47
3508	252.1	.344	1.36	1.63
3509	261.4	.253	.97	1.23
3510	253.7	.381	1.50	1.92
3511	300.0	.456	1.52	2.44
3512	291.1	.314	1.08	1.66
3513	272.8	.262	.96	1.33
3514	308.7	.453	1.47	2.21
3515	293.0	.590	2.01	2.83
3516	242.4	.412	1.70	1.99
3517	263.8	.246	.93	1.23
3518	307.5	.320	1.04	1.67
3519	301.5	.317	1.05	1.60
3520	261.8	.217	.83	1.11
MEAN	281.7	.361	1.28	1.79
S.D.	21.7	.095	.31	.44
N	20	20	20	20
MIN.	242.4	.217	.83	1.11
MAX.	322.9	.590	2.01	2.83

APPENDIX I (CONT.)
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX®XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

TERMINAL ORGAN AND BODY WEIGHTS, ORGAN/BODY WEIGHT
AND ORGAN/BRAIN WEIGHT RATIOS
TERMINATION - FEMALES

INDIVIDUAL VALUES

AN NO	TERMINAL BODY WT. (G)	BRAIN WT. (G)	BRAIN ORG/TBW (X 1000)	BRAIN ORG/BRN (X 1)	ADRENALS WT. (G)	ADRENALS ORG/TBW (X 10000)	ADRENALS ORG/BRN (X 100)
GROUP IV - 270 MG/KG/DAY							
4501	236.7	1.766	7.46	1.00	.0652	2.75	3.69
4502	287.7	2.090	7.26	1.00	.0727	2.53	3.48
4503	283.0	2.100	7.42	1.00	.0843	2.98	4.01
4504	318.1	1.972	6.20	1.00	.0729	2.29	3.70
4505	291.7	2.248	7.71	1.00	.0744	2.55	3.31
4506	236.2	2.057	8.71	1.00	.0740	3.13	3.60
4507	213.8	2.035	9.52	1.00	.0873	4.08	4.29
4508	268.4	2.100	7.82	1.00	.0793	2.95	3.78
4510	291.4	2.209	7.58	1.00	.0564	1.94	2.55
4511	289.7	2.143	7.40	1.00	.0801	2.76	3.74
4512	289.4	2.079	7.18	1.00	.0807	2.79	3.88
4513	267.0	1.964	7.36	1.00	.0797	2.99	4.06
4514	271.8	1.958	7.20	1.00	.0809	2.98	4.13
4515	300.0	2.010	6.70	1.00	.0665	2.22	3.31
4516	286.9	1.997	6.96	1.00	.0722	2.52	3.62
4517	249.9	2.062	8.25	1.00	.0857	3.43	4.16
4518	274.8	1.977	7.19	1.00	.0579	2.11	2.93
4519	289.7	2.050	7.08	1.00	.0811	2.80	3.96
4520	282.2	1.944	6.89	1.00	.0749	2.65	3.85
MEAN	275.2	2.040	7.47	1.00	.0751	2.76	3.69
S.D.	25.3	.106	.74	.00	.0087	.49	.43
N	19	19	19	19	19	19	19
MIN.	213.8	1.766	6.20	1.00	.0564	1.94	2.55
MAX.	318.1	2.248	9.52	1.00	.0873	4.08	4.29

APPENDIX I (CONT.)
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX®XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

TERMINAL ORGAN AND BODY WEIGHTS, ORGAN/BODY WEIGHT
AND ORGAN/BRAIN WEIGHT RATIOS
TERMINATION - FEMALES

INDIVIDUAL VALUES

AN NO	TERMINAL BODY WT. (G)	KIDNEYS WT. (G)	KIDNEYS ORG/TBW (X 1000)	KIDNEYS ORG/BRN (X 1)	LIVER WT. (G)	LIVER ORG/TBW (X 100)	LIVER ORG/BRN (X 1)
GROUP IV - 270 MG/KG/DAY							
4501	236.7	1.750	7.39	.99	9.010	3.81	5.10
4502	287.7	2.202	7.65	1.05	12.364	4.30	5.92
4503	283.0	2.021	7.14	.96	11.382	4.02	5.42
4504	318.1	2.705	8.50	1.37	14.919	4.69	7.57
4505	291.7	2.254	7.73	1.00	12.040	4.13	5.36
4506	236.2	1.780	7.54	.87	9.565	4.05	4.65
4507	213.8	1.837	8.59	.90	9.942	4.65	4.89
4508	268.4	2.044	7.62	.97	12.201	4.55	5.81
4510	291.4	2.203	7.56	1.00	12.144	4.17	5.50
4511	289.7	2.185	7.54	1.02	13.291	4.59	6.20
4512	289.4	2.349	8.12	1.13	11.500	3.97	5.53
4513	267.0	2.279	8.54	1.16	13.109	4.91	6.67
4514	271.8	2.317	8.52	1.18	11.335	4.17	5.79
4515	300.0	2.019	6.73	1.00	11.099	3.70	5.52
4516	286.9	2.131	7.43	1.07	11.375	3.96	5.70
4517	249.9	2.398	9.60	1.16	10.857	4.34	5.27
4518	274.8	2.179	7.93	1.10	11.737	4.27	5.94
4519	289.7	2.301	7.94	1.12	12.105	4.18	5.90
4520	282.2	2.355	8.35	1.21	13.742	4.87	7.07
MEAN	275.2	2.174	7.92	1.07	11.775	4.28	5.78
S.D.	25.3	.232	.66	.12	1.423	.35	.72
N	19	19	19	19	19	19	19
MIN.	213.8	1.750	6.73	.87	9.010	3.70	4.65
MAX.	318.1	2.705	9.60	1.37	14.919	4.91	7.57

APPENDIX I (CONT.)
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX®XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

TERMINAL ORGAN AND BODY WEIGHTS, ORGAN/BODY WEIGHT
AND ORGAN/BRAIN WEIGHT RATIOS
TERMINATION - FEMALES

AN NO	TERMINAL BODY WT. (G)	INDIVIDUAL VALUES OVARIES WT. (G)	OVARIES ORG/TBW (X 10000)	OVARIES ORG/BRN (X 100)	SPLEEN WT. (G)	SPLEEN ORG/TBW (X 1000)	SPLEEN ORG/BRN (X 10)
GROUP IV - 270 MG/KG/DAY							
4501	236.7	.0928	3.92	5.25	.400	1.69	2.27
4502	287.7	.1287	4.47	6.16	.578	2.01	2.77
4503	283.0	.1344	4.75	6.40	.552	1.95	2.63
4504	318.1	.1306	4.11	6.62	.529	1.66	2.68
4505	291.7	.1297	4.45	5.77	.525	1.80	2.34
4506	236.2	.1013	4.29	4.92	.424	1.80	2.06
4507	213.8	.0579	2.71	2.85	.406	1.90	2.00
4508	268.4	.1236	4.61	5.89	.562	2.09	2.68
4510	291.4	.1281	4.40	5.80	.588	2.02	2.66
4511	289.7	.0830	2.87	3.87	.488	1.68	2.28
4512	289.4	.1358	4.69	6.53	.664	2.29	3.19
4513	267.0	.0717	2.69	3.65	.469	1.76	2.39
4514	271.8	.1241	4.57	6.34	.600	2.21	3.06
4515	300.0	.1071	3.57	5.33	.502	1.67	2.50
4516	286.9	.1193	4.16	5.97	.647	2.26	3.24
4517	249.9	.1245	4.98	6.04	.563	2.25	2.73
4518	274.8	.1135	4.13	5.74	.556	2.02	2.81
4519	289.7	.1475	5.09	7.20	.567	1.96	2.77
4520	282.2	.0991	3.51	5.10	.476	1.69	2.45
MEAN	275.2	.1133	4.10	5.55	.531	1.93	2.60
S.D.	25.3	.0236	.73	1.10	.074	.22	.34
N	19	19	19	19	19	19	19
MIN.	213.8	.0579	2.69	2.85	.400	1.66	2.00
MAX.	318.1	.1475	5.09	7.20	.664	2.29	3.24

APPENDIX I (CONT.)
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX®XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

TERMINAL ORGAN AND BODY WEIGHTS, ORGAN/BODY WEIGHT
AND ORGAN/BRAIN WEIGHT RATIOS
TERMINATION - FEMALES

INDIVIDUAL VALUES

AN NO	TERMINAL BODY WT. (G)	THYMUS WT. (G)	THYMUS ORG/TBW (X 1000)	THYMUS ORG/BRN (X 10)
GROUP IV - 270 MG/KG/DAY				
4501	236.7	.415	1.75	2.35
4502	287.7	.311	1.08	1.49
4503	283.0	.311	1.10	1.48
4504	318.1	.373	1.17	1.89
4505	291.7	.396	1.36	1.76
4506	236.2	.422	1.79	2.05
4507	213.8	.194	.91	.95
4508	268.4	.351	1.31	1.67
4510	291.4	.316	1.08	1.43
4511	289.7	.399	1.38	1.86
4512	289.4	.344	1.19	1.65
4513	267.0	.249	.93	1.27
4514	271.8	.307	1.13	1.57
4515	300.0	.275	.92	1.37
4516	286.9	.313	1.09	1.57
4517	249.9	.239	.96	1.16
4518	274.8	.351	1.28	1.78
4519	289.7	.246	.85	1.20
4520	282.2	.291	1.03	1.50
MEAN	275.2	.321	1.17	1.58
S.D.	25.3	.064	.26	.33
N	19	19	19	19
MIN.	213.8	.194	.85	.95
MAX.	318.1	.422	1.79	2.35

Huntingdon
Life Sciences

Contains No CBI

STUDY NO. 96-2459

A SUBCHRONIC (3-MONTH) TOXICITY STUDY OF ULTRANOX®XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

Final Report

VOLUME II OF II

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Date: 6 January 1997

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Appendix J
A Subchronic (3-Month) Toxicity Study
of Ultranox®XR-2677 in the Rat via Oral Gavage Administration

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Table I
Incidence Summary of Macroscopic Postmortem Findings
Preface

Key to Abbreviation:

LN = Lymph Node

TABLE INCLUDES:
SEX=ALL;GROUP=ALL;WEEKS=ALL
DEATH=ALL;SUBSET=T

ORGAN AND KEYWORD(S) OR PHRASE		--- NUMBER-OF-ANIMALS-AFFECTED ---							
SEX:		-------MALE-------				------FEMALE------			
GROUP:		-1-	-2-	-3-	-4-	-1-	-2-	-3-	-4-
NUMBER:		20	20	21	20	20	20	20	20
** TOP OF LIST **									
ADRENAL GLAND	NUMBER EXAMINED:	20	20	21	20	20	20	20	20
SMALL		0	0	0	0	1	0	0	0
THORACIC AORTA	NUMBER EXAMINED:	20	20	21	20	20	20	20	20
BRAIN	NUMBER EXAMINED:	20	20	21	20	20	20	20	20
STERNUM	NUMBER EXAMINED:	20	20	21	20	20	20	20	20
FEMUR	NUMBER EXAMINED:	20	20	21	20	20	20	20	20
STERNAL MARROW	NUMBER EXAMINED:	20	20	21	20	20	20	20	20
FEMORAL MARROW	NUMBER EXAMINED:	20	20	21	20	20	20	20	20
EPIDIDYMIS	NUMBER EXAMINED:	20	20	21	20	0	0	0	0
ESOPHAGUS	NUMBER EXAMINED:	20	20	21	20	20	20	20	20
PERFORATED		0	0	0	0	0	0	0	1
DISCOLORED		0	0	0	0	0	0	0	1
EYE	NUMBER EXAMINED:	20	20	21	20	20	20	20	20
EXOPHTHALMIA		0	0	0	1	0	0	0	0
LACRIMAL GLAND	NUMBER EXAMINED:	20	20	21	20	20	20	20	20
HEART	NUMBER EXAMINED:	20	20	21	20	20	20	20	20
ABNORMAL CONTENTS		1	0	0	0	0	0	0	0
KIDNEY	NUMBER EXAMINED:	20	20	21	20	20	20	20	20
DISCOLORED-FOCUS(FOCI)		1	1	1	0	0	0	0	0
DISCOLORED		1	0	0	0	1	0	0	0
DILATATION		0	0	0	0	0	1	0	0
LIVER	NUMBER EXAMINED:	20	20	21	20	20	20	20	20
DISCOLORED-FOCUS(FOCI)		0	0	0	0	1	0	0	0

TABLE INCLUDES:
SEX=ALL;GROUP=ALL;WEEKS=ALL
DEATH=ALL;SUBSET=T

ORGAN AND KEYWORD(S) OR PHRASE		--- NUMBER OF ANIMALS AFFECTED ---							
SEX:		-------MALE-------				------FEMALE------			
GROUP:		-1-	-2-	-3-	-4-	-1-	-2-	-3-	-4-
NUMBER:		20	20	21	20	20	20	20	20
LUNGS	NUMBER EXAMINED:	20	20	21	20	20	20	20	20
DISCOLORED-FOCUS(FOCI)		3	1	2	4	0	1	2	1
DISCOLORED		0	0	0	1	0	0	0	0
ADHESION(S)		1	0	0	0	0	0	0	0
MESENTERIC LN	NUMBER EXAMINED:	20	20	21	20	20	20	20	20
MEDIASTINAL LN	NUMBER EXAMINED:	20	20	21	20	20	20	20	20
ENLARGED		1	0	0	0	0	0	0	0
MAMMARY GLAND	NUMBER EXAMINED:	20	20	21	20	20	20	20	20
NODULE(S)/MASS(ES)		1	0	0	0	0	0	0	0
NERVE	NUMBER EXAMINED:	20	20	21	20	20	20	20	20
OVARY	NUMBER EXAMINED:	0	0	0	0	20	20	20	20
PANCREAS	NUMBER EXAMINED:	20	20	21	20	20	20	20	20
PITUITARY GLAND	NUMBER EXAMINED:	20	20	21	20	20	20	20	20
PROSTATE GLAND	NUMBER EXAMINED:	20	20	21	20	0	0	0	0
SPINAL CORD	NUMBER EXAMINED:	20	20	21	20	20	20	20	20
SALIVARY GLAND	NUMBER EXAMINED:	20	20	21	20	20	20	20	20
SKELETAL MUSCLE	NUMBER EXAMINED:	20	20	21	20	20	20	20	20
SPLEEN	NUMBER EXAMINED:	20	20	21	20	20	20	20	20
DISCOLORED		2	0	0	0	1	0	1	0
STOMACH	NUMBER EXAMINED:	20	20	21	20	20	20	20	20
ABNORMAL CONTENTS		0	0	0	0	0	0	0	1
DISCOLORED		0	0	0	2	0	0	0	0
DUODENUM	NUMBER EXAMINED:	20	20	21	20	20	20	20	20
JEJUNUM	NUMBER EXAMINED:	20	20	21	20	20	20	20	20

TABLE INCLUDES:
SEX=ALL;GROUP=ALL;WEEKS=ALL
DEATH=ALL;SUBSET=T

ORGAN AND KEYWORD(S) OR PHRASE		--- NUMBER-OF-ANIMALS-AFFECTED ---							
SEX:		-------MALE-------				------FEMALE------			
GROUP:		-1-	-2-	-3-	-4-	-1-	-2-	-3-	-4-
NUMBER:		20	20	21	20	20	20	20	20
ILEUM	NUMBER EXAMINED:	20	20	21	20	20	20	20	20
CECUM	NUMBER EXAMINED:	20	20	21	20	20	20	20	20
COLON	NUMBER EXAMINED:	20	20	21	20	20	20	20	20
LOW COLON/RECTUM	NUMBER EXAMINED:	20	20	21	20	20	20	20	20
SEMINAL VESICLE	NUMBER EXAMINED:	20	20	21	20	0	0	0	0
SMALL		0	0	2	0	0	0	0	0
TESTIS	NUMBER EXAMINED:	20	20	21	20	0	0	0	0
SMALL		0	0	0	1	0	0	0	0
SOFT		0	0	0	1	0	0	0	0
THYROID GLAND	NUMBER EXAMINED:	20	20	21	20	20	20	20	20
PARATHYROID GL	NUMBER EXAMINED:	20	20	21	20	20	20	20	20
THYMUS	NUMBER EXAMINED:	20	20	21	20	20	20	20	20
DISCOLORED		1	0	0	0	0	0	0	0
TRACHEA	NUMBER EXAMINED:	20	20	21	20	20	20	20	20
URINARY BLADDER	NUMBER EXAMINED:	20	20	21	20	20	20	20	20
UTERUS	NUMBER EXAMINED:	0	0	0	0	20	20	20	20
DISTENDED		0	0	0	0	0	0	1	0
VAGINA	NUMBER EXAMINED:	0	0	0	0	20	20	20	20
ZYMBAL'S GLAND	NUMBER EXAMINED:	20	20	21	20	20	20	20	20
EAR	NUMBER EXAMINED:	20	20	21	20	20	20	20	20
SWOLLEN		0	0	0	0	0	2	0	0
DISCOLORED		0	0	0	0	0	1	0	0

TABLE INCLUDES:
SEX=ALL;GROUP=ALL;WEEKS=ALL
DEATH=ALL;SUBSET=T

ORGAN AND KEYWORD(S) OR PHRASE		--- NUMBER-OF-ANIMALS-AFFECTED ---							
SEX:		-------MALE-------				------FEMALE------			
GROUP:		-1-	-2-	-3-	-4-	-1-	-2-	-3-	-4-
NUMBER:		20	20	21	20	20	20	20	20
BONE	NUMBER EXAMINED:	20	20	21	20	20	20	20	20
DISCOLORED		0	0	0	1	0	0	0	0
LYMPH NODE	NUMBER EXAMINED:	20	20	21	20	20	20	20	20
DISCOLORED		1	1	0	0	0	1	0	0
SKIN	NUMBER EXAMINED:	20	20	21	20	20	20	20	20
HAIR ABSENT/THIN		0	0	0	0	1	3	0	1

** END OF LIST **

Table II
Expanded Incidence Summary of Microscopic Postmortem Findings
Preface

Key to Abbreviations:

1> = Minimal
2> = Slight
3> = Moderate
4> = Moderately Severe (Marked)
P> = Present
+> = Neoplasm Present
TL> = Total
U/ = Unilateral
B/ = Bilateral
B- = Benign
LN = Lymph Node
SC = Spinal Cord

TABLE INCLUDES:
SEX=ALL;GROUP=ALL;SCREEN=ALL;WEEKS=ALL
DEATH=ALL;FIND=ALL;SUBSET=T

ORGAN/TISSUE EXAMINED		--- NUMBER-OF-ANIMALS-AFFECTED ---							
SEX:		-------MALE-------				------FEMALE------			
GROUP:		-1-	-2-	-3-	-4-	-1-	-2-	-3-	-4-
NUMBER:		20	20	21	20	20	20	20	20
** TOP OF LIST **									
BRAIN	NUMBER EXAMINED:	20	1	1	20	20	0	0	20
	1>	0	0	0	0	0	0	0	1
--HEMORRHAGE	TL>	0	0	0	0	0	0	0	1
CERVICAL SC	NUMBER EXAMINED:	20	1	1	20	20	0	0	20
	1>	0	0	0	0	0	0	0	1
--HEMORRHAGE	TL>	0	0	0	0	0	0	0	1
THORACIC SC	NUMBER EXAMINED:	20	1	1	20	20	0	0	20
THORACIC AORTA	NUMBER EXAMINED:	20	1	1	20	20	0	0	20
TRACHEA	NUMBER EXAMINED:	20	1	0	20	20	0	0	20
	1>	12	1	0	11	14	0	0	11
	2>	2	0	0	3	1	0	0	2
--LYMPHOID CELL INFILTRATE	TL>	14	1	0	14	15	0	0	13
ESOPHAGUS	NUMBER EXAMINED:	20	1	1	20	20	0	0	20
	1>	0	0	0	0	1	0	0	0
	2>	0	0	0	0	1	0	0	1
--CHRONIC INFLAMMATION	TL>	0	0	0	0	2	0	0	1
	1>	0	0	0	0	1	0	0	1
--LYMPHOID CELL INFILTRATE	TL>	0	0	0	0	1	0	0	1
	1>	0	0	0	0	0	0	0	1
--HEMORRHAGE	TL>	0	0	0	0	0	0	0	1
	4>	0	0	0	0	0	0	0	1
--PERIESOPHAGEAL ERYTHROCYTES	TL>	0	0	0	0	0	0	0	1
	1>	0	0	0	0	0	0	0	1
--LUMEN: ERYTHROCYTES	TL>	0	0	0	0	0	0	0	1
	2>	0	0	0	0	0	0	0	1
--WALL PERFORATION	TL>	0	0	0	0	0	0	0	1

TABLE INCLUDES:
SEX=ALL;GROUP=ALL;SCREEN=ALL;WEEKS=ALL
DEATH=ALL;FIND=ALL;SUBSET=T

ORGAN/TISSUE EXAMINED		--- NUMBER-OF-ANIMALS-AFFECTED ---							
	SEX:	-------MALE-------				------FEMALE------			
	GROUP:	-1-	-2-	-3-	-4-	-1-	-2-	-3-	-4-
	NUMBER:	20	20	21	20	20	20	20	20
HEART	NUMBER EXAMINED:	20	1	1	20	20	0	0	20
--NECROSIS	1>	14	0	0	8	1	0	0	2
	2>	0	0	0	5	0	0	0	0
	TL>	14	0	0	13	1	0	0	2
--LYMPHOID CELL INFILTRATE	1>	5	0	0	4	3	0	0	0
	TL>	5	0	0	4	3	0	0	0
--RETICULOENDOTHELIAL CELLS: BROWN PIGMENT	1>	7	0	0	2	0	0	0	0
	TL>	7	0	0	2	0	0	0	0
--FIBROSIS	1>	6	0	0	2	0	0	0	0
	2>	0	0	0	1	0	0	0	0
	TL>	6	0	0	3	0	0	0	0
--HEMORRHAGE	2>	0	0	0	3	0	0	0	0
	TL>	0	0	0	3	0	0	0	0
--PERICARDIUM: CHRONIC INFLAMMATION	4>	1	0	0	0	0	0	0	0
	TL>	1	0	0	0	0	0	0	0
THYMUS	NUMBER EXAMINED:	20	1	1	20	20	0	0	20
--HEMORRHAGE	1>	10	1	0	10	11	0	0	10
	2>	2	0	0	1	0	0	0	0
	TL>	12	1	0	11	11	0	0	10
SALIVARY GLAND	NUMBER EXAMINED:	20	1	1	20	20	0	0	20
--U/ LYMPHOID CELL INFILTRATE	1>	1	0	0	0	0	0	0	0
	TL>	1	0	0	0	0	0	0	0
--B/ LYMPHOID CELL INFILTRATE	TL>	0	0	0	0	0	0	0	0
MEDIASTINAL LN	NUMBER EXAMINED:	20	1	1	20	20	0	0	19
SINUSES ERYTHROCYTES	1>	7	0	0	6	11	0	0	8
	2>	4	0	0	4	3	0	0	1
	3>	0	0	0	0	1	0	0	0
	4>	0	1	0	0	0	0	0	0
	TL>	11	1	0	10	15	0	0	9

** CONTINUED ON NEXT PAGE **

TABLE INCLUDES:
SEX=ALL;GROUP=ALL;SCREEN=ALL;WEEKS=ALL
DEATH=ALL;FIND=ALL;SUBSET=T

ORGAN/TISSUE EXAMINED		--- NUMBER-OF-ANIMALS-AFFECTED ---							
SEX:		-------MALE-------				------FEMALE------			
GROUP:		-1-	-2-	-3-	-4-	-1-	-2-	-3-	-4-
NUMBER:		20	20	21	20	20	20	20	20
** FROM PREVIOUS PAGE **									
MEDIASTINAL LN	NUMBER EXAMINED:	20	1	1	20	20	0	0	19
--RETICULOENDOTHELIAL CELLS: BROWN PIGMENT	1>	8	0	1	6	9	0	0	10
	2>	0	0	0	2	7	0	0	4
	3>	0	0	0	0	2	0	0	0
	TL>	8	0	1	8	18	0	0	14
--PLASMA CELL HYPERPLASIA	2>	0	0	0	0	0	0	0	1
	3>	2	0	0	2	2	0	0	2
	4>	4	0	0	0	0	0	0	0
	TL>	6	0	0	2	2	0	0	3
LUNGS	NUMBER EXAMINED:	20	20	21	20	20	20	20	20
--PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE	1>	9	6	14	13	12	13	19	15
	2>	11	12	7	6	8	7	1	1
	3>	0	2	0	1	0	0	0	0
	TL>	20	20	21	20	20	20	20	16
--PULMONARY ARTERY: MINERAL DEPOSIT	1>	10	13	8	12	7	4	12	3
	2>	3	0	3	2	3	1	1	1
	TL>	13	13	11	14	10	5	13	4
--BRONCHIAL LUMEN: ERYTHROCYTES	2>	1	0	0	0	0	0	0	0
	TL>	1	0	0	0	0	0	0	0
--ALVEOLI: ERYTHROCYTES	1>	11	14	13	10	11	10	10	7
	2>	2	3	1	2	0	1	1	0
	TL>	13	17	14	12	11	11	11	7
--ALVEOLI: MACROPHAGES	1>	6	10	6	10	11	12	12	11
	2>	10	6	6	4	4	4	3	6
	4>	0	0	0	1	0	0	0	0
	TL>	16	16	12	15	15	16	15	17
--ALVEOLI BONE SPICULE	1>	2	3	2	1	1	0	1	2
	TL>	2	3	2	1	1	0	1	2
--ALVEOLI EDEMA	2>	0	1	0	0	0	0	0	0
	TL>	0	1	0	0	0	0	0	0

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TABLE INCLUDES:
SEX=ALL;GROUP=ALL;SCREEN=ALL;WEEKS=ALL
DEATH=ALL;FIND=ALL;SUBSET=T

ORGAN/TISSUE EXAMINED		--- NUMBER-OF-ANIMALS-AFFECTED ---							
SEX:		-------MALE-------				------FEMALE------			
GROUP:		-1-	-2-	-3-	-4-	-1-	-2-	-3-	-4-
NUMBER:		20	20	21	20	20	20	20	20
** FROM PREVIOUS PAGE **									
LUNGS	NUMBER EXAMINED:	20	20	21	20	20	20	20	20
--INTERSTITIUM: SUBACUTE/CHRONIC INFLAMMATION	1>	0	0	0	0	0	1	0	0
	2>	1	0	0	0	0	0	1	0
	TL>	1	0	0	0	0	1	1	0
--MICROGRANULOMA	1>	1	0	0	0	0	0	0	1
	2>	1	0	0	0	0	0	0	0
	TL>	2	0	0	0	0	0	0	1
--ACUTE/SUBACUTE INFLAMMATION	1>	0	0	2	0	1	0	0	0
	2>	1	1	3	0	1	2	1	1
	3>	1	0	0	0	0	0	0	0
	TL>	2	1	5	0	2	2	1	1
--SUBACUTE/CHRONIC INFLAMMATION	1>	0	0	0	0	0	1	0	0
	2>	4	0	2	1	1	0	0	0
	TL>	4	0	2	1	1	1	0	0
--PLEURA: CHRONIC INFLAMMATION	4>	1	0	0	0	0	0	0	0
	TL>	1	0	0	0	0	0	0	0
LIVER	NUMBER EXAMINED:	20	20	21	20	20	20	20	20
--CENTRILOBULAR HEPATOCYTES: HYPERTROPHY	1>	0	6	13	16	0	10	14	0
	2>	0	0	0	0	0	5	6	20
	TL>	0	6	13	16	0	15	20	20
--PERIPORTAL HEPATOCYTES: CYTOPLASMIC VACUOLATION	1>	3	5	4	4	5	4	1	2
	2>	3	0	0	1	4	2	0	0
	TL>	6	5	4	5	9	6	1	2
--EXTRAMEDULLARY HEMATOPOIESIS	1>	17	19	17	17	19	19	16	18
	2>	3	1	4	3	1	1	3	2
	TL>	20	20	21	20	20	20	19	20
--NONSPECIFIC CYTOPLASMIC VACUOLATION	1>	2	0	2	1	0	0	0	0
	TL>	2	0	2	1	0	0	0	0

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TABLE INCLUDES:
SEX=ALL;GROUP=ALL;SCREEN=ALL;WEEKS=ALL
DEATH=ALL;FIND=ALL;SUBSET=T

--- N U M B E R - O F - A N I M A L S - A F F E C T E D ---

ORGAN/TISSUE EXAMINED		SEX:	MALE				FEMALE			
		GROUP:	-1-	-2-	-3-	-4-	-1-	-2-	-3-	-4-
		NUMBER:	20	20	21	20	20	20	20	20
** FROM PREVIOUS PAGE **										
LIVER	NUMBER EXAMINED:		20	20	21	20	20	20	20	20
		1>	0	0	0	1	0	0	0	0
--CHOLANGIOFIBROSIS		TL>	0	0	0	1	0	0	0	0
--RETICULOENDOTHELIAL CELLS: BROWN PIGMENT		1>	0	0	1	1	0	0	0	0
		TL>	0	0	1	1	0	0	0	0
--NECROSIS		1>	0	0	0	0	1	0	0	1
		2>	1	0	0	0	0	1	1	1
		TL>	1	0	0	0	1	1	1	2
--HEMORRHAGE		2>	0	1	0	0	0	0	0	0
		3>	1	0	0	0	0	0	0	0
		TL>	1	1	0	0	0	0	0	0
--TENSION LIPIDOSIS		1>	0	0	0	0	0	1	0	0
		2>	0	0	0	0	1	0	0	0
		TL>	0	0	0	0	1	1	0	0
SPLEEN	NUMBER EXAMINED:		20	1	1	20	20	0	1	20
		1>	1	0	0	0	1	0	0	1
--CONGESTION		2>	11	1	0	9	14	0	1	9
		3>	7	0	0	8	3	0	0	10
		4>	1	0	0	3	2	0	0	0
		TL>	20	1	0	20	20	0	1	20
--RETICULOENDOTHELIAL CELLS: BROWN PIGMENT		1>	11	1	1	15	1	0	0	0
		2>	9	0	0	4	8	0	0	17
		3>	0	0	0	1	10	0	0	2
		4>	0	0	0	0	1	0	1	0
		TL>	20	1	1	20	20	0	1	19
--EXTRAMEDULLARY HEMATOPOIESIS		TL>	0	0	0	0	0	0	0	0
KIDNEY	NUMBER EXAMINED:		20	20	21	20	20	20	20	20
		1>	11	9	15	13	0	1	1	1
--B/ CHRONIC NEPHROPATHY		2>	0	2	2	2	0	0	0	0
		TL>	11	11	17	15	0	1	1	1

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TABLE INCLUDES:
SEX=ALL;GROUP=ALL;SCREEN=ALL;WEEKS=ALL
DEATH=ALL;FIND=ALL;SUBSET=T

--- N U M B E R - O F - A N I M A L S - A F F E C T E D ---

ORGAN/TISSUE EXAMINED		SEX:	-------MALE-------				------FEMALE------			
		GROUP:	-1-	-2-	-3-	-4-	-1-	-2-	-3-	-4-
		NUMBER:	20	20	21	20	20	20	20	20
** FROM PREVIOUS PAGE **										
KIDNEY	NUMBER EXAMINED:		20	20	21	20	20	20	20	20
--U/ LYMPHOID CELL INFILTRATE		1>	0	0	1	0	3	5	9	5
		TL>	0	0	1	0	3	5	9	5
--B/ LYMPHOID CELL INFILTRATE		1>	8	9	3	5	14	4	6	7
		TL>	8	9	3	5	14	4	6	7
--U/ TUBULAR ATROPHY		1>	0	1	0	1	3	4	4	3
		TL>	0	1	0	1	3	4	4	3
--B/ TUBULAR ATROPHY		1>	5	7	3	4	0	3	0	3
		2>	0	1	0	0	0	0	0	0
		TL>	5	8	3	4	0	3	0	3
--U/ MINERAL DEPOSIT		1>	4	1	1	2	2	5	6	5
		TL>	4	1	1	2	2	5	6	5
--B/ MINERAL DEPOSIT		1>	1	1	4	2	1	6	5	4
		2>	0	0	0	0	0	0	1	0
		TL>	1	1	4	2	1	6	6	4
--U/ CYST(S)		P>	2	1	2	3	1	5	2	1
		TL>	2	1	2	3	1	5	2	1
--B/ CYSTS		P>	0	0	0	1	0	0	0	0
		TL>	0	0	0	1	0	0	0	0
--U/ INTERSTITIAL FIBROSIS		1>	1	1	1	0	1	1	1	0
		2>	1	0	0	0	0	0	1	0
		TL>	2	1	1	0	1	1	2	0
--B/ INTERSTITIAL FIBROSIS		1>	0	0	0	0	0	0	1	0
		TL>	0	0	0	0	0	0	1	0
--U/ HYDRONEPHROSIS		2>	1	2	3	0	1	0	0	1
		3>	0	0	0	0	0	1	0	0
		TL>	1	2	3	0	1	1	0	1

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TABLE INCLUDES:
SEX=ALL;GROUP=ALL;SCREEN=ALL;WEEKS=ALL
DEATH=ALL;FIND=ALL;SUBSET=T

--- N U M B E R - O F - A N I M A L S - A F F E C T E D ---

ORGAN/TISSUE EXAMINED		SEX:	MALE				FEMALE			
		GROUP:	-1-	-2-	-3-	-4-	-1-	-2-	-3-	-4-
		NUMBER:	20	20	21	20	20	20	20	20
** FROM PREVIOUS PAGE **										
KIDNEY	NUMBER EXAMINED:		20	20	21	20	20	20	20	20
		2>	0	1	2	0	0	0	0	0
--B/ HYDRONEPHROSIS		TL>	0	1	2	0	0	0	0	0
		1>	0	1	0	0	0	1	3	3
--U/ TUBULE(S): PROTEINACEOUS CAST		TL>	0	1	0	0	0	1	3	3
		1>	0	0	0	0	0	2	0	0
--B/ TUBULES: PROTEINACEOUS CAST		TL>	0	0	0	0	0	2	0	0
		2>	0	0	0	0	0	1	0	0
--U/ PELVIS: PURULENT EXUDATE		TL>	0	0	0	0	0	1	0	0
		2>	0	0	0	0	0	1	0	0
--U/ PELVIS: MINERAL DEPOSIT		TL>	0	0	0	0	0	1	0	0
		2>	0	1	0	0	0	0	0	0
--U/ PELVIS: ACUTE/SUBACUTE INFLAMMATION		TL>	0	1	0	0	0	0	0	0
		3>	0	1	0	0	0	0	0	0
--U/ PELVIS: SUBACUTE/CHRONIC INFLAMMATION		TL>	0	1	0	0	0	0	0	0
		2>	0	0	0	1	0	0	0	0
--B/ TUBULAR EPITHELIUM: BROWN PIGMENT		TL>	0	0	0	1	0	0	0	0
STOMACH	NUMBER EXAMINED:		20	1	0	20	20	0	0	20
		1>	0	0	0	2	0	0	0	0
--NONGLANDULAR MUCOSA: SQUAMOUS CELL HYPERPLASIA		2>	0	0	0	4	0	0	0	4
		3>	0	0	0	4	0	0	0	0
		TL>	0	0	0	10	0	0	0	4
		1>	0	0	0	1	0	0	0	0
--NONGLANDULAR HYPERKERATOSIS		2>	0	0	0	4	0	0	0	3
		3>	0	0	0	4	0	0	0	1
		4>	0	0	0	1	0	0	0	0
		TL>	0	0	0	10	0	0	0	4

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TABLE INCLUDES:
SEX=ALL;GROUP=ALL;SCREEN=ALL;WEEKS=ALL
DEATH=ALL;FIND=ALL;SUBSET=T

ORGAN/TISSUE EXAMINED		--- NUMBER-OF-ANIMALS-AFFECTED ---							
SEX:		-------MALE-------				------FEMALE------			
GROUP:		-1-	-2-	-3-	-4-	-1-	-2-	-3-	-4-
NUMBER:		20	20	21	20	20	20	20	20
** FROM PREVIOUS PAGE **									
STOMACH	NUMBER EXAMINED:	20	1	0	20	20	0	0	20
--NONGLANDULAR: ACUTE/SUBACUTE INFLAMMATION	1>	0	0	0	1	1	0	0	1
	2>	0	0	0	3	1	0	0	1
	TL>	0	0	0	4	2	0	0	2
--NONGLANDULAR: HEMORRHAGE	1>	1	0	0	1	1	0	0	0
	TL>	1	0	0	1	1	0	0	0
--NONGLANDULAR: EDEMA	2>	0	0	0	2	0	0	0	1
	3>	0	0	0	1	0	0	0	1
	4>	0	0	0	3	0	0	0	0
	TL>	0	0	0	6	0	0	0	2
--EOSINOPHIL INFILTRATE	1>	9	0	0	12	14	0	0	15
	2>	11	1	0	8	6	0	0	5
	TL>	20	1	0	20	20	0	0	20
--LYMPHOID CELL INFILTRATE	1>	15	1	0	10	15	0	0	2
	2>	2	0	0	5	1	0	0	0
	TL>	17	1	0	15	16	0	0	2
--GLAND(S): DILATATION/CYST	1>	10	0	0	9	6	0	0	7
	2>	2	0	0	2	1	0	0	3
	TL>	12	0	0	11	7	0	0	10
--GLANDULAR: ACUTE/SUBACUTE INFLAMMATION	1>	0	0	0	0	0	0	0	1
	2>	1	0	0	0	0	0	0	0
	TL>	1	0	0	0	0	0	0	1
--MUCOSA: HEMORRHAGE	1>	1	0	0	0	3	0	0	1
	TL>	1	0	0	0	3	0	0	1
--LIMITING RIDGE: HYPERPLASIA	2>	0	0	0	1	0	0	0	3
	TL>	0	0	0	1	0	0	0	3
--LIMITING RIDGE: HYPERKERATOSIS	2>	0	0	0	1	0	0	0	3
	TL>	0	0	0	1	0	0	0	3

TABLE INCLUDES:
SEX=ALL;GROUP=ALL;SCREEN=ALL;WEEKS=ALL
DEATH=ALL;FIND=ALL;SUBSET=T

ORGAN/TISSUE EXAMINED		--- NUMBER-OF-ANIMALS-AFFECTED ---							
SEX:		-------MALE-------				------FEMALE------			
GROUP:		-1-	-2-	-3-	-4-	-1-	-2-	-3-	-4-
NUMBER:		20	20	21	20	20	20	20	20
DUODENUM	NUMBER EXAMINED:	20	1	1	20	20	0	0	20
PANCREAS	NUMBER EXAMINED:	20	1	1	20	20	0	0	20
--LYMPHOID CELL INFILTRATE	1>	10	0	0	6	10	0	0	6
	TL>	10	0	0	6	10	0	0	6
--RETICULOENDOTHELIAL CELLS: BROWN PIGMENT	1>	5	0	0	7	1	0	0	2
	2>	0	0	0	1	0	0	0	0
	TL>	5	0	0	8	1	0	0	2
--EXOCRINE CELLS: ATROPHY	1>	0	0	0	2	0	0	0	0
	2>	0	0	0	0	0	0	0	1
	TL>	0	0	0	2	0	0	0	1
--INTERSTITIAL FIBROSIS	2>	1	0	0	0	0	0	0	0
	TL>	1	0	0	0	0	0	0	0
--CHRONIC INFLAMMATION	2>	1	0	0	0	0	0	0	0
	TL>	1	0	0	0	0	0	0	0
JEJUNUM	NUMBER EXAMINED:	20	1	0	20	20	0	0	20
ILEUM	NUMBER EXAMINED:	20	1	0	20	20	0	0	20
CECUM	NUMBER EXAMINED:	20	1	1	20	20	0	0	20
COLON	NUMBER EXAMINED:	20	1	1	20	20	0	0	20
--LUMEN: NEMATODE PARASITE	P>	0	0	0	0	2	0	0	0
	TL>	0	0	0	0	2	0	0	0
LOW COLON/RECTUM	NUMBER EXAMINED:	20	1	1	20	20	0	0	20
--LUMEN: NEMATODE PARASITE	P>	0	0	0	0	1	0	0	1
	TL>	0	0	0	0	1	0	0	1
--HEMORRHAGE	1>	0	0	0	0	1	0	0	0
	TL>	0	0	0	0	1	0	0	0

TABLE INCLUDES:
SEX=ALL;GROUP=ALL;SCREEN=ALL;WEEKS=ALL
DEATH=ALL;FIND=ALL;SUBSET=T

--- N U M B E R - O F - A N I M A L S - A F F E C T E D ---

ORGAN/TISSUE EXAMINED		SEX:	MALE				FEMALE			
		GROUP:	-1-	-2-	-3-	-4-	-1-	-2-	-3-	-4-
		NUMBER:	20	20	21	20	20	20	20	20
MESENTERIC LN	NUMBER EXAMINED:		20	1	1	20	20	0	0	20
--SINUSES: ERYTHROCYTES		1>	7	0	0	4	3	0	0	2
		TL>	7	0	0	4	3	0	0	2
--RETICULOENDOTHELIAL CELLS: BROWN PIGMENT		1>	10	1	0	9	7	0	0	9
		2>	0	0	0	0	1	0	0	0
		TL>	10	1	0	9	8	0	0	9
TESTIS	NUMBER EXAMINED:		20	1	1	20	0	0	0	0
--U/ TUBULAR ATROPHY		2>	0	0	0	1	0	0	0	0
		3>	1	0	0	0	0	0	0	0
		TL>	1	0	0	1	0	0	0	0
--B/ TUBULAR ATROPHY		2>	1	0	0	0	0	0	0	0
		3>	0	0	0	1	0	0	0	0
		TL>	1	0	0	1	0	0	0	0
EPIDIDYMIS	NUMBER EXAMINED:		20	1	1	20	0	0	0	0
--B/ LYMPHOID CELL INFILTRATE		1>	20	1	1	18	0	0	0	0
		TL>	20	1	1	18	0	0	0	0
--B/ OLIGOSPERMIA		4>	0	0	0	1	0	0	0	0
		TL>	0	0	0	1	0	0	0	0
PROSTATE GLAND	NUMBER EXAMINED:		20	1	1	20	0	0	0	0
--LYMPHOID CELL INFILTRATE		1>	4	1	0	1	0	0	0	0
		2>	1	0	0	6	0	0	0	0
		TL>	5	1	0	7	0	0	0	0
SEMINAL VESICLE	NUMBER EXAMINED:		20	1	2	20	0	0	0	0
--LYMPHOID CELL INFILTRATE		1>	1	0	0	0	0	0	0	0
		TL>	1	0	0	0	0	0	0	0
--DECREASED SECRETORY PRODUCT		2>	0	0	2	0	0	0	0	0
		TL>	0	0	2	0	0	0	0	0

TABLE INCLUDES:
SEX=ALL;GROUP=ALL;SCREEN=ALL;WEEKS=ALL
DEATH=ALL;FIND=ALL;SUBSET=T

ORGAN/TISSUE EXAMINED		--- NUMBER-OF-ANIMALS-AFFECTED ---							
	SEX:	-------MALE-------				------FEMALE------			
	GROUP:	-1-	-2-	-3-	-4-	-1-	-2-	-3-	-4-
	NUMBER:	20	20	21	20	20	20	20	20
OVARY	NUMBER EXAMINED:	0	0	0	0	20	0	0	20
--U/ CYST(S)	P>	0	0	0	0	0	0	0	2
	TL>	0	0	0	0	0	0	0	2
--B/ BROWN PIGMENT	1>	0	0	0	0	19	0	0	18
	2>	0	0	0	0	1	0	0	2
	TL>	0	0	0	0	20	0	0	20
UTERUS	NUMBER EXAMINED:	0	0	0	0	20	0	1	20
--EOSINOPHILIC INFILTRATE	1>	0	0	0	0	3	0	0	2
	2>	0	0	0	0	8	0	1	13
	3>	0	0	0	0	5	0	0	4
	TL>	0	0	0	0	16	0	1	19
--RETICULOENDOTHELIAL CELLS: BROWN PIGMENT	1>	0	0	0	0	17	0	1	15
	TL>	0	0	0	0	17	0	1	15
--HYDROMETRA	2>	0	0	0	0	1	0	0	0
	3>	0	0	0	0	3	0	0	1
	4>	0	0	0	0	2	0	1	0
	TL>	0	0	0	0	6	0	1	1
--HEMORRHAGE	1>	0	0	0	0	0	0	0	1
	2>	0	0	0	0	1	0	0	0
	TL>	0	0	0	0	1	0	0	1
--LYMPHOID CELL INFILTRATE	1>	0	0	0	0	10	0	0	9
	2>	0	0	0	0	3	0	0	0
	TL>	0	0	0	0	13	0	0	9
--ACUTE/SUBACUTE INFLAMMATION	1>	0	0	0	0	1	0	0	1
	2>	0	0	0	0	3	0	1	0
	TL>	0	0	0	0	4	0	1	1
URINARY BLADDER	NUMBER EXAMINED:	20	1	0	20	20	0	0	20
--LYMPHOID CELL INFILTRATE	1>	9	0	0	0	2	0	0	0
	TL>	9	0	0	0	2	0	0	0

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TABLE INCLUDES:
SEX=ALL;GROUP=ALL;SCREEN=ALL;WEEKS=ALL
DEATH=ALL;FIND=ALL;SUBSET=T

--- N U M B E R - O F - A N I M A L S - A F F E C T E D ---

ORGAN/TISSUE EXAMINED		SEX:	MALE				FEMALE			
		GROUP:	-1-	-2-	-3-	-4-	-1-	-2-	-3-	-4-
		NUMBER:	20	20	21	20	20	20	20	20
** FROM PREVIOUS PAGE **										
URINARY BLADDER	NUMBER EXAMINED:		20	1	0	20	20	0	0	20
		P>	2	0	0	0	0	0	0	0
--LUMEN: PROTEINACEOUS PLUG		TL>	2	0	0	0	0	0	0	0
VAGINA	NUMBER EXAMINED:		0	0	0	0	20	0	0	20
		2>	0	0	0	0	1	0	0	0
--LYMPHOID CELL INFILTRATE		TL>	0	0	0	0	1	0	0	0
		1>	0	0	0	0	1	0	0	0
--EOSINOPHILIC INFILTRATE		2>	0	0	0	0	0	0	0	1
		TL>	0	0	0	0	1	0	0	1
		2>	0	0	0	0	1	0	0	0
--HYPERKERATOSIS		TL>	0	0	0	0	1	0	0	0
		1>	0	0	0	0	1	0	0	1
--ACUTE/SUBACUTE INFLAMMATION		2>	0	0	0	0	16	0	0	18
		3>	0	0	0	0	1	0	0	0
		TL>	0	0	0	0	18	0	0	19
		2>	0	0	0	0	0	0	0	1
--SQUAMOUS CELL HYPERPLASIA		3>	0	0	0	0	1	0	0	1
		4>	0	0	0	0	1	0	0	0
		TL>	0	0	0	0	2	0	0	2
		P>	0	0	0	0	0	0	0	1
--CYST(S)		TL>	0	0	0	0	0	0	0	1
NERVE	NUMBER EXAMINED:		20	1	1	20	20	0	0	20
ADRENAL GLAND	NUMBER EXAMINED:		20	1	1	20	20	0	0	20
		1>	1	0	0	0	0	0	0	1
U/ CORTEX CYTOPLASMIC VACUOLATION		TL>	1	0	0	0	0	0	0	1
		1>	12	0	0	12	0	0	0	0
		2>	0	1	0	3	0	0	0	0
		TL>	12	1	0	15	0	0	0	0

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TABLE INCLUDES:
SEX=ALL;GROUP=ALL;SCREEN=ALL;WEEKS=ALL
DEATH=ALL;FIND=ALL;SUBSET=T

--- N U M B E R - O F - A N I M A L S - A F F E C T E D ---

ORGAN/TISSUE EXAMINED		SEX:	MALE				FEMALE			
		GROUP:	-1-	-2-	-3-	-4-	-1-	-2-	-3-	-4-
		NUMBER:	20	20	21	20	20	20	20	20
PITUITARY GLAND	NUMBER EXAMINED:		20	1	1	19	20	0	0	20
	P>		0	1	0	3	0	0	0	0
--CYST(S)	TL>		0	1	0	3	0	0	0	0
THYROID GLAND	NUMBER EXAMINED:		20	1	1	20	20	0	0	20
	P>		9	0	0	5	10	0	0	8
--U/ SQUAMOUS CYST(S)	TL>		9	0	0	5	10	0	0	8
	P>		1	0	0	0	0	0	0	2
--B/ SQUAMOUS CYSTS	TL>		1	0	0	0	0	0	0	2
	1>		1	0	0	0	0	0	0	1
--U/ LYMPHOID CELL INFILTRATE	TL>		1	0	0	0	0	0	0	1
	P>		2	1	0	1	0	0	0	1
--U/ ECTOPIC THYMUS	TL>		2	1	0	1	0	0	0	1
PARATHYROID GL	NUMBER EXAMINED:		17	1	1	19	19	0	0	16
SKELETAL MUSCLE	NUMBER EXAMINED:		20	1	1	20	20	0	0	20
MAMMARY GLAND	NUMBER EXAMINED:		18	1	1	18	20	0	0	20
EYE	NUMBER EXAMINED:		20	1	1	20	20	0	0	20
	1>		0	0	0	1	0	0	0	0
--U/ CORNEA: MINERAL DEPOSIT	TL>		0	0	0	1	0	0	0	0
	2>		0	0	1	0	0	0	0	0
--U/ LENS: FIBER DEGENERATION	TL>		0	0	1	0	0	0	0	0
OPTIC NERVE	NUMBER EXAMINED:		20	1	1	20	20	0	0	20
	1>		1	0	0	0	0	0	0	0
--U/ HEMORRHAGE	2>		1	0	0	0	2	0	0	1
	TL>		2	0	0	0	2	0	0	1

TABLE INCLUDES:
SEX=ALL;GROUP=ALL;SCREEN=ALL;WEEKS=ALL
DEATH=ALL;FIND=ALL;SUBSET=T

--- N U M B E R - O F - A N I M A L S - A F F E C T E D ---

ORGAN/TISSUE EXAMINED		SEX:	MALE				FEMALE			
		GROUP:	-1-	-2-	-3-	-4-	-1-	-2-	-3-	-4-
		NUMBER:	20	20	21	20	20	20	20	20
LACRIMAL GLAND	NUMBER EXAMINED:		20	0	1	20	19	0	0	20
--U/ LYMPHOID CELL INFILTRATE	1>		3	0	0	8	4	0	0	2
	2>		1	0	0	1	1	0	0	0
	TL>		4	0	0	9	5	0	0	2
--B/ LYMPHOID CELL INFILTRATE	1>		5	0	0	2	0	0	0	0
	TL>		5	0	0	2	0	0	0	0
ZYMBAL'S GLAND	NUMBER EXAMINED:		20	1	1	19	20	0	0	20
--B-ADENOMA	+>		0	0	0	0	1	0	0	0
	TL>		0	0	0	0	1	0	0	0
STERNUM	NUMBER EXAMINED:		20	1	1	20	20	0	0	20
STERNAL MARROW	NUMBER EXAMINED:		20	1	1	20	20	0	0	20
FEMUR	NUMBER EXAMINED:		20	1	1	20	20	0	0	20
FEMORAL MARROW	NUMBER EXAMINED:		20	1	1	20	20	0	0	20
SOFT TISSUE	NUMBER EXAMINED:		1	0	0	0	0	0	0	0
--ABSCESS(ES)	P>		1	0	0	0	0	0	0	0
	TL>		1	0	0	0	0	0	0	0
BONE	NUMBER EXAMINED:		0	0	0	1	0	0	0	0
--HEMORRHAGE	2>		0	0	0	1	0	0	0	0
	TL>		0	0	0	1	0	0	0	0
LYMPH NODE	NUMBER EXAMINED:		1	1	0	0	0	1	0	0
--SINUSES: ERYTHROCYTES	2>		1	0	0	0	0	0	0	0
	TL>		1	0	0	0	0	0	0	0
--RETICULOENDOTHELIAL CELLS: BROWN PIGMENT	1>		0	0	0	0	0	1	0	0
	2>		1	0	0	0	0	0	0	0
	TL>		1	0	0	0	0	1	0	0
--HEMORRHAGE	2>		0	1	0	0	0	1	0	0
	TL>		0	1	0	0	0	1	0	0

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TABLE INCLUDES:
SEX=ALL;GROUP=ALL;SCREEN=ALL;WEEKS=ALL
DEATH=ALL;FIND=ALL;SUBSET=T

--- N U M B E R - O F - A N I M A L S - A F F E C T E D ---

ORGAN/TISSUE EXAMINED		SEX:	-------MALE-------				------FEMALE------			
		GROUP:	-1-	-2-	-3-	-4-	-1-	-2-	-3-	-4-
		NUMBER:	20	20	21	20	20	20	20	20
** FROM PREVIOUS PAGE **										
LYMPH NODE	NUMBER EXAMINED:		1	1	0	0	0	1	0	0
		3>	0	1	0	0	0	0	0	0
--PLASMA CELL HYPERPLASIA		TL>	0	1	0	0	0	0	0	0
EXTREMITY	NUMBER EXAMINED:		0	0	0	0	1	3	0	1
		1>	0	0	0	0	0	0	0	1
--B/ FOREPAWS: LYMPHOID CELL INFILTRATE		TL>	0	0	0	0	0	0	0	1
		1>	0	0	0	0	1	2	0	0
--B/ FORELIMBS: LYMPHOID CELL INFILTRATE		2>	0	0	0	0	0	1	0	0
		TL>	0	0	0	0	1	3	0	0
		1>	0	0	0	0	1	0	0	0
--B/ FORELIMBS: ACANTHOSIS		2>	0	0	0	0	0	1	0	0
		TL>	0	0	0	0	1	1	0	0
EAR	NUMBER EXAMINED:		0	0	0	0	0	2	0	0
		2>	0	0	0	0	0	2	0	0
--B/ CONGESTION		TL>	0	0	0	0	0	2	0	0
		3>	0	0	0	0	0	1	0	0
--B/ ACUTE/SUBACUTE INFLAMMATION		4>	0	0	0	0	0	1	0	0
		TL>	0	0	0	0	0	2	0	0
		2>	0	0	0	0	0	1	0	0
--B/ HEMORRHAGE		TL>	0	0	0	0	0	1	0	0
		3>	0	0	0	0	0	1	0	0
--B/ ACANTHOSIS		4>	0	0	0	0	0	1	0	0
		TL>	0	0	0	0	0	2	0	0

** END OF LIST **

Table III
Individual Animal Postmortem Findings
Preface

Key to Abbreviations:

D = Found Dead
U/ = Unilateral
B/ = Bilateral
B- = Benign
LN = Lymph Node
SC = Spinal Cord
NMC = No Microscopic Correlation
GROSS/MICRO CORR = Correlation of Macroscopic and Microscopic Findings

Notes:

Unless otherwise specified in a histopathology note, the organ/tissue examined was the required (routine) section.

"Study Day of Death" indicates the number of days accumulated from the experiment's initiation, which is calculated from Day 1. It does not reflect the number of dosing days.

ANIMAL NUMBER: 1001 SEX: MALE DOSE GROUP: 1 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 645.4 GRAMS

* * * PATHOLOGY OBSERVATIONS * * *

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
EPIDIDYMIS	MICRO: -MINIMAL	-B/ LYMPHOID CELL INFILTRATE
HEART	MICRO: -MINIMAL	-NECROSIS
	-MINIMAL	-LYMPHOID CELL INFILTRATE
	-MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
	-MINIMAL	-FIBROSIS
KIDNEY	MICRO: -MINIMAL	-B/ LYMPHOID CELL INFILTRATE
	-MINIMAL	-B/ TUBULAR ATROPHY
	-PRESENT	-U/ CYST(S)
LACRIMAL GLAND	MICRO: -MINIMAL	-B/ LYMPHOID CELL INFILTRATE
LIVER	MICRO: -MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS	MICRO: -MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-PULMONARY ARTERY: MINERAL DEPOSIT
	-MINIMAL	-ALVEOLI: ERYTHROCYTES
	-MINIMAL	-ALVEOLI: BONE SPICULE
	-SLIGHT	-ACUTE/SUBACUTE INFLAMMATION
MAMMARY GLAND	MICRO: -TISSUE MISSING	
MEDIASTINAL LN	MICRO: -MINIMAL	-SINUSES: ERYTHROCYTES
MESENTERIC LN	MICRO: -MINIMAL	-SINUSES: ERYTHROCYTES
	-MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
PARATHYROID GL	MICRO: -TISSUE MISSING	
SPLEEN	MICRO: -MINIMAL	-CONGESTION
	-SLIGHT	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
STOMACH	[illegible]	-EOSINOPHIL INFILTRATE
	[illegible]	-LYMPHOID CELL INFILTRATE
	[illegible]	-GLAND(S) DILATATION/CYST
[illegible]	[illegible]	HEMORRHAGE
[illegible]	[illegible]	-U/ SQUAMOUS CYST(S)

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ANIMAL NUMBER: 1001 SEX: MALE DOSE GROUP: 1 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 645.4 GRAMS

* * * PATHOLOGY OBSERVATIONS (CONTINUED) * * *

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
TRACHEA	MICRO: -MINIMAL	-LYMPHOID CELL INFILTRATE
URINARY BLADDER	MICRO: -PRESENT	-LUMEN: PROTEINACEOUS PLUG

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

THE FOLLOWING TISSUES HAD NO MICROSCOPIC ABNORMALITIES OBSERVED:
ADRENAL GLAND, BRAIN, CECUM, CERVICAL SC, COLON, DUODENUM, ESOPHAGUS, EYE, FEMORAL MARROW, FEMUR, ILEUM, JEJUNUM, LOW COLON/RECTUM, NERVE, OPTIC NERVE, PANCREAS, PITUITARY GLAND, PROSTATE GLAND, SALIVARY GLAND, SEMINAL VESICLE, SKELETAL MUSCLE, STERNAL MARROW, STERNUM, TESTIS, THORACIC AORTA, THORACIC SC, ZYMBAL'S GLAND

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

*** PATH/TOX SYSTEM OUTPUT ***
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION
INDIVIDUAL ANIMAL DATA SHEET

STUDY NUMBER: 962459

ANIMAL NUMBER: 1002 SEX: MALE DOSE GROUP: 1 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 583.4 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
ADRENAL GLAND	MICRO: -MINIMAL	-B/ CORTEX: CYTOPLASMIC VACUOLATION
EPIDIDYMIS	MICRO: -MINIMAL	-B/ LYMPHOID CELL INFILTRATE
HEART	MICRO: -MINIMAL	-NECROSIS
	-MINIMAL	-LYMPHOID CELL INFILTRATE
	-MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
	-MINIMAL	-FIBROSIS
KIDNEY	MICRO: -MINIMAL	-B/ CHRONIC NEPHROPATHY
LACRIMAL GLAND	MICRO: -MINIMAL	-B/ LYMPHOID CELL INFILTRATE
LIVER	MICRO: -MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS	MICRO: -SLIGHT	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-PULMONARY ARTERY: MINERAL DEPOSIT
	-MINIMAL	-ALVEOLI: ERYTHROCYTES
	-MODERATE	-ACUTE/SUBACUTE INFLAMMATION
MEDIASTINAL LN	MICRO: -MINIMAL	-SINUSES: ERYTHROCYTES
	-MODERATE	-PLASMA CELL HYPERPLASIA
PARATHYROID GL	MICRO: -TISSUE MISSING	
SPLEEN	MICRO: -SLIGHT	-CONGESTION
	-MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
STOMACH	MICRO: -SLIGHT	-EOSINOPHIL INFILTRATE
	-MINIMAL	-LYMPHOID CELL INFILTRATE
THYMUS	MICRO: -MINIMAL	-HEMORRHAGE
TRACHEA	MICRO: -MINIMAL	-LYMPHOID CELL INFILTRATE

ANIMAL NUMBER: 1002 SEX: MALE DOSE GROUP: 1 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 583.4 GRAMS

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

THE FOLLOWING TISSUES HAD NO MICROSCOPIC ABNORMALITIES OBSERVED:
BRAIN, CECUM, CERVICAL SC, COLON, DUODENUM, ESOPHAGUS, EYE, FEMORAL MARROW, FEMUR, ILEUM, JEJUNUM, LOW COLON/RECTUM, MAMMARY GLAND, MESENTERIC LN, NERVE, OPTIC NERVE, PANCREAS, PITUITARY GLAND, PROSTATE GLAND, SALIVARY GLAND, SEMINAL VESICLE, SKELETAL MUSCLE, STERNAL MARROW, STERNUM, TESTIS, THORACIC AORTA, THORACIC SC, THYROID GLAND, URINARY BLADDER, ZYMBAL'S GLAND

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 1003 SEX: MALE DOSE GROUP: 1 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 556.5 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
ADRENAL GLAND	MICRO: -MINIMAL	-B/ CORTEX: CYTOPLASMIC VACUOLATION
EPIDIDYMIS	MICRO: -MINIMAL	-B/ LYMPHOID CELL INFILTRATE
GROSS-MICRO COR1	MICRO: HISTOPATHOLOGICAL COMMENT:	>PALE, KIDNEYS=NMC. MASS, LEFT UPPER LATERAL=ABSCESS IN SOFT TISSUE. TAN, MOTTLED, SPLEEN=NMC.
HEART	MICRO: -MINIMAL	-NECROSIS
KIDNEY	GROSS: -DISCOLORED, SLIGHT MICRO: -MINIMAL	-BOTH: PALE -B/ LYMPHOID CELL INFILTRATE
LIVER	MICRO: -MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS	MICRO: -SLIGHT -MINIMAL -MINIMAL -MINIMAL -MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE -PULMONARY ARTERY: MINERAL DEPOSIT -ALVEOLI: ERYTHROCYTES -ALVEOLI: MACROPHAGES -MICROGRANULOMA
MAMMARY GLAND	GROSS: -NODULE(S)/MASS(ES)	-MASS, LEFT UPPER LATERAL: 1.5 CM DIA, TAN, SOFT, FILLED WITH GREEN VISCOUS MATERIAL
MEDIASTINAL LN	MICRO: -MINIMAL -MINIMAL	-SINUSES: ERYTHROCYTES -RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
MESENTERIC LN	MICRO: -MINIMAL -MINIMAL	-SINUSES: ERYTHROCYTES -RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
PARATHYROID GL	MICRO: HISTOPATHOLOGICAL COMMENT:	>ONE PARATHYROID
PROSTATE GLAND	MICRO: -MINIMAL	-LYMPHOID CELL INFILTRATE
SOFT TISSUE	MICRO -PRESENT HISTOPATHOLOGICAL COMMENT:	-ABSCESS(ES) >MASS DESCRIBED FOR MAMMARY GLAND.
SPLEEN	GROSS -DISCOLORED, SLIGHT MICRO SLIGHT -MINIMAL	-TAN, MOTTLED -CONGESTION -RETICULOENDOTHELIAL CELLS: BROWN PIGMENT

ANIMAL NUMBER: 1003 SEX: MALE DOSE GROUP: 1 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 556.5 GRAMS

*** PATHOLOGY OBSERVATIONS (CONTINUED) ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
STOMACH	MICRO: -SLIGHT	-EOSINOPHIL INFILTRATE
TRACHEA	MICRO: -MINIMAL	-LYMPHOID CELL INFILTRATE

THE FOLLOWING TISSUES HAD NO MICROSCOPIC ABNORMALITIES OBSERVED:
BRAIN, CECUM, CERVICAL SC, COLON, DUODENUM, ESOPHAGUS, EYE, FEMORAL MARROW, FEMUR, ILEUM, JEJUNUM, LACRIMAL GLAND, LOW COLON/RECTUM, MAMMARY GLAND, NERVE, OPTIC NERVE, PANCREAS, PARATHYROID GL, PITUITARY GLAND, SALIVARY GLAND, SEMINAL VESICLE, SKELETAL MUSCLE, STERNAL MARROW, STERNUM, TESTIS, THORACIC AORTA, THORACIC SC, THYMUS, THYROID GLAND, URINARY BLADDER, ZYMBAL'S GLAND

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 1004 SEX: MALE DOSE GROUP: 1 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 597.5 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
ADRENAL GLAND	MICRO: -MINIMAL	-U/ CORTEX: CYTOPLASMIC VACUOLATION
EPIDIDYMIS	MICRO: -MINIMAL	-B/ LYMPHOID CELL INFILTRATE
HEART	MICRO: -MINIMAL	-NECROSIS
KIDNEY	MICRO: -MINIMAL	-B/ CHRONIC NEPHROPATHY
LIVER	MICRO: -MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
	-MINIMAL	-NONSPECIFIC CYTOPLASMIC VACUOLATION
LUNGS	MICRO: -MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-PULMONARY ARTERY: MINERAL DEPOSIT
	-MINIMAL	-ALVEOLI: MACROPHAGES
	-MINIMAL	-ALVEOLI: BONE SPICULE
MEDIASTINAL LN	MICRO: -SLIGHT	-SINUSES: ERYTHROCYTES
	-MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
MESENTERIC LN	MICRO: -MINIMAL	-SINUSES: ERYTHROCYTES
PANCREAS	MICRO: -MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
PARATHYROID GL	HISTOPATHOLOGICAL COMMENT:	>ONE PARATHYROID
SPLEEN	MICRO: -SLIGHT	-CONGESTION
	-MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
STOMACH	MICRO: -MINIMAL	-EOSINOPHIL INFILTRATE
	-MINIMAL	-LYMPHOID CELL INFILTRATE
	-MINIMAL	-GLAND(S): DILATATION/CYST
TESTIS	MICRO: -MODERATE	-U/ TUBULAR ATROPHY

ANIMAL NUMBER: 1004 SEX: MALE DOSE GROUP: 1 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 597.5 GRAMS

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

THE FOLLOWING TISSUES HAD NO MICROSCOPIC ABNORMALITIES OBSERVED:
BRAIN, CECUM, CERVICAL SC, COLON, DUODENUM, ESOPHAGUS, EYE, FEMORAL MARROW, FEMUR, ILEUM, JEJUNUM, LACRIMAL GLAND, LOW COLON/RECTUM, MAMMARY GLAND, NERVE, OPTIC NERVE, PARATHYROID GL, PITUITARY GLAND, PROSTATE GLAND, SALIVARY GLAND, SEMINAL VESICLE, SKELETAL MUSCLE, STERNAL MARROW, STERNUM, THORACIC AORTA, THORACIC SC, THYMUS, THYROID GLAND, TRACHEA, URINARY BLADDER, ZYMBAL'S GLAND

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 1005 SEX: MALE DOSE GROUP: 1 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 559.0 GRAMS

* * * PATHOLOGY OBSERVATIONS * * *

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
ADRENAL GLAND	MICRO: -MINIMAL	-B/ CORTEX: CYTOPLASMIC VACUOLATION
EPIDIDYMIS	MICRO: -MINIMAL	-B/ LYMPHOID CELL INFILTRATE
HEART	MICRO: -MINIMAL	-NECROSIS
KIDNEY	MICRO: -MINIMAL	-B/ LYMPHOID CELL INFILTRATE
LIVER	MICRO: -SLIGHT	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS	MICRO: -SLIGHT -MINIMAL -SLIGHT	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE -ALVEOLI: ERYTHROCYTES -ALVEOLI: MACROPHAGES
MEDIASTINAL LN	MICRO: -MINIMAL -MINIMAL	-SINUSES: ERYTHROCYTES -RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
MESENTERIC LN	MICRO: -MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
PANCREAS	MICRO: -MINIMAL	-LYMPHOID CELL INFILTRATE
SPLEEN	MICRO: -SLIGHT -SLIGHT	-CONGESTION -RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
STOMACH	MICRO: -MINIMAL -MINIMAL -MINIMAL -SLIGHT	-NONGLANDULAR: HEMORRHAGE -EOSINOPHIL INFILTRATE -LYMPHOID CELL INFILTRATE -GLAND(S): DILATATION/CYST
URINARY BLADDER	MICRO: -MINIMAL	-LYMPHOID CELL INFILTRATE

ANIMAL NUMBER: 1005 SEX: MALE DOSE GROUP: 1 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 559.0 GRAMS

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

THE FOLLOWING TISSUES HAD NO MICROSCOPIC ABNORMALITIES OBSERVED:
BRAIN, CECUM, CERVICAL SC, COLON, DUODENUM, ESOPHAGUS, EYE, FEMORAL MARROW, FEMUR, ILEUM, JEJUNUM, LACRIMAL GLAND, LOW COLON/RECTUM, MAMMARY GLAND, NERVE, OPTIC NERVE, PARATHYROID GL, PITUITARY GLAND, PROSTATE GLAND, SALIVARY GLAND, SEMINAL VESICLE, SKELETAL MUSCLE, STERNAL MARROW, STERNUM, TESTIS, THORACIC AORTA, THORACIC SC, THYMUS, THYROID GLAND, TRACHEA, ZYMBAL'S GLAND

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 1006 SEX: MALE DOSE GROUP: 1 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 605.2 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
ADRENAL GLAND		
	MICRO: -MINIMAL	-B/ CORTEX: CYTOPLASMIC VACUOLATION
EPIDIDYMIS		
	MICRO: -MINIMAL	-B/ LYMPHOID CELL INFILTRATE
GROSS-MICRO COR1		
	MICRO: HISTOPATHOLOGICAL COMMENT:	>RED FOCI, LUNGS=ERYTHROCYTES IN ALVEOLI.
HEART		
	MICRO: -MINIMAL	-LYMPHOID CELL INFILTRATE
KIDNEY		
	MICRO: -MINIMAL	-B/ CHRONIC NEPHROPATHY
LACRIMAL GLAND		
	MICRO: -MINIMAL	-U/ LYMPHOID CELL INFILTRATE
LIVER		
	MICRO: -SLIGHT	-PERIPORTAL HEPATOCYTES: CYTOPLASMIC VACUOLATION
	-MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS		
	GROSS: -DISCOLORED-FOCUS(FOCI)	-ALL LOBES: 0.1 - 0.2 CM DIA, RED
	MICRO: -SLIGHT	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-PULMONARY ARTERY: MINERAL DEPOSIT
	-SLIGHT	-ALVEOLI: ERYTHROCYTES
	-SLIGHT	-ALVEOLI: MACROPHAGES
	-SLIGHT	-SUBACUTE/CHRONIC INFLAMMATION
MEDIASTINAL LN		
	MICRO: -SLIGHT	-SINUSES: ERYTHROCYTES
	-MODERATE	-PLASMA CELL HYPERPLASIA
MESENTERIC LN		
	MICRO: -MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
PROSTATE GLAND		
	MICRO: -MINIMAL	-LYMPHOID CELL INFILTRATE
SPLEEN		
	MICRO: -SLIGHT	-CONGESTION
	-SLIGHT	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
STOMACH		
	MICRO -MINIMAL	-EOSINOPHIL INFILTRATE
THYROID GLAND		
	MICRO: -MINIMAL	-U/ SQUAMOUS CYST(S)
	-MINIMAL	-U/ LYMPHOID CELL INFILTRATE
URINARY BLADDER		
	MICRO: -MINIMAL	-LYMPHOID CELL INFILTRATE

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ANIMAL NUMBER: 1006 SEX: MALE DOSE GROUP: 1 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 605.2 GRAMS

THE FOLLOWING TISSUES HAD NO MICROSCOPIC ABNORMALITIES OBSERVED:
BRAIN, CECUM, CERVICAL SC, COLON, DUODENUM, ESOPHAGUS, EYE, FEMORAL MARROW, FEMUR, ILEUM, JEJUNUM, LOW COLON/RECTUM, MAMMARY GLAND, NERVE, OPTIC NERVE, PANCREAS, PARATHYROID GL, PITUITARY GLAND, SALIVARY GLAND, SEMINAL VESICLE, SKELETAL MUSCLE, STERNAL MARROW, STERNUM, TESTIS, THORACIC AORTA, THORACIC SC, THYMUS, ZYMBAL'S GLAND

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 1007 SEX: MALE DOSE GROUP: 1 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 538.7 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
ADRENAL GLAND		
	MICRO: -MINIMAL	-B/ CORTEX: CYTOPLASMIC VACUOLATION
EPIDIDYMIS		
	MICRO: -MINIMAL	-B/ LYMPHOID CELL INFILTRATE
HEART		
	MICRO: -MINIMAL	-NECROSIS
KIDNEY		
	MICRO: -MINIMAL	-B/ LYMPHOID CELL INFILTRATE
LACRIMAL GLAND		
	MICRO: -MINIMAL	-B/ LYMPHOID CELL INFILTRATE
LIVER		
	MICRO: -MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS		
	MICRO: -MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-ALVEOLI: ERYTHROCYTES
	-MINIMAL	-ALVEOLI: MACROPHAGES
MEDIASTINAL LN		
	MICRO: -SLIGHT	-SINUSES: ERYTHROCYTES
MESENTERIC LN		
	MICRO: -MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
OPTIC NERVE		
	MICRO: -MINIMAL	-U/ HEMORRHAGE
PANCREAS		
	MICRO: -MINIMAL	-LYMPHOID CELL INFILTRATE
PARATHYROID GL		
	HISTOPATHOLOGICAL COMMENT:	>ONE PARATHYROID
PROSTATE GLAND		
	MICRO: -MINIMAL	-LYMPHOID CELL INFILTRATE
SPLEEN		
	MICRO: -SLIGHT	-CONGESTION
	-SLIGHT	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
STOMACH		
	MICRO: -SLIGHT	-EOSINOPHIL INFILTRATE
	-MINIMAL	-LYMPHOID CELL INFILTRATE
	-MINIMAL	-GLAND(S): DILATATION/CYST
	-MINIMAL	-MUCOSA: HEMORRHAGE
THYROID GLAND		
	MICRO: -PRESENT	-U/ SQUAMOUS CYST(S)
TRACHEA		
	MICRO: -MINIMAL	-LYMPHOID CELL INFILTRATE

ANIMAL NUMBER: 1007 SEX: MALE DOSE GROUP: 1 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 538.7 GRAMS

*** PATHOLOGY OBSERVATIONS (CONTINUED) ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
URINARY BLADDER		
	MICRO: -MINIMAL	-LYMPHOID CELL INFILTRATE

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

THE FOLLOWING TISSUES HAD NO MICROSCOPIC ABNORMALITIES OBSERVED:
BRAIN, CECUM, CERVICAL SC, COLON, DUODENUM, ESOPHAGUS, EYE, FEMORAL MARROW, FEMUR, ILEUM, JEJUNUM, LOW COLON/RECTUM, MAMMARY GLAND, NERVE, PARATHYROID GL, PITUITARY GLAND, SALIVARY GLAND, SEMINAL VESICLE, SKELETAL MUSCLE, STERNAL MARROW, STERNUM, TESTIS, THORACIC AORTA, THORACIC SC, THYMUS, ZYMBAL'S GLAND

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 1008 SEX: MALE DOSE GROUP: 1 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/16/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 567.1 GRAMS

* * * PATHOLOGY OBSERVATIONS * * *

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
ADRENAL GLAND	MICRO: -MINIMAL	-B/ CORTEX: CYTOPLASMIC VACUOLATION
EPIDIDYMIS	MICRO: -MINIMAL	-B/ LYMPHOID CELL INFILTRATE
HEART	MICRO: -MINIMAL	-NECROSIS
KIDNEY	MICRO: -MINIMAL	-B/ CHRONIC NEPHROPATHY
LACRIMAL GLAND	MICRO: -MINIMAL	-B/ LYMPHOID CELL INFILTRATE
LIVER	MICRO: -MINIMAL -MINIMAL -MINIMAL	-PERIPORTAL HEPATOCYTES: CYTOPLASMIC VACUOLATION -EXTRAMEDULLARY HEMATOPOIESIS -NONSPECIFIC CYTOPLASMIC VACUOLATION
LUNGS	MICRO: -SLIGHT -MINIMAL -MINIMAL -SLIGHT	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE -PULMONARY ARTERY: MINERAL DEPOSIT -ALVEOLI: ERYTHROCYTES -ALVEOLI: MACROPHAGES
MEDIASTINAL LN	MICRO: -MINIMAL	-SINUSES: ERYTHROCYTES
MESENTERIC LN	MICRO: -MINIMAL	-SINUSES: ERYTHROCYTES
PANCREAS	MICRO: -MINIMAL	-LYMPHOID CELL INFILTRATE
SPLEEN	MICRO: -MODERATE -MINIMAL	-CONGESTION -RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
STOMACH	MICRO: -MINIMAL -MINIMAL	-EOSINOPHIL INFILTRATE -LYMPHOID CELL INFILTRATE
THYMUS	MICRO: -MINIMAL	-HEMORRHAGE

ANIMAL NUMBER: 1008 SEX: MALE DOSE GROUP: 1 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 567.1 GRAMS

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

THE FOLLOWING TISSUES HAD NO MICROSCOPIC ABNORMALITIES OBSERVED:
BRAIN, CECUM, CERVICAL SC, COLON, DUODENUM, ESOPHAGUS, EYE, FEMORAL MARROW, FEMUR, ILEUM, JEJUNUM, LOW COLON/RECTUM, MAMMARY GLAND, NERVE, OPTIC NERVE, PARATHYROID GL, PITUITARY GLAND, PROSTATE GLAND, SALIVARY GLAND, SEMINAL VESICLE, SKELETAL MUSCLE, STERNAL MARROW, STERNUM, TESTIS, THORACIC AORTA, THORACIC SC, THYROID GLAND, TRACHEA, URINARY BLADDER , ZYMBAL'S GLAND

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 1009 SEX: MALE DOSE GROUP: 1 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 590.2 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
EPIDIDYMIS	MICRO: -MINIMAL	-B/ LYMPHOID CELL INFILTRATE
GROSS-MICRO COR1	MICRO: HISTOPATHOLOGICAL COMMENT:	>RED, SUBMANDIBULAR LYMPH NODE=ERYTHROCYTES IN SINUSES. RED, THYMUS=HEMORRHAGE.
KIDNEY	MICRO: -MINIMAL	-B/ CHRONIC NEPHROPATHY
LIVER	MICRO: -MINIMAL -MINIMAL	-PERIPORTAL HEPATOCYTES: CYTOPLASMIC VACUOLATION -EXTRAMEDULLARY HEMATOPOIESIS
LUNGS	MICRO: -MINIMAL -MINIMAL -MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE -PULMONARY ARTERY: MINERAL DEPOSIT -ALVEOLI: ERYTHROCYTES
LYMPH NODE	GROSS: -DISCOLORED, SLIGHT MICRO: -SLIGHT -SLIGHT HISTOPATHOLOGICAL COMMENT:	-SUBMANDIBULAR: RED -SINUSES: ERYTHROCYTES -RETICULOENDOTHELIAL CELLS: BROWN PIGMENT >SUBMANDIBULAR
MEDIASTINAL LN	MICRO: -MINIMAL	-SINUSES: ERYTHROCYTES
MESENTERIC LN	MICRO: -MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
PANCREAS	MICRO: -MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
PARATHYROID GL	HISTOPATHOLOGICAL COMMENT:	>ONE PARATHYROID
SEMINAL VESICLE	MICRO: -MINIMAL	-LYMPHOID CELL INFILTRATE
SPLEEN	MICRO: -SLIGHT -MINIMAL	-CONGESTION -RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
STOMACH	MICRO: -SLIGHT -MINIMAL -MINIMAL	-EOSINOPHIL INFILTRATE -LYMPHOID CELL INFILTRATE -GLAND(S): DILATATION/CYST
THYMUS	GROSS -DISCOLORED, MODERATE MICRO -SLIGHT	-ENTIRE: RED -HEMORRHAGE
THYROID GLAND	MICRO: -PRESENT	-U/ SQUAMOUS CYST(S)

ANIMAL NUMBER: 1009 SEX: MALE DOSE GROUP: 1 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 590.2 GRAMS

*** PATHOLOGY OBSERVATIONS (CONTINUED) ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
TRACHEA	MICRO: -MINIMAL	-LYMPHOID CELL INFILTRATE
URINARY BLADDER	MICRO: -MINIMAL	-LYMPHOID CELL INFILTRATE

THE FOLLOWING TISSUES HAD NO MICROSCOPIC ABNORMALITIES OBSERVED:
ADRENAL GLAND, BRAIN, CECUM, CERVICAL SC, COLON, DUODENUM, ESOPHAGUS, EYE, FEMORAL MARROW, FEMUR, HEART, ILEUM, JEJUNUM, LACRIMAL GLAND, LOW COLON/RECTUM, MAMMARY GLAND, NERVE, OPTIC NERVE, PARATHYROID GL, PITUITARY GLAND, PROSTATE GLAND, SALIVARY GLAND, SKELETAL MUSCLE, STERNAL MARROW, STERNUM, TESTIS, THORACIC AORTA, THORACIC SC, ZYMBAL'S GLAND

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 1010 SEX: MALE DOSE GROUP: 1 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 584.1 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
ADRENAL GLAND	MICRO: -MINIMAL	-B/ CORTEX: CYTOPLASMIC VACUOLATION
EPIDIDYMIS	MICRO: -MINIMAL	-B/ LYMPHOID CELL INFILTRATE
GROSS-MICRO COR1	MICRO: HISTOPATHOLOGICAL COMMENT:	>RED FOCI, LUNGS=ERYTHROCYTES IN ALVEOLI.
HEART	MICRO: -MINIMAL	-NECROSIS
KIDNEY	MICRO: -MINIMAL -MINIMAL -SLIGHT	-B/ LYMPHOID CELL INFILTRATE -B/ TUBULAR ATROPHY -U/ INTERSTITIAL FIBROSIS
LIVER	MICRO: -MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS	GROSS: -DISCOLORED-FOCUS(FOCI) MICRO: -SLIGHT -MINIMAL -MINIMAL -SLIGHT	-ALL LOBES: 0.2 - 0.3 CM DIA, RED -PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE -PULMONARY ARTERY: MINERAL DEPOSIT -ALVEOLI: ERYTHROCYTES -ALVEOLI: MACROPHAGES
OPTIC NERVE	MICRO: -SLIGHT	-U/ HEMORRHAGE
SPLEEN	MICRO: -SLIGHT -MINIMAL	-CONGESTION -RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
STOMACH	MICRO: -SLIGHT -MINIMAL -MINIMAL -SLIGHT	-EOSINOPHIL INFILTRATE -LYMPHOID CELL INFILTRATE -GLAND(S): DILATATION/CYST -GLANDULAR: ACUTE/SUBACUTE INFLAMMATION
THYMUS	MICRO: -MINIMAL	-HEMORRHAGE
TRACHEA	MICRO: -SLIGHT	-LYMPHOID CELL INFILTRATE
URINARY BLADDER	MICRO: -MINIMAL	-LYMPHOID CELL INFILTRATE

ANIMAL NUMBER: 1010 SEX: MALE DOSE GROUP: 1 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 584.1 GRAMS

THE FOLLOWING TISSUES HAD NO MICROSCOPIC ABNORMALITIES OBSERVED:
BRAIN, CECUM, CERVICAL SC, COLON, DUODENUM, ESOPHAGUS, EYE, FEMORAL MARROW, FEMUR, ILEUM, JEJUNUM, LACRIMAL GLAND, LOW COLON/RECTUM, MAMMARY GLAND, MEDIASTINAL LN, MESENTERIC LN, NERVE, PANCREAS, PARATHYROID GL, PITUITARY GLAND, PROSTATE GLAND, SALIVARY GLAND, SEMINAL VESICLE, SKELETAL MUSCLE, STERNAL MARROW, STERNUM, TESTIS, THORACIC AORTA, THORACIC SC, THYROID GLAND, ZYMBAL'S GLAND

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 1011 SEX: MALE DOSE GROUP: 1 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 551.6 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
EPIDIDYMIS	MICRO: -MINIMAL	-B/ LYMPHOID CELL INFILTRATE
HEART	MICRO: -MINIMAL -MINIMAL -MINIMAL	-NECROSIS -RETICULOENDOTHELIAL CELLS: BROWN PIGMENT -FIBROSIS
KIDNEY	MICRO: -MINIMAL	-B/ CHRONIC NEPHROPATHY
LACRIMAL GLAND	MICRO: -SLIGHT	-U/ LYMPHOID CELL INFILTRATE
LIVER	MICRO: -MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS	MICRO: -SLIGHT -MINIMAL -SLIGHT	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE -PULMONARY ARTERY: MINERAL DEPOSIT -ALVEOLI: MACROPHAGES
MEDIASTINAL LN	MICRO: -MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
MESENTERIC LN	MICRO: -MINIMAL	-SINUSES: ERYTHROCYTES
PARATHYROID GL	MICRO: HISTOPATHOLOGICAL COMMENT: >ONE PARATHYROID	
SPLEEN	MICRO: -MODERATE -MINIMAL	-CONGESTION -RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
STOMACH	MICRO: -SLIGHT -MINIMAL -MINIMAL	-EOSINOPHIL INFILTRATE -LYMPHOID CELL INFILTRATE -GLAND(S): DILATATION/CYST
TESTIS	MICRO: -SLIGHT	-B/ TUBULAR ATROPHY
THYMUS	MICRO -MINIMAL	-HEMORRHAGE
THYROID GLAND	MICRO PRESENT	-U/ SQUAMOUS CYST(S)

ANIMAL NUMBER: 1011 SEX: MALE DOSE GROUP: 1 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 551.6 GRAMS

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

THE FOLLOWING TISSUES HAD NO MICROSCOPIC ABNORMALITIES OBSERVED:
ADRENAL GLAND, BRAIN, CECUM, CERVICAL SC, COLON, DUODENUM, ESOPHAGUS, EYE, FEMORAL MARROW, FEMUR, ILEUM, JEJUNUM, LOW COLON/RECTUM, MAMMARY GLAND, NERVE, OPTIC NERVE, PANCREAS, PARATHYROID GL, PITUITARY GLAND, PROSTATE GLAND, SALIVARY GLAND, SEMINAL VESICLE, SKELETAL MUSCLE, STERNAL MARROW, STERNUM, THORACIC AORTA, THORACIC SC, TRACHEA, URINARY BLADDER, ZYMBAL'S GLAND

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 1012 SEX: MALE DOSE GROUP: 1 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 576.8 GRAMS

* * * P A T H O L O G Y O B S E R V A T I O N S * * *

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
EPIDIDYMIS	MICRO: -MINIMAL	-B/ LYMPHOID CELL INFILTRATE
GROSS-MICRO COR1	MICRO: HISTOPATHOLOGICAL COMMENT:	>TAN, SPLEEN=NMC. TAN FOCI, KIDNEYS=NMC.
HEART	MICRO: -MINIMAL -MINIMAL	-NECROSIS -RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
KIDNEY	GROSS: -DISCOLORED-FOCUS(FOCI), SLIGHT	-BOTH: TAN
LIVER	MICRO: -MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS	MICRO: -MINIMAL -MINIMAL -MINIMAL -SLIGHT	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE -PULMONARY ARTERY: MINERAL DEPOSIT -ALVEOLI: ERYTHROCYTES -ALVEOLI: MACROPHAGES
PANCREAS	MICRO: -MINIMAL	-LYMPHOID CELL INFILTRATE
SPLEEN	GROSS: -DISCOLORED, SLIGHT MICRO: -SLIGHT -SLIGHT	-TAN -CONGESTION -RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
STOMACH	MICRO: -MINIMAL -MINIMAL	-EOSINOPHIL INFILTRATE -GLAND(S): DILATATION/CYST
THYMUS	MICRO: -MINIMAL	-HEMORRHAGE
TRACHEA	MICRO: -MINIMAL	-LYMPHOID CELL INFILTRATE

THE FOLLOWING TISSUES HAD NO MICROSCOPIC ABNORMALITIES OBSERVED:
ADRENAL GLAND, BRAIN, CECUM, CERVICAL SC, COLON, DUODENUM, ESOPHAGUS, EYE, FEMORAL MARROW, FEMUR, ILEUM, JEJUNUM, KIDNEY, LACRIMAL GLAND, LOW COLON/RECTUM, MAMMARY GLAND, MEDIASTINAL LN, MESENTERIC LN, NERVE, OPTIC NERVE, PARATHYROID GL, PITUITARY GLAND, PROSTATE GLAND, SALIVARY GLAND, SEMINAL VESICLE, SKELETAL MUSCLE, STERNAL MARROW, STERNUM, TESTIS, THORACIC AORTA, THORACIC SC, THYROID GLAND, URINARY BLADDER, ZYMBAL'S GLAND

ANIMAL NUMBER: 1013 SEX: MALE DOSE GROUP: 1 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 655.9 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
ADRENAL GLAND	MICRO: -MINIMAL	-B/ CORTEX: CYTOPLASMIC VACUOLATION
EPIDIDYMIS	MICRO: -MINIMAL	-B/ LYMPHOID CELL INFILTRATE
HEART	MICRO: -MINIMAL	-NECROSIS
	-MINIMAL	-LYMPHOID CELL INFILTRATE
KIDNEY	MICRO: -MINIMAL	-B/ CHRONIC NEPHROPATHY
	-MINIMAL	-U/ MINERAL DEPOSIT
LIVER	MICRO: -SLIGHT	-PERIPORTAL HEPATOCYTES: CYTOPLASMIC VACUOLATION
	-MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS	MICRO: -SLIGHT	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-SLIGHT	-PULMONARY ARTERY: MINERAL DEPOSIT
	-MINIMAL	-ALVEOLI: ERYTHROCYTES
	-SLIGHT	-ALVEOLI: MACROPHAGES
	-SLIGHT	-INTERSTITIUM: SUBACUTE/CHRONIC INFLAMMATION
MEDIASTINAL LN	MICRO: -MARKED	-PLASMA CELL HYPERPLASIA
PANCREAS	MICRO: -MINIMAL	-LYMPHOID CELL INFILTRATE
	-MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
PROSTATE GLAND	MICRO: -SLIGHT	-LYMPHOID CELL INFILTRATE
SPLEEN	MICRO: -SLIGHT	-CONGESTION
	-SLIGHT	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
STOMACH	MICRO: -SLIGHT	-EOSINOPHIL INFILTRATE
	-MINIMAL	-LYMPHOID CELL INFILTRATE
	-MINIMAL	-GLAND(S): DILATATION/CYST
THYMUS	MICRO -MINIMAL	-HEMORRHAGE
THYROID GLAND	MICRO -PRESENT	-B/ SQUAMOUS CYSTS
TRACHEA	MICRO -MINIMAL	-LYMPHOID CELL INFILTRATE

*** PATH/TOX SYSTEM OUTPUT ***
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION
INDIVIDUAL ANIMAL DATA SHEET

STUDY NUMBER: 962459

ANIMAL NUMBER: 1013 SEX: MALE DOSE GROUP: 1 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 655.9 GRAMS

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

THE FOLLOWING TISSUES HAD NO MICROSCOPIC ABNORMALITIES OBSERVED:
BRAIN, CECUM, CERVICAL SC, COLON, DUODENUM, ESOPHAGUS, EYE, FEMORAL MARROW, FEMUR, ILEUM, JEJUNUM, LACRIMAL GLAND, LOW COLON/RECTUM, MAMMARY GLAND, MESENTERIC LN, NERVE, OPTIC NERVE, PARATHYROID GL, PITUITARY GLAND, SALIVARY GLAND, SEMINAL VESICLE, SKELETAL MUSCLE, STERNAL MARROW, STERNUM, TESTIS, THORACIC AORTA, THORACIC SC, URINARY BLADDER, ZYMBAL'S GLAND

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 1014 SEX: MALE DOSE GROUP: 1 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 568.8 GRAMS

* * * PATHOLOGY OBSERVATIONS * * *

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
EPIDIDYMIS	MICRO: -MINIMAL	-B/ LYMPHOID CELL INFILTRATE
GROSS-MICRO COR1	MICRO: HISTOPATHOLOGICAL COMMENT:	>TAN FOCI, LUNGS=ALVEOLAR MACROPHAGES.
HEART	MICRO: -MINIMAL -MINIMAL -MINIMAL	-NECROSIS -RETICULOENDOTHELIAL CELLS: BROWN PIGMENT -FIBROSIS
KIDNEY	MICRO: -MINIMAL -MINIMAL	-B/ CHRONIC NEPHROPATHY -U/ MINERAL DEPOSIT
LACRIMAL GLAND	MICRO: -MINIMAL HISTOPATHOLOGICAL COMMENT:	-U/ LYMPHOID CELL INFILTRATE >ONE LACRIMAL GLAND
LIVER	MICRO: -MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS	GROSS: -DISCOLORED-FOCUS(FOCI) MICRO: -SLIGHT -SLIGHT -SLIGHT	-ALL LOBES: 0.1 CM DIA, TAN -PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE -ALVEOLI: MACROPHAGES -SUBACUTE/CHRONIC INFLAMMATION
MEDIASTINAL LN	MICRO: -MARKED	-PLASMA CELL HYPERPLASIA
MESENTERIC LN	MICRO: -MINIMAL	-SINUSES: ERYTHROCYTES
PANCREAS	MICRO: -MINIMAL -MINIMAL -SLIGHT -SLIGHT	-LYMPHOID CELL INFILTRATE -RETICULOENDOTHELIAL CELLS: BROWN PIGMENT -INTERSTITIAL FIBROSIS -CHRONIC INFLAMMATION
SPLEEN	MICRO: -SLIGHT -MINIMAL	-CONGESTION -RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
STOMACH	[illegible]	-EOSINOPHIL INFILTRATE -LYMPHOID CELL INFILTRATE
[illegible]	[illegible]	HEMORRHAGE
[illegible]	[illegible]	LYMPHOID CELL INFILTRATE

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ANIMAL NUMBER: 1014 SEX: MALE DOSE GROUP: 1 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 568.8 GRAMS

THE FOLLOWING TISSUES HAD NO MICROSCOPIC ABNORMALITIES OBSERVED:
ADRENAL GLAND, BRAIN, CECUM, CERVICAL SC, COLON, DUODENUM, ESOPHAGUS, EYE, FEMORAL MARROW, FEMUR, ILEUM, JEJUNUM, LOW COLON/RECTUM, MAMMARY GLAND, NERVE, OPTIC NERVE, PARATHYROID GL, PITUITARY GLAND, PROSTATE GLAND, SALIVARY GLAND, SEMINAL VESICLE, SKELETAL MUSCLE, STERNAL MARROW, STERNUM, TESTIS, THORACIC AORTA, THORACIC SC, THYROID GLAND, URINARY BLADDER, ZYMBAL'S GLAND

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 1015 SEX: MALE DOSE GROUP: 1 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 660.7 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
ADRENAL GLAND	MICRO: -MINIMAL	-B/ CORTEX: CYTOPLASMIC VACUOLATION
EPIDIDYMIS	MICRO: -MINIMAL	-B/ LYMPHOID CELL INFILTRATE
KIDNEY	MICRO: -MINIMAL -PRESENT	-B/ CHRONIC NEPHROPATHY -U/ CYST(S)
LACRIMAL GLAND	HISTOPATHOLOGICAL COMMENT:	>ONE LACRIMAL GLAND
LIVER	MICRO: -MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS	MICRO: -MINIMAL -MINIMAL -MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE -ALVEOLI: ERYTHROCYTES -ALVEOLI: MACROPHAGES
MEDIASTINAL LN	MICRO: -MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
MESENTERIC LN	MICRO: -MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
PANCREAS	MICRO: -MINIMAL -MINIMAL	-LYMPHOID CELL INFILTRATE -RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
SPLEEN	MICRO: -MODERATE -MINIMAL	-CONGESTION -RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
STOMACH	MICRO: -SLIGHT -SLIGHT	-EOSINOPHIL INFILTRATE -LYMPHOID CELL INFILTRATE
THYMUS	MICRO: -MINIMAL	-HEMORRHAGE
TRACHEA	MICRO: -MINIMAL	-LYMPHOID CELL INFILTRATE
URINARY BLADDER	MICRO: -MINIMAL	-LYMPHOID CELL INFILTRATE

ANIMAL NUMBER: 1015 SEX: MALE DOSE GROUP: 1 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 660.7 GRAMS

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

THE FOLLOWING TISSUES HAD NO MICROSCOPIC ABNORMALITIES OBSERVED:
BRAIN, CECUM, CERVICAL SC, COLON, DUODENUM, ESOPHAGUS, EYE, FEMORAL MARROW, FEMUR, HEART, ILEUM, JEJUNUM, LACRIMAL GLAND, LOW COLON/RECTUM, MAMMARY GLAND, NERVE, OPTIC NERVE, PARATHYROID GL, PITUITARY GLAND, PROSTATE GLAND, SALIVARY GLAND, SEMINAL VESICLE, SKELETAL MUSCLE, STERNAL MARROW, STERNUM, TESTIS, THORACIC AORTA, THORACIC SC, THYROID GLAND, ZYMBAL'S GLAND

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 1016 SEX: MALE DOSE GROUP: 1 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 514.4 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
ADRENAL GLAND	MICRO: -MINIMAL	-B/ CORTEX: CYTOPLASMIC VACUOLATION
EPIDIDYMIS	MICRO: -MINIMAL	-B/ LYMPHOID CELL INFILTRATE
GROSS-MICRO COR1	MICRO: HISTOPATHOLOGICAL COMMENT:	>TAN CONTENTS, PERICARDIUM, HEART=CHRONIC INFLAMMATION. ADHESION, CARDIAC, APICAL AND DIAPHRAGMATIC LOBES, LUNGS, TO THORACIC WALL AND PERICARDIUM=CHRONIC INFLAMMATION OF PLEURA. ENLARGED, MEDIASTINAL LYMPH NODE=PLASMA CELL HYPERPLASIA.
HEART	GROSS: -ABNORMAL CONTENTS, SEVERE MICRO: -MARKED	-PERICARDIUM: TAN -PERICARDIUM: CHRONIC INFLAMMATION
KIDNEY	MICRO: -MINIMAL -MINIMAL	-B/ CHRONIC NEPHROPATHY -U/ INTERSTITIAL FIBROSIS
LIVER	MICRO: -MINIMAL -MINIMAL -MODERATE, FOCAL	-PERIPORTAL HEPATOCYTES: CYTOPLASMIC VACUOLATION -EXTRAMEDULLARY HEMATOPOIESIS -HEMORRHAGE
LUNGS	GROSS: -ADHESION(S), SEVERE MICRO: -SLIGHT -SLIGHT -SLIGHT -SLIGHT -SLIGHT -SLIGHT -MARKED, FOCAL	-CARDIAC, APICAL, AND DIAPHRAGMATIC LOBES: TO THORACIC WALL AND PERICARDIUM -PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE -BRONCHIAL LUMEN: ERYTHROCYTES -ALVEOLI: ERYTHROCYTES -ALVEOLI: MACROPHAGES -MICROGRANULOMA -SUBACUTE/CHRONIC INFLAMMATION -PLEURA: CHRONIC INFLAMMATION
MAMMARY GLAND	MICRO: -TISSUE MISSING	
MEDIASTINAL LN	GROSS: -ENLARGED, SLIGHT MICRO: -MINIMAL -MINIMAL -MARKED	-SINUSES: ERYTHROCYTES -RETICULOENDOTHELIAL CELLS: BROWN PIGMENT -PLASMA CELL HYPERPLASIA
MESENTERIC LN	MICRO MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
PARATHYROID GL	MICRO HISTOPATHOLOGICAL COMMENT:	>ONE PARATHYROID

ANIMAL NUMBER: 1016 SEX: MALE DOSE GROUP: 1 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 514.4 GRAMS

* * * PATHOLOGY OBSERVATIONS (CONTINUED) * * *

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
SPLEEN	MICRO: -MODERATE	-CONGESTION
	-MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
STOMACH	MICRO: -MINIMAL	-EOSINOPHIL INFILTRATE
	-MINIMAL	-LYMPHOID CELL INFILTRATE
	-MINIMAL	-GLAND(S): DILATATION/CYST
THYROID GLAND	MICRO: -PRESENT	-U/ SQUAMOUS CYST(S)
TRACHEA	MICRO: -MINIMAL	-LYMPHOID CELL INFILTRATE
URINARY BLADDER	MICRO: -PRESENT	-LUMEN: PROTEINACEOUS PLUG

THE FOLLOWING TISSUES HAD NO MICROSCOPIC ABNORMALITIES OBSERVED:
BRAIN, CECUM, CERVICAL SC, COLON, DUODENUM, ESOPHAGUS, EYE, FEMORAL MARROW, FEMUR, ILEUM, JEJUNUM, LACRIMAL GLAND, LOW COLON/RECTUM, NERVE, OPTIC NERVE, PANCREAS, PARATHYROID GL, PITUITARY GLAND, PROSTATE GLAND, SALIVARY GLAND, SEMINAL VESICLE, SKELETAL MUSCLE, STERNAL MARROW, STERNUM, TESTIS, THORACIC AORTA, THORACIC SC, THYMUS, ZYMBAL'S GLAND

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 1017 SEX: MALE DOSE GROUP: 1 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 582.5 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
EPIDIDYMIS	MICRO: -MINIMAL	-B/ LYMPHOID CELL INFILTRATE
HEART	MICRO: -MINIMAL	-LYMPHOID CELL INFILTRATE
	-MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
	-MINIMAL	-FIBROSIS
KIDNEY	MICRO: -MINIMAL	-B/ CHRONIC NEPHROPATHY
	-MINIMAL	-U/ MINERAL DEPOSIT
	-SLIGHT	-U/ HYDRONEPHROSIS
LACRIMAL GLAND	HISTOPATHOLOGICAL COMMENT:	>ONE LACRIMAL GLAND
LIVER	MICRO: -SLIGHT	-PERIPORTAL HEPATOCYTES: CYTOPLASMIC VACUOLATION
	-MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS	MICRO: -MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-ALVEOLI: MACROPHAGES
MESENTERIC LN	MICRO: -MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
PANCREAS	MICRO: -MINIMAL	-LYMPHOID CELL INFILTRATE
PARATHYROID GL	MICRO: -TISSUE MISSING	
PROSTATE GLAND	MICRO: -MINIMAL	-LYMPHOID CELL INFILTRATE
SPLEEN	MICRO: -MARKED	-CONGESTION
	-MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
STOMACH	MICRO: -SLIGHT	-EOSINOPHIL INFILTRATE
	-MINIMAL	-LYMPHOID CELL INFILTRATE
THYROID GLAND	MICRO -PRESENT	-U/ SQUAMOUS CYST(S)
URINARY BLADDER	MICRO -MINIMAL	-LYMPHOID CELL INFILTRATE

ANIMAL NUMBER: 1017 SEX: MALE DOSE GROUP: 1 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 582.5 GRAMS

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

THE FOLLOWING TISSUES HAD NO MICROSCOPIC ABNORMALITIES OBSERVED:
ADRENAL GLAND, BRAIN, CECUM, CERVICAL SC, COLON, DUODENUM, ESOPHAGUS, EYE, FEMORAL MARROW, FEMUR, ILEUM, JEJUNUM, LACRIMAL GLAND, LOW COLON/RECTUM, MAMMARY GLAND, MEDIASTINAL LN, NERVE, OPTIC NERVE, PITUITARY GLAND, SALIVARY GLAND, SEMINAL VESICLE, SKELETAL MUSCLE, STERNAL MARROW, STERNUM, TESTIS, THORACIC AORTA, THORACIC SC, THYMUS, TRACHEA, ZYMBAL'S GLAND

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 1018 SEX: MALE DOSE GROUP: 1 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 653.5 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
EPIDIDYMIS	MICRO: -MINIMAL	-B/ LYMPHOID CELL INFILTRATE
HEART	MICRO: -MINIMAL	-NECROSIS
	-MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
	-MINIMAL	-FIBROSIS
KIDNEY	MICRO: -MINIMAL	-B/ LYMPHOID CELL INFILTRATE
	-MINIMAL	-B/ TUBULAR ATROPHY
	-MINIMAL	-U/ MINERAL DEPOSIT
LIVER	MICRO: -SLIGHT	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS	MICRO: -SLIGHT	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-ALVEOLI: MACROPHAGES
	-SLIGHT	-SUBACUTE/CHRONIC INFLAMMATION
MEDIASTINAL LN	MICRO: -SLIGHT	-SINUSES: ERYTHROCYTES
	-MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
	-MARKED	-PLASMA CELL HYPERPLASIA
MESENTERIC LN	MICRO: -MINIMAL	-SINUSES: ERYTHROCYTES
	-MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
PANCREAS	MICRO: -MINIMAL	-LYMPHOID CELL INFILTRATE
PARATHYROID GL	HISTOPATHOLOGICAL COMMENT: >ONE PARATHYROID	
SPLEEN	MICRO: -MODERATE	-CONGESTION
	-SLIGHT	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
STOMACH	MICRO: -SLIGHT	-EOSINOPHIL INFILTRATE
	-SLIGHT	-LYMPHOID CELL INFILTRATE
THYROID GLAND	MICRO: PRESENT	-U/ SQUAMOUS CYST(S)
	PRESENT	-U/ ECTOPIC THYMUS

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ANIMAL NUMBER: 1018 SEX: MALE DOSE GROUP: 1 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 653.5 GRAMS

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

THE FOLLOWING TISSUES HAD NO MICROSCOPIC ABNORMALITIES OBSERVED:
ADRENAL GLAND, BRAIN, CECUM, CERVICAL SC, COLON, DUODENUM, ESOPHAGUS, EYE, FEMORAL MARROW, FEMUR, ILEUM, JEJUNUM, LACRIMAL GLAND, LOW COLON/RECTUM, MAMMARY GLAND, NERVE, OPTIC NERVE, PARATHYROID GL, PITUITARY GLAND, PROSTATE GLAND, SALIVARY GLAND, SEMINAL VESICLE, SKELETAL MUSCLE, STERNAL MARROW, STERNUM, TESTIS, THORACIC AORTA, THORACIC SC, THYMUS, TRACHEA, URINARY BLADDER, ZYMBAL'S GLAND

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 1019 SEX: MALE DOSE GROUP: 1 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 561.4 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
ADRENAL GLAND	MICRO: -MINIMAL	-B/ CORTEX: CYTOPLASMIC VACUOLATION
EPIDIDYMIS	MICRO: -MINIMAL	-B/ LYMPHOID CELL INFILTRATE
KIDNEY	MICRO: -MINIMAL	-B/ LYMPHOID CELL INFILTRATE
	-MINIMAL	-B/ TUBULAR ATROPHY
	-MINIMAL	-B/ MINERAL DEPOSIT
LACRIMAL GLAND	MICRO: -MINIMAL	-B/ LYMPHOID CELL INFILTRATE
LIVER	MICRO: -SLIGHT	-EXTRAMEDULLARY HEMATOPOIESIS
	-SLIGHT	-NECROSIS
LUNGS	MICRO: -MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-SLIGHT	-PULMONARY ARTERY: MINERAL DEPOSIT
	-SLIGHT	-ALVEOLI: MACROPHAGES
MEDIASTINAL LN	MICRO: -MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
PARATHYROID GL	MICRO: HISTOPATHOLOGICAL COMMENT:	>ONE PARATHYROID
SPLEEN	MICRO: -MODERATE	-CONGESTION
	-SLIGHT	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
STOMACH	MICRO: -MINIMAL	-EOSINOPHIL INFILTRATE
	-MINIMAL	-LYMPHOID CELL INFILTRATE
	-MINIMAL	-GLAND(S): DILATATION/CYST
THYMUS	MICRO: -MINIMAL	-HEMORRHAGE
TRACHEA	MICRO: -MINIMAL	-LYMPHOID CELL INFILTRATE
URINARY BLADDER	MICRO: -MINIMAL	-LYMPHOID CELL INFILTRATE

ANIMAL NUMBER: 1019 SEX: MALE DOSE GROUP: 1 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 561.4 GRAMS

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

THE FOLLOWING TISSUES HAD NO MICROSCOPIC ABNORMALITIES OBSERVED:
BRAIN, CECUM, CERVICAL SC, COLON, DUODENUM, ESOPHAGUS, EYE, FEMORAL MARROW, FEMUR, HEART, ILEUM, JEJUNUM, LOW COLON/RECTUM, MAMMARY GLAND, MESENTERIC LN, NERVE, OPTIC NERVE, PANCREAS, PARATHYROID GL, PITUITARY GLAND, PROSTATE GLAND, SALIVARY GLAND, SEMINAL VESICLE, SKELETAL MUSCLE, STERNAL MARROW, STERNUM, TESTIS, THORACIC AORTA, THORACIC SC, THYROID GLAND, ZYMBAL'S GLAND

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 1020 SEX: MALE DOSE GROUP: 1 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 481.1 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
ADRENAL GLAND	MICRO: -MINIMAL	-B/ CORTEX: CYTOPLASMIC VACUOLATION
EPIDIDYMIS	MICRO: -MINIMAL	-B/ LYMPHOID CELL INFILTRATE
HEART	MICRO: -MINIMAL	-NECROSIS
KIDNEY	MICRO: -MINIMAL	-B/ LYMPHOID CELL INFILTRATE
	-MINIMAL	-B/ TUBULAR ATROPHY
LACRIMAL GLAND	MICRO: -MINIMAL	-U/ LYMPHOID CELL INFILTRATE
	HISTOPATHOLOGICAL COMMENT:	>ONE LACRIMAL GLAND
LIVER	MICRO: -MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS	MICRO: -MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-SLIGHT	-PULMONARY ARTERY: MINERAL DEPOSIT
PANCREAS	MICRO: -MINIMAL	-LYMPHOID CELL INFILTRATE
SALIVARY GLAND	MICRO: -MINIMAL	-U/ LYMPHOID CELL INFILTRATE
SPLEEN	MICRO: -MODERATE	-CONGESTION
	-SLIGHT	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
STOMACH	MICRO: -MINIMAL	-EOSINOPHIL INFILTRATE
	-MINIMAL	-LYMPHOID CELL INFILTRATE
	-SLIGHT	-GLAND(S): DILATATION/CYST
THYMUS	MICRO: -SLIGHT	-HEMORRHAGE
THYROID GLAND	MICRO: -PRESENT	-U/ SQUAMOUS CYST(S)
	-PRESENT	-U/ ECTOPIC THYMUS
TRACHEA	MICRO -SLIGHT	-LYMPHOID CELL INFILTRATE
URINARY BLADDER	MICRO -MINIMAL	-LYMPHOID CELL INFILTRATE

ANIMAL NUMBER: 1020 SEX: MALE DOSE GROUP: 1 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 481.1 GRAMS

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

THE FOLLOWING TISSUES HAD NO MICROSCOPIC ABNORMALITIES OBSERVED:
BRAIN, CECUM, CERVICAL SC, COLON, DUODENUM, ESOPHAGUS, EYE, FEMORAL MARROW, FEMUR, ILEUM, JEJUNUM, LOW COLON/RECTUM, MAMMARY GLAND, MEDIASTINAL LN, MESENTERIC LN, NERVE, OPTIC NERVE, PARATHYROID GL, PITUITARY GLAND, PROSTATE GLAND, SEMINAL VESICLE, SKELETAL MUSCLE, STERNAL MARROW, STERNUM, TESTIS, THORACIC AORTA, THORACIC SC, ZYMBAL'S GLAND

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 2001 SEX: MALE DOSE GROUP: 2 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 601.4 GRAMS

* * * P A T H O L O G Y O B S E R V A T I O N S * * *

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
GROSS-MICRO COR1		
	MICRO: HISTOPATHOLOGICAL COMMENT:	>RED, SUBMANDIBULAR LYMPH NODE=HEMORRHAGE.
KIDNEY		
	MICRO: -MINIMAL	-B/ LYMPHOID CELL INFILTRATE
	-MINIMAL	-B/ TUBULAR ATROPHY
LIVER		
	MICRO: -MINIMAL	-CENTRILOBULAR HEPATOCYTES: HYPERTROPHY
	-MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS		
	MICRO: -SLIGHT	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-SLIGHT	-ALVEOLI: ERYTHROCYTES
	-SLIGHT	-ALVEOLI: MACROPHAGES
LYMPH NODE		
	GROSS: -DISCOLORED, SLIGHT	-SUBMANDIBULAR: RED
	MICRO: -SLIGHT	-HEMORRHAGE
	-MODERATE	-PLASMA CELL HYPERPLASIA
	HISTOPATHOLOGICAL COMMENT:	>SUBMANDIBULAR

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 2002 SEX: MALE DOSE GROUP: 2 SACRIFICE STATUS: UNSCHEDULED (D)
DATE OF DEATH: 08/08/96 STUDY DAY OF DEATH: 51 STUDY WEEK OF DEATH: 8 TERMINAL BODY WEIGHT: 533.6 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
ADRENAL GLAND	MICRO: -SLIGHT	-B/ CORTEX: CYTOPLASMIC VACUOLATION
	HISTOPATHOLOGICAL COMMENT:	>ONE MEDULLA
EPIDIDYMIS	MICRO: -MINIMAL	-B/ LYMPHOID CELL INFILTRATE
KIDNEY	MICRO: -MINIMAL	-B/ LYMPHOID CELL INFILTRATE
	-MINIMAL	-B/ TUBULAR ATROPHY
	-MINIMAL	-U/ INTERSTITIAL FIBROSIS
LACRIMAL GLAND	MICRO: -TISSUE MISSING	
LIVER	MICRO: -MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS	MICRO: -SLIGHT	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-PULMONARY ARTERY: MINERAL DEPOSIT
	-MINIMAL	-ALVEOLI: MACROPHAGES
MEDIASTINAL LN	MICRO: -MARKED	-SINUSES: ERYTHROCYTES
MESENTERIC LN	MICRO: -MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
MORTALITY	MICRO: -PRESENT	-UNKNOWN
PARATHYROID GL	MICRO:	
	HISTOPATHOLOGICAL COMMENT:	>ONE PARATHYROID
PITUITARY GLAND	MICRO: -PRESENT	-CYST(S)
PROSTATE GLAND	MICRO: -MINIMAL	-LYMPHOID CELL INFILTRATE
SPLEEN	MICRO: -SLIGHT	-CONGESTION
	-MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
STOMACH	MICRO: -SLIGHT	-EOSINOPHIL INFILTRATE
	-MINIMAL	-LYMPHOID CELL INFILTRATE
THYMUS	MICRO: -MINIMAL	-HEMORRHAGE
THYROID GLAND	MICRO: -PRESENT	-U/ ECTOPIC THYMUS
TRACHEA	MICRO: -MINIMAL	-LYMPHOID CELL INFILTRATE

ANIMAL NUMBER: 2002 SEX: MALE DOSE GROUP: 2 SACRIFICE STATUS: UNSCHEDULED (D)
DATE OF DEATH: 08/08/96 STUDY DAY OF DEATH: 51 STUDY WEEK OF DEATH: 8 TERMINAL BODY WEIGHT: 533.6 GRAMS

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

THE FOLLOWING TISSUES HAD NO MICROSCOPIC ABNORMALITIES OBSERVED:
BRAIN, CECUM, CERVICAL SC, COLON, DUODENUM, ESOPHAGUS, EYE, FEMORAL MARROW, FEMUR, HEART, ILEUM, JEJUNUM, LOW COLON/RECTUM, MAMMARY GLAND, NERVE, OPTIC NERVE, PANCREAS, PARATHYROID GL, SALIVARY GLAND, SEMINAL VESICLE, SKELETAL MUSCLE, STERNAL MARROW, STERNUM, TESTIS, THORACIC AORTA, THORACIC SC, URINARY BLADDER, ZYMBAL'S GLAND

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 2003 SEX: MALE DOSE GROUP: 2 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 593.2 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
KIDNEY		
	MICRO: -MINIMAL	-B/ LYMPHOID CELL INFILTRATE
	-MINIMAL	-B/ TUBULAR ATROPHY
	-SLIGHT	-U/ HYDRONEPHROSIS
	-MINIMAL	-U/ TUBULE(S): PROTEINACEOUS CAST
LIVER		
	MICRO: -MINIMAL	-PERIPORTAL HEPATOCYTES: CYTOPLASMIC VACUOLATION
	-MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS		
	MICRO: -MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-PULMONARY ARTERY: MINERAL DEPOSIT
	-MINIMAL	-ALVEOLI: ERYTHROCYTES
	-MINIMAL	-ALVEOLI: MACROPHAGES

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 2004 SEX: MALE DOSE GROUP: 2 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 544.1 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
KIDNEY		
	MICRO: -MINIMAL	-B/ LYMPHOID CELL INFILTRATE
	-MINIMAL	-B/ TUBULAR ATROPHY
LIVER		
	MICRO: -MINIMAL	-PERIPORTAL HEPATOCYTES: CYTOPLASMIC VACUOLATION
	-MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS		
	MICRO: -SLIGHT	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-PULMONARY ARTERY: MINERAL DEPOSIT
	-MINIMAL	-ALVEOLI: ERYTHROCYTES
	-MINIMAL	-ALVEOLI: MACROPHAGES

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 2005 SEX: MALE DOSE GROUP: 2 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 673.8 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
GROSS-MICRO COR1		
	MICRO: HISTOPATHOLOGICAL COMMENT:	>RED FOCI, LUNGS=ERYTHROCYTES IN ALVEOLI.
KIDNEY		
	MICRO: -MINIMAL	-B/ LYMPHOID CELL INFILTRATE
	-MINIMAL	-B/ TUBULAR ATROPHY
	-SLIGHT	-B/ HYDRONEPHROSIS
LIVER		
	MICRO: -MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS		
	GROSS: -DISCOLORED-FOCUS(FOCI)	-ALL LOBES: 0.1 CM DIA, RED
	MICRO: -SLIGHT	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-SLIGHT	-ALVEOLI: ERYTHROCYTES
	-SLIGHT	-ALVEOLI: MACROPHAGES

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 2006 SEX: MALE DOSE GROUP: 2 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 586.5 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
KIDNEY		
	MICRO: -MINIMAL	-B/ LYMPHOID CELL INFILTRATE
	-MINIMAL	-B/ TUBULAR ATROPHY
	-MODERATE	-U/ PELVIS: SUBACUTE/CHRONIC INFLAMMATION
LIVER		
	MICRO: -MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS		
	MICRO: -SLIGHT	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-PULMONARY ARTERY: MINERAL DEPOSIT
	-SLIGHT	-ALVEOLI: ERYTHROCYTES
	-MINIMAL	-ALVEOLI: MACROPHAGES
	-SLIGHT	-ALVEOLI: EDEMA

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 2007 SEX: MALE DOSE GROUP: 2 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 639.3 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
KIDNEY		
	MICRO: -MINIMAL	-B/ CHRONIC NEPHROPATHY
	-MINIMAL	-U/ MINERAL DEPOSIT
LIVER		
	MICRO: -MINIMAL	-CENTRILOBULAR HEPATOCYTES: HYPERTROPHY
	-MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS		
	MICRO: -MODERATE	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-PULMONARY ARTERY: MINERAL DEPOSIT
	-MINIMAL	-ALVEOLI: ERYTHROCYTES
	-SLIGHT	-ALVEOLI: MACROPHAGES

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 2008 SEX: MALE DOSE GROUP: 2 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 696.6 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
KIDNEY		
	MICRO: -SLIGHT	-B/ CHRONIC NEPHROPATHY
	-SLIGHT	-U/ HYDRONEPHROSIS
LIVER		
	MICRO: -MINIMAL	-PERIPORTAL HEPATOCYTES: CYTOPLASMIC VACUOLATION
	-MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS		
	MICRO: -SLIGHT	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-PULMONARY ARTERY: MINERAL DEPOSIT
	-MINIMAL	-ALVEOLI: ERYTHROCYTES
	-MINIMAL	-ALVEOLI: MACROPHAGES

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 2009 SEX: MALE DOSE GROUP: 2 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 782.2 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
KIDNEY	MICRO: -MINIMAL	-B/ CHRONIC NEPHROPATHY
LIVER	MICRO: -MINIMAL -MINIMAL	-CENTRILOBULAR HEPATOCYTES: HYPERTROPHY -EXTRAMEDULLARY HEMATOPOIESIS
LUNGS	MICRO: -SLIGHT -MINIMAL -MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE -PULMONARY ARTERY: MINERAL DEPOSIT -ALVEOLI: ERYTHROCYTES

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 2010 SEX: MALE DOSE GROUP: 2 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 526.0 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
KIDNEY		
	MICRO: -MINIMAL	-B/ CHRONIC NEPHROPATHY
LIVER		
	MICRO: -MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS		
	MICRO: -SLIGHT	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-ALVEOLI: ERYTHROCYTES
	-MINIMAL	-ALVEOLI: MACROPHAGES

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 2011 SEX: MALE DOSE GROUP: 2 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 618.0 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
KIDNEY	MICRO: -MINIMAL	-B/ CHRONIC NEPHROPATHY
LIVER	MICRO: -MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS	MICRO: -SLIGHT	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-PULMONARY ARTERY: MINERAL DEPOSIT
	-MINIMAL	-ALVEOLI: ERYTHROCYTES
	-MINIMAL	-ALVEOLI: MACROPHAGES
	-MINIMAL	-ALVEOLI: BONE SPICULE

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 2012 SEX: MALE DOSE GROUP: 2 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 547.4 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
KIDNEY		
	MICRO: -MINIMAL	-B/ LYMPHOID CELL INFILTRATE
	-SLIGHT	-B/ TUBULAR ATROPHY
LIVER		
	MICRO: -MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS		
	MICRO: -MODERATE	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-PULMONARY ARTERY: MINERAL DEPOSIT
	-MINIMAL	-ALVEOLI: ERYTHROCYTES
	-SLIGHT	-ALVEOLI: MACROPHAGES

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 2013 SEX: MALE DOSE GROUP: 2 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 533.6 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
KIDNEY		
	MICRO: -MINIMAL	-B/ CHRONIC NEPHROPATHY
LIVER		
	MICRO: -MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS		
	MICRO: -MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-ALVEOLI: ERYTHROCYTES
	-MINIMAL	-ALVEOLI: MACROPHAGES

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 2014 SEX: MALE DOSE GROUP: 2 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 683.4 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
GROSS-MICRO COR1		
	MICRO: HISTOPATHOLOGICAL COMMENT:	>TAN FOCI, KIDNEYS=NMC.
KIDNEY		
	GROSS: -DISCOLORED-FOCUS(FOCI), SLIGHT	-BOTH: 0.1 - 0.3 CM DIA, TAN
	MICRO: -SLIGHT	-B/ CHRONIC NEPHROPATHY
LIVER		
	MICRO: -MINIMAL	-PERIPORTAL HEPATOCYTES: CYTOPLASMIC VACUOLATION
	-MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS		
	MICRO: -SLIGHT	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-PULMONARY ARTERY: MINERAL DEPOSIT
	-MINIMAL	-ALVEOLI: ERYTHROCYTES
	-MINIMAL	-ALVEOLI: MACROPHAGES
	-MINIMAL	-ALVEOLI: BONE SPICULE

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 2015 SEX: MALE DOSE GROUP: 2 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 604.8 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
KIDNEY		
	MICRO: -MINIMAL	-B/ CHRONIC NEPHROPATHY
LIVER		
	MICRO: -MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS		
	MICRO: -MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-PULMONARY ARTERY: MINERAL DEPOSIT
	-MINIMAL	-ALVEOLI: ERYTHROCYTES

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 2016 SEX: MALE DOSE GROUP: 2 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 603.5 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
KIDNEY		
	MICRO: -MINIMAL	-B/ LYMPHOID CELL INFILTRATE
	-MINIMAL	-B/ TUBULAR ATROPHY
LIVER		
	MICRO: -MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS		
	MICRO: -MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-PULMONARY ARTERY: MINERAL DEPOSIT
	-SLIGHT	-ALVEOLI: MACROPHAGES
	-MINIMAL	-ALVEOLI: BONE SPICULE

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 2017 SEX: MALE DOSE GROUP: 2 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 640.2 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
KIDNEY		
	MICRO: -MINIMAL	-B/ LYMPHOID CELL INFILTRATE
	-MINIMAL	-U/ TUBULAR ATROPHY
	-MINIMAL	-B/ MINERAL DEPOSIT
	-SLIGHT	-U/ PELVIS: ACUTE/SUBACUTE INFLAMMATION
LIVER		
	MICRO: -MINIMAL	-CENTRILOBULAR HEPATOCYTES: HYPERTROPHY
	-SLIGHT	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS		
	MICRO: -SLIGHT	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-PULMONARY ARTERY: MINERAL DEPOSIT
	-MINIMAL	-ALVEOLI: ERYTHROCYTES
	-SLIGHT	-ALVEOLI: MACROPHAGES
	-SLIGHT	-ACUTE/SUBACUTE INFLAMMATION

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 2018 SEX: MALE DOSE GROUP: 2 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 540.1 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
KIDNEY		
	MICRO: -MINIMAL	-B/ CHRONIC NEPHROPATHY
LIVER		
	MICRO: -MINIMAL	-PERIPORTAL HEPATOCYTES: CYTOPLASMIC VACUOLATION
	-MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS		
	MICRO: -MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 2019 SEX: MALE DOSE GROUP: 2 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 541.6 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
KIDNEY		
	MICRO: -MINIMAL	-B/ CHRONIC NEPHROPATHY
	-PRESENT	-U/ CYST(S)
LIVER		
	MICRO: -MINIMAL	-CENTRILOBULAR HEPATOCYTES: HYPERTROPHY
	-MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
	-SLIGHT	-HEMORRHAGE
LUNGS		
	MICRO: -MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-ALVEOLI: ERYTHROCYTES

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 2020 SEX: MALE DOSE GROUP: 2 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 538.4 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
KIDNEY		
	MICRO: -MINIMAL	-B/ CHRONIC NEPHROPATHY
LIVER		
	MICRO: -MINIMAL	-CENTRILOBULAR HEPATOCYTES: HYPERTROPHY
	-MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS		
	MICRO: -SLIGHT	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-ALVEOLI: ERYTHROCYTES
	-MINIMAL	-ALVEOLI: MACROPHAGES

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 3001 SEX: MALE DOSE GROUP: 3 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 666.1 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
KIDNEY		
	MICRO: -MINIMAL	-B/ CHRONIC NEPHROPATHY
LIVER		
	MICRO: -MINIMAL	-CENTRILOBULAR HEPATOCYTES: HYPERTROPHY
	-SLIGHT	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS		
	MICRO: -MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-PULMONARY ARTERY: MINERAL DEPOSIT
	-MINIMAL	-ALVEOLI: ERYTHROCYTES
	-MINIMAL	-ALVEOLI: MACROPHAGES

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 3002 SEX: MALE DOSE GROUP: 3 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 585.1 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
KIDNEY		
	MICRO: -MINIMAL	-B/ CHRONIC NEPHROPATHY
	-MINIMAL	-B/ MINERAL DEPOSIT
	-SLIGHT	-B/ HYDRONEPHROSIS
LIVER		
	MICRO: -MINIMAL	-CENTRILOBULAR HEPATOCYTES: HYPERTROPHY
	-MINIMAL	-PERIPORTAL HEPATOCYTES: CYTOPLASMIC VACUOLATION
	-MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS		
	MICRO: -MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-ALVEOLI: ERYTHROCYTES
	-MINIMAL	-ALVEOLI: BONE SPICULE
	-MINIMAL	-ACUTE/SUBACUTE INFLAMMATION

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 3003 SEX: MALE DOSE GROUP: 3 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 649.6 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
KIDNEY		
	MICRO: -MINIMAL	-B/ CHRONIC NEPHROPATHY
	-MINIMAL	-U/ MINERAL DEPOSIT
	-PRESENT	-U/ CYST(S)
	-SLIGHT	-U/ HYDRONEPHROSIS
LIVER		
	MICRO: -MINIMAL	-CENTRILOBULAR HEPATOCYTES: HYPERTROPHY
	-MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS		
	MICRO: -MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-SLIGHT	-PULMONARY ARTERY: MINERAL DEPOSIT
	-MINIMAL	-ALVEOLI: ERYTHROCYTES

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 3004 SEX: MALE DOSE GROUP: 3 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 563.0 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
KIDNEY		
	MICRO: -MINIMAL	-B/ LYMPHOID CELL INFILTRATE
	-MINIMAL	-B/ TUBULAR ATROPHY
LIVER		
	MICRO: -MINIMAL	-CENTRILOBULAR HEPATOCYTES: HYPERTROPHY
	-MINIMAL	-PERIPORTAL HEPATOCYTES: CYTOPLASMIC VACUOLATION
	-MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS		
	MICRO: -MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-PULMONARY ARTERY: MINERAL DEPOSIT
	-MINIMAL	-ALVEOLI: ERYTHROCYTES

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 3005 SEX: MALE DOSE GROUP: 3 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 741.7 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
KIDNEY		
	MICRO: -MINIMAL	-B/ CHRONIC NEPHROPATHY
LIVER		
	MICRO: -MINIMAL	-PERIPORTAL HEPATOCYTES: CYTOPLASMIC VACUOLATION
	-MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS		
	MICRO: -MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-PULMONARY ARTERY: MINERAL DEPOSIT
	-MINIMAL	-ALVEOLI: ERYTHROCYTES
	-MINIMAL	-ALVEOLI: MACROPHAGES
	-MINIMAL	-ALVEOLI: BONE SPICULE

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 3006 SEX: MALE DOSE GROUP: 3 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 594.9 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
GROSS-MICRO COR1		
	MICRO: HISTOPATHOLOGICAL COMMENT:	>RED FOCI, LUNGS=ERYTHROCYTES IN ALVEOLI.
KIDNEY		
	MICRO: -MINIMAL	-B/ LYMPHOID CELL INFILTRATE
	-MINIMAL	-B/ TUBULAR ATROPHY
	-SLIGHT	-U/ HYDRONEPHROSIS
LIVER		
	MICRO: -MINIMAL	-CENTRILOBULAR HEPATOCYTES: HYPERTROPHY
	-MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS		
	GROSS: -DISCOLORED-FOCUS(FOCI)	-ALL LOBES: 0.1 CM DIA, RED
	MICRO: -SLIGHT	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-PULMONARY ARTERY: MINERAL DEPOSIT
	-MINIMAL	-ALVEOLI: ERYTHROCYTES
	-SLIGHT	-ACUTE/SUBACUTE INFLAMMATION

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 3007 SEX: MALE DOSE GROUP: 3 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 733.3 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
KIDNEY		
MICRO:	-MINIMAL	-B/ CHRONIC NEPHROPATHY
	-PRESENT	-U/ CYST(S)
LIVER		
MICRO:	-MINIMAL	-CENTRILOBULAR HEPATOCYTES: HYPERTROPHY
	-MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS		
MICRO:	-MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-PULMONARY ARTERY: MINERAL DEPOSIT
	-MINIMAL	-ALVEOLI: ERYTHROCYTES
	-SLIGHT	-ACUTE/SUBACUTE INFLAMMATION

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 3008 SEX: MALE DOSE GROUP: 3 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 584.6 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
KIDNEY	MICRO: -SLIGHT	-B/ CHRONIC NEPHROPATHY
LIVER	MICRO: -MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS	MICRO: -MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 3009 SEX: MALE DOSE GROUP: 3 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 702.3 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
GROSS-MICRO COR1		
MICRO:	HISTOPATHOLOGICAL COMMENT:	>SMALL, LEFT SEMINAL VESICLE=DECREASED SECRETORY PRODUCT.
KIDNEY		
MICRO:	-MINIMAL	-B/ CHRONIC NEPHROPATHY
	-MINIMAL	-B/ MINERAL DEPOSIT
LIVER		
MICRO:	-MINIMAL	-CENTRILOBULAR HEPATOCYTES: HYPERTROPHY
	-MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS		
MICRO:	-MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-ALVEOLI: ERYTHROCYTES
	-MINIMAL	-ALVEOLI: MACROPHAGES
SEMINAL VESICLE		
GROSS:	-SMALL, MODERATE	-LEFT
MICRO:	-SLIGHT	-DECREASED SECRETORY PRODUCT

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 3010 SEX: MALE DOSE GROUP: 3 SACRIFICE STATUS: UNSCHEDULED (D)
DATE OF DEATH: 06/24/96 STUDY DAY OF DEATH: 6 STUDY WEEK OF DEATH: 1 TERMINAL BODY WEIGHT: 245.0 GRAMS

THE FOLLOWING TISSUES HAD NO MICROSCOPIC ABNORMALITIES OBSERVED:
ADRENAL GLAND, BRAIN, CECUM, CERVICAL SC, COLON, DUODENUM, ESOPHAGUS, FEMORAL MARROW, FEMUR, HEART, LACRIMAL GLAND, LOW COLON/RECTUM, MAMMARY GLAND, MESENTERIC LN, NERVE, OPTIC NERVE, PANCREAS, PARATHYROID GL, PITUITARY GLAND, PROSTATE GLAND, SALIVARY GLAND, SKELETAL MUSCLE, STERNAL MARROW, STERNUM, TESTIS, THORACIC AORTA, THORACIC SC, THYMUS, THYROID GLAND, ZYMBAL'S GLAND

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 3011 SEX: MALE DOSE GROUP: 3 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 645.1 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
KIDNEY	MICRO: -MINIMAL	-B/ LYMPHOID CELL INFILTRATE
	-MINIMAL	-B/ TUBULAR ATROPHY
	-MINIMAL	-B/ MINERAL DEPOSIT
LIVER	MICRO: -SLIGHT	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS	MICRO: -SLIGHT	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-ALVEOLI: ERYTHROCYTES
	-SLIGHT	-ALVEOLI: MACROPHAGES

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 3012 SEX: MALE DOSE GROUP: 3 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 584.3 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
KIDNEY		
	MICRO: -MINIMAL	-B/ CHRONIC NEPHROPATHY
LIVER		
	MICRO: -MINIMAL	-CENTRILOBULAR HEPATOCYTES: HYPERTROPHY
	-SLIGHT	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS		
	MICRO: -MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-PULMONARY ARTERY: MINERAL DEPOSIT
	-SLIGHT	-ALVEOLI: MACROPHAGES

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 3013 SEX: MALE DOSE GROUP: 3 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 505.2 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
KIDNEY	MICRO: -MINIMAL	-B/ CHRONIC NEPHROPATHY
LIVER	MICRO: -MINIMAL	-CENTRILOBULAR HEPATOCYTES: HYPERTROPHY
	-MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS	MICRO: -MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-SLIGHT	-PULMONARY ARTERY: MINERAL DEPOSIT
	-MINIMAL	-ALVEOLI: ERYTHROCYTES
	-MINIMAL	-ALVEOLI: MACROPHAGES

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 3014 SEX: MALE DOSE GROUP: 3 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 649.5 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
KIDNEY	MICRO: -MINIMAL	-B/ CHRONIC NEPHROPATHY
LIVER	MICRO: -MINIMAL -MINIMAL	-CENTRILOBULAR HEPATOCYTES: HYPERTROPHY -EXTRAMEDULLARY HEMATOPOIESIS
LUNGS	MICRO: -SLIGHT -MINIMAL -SLIGHT	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE -ALVEOLI: MACROPHAGES -ACUTE/SUBACUTE INFLAMMATION

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 3015 SEX: MALE DOSE GROUP: 3 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 715.7 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
KIDNEY	MICRO: -SLIGHT	-B/ CHRONIC NEPHROPATHY
LIVER	MICRO: -MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
	-MINIMAL	-NONSPECIFIC CYTOPLASMIC VACUOLATION
	-MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
LUNGS	MICRO: -SLIGHT	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-PULMONARY ARTERY: MINERAL DEPOSIT
	-SLIGHT	-ALVEOLI: MACROPHAGES
	-SLIGHT	-SUBACUTE/CHRONIC INFLAMMATION

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 3016 SEX: MALE DOSE GROUP: 3 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 629.7 GRAMS

* * * PATHOLOGY OBSERVATIONS * * *

ORGAN NAME		KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
GROSS-MICRO COR1			
	MICRO:	HISTOPATHOLOGICAL COMMENT:	>TAN FOCI, KIDNEYS=NMC.
KIDNEY			
	GROSS:	-DISCOLORED-FOCUS(FOCI), SLIGHT	-BOTH: 0.1 - 0.3 CM DIA, TAN
	MICRO:	-MINIMAL	-B/ CHRONIC NEPHROPATHY
		-MINIMAL	-B/ MINERAL DEPOSIT
		-SLIGHT	-B/ HYDRONEPHROSIS
LIVER			
	MICRO:	-SLIGHT	-EXTRAMEDULLARY HEMATOPOIESIS
		-MINIMAL	-NONSPECIFIC CYTOPLASMIC VACUOLATION
LUNGS			
	MICRO:	-MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
		-MINIMAL	-PULMONARY ARTERY: MINERAL DEPOSIT
		-MINIMAL	-ALVEOLI: ERYTHROCYTES
		-MINIMAL	-ALVEOLI: MACROPHAGES

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 3017 SEX: MALE DOSE GROUP: 3 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 667.5 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
KIDNEY	MICRO: -MINIMAL	-B/ CHRONIC NEPHROPATHY
LIVER	MICRO: -MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS	MICRO: -MINIMAL -SLIGHT	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE -ALVEOLI: MACROPHAGES

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 3018 SEX: MALE DOSE GROUP: 3 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 632.8 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
KIDNEY	MICRO: -MINIMAL	-B/ CHRONIC NEPHROPATHY
LIVER	MICRO: -MINIMAL	-PERIPORTAL HEPATOCYTES: CYTOPLASMIC VACUOLATION
	-MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS	MICRO: -MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 3019 SEX: MALE DOSE GROUP: 3 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 550.9 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
KIDNEY	MICRO: -MINIMAL	-B/ CHRONIC NEPHROPATHY
LIVER	MICRO: -MINIMAL	-CENTRILOBULAR HEPATOCYTES: HYPERTROPHY
	-MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS	MICRO: -SLIGHT	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-ALVEOLI: ERYTHROCYTES
	-SLIGHT	-ALVEOLI: MACROPHAGES
	-MINIMAL	-ACUTE/SUBACUTE INFLAMMATION

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 3020 SEX: MALE DOSE GROUP: 3 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 539.2 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
KIDNEY	MICRO: -MINIMAL	-B/ CHRONIC NEPHROPATHY
LIVER	MICRO: -MINIMAL	-CENTRILOBULAR HEPATOCYTES: HYPERTROPHY
	-MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS	MICRO: -SLIGHT	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-ALVEOLI: ERYTHROCYTES
	-SLIGHT	-ALVEOLI: MACROPHAGES

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

*** PATH/TOX SYSTEM OUTPUT ***
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION
INDIVIDUAL ANIMAL DATA SHEET

STUDY NUMBER: 962459

ANIMAL NUMBER: 3021 SEX: MALE DOSE GROUP: 3 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 623.7 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
GROSS-MICRO COR1	MICRO: HISTOPATHOLOGICAL COMMENT:	>RED FOCI, LUNGS=ERYTHROCYTES IN ALVEOLI.
KIDNEY	MICRO: -MINIMAL	-B/ CHRONIC NEPHROPATHY
LIVER	MICRO: -MINIMAL	-CENTRILOBULAR HEPATOCYTES: HYPERTROPHY
	-MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS	GROSS: -DISCOLORED-FOCUS(FOCI)	-ALL LOBES: 0.1 - 0.3 CM DIA, RED
	MICRO: -SLIGHT	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-SLIGHT	-PULMONARY ARTERY: MINERAL DEPOSIT
	-SLIGHT	-ALVEOLI: ERYTHROCYTES
	-SLIGHT	-SUBACUTE/CHRONIC INFLAMMATION

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 4001 SEX: MALE DOSE GROUP: 4 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 621.8 GRAMS

* * * PATHOLOGY OBSERVATIONS * * *

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
ADRENAL GLAND		
	MICRO: -MINIMAL	-B/ CORTEX: CYTOPLASMIC VACUOLATION
EPIDIDYMIS		
	MICRO: -MINIMAL	-B/ LYMPHOID CELL INFILTRATE
EYE		
	GROSS: -EXOPHTHALMIA, MODERATE	-LEFT
GROSS-MICRO COR1		
	MICRO: HISTOPATHOLOGICAL COMMENT:	>EXOPHTHALMIA, LEFT EYE=NMC.
KIDNEY		
	MICRO: -MINIMAL	-B/ LYMPHOID CELL INFILTRATE
	-MINIMAL	-B/ TUBULAR ATROPHY
	-SLIGHT	-B/ TUBULAR EPITHELIUM: BROWN PIGMENT
LACRIMAL GLAND		
	HISTOPATHOLOGICAL COMMENT:	>ONE LACRIMAL GLAND
LIVER		
	MICRO: -MINIMAL	-CENTRILOBULAR HEPATOCYTES: HYPERTROPHY
	-MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS		
	MICRO: -MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-PULMONARY ARTERY: MINERAL DEPOSIT
	-MINIMAL	-ALVEOLI: ERYTHROCYTES
	-MINIMAL	-ALVEOLI: MACROPHAGES
MEDIASTINAL LN		
	MICRO: -MINIMAL	-SINUSES: ERYTHROCYTES
MESENTERIC LN		
	MICRO: -MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
OPTIC NERVE		
	MICRO: HISTOPATHOLOGICAL COMMENT:	>ONE OPTIC NERVE
PITUITARY GLAND		
	MICRO: -PRESENT	-CYST(S)
PROSTATE GLAND		
	MICRO: -SLIGHT	-LYMPHOID CELL INFILTRATE
SPLEEN		
	MICRO: -SLIGHT	-CONGESTION
	-SLIGHT	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
STOMACH		
	MICRO -MINIMAL	-EOSINOPHIL INFILTRATE
TRACHEA		
	MICRO -MINIMAL	-LYMPHOID CELL INFILTRATE

ANIMAL NUMBER: 4001 SEX: MALE DOSE GROUP: 4 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 621.8 GRAMS

THE FOLLOWING TISSUES HAD NO MICROSCOPIC ABNORMALITIES OBSERVED:
BRAIN, CECUM, CERVICAL SC, COLON, DUODENUM, ESOPHAGUS, EYE, FEMORAL MARROW, FEMUR, HEART, ILEUM, JEJUNUM, LACRIMAL GLAND, LOW COLON/RECTUM, MAMMARY GLAND, NERVE, OPTIC NERVE, PANCREAS, PARATHYROID GL, SALIVARY GLAND, SEMINAL VESICLE, SKELETAL MUSCLE, STERNAL MARROW, STERNUM, TESTIS, THORACIC AORTA, THORACIC SC, THYMUS, THYROID GLAND, URINARY BLADDER, ZYMBAL'S GLAND

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 4002 SEX: MALE DOSE GROUP: 4 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 661.5 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
BONE	GROSS: -DISCOLORED, SEVERE	-CRANIAL PAN: 0.5 X 2.5 CM, RED, GELATINOUS, MATERIAL
	MICRO: -SLIGHT	-HEMORRHAGE
	HISTOPATHOLOGICAL COMMENT:	>CRANIAL PAN=HEMORRHAGE IN SOFT TISSUE.
EPIDIDYMIS	MICRO: -MINIMAL	-B/ LYMPHOID CELL INFILTRATE
GROSS-MICRO COR1	MICRO:	
	HISTOPATHOLOGICAL COMMENT:	>RED FOCI, LUNGS=ERYTHROCYTES IN ALVEOLI. RED, GELATINOUS MATERIAL, CRANIAL PAN=HEMORRHAGE IN SOFT TISSUE.
HEART	MICRO: -SLIGHT	-NECROSIS
	-MINIMAL	-LYMPHOID CELL INFILTRATE
	-MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
	-SLIGHT	-HEMORRHAGE
KIDNEY	MICRO: -MINIMAL	-B/ CHRONIC NEPHROPATHY
	-MINIMAL	-U/ MINERAL DEPOSIT
LACRIMAL GLAND	MICRO: -MINIMAL	-U/ LYMPHOID CELL INFILTRATE
	HISTOPATHOLOGICAL COMMENT:	>ONE LACRIMAL GLAND
LIVER	MICRO: -MINIMAL	-CENTRILOBULAR HEPATOCYTES: HYPERTROPHY
	-MINIMAL	-PERIPORTAL HEPATOCYTES: CYTOPLASMIC VACUOLATION
	-MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS	GROSS: -DISCOLORED-FOCUS(FOCI)	-ALL LOBES: 0.1 - 0.3 CM DIA, RED
	MICRO: -MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-SLIGHT	-ALVEOLI: ERYTHROCYTES
	-MINIMAL	-ALVEOLI: MACROPHAGES
MEDIASTINAL LN	MICRO: -SLIGHT	-SINUSES: ERYTHROCYTES
	-SLIGHT	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
MESENTERIC LN	MICRO: -MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
PANCREAS	MICRO -MINIMAL	-LYMPHOID CELL INFILTRATE
	-SLIGHT	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
	-MINIMAL	-EXOCRINE CELLS: ATROPHY
PITUITARY GLAND	MICRO -PRESENT	-CYST(S)

ANIMAL NUMBER: 4002 SEX: MALE DOSE GROUP: 4 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 661.5 GRAMS

* * * PATHOLOGY OBSERVATIONS (CONTINUED) * * *

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
SPLEEN		
	MICRO: -SLIGHT	-CONGESTION
	-MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
STOMACH		
	MICRO: -MINIMAL	-NONGLANDULAR MUCOSA: SQUAMOUS CELL HYPERPLASIA
	-MINIMAL	-NONGLANDULAR: HYPERKERATOSIS
	-SLIGHT	-EOSINOPHIL INFILTRATE
	-SLIGHT	-LYMPHOID CELL INFILTRATE
	-MINIMAL	-GLAND(S): DILATATION/CYST

THE FOLLOWING TISSUES HAD NO MICROSCOPIC ABNORMALITIES OBSERVED:
ADRENAL GLAND, BRAIN, CECUM, CERVICAL SC, COLON, DUODENUM, ESOPHAGUS, EYE, FEMORAL MARROW, FEMUR, ILEUM, JEJUNUM, LOW COLON/RECTUM, MAMMARY GLAND, NERVE, OPTIC NERVE, PARATHYROID GL, PROSTATE GLAND, SALIVARY GLAND, SEMINAL VESICLE, SKELETAL MUSCLE, STERNAL MARROW, STERNUM, TESTIS, THORACIC AORTA, THORACIC SC, THYMUS, THYROID GLAND, TRACHEA, URINARY BLADDER, ZYMBAL'S GLAND

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 4003 SEX: MALE DOSE GROUP: 4 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 552.9 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
EPIDIDYMIS		
	MICRO: -MINIMAL	-B/ LYMPHOID CELL INFILTRATE
HEART		
	MICRO: -MINIMAL	-LYMPHOID CELL INFILTRATE
	-SLIGHT	-FIBROSIS
KIDNEY		
	MICRO: -MINIMAL	-B/ CHRONIC NEPHROPATHY
LACRIMAL GLAND		
	MICRO: -MINIMAL	-U/ LYMPHOID CELL INFILTRATE
	HISTOPATHOLOGICAL COMMENT:	>ONE LACRIMAL GLAND
LIVER		
	MICRO: -MINIMAL	-CENTRILOBULAR HEPATOCYTES: HYPERTROPHY
	-MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS		
	MICRO: -MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-PULMONARY ARTERY: MINERAL DEPOSIT
MEDIASTINAL LN		
	MICRO: -SLIGHT	-SINUSES: ERYTHROCYTES
MESENTERIC LN		
	MICRO: -MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
PANCREAS		
	MICRO: -MINIMAL	-LYMPHOID CELL INFILTRATE
PROSTATE GLAND		
	MICRO: -SLIGHT	-LYMPHOID CELL INFILTRATE
SPLEEN		
	MICRO: -SLIGHT	-CONGESTION
	-MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
STOMACH		
	MICRO: -MINIMAL	-EOSINOPHIL INFILTRATE
	-SLIGHT	-LYMPHOID CELL INFILTRATE
	-MINIMAL	-GLAND(S): DILATATION/CYST
THYMUS		
	MICRO -MINIMAL	-HEMORRHAGE
TRACHEA		
	MICRO -MINIMAL	-LYMPHOID CELL INFILTRATE

ANIMAL NUMBER: 4003 SEX: MALE DOSE GROUP: 4 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 552.9 GRAMS

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

THE FOLLOWING TISSUES HAD NO MICROSCOPIC ABNORMALITIES OBSERVED:
ADRENAL GLAND, BRAIN, CECUM, CERVICAL SC, COLON, DUODENUM, ESOPHAGUS, EYE, FEMORAL MARROW, FEMUR, ILEUM, JEJUNUM, LOW COLON/RECTUM, MAMMARY GLAND, NERVE, OPTIC NERVE, PARATHYROID GL, PITUITARY GLAND, SALIVARY GLAND, SEMINAL VESICLE, SKELETAL MUSCLE, STERNAL MARROW, STERNUM, TESTIS, THORACIC AORTA, THORACIC SC, THYROID GLAND, URINARY BLADDER, ZYMBAL'S GLAND

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 4004 SEX: MALE DOSE GROUP: 4 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 597.0 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
ADRENAL GLAND	MICRO: -MINIMAL	-B/ CORTEX: CYTOPLASMIC VACUOLATION
HEART	MICRO: -MINIMAL	-NECROSIS
KIDNEY	MICRO: -MINIMAL	-B/ CHRONIC NEPHROPATHY
LACRIMAL GLAND	MICRO: -MINIMAL	-U/ LYMPHOID CELL INFILTRATE
LIVER	MICRO: -MINIMAL -MINIMAL	-CENTRILOBULAR HEPATOCYTES: HYPERTROPHY -EXTRAMEDULLARY HEMATOPOIESIS
LUNGS	MICRO: -MINIMAL -MINIMAL -MINIMAL -MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE -PULMONARY ARTERY: MINERAL DEPOSIT -ALVEOLI: ERYTHROCYTES -ALVEOLI: MACROPHAGES
MEDIASTINAL LN	MICRO: -SLIGHT -SLIGHT	-SINUSES: ERYTHROCYTES -RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
MESENTERIC LN	MICRO: -MINIMAL -MINIMAL	-SINUSES: ERYTHROCYTES -RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
SPLEEN	MICRO: -MODERATE -SLIGHT	-CONGESTION -RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
STOMACH	MICRO: -SLIGHT -SLIGHT -MINIMAL -MINIMAL -MINIMAL	-NONGLANDULAR MUCOSA: SQUAMOUS CELL HYPERPLASIA -NONGLANDULAR: HYPERKERATOSIS -EOSINOPHIL INFILTRATE -LYMPHOID CELL INFILTRATE -GLAND(S): DILATATION/CYST
THYROID GLAND	MICRO: -PRESENT	-U/ SQUAMOUS CYST(S)
TRACHEA	MICRO: -MINIMAL	-LYMPHOID CELL INFILTRATE

ANIMAL NUMBER: 4004 SEX: MALE DOSE GROUP: 4 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 597.0 GRAMS

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

THE FOLLOWING TISSUES HAD NO MICROSCOPIC ABNORMALITIES OBSERVED:
BRAIN, CECUM, CERVICAL SC, COLON, DUODENUM, EPIDIDYMIS, ESOPHAGUS, EYE, FEMORAL MARROW, FEMUR, ILEUM, JEJUNUM, LOW COLON/RECTUM, MAMMARY GLAND, NERVE, OPTIC NERVE, PANCREAS, PARATHYROID GL, PITUITARY GLAND, PROSTATE GLAND, SALIVARY GLAND, SEMINAL VESICLE, SKELETAL MUSCLE, STERNAL MARROW, STERNUM, TESTIS, THORACIC AORTA, THORACIC SC, THYMUS, URINARY BLADDER, ZYMBAL'S GLAND

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 4005 SEX: MALE DOSE GROUP: 4 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 636.4 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
EPIDIDYMIS	MICRO: -MINIMAL	-B/ LYMPHOID CELL INFILTRATE
KIDNEY	MICRO: -MINIMAL	-B/ LYMPHOID CELL INFILTRATE
	-MINIMAL	-U/ TUBULAR ATROPHY
	-MINIMAL	-B/ MINERAL DEPOSIT
LACRIMAL GLAND	MICRO: -MINIMAL	-U/ LYMPHOID CELL INFILTRATE
	HISTOPATHOLOGICAL COMMENT:	>ONE LACRIMAL GLAND
LIVER	MICRO: -MINIMAL	-CENTRILOBULAR HEPATOCYTES: HYPERTROPHY
	-SLIGHT	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS	MICRO: -MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-PULMONARY ARTERY: MINERAL DEPOSIT
	-MINIMAL	-ALVEOLI: ERYTHROCYTES
	-MINIMAL	-ALVEOLI: MACROPHAGES
MEDIASTINAL LN	MICRO: -MINIMAL	-SINUSES: ERYTHROCYTES
	-MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
MESENTERIC LN	MICRO: -MINIMAL	-SINUSES: ERYTHROCYTES
SPLEEN	MICRO: -MODERATE	-CONGESTION
	-MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
STOMACH	MICRO: -MINIMAL	-NONGLANDULAR MUCOSA: SQUAMOUS CELL HYPERPLASIA
	-SLIGHT	-NONGLANDULAR: HYPERKERATOSIS
	-SLIGHT	-EOSINOPHIL INFILTRATE
	-MINIMAL	-LYMPHOID CELL INFILTRATE
	-SLIGHT	-GLAND(S): DILATATION/CYST
TRACHEA	MICRO: -SLIGHT	-LYMPHOID CELL INFILTRATE

ANIMAL NUMBER: 4005 SEX: MALE DOSE GROUP: 4 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 636.4 GRAMS

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

THE FOLLOWING TISSUES HAD NO MICROSCOPIC ABNORMALITIES OBSERVED:
ADRENAL GLAND, BRAIN, CECUM, CERVICAL SC, COLON, DUODENUM, ESOPHAGUS, EYE, FEMORAL MARROW, FEMUR, HEART, ILEUM, JEJUNUM, LOW COLON/RECTUM, MAMMARY GLAND, NERVE, OPTIC NERVE, PANCREAS, PARATHYROID GL, PITUITARY GLAND, PROSTATE GLAND, SALIVARY GLAND, SEMINAL VESICLE, SKELETAL MUSCLE, STERNAL MARROW, STERNUM, TESTIS, THORACIC AORTA, THORACIC SC, THYMUS, THYROID GLAND, URINARY BLADDER, ZYMBAL'S GLAND

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 4006 SEX: MALE DOSE GROUP: 4 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 772.0 GRAMS

* * * PATHOLOGY OBSERVATIONS * * *

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
ADRENAL GLAND		
	MICRO: -MINIMAL	-B/ CORTEX: CYTOPLASMIC VACUOLATION
EPIDIDYMIS		
	MICRO: -MINIMAL	-B/ LYMPHOID CELL INFILTRATE
EYE		
	MICRO: -MINIMAL	-U/ CORNEA: MINERAL DEPOSIT
GROSS-MICRO COR1		
	MICRO: HISTOPATHOLOGICAL COMMENT:	>YELLOW, NONGLANDULAR MUCOSA, STOMACH=NMC. RED FOCI, LUNGS=ERYTHROCYTES IN ALVEOLI.
HEART		
	MICRO: -MINIMAL	-NECROSIS
KIDNEY		
	MICRO: -MINIMAL	-B/ LYMPHOID CELL INFILTRATE
	-MINIMAL	-B/ TUBULAR ATROPHY
LACRIMAL GLAND		
	HISTOPATHOLOGICAL COMMENT:	>ONE LACRIMAL GLAND
LIVER		
	MICRO: -SLIGHT	-PERIPORTAL HEPATOCYTES: CYTOPLASMIC VACUOLATION
	-MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS		
	GROSS: -DISCOLORED-FOCUS(FOCI)	-ALL LOBES: 0.1 - 0.2 CM DIA, RED
	MICRO: -MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-PULMONARY ARTERY: MINERAL DEPOSIT
	-MINIMAL	-ALVEOLI: ERYTHROCYTES
	-MINIMAL	-ALVEOLI: MACROPHAGES
MEDIASTINAL LN		
	MICRO: -SLIGHT	-SINUSES: ERYTHROCYTES
MESENTERIC LN		
	MICRO: -MINIMAL	-SINUSES: ERYTHROCYTES
	-MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
PANCREAS		
	MICRO: -MINIMAL	-LYMPHOID CELL INFILTRATE
	-MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
	-MINIMAL	-EXOCRINE CELLS: ATROPHY
SPLEEN		
	MICRO -MODERATE	-CONGESTION
	-MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
STOMACH		
	GROSS -DISCOLORED, MODERATE	-NON-GLANDULAR MUCOSA: YELLOW
	MICRO -MODERATE	-NONGLANDULAR MUCOSA: SQUAMOUS CELL HYPERPLASIA
	-MARKED	-NONGLANDULAR: HYPERKERATOSIS

ANIMAL NUMBER: 4006 SEX: MALE DOSE GROUP: 4 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 772.0 GRAMS

* * * PATHOLOGY OBSERVATIONS (CONTINUED) * * *

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
STOMACH		
	MICRO: -SLIGHT	-NONGLANDULAR: ACUTE/SUBACUTE INFLAMMATION
	-MARKED	-NONGLANDULAR: EDEMA
	-SLIGHT	-EOSINOPHIL INFILTRATE
	-SLIGHT	-LYMPHOID CELL INFILTRATE
	-MINIMAL	-GLAND(S): DILATATION/CYST
TESTIS		
	MICRO: -SLIGHT	-U/ TUBULAR ATROPHY
TRACHEA		
	MICRO: -MINIMAL	-LYMPHOID CELL INFILTRATE

THE FOLLOWING TISSUES HAD NO MICROSCOPIC ABNORMALITIES OBSERVED:
BRAIN, CECUM, CERVICAL SC, COLON, DUODENUM, ESOPHAGUS, FEMORAL MARROW, FEMUR, ILEUM, JEJUNUM, LACRIMAL GLAND, LOW COLON/RECTUM, MAMMARY GLAND, NERVE, OPTIC NERVE, PARATHYROID GL, PITUITARY GLAND, PROSTATE GLAND, SALIVARY GLAND, SEMINAL VESICLE, SKELETAL MUSCLE, STERNAL MARROW, STERNUM, THORACIC AORTA, THORACIC SC, THYMUS, THYROID GLAND, URINARY BLADDER, ZYMBAL'S GLAND

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 4007 SEX: MALE DOSE GROUP: 4 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 614.7 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
ADRENAL GLAND	MICRO: -MINIMAL	-B/ CORTEX: CYTOPLASMIC VACUOLATION
EPIDIDYMIS	MICRO: -MINIMAL	-B/ LYMPHOID CELL INFILTRATE
HEART	MICRO: -MINIMAL	-NECROSIS
KIDNEY	MICRO: -MINIMAL	-B/ LYMPHOID CELL INFILTRATE
	-MINIMAL	-B/ TUBULAR ATROPHY
	-PRESENT	-U/ CYST(S)
LACRIMAL GLAND	HISTOPATHOLOGICAL COMMENT:	>ONE LACRIMAL GLAND
LIVER	MICRO: -MINIMAL	-CENTRILOBULAR HEPATOCYTES: HYPERTROPHY
	-MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS	MICRO: -SLIGHT	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-ALVEOLI: ERYTHROCYTES
	-MINIMAL	-ALVEOLI: MACROPHAGES
MEDIASTINAL LN	MICRO: -MINIMAL	-SINUSES: ERYTHROCYTES
MESENTERIC LN	MICRO: -MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
PANCREAS	MICRO: -MINIMAL	-LYMPHOID CELL INFILTRATE
PARATHYROID GL	HISTOPATHOLOGICAL COMMENT:	>ONE PARATHYROID
PROSTATE GLAND	MICRO: -SLIGHT	-LYMPHOID CELL INFILTRATE
SPLEEN	MICRO: -SLIGHT	-CONGESTION
	-MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
STOMACH	MICRO: -SLIGHT	-NONGLANDULAR MUCOSA: SQUAMOUS CELL HYPERPLASIA
	-SLIGHT	-NONGLANDULAR: HYPERKERATOSIS
	-MINIMAL	-NONGLANDULAR: HEMORRHAGE
	-SLIGHT	-NONGLANDULAR: EDEMA
	-MINIMAL	-EOSINOPHIL INFILTRATE
	-MINIMAL	-LYMPHOID CELL INFILTRATE
	-SLIGHT	-GLAND(S): DILATATION/CYST

ANIMAL NUMBER: 4007 SEX: MALE DOSE GROUP: 4 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 614.7 GRAMS

*** PATHOLOGY OBSERVATIONS (CONTINUED) ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
THYMUS	MICRO: -MINIMAL	-HEMORRHAGE
THYROID GLAND	MICRO: -PRESENT	-U/ SQUAMOUS CYST(S)
TRACHEA	MICRO: -SLIGHT	-LYMPHOID CELL INFILTRATE

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

THE FOLLOWING TISSUES HAD NO MICROSCOPIC ABNORMALITIES OBSERVED:
BRAIN, CECUM, CERVICAL SC, COLON, DUODENUM, ESOPHAGUS, EYE, FEMORAL MARROW, FEMUR, ILEUM, JEJUNUM, LACRIMAL GLAND, LOW COLON/RECTUM, MAMMARY GLAND, NERVE, OPTIC NERVE, PARATHYROID GL, PITUITARY GLAND, SALIVARY GLAND, SEMINAL VESICLE, SKELETAL MUSCLE, STERNAL MARROW, STERNUM, TESTIS, THORACIC AORTA, THORACIC SC, URINARY BLADDER, ZYMBAL'S GLAND

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 4008 SEX: MALE DOSE GROUP: 4 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 599.5 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
ADRENAL GLAND	MICRO: -MINIMAL	-B/ CORTEX: CYTOPLASMIC VACUOLATION
EPIDIDYMIS	MICRO: -MINIMAL	-B/ LYMPHOID CELL INFILTRATE
HEART	MICRO: -SLIGHT	-NECROSIS
KIDNEY	MICRO: -MINIMAL	-B/ CHRONIC NEPHROPATHY
LACRIMAL GLAND	MICRO: -MINIMAL	-U/ LYMPHOID CELL INFILTRATE
	HISTOPATHOLOGICAL COMMENT:	>ONE LACRIMAL GLAND
LIVER	MICRO: -MINIMAL	-CENTRILOBULAR HEPATOCYTES: HYPERTROPHY
	-MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS	MICRO: -MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-ALVEOLI: ERYTHROCYTES
	-MINIMAL	-ALVEOLI: MACROPHAGES
MEDIASTINAL LN	MICRO: -MINIMAL	-SINUSES: ERYTHROCYTES
PANCREAS	MICRO: -MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
PROSTATE GLAND	MICRO: -SLIGHT	-LYMPHOID CELL INFILTRATE
SPLEEN	MICRO: -MODERATE	-CONGESTION
	-MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
STOMACH	MICRO: -SLIGHT	-EOSINOPHIL INFILTRATE
	-MINIMAL	-GLAND(S): DILATATION/CYST
THYMUS	MICRO: -MINIMAL	-HEMORRHAGE
THYROID GLAND	MICRO PRESENT	-U/ SQUAMOUS CYST(S)
TRACHEA	M.C. M.B.MA.	-LYMPHOID CELL INFILTRATE

ANIMAL NUMBER: 4008 SEX: MALE DOSE GROUP: 4 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 599.5 GRAMS

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

THE FOLLOWING TISSUES HAD NO MICROSCOPIC ABNORMALITIES OBSERVED:
BRAIN, CECUM, CERVICAL SC, COLON, DUODENUM, ESOPHAGUS, EYE, FEMORAL MARROW, FEMUR, ILEUM, JEJUNUM, LOW COLON/RECTUM, MAMMARY GLAND, MESENTERIC LN, NERVE, OPTIC NERVE, PARATHYROID GL, PITUITARY GLAND, SALIVARY GLAND, SEMINAL VESICLE, SKELETAL MUSCLE, STERNAL MARROW, STERNUM, TESTIS, THORACIC AORTA, THORACIC SC, URINARY BLADDER, ZYMBAL'S GLAND

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 4009 SEX: MALE DOSE GROUP: 4 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 660.2 GRAMS

* * * PATHOLOGY OBSERVATIONS * * *

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
ADRENAL GLAND	MICRO: -SLIGHT	-B/ CORTEX: CYTOPLASMIC VACUOLATION
EPIDIDYMIS	MICRO: -MINIMAL	-B/ LYMPHOID CELL INFILTRATE
HEART	MICRO: -MINIMAL	-NECROSIS
	-MINIMAL	-LYMPHOID CELL INFILTRATE
KIDNEY	MICRO: -SLIGHT	-B/ CHRONIC NEPHROPATHY
LACRIMAL GLAND	MICRO: -MINIMAL	-U/ LYMPHOID CELL INFILTRATE
	HISTOPATHOLOGICAL COMMENT:	>ONE LACRIMAL GLAND
LIVER	MICRO: -MINIMAL	-PERIPORTAL HEPATOCYTES: CYTOPLASMIC VACUOLATION
	-MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS	MICRO: -MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-SLIGHT	-ALVEOLI: MACROPHAGES
MAMMARY GLAND	MICRO: -TISSUE MISSING	
MEDIASTINAL LN	MICRO: -MINIMAL	-SINUSES: ERYTHROCYTES
PANCREAS	MICRO: -MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
PARATHYROID GL	HISTOPATHOLOGICAL COMMENT:	>ONE PARATHYROID
SPLEEN	MICRO: -MODERATE	-CONGESTION
	-MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
STOMACH	MICRO: -MINIMAL	-EOSINOPHIL INFILTRATE
THYMUS	MICRO: -MINIMAL	-HEMORRHAGE
THYROID GLAND	MICRO -PRESENT	-U/ ECTOPIC THYMUS
TRACHEA	MICRO SLIGHT	-LYMPHOID CELL INFILTRATE

ANIMAL NUMBER: 4009 SEX: MALE DOSE GROUP: 4 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 660.2 GRAMS

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

THE FOLLOWING TISSUES HAD NO MICROSCOPIC ABNORMALITIES OBSERVED:
BRAIN, CECUM, CERVICAL SC, COLON, DUODENUM, ESOPHAGUS, EYE, FEMORAL MARROW, FEMUR, ILEUM, JEJUNUM, LOW COLON/RECTUM, MESENTERIC LN, NERVE, OPTIC NERVE, PARATHYROID GL, PITUITARY GLAND, PROSTATE GLAND, SALIVARY GLAND, SEMINAL VESICLE, SKELETAL MUSCLE, STERNAL MARROW, STERNUM, TESTIS, THORACIC AORTA, THORACIC SC, URINARY BLADDER, ZYMBAL'S GLAND

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 4010 SEX: MALE DOSE GROUP: 4 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 628.4 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
ADRENAL GLAND		
	MICRO: -MINIMAL	-B/ CORTEX: CYTOPLASMIC VACUOLATION
EPIDIDYMIS		
	MICRO: -MINIMAL	-B/ LYMPHOID CELL INFILTRATE
	-MARKED	-B/ OLIGOSPERMIA
GROSS-MICRO COR1		
	MICRO: HISTOPATHOLOGICAL COMMENT:	>RED, LUNGS=NMC. SMALL, TESTES=TUBULAR ATROPHY. SOFT, RIGHT TESTIS=TUBULAR ATROPHY.
HEART		
	MICRO: -MINIMAL	-FIBROSIS
KIDNEY		
	MICRO: -MINIMAL	-B/ CHRONIC NEPHROPATHY
LIVER		
	MICRO: -MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
	-MINIMAL	-CHOLANGIOFIBROSIS
LUNGS		
	GROSS: -DISCOLORED, MODERATE	-ALL LOBES: RED
	MICRO: -MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-SLIGHT	-PULMONARY ARTERY: MINERAL DEPOSIT
	-MINIMAL	-ALVEOLI: ERYTHROCYTES
	-MINIMAL	-ALVEOLI: MACROPHAGES
MEDIASTINAL LN		
	MICRO: -MINIMAL	-SINUSES: ERYTHROCYTES
PANCREAS		
	MICRO: -MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
PARATHYROID GL		
	HISTOPATHOLOGICAL COMMENT:	>ONE PARATHYROID
PROSTATE GLAND		
	MICRO: -MINIMAL	-LYMPHOID CELL INFILTRATE
SPLEEN		
	MICRO: -MODERATE	-CONGESTION
	-MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
STOMACH		
	MICRO: -MODERATE	-NONGLANDULAR MUCOSA: SQUAMOUS CELL HYPERPLASIA
	-MODERATE	-NONGLANDULAR: HYPERKERATOSIS
	-MODERATE	-NONGLANDULAR: EDEMA
	-MINIMAL	-EOSINOPHIL INFILTRATE
	-MINIMAL	-LYMPHOID CELL INFILTRATE
	-SLIGHT	-LIMITING RIDGE: HYPERPLASIA
	-SLIGHT	-LIMITING RIDGE: HYPERKERATOSIS

ANIMAL NUMBER: 4010 SEX: MALE DOSE GROUP: 4 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 628.4 GRAMS

* * * PATHOLOGY OBSERVATIONS (CONTINUED) * * *

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
TESTIS		
	GROSS: -SMALL, SLIGHT	-BOTH
	-SOFT	-RIGHT
	MICRO: -MODERATE	-B/ TUBULAR ATROPHY
THYMUS		
	MICRO: -MINIMAL	-HEMORRHAGE
TRACHEA		
	MICRO: -MINIMAL	-LYMPHOID CELL INFILTRATE

THE FOLLOWING TISSUES HAD NO MICROSCOPIC ABNORMALITIES OBSERVED:
BRAIN, CECUM, CERVICAL SC, COLON, DUODENUM, ESOPHAGUS, EYE, FEMORAL MARROW, FEMUR, ILEUM, JEJUNUM, LACRIMAL GLAND, LOW COLON/RECTUM, MAMMARY GLAND, MESENTERIC LN, NERVE, OPTIC NERVE, PARATHYROID GL, PITUITARY GLAND, SALIVARY GLAND, SEMINAL VESICLE, SKELETAL MUSCLE, STERNAL MARROW, STERNUM, THORACIC AORTA, THORACIC SC, THYROID GLAND, URINARY BLADDER , ZYMBAL'S GLAND

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 4011 SEX: MALE DOSE GROUP: 4 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 641.6 GRAMS

* * * P A T H O L O G Y O B S E R V A T I O N S * * *

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
ADRENAL GLAND		
	MICRO: -MINIMAL	-B/ CORTEX: CYTOPLASMIC VACUOLATION
EPIDIDYMIS		
	MICRO: -MINIMAL	-B/ LYMPHOID CELL INFILTRATE
GROSS-MICRO COR1		
	MICRO: HISTOPATHOLOGICAL COMMENT:	>YELLOW, NONGLANDULAR MUCOSA, STOMACH=NMC.
HEART		
	MICRO: -SLIGHT	-NECROSIS
	-SLIGHT	-HEMORRHAGE
KIDNEY		
	MICRO: -MINIMAL	-B/ CHRONIC NEPHROPATHY
LIVER		
	MICRO: -MINIMAL	-CENTRILOBULAR HEPATOCYTES: HYPERTROPHY
	-MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
	-MINIMAL	-NONSPECIFIC CYTOPLASMIC VACUOLATION
LUNGS		
	MICRO: -MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-PULMONARY ARTERY: MINERAL DEPOSIT
	-MINIMAL	-ALVEOLI: MACROPHAGES
MEDIASTINAL LN		
	MICRO: -MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
MESENTERIC LN		
	MICRO: -MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
PANCREAS		
	MICRO: -MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
PARATHYROID GL		
	HISTOPATHOLOGICAL COMMENT:	>ONE PARATHYROID
SPLEEN		
	MICRO: -SLIGHT	-CONGESTION
	-SLIGHT	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
STOMACH		
	GROSS: -DISCOLORED, MODERATE	-NON-GLANDULAR MUCOSA: YELLOW
	MICRO: -SLIGHT	-NONGLANDULAR MUCOSA: SQUAMOUS CELL HYPERPLASIA
	-MODERATE	-NONGLANDULAR: HYPERKERATOSIS
	-MINIMAL	-NONGLANDULAR: ACUTE/SUBACUTE INFLAMMATION
	-SLIGHT	-NONGLANDULAR: EDEMA
	-MINIMAL	-EOSINOPHIL INFILTRATE
	-MINIMAL	-LYMPHOID CELL INFILTRATE
THYMUS		
	MICRO -MINIMAL	-HEMORRHAGE

ANIMAL NUMBER: 4011 SEX: MALE DOSE GROUP: 4 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 641.6 GRAMS

* * * PATHOLOGY OBSERVATIONS (CONTINUED) * * *

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
TRACHEA	MICRO: -MINIMAL	-LYMPHOID CELL INFILTRATE
ZYMBAL'S GLAND	MICRO: -TISSUE MISSING	

THE FOLLOWING TISSUES HAD NO MICROSCOPIC ABNORMALITIES OBSERVED:
BRAIN, CECUM, CERVICAL SC, COLON, DUODENUM, ESOPHAGUS, EYE, FEMORAL MARROW, FEMUR, ILEUM, JEJUNUM, LACRIMAL GLAND, LOW COLON/RECTUM, MAMMARY GLAND, NERVE, OPTIC NERVE, PARATHYROID GL, PITUITARY GLAND, PROSTATE GLAND, SALIVARY GLAND, SEMINAL VESICLE, SKELETAL MUSCLE, STERNAL MARROW, STERNUM, TESTIS, THORACIC AORTA, THORACIC SC, THYROID GLAND, URINARY BLADDER

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 4012 SEX: MALE DOSE GROUP: 4 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 518.2 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
ADRENAL GLAND	MICRO: -MINIMAL	-B/ CORTEX: CYTOPLASMIC VACUOLATION
EPIDIDYMIS	MICRO: -MINIMAL	-B/ LYMPHOID CELL INFILTRATE
GROSS-MICRO COR1	MICRO: HISTOPATHOLOGICAL COMMENT:	>TAN FOCI, LUNGS=ALVEOLAR MACROPHAGES.
KIDNEY	MICRO: -MINIMAL	-B/ CHRONIC NEPHROPATHY
LIVER	MICRO: -MINIMAL -MINIMAL	-CENTRILOBULAR HEPATOCYTES: HYPERTROPHY -EXTRAMEDULLARY HEMATOPOIESIS
LUNGS	GROSS: -DISCOLORED-FOCUS(FOCI) MICRO: -SLIGHT -MINIMAL -SLIGHT	-TAN, <0.1 - 0.1 CM DIA (POST-FIXATION OBSERVATION) -PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE -PULMONARY ARTERY: MINERAL DEPOSIT -ALVEOLI: MACROPHAGES
MESENTERIC LN	MICRO: -MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
PITUITARY GLAND	MICRO: -PRESENT	-CYST(S)
PROSTATE GLAND	MICRO: -SLIGHT	-LYMPHOID CELL INFILTRATE
SPLEEN	MICRO: -SLIGHT -MINIMAL	-CONGESTION -RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
STOMACH	MICRO: -SLIGHT	-EOSINOPHIL INFILTRATE
THYMUS	MICRO: -MINIMAL	-HEMORRHAGE
THYROID GLAND	MICRO: -PRESENT	-U/ SQUAMOUS CYST(S)
TRACHEA	MICRO -MINIMAL	-LYMPHOID CELL INFILTRATE

ANIMAL NUMBER: 4012 SEX: MALE DOSE GROUP: 4 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 518.2 GRAMS

THE FOLLOWING TISSUES HAD NO MICROSCOPIC ABNORMALITIES OBSERVED:
BRAIN, CECUM, CERVICAL SC, COLON, DUODENUM, ESOPHAGUS, EYE, FEMORAL MARROW, FEMUR, HEART, ILEUM, JEJUNUM, LACRIMAL GLAND, LOW COLON/RECTUM, MAMMARY GLAND, MEDIASTINAL LN, NERVE, OPTIC NERVE, PANCREAS, PARATHYROID GL, SALIVARY GLAND, SEMINAL VESICLE, SKELETAL MUSCLE, STERNAL MARROW, STERNUM, TESTIS, THORACIC AORTA, THORACIC SC, URINARY BLADDER, ZYMBAL'S GLAND

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 4013 SEX: MALE DOSE GROUP: 4 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 599.9 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
ADRENAL GLAND	MICRO: -MINIMAL	-B/ CORTEX: CYTOPLASMIC VACUOLATION
EPIDIDYMIS	MICRO: -MINIMAL	-B/ LYMPHOID CELL INFILTRATE
HEART	MICRO: -MINIMAL	-NECROSIS
KIDNEY	MICRO: -MINIMAL -MINIMAL	-B/ CHRONIC NEPHROPATHY -B/ MINERAL DEPOSIT
LIVER	MICRO: -MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS	MICRO: -SLIGHT -MARKED -MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE -ALVEOLI: MACROPHAGES -ALVEOLI: BONE SPICULE
MEDIASTINAL LN	MICRO: -MINIMAL -MODERATE	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT -PLASMA CELL HYPERPLASIA
SPLEEN	MICRO: -MARKED -MINIMAL	-CONGESTION -RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
STOMACH	MICRO: -MODERATE -MODERATE -SLIGHT -SLIGHT	-NONGLANDULAR MUCOSA: SQUAMOUS CELL HYPERPLASIA -NONGLANDULAR: HYPERKERATOSIS -EOSINOPHIL INFILTRATE -LYMPHOID CELL INFILTRATE
THYROID GLAND	MICRO: -PRESENT	-U/ SQUAMOUS CYST(S)
TRACHEA	MICRO: -MINIMAL	-LYMPHOID CELL INFILTRATE

ANIMAL NUMBER: 4013 SEX: MALE DOSE GROUP: 4 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 599.9 GRAMS

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

THE FOLLOWING TISSUES HAD NO MICROSCOPIC ABNORMALITIES OBSERVED:
BRAIN, CECUM, CERVICAL SC, COLON, DUODENUM, ESOPHAGUS, EYE, FEMORAL MARROW, FEMUR, ILEUM, JEJUNUM, LACRIMAL GLAND, LOW COLON/RECTUM, MAMMARY GLAND, MESENTERIC LN, NERVE, OPTIC NERVE, PANCREAS, PARATHYROID GL, PITUITARY GLAND, PROSTATE GLAND, SALIVARY GLAND, SEMINAL VESICLE, SKELETAL MUSCLE, STERNAL MARROW, STERNUM, TESTIS, THORACIC AORTA, THORACIC SC, THYMUS, URINARY BLADDER, ZYMBAL'S GLAND

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 4014 SEX: MALE DOSE GROUP: 4 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 591.2 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
EPIDIDYMIS	MICRO: -MINIMAL	-B/ LYMPHOID CELL INFILTRATE
HEART	MICRO: -MINIMAL	-NECROSIS
	-MINIMAL	-LYMPHOID CELL INFILTRATE
	-MINIMAL	-FIBROSIS
KIDNEY	MICRO: -SLIGHT	-B/ CHRONIC NEPHROPATHY
LACRIMAL GLAND	MICRO: -MINIMAL	-U/ LYMPHOID CELL INFILTRATE
LIVER	MICRO: -MINIMAL	-CENTRILOBULAR HEPATOCYTES: HYPERTROPHY
	-MINIMAL	-PERIPORTAL HEPATOCYTES: CYTOPLASMIC VACUOLATION
	-MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS	MICRO: -MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-PULMONARY ARTERY: MINERAL DEPOSIT
	-MINIMAL	-ALVEOLI: ERYTHROCYTES
PANCREAS	MICRO: -MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
SPLEEN	MICRO: -MODERATE	-CONGESTION
	-MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
STOMACH	MICRO: -MINIMAL	-EOSINOPHIL INFILTRATE
	-MINIMAL	-LYMPHOID CELL INFILTRATE
	-MINIMAL	-GLAND(S): DILATATION/CYST
TRACHEA	MICRO: -MINIMAL	-LYMPHOID CELL INFILTRATE

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

THE FOLLOWING TISSUES HAD NO MICROSCOPIC ABNORMALITIES OBSERVED:
ADRENAL GLAND, BRAIN, CECUM, CERVICAL SC, COLON, DUODENUM, ESOPHAGUS, EYE, FEMORAL MARROW, FEMUR, ILEUM, JEJUNUM, LOW COLON/RECTUM, MAMMARY GLAND, MEDIASTINAL LN, MESENTERIC LN, NERVE, OPTIC NERVE, PARATHYROID GL, PITUITARY GLAND, PROSTATE GLAND, SALIVARY GLAND, SEMINAL VESICLE, SKELETAL MUSCLE, STERNAL MARROW, STERNUM, TESTIS, THORACIC AORTA, THORACIC SC, THYMUS, THYROID GLAND, URINARY BLADDER, ZYMBAL'S GLAND

*** PATH/TOX SYSTEM OUTPUT ***
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION
INDIVIDUAL ANIMAL DATA SHEET

STUDY NUMBER: 962459

ANIMAL NUMBER: 4015 SEX: MALE DOSE GROUP: 4 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 673.0 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
ADRENAL GLAND	MICRO: -MINIMAL	-B/ CORTEX: CYTOPLASMIC VACUOLATION
EPIDIDYMIS	MICRO: -MINIMAL	-B/ LYMPHOID CELL INFILTRATE
HEART	MICRO: -MINIMAL	-NECROSIS
KIDNEY	MICRO: -MINIMAL -PRESENT	-B/ CHRONIC NEPHROPATHY -B/ CYSTS
LACRIMAL GLAND	MICRO: -MINIMAL	-U/ LYMPHOID CELL INFILTRATE
LIVER	MICRO: -MINIMAL -SLIGHT	-CENTRILOBULAR HEPATOCYTES: HYPERTROPHY -EXTRAMEDULLARY HEMATOPOIESIS
LUNGS	MICRO: -SLIGHT -MINIMAL -MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE -PULMONARY ARTERY: MINERAL DEPOSIT -ALVEOLI: MACROPHAGES
MEDIASTINAL LN	MICRO: -MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
SPLEEN	MICRO: -SLIGHT -SLIGHT	-CONGESTION -RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
STOMACH	MICRO: -SLIGHT -MINIMAL -MINIMAL	-EOSINOPHIL INFILTRATE -LYMPHOID CELL INFILTRATE -GLAND(S): DILATATION/CYST
THYMUS	MICRO: -MINIMAL	-HEMORRHAGE

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

THE FOLLOWING TISSUES HAD NO MICROSCOPIC ABNORMALITIES OBSERVED:
BRAIN, CECUM, CERVICAL SC, COLON, DUODENUM, ESOPHAGUS, EYE, FEMORAL MARROW, FEMUR, ILEUM, JEJUNUM, LOW COLON/RECTUM, MAMMARY GLAND, MESENTERIC LN, NERVE, OPTIC NERVE, PANCREAS, PARATHYROID GL, PITUITARY GLAND, PROSTATE GLAND, SALIVARY GLAND, SEMINAL VESICLE, SKELETAL MUSCLE, STERNAL MARROW, STERNUM, TESTIS, THORACIC AORTA, THORACIC SC, THYROID GLAND, TRACHEA, URINARY BLADDER, ZYMBAL'S GLAND

[illegible] MALIGNANT "B" BENIGN "S" METASTATIC "I" INVASIVE, "X" OTHER

ANIMAL NUMBER: 4016 SEX: MALE DOSE GROUP: 4 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 680.4 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
EPIDIDYMIS	MICRO: -MINIMAL	-B/ LYMPHOID CELL INFILTRATE
HEART	MICRO: -SLIGHT	-NECROSIS
	-SLIGHT	-HEMORRHAGE
KIDNEY	MICRO: -MINIMAL	-B/ CHRONIC NEPHROPATHY
	-PRESENT	-U/ CYST(S)
LIVER	MICRO: -MINIMAL	-CENTRILOBULAR HEPATOCYTES: HYPERTROPHY
	-MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS	MICRO: -SLIGHT	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-PULMONARY ARTERY: MINERAL DEPOSIT
	-SLIGHT	-ALVEOLI: ERYTHROCYTES
	-SLIGHT	-ALVEOLI: MACROPHAGES
MAMMARY GLAND	MICRO: -TISSUE MISSING	
MEDIASTINAL LN	MICRO: -MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
PARATHYROID GL	MICRO:	HISTOPATHOLOGICAL COMMENT: >ONE PARATHYROID
SPLEEN	MICRO: -MARKED	-CONGESTION
	-MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
STOMACH	MICRO: -SLIGHT	-EOSINOPHIL INFILTRATE
	-MINIMAL	-LYMPHOID CELL INFILTRATE
THYMUS	MICRO: -MINIMAL	-HEMORRHAGE

ANIMAL NUMBER: 4016 SEX: MALE DOSE GROUP: 4 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 680.4 GRAMS

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

THE FOLLOWING TISSUES HAD NO MICROSCOPIC ABNORMALITIES OBSERVED:
ADRENAL GLAND, BRAIN, CECUM, CERVICAL SC, COLON, DUODENUM, ESOPHAGUS, EYE, FEMORAL MARROW, FEMUR, ILEUM, JEJUNUM, LACRIMAL GLAND, LOW COLON/RECTUM, MESENTERIC LN, NERVE, OPTIC NERVE, PANCREAS, PARATHYROID GL, PITUITARY GLAND, PROSTATE GLAND, SALIVARY GLAND, SEMINAL VESICLE, SKELETAL MUSCLE, STERNAL MARROW, STERNUM, TESTIS, THORACIC AORTA, THORACIC SC, THYROID GLAND, TRACHEA, URINARY BLADDER, ZYMBAL'S GLAND

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 4017 SEX: MALE DOSE GROUP: 4 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 738.9 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
ADRENAL GLAND	MICRO: -SLIGHT	-B/ CORTEX: CYTOPLASMIC VACUOLATION
EPIDIDYMIS	MICRO: -MINIMAL	-B/ LYMPHOID CELL INFILTRATE
GROSS-MICRO COR1	MICRO: HISTOPATHOLOGICAL COMMENT:	>TAN FOCI, LUNGS=ALVEOLAR MACROPHAGES.
KIDNEY	MICRO: -MINIMAL	-B/ CHRONIC NEPHROPATHY
LACRIMAL GLAND	MICRO: -MINIMAL	-B/ LYMPHOID CELL INFILTRATE
LIVER	MICRO: -MINIMAL -MINIMAL	-CENTRILOBULAR HEPATOCYTES: HYPERTROPHY -EXTRAMEDULLARY HEMATOPOIESIS
LUNGS	GROSS: -DISCOLORED-FOCUS(FOCI) MICRO: -MODERATE -SLIGHT	-ALL LOBES: 0.1 CM DIA, TAN -PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE -ALVEOLI: MACROPHAGES
PITUITARY GLAND	MICRO: -TISSUE MISSING	
SPLEEN	MICRO: -MARKED -MINIMAL	-CONGESTION -RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
STOMACH	MICRO: -MINIMAL -MINIMAL -MINIMAL	-EOSINOPHIL INFILTRATE -LYMPHOID CELL INFILTRATE -GLAND(S): DILATATION/CYST
THYMUS	MICRO: -MINIMAL	-HEMORRHAGE
TRACHEA	MICRO: -MINIMAL	-LYMPHOID CELL INFILTRATE

THE FOLLOWING TISSUES HAD NO MICROSCOPIC ABNORMALITIES OBSERVED:
BRAIN, CECUM, CERVICAL SC, COLON, DUODENUM, ESOPHAGUS, EYE, FEMORAL MARROW, FEMUR, HEART, ILEUM, JEJUNUM, LOW COLON/RECTUM, MAMMARY GLAND, MEDIASTINAL LN, MESENTERIC LN, NERVE, OPTIC NERVE, PANCREAS, PARATHYROID GL, PROSTATE GLAND, SALIVARY GLAND, SEMINAL VESICLE, SKELETAL MUSCLE, STERNAL MARROW, STERNUM, TESTIS, THORACIC AORTA, THORACIC SC, THYROID GLAND, URINARY BLADDER, ZYMBAL'S GLAND

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 4018 SEX: MALE DOSE GROUP: 4 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 624.0 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
ADRENAL GLAND		
	MICRO: -SLIGHT	-B/ CORTEX: CYTOPLASMIC VACUOLATION
EPIDIDYMIS		
	MICRO: -MINIMAL	-B/ LYMPHOID CELL INFILTRATE
HEART		
	MICRO: -SLIGHT	-NECROSIS
KIDNEY		
	MICRO: -MINIMAL	-B/ CHRONIC NEPHROPATHY
	-PRESENT	-U/ CYST(S)
LACRIMAL GLAND		
	MICRO: -MINIMAL	-B/ LYMPHOID CELL INFILTRATE
LIVER		
	MICRO: -MINIMAL	-CENTRILOBULAR HEPATOCYTES: HYPERTROPHY
	-MINIMAL	-PERIPORTAL HEPATOCYTES: CYTOPLASMIC VACUOLATION
	-MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
	-MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
LUNGS		
	MICRO: -MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-PULMONARY ARTERY: MINERAL DEPOSIT
	-MINIMAL	-ALVEOLI: ERYTHROCYTES
MEDIASTINAL LN		
	MICRO: -MODERATE	-PLASMA CELL HYPERPLASIA
MESENTERIC LN		
	MICRO: -MINIMAL	-SINUSES: ERYTHROCYTES
	-MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
PANCREAS		
	MICRO: -MINIMAL	-LYMPHOID CELL INFILTRATE
SPLEEN		
	MICRO: -SLIGHT	-CONGESTION
	-MODERATE	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
STOMACH		
	MICRO: -MODERATE	-NONGLANDULAR MUCOSA: SQUAMOUS CELL HYPERPLASIA
	-MODERATE	-NONGLANDULAR: HYPERKERATOSIS
	-SLIGHT	-NONGLANDULAR: ACUTE/SUBACUTE INFLAMMATION
	-MARKED	-NONGLANDULAR: EDEMA
	-MINIMAL	-EOSINOPHIL INFILTRATE
THYMUS		
	MICRO: -SLIGHT	-HEMORRHAGE

ANIMAL NUMBER: 4018 SEX: MALE DOSE GROUP: 4 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 624.0 GRAMS

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

THE FOLLOWING TISSUES HAD NO MICROSCOPIC ABNORMALITIES OBSERVED:
BRAIN, CECUM, CERVICAL SC, COLON, DUODENUM, ESOPHAGUS, EYE, FEMORAL MARROW, FEMUR, ILEUM, JEJUNUM, LOW COLON/RECTUM, MAMMARY GLAND, NERVE, OPTIC NERVE, PARATHYROID GL, PITUITARY GLAND, PROSTATE GLAND, SALIVARY GLAND, SEMINAL VESICLE, SKELETAL MUSCLE, STERNAL MARROW, STERNUM, TESTIS, THORACIC AORTA, THORACIC SC, THYROID GLAND, TRACHEA, URINARY BLADDER , ZYMBAL'S GLAND

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 4019 SEX: MALE DOSE GROUP: 4 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 679.8 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
ADRENAL GLAND	MICRO: -MINIMAL	-B/ CORTEX: CYTOPLASMIC VACUOLATION
HEART	MICRO: -MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
KIDNEY	MICRO: -MINIMAL	-B/ CHRONIC NEPHROPATHY
LIVER	MICRO: -MINIMAL -MINIMAL	-CENTRILOBULAR HEPATOCYTES: HYPERTROPHY -EXTRAMEDULLARY HEMATOPOIESIS
LUNGS	MICRO: -MINIMAL -SLIGHT -MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE -PULMONARY ARTERY: MINERAL DEPOSIT -ALVEOLI: ERYTHROCYTES
MEDIASTINAL LN	MICRO: -MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
PANCREAS	MICRO: -MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
PARATHYROID GL	MICRO: -TISSUE MISSING	
SPLEEN	MICRO: -MODERATE -MINIMAL	-CONGESTION -RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
STOMACH	MICRO: -MINIMAL -MINIMAL -MINIMAL	-EOSINOPHIL INFILTRATE -LYMPHOID CELL INFILTRATE -GLAND(S): DILATATION/CYST

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

THE FOLLOWING TISSUES HAD NO MICROSCOPIC ABNORMALITIES OBSERVED:
BRAIN, CECUM, CERVICAL SC, COLON, DUODENUM, EPIDIDYMIS, ESOPHAGUS, EYE, FEMORAL MARROW, FEMUR, ILEUM, JEJUNUM, LACRIMAL GLAND, LOW COLON/RECTUM, MAMMARY GLAND, MESENTERIC LN, NERVE, OPTIC NERVE, PITUITARY GLAND, PROSTATE GLAND, SALIVARY GLAND, SEMINAL VESICLE, SKELETAL MUSCLE, STERNAL MARROW, STERNUM, TESTIS, THORACIC AORTA, THORACIC SC, THYMUS, THYROID GLAND, TRACHEA, URINARY BLADDER, ZYMBAL'S GLAND

KEY TO NEOPLASMS "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 4020 SEX: MALE DOSE GROUP: 4 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 469.0 GRAMS

* * * PATHOLOGY OBSERVATIONS * * *

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
ADRENAL GLAND	MICRO: -MINIMAL	-B/ CORTEX: CYTOPLASMIC VACUOLATION
EPIDIDYMIS	MICRO: -MINIMAL	-B/ LYMPHOID CELL INFILTRATE
HEART	MICRO: -MINIMAL	-NECROSIS
KIDNEY	MICRO: -MINIMAL	-B/ LYMPHOID CELL INFILTRATE
	-MINIMAL	-B/ TUBULAR ATROPHY
	-MINIMAL	-U/ MINERAL DEPOSIT
LACRIMAL GLAND	MICRO: -SLIGHT	-U/ LYMPHOID CELL INFILTRATE
	HISTOPATHOLOGICAL COMMENT:	>ONE LACRIMAL GLAND
LIVER	MICRO: -MINIMAL	-CENTRILOBULAR HEPATOCYTES: HYPERTROPHY
	-SLIGHT	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS	MICRO: -SLIGHT	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-PULMONARY ARTERY: MINERAL DEPOSIT
	-SLIGHT	-SUBACUTE/CHRONIC INFLAMMATION
PANCREAS	MICRO: -MINIMAL	-LYMPHOID CELL INFILTRATE
PROSTATE GLAND	MICRO: -SLIGHT	-LYMPHOID CELL INFILTRATE
SPLEEN	MICRO: -SLIGHT	-CONGESTION
	-MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
STOMACH	MICRO: -SLIGHT	-NONGLANDULAR MUCOSA: SQUAMOUS CELL HYPERPLASIA
	-SLIGHT	-NONGLANDULAR: HYPERKERATOSIS
	-SLIGHT	-NONGLANDULAR: ACUTE/SUBACUTE INFLAMMATION
	-MARKED	-NONGLANDULAR: EDEMA
	-MINIMAL	-EOSINOPHIL INFILTRATE
	-SLIGHT	-LYMPHOID CELL INFILTRATE

ANIMAL NUMBER: 4020 SEX: MALE DOSE GROUP: 4 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 469.0 GRAMS

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

THE FOLLOWING TISSUES HAD NO MICROSCOPIC ABNORMALITIES OBSERVED:
BRAIN, CECUM, CERVICAL SC, COLON, DUODENUM, ESOPHAGUS, EYE, FEMORAL MARROW, FEMUR, ILEUM, JEJUNUM, LOW COLON/RECTUM, MAMMARY GLAND, MEDIASTINAL LN, MESENTERIC LN, NERVE, OPTIC NERVE, PARATHYROID GL, PITUITARY GLAND, SALIVARY GLAND, SEMINAL VESICLE, SKELETAL MUSCLE, STERNAL MARROW, STERNUM, TESTIS, THORACIC AORTA, THORACIC SC, THYMUS, THYROID GLAND, TRACHEA, URINARY BLADDER, ZYMBAL'S GLAND

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 1501 SEX: FEMALE DOSE GROUP: 1 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 236.3 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
LACRIMAL GLAND	MICRO: -MINIMAL	-U/ LYMPHOID CELL INFILTRATE
LIVER	MICRO: -MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS	MICRO: -MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-ALVEOLI: MACROPHAGES
OPTIC NERVE	MICRO: -SLIGHT	-U/ HEMORRHAGE
OVARY	MICRO: -MINIMAL	-B/ BROWN PIGMENT
PANCREAS	MICRO: -MINIMAL	-LYMPHOID CELL INFILTRATE
SPLEEN	MICRO: -MINIMAL	-CONGESTION
	-MODERATE	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
STOMACH	MICRO: -MINIMAL	-EOSINOPHIL INFILTRATE
THYROID GLAND	MICRO: -PRESENT	-U/ SQUAMOUS CYST(S)
TRACHEA	MICRO: -MINIMAL	-LYMPHOID CELL INFILTRATE
UTERUS	MICRO: -MINIMAL	-EOSINOPHILIC INFILTRATE
VAGINA	MICRO: -SLIGHT	-LYMPHOID CELL INFILTRATE
	-MINIMAL	-EOSINOPHILIC INFILTRATE

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

THE FOLLOWING TISSUES HAD NO MICROSCOPIC ABNORMALITIES OBSERVED:
ADRENAL GLAND, BRAIN, CECUM, CERVICAL SC, COLON, DUODENUM, ESOPHAGUS, EYE, FEMORAL MARROW, FEMUR, HEART, ILEUM, JEJUNUM, KIDNEY, LOW COLON/RECTUM, MAMMARY GLAND, MEDIASTINAL LN, MESENTERIC LN, NERVE, PARATHYROID GL, PITUITARY GLAND, SALIVARY GLAND, SKELETAL MUSCLE, STERNAL MARROW, STERNUM, THORACIC AORTA, THORACIC SC, THYMUS, URINARY BLADDER, ZYMBAL'S GLAND

ANIMAL NUMBER: 1502 SEX: FEMALE DOSE GROUP: 1 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 270.2 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
GROSS-MICRO COR1		
	MICRO: HISTOPATHOLOGICAL COMMENT:	>PALE, KIDNEYS=NMC. TAN, MOTTLED, SPLEEN=NMC.
KIDNEY		
	GROSS: -DISCOLORED, SLIGHT	-BOTH: PALE
	MICRO: -MINIMAL	-U/ LYMPHOID CELL INFILTRATE
	-MINIMAL	-U/ TUBULAR ATROPHY
LIVER		
	MICRO: -MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
	-MINIMAL	-NECROSIS
LUNGS		
	MICRO: -SLIGHT	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-SLIGHT	-ALVEOLI: MACROPHAGES
MEDIASTINAL LN		
	MICRO: -MINIMAL	-SINUSES: ERYTHROCYTES
	-MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
OVARY		
	MICRO: -MINIMAL	-B/ BROWN PIGMENT
PANCREAS		
	MICRO: -MINIMAL	-LYMPHOID CELL INFILTRATE
SPLEEN		
	GROSS: -DISCOLORED, SLIGHT	-TAN, MOTTLED
	MICRO: -SLIGHT	-CONGESTION
	-MARKED	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
STOMACH		
	MICRO: -MINIMAL	-EOSINOPHIL INFILTRATE
	-MINIMAL	-LYMPHOID CELL INFILTRATE
TRACHEA		
	MICRO: -MINIMAL	-LYMPHOID CELL INFILTRATE
UTERUS		
	MICRO: -MODERATE	-EOSINOPHILIC INFILTRATE
VAGINA		
	MICRO: -SLIGHT	-HYPERKERATOSIS

ANIMAL NUMBER: 1502 SEX: FEMALE DOSE GROUP: 1 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 270.2 GRAMS

THE FOLLOWING TISSUES HAD NO MICROSCOPIC ABNORMALITIES OBSERVED:
ADRENAL GLAND, BRAIN, CECUM, CERVICAL SC, COLON, DUODENUM, ESOPHAGUS, EYE, FEMORAL MARROW, FEMUR, HEART, ILEUM, JEJUNUM, LACRIMAL GLAND, LOW COLON/RECTUM, MAMMARY GLAND, MESENTERIC LN, NERVE, OPTIC NERVE, PARATHYROID GL, PITUITARY GLAND, SALIVARY GLAND, SKELETAL MUSCLE, STERNAL MARROW, STERNUM, THORACIC AORTA, THORACIC SC, THYMUS, THYROID GLAND, URINARY BLADDER, ZYMBAL'S GLAND

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 1503 SEX: FEMALE DOSE GROUP: 1 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 254.8 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
KIDNEY	MICRO: -MINIMAL	-B/ LYMPHOID CELL INFILTRATE
LACRIMAL GLAND	MICRO: -SLIGHT	-U/ LYMPHOID CELL INFILTRATE
LIVER	MICRO: -MINIMAL	-PERIPORTAL HEPATOCYTES: CYTOPLASMIC VACUOLATION
	-MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS	MICRO: -MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-ALVEOLI: ERYTHROCYTES
	-MINIMAL	-ALVEOLI: MACROPHAGES
MEDIASTINAL LN	MICRO: -MINIMAL	-SINUSES: ERYTHROCYTES
	-MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
OVARY	MICRO: -MINIMAL	-B/ BROWN PIGMENT
PANCREAS	MICRO: -MINIMAL	-LYMPHOID CELL INFILTRATE
PARATHYROID GL	HISTOPATHOLOGICAL COMMENT:	>ONE PARATHYROID
SPLEEN	MICRO: -SLIGHT	-CONGESTION
	-SLIGHT	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
STOMACH	MICRO: -SLIGHT	-EOSINOPHIL INFILTRATE
	-MINIMAL	-LYMPHOID CELL INFILTRATE
	-MINIMAL	-GLAND(S): DILATATION/CYST
THYROID GLAND	MICRO: -PRESENT	-U/ SQUAMOUS CYST(S)
TRACHEA	MICRO: -MINIMAL	-LYMPHOID CELL INFILTRATE
UTERUS	MICRO: -MINIMAL	-EOSINOPHILIC INFILTRATE
	-MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
	-MODERATE	-HYDROMETRA
	-SLIGHT	-LYMPHOID CELL INFILTRATE
VAGINA	MICRO -SLIGHT	-ACUTE/SUBACUTE INFLAMMATION

*** PATH/TOX SYSTEM OUTPUT ***
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION
INDIVIDUAL ANIMAL DATA SHEET

STUDY NUMBER: 962459

ANIMAL NUMBER: 1503 SEX: FEMALE DOSE GROUP: 1 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 254.8 GRAMS

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

THE FOLLOWING TISSUES HAD NO MICROSCOPIC ABNORMALITIES OBSERVED:
ADRENAL GLAND, BRAIN, CECUM, CERVICAL SC, COLON, DUODENUM, ESOPHAGUS, EYE, FEMORAL MARROW, FEMUR, HEART, ILEUM, JEJUNUM, LOW COLON/RECTUM, MAMMARY GLAND, MESENTERIC LN, NERVE, OPTIC NERVE, PARATHYROID GL, PITUITARY GLAND, SALIVARY GLAND, SKELETAL MUSCLE, STERNAL MARROW, STERNUM, THORACIC AORTA, THORACIC SC, THYMUS, URINARY BLADDER, ZYMBAL'S GLAND

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 1504 SEX: FEMALE DOSE GROUP: 1 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 283.4 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
KIDNEY	MICRO: -MINIMAL	-B/ LYMPHOID CELL INFILTRATE
LACRIMAL GLAND	MICRO: -TISSUE MISSING	
LIVER	MICRO: -MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS	MICRO: -MINIMAL -MINIMAL -MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE -ALVEOLI: ERYTHROCYTES -ALVEOLI: MACROPHAGES
MEDIASTINAL LN	MICRO: -MINIMAL -SLIGHT	-SINUSES: ERYTHROCYTES -RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
MESENTERIC LN	MICRO: -MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
OVARY	MICRO: -MINIMAL	-B/ BROWN PIGMENT
PANCREAS	MICRO: -MINIMAL	-LYMPHOID CELL INFILTRATE
PARATHYROID GL	HISTOPATHOLOGICAL COMMENT:	>ONE PARATHYROID
SPLEEN	MICRO: -SLIGHT -MODERATE	-CONGESTION -RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
STOMACH	MICRO: -MINIMAL -MINIMAL -MINIMAL -MINIMAL	-EOSINOPHIL INFILTRATE -LYMPHOID CELL INFILTRATE -GLAND(S): DILATATION/CYST -MUCOSA: HEMORRHAGE
THYROID GLAND	MICRO: -PRESENT	-U/ SQUAMOUS CYST(S)
TRACHEA	MICRO: -MINIMAL	-LYMPHOID CELL INFILTRATE
UTERUS	MICRO -MODERATE -MINIMAL -MINIMAL	-EOSINOPHILIC INFILTRATE -RETICULOENDOTHELIAL CELLS: BROWN PIGMENT -LYMPHOID CELL INFILTRATE
VAGINA	MICRO -SLIGHT	-ACUTE/SUBACUTE INFLAMMATION

*** PATH/TOX SYSTEM OUTPUT ***
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION
INDIVIDUAL ANIMAL DATA SHEET

STUDY NUMBER: 962459

ANIMAL NUMBER: 1504 SEX: FEMALE DOSE GROUP: 1 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 283.4 GRAMS

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

THE FOLLOWING TISSUES HAD NO MICROSCOPIC ABNORMALITIES OBSERVED:
ADRENAL GLAND, BRAIN, CECUM, CERVICAL SC, COLON, DUODENUM, ESOPHAGUS, EYE, FEMORAL MARROW, FEMUR, HEART, ILEUM, JEJUNUM, LOW COLON/RECTUM, MAMMARY GLAND, NERVE, OPTIC NERVE, PARATHYROID GL, PITUITARY GLAND, SALIVARY GLAND, SKELETAL MUSCLE, STERNAL MARROW, STERNUM, THORACIC AORTA, THORACIC SC, THYMUS, URINARY BLADDER, ZYMBAL'S GLAND

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 1505 SEX: FEMALE DOSE GROUP: 1 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 300.1 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
HEART	MICRO: -MINIMAL	-NECROSIS
KIDNEY	MICRO: -MINIMAL	-U/ LYMPHOID CELL INFILTRATE
	-MINIMAL	-B/ MINERAL DEPOSIT
LACRIMAL GLAND	MICRO: -MINIMAL	-U/ LYMPHOID CELL INFILTRATE
LIVER	MICRO: -MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS	MICRO: -SLIGHT	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-SLIGHT	-PULMONARY ARTERY: MINERAL DEPOSIT
	-MINIMAL	-ALVEOLI: ERYTHROCYTES
	-SLIGHT	-ALVEOLI: MACROPHAGES
MEDIASTINAL LN	MICRO: -SLIGHT	-SINUSES: ERYTHROCYTES
	-MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
OVARY	MICRO: -MINIMAL	-B/ BROWN PIGMENT
PARATHYROID GL	HISTOPATHOLOGICAL COMMENT:	>ONE PARATHYROID
SPLEEN	MICRO: -MODERATE	-CONGESTION
	-MODERATE	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
STOMACH	MICRO: -MINIMAL	-EOSINOPHIL INFILTRATE
	-MINIMAL	-LYMPHOID CELL INFILTRATE
	-SLIGHT	-GLAND(S): DILATATION/CYST
TRACHEA	MICRO: -MINIMAL	-LYMPHOID CELL INFILTRATE
UTERUS	MICRO: -SLIGHT	-EOSINOPHILIC INFILTRATE
	-MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
	-MODERATE	-HYDROMETRA
	-MINIMAL	-LYMPHOID CELL INFILTRATE
VAGINA	MICRO -SLIGHT	-ACUTE/SUBACUTE INFLAMMATION

ANIMAL NUMBER: 1505 SEX: FEMALE DOSE GROUP: 1 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 300.1 GRAMS

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

THE FOLLOWING TISSUES HAD NO MICROSCOPIC ABNORMALITIES OBSERVED:
ADRENAL GLAND, BRAIN, CECUM, CERVICAL SC, COLON, DUODENUM, ESOPHAGUS, EYE, FEMORAL MARROW, FEMUR, ILEUM, JEJUNUM, LOW COLON/RECTUM, MAMMARY GLAND, MESENTERIC LN, NERVE, OPTIC NERVE, PANCREAS, PARATHYROID GL, PITUITARY GLAND, SALIVARY GLAND, SKELETAL MUSCLE, STERNAL MARROW, STERNUM, THORACIC AORTA, THORACIC SC, THYMUS, THYROID GLAND, URINARY BLADDER, ZYMBAL'S GLAND

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 1506 SEX: FEMALE DOSE GROUP: 1 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 281.9 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
COLON		
	MICRO: -PRESENT	-LUMEN: NEMATODE PARASITE
HEART		
	MICRO: -MINIMAL	-LYMPHOID CELL INFILTRATE
KIDNEY		
	MICRO: -MINIMAL	-B/ LYMPHOID CELL INFILTRATE
LACRIMAL GLAND		
	HISTOPATHOLOGICAL COMMENT:	>ONE LACRIMAL GLAND
LIVER		
	MICRO: -MINIMAL	-PERIPORTAL HEPATOCYTES: CYTOPLASMIC VACUOLATION
	-MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS		
	MICRO: -SLIGHT	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-SLIGHT	-PULMONARY ARTERY: MINERAL DEPOSIT
	-MINIMAL	-ALVEOLI: ERYTHROCYTES
	-SLIGHT	-ALVEOLI: MACROPHAGES
	-SLIGHT	-ACUTE/SUBACUTE INFLAMMATION
MEDIASTINAL LN		
	MICRO: -MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
OVARY		
	MICRO: -MINIMAL	-B/ BROWN PIGMENT
PARATHYROID GL		
	HISTOPATHOLOGICAL COMMENT:	>ONE PARATHYROID
SPLEEN		
	MICRO: -SLIGHT	-CONGESTION
	-SLIGHT	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
STOMACH		
	MICRO: -MINIMAL	-EOSINOPHIL INFILTRATE
	-MINIMAL	-LYMPHOID CELL INFILTRATE
THYMUS		
	MICRO: -MINIMAL	-HEMORRHAGE
TRACHEA		
	MICRO: -MINIMAL	-LYMPHOID CELL INFILTRATE
UTERUS		
	MICRO: -MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
	-SLIGHT	-ACUTE/SUBACUTE INFLAMMATION
VAGINA		
	MICRO -MINIMAL	-ACUTE/SUBACUTE INFLAMMATION

ANIMAL NUMBER: 1506 SEX: FEMALE DOSE GROUP: 1 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 281.9 GRAMS

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

THE FOLLOWING TISSUES HAD NO MICROSCOPIC ABNORMALITIES OBSERVED:
ADRENAL GLAND, BRAIN, CECUM, CERVICAL SC, DUODENUM, ESOPHAGUS, EYE, FEMORAL MARROW, FEMUR, ILEUM, JEJUNUM, LACRIMAL GLAND, LOW COLON/RECTUM, MAMMARY GLAND, MESENTERIC LN, NERVE, OPTIC NERVE, PANCREAS, PARATHYROID GL, PITUITARY GLAND, SALIVARY GLAND, SKELETAL MUSCLE, STERNAL MARROW, STERNUM, THORACIC AORTA, THORACIC SC, THYROID GLAND, URINARY BLADDER, ZYMBAL'S GLAND

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 1507 SEX: FEMALE DOSE GROUP: 1 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 285.8 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
EXTREMITY	MICRO: -MINIMAL	-B/ FORELIMBS: LYMPHOID CELL INFILTRATE
	-MINIMAL	-B/ FORELIMBS: ACANTHOSIS
GROSS-MICRO COR1	MICRO:	HISTOPATHOLOGICAL COMMENT: >HAIR THIN, BOTH FORELIMBS=NMC.
LACRIMAL GLAND		HISTOPATHOLOGICAL COMMENT: >ONE LACRIMAL GLAND
LIVER	MICRO: -SLIGHT	-PERIPORTAL HEPATOCYTES: CYTOPLASMIC VACUOLATION
	-MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS	MICRO: -MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-ALVEOLI: ERYTHROCYTES
	-MINIMAL	-ALVEOLI: MACROPHAGES
MEDIASTINAL LN	MICRO: -MODERATE	-SINUSES: ERYTHROCYTES
	-MODERATE	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
MESENTERIC LN	MICRO: -MINIMAL	-SINUSES: ERYTHROCYTES
	-SLIGHT	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
OPTIC NERVE	MICRO: -SLIGHT	-U/ HEMORRHAGE
OVARY	MICRO: -MINIMAL	-B/ BROWN PIGMENT
PANCREAS	MICRO: -MINIMAL	-LYMPHOID CELL INFILTRATE
	-MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
SKIN	GROSS: -HAIR ABSENT/THIN, SLIGHT	-HAIR THIN, BOTH FORELIMBS
SPLEEN	MICRO: -SLIGHT	-CONGESTION
	-MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
STOMACH	MICRO -SLIGHT	-EOSINOPHIL INFILTRATE
	-MINIMAL	-LYMPHOID CELL INFILTRATE
	-MINIMAL	-MUCOSA HEMORRHAGE
THYMUS	M..R. M.D.RA.	-HEMORRHAGE
THYROID GLAND	M..R. PRESENT	-U/ SQUAMOUS CYST(S)

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ANIMAL NUMBER: 1507 SEX: FEMALE DOSE GROUP: 1 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 285.8 GRAMS

*** PATHOLOGY OBSERVATIONS (CONTINUED) ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
TRACHEA	MICRO: -MINIMAL	-LYMPHOID CELL INFILTRATE
URINARY BLADDER	MICRO: -MINIMAL	-LYMPHOID CELL INFILTRATE
UTERUS	MICRO: -SLIGHT	-EOSINOPHILIC INFILTRATE
	-MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
	-MARKED	-HYDROMETRA
	-MINIMAL	-LYMPHOID CELL INFILTRATE
VAGINA	MICRO: -SLIGHT	-ACUTE/SUBACUTE INFLAMMATION

THE FOLLOWING TISSUES HAD NO MICROSCOPIC ABNORMALITIES OBSERVED:
ADRENAL GLAND, BRAIN, CECUM, CERVICAL SC, COLON, DUODENUM, ESOPHAGUS, EYE, FEMORAL MARROW, FEMUR, HEART, ILEUM, JEJUNUM, KIDNEY, LACRIMAL GLAND, LOW COLON/RECTUM, MAMMARY GLAND, NERVE, PARATHYROID GL, PITUITARY GLAND, SALIVARY GLAND, SKELETAL MUSCLE, STERNAL MARROW, STERNUM, THORACIC AORTA, THORACIC SC, ZYMBAL'S GLAND

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 1508 SEX: FEMALE DOSE GROUP: 1 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 260.9 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
KIDNEY	MICRO: -MINIMAL	-B/ LYMPHOID CELL INFILTRATE
LACRIMAL GLAND	HISTOPATHOLOGICAL COMMENT:	>ONE LACRIMAL GLAND
LIVER	MICRO: -MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS	MICRO: -MINIMAL -SLIGHT -MINIMAL -MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE -PULMONARY ARTERY: MINERAL DEPOSIT -ALVEOLI: ERYTHROCYTES -ALVEOLI: BONE SPICULE
MEDIASTINAL LN	MICRO: -MINIMAL -SLIGHT	-SINUSES: ERYTHROCYTES -RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
MESENTERIC LN	MICRO: -MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
OVARY	MICRO: -MINIMAL	-B/ BROWN PIGMENT
PANCREAS	MICRO: -MINIMAL	-LYMPHOID CELL INFILTRATE
PARATHYROID GL	HISTOPATHOLOGICAL COMMENT:	>ONE PARATHYROID
SPLEEN	MICRO: -SLIGHT -MODERATE	-CONGESTION -RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
STOMACH	MICRO: -MINIMAL -MINIMAL	-EOSINOPHIL INFILTRATE -LYMPHOID CELL INFILTRATE
THYMUS	MICRO: -MINIMAL	-HEMORRHAGE
THYROID GLAND	MICRO: -PRESENT	-U/ SQUAMOUS CYST(S)
TRACHEA	MICRO -MINIMAL	-LYMPHOID CELL INFILTRATE
[illegible]	[illegible]	-EOSINOPHILIC INFILTRATE -RETICULOENDOTHELIAL CELLS BROWN PIGMENT -LYMPHOID CELL INFILTRATE
[illegible]	[illegible]	ACUTE/SUBACUTE INFLAMMATION

BEST COPY AVAILABLE

ANIMAL NUMBER: 1508 SEX: FEMALE DOSE GROUP: 1 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 260.9 GRAMS

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

THE FOLLOWING TISSUES HAD NO MICROSCOPIC ABNORMALITIES OBSERVED:
ADRENAL GLAND, BRAIN, CECUM, CERVICAL SC, COLON, DUODENUM, ESOPHAGUS, EYE, FEMORAL MARROW, FEMUR, HEART, ILEUM, JEJUNUM, LACRIMAL GLAND, LOW COLON/RECTUM, MAMMARY GLAND, NERVE, OPTIC NERVE, PARATHYROID GL, PITUITARY GLAND, SALIVARY GLAND, SKELETAL MUSCLE, STERNAL MARROW, STERNUM, THORACIC AORTA, THORACIC SC, URINARY BLADDER, ZYMBAL'S GLAND

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 1509 SEX: FEMALE DOSE GROUP: 1 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 312.9 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
KIDNEY		
	MICRO: -MINIMAL	-B/ LYMPHOID CELL INFILTRATE
LIVER		
	MICRO: -MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS		
	MICRO: -MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-PULMONARY ARTERY: MINERAL DEPOSIT
	-MINIMAL	-ALVEOLI: MACROPHAGES
MEDIASTINAL LN		
	MICRO: -MINIMAL	-SINUSES: ERYTHROCYTES
	-MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
MESENTERIC LN		
	MICRO: -MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
OVARY		
	MICRO: -MINIMAL	-B/ BROWN PIGMENT
SPLEEN		
	MICRO: -SLIGHT	-CONGESTION
	-SLIGHT	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
STOMACH		
	MICRO: -MINIMAL	-EOSINOPHIL INFILTRATE
	-MINIMAL	-LYMPHOID CELL INFILTRATE
	-MINIMAL	-MUCOSA: HEMORRHAGE
THYMUS		
	MICRO: -MINIMAL	-HEMORRHAGE
TRACHEA		
	MICRO: -MINIMAL	-LYMPHOID CELL INFILTRATE
UTERUS		
	MICRO: -MODERATE	-EOSINOPHILIC INFILTRATE
	-MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
	-MODERATE	-HYDROMETRA
	-SLIGHT	-LYMPHOID CELL INFILTRATE
VAGINA		
	MICRO: -SLIGHT	-ACUTE/SUBACUTE INFLAMMATION

ANIMAL NUMBER: 1509 SEX: FEMALE DOSE GROUP: 1 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 312.9 GRAMS

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

THE FOLLOWING TISSUES HAD NO MICROSCOPIC ABNORMALITIES OBSERVED:
ADRENAL GLAND, BRAIN, CECUM, CERVICAL SC, COLON, DUODENUM, ESOPHAGUS, EYE, FEMORAL MARROW, FEMUR, HEART, ILEUM, JEJUNUM, LACRIMAL GLAND, LOW COLON/RECTUM, MAMMARY GLAND, NERVE, OPTIC NERVE, PANCREAS, PARATHYROID GL, PITUITARY GLAND, SALIVARY GLAND, SKELETAL MUSCLE, STERNAL MARROW, STERNUM, THORACIC AORTA, THORACIC SC, THYROID GLAND, URINARY BLADDER, ZYMBAL'S GLAND

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 1510 SEX: FEMALE DOSE GROUP: 1 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 309.9 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
KIDNEY		
	MICRO: -MINIMAL	-B/ LYMPHOID CELL INFILTRATE
	-MINIMAL	-U/ MINERAL DEPOSIT
LIVER		
	MICRO: -MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS		
	MICRO: -MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-ALVEOLI: ERYTHROCYTES
	-MINIMAL	-ALVEOLI: MACROPHAGES
MEDIASTINAL LN		
	MICRO: -MINIMAL	-SINUSES: ERYTHROCYTES
MESENTERIC LN		
	MICRO: -MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
OVARY		
	MICRO: -SLIGHT	-B/ BROWN PIGMENT
SPLEEN		
	MICRO: -SLIGHT	-CONGESTION
	-MODERATE	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
STOMACH		
	MICRO: -SLIGHT	-EOSINOPHIL INFILTRATE
	-SLIGHT	-LYMPHOID CELL INFILTRATE
THYROID GLAND		
	MICRO: -PRESENT	-U/ SQUAMOUS CYST(S)
UTERUS		
	MICRO: -SLIGHT	-EOSINOPHILIC INFILTRATE
	-MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
	-SLIGHT	-HEMORRHAGE
	-MINIMAL	-LYMPHOID CELL INFILTRATE
VAGINA		
	MICRO: -SLIGHT	-ACUTE/SUBACUTE INFLAMMATION

ANIMAL NUMBER: 1510 SEX: FEMALE DOSE GROUP: 1 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 309.9 GRAMS

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

THE FOLLOWING TISSUES HAD NO MICROSCOPIC ABNORMALITIES OBSERVED:
ADRENAL GLAND, BRAIN, CECUM, CERVICAL SC, COLON, DUODENUM, ESOPHAGUS, EYE, FEMORAL MARROW, FEMUR, HEART, ILEUM, JEJUNUM, LACRIMAL GLAND, LOW COLON/RECTUM, MAMMARY GLAND, NERVE, OPTIC NERVE, PANCREAS, PARATHYROID GL, PITUITARY GLAND, SALIVARY GLAND, SKELETAL MUSCLE, STERNAL MARROW, STERNUM, THORACIC AORTA, THORACIC SC, THYMUS, TRACHEA, URINARY BLADDER, ZYMBAL'S GLAND

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 1511 SEX: FEMALE DOSE GROUP: 1 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 272.2 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
ESOPHAGUS	MICRO: -SLIGHT	-CHRONIC INFLAMMATION
KIDNEY	MICRO: -MINIMAL	-B/ LYMPHOID CELL INFILTRATE
	-MINIMAL	-U/ TUBULAR ATROPHY
LIVER	MICRO: -MINIMAL	-PERIPORTAL HEPATOCYTES: CYTOPLASMIC VACUOLATION
	-MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS	MICRO: -MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-PULMONARY ARTERY: MINERAL DEPOSIT
MEDIASTINAL LN	MICRO: -MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
MESENTERIC LN	MICRO: -MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
OVARY	MICRO: -MINIMAL	-B/ BROWN PIGMENT
PARATHYROID GL	HISTOPATHOLOGICAL COMMENT: >ONE PARATHYROID	
SPLEEN	MICRO: -SLIGHT	-CONGESTION
	-SLIGHT	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
STOMACH	MICRO: -MINIMAL	-EOSINOPHIL INFILTRATE
	-MINIMAL	-LYMPHOID CELL INFILTRATE
	-MINIMAL	-GLAND(S): DILATATION/CYST
THYMUS	MICRO: -MINIMAL	-HEMORRHAGE
THYROID GLAND	MICRO: -PRESENT	-U/ SQUAMOUS CYST(S)
TRACHEA	MICRO: -SLIGHT	-LYMPHOID CELL INFILTRATE
UTERUS	MICRO: -SLIGHT	-EOSINOPHILIC INFILTRATE
	-MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
	-MINIMAL	-LYMPHOID CELL INFILTRATE
VAGINA	MICRO -SLIGHT	-ACUTE/SUBACUTE INFLAMMATION

ANIMAL NUMBER: 1511 SEX: FEMALE DOSE GROUP: 1 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 272.2 GRAMS

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

THE FOLLOWING TISSUES HAD NO MICROSCOPIC ABNORMALITIES OBSERVED:
ADRENAL GLAND, BRAIN, CECUM, CERVICAL SC, COLON, DUODENUM, EYE, FEMORAL MARROW, FEMUR, HEART, ILEUM, JEJUNUM, LACRIMAL GLAND, LOW COLON/RECTUM, MAMMARY GLAND, NERVE, OPTIC NERVE, PANCREAS, PARATHYROID GL, PITUITARY GLAND, SALIVARY GLAND, SKELETAL MUSCLE, STERNAL MARROW, STERNUM, THORACIC AORTA, THORACIC SC, URINARY BLADDER, ZYMBAL'S GLAND

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 1512 SEX: FEMALE DOSE GROUP: 1 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 288.6 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
KIDNEY		
	MICRO: -MINIMAL	-B/ LYMPHOID CELL INFILTRATE
LIVER		
	MICRO: -MINIMAL	-PERIPORTAL HEPATOCYTES: CYTOPLASMIC VACUOLATION
	-MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS		
	MICRO: -MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-ALVEOLI: ERYTHROCYTES
	-MINIMAL	-ALVEOLI: MACROPHAGES
	-MINIMAL	-ACUTE/SUBACUTE INFLAMMATION
MEDIASTINAL LN		
	MICRO: -MINIMAL	-SINUSES: ERYTHROCYTES
	-SLIGHT	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
	-MODERATE	-PLASMA CELL HYPERPLASIA
OVARY		
	MICRO: -MINIMAL	-B/ BROWN PIGMENT
SPLEEN		
	MICRO: -SLIGHT	-CONGESTION
	-MODERATE	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
STOMACH		
	MICRO: -SLIGHT	-EOSINOPHIL INFILTRATE
	-MINIMAL	-LYMPHOID CELL INFILTRATE
THYMUS		
	MICRO: -MINIMAL	-HEMORRHAGE
TRACHEA		
	MICRO: -MINIMAL	-LYMPHOID CELL INFILTRATE
UTERUS		
	MICRO: -MINIMAL	-EOSINOPHILIC INFILTRATE
	-MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
VAGINA		
	MICRO: -MODERATE	-ACUTE/SUBACUTE INFLAMMATION

ANIMAL NUMBER: 1512 SEX: FEMALE DOSE GROUP: 1 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 288.6 GRAMS

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

THE FOLLOWING TISSUES HAD NO MICROSCOPIC ABNORMALITIES OBSERVED:
ADRENAL GLAND, BRAIN, CECUM, CERVICAL SC, COLON, DUODENUM, ESOPHAGUS, EYE, FEMORAL MARROW, FEMUR, HEART, ILEUM, JEJUNUM, LACRIMAL GLAND, LOW COLON/RECTUM, MAMMARY GLAND, MESENTERIC LN, NERVE, OPTIC NERVE, PANCREAS, PARATHYROID GL, PITUITARY GLAND, SALIVARY GLAND, SKELETAL MUSCLE, STERNAL MARROW, STERNUM, THORACIC AORTA, THORACIC SC, THYROID GLAND, URINARY BLADDER, ZYMBAL'S GLAND

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 1513 SEX: FEMALE DOSE GROUP: 1 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 270.5 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
KIDNEY	MICRO: -MINIMAL	-B/ LYMPHOID CELL INFILTRATE
	-MINIMAL	-U/ MINERAL DEPOSIT
	-SLIGHT	-U/ HYDRONEPHROSIS
LIVER	MICRO: -MINIMAL	-PERIPORTAL HEPATOCYTES: CYTOPLASMIC VACUOLATION
	-MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS	MICRO: -MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-PULMONARY ARTERY: MINERAL DEPOSIT
	-MINIMAL	-ALVEOLI: MACROPHAGES
MEDIASTINAL LN	MICRO: -MINIMAL	-SINUSES: ERYTHROCYTES
	-MODERATE	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
OVARY	MICRO: -MINIMAL	-B/ BROWN PIGMENT
PARATHYROID GL	HISTOPATHOLOGICAL COMMENT:	>ONE PARATHYROID
SPLEEN	MICRO: -MODERATE	-CONGESTION
	-SLIGHT	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
STOMACH	MICRO: -SLIGHT	-NONGLANDULAR: ACUTE/SUBACUTE INFLAMMATION
	-SLIGHT	-EOSINOPHIL INFILTRATE
	-MINIMAL	-LYMPHOID CELL INFILTRATE
THYROID GLAND	MICRO: -PRESENT	-U/ SQUAMOUS CYST(S)
TRACHEA	MICRO: -MINIMAL	-LYMPHOID CELL INFILTRATE
URINARY BLADDER	MICRO: -MINIMAL	-LYMPHOID CELL INFILTRATE
UTERUS	MICRO -SLIGHT	-EOSINOPHILIC INFILTRATE
	-MINIMAL	-LYMPHOID CELL INFILTRATE
VAGINA	[illegible]	-ACUTE/SUBACUTE INFLAMMATION

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ANIMAL NUMBER: 1513 SEX: FEMALE DOSE GROUP: 1 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 270.5 GRAMS

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

THE FOLLOWING TISSUES HAD NO MICROSCOPIC ABNORMALITIES OBSERVED:
ADRENAL GLAND, BRAIN, CECUM, CERVICAL SC, COLON, DUODENUM, ESOPHAGUS, EYE, FEMORAL MARROW, FEMUR, HEART, ILEUM, JEJUNUM, LACRIMAL GLAND, LOW COLON/RECTUM, MAMMARY GLAND, MESENTERIC LN, NERVE, OPTIC NERVE, PANCREAS, PARATHYROID GL, PITUITARY GLAND, SALIVARY GLAND, SKELETAL MUSCLE, STERNAL MARROW, STERNUM, THORACIC AORTA, THORACIC SC, THYMUS, ZYMBAL'S GLAND

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 1514 SEX: FEMALE DOSE GROUP: 1 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 263.5 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
COLON		
	MICRO: -PRESENT	-LUMEN: NEMATODE PARASITE
ESOPHAGUS		
	MICRO: -MINIMAL	-LYMPHOID CELL INFILTRATE
KIDNEY		
	MICRO: -MINIMAL	-B/ LYMPHOID CELL INFILTRATE
LIVER		
	MICRO: -SLIGHT	-PERIPORTAL HEPATOCYTES: CYTOPLASMIC VACUOLATION
	-MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LOW COLON/RECTUM		
	MICRO: -PRESENT	-LUMEN: NEMATODE PARASITE
	-MINIMAL	-HEMORRHAGE
LUNGS		
	MICRO: -SLIGHT	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-PULMONARY ARTERY: MINERAL DEPOSIT
MEDIASTINAL LN		
	MICRO: -SLIGHT	-SINUSES: ERYTHROCYTES
	-SLIGHT	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
OVARY		
	MICRO: -MINIMAL	-B/ BROWN PIGMENT
PANCREAS		
	MICRO: -MINIMAL	-LYMPHOID CELL INFILTRATE
PARATHYROID GL		
	HISTOPATHOLOGICAL COMMENT:	>ONE PARATHYROID
SPLEEN		
	MICRO: -SLIGHT	-CONGESTION
	-MODERATE	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
STOMACH		
	MICRO: -MINIMAL	-EOSINOPHIL INFILTRATE
	-MINIMAL	-LYMPHOID CELL INFILTRATE
	-MINIMAL	-GLAND(S): DILATATION/CYST
THYMUS		
	MICRO: -MINIMAL	-HEMORRHAGE
THYROID GLAND		
	MICRO: -PRESENT	-U/ SQUAMOUS CYST(S)
TRACHEA		
	MICRO: -MINIMAL	-LYMPHOID CELL INFILTRATE
UTERUS		
	MICRO: -SLIGHT	-EOSINOPHILIC INFILTRATE
	-MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
	-MINIMAL	-LYMPHOID CELL INFILTRATE

ANIMAL NUMBER: 1514 SEX: FEMALE DOSE GROUP: 1 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 263.5 GRAMS

*** PATHOLOGY OBSERVATIONS (CONTINUED) ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
VAGINA	MICRO: -SLIGHT	-ACUTE/SUBACUTE INFLAMMATION

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

THE FOLLOWING TISSUES HAD NO MICROSCOPIC ABNORMALITIES OBSERVED:
ADRENAL GLAND, BRAIN, CECUM, CERVICAL SC, DUODENUM, EYE, FEMORAL MARROW, FEMUR, HEART, ILEUM, JEJUNUM, LACRIMAL GLAND, MAMMARY GLAND, MESENTERIC LN, NERVE, OPTIC NERVE, PARATHYROID GL, PITUITARY GLAND, SALIVARY GLAND, SKELETAL MUSCLE, STERNAL MARROW, STERNUM, THORACIC AORTA, THORACIC SC, URINARY BLADDER, ZYMBAL'S GLAND

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 1515 SEX: FEMALE DOSE GROUP: 1 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 267.9 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
GROSS-MICRO COR1	MICRO: HISTOPATHOLOGICAL COMMENT:	>TAN FOCUS, MEDIAN LOBE, LIVER=TENSION LIPIDOSIS.
HEART	MICRO: -MINIMAL	-LYMPHOID CELL INFILTRATE
KIDNEY	MICRO: -PRESENT	-U/ CYST(S)
LIVER	GROSS: -DISCOLORED-FOCUS(FOCI) MICRO: -MINIMAL -SLIGHT	-MEDIAN LOBE: 0.3 CM DIA, TAN, AT CLEFT -EXTRAMEDULLARY HEMATOPOIESIS -TENSION LIPIDOSIS
LUNGS	MICRO: -SLIGHT -MINIMAL -MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE -PULMONARY ARTERY: MINERAL DEPOSIT -ALVEOLI: MACROPHAGES
MEDIASTINAL LN	MICRO: -MINIMAL -MINIMAL	-SINUSES: ERYTHROCYTES -RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
OVARY	MICRO: -MINIMAL	-B/ BROWN PIGMENT
PARATHYROID GL	MICRO: -TISSUE MISSING	
SPLEEN	MICRO: -MARKED -SLIGHT	-CONGESTION -RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
STOMACH	MICRO: -MINIMAL -MINIMAL	-EOSINOPHIL INFILTRATE -GLAND(S): DILATATION/CYST
THYMUS	MICRO: -MINIMAL	-HEMORRHAGE
UTERUS	MICRO: -SLIGHT -MINIMAL -MARKED -MINIMAL	-EOSINOPHILIC INFILTRATE -RETICULOENDOTHELIAL CELLS: BROWN PIGMENT -HYDROMETRA -LYMPHOID CELL INFILTRATE
VAGINA	MICRO -SLIGHT	-ACUTE/SUBACUTE INFLAMMATION

ANIMAL NUMBER: 1515 SEX: FEMALE DOSE GROUP: 1 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 267.9 GRAMS

THE FOLLOWING TISSUES HAD NO MICROSCOPIC ABNORMALITIES OBSERVED:
ADRENAL GLAND, BRAIN, CECUM, CERVICAL SC, COLON, DUODENUM, ESOPHAGUS, EYE, FEMORAL MARROW, FEMUR, ILEUM, JEJUNUM, LACRIMAL GLAND, LOW COLON/RECTUM, MAMMARY GLAND, MESENTERIC LN, NERVE, OPTIC NERVE, PANCREAS, PITUITARY GLAND, SALIVARY GLAND, SKELETAL MUSCLE, STERNAL MARROW, STERNUM, THORACIC AORTA, THORACIC SC, THYROID GLAND, TRACHEA, URINARY BLADDER, ZYMBAL'S GLAND

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 1516 SEX: FEMALE DOSE GROUP: 1 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 258.3 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
KIDNEY	MICRO: -MINIMAL	-B/ LYMPHOID CELL INFILTRATE
LIVER	MICRO: -SLIGHT	-PERIPORTAL HEPATOCYTES: CYTOPLASMIC VACUOLATION
	-MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS	MICRO: -SLIGHT	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-ALVEOLI: ERYTHROCYTES
	-MINIMAL	-ALVEOLI: MACROPHAGES
MEDIASTINAL LN	MICRO: -MINIMAL	-SINUSES: ERYTHROCYTES
	-SLIGHT	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
OVARY	MICRO: -MINIMAL	-B/ BROWN PIGMENT
PARATHYROID GL	HISTOPATHOLOGICAL COMMENT:	>ONE PARATHYROID
SPLEEN	MICRO: -MODERATE	-CONGESTION
	-SLIGHT	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
STOMACH	MICRO: -MINIMAL	-EOSINOPHIL INFILTRATE
	-MINIMAL	-LYMPHOID CELL INFILTRATE
THYROID GLAND	MICRO: -PRESENT	-U/ SQUAMOUS CYST(S)
UTERUS	MICRO: -MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
	-MINIMAL	-ACUTE/SUBACUTE INFLAMMATION
VAGINA	MICRO: -SLIGHT	-ACUTE/SUBACUTE INFLAMMATION

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

THE FOLLOWING TISSUES HAD NO MICROSCOPIC ABNORMALITIES OBSERVED:
ADRENAL GLAND, BRAIN, CECUM, CERVICAL SC, COLON, DUODENUM, ESOPHAGUS, EYE, FEMORAL MARROW, FEMUR, HEART, ILEUM, JEJUNUM, LACRIMAL GLAND, LOW COLON/RECTUM, MAMMARY GLAND, MESENTERIC LN, NERVE, OPTIC NERVE, PANCREAS, PARATHYROID GL, PITUITARY GLAND, SALIVARY GLAND, SKELETAL MUSCLE, STERNAL MARROW, STERNUM, THORACIC AORTA, THORACIC SC, THYMUS, TRACHEA, URINARY BLADDER, ZYMBAL'S GLAND

KEY TO NEOPLASMS "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 1517 SEX: FEMALE DOSE GROUP: 1 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 305.7 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
ADRENAL GLAND		
	MICRO: HISTOPATHOLOGICAL COMMENT:	>ONE MEDULLA
ESOPHAGUS		
	MICRO: -MINIMAL	-CHRONIC INFLAMMATION
HEART		
	MICRO: -MINIMAL	-LYMPHOID CELL INFILTRATE
KIDNEY		
	MICRO: -MINIMAL	-U/ LYMPHOID CELL INFILTRATE
	-MINIMAL	-U/ TUBULAR ATROPHY
LACRIMAL GLAND		
	MICRO: -MINIMAL	-U/ LYMPHOID CELL INFILTRATE
LIVER		
	MICRO: -SLIGHT	-PERIPORTAL HEPATOCYTES: CYTOPLASMIC VACUOLATION
	-SLIGHT	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS		
	MICRO: -SLIGHT	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-PULMONARY ARTERY: MINERAL DEPOSIT
	-MINIMAL	-ALVEOLI: ERYTHROCYTES
	-MINIMAL	-ALVEOLI: MACROPHAGES
MEDIASTINAL LN		
	MICRO: -SLIGHT	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
OVARY		
	MICRO: -MINIMAL	-B/ BROWN PIGMENT
PANCREAS		
	MICRO: -MINIMAL	-LYMPHOID CELL INFILTRATE
PARATHYROID GL		
	HISTOPATHOLOGICAL COMMENT:	>ONE PARATHYROID
SPLEEN		
	MICRO: -MARKED	-CONGESTION
	-SLIGHT	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
STOMACH		
	MICRO: -MINIMAL	-EOSINOPHIL INFILTRATE
	-MINIMAL	-LYMPHOID CELL INFILTRATE
	-MINIMAL	-GLAND(S): DILATATION/CYST
UTERUS		
	MICRO -MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
	-SLIGHT	-ACUTE/SUBACUTE INFLAMMATION
VAGINA		
	MICRO -SLIGHT	-ACUTE/SUBACUTE INFLAMMATION

*** PATH/TOX SYSTEM OUTPUT ***
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION
INDIVIDUAL ANIMAL DATA SHEET

STUDY NUMBER: 962459

ANIMAL NUMBER: 1517 SEX: FEMALE DOSE GROUP: 1 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 305.7 GRAMS

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

THE FOLLOWING TISSUES HAD NO MICROSCOPIC ABNORMALITIES OBSERVED:
ADRENAL GLAND, BRAIN, CECUM, CERVICAL SC, COLON, DUODENUM, EYE, FEMORAL MARROW, FEMUR, ILEUM, JEJUNUM, LOW COLON/RECTUM
, MAMMARY GLAND, MESENTERIC LN, NERVE, OPTIC NERVE, PARATHYROID GL, PITUITARY GLAND, SALIVARY GLAND, SKELETAL MUSCLE,
STERNAL MARROW, STERNUM, THORACIC AORTA, THORACIC SC, THYMUS, THYROID GLAND, TRACHEA, URINARY BLADDER, ZYMBAL'S GLAND

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 1518 SEX: FEMALE DOSE GROUP: 1 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 377.9 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
KIDNEY	MICRO: -MINIMAL	-B/ LYMPHOID CELL INFILTRATE
LACRIMAL GLAND	HISTOPATHOLOGICAL COMMENT:	>ONE LACRIMAL GLAND
LIVER	MICRO: -MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS	MICRO: -SLIGHT	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-PULMONARY ARTERY: MINERAL DEPOSIT
	-MINIMAL	-ALVEOLI: ERYTHROCYTES
	-SLIGHT	-ALVEOLI: MACROPHAGES
	-SLIGHT	-SUBACUTE/CHRONIC INFLAMMATION
MEDIASTINAL LN	MICRO: -MINIMAL	-SINUSES: ERYTHROCYTES
	-MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
	-MODERATE	-PLASMA CELL HYPERPLASIA
MESENTERIC LN	MICRO: -MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
OVARY	MICRO: -MINIMAL	-B/ BROWN PIGMENT
PANCREAS	MICRO: -MINIMAL	-LYMPHOID CELL INFILTRATE
SPLEEN	MICRO: -SLIGHT	-CONGESTION
	-MODERATE	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
STOMACH	MICRO: -MINIMAL	-NONGLANDULAR: ACUTE/SUBACUTE INFLAMMATION
	-MINIMAL	-NONGLANDULAR: HEMORRHAGE
	-MINIMAL	-EOSINOPHIL INFILTRATE
THYMUS	MICRO: -MINIMAL	-HEMORRHAGE
TRACHEA	MICRO: -MINIMAL	-LYMPHOID CELL INFILTRATE
UTERUS	MICRO: -MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
	-SLIGHT	-ACUTE/SUBACUTE INFLAMMATION
VAGINA	MICRO: SLIGHT	-ACUTE/SUBACUTE INFLAMMATION
ZYMBAL'S GLAND	MICRO: -NEOPLASM PRESENT	-B-ADENOMA

A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION
INDIVIDUAL ANIMAL DATA SHEET

STUDY NUMBER: 962459

ANIMAL NUMBER: 1518 SEX: FEMALE DOSE GROUP: 1 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 377.9 GRAMS

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

THE FOLLOWING TISSUES HAD NO MICROSCOPIC ABNORMALITIES OBSERVED:
ADRENAL GLAND, BRAIN, CECUM, CERVICAL SC, COLON, DUODENUM, ESOPHAGUS, EYE, FEMORAL MARROW, FEMUR, HEART, ILEUM, JEJUNUM, LACRIMAL GLAND, LOW COLON/RECTUM, MAMMARY GLAND, NERVE, OPTIC NERVE, PARATHYROID GL, PITUITARY GLAND, SALIVARY GLAND, SKELETAL MUSCLE, STERNAL MARROW, STERNUM, THORACIC AORTA, THORACIC SC, THYROID GLAND, URINARY BLADDER

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 1519 SEX: FEMALE DOSE GROUP: 1 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 285.2 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
ADRENAL GLAND		
	GROSS: -SMALL, MODERATE	-LEFT
GROSS-MICRO COR1		
	MICRO: HISTOPATHOLOGICAL COMMENT:	>SMALL, LEFT ADRENAL GLAND=NMC.
KIDNEY		
	MICRO: -MINIMAL	-B/ LYMPHOID CELL INFILTRATE
	-MINIMAL	-U/ INTERSTITIAL FIBROSIS
LACRIMAL GLAND		
	HISTOPATHOLOGICAL COMMENT:	>ONE LACRIMAL GLAND
LIVER		
	MICRO: -MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS		
	MICRO: -MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
MEDIASTINAL LN		
	MICRO: -SLIGHT	-SINUSES: ERYTHROCYTES
	-SLIGHT	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
MESENTERIC LN		
	MICRO: -MINIMAL	-SINUSES: ERYTHROCYTES
OVARY		
	MICRO: -MINIMAL	-B/ BROWN PIGMENT
PARATHYROID GL		
	HISTOPATHOLOGICAL COMMENT:	>ONE PARATHYROID
SPLEEN		
	MICRO: -SLIGHT	-CONGESTION
	-MODERATE	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
STOMACH		
	MICRO: -SLIGHT	-EOSINOPHIL INFILTRATE
THYMUS		
	MICRO: -MINIMAL	-HEMORRHAGE
UTERUS		
	MICRO: -MODERATE	-EOSINOPHILIC INFILTRATE
	-MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
	-SLIGHT	-HYDROMETRA
	-SLIGHT	-LYMPHOID CELL INFILTRATE
VAGINA		
	MICRO -SLIGHT	-ACUTE/SUBACUTE INFLAMMATION
	-MODERATE	-SQUAMOUS CELL HYPERPLASIA

*** PATH/TOX SYSTEM OUTPUT ***
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION
INDIVIDUAL ANIMAL DATA SHEET

STUDY NUMBER: 962459

ANIMAL NUMBER: 1519 SEX: FEMALE DOSE GROUP: 1 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 285.2 GRAMS

THE FOLLOWING TISSUES HAD NO MICROSCOPIC ABNORMALITIES OBSERVED:
ADRENAL GLAND, BRAIN, CECUM, CERVICAL SC, COLON, DUODENUM, ESOPHAGUS, EYE, FEMORAL MARROW, FEMUR, HEART, ILEUM, JEJUNUM, LACRIMAL GLAND, LOW COLON/RECTUM, MAMMARY GLAND, NERVE, OPTIC NERVE, PANCREAS, PARATHYROID GL, PITUITARY GLAND, SALIVARY GLAND, SKELETAL MUSCLE, STERNAL MARROW, STERNUM, THORACIC AORTA, THORACIC SC, THYROID GLAND, TRACHEA, URINARY BLADDER, ZYMBAL'S GLAND

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

*** PATH/TOX SYSTEM OUTPUT ***
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION
INDIVIDUAL ANIMAL DATA SHEET

STUDY NUMBER: 962459

ANIMAL NUMBER: 1520 SEX: FEMALE DOSE GROUP: 1 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 293.8 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
KIDNEY	MICRO: -MINIMAL	-B/ LYMPHOID CELL INFILTRATE
LACRIMAL GLAND	MICRO: -MINIMAL	-U/ LYMPHOID CELL INFILTRATE HISTOPATHOLOGICAL COMMENT: >ONE LACRIMAL GLAND
LIVER	MICRO: -MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS	MICRO: -MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
MEDIASTINAL LN	MICRO: -MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
MESENTERIC LN	MICRO: -MINIMAL -MINIMAL	-SINUSES: ERYTHROCYTES -RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
OVARY	MICRO: -MINIMAL	-B/ BROWN PIGMENT
PANCREAS	MICRO: -MINIMAL	-LYMPHOID CELL INFILTRATE
SPLEEN	MICRO: -SLIGHT -MODERATE	-CONGESTION -RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
STOMACH	MICRO: -MINIMAL -MINIMAL	-EOSINOPHIL INFILTRATE -LYMPHOID CELL INFILTRATE
THYMUS	MICRO: -MINIMAL	-HEMORRHAGE
TRACHEA	MICRO: -MINIMAL	-LYMPHOID CELL INFILTRATE
UTERUS	MICRO: -SLIGHT -MINIMAL -MINIMAL	-EOSINOPHILIC INFILTRATE -RETICULOENDOTHELIAL CELLS: BROWN PIGMENT -LYMPHOID CELL INFILTRATE
VAGINA	MICRO: -SLIGHT -MARKED	-ACUTE/SUBACUTE INFLAMMATION -SQUAMOUS CELL HYPERPLASIA

ANIMAL NUMBER: 1520 SEX: FEMALE DOSE GROUP: 1 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 293.8 GRAMS

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

THE FOLLOWING TISSUES HAD NO MICROSCOPIC ABNORMALITIES OBSERVED:
ADRENAL GLAND, BRAIN, CECUM, CERVICAL SC, COLON, DUODENUM, ESOPHAGUS, EYE, FEMORAL MARROW, FEMUR, HEART, ILEUM, JEJUNUM, LOW COLON/RECTUM, MAMMARY GLAND, NERVE, OPTIC NERVE, PARATHYROID GL, PITUITARY GLAND, SALIVARY GLAND, SKELETAL MUSCLE, STERNAL MARROW, STERNUM, THORACIC AORTA, THORACIC SC, THYROID GLAND, URINARY BLADDER, ZYMBAL'S GLAND

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 2501 SEX: FEMALE DOSE GROUP: 2 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 263.9 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
KIDNEY		
	MICRO: -MINIMAL	-U/ LYMPHOID CELL INFILTRATE
	-MINIMAL	-B/ TUBULAR ATROPHY
	-MINIMAL	-U/ MINERAL DEPOSIT
	-MINIMAL	-U/ INTERSTITIAL FIBROSIS
LIVER		
	MICRO: -SLIGHT	-CENTRILOBULAR HEPATOCYTES: HYPERTROPHY
	-MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS		
	MICRO: -SLIGHT	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-ALVEOLI: ERYTHROCYTES
	-MINIMAL	-ALVEOLI: MACROPHAGES
	-MINIMAL	-SUBACUTE/CHRONIC INFLAMMATION

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 2502 SEX: FEMALE DOSE GROUP: 2 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 230.6 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
KIDNEY		
	MICRO: -MINIMAL	-U/ MINERAL DEPOSIT
	-PRESENT	-U/ CYST(S)
	-MINIMAL	-B/ TUBULES: PROTEINACEOUS CAST
LIVER		
	MICRO: -MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
	-SLIGHT, MULTI-FOCAL	-NECROSIS
LUNGS		
	MICRO: -MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-ALVEOLI: MACROPHAGES

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 2503 SEX: FEMALE DOSE GROUP: 2 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 235.9 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
EXTREMITY		
	MICRO: -MINIMAL	-B/ FORELIMBS: LYMPHOID CELL INFILTRATE
GROSS-MICRO COR1		
	MICRO: HISTOPATHOLOGICAL COMMENT:	>HAIR THIN, BOTH FORELIMBS=NMC.
KIDNEY		
	MICRO: -MINIMAL	-B/ CHRONIC NEPHROPATHY
	-MINIMAL	-U/ MINERAL DEPOSIT
LIVER		
	MICRO: -MINIMAL	-CENTRILOBULAR HEPATOCYTES: HYPERTROPHY
	-MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS		
	MICRO: -MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-ALVEOLI: ERYTHROCYTES
	-MINIMAL	-ALVEOLI: MACROPHAGES
SKIN		
	GROSS: -HAIR ABSENT/THIN, SLIGHT	-HAIR THIN, BOTH FORELIMBS

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 2504 SEX: FEMALE DOSE GROUP: 2 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 273.6 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
KIDNEY		
	MICRO: -MINIMAL	-B/ LYMPHOID CELL INFILTRATE
	-MINIMAL	-U/ TUBULAR ATROPHY
	-MINIMAL	-B/ MINERAL DEPOSIT
	-PRESENT	-U/ CYST(S)
	-SLIGHT	-U/ PELVIS: PURULENT EXUDATE
LIVER		
	MICRO: -MINIMAL	-CENTRILOBULAR HEPATOCYTES: HYPERTROPHY
	-MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS		
	MICRO: -MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-ALVEOLI: ERYTHROCYTES
	-MINIMAL	-ALVEOLI: MACROPHAGES
	-SLIGHT	-ACUTE/SUBACUTE INFLAMMATION

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 2505 SEX: FEMALE DOSE GROUP: 2 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 300.6 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
KIDNEY		
MICRO:	-MINIMAL	-U/ LYMPHOID CELL INFILTRATE
	-MINIMAL	-B/ TUBULAR ATROPHY
	-MINIMAL	-U/ MINERAL DEPOSIT
	-PRESENT	-U/ CYST(S)
LIVER		
MICRO:	-MINIMAL	-CENTRILOBULAR HEPATOCYTES: HYPERTROPHY
	-MINIMAL	-PERIPORTAL HEPATOCYTES: CYTOPLASMIC VACUOLATION
	-MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
	-MINIMAL	-TENSION LIPIDOSIS
LUNGS		
MICRO:	-MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-ALVEOLI: ERYTHROCYTES
	-SLIGHT	-ALVEOLI: MACROPHAGES

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 2506 SEX: FEMALE DOSE GROUP: 2 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 278.4 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
EXTREMITY		
	MICRO: -MINIMAL	-B/ FORELIMBS: LYMPHOID CELL INFILTRATE
GROSS-MICRO COR1		
	MICRO:	HISTOPATHOLOGICAL COMMENT: >HAIR THIN, BOTH FORELIMBS=NMC.
LIVER		
	MICRO: -MINIMAL	-CENTRILOBULAR HEPATOCYTES: HYPERTROPHY
	-MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS		
	MICRO: -SLIGHT	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-PULMONARY ARTERY: MINERAL DEPOSIT
	-MINIMAL	-ALVEOLI: ERYTHROCYTES
	-SLIGHT	-ALVEOLI: MACROPHAGES
SKIN		
	GROSS: -HAIR ABSENT/THIN, SLIGHT	-HAIR THIN, BOTH FORELIMBS

THE FOLLOWING TISSUES HAD NO MICROSCOPIC ABNORMALITIES OBSERVED:
KIDNEY

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 2507 SEX: FEMALE DOSE GROUP: 2 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 282.6 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
KIDNEY	MICRO: -MINIMAL	-U/ TUBULAR ATROPHY
	-MINIMAL	-B/ MINERAL DEPOSIT
LIVER	MICRO: -SLIGHT	-CENTRILOBULAR HEPATOCYTES: HYPERTROPHY
	-MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS	MICRO: -MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-ALVEOLI: ERYTHROCYTES
	-MINIMAL	-ALVEOLI: MACROPHAGES

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 2508 SEX: FEMALE DOSE GROUP: 2 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 320.3 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
GROSS-MICRO COR1		
MICRO:	HISTOPATHOLOGICAL COMMENT:	>DILATATION, PELVIS, LEFT KIDNEY=HYDRONEPHROSIS.
KIDNEY		
GROSS:	-DILATATION, SEVERE	-LEFT PELVIS
MICRO:	-MODERATE	-U/ HYDRONEPHROSIS
LIVER		
MICRO:	-MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS		
MICRO:	-MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 2509 SEX: FEMALE DOSE GROUP: 2 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 255.1 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
KIDNEY		
	MICRO: -MINIMAL	-B/ LYMPHOID CELL INFILTRATE
	-MINIMAL	-B/ TUBULAR ATROPHY
	-PRESENT	-U/ CYST(S)
LIVER		
	MICRO: -MINIMAL	-PERIPORTAL HEPATOCYTES: CYTOPLASMIC VACUOLATION
	-MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS		
	MICRO: -SLIGHT	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-ALVEOLI: ERYTHROCYTES
	-SLIGHT	-ALVEOLI: MACROPHAGES

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 2510 SEX: FEMALE DOSE GROUP: 2 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 302.3 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
KIDNEY		
	MICRO: -SLIGHT	-U/ PELVIS: MINERAL DEPOSIT
LIVER		
	MICRO: -MINIMAL	-PERIPORTAL HEPATOCYTES: CYTOPLASMIC VACUOLATION
	-MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS		
	MICRO: -MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-ALVEOLI: MACROPHAGES

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 2511 SEX: FEMALE DOSE GROUP: 2 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 281.9 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
GROSS-MICRO COR1		
	MICRO: HISTOPATHOLOGICAL COMMENT:	>TAN FOCI, LUNGS=ALVEOLAR MACROPHAGES.
KIDNEY		
	MICRO: -MINIMAL	-B/ MINERAL DEPOSIT
LIVER		
	MICRO: -SLIGHT	-CENTRILOBULAR HEPATOCYTES: HYPERTROPHY
	-MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS		
	GROSS: -DISCOLORED-FOCUS(FOCI), SLIGHT	-ALL LOBES: < 0.1 CM DIA, TAN
	MICRO: -SLIGHT	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-ALVEOLI: ERYTHROCYTES
	-SLIGHT	-ALVEOLI: MACROPHAGES
	-MINIMAL	-INTERSTITIUM: SUBACUTE/CHRONIC INFLAMMATION

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 2512 SEX: FEMALE DOSE GROUP: 2 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 314.2 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
KIDNEY		
	MICRO: -MINIMAL	-U/ LYMPHOID CELL INFILTRATE
	-MINIMAL	-U/ TUBULAR ATROPHY
	-MINIMAL	-U/ MINERAL DEPOSIT
LIVER		
	MICRO: -MINIMAL	-CENTRILOBULAR HEPATOCYTES: HYPERTROPHY
	-MINIMAL	-PERIPORTAL HEPATOCYTES: CYTOPLASMIC VACUOLATION
	-SLIGHT	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS		
	MICRO: -MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 2513 SEX: FEMALE DOSE GROUP: 2 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 357.0 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
KIDNEY	MICRO: -MINIMAL	-B/ LYMPHOID CELL INFILTRATE
LIVER	MICRO: -SLIGHT	-PERIPORTAL HEPATOCYTES: CYTOPLASMIC VACUOLATION
	-MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS	MICRO: -MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-PULMONARY ARTERY: MINERAL DEPOSIT
	-MINIMAL	-ALVEOLI: ERYTHROCYTES

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 2514 SEX: FEMALE DOSE GROUP: 2 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 296.6 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
EAR	GROSS: -SWOLLEN, SLIGHT	-BOTH
	-DISCOLORED, SLIGHT	-BOTH: RED
	MICRO: -SLIGHT	-B/ CONGESTION
	-MARKED	-B/ ACUTE/SUBACUTE INFLAMMATION
	-SLIGHT	-B/ HEMORRHAGE
	-MARKED	-B/ ACANTHOSIS
EXTREMITY	MICRO: -SLIGHT	-B/ FORELIMBS: LYMPHOID CELL INFILTRATE
	-SLIGHT	-B/ FORELIMBS: ACANTHOSIS
GROSS-MICRO COR1	MICRO: HISTOPATHOLOGICAL COMMENT:	>HAIR ABSENT, BOTH FORELIMBS=NMC. RED, EARS=CONGESTION, HEMORRHAGE. SWOLLEN, EARS=ACUTE/SUBACUTE INFLAMMATION.
KIDNEY	MICRO: -MINIMAL	-B/ MINERAL DEPOSIT
LIVER	MICRO: -MINIMAL	-CENTRILOBULAR HEPATOCYTES: HYPERTROPHY
	-MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS	MICRO: -MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-PULMONARY ARTERY: MINERAL DEPOSIT
	-MINIMAL	-ALVEOLI: MACROPHAGES
SKIN	GROSS: -HAIR ABSENT/THIN, MODERATE	-HAIR ABSENT, BOTH FORELIMBS

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 2515 SEX: FEMALE DOSE GROUP: 2 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 292.1 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
GROSS-MICRO COR1		
	MICRO: HISTOPATHOLOGICAL COMMENT:	>RED, SUBMANDIBULAR LYMPH NODE=HEMORRHAGE.
KIDNEY		
	MICRO: -MINIMAL	-U/ LYMPHOID CELL INFILTRATE
	-MINIMAL	-B/ MINERAL DEPOSIT
LIVER		
	MICRO: -MINIMAL	-CENTRILOBULAR HEPATOCYTES: HYPERTROPHY
	-MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS		
	MICRO: -MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
LYMPH NODE		
	GROSS: -DISCOLORED, SLIGHT	-SUBMANDIBULAR: RED
	MICRO: -MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
	-SLIGHT	-HEMORRHAGE
	HISTOPATHOLOGICAL COMMENT:	>SUBMANDIBULAR

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 2516 SEX: FEMALE DOSE GROUP: 2 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 348.0 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
LIVER		
	MICRO: -MINIMAL	-CENTRILOBULAR HEPATOCYTES: HYPERTROPHY
	-MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS		
	MICRO: -SLIGHT	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-PULMONARY ARTERY: MINERAL DEPOSIT
	-SLIGHT	-ALVEOLI: ERYTHROCYTES
	-MINIMAL	-ALVEOLI: MACROPHAGES

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

THE FOLLOWING TISSUES HAD NO MICROSCOPIC ABNORMALITIES OBSERVED:
KIDNEY

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 2517 SEX: FEMALE DOSE GROUP: 2 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 289.8 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
KIDNEY		
	MICRO: -MINIMAL	-B/ MINERAL DEPOSIT
	-PRESENT	-U/ CYST(S)
LIVER		
	MICRO: -MINIMAL	-CENTRILOBULAR HEPATOCYTES: HYPERTROPHY
	-MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS		
	MICRO: -MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-ALVEOLI: MACROPHAGES

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 2518 SEX: FEMALE DOSE GROUP: 2 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 264.5 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
KIDNEY		
	MICRO: -MINIMAL	-B/ LYMPHOID CELL INFILTRATE
	-MINIMAL	-U/ TUBULAR ATROPHY
	-MINIMAL	-U/ TUBULE(S): PROTEINACEOUS CAST
LIVER		
	MICRO: -SLIGHT	-CENTRILOBULAR HEPATOCYTES: HYPERTROPHY
	-MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS		
	MICRO: -SLIGHT	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-ALVEOLI: MACROPHAGES
	-SLIGHT	-ACUTE/SUBACUTE INFLAMMATION

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 2519 SEX: FEMALE DOSE GROUP: 2 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 311.7 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
KIDNEY		
	MICRO: -MINIMAL	-U/ LYMPHOID CELL INFILTRATE
	-MINIMAL	-B/ TUBULES: PROTEINACEOUS CAST
LIVER		
	MICRO: -MINIMAL	-CENTRILOBULAR HEPATOCYTES: HYPERTROPHY
	-SLIGHT	-PERIPORTAL HEPATOCYTES: CYTOPLASMIC VACUOLATION
	-MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS		
	MICRO: -SLIGHT	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-SLIGHT	-PULMONARY ARTERY: MINERAL DEPOSIT
	-MINIMAL	-ALVEOLI: MACROPHAGES

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 2520 SEX: FEMALE DOSE GROUP: 2 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 314.3 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
EAR		
GROSS:	-SWOLLEN, SLIGHT	-BOTH
MICRO:	-SLIGHT	-B/ CONGESTION
	-MODERATE	-B/ ACUTE/SUBACUTE INFLAMMATION
	-MODERATE	-B/ ACANTHOSIS
GROSS-MICRO COR1		
MICRO:	HISTOPATHOLOGICAL COMMENT:	>SWOLLEN, EARS=ACUTE/SUBACUTE INFLAMMATION.
LIVER		
MICRO:	-SLIGHT	-CENTRILOBULAR HEPATOCYTES: HYPERTROPHY
	-MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS		
MICRO:	-MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-ALVEOLI: ERYTHROCYTES
	-MINIMAL	-ALVEOLI: MACROPHAGES

THE FOLLOWING TISSUES HAD NO MICROSCOPIC ABNORMALITIES OBSERVED:
KIDNEY

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 3501 SEX: FEMALE DOSE GROUP: 3 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 280.7 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
GROSS-MICRO COR1		
	MICRO: HISTOPATHOLOGICAL COMMENT:	>TAN, MOTTLED, SPLEEN=NMC.
KIDNEY		
	MICRO: -MINIMAL	-B/ LYMPHOID CELL INFILTRATE
LIVER		
	MICRO: -MINIMAL	-CENTRILOBULAR HEPATOCYTES: HYPERTROPHY
	-MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS		
	MICRO: -MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-PULMONARY ARTERY: MINERAL DEPOSIT
	-MINIMAL	-ALVEOLI: ERYTHROCYTES
	-MINIMAL	-ALVEOLI: MACROPHAGES
	-SLIGHT	-ACUTE/SUBACUTE INFLAMMATION
SPLEEN		
	GROSS: -DISCOLORED, SLIGHT	-TAN, MOTTLED
	MICRO: -SLIGHT	-CONGESTION
	-MARKED	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 3502 SEX: FEMALE DOSE GROUP: 3 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 273.6 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
KIDNEY		
	MICRO: -MINIMAL	-B/ LYMPHOID CELL INFILTRATE
	-MINIMAL	-B/ INTERSTITIAL FIBROSIS
LIVER		
	MICRO: -MINIMAL	-CENTRILOBULAR HEPATOCYTES: HYPERTROPHY
	-MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS		
	MICRO: -MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-ALVEOLI: ERYTHROCYTES
	-MINIMAL	-ALVEOLI: MACROPHAGES

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 3503 SEX: FEMALE DOSE GROUP: 3 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 292.2 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
KIDNEY		
	MICRO: -MINIMAL	-B/ LYMPHOID CELL INFILTRATE
	-MINIMAL	-B/ MINERAL DEPOSIT
LIVER		
	MICRO: -MINIMAL	-CENTRILOBULAR HEPATOCYTES: HYPERTROPHY
	-SLIGHT	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS		
	MICRO: -MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-PULMONARY ARTERY: MINERAL DEPOSIT
	-SLIGHT	-ALVEOLI: MACROPHAGES
	-SLIGHT	-INTERSTITIUM: SUBACUTE/CHRONIC INFLAMMATION

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 3504 SEX: FEMALE DOSE GROUP: 3 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 279.7 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
GROSS-MICRO COR1		
MICRO:	HISTOPATHOLOGICAL COMMENT:	>RED FOCI, CARDIAC, DIAPHRAGMATIC, LEFT LOBES, LUNGS=ERYTHROCYTES IN ALVEOLI.
KIDNEY		
MICRO:	-MINIMAL	-U/ LYMPHOID CELL INFILTRATE
	-MINIMAL	-U/ MINERAL DEPOSIT
	-MINIMAL	-U/ INTERSTITIAL FIBROSIS
LIVER		
MICRO:	-MINIMAL	-CENTRILOBULAR HEPATOCYTES: HYPERTROPHY
	-MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS		
GROSS:	-DISCOLORED-FOCUS(FOCI), SLIGHT	-CARDIAC, DIAPHRAGMATIC AND LEFT LOBES: 0.1 CM DIA, RED
MICRO:	-MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-PULMONARY ARTERY: MINERAL DEPOSIT
	-MINIMAL	-ALVEOLI: ERYTHROCYTES
	-MINIMAL	-ALVEOLI: MACROPHAGES

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 3505 SEX: FEMALE DOSE GROUP: 3 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 276.9 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
GROSS-MICRO COR1		
MICRO:	HISTOPATHOLOGICAL COMMENT:	>RED FOCI, LUNGS=ERYTHROCYTES IN ALVEOLI.
KIDNEY		
MICRO:	-MINIMAL	-U/ LYMPHOID CELL INFILTRATE
	-MINIMAL	-U/ TUBULAR ATROPHY
	-MINIMAL	-B/ MINERAL DEPOSIT
LIVER		
MICRO:	-MINIMAL	-CENTRILOBULAR HEPATOCYTES: HYPERTROPHY
	-MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS		
GROSS:	-DISCOLORED-FOCUS(FOCI), SLIGHT	-ALL LOBES: 0.1 - 0.2 CM DIA, RED
MICRO:	-MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-PULMONARY ARTERY: MINERAL DEPOSIT
	-SLIGHT	-ALVEOLI: ERYTHROCYTES
	-MINIMAL	-ALVEOLI: MACROPHAGES

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 3506 SEX: FEMALE DOSE GROUP: 3 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 298.2 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
KIDNEY		
	MICRO: -MINIMAL	-U/ LYMPHOID CELL INFILTRATE
	-SLIGHT	-B/ MINERAL DEPOSIT
LIVER		
	MICRO: -MINIMAL	-CENTRILOBULAR HEPATOCYTES: HYPERTROPHY
	-MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS		
	MICRO: -MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-ALVEOLI: ERYTHROCYTES
	-SLIGHT	-ALVEOLI: MACROPHAGES

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 3507 SEX: FEMALE DOSE GROUP: 3 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 322.9 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
KIDNEY	MICRO: -PRESENT	-U/ CYST(S)
LIVER	MICRO: -MINIMAL	-CENTRILOBULAR HEPATOCYTES: HYPERTROPHY
	-MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS	MICRO: -MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-ALVEOLI: ERYTHROCYTES
	-MINIMAL	-ALVEOLI: MACROPHAGES

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 3508 SEX: FEMALE DOSE GROUP: 3 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 252.1 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
KIDNEY		
	MICRO: -MINIMAL	-B/ LYMPHOID CELL INFILTRATE
	-MINIMAL	-U/ MINERAL DEPOSIT
LIVER		
	MICRO: -SLIGHT	-CENTRILOBULAR HEPATOCYTES: HYPERTROPHY
	-MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS		
	MICRO: -MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-PULMONARY ARTERY: MINERAL DEPOSIT
	-MINIMAL	-ALVEOLI: ERYTHROCYTES
	-MINIMAL	-ALVEOLI: MACROPHAGES

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 3509 SEX: FEMALE DOSE GROUP: 3 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 261.4 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
KIDNEY	MICRO: -MINIMAL	-B/ LYMPHOID CELL INFILTRATE
	-MINIMAL	-U/ TUBULE(S): PROTEINACEOUS CAST
LIVER	MICRO: -MINIMAL	-CENTRILOBULAR HEPATOCYTES: HYPERTROPHY
	-MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS	MICRO: -SLIGHT	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-ALVEOLI: MACROPHAGES

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 3510 SEX: FEMALE DOSE GROUP: 3 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 253.7 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
KIDNEY		
	MICRO: -MINIMAL	-U/ LYMPHOID CELL INFILTRATE
	-MINIMAL	-U/ TUBULAR ATROPHY
	-MINIMAL	-U/ MINERAL DEPOSIT
LIVER		
	MICRO: -SLIGHT	-CENTRILOBULAR HEPATOCYTES: HYPERTROPHY
	-MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS		
	MICRO: -MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-SLIGHT	-PULMONARY ARTERY: MINERAL DEPOSIT
	-MINIMAL	-ALVEOLI: ERYTHROCYTES
	-MINIMAL	-ALVEOLI: MACROPHAGES

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 3511 SEX: FEMALE DOSE GROUP: 3 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 300.0 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
KIDNEY	MICRO: -MINIMAL	-B/ LYMPHOID CELL INFILTRATE
LIVER	MICRO: -MINIMAL	-CENTRILOBULAR HEPATOCYTES: HYPERTROPHY
	-MINIMAL	-PERIPORTAL HEPATOCYTES: CYTOPLASMIC VACUOLATION
	-MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS	MICRO: -MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 3512 SEX: FEMALE DOSE GROUP: 3 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 291.1 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
KIDNEY		
	MICRO: -MINIMAL	-U/ TUBULAR ATROPHY
LIVER		
	MICRO: -SLIGHT	-CENTRILOBULAR HEPATOCYTES: HYPERTROPHY
	-MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS		
	MICRO: -MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-PULMONARY ARTERY: MINERAL DEPOSIT

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 3513 SEX: FEMALE DOSE GROUP: 3 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 272.8 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
KIDNEY		
	MICRO: -MINIMAL	-U/ LYMPHOID CELL INFILTRATE
LIVER		
	MICRO: -SLIGHT	-CENTRILOBULAR HEPATOCYTES: HYPERTROPHY
	-MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS		
	MICRO: -MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-PULMONARY ARTERY: MINERAL DEPOSIT
	-MINIMAL	-ALVEOLI: ERYTHROCYTES

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 3514 SEX: FEMALE DOSE GROUP: 3 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 308.7 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
KIDNEY		
	MICRO: -MINIMAL	-U/ LYMPHOID CELL INFILTRATE
	-MINIMAL	-U/ TUBULAR ATROPHY
	-MINIMAL	-B/ MINERAL DEPOSIT
	-MINIMAL	-U/ TUBULE(S): PROTEINACEOUS CAST
LIVER		
	MICRO: -SLIGHT	-CENTRILOBULAR HEPATOCYTES: HYPERTROPHY
	-MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS		
	MICRO: -MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-ALVEOLI: ERYTHROCYTES
	-SLIGHT	-ALVEOLI: MACROPHAGES

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 3515 SEX: FEMALE DOSE GROUP: 3 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 293.0 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
KIDNEY	MICRO: -MINIMAL	-U/ LYMPHOID CELL INFILTRATE
	-MINIMAL	-U/ MINERAL DEPOSIT
LIVER	MICRO: -MINIMAL	-CENTRILOBULAR HEPATOCYTES: HYPERTROPHY
	-SLIGHT	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS	MICRO: -MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-PULMONARY ARTERY: MINERAL DEPOSIT

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 3516 SEX: FEMALE DOSE GROUP: 3 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 242.4 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
GROSS-MICRO COR1		
MICRO:	HISTOPATHOLOGICAL COMMENT:	>DISTENDED, BOTH HORNS, UTERUS=HYDROMETRA.
KIDNEY		
MICRO:	-MINIMAL	-B/ MINERAL DEPOSIT
LIVER		
MICRO:	-MINIMAL	-CENTRILOBULAR HEPATOCYTES: HYPERTROPHY
	-MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
	-SLIGHT	-NECROSIS
LUNGS		
MICRO:	-MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-PULMONARY ARTERY: MINERAL DEPOSIT
	-MINIMAL	-ALVEOLI: MACROPHAGES
UTERUS		
GROSS:	-DISTENDED, SLIGHT	-BOTH HORNS
MICRO:	-SLIGHT	-EOSINOPHILIC INFILTRATE
	-MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
	-MARKED	-HYDROMETRA
	-SLIGHT	-ACUTE/SUBACUTE INFLAMMATION

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 3517 SEX: FEMALE DOSE GROUP: 3 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 263.8 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
KIDNEY		
	MICRO: -MINIMAL	-U/ LYMPHOID CELL INFILTRATE
	-MINIMAL	-U/ MINERAL DEPOSIT
	-PRESENT	-U/ CYST(S)
	-SLIGHT	-U/ INTERSTITIAL FIBROSIS
LIVER		
	MICRO: -MINIMAL	-CENTRILOBULAR HEPATOCYTES: HYPERTROPHY
	-MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS		
	MICRO: -MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-PULMONARY ARTERY: MINERAL DEPOSIT
	-MINIMAL	-ALVEOLI: BONE SPICULE

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 3518 SEX: FEMALE DOSE GROUP: 3 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 307.5 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
KIDNEY		
	MICRO: -MINIMAL	-B/ CHRONIC NEPHROPATHY
	-MINIMAL	-B/ MINERAL DEPOSIT
LIVER		
	MICRO: -MINIMAL	-CENTRILOBULAR HEPATOCYTES: HYPERTROPHY
	-MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS		
	MICRO: -MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-PULMONARY ARTERY: MINERAL DEPOSIT
	-MINIMAL	-ALVEOLI: MACROPHAGES

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 3519 SEX: FEMALE DOSE GROUP: 3 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 301.5 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
KIDNEY		
	MICRO: -MINIMAL	-U/ LYMPHOID CELL INFILTRATE
	-MINIMAL	-U/ MINERAL DEPOSIT
	-MINIMAL	-U/ TUBULE(S): PROTEINACEOUS CAST
LIVER		
	MICRO: -MINIMAL	-CENTRILOBULAR HEPATOCYTES: HYPERTROPHY
	-SLIGHT	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS		
	MICRO: -MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-PULMONARY ARTERY: MINERAL DEPOSIT
	-MINIMAL	-ALVEOLI: ERYTHROCYTES
	-MINIMAL	-ALVEOLI: MACROPHAGES

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 3520 SEX: FEMALE DOSE GROUP: 3 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 261.8 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
LIVER		
	MICRO: -SLIGHT	-CENTRILOBULAR HEPATOCYTES: HYPERTROPHY
LUNGS		
	MICRO: -MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-ALVEOLI: MACROPHAGES

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

THE FOLLOWING TISSUES HAD NO MICROSCOPIC ABNORMALITIES OBSERVED:
KIDNEY

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 4501 SEX: FEMALE DOSE GROUP: 4 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 236.7 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
KIDNEY		
	MICRO: -MINIMAL	-B/ LYMPHOID CELL INFILTRATE
	-MINIMAL	-U/ MINERAL DEPOSIT
LIVER		
	MICRO: -SLIGHT	-CENTRILOBULAR HEPATOCYTES: HYPERTROPHY
	-MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS		
	MICRO: -MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-ALVEOLI: ERYTHROCYTES
	-SLIGHT	-ALVEOLI: MACROPHAGES
	-MINIMAL	-ALVEOLI: BONE SPICULE
MEDIASTINAL LN		
	MICRO: -MINIMAL	-SINUSES: ERYTHROCYTES
	-MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
MESENTERIC LN		
	MICRO: -MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
OPTIC NERVE		
	MICRO: -SLIGHT	-U/ HEMORRHAGE
OVARY		
	MICRO: -MINIMAL	-B/ BROWN PIGMENT
PANCREAS		
	MICRO: -MINIMAL	-LYMPHOID CELL INFILTRATE
SPLEEN		
	MICRO: -SLIGHT	-CONGESTION
	-MODERATE	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
STOMACH		
	MICRO: -MINIMAL	-EOSINOPHIL INFILTRATE
	-SLIGHT	-GLAND(S): DILATATION/CYST
THYROID GLAND		
	MICRO: -PRESENT	-B/ SQUAMOUS CYSTS
TRACHEA		
	MICRO: -MINIMAL	-LYMPHOID CELL INFILTRATE
UTERUS		
	MICRO -SLIGHT	-EOSINOPHILIC INFILTRATE
	MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
	MODERATE	-HYDROMETRA
	[illegible]	-HEMORRHAGE
	[illegible]	LYMPHOID CELL INFILTRATE
[illegible]		
	[illegible]	ACUTE SUBACUTE INFLAMMATION

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ANIMAL NUMBER: 4501 SEX: FEMALE DOSE GROUP: 4 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 236.7 GRAMS

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

THE FOLLOWING TISSUES HAD NO MICROSCOPIC ABNORMALITIES OBSERVED:
ADRENAL GLAND, BRAIN, CECUM, CERVICAL SC, COLON, DUODENUM, ESOPHAGUS, EYE, FEMORAL MARROW, FEMUR, HEART, ILEUM, JEJUNUM, LACRIMAL GLAND, LOW COLON/RECTUM, MAMMARY GLAND, NERVE, PARATHYROID GL, PITUITARY GLAND, SALIVARY GLAND, SKELETAL MUSCLE, STERNAL MARROW, STERNUM, THORACIC AORTA, THORACIC SC, THYMUS, URINARY BLADDER, ZYMBAL'S GLAND

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 4502 SEX: FEMALE DOSE GROUP: 4 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 287.7 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
ESOPHAGUS		
	MICRO: -SLIGHT	-CHRONIC INFLAMMATION
KIDNEY		
	MICRO: -MINIMAL	-B/ LYMPHOID CELL INFILTRATE
LIVER		
	MICRO: -SLIGHT	-CENTRILOBULAR HEPATOCYTES: HYPERTROPHY
	-MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS		
	MICRO: -MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-ALVEOLI: ERYTHROCYTES
	-MINIMAL	-ALVEOLI: MACROPHAGES
MEDIASTINAL LN		
	MICRO: -MINIMAL	-SINUSES: ERYTHROCYTES
	-MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
MESENTERIC LN		
	MICRO: -MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
OVARY		
	MICRO: -PRESENT	-U/ CYST(S)
	-MINIMAL	-B/ BROWN PIGMENT
PARATHYROID GL		
	MICRO: -TISSUE MISSING	
SPLEEN		
	MICRO: -MODERATE	-CONGESTION
	-SLIGHT	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
STOMACH		
	MICRO: -MINIMAL	-EOSINOPHIL INFILTRATE
THYMUS		
	MICRO: -MINIMAL	-HEMORRHAGE
TRACHEA		
	MICRO: -MINIMAL	-LYMPHOID CELL INFILTRATE
UTERUS		
	MICRO: -MINIMAL	-EOSINOPHILIC INFILTRATE
	-MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
	-MINIMAL	-LYMPHOID CELL INFILTRATE
VAGINA		
	MICRO: -SLIGHT	-ACUTE/SUBACUTE INFLAMMATION

ANIMAL NUMBER: 4502 SEX: FEMALE DOSE GROUP: 4 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 287.7 GRAMS

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

THE FOLLOWING TISSUES HAD NO MICROSCOPIC ABNORMALITIES OBSERVED:
ADRENAL GLAND, BRAIN, CECUM, CERVICAL SC, COLON, DUODENUM, EYE, FEMORAL MARROW, FEMUR, HEART, ILEUM, JEJUNUM, LACRIMAL GLAND, LOW COLON/RECTUM, MAMMARY GLAND, NERVE, OPTIC NERVE, PANCREAS, PITUITARY GLAND, SALIVARY GLAND, SKELETAL MUSCLE, STERNAL MARROW, STERNUM, THORACIC AORTA, THORACIC SC, THYROID GLAND, URINARY BLADDER, ZYMBAL'S GLAND

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

*** PATH/TOX SYSTEM OUTPUT ***
A SUBCHRONIC (3-MONTH) TOXICITY STUDY
OF ULTRANOX XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION
INDIVIDUAL ANIMAL DATA SHEET

STUDY NUMBER: 962459

ANIMAL NUMBER: 4503 SEX: FEMALE DOSE GROUP: 4 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 283.0 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
LIVER	MICRO: -SLIGHT	-CENTRILOBULAR HEPATOCYTES: HYPERTROPHY
	-MINIMAL	-PERIPORTAL HEPATOCYTES: CYTOPLASMIC VACUOLATION
	-MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS	MICRO: -SLIGHT	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-SLIGHT	-ALVEOLI: MACROPHAGES
MEDIASTINAL LN	MICRO: -MINIMAL	-SINUSES: ERYTHROCYTES
	-MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
MESENTERIC LN	MICRO: -MINIMAL	-SINUSES: ERYTHROCYTES
OVARY	MICRO: -MINIMAL	-B/ BROWN PIGMENT
PANCREAS	MICRO: -MINIMAL	-LYMPHOID CELL INFILTRATE
SPLEEN	MICRO: -MODERATE	-CONGESTION
	-SLIGHT	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
STOMACH	MICRO: -MINIMAL	-EOSINOPHIL INFILTRATE
	-MINIMAL	-LYMPHOID CELL INFILTRATE
	-MINIMAL	-GLAND(S): DILATATION/CYST
THYROID GLAND	MICRO: -PRESENT	-B/ SQUAMOUS CYSTS
TRACHEA	MICRO: -SLIGHT	-LYMPHOID CELL INFILTRATE
UTERUS	MICRO: -SLIGHT	-EOSINOPHILIC INFILTRATE
	-MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
	-MINIMAL	-LYMPHOID CELL INFILTRATE
VAGINA	MICRO: -MINIMAL	-ACUTE/SUBACUTE INFLAMMATION

ANIMAL NUMBER: 4503 SEX: FEMALE DOSE GROUP: 4 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 283.0 GRAMS

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

THE FOLLOWING TISSUES HAD NO MICROSCOPIC ABNORMALITIES OBSERVED:
ADRENAL GLAND, BRAIN, CECUM, CERVICAL SC, COLON, DUODENUM, ESOPHAGUS, EYE, FEMORAL MARROW, FEMUR, HEART, ILEUM, JEJUNUM, KIDNEY, LACRIMAL GLAND, LOW COLON/RECTUM, MAMMARY GLAND, NERVE, OPTIC NERVE, PARATHYROID GL, PITUITARY GLAND, SALIVARY GLAND, SKELETAL MUSCLE, STERNAL MARROW, STERNUM, THORACIC AORTA, THORACIC SC, THYMUS, URINARY BLADDER, ZYMBAL'S GLAND

ANIMAL NUMBER: 4504 SEX: FEMALE DOSE GROUP: 4 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 318.1 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
KIDNEY	MICRO: -MINIMAL	-B/ LYMPHOID CELL INFILTRATE
	-MINIMAL	-B/ TUBULAR ATROPHY
	-MINIMAL	-U/ MINERAL DEPOSIT
	-SLIGHT	-U/ HYDRONEPHROSIS
LACRIMAL GLAND	HISTOPATHOLOGICAL COMMENT:	>ONE LACRIMAL GLAND
LIVER	MICRO: -SLIGHT	-CENTRILOBULAR HEPATOCYTES: HYPERTROPHY
	-MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS	MICRO: -MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-ALVEOLI: MACROPHAGES
MEDIASTINAL LN	MICRO: -MINIMAL	-SINUSES: ERYTHROCYTES
	-SLIGHT	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
MESENTERIC LN	MICRO: -MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
OVARY	MICRO: -MINIMAL	-B/ BROWN PIGMENT
PANCREAS	MICRO: -MINIMAL	-LYMPHOID CELL INFILTRATE
SPLEEN	MICRO: -MODERATE	-CONGESTION
	-SLIGHT	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
STOMACH	MICRO: -SLIGHT	-EOSINOPHIL INFILTRATE
	-MINIMAL	-LYMPHOID CELL INFILTRATE
THYROID GLAND	MICRO: -PRESENT	-U/ SQUAMOUS CYST(S)
TRACHEA	MICRO: -MINIMAL	-LYMPHOID CELL INFILTRATE
UTERUS	MICRO: -SLIGHT	-EOSINOPHILIC INFILTRATE
	-MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
VAGINA	MICRO -SLIGHT	-ACUTE/SUBACUTE INFLAMMATION

ANIMAL NUMBER: 4504 SEX: FEMALE DOSE GROUP: 4 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 318.1 GRAMS

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

THE FOLLOWING TISSUES HAD NO MICROSCOPIC ABNORMALITIES OBSERVED:
ADRENAL GLAND, BRAIN, CECUM, CERVICAL SC, COLON, DUODENUM, ESOPHAGUS, EYE, FEMORAL MARROW, FEMUR, HEART, ILEUM, JEJUNUM, LACRIMAL GLAND, LOW COLON/RECTUM, MAMMARY GLAND, NERVE, OPTIC NERVE, PARATHYROID GL, PITUITARY GLAND, SALIVARY GLAND, SKELETAL MUSCLE, STERNAL MARROW, STERNUM, THORACIC AORTA, THORACIC SC, THYMUS, URINARY BLADDER, ZYMBAL'S GLAND

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 4505 SEX: FEMALE DOSE GROUP: 4 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 291.7 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
ADRENAL GLAND	MICRO: -MINIMAL	-U/ CORTEX: CYTOPLASMIC VACUOLATION
KIDNEY	MICRO: -MINIMAL	-U/ LYMPHOID CELL INFILTRATE
LIVER	MICRO: -SLIGHT	-CENTRILOBULAR HEPATOCYTES: HYPERTROPHY
	-MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS	MICRO: -MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-SLIGHT	-ALVEOLI: MACROPHAGES
MEDIASTINAL LN	MICRO: -MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
OVARY	MICRO: -PRESENT	-U/ CYST(S)
	-MINIMAL	-B/ BROWN PIGMENT
PANCREAS	MICRO: -MINIMAL	-LYMPHOID CELL INFILTRATE
PARATHYROID GL	MICRO: -TISSUE MISSING	
SPLEEN	MICRO: -SLIGHT	-CONGESTION
	-SLIGHT	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
STOMACH	MICRO: -SLIGHT	-NONGLANDULAR MUCOSA: SQUAMOUS CELL HYPERPLASIA
	-SLIGHT	-NONGLANDULAR: HYPERKERATOSIS
	-SLIGHT	-NONGLANDULAR: ACUTE/SUBACUTE INFLAMMATION
	-MODERATE	-NONGLANDULAR: EDEMA
	-SLIGHT	-EOSINOPHIL INFILTRATE
	-SLIGHT	-GLAND(S): DILATATION/CYST
THYMUS	MICRO: -MINIMAL	-HEMORRHAGE
UTERUS	MICRO: -SLIGHT	-EOSINOPHILIC INFILTRATE
	-MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
VAGINA	MICRO: -SLIGHT	-ACUTE/SUBACUTE INFLAMMATION

ANIMAL NUMBER: 4505 SEX: FEMALE DOSE GROUP: 4 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 291.7 GRAMS

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

THE FOLLOWING TISSUES HAD NO MICROSCOPIC ABNORMALITIES OBSERVED:
BRAIN, CECUM, CERVICAL SC, COLON, DUODENUM, ESOPHAGUS, EYE, FEMORAL MARROW, FEMUR, HEART, ILEUM, JEJUNUM, LACRIMAL GLAND, LOW COLON/RECTUM, MAMMARY GLAND, MESENTERIC LN, NERVE, OPTIC NERVE, PITUITARY GLAND, SALIVARY GLAND, SKELETAL MUSCLE, STERNAL MARROW, STERNUM, THORACIC AORTA, THORACIC SC, THYROID GLAND, TRACHEA, URINARY BLADDER, ZYMBAL'S GLAND

ANIMAL NUMBER: 4506 SEX: FEMALE DOSE GROUP: 4 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 236.2 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
KIDNEY	MICRO: -MINIMAL	-U/ TUBULAR ATROPHY
	-MINIMAL	-U/ MINERAL DEPOSIT
LIVER	MICRO: -SLIGHT	-CENTRILOBULAR HEPATOCYTES: HYPERTROPHY
	-MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS	MICRO: -MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-ALVEOLI: MACROPHAGES
MEDIASTINAL LN	MICRO: -SLIGHT	-PLASMA CELL HYPERPLASIA
OVARY	MICRO: -MINIMAL	-B/ BROWN PIGMENT
PARATHYROID GL	HISTOPATHOLOGICAL COMMENT:	>ONE PARATHYROID
SPLEEN	MICRO: -SLIGHT	-CONGESTION
	-MODERATE	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
STOMACH	MICRO: -SLIGHT	-NONGLANDULAR MUCOSA: SQUAMOUS CELL HYPERPLASIA
	-MODERATE	-NONGLANDULAR: HYPERKERATOSIS
	-MINIMAL	-NONGLANDULAR: ACUTE/SUBACUTE INFLAMMATION
	-SLIGHT	-NONGLANDULAR: EDEMA
	-MINIMAL	-EOSINOPHIL INFILTRATE
THYMUS	MICRO: -MINIMAL	-HEMORRHAGE
THYROID GLAND	MICRO: -PRESENT	-U/ SQUAMOUS CYST(S)
TRACHEA	MICRO: -SLIGHT	-LYMPHOID CELL INFILTRATE
UTERUS	MICRO: -MODERATE	-EOSINOPHILIC INFILTRATE
	-MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
VAGINA	MICRO: -SLIGHT	-ACUTE/SUBACUTE INFLAMMATION

ANIMAL NUMBER: 4506 SEX: FEMALE DOSE GROUP: 4 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 236.2 GRAMS

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

THE FOLLOWING TISSUES HAD NO MICROSCOPIC ABNORMALITIES OBSERVED:
ADRENAL GLAND, BRAIN, CECUM, CERVICAL SC, COLON, DUODENUM, ESOPHAGUS, EYE, FEMORAL MARROW, FEMUR, HEART, ILEUM, JEJUNUM, LACRIMAL GLAND, LOW COLON/RECTUM, MAMMARY GLAND, MESENTERIC LN, NERVE, OPTIC NERVE, PANCREAS, PARATHYROID GL, PITUITARY GLAND, SALIVARY GLAND, SKELETAL MUSCLE, STERNAL MARROW, STERNUM, THORACIC AORTA, THORACIC SC, URINARY BLADDER, ZYMBAL'S GLAND

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 4507 SEX: FEMALE DOSE GROUP: 4 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 213.8 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
ADRENAL GLAND	MICRO: HISTOPATHOLOGICAL COMMENT: >ONE MEDULLA	
KIDNEY	MICRO: -MINIMAL	-B/ CHRONIC NEPHROPATHY
	-MINIMAL	-U/ MINERAL DEPOSIT
LIVER	MICRO: -SLIGHT	-CENTRILOBULAR HEPATOCYTES: HYPERTROPHY
	-MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
	-MINIMAL	-NECROSIS
LUNGS	MICRO: -MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-ALVEOLI: MACROPHAGES
MEDIASTINAL LN	MICRO: -TISSUE MISSING	
MESENTERIC LN	MICRO: -MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
OVARY	MICRO: -MINIMAL	-B/ BROWN PIGMENT
SPLEEN	MICRO: -SLIGHT	-CONGESTION
	-SLIGHT	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
STOMACH	MICRO: -SLIGHT	-NONGLANDULAR MUCOSA: SQUAMOUS CELL HYPERPLASIA
	-SLIGHT	-NONGLANDULAR: HYPERKERATOSIS
	-MINIMAL	-EOSINOPHIL INFILTRATE
THYMUS	MICRO: -MINIMAL, FOCAL	-HEMORRHAGE
THYROID GLAND	MICRO: -PRESENT	-U/ SQUAMOUS CYST(S)
UTERUS	MICRO: -SLIGHT	-EOSINOPHILIC INFILTRATE
	-MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
VAGINA	MICRO: -SLIGHT	-ACUTE/SUBACUTE INFLAMMATION

ANIMAL NUMBER: 4507 SEX: FEMALE DOSE GROUP: 4 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 213.8 GRAMS

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

THE FOLLOWING TISSUES HAD NO MICROSCOPIC ABNORMALITIES OBSERVED:
ADRENAL GLAND, BRAIN, CECUM, CERVICAL SC, COLON, DUODENUM, ESOPHAGUS, EYE, FEMORAL MARROW, FEMUR, HEART, ILEUM, JEJUNUM, LACRIMAL GLAND, LOW COLON/RECTUM, MAMMARY GLAND, NERVE, OPTIC NERVE, PANCREAS, PARATHYROID GL, PITUITARY GLAND, SALIVARY GLAND, SKELETAL MUSCLE, STERNAL MARROW, STERNUM, THORACIC AORTA, THORACIC SC, TRACHEA, URINARY BLADDER, ZYMBAL'S GLAND

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 4508 SEX: FEMALE DOSE GROUP: 4 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 268.4 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
LIVER		
	MICRO: -SLIGHT	-CENTRILOBULAR HEPATOCYTES: HYPERTROPHY
	-MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS		
	MICRO: -MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-ALVEOLI: ERYTHROCYTES
	-MINIMAL	-ALVEOLI: MACROPHAGES
MEDIASTINAL LN		
	MICRO: -MINIMAL	-SINUSES: ERYTHROCYTES
	-MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
OVARY		
	MICRO: -MINIMAL	-B/ BROWN PIGMENT
SPLEEN		
	MICRO: -MODERATE	-CONGESTION
	-SLIGHT	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
STOMACH		
	MICRO: -SLIGHT	-NONGLANDULAR MUCOSA: SQUAMOUS CELL HYPERPLASIA
	-SLIGHT	-NONGLANDULAR: HYPERKERATOSIS
	-SLIGHT	-EOSINOPHIL INFILTRATE
TRACHEA		
	MICRO: -MINIMAL	-LYMPHOID CELL INFILTRATE
UTERUS		
	MICRO: -SLIGHT	-EOSINOPHILIC INFILTRATE
	-MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
	-MINIMAL	-LYMPHOID CELL INFILTRATE
VAGINA		
	MICRO: -SLIGHT	-ACUTE/SUBACUTE INFLAMMATION

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

THE FOLLOWING TISSUES HAD NO MICROSCOPIC ABNORMALITIES OBSERVED:
ADRENAL GLAND, BRAIN, CECUM, CERVICAL SC, COLON, DUODENUM, ESOPHAGUS, EYE, FEMORAL MARROW, FEMUR, HEART, ILEUM, JEJUNUM, KIDNEY, LACRIMAL GLAND, LOW COLON/RECTUM, MAMMARY GLAND, MESENTERIC LN, NERVE, OPTIC NERVE, PANCREAS, PARATHYROID GL, PITUITARY GLAND, SALIVARY GLAND, SKELETAL MUSCLE, STERNAL MARROW, STERNUM, THORACIC AORTA, THORACIC SC, THYMUS, THYROID GLAND, URINARY BLADDER, ZYMBAL'S GLAND

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 4509 SEX: FEMALE DOSE GROUP: 4 SACRIFICE STATUS: UNSCHEDULED (D)
DATE OF DEATH: 06/30/96 STUDY DAY OF DEATH: 12 STUDY WEEK OF DEATH: 2 TERMINAL BODY WEIGHT: 176.8 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
ADRENAL GLAND	MICRO: HISTOPATHOLOGICAL COMMENT:	>ONE MEDULLA
BRAIN	MICRO: -MINIMAL, MULTI-FOCAL	-HEMORRHAGE
CERVICAL SC	MICRO: -MINIMAL, MULTI-FOCAL	-HEMORRHAGE
ESOPHAGUS	GROSS: -PERFORATED -DISCOLORED, SEVERE MICRO: -MINIMAL -MARKED -MINIMAL -SLIGHT	-SEROSA: RED -HEMORRHAGE -PERIESOPHAGEAL ERYTHROCYTES -LUMEN: ERYTHROCYTES -WALL: PERFORATION
GROSS-MICRO CORI	MICRO: HISTOPATHOLOGICAL COMMENT:	>RED SEROSA, ESOPHAGUS=PERIESOPHAGEAL ERYTHROCYTES. RED, GELATINOUS CONTENT, STOMACH=NMC. PERFORATION, ESOPHAGUS=PERFORATION.
KIDNEY	MICRO: -MINIMAL -MINIMAL	-B/ LYMPHOID CELL INFILTRATE -B/ TUBULAR ATROPHY
LIVER	MICRO: -SLIGHT -MINIMAL	-CENTRILOBULAR HEPATOCYTES: HYPERTROPHY -EXTRAMEDULLARY HEMATOPOIESIS
LUNGS	MICRO: -MINIMAL -SLIGHT	-ALVEOLI: ERYTHROCYTES -ALVEOLI: MACROPHAGES
MEDIASTINAL LN	MICRO: -MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
MORTALITY	MICRO: -PRESENT	-ESOPHAGEAL PERFORATION/HEMORRHAGE
OVARY	MICRO: -MINIMAL	-B/ BROWN PIGMENT
SPLEEN	MICRO: -MINIMAL	-CONGESTION
STOMACH	GROSS: -ABNORMAL CONTENTS, SEVERE MICRO -MINIMAL	-RED, GELATINOUS -EOSINOPHIL INFILTRATE
THYMUS	MICRO -MINIMAL	-HEMORRHAGE
THYROID GLAND	MICRO -PRESENT	-U/ ECTOPIC THYMUS

ANIMAL NUMBER: 4509 SEX: FEMALE DOSE GROUP: 4 SACRIFICE STATUS: UNSCHEDULED (D)
DATE OF DEATH: 06/30/96 STUDY DAY OF DEATH: 12 STUDY WEEK OF DEATH: 2 TERMINAL BODY WEIGHT: 176.8 GRAMS

*** PATHOLOGY OBSERVATIONS (CONTINUED) ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
TRACHEA	MICRO: -MINIMAL	-LYMPHOID CELL INFILTRATE
UTERUS	MICRO: -SLIGHT	-EOSINOPHILIC INFILTRATE
VAGINA	MICRO: -SLIGHT	-ACUTE/SUBACUTE INFLAMMATION

THE FOLLOWING TISSUES HAD NO MICROSCOPIC ABNORMALITIES OBSERVED:
ADRENAL GLAND, CECUM, COLON, DUODENUM, EYE, FEMORAL MARROW, FEMUR, HEART, ILEUM, JEJUNUM, LACRIMAL GLAND, LOW COLON/RECTUM, MAMMARY GLAND, MESENTERIC LN, NERVE, OPTIC NERVE, PANCREAS, PARATHYROID GL, PITUITARY GLAND, SALIVARY GLAND, SKELETAL MUSCLE, STERNAL MARROW, STERNUM, THORACIC AORTA, THORACIC SC, URINARY BLADDER, ZYMBAL'S GLAND

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 4510 SEX: FEMALE DOSE GROUP: 4 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 291.4 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
ADRENAL GLAND	MICRO: HISTOPATHOLOGICAL COMMENT:	>ONE MEDULLA
HEART	MICRO: -MINIMAL	-NECROSIS
KIDNEY	MICRO: -MINIMAL	-U/ LYMPHOID CELL INFILTRATE
	-MINIMAL	-U/ TUBULAR ATROPHY
LACRIMAL GLAND	MICRO: -MINIMAL	-U/ LYMPHOID CELL INFILTRATE
LIVER	MICRO: -SLIGHT	-CENTRILOBULAR HEPATOCYTES: HYPERTROPHY
	-MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
	-SLIGHT	-NECROSIS
LUNGS	MICRO: -MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-ALVEOLI: ERYTHROCYTES
	-SLIGHT	-ALVEOLI: MACROPHAGES
	-MINIMAL	-MICROGRANULOMA
MEDIASTINAL LN	MICRO: -MINIMAL	-SINUSES: ERYTHROCYTES
	-MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
OVARY	MICRO: -MINIMAL	-B/ BROWN PIGMENT
SPLEEN	MICRO: -SLIGHT	-CONGESTION
	-SLIGHT	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
STOMACH	MICRO: -SLIGHT	-EOSINOPHIL INFILTRATE
	-SLIGHT	-LIMITING RIDGE: HYPERPLASIA
	-SLIGHT	-LIMITING RIDGE: HYPERKERATOSIS
TRACHEA	MICRO: -MINIMAL	-LYMPHOID CELL INFILTRATE
UTERUS	MICRO: -SLIGHT	-EOSINOPHILIC INFILTRATE
	-MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
VAGINA	MICRO -SLIGHT	-ACUTE/SUBACUTE INFLAMMATION

ANIMAL NUMBER: 4510 SEX: FEMALE DOSE GROUP: 4 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 291.4 GRAMS

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

THE FOLLOWING TISSUES HAD NO MICROSCOPIC ABNORMALITIES OBSERVED:
ADRENAL GLAND, BRAIN, CECUM, CERVICAL SC, COLON, DUODENUM, ESOPHAGUS, EYE, FEMORAL MARROW, FEMUR, ILEUM, JEJUNUM, LOW COLON/RECTUM, MAMMARY GLAND, MESENTERIC LN, NERVE, OPTIC NERVE, PANCREAS, PARATHYROID GL, PITUITARY GLAND, SALIVARY GLAND, SKELETAL MUSCLE, STERNAL MARROW, STERNUM, THORACIC AORTA, THORACIC SC, THYMUS, THYROID GLAND, URINARY BLADDER, ZYMBAL'S GLAND

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 4511 SEX: FEMALE DOSE GROUP: 4 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 289.7 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
HEART	MICRO: -MINIMAL	-NECROSIS
KIDNEY	MICRO: -MINIMAL	-U/ LYMPHOID CELL INFILTRATE
	-MINIMAL	-U/ MINERAL DEPOSIT
LIVER	MICRO: -SLIGHT	-CENTRILOBULAR HEPATOCYTES: HYPERTROPHY
	-MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LOW COLON/RECTUM	MICRO: -PRESENT	-LUMEN: NEMATODE PARASITE
LUNGS	MICRO: -SLIGHT	-PULMONARY ARTERY: MINERAL DEPOSIT
	-MINIMAL	-ALVEOLI: ERYTHROCYTES
	-SLIGHT	-ALVEOLI: MACROPHAGES
MEDIASTINAL LN	MICRO: -MINIMAL	-SINUSES: ERYTHROCYTES
	-SLIGHT	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
	-MODERATE	-PLASMA CELL HYPERPLASIA
OVARY	MICRO: -MINIMAL	-B/ BROWN PIGMENT
PARATHYROID GL	HISTOPATHOLOGICAL COMMENT:	>ONE PARATHYROID
SPLEEN	MICRO: -SLIGHT	-CONGESTION
	-SLIGHT	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
STOMACH	MICRO: -SLIGHT	-EOSINOPHIL INFILTRATE
	-SLIGHT	-GLAND(S): DILATATION/CYST
THYMUS	MICRO: -MINIMAL	-HEMORRHAGE
THYROID GLAND	MICRO: -PRESENT	-U/ SQUAMOUS CYST(S)
UTERUS	MICRO: -MODERATE	-EOSINOPHILIC INFILTRATE
	-MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
	-MINIMAL	-LYMPHOID CELL INFILTRATE
VAGINA	MICRO -SLIGHT	-ACUTE/SUBACUTE INFLAMMATION
	-MODERATE	-SQUAMOUS CELL HYPERPLASIA

ANIMAL NUMBER: 4511 SEX: FEMALE DOSE GROUP: 4 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/18/96 STUDY DAY OF DEATH: 92 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 289.7 GRAMS

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

THE FOLLOWING TISSUES HAD NO MICROSCOPIC ABNORMALITIES OBSERVED:
ADRENAL GLAND, BRAIN, CECUM, CERVICAL SC, COLON, DUODENUM, ESOPHAGUS, EYE, FEMORAL MARROW, FEMUR, ILEUM, JEJUNUM, LACRIMAL GLAND, MAMMARY GLAND, MESENTERIC LN, NERVE, OPTIC NERVE, PANCREAS, PARATHYROID GL, PITUITARY GLAND, SALIVARY GLAND, SKELETAL MUSCLE, STERNAL MARROW, STERNUM, THORACIC AORTA, THORACIC SC, TRACHEA, URINARY BLADDER, ZYMBAL'S GLAND

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 4512 SEX: FEMALE DOSE GROUP: 4 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 289.4 GRAMS

* * * P A T H O L O G Y O B S E R V A T I O N S * * *

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
ESOPHAGUS		
	MICRO: -MINIMAL	-LYMPHOID CELL INFILTRATE
EXTREMITY		
	MICRO: -MINIMAL	-B/ FOREPAWS: LYMPHOID CELL INFILTRATE
GROSS-MICRO COR1		
	MICRO: HISTOPATHOLOGICAL COMMENT:	>HAIR THIN, BOTH FOREPAWS=NMC.
KIDNEY		
	MICRO: -MINIMAL	-U/ LYMPHOID CELL INFILTRATE
	-MINIMAL	-B/ MINERAL DEPOSIT
	-MINIMAL	-U/ TUBULE(S): PROTEINACEOUS CAST
LIVER		
	MICRO: -SLIGHT	-CENTRILOBULAR HEPATOCYTES: HYPERTROPHY
	-MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS		
	MICRO: -MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-ALVEOLI: MACROPHAGES
MEDIASTINAL LN		
	MICRO: -SLIGHT	-SINUSES: ERYTHROCYTES
	-SLIGHT	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
MESENTERIC LN		
	MICRO: -MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
OVARY		
	MICRO: -MINIMAL	-B/ BROWN PIGMENT
PANCREAS		
	MICRO: -MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
	-SLIGHT	-EXOCRINE CELLS: ATROPHY
PARATHYROID GL		
	MICRO: -TISSUE MISSING	
SKIN		
	GROSS: -HAIR ABSENT/THIN, SLIGHT	-HAIR THIN, BOTH FOREPAWS
SPLEEN		
	MICRO: -MODERATE	-CONGESTION
	-SLIGHT	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
STOMACH		
	MICRO: MINIMAL	-EOSINOPHIL INFILTRATE
	MINIMAL	-GLAND(S): DILATATION/CYST
[illegible]		
	[illegible]	-HEMORRHAGE
[illegible]		
	[illegible]	-LYMPHOID CELL INFILTRATE

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ANIMAL NUMBER: 4512 SEX: FEMALE DOSE GROUP: 4 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 289.4 GRAMS

* * * PATHOLOGY OBSERVATIONS (CONTINUED) * * *

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
UTERUS	MICRO: -MODERATE	-EOSINOPHILIC INFILTRATE
	-MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
VAGINA	MICRO: -SLIGHT	-ACUTE/SUBACUTE INFLAMMATION

THE FOLLOWING TISSUES HAD NO MICROSCOPIC ABNORMALITIES OBSERVED:
ADRENAL GLAND, BRAIN, CECUM, CERVICAL SC, COLON, DUODENUM, EYE, FEMORAL MARROW, FEMUR, HEART, ILEUM, JEJUNUM, LACRIMAL GLAND, LOW COLON/RECTUM, MAMMARY GLAND, NERVE, OPTIC NERVE, PITUITARY GLAND, SALIVARY GLAND, SKELETAL MUSCLE, STERNAL MARROW, STERNUM, THORACIC AORTA, THORACIC SC, THYROID GLAND, URINARY BLADDER, ZYMBAL'S GLAND

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 4513 SEX: FEMALE DOSE GROUP: 4 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 267.0 GRAMS

* * * P A T H O L O G Y O B S E R V A T I O N S * * *

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
GROSS-MICRO COR1		
MICRO:	HISTOPATHOLOGICAL COMMENT:	>TAN FOCI, DIAPHRAGMATIC LOBE, LUNGS=ALVEOLAR MACROPHAGES.
KIDNEY		
MICRO:	-MINIMAL	-B/ MINERAL DEPOSIT
	-MINIMAL	-U/ TUBULE(S): PROTEINACEOUS CAST
LIVER		
MICRO:	-SLIGHT	-CENTRILOBULAR HEPATOCYTES: HYPERTROPHY
	-MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS		
GROSS:	-DISCOLORED-FOCUS(FOCI)	-DIAPHRAGMATIC LOBE: 0.1 CM DIA, TAN
MICRO:	-MINIMAL	-ALVEOLI: MACROPHAGES
OVARY		
MICRO:	-SLIGHT	-B/ BROWN PIGMENT
SPLEEN		
MICRO:	-MODERATE	-CONGESTION
	-SLIGHT	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
STOMACH		
MICRO:	-MINIMAL	-EOSINOPHIL INFILTRATE
THYMUS		
MICRO:	-MINIMAL	-HEMORRHAGE
UTERUS		
MICRO:	-MODERATE	-EOSINOPHILIC INFILTRATE
VAGINA		
MICRO:	-SLIGHT	-EOSINOPHILIC INFILTRATE
	-SLIGHT	-SQUAMOUS CELL HYPERPLASIA

THE FOLLOWING TISSUES HAD NO MICROSCOPIC ABNORMALITIES OBSERVED:
ADRENAL GLAND, BRAIN, CECUM, CERVICAL SC, COLON, DUODENUM, ESOPHAGUS, EYE, FEMORAL MARROW, FEMUR, HEART, ILEUM, JEJUNUM, LACRIMAL GLAND, LOW COLON/RECTUM, MAMMARY GLAND, MEDIASTINAL LN, MESENTERIC LN, NERVE, OPTIC NERVE, PANCREAS, PARATHYROID GL, PITUITARY GLAND, SALIVARY GLAND, SKELETAL MUSCLE, STERNAL MARROW, STERNUM, THORACIC AORTA, THORACIC SC, THYROID GLAND, TRACHEA, URINARY BLADDER, ZYMBAL'S GLAND

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 4514 SEX: FEMALE DOSE GROUP: 4 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 271.8 GRAMS

* * * P A T H O L O G Y O B S E R V A T I O N S * * *

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
KIDNEY	MICRO: -MINIMAL	-U/ TUBULAR ATROPHY
LACRIMAL GLAND	HISTOPATHOLOGICAL COMMENT:	>ONE LACRIMAL GLAND
LIVER	MICRO: -SLIGHT -MINIMAL	-CENTRILOBULAR HEPATOCYTES: HYPERTROPHY -EXTRAMEDULLARY HEMATOPOIESIS
LUNGS	MICRO: -MINIMAL -MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE -ALVEOLI: MACROPHAGES
MEDIASTINAL LN	MICRO: -MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
MESENTERIC LN	MICRO: -MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
OVARY	MICRO: -MINIMAL	-B/ BROWN PIGMENT
PANCREAS	MICRO: -MINIMAL	-LYMPHOID CELL INFILTRATE
SPLEEN	MICRO: -SLIGHT -SLIGHT	-CONGESTION -RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
STOMACH	MICRO: -MINIMAL -MINIMAL	-EOSINOPHIL INFILTRATE -GLAND(S): DILATATION/CYST
TRACHEA	MICRO: -MINIMAL	-LYMPHOID CELL INFILTRATE
UTERUS	MICRO: -SLIGHT -MINIMAL	-EOSINOPHILIC INFILTRATE -RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
VAGINA	MICRO: -SLIGHT -PRESENT	-ACUTE/SUBACUTE INFLAMMATION -CYST(S)

ANIMAL NUMBER: 4514 SEX: FEMALE DOSE GROUP: 4 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 271.8 GRAMS

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

THE FOLLOWING TISSUES HAD NO MICROSCOPIC ABNORMALITIES OBSERVED:
ADRENAL GLAND, BRAIN, CECUM, CERVICAL SC, COLON, DUODENUM, ESOPHAGUS, EYE, FEMORAL MARROW, FEMUR, HEART, ILEUM, JEJUNUM, LACRIMAL GLAND, LOW COLON/RECTUM, MAMMARY GLAND, NERVE, OPTIC NERVE, PARATHYROID GL, PITUITARY GLAND, SALIVARY GLAND, SKELETAL MUSCLE, STERNAL MARROW, STERNUM, THORACIC AORTA, THORACIC SC, THYMUS, THYROID GLAND, URINARY BLADDER, ZYMBAL'S GLAND

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 4515 SEX: FEMALE DOSE GROUP: 4 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 300.0 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
ADRENAL GLAND	MICRO: HISTOPATHOLOGICAL COMMENT:	>ONE MEDULLA
LIVER	MICRO: -SLIGHT	-CENTRILOBULAR HEPATOCYTES: HYPERTROPHY
	-MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS	MICRO: -MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-ALVEOLI: ERYTHROCYTES
	-MINIMAL	-ALVEOLI: MACROPHAGES
	-SLIGHT	-ACUTE/SUBACUTE INFLAMMATION
MEDIASTINAL LN	MICRO: -MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
	-MODERATE	-PLASMA CELL HYPERPLASIA
MESENTERIC LN	MICRO: -MINIMAL	-SINUSES: ERYTHROCYTES
	-MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
OVARY	MICRO: -MINIMAL	-B/ BROWN PIGMENT
PANCREAS	MICRO: -MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
SPLEEN	MICRO: -MODERATE	-CONGESTION
	-SLIGHT	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
STOMACH	MICRO: -MINIMAL	-EOSINOPHIL INFILTRATE
	-MINIMAL	-GLAND(S): DILATATION/CYST
THYMUS	MICRO: -MINIMAL	-HEMORRHAGE
THYROID GLAND	MICRO: -PRESENT	-U/ SQUAMOUS CYST(S)
UTERUS	MICRO: -MINIMAL	-EOSINOPHILIC INFILTRATE
	-MINIMAL	-LYMPHOID CELL INFILTRATE
VAGINA	MICRO: -SLIGHT	-ACUTE/SUBACUTE INFLAMMATION

ANIMAL NUMBER: 4515 SEX: FEMALE DOSE GROUP: 4 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 300.0 GRAMS

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

THE FOLLOWING TISSUES HAD NO MICROSCOPIC ABNORMALITIES OBSERVED:
ADRENAL GLAND, BRAIN, CECUM, CERVICAL SC, COLON, DUODENUM, ESOPHAGUS, EYE, FEMORAL MARROW, FEMUR, HEART, ILEUM, JEJUNUM, KIDNEY, LACRIMAL GLAND, LOW COLON/RECTUM, MAMMARY GLAND, NERVE, OPTIC NERVE, PARATHYROID GL, PITUITARY GLAND, SALIVARY GLAND, SKELETAL MUSCLE, STERNAL MARROW, STERNUM, THORACIC AORTA, THORACIC SC, TRACHEA, URINARY BLADDER, ZYMBAL'S GLAND

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 4516 SEX: FEMALE DOSE GROUP: 4 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 286.9 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
KIDNEY	MICRO: -MINIMAL	-B/ LYMPHOID CELL INFILTRATE
	-MINIMAL	-B/ TUBULAR ATROPHY
LIVER	MICRO: -SLIGHT	-CENTRILOBULAR HEPATOCYTES: HYPERTROPHY
	-MINIMAL	-PERIPORTAL HEPATOCYTES: CYTOPLASMIC VACUOLATION
	-SLIGHT	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS	MICRO: -MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-PULMONARY ARTERY: MINERAL DEPOSIT
MEDIASTINAL LN	MICRO: -MINIMAL	-SINUSES: ERYTHROCYTES
	-MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
MESENTERIC LN	MICRO: -MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
OVARY	MICRO: -MINIMAL	-B/ BROWN PIGMENT
SPLEEN	MICRO: -MODERATE	-CONGESTION
	-SLIGHT	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
STOMACH	MICRO: -MINIMAL	-EOSINOPHIL INFILTRATE
	-MINIMAL	-GLAND(S): DILATATION/CYST
	-MINIMAL	-MUCOSA: HEMORRHAGE
	-SLIGHT	-LIMITING RIDGE: HYPERPLASIA
	-SLIGHT	-LIMITING RIDGE: HYPERKERATOSIS
THYROID GLAND	MICRO: -PRESENT	-U/ SQUAMOUS CYST(S)
TRACHEA	MICRO: -MINIMAL	-LYMPHOID CELL INFILTRATE
UTERUS	MICRO: -MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
	-MINIMAL	-ACUTE/SUBACUTE INFLAMMATION
VAGINA	MICRO: -SLIGHT	-ACUTE/SUBACUTE INFLAMMATION

ANIMAL NUMBER: 4516 SEX: FEMALE DOSE GROUP: 4 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 286.9 GRAMS

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

THE FOLLOWING TISSUES HAD NO MICROSCOPIC ABNORMALITIES OBSERVED:
ADRENAL GLAND, BRAIN, CECUM, CERVICAL SC, COLON, DUODENUM, ESOPHAGUS, EYE, FEMORAL MARROW, FEMUR, HEART, ILEUM, JEJUNUM, LACRIMAL GLAND, LOW COLON/RECTUM, MAMMARY GLAND, NERVE, OPTIC NERVE, PANCREAS, PARATHYROID GL, PITUITARY GLAND, SALIVARY GLAND, SKELETAL MUSCLE, STERNAL MARROW, STERNUM, THORACIC AORTA, THORACIC SC, THYMUS, URINARY BLADDER, ZYMBAL'S GLAND

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 4517 SEX: FEMALE DOSE GROUP: 4 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 249.9 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
KIDNEY		
	MICRO: -MINIMAL	-U/ LYMPHOID CELL INFILTRATE
	-MINIMAL	-B/ MINERAL DEPOSIT
	-PRESENT	-U/ CYST(S)
	-MINIMAL	-U/ TUBULE(S): PROTEINACEOUS CAST
LIVER		
	MICRO: -SLIGHT	-CENTRILOBULAR HEPATOCYTES: HYPERTROPHY
	-MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS		
	MICRO: -MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-PULMONARY ARTERY: MINERAL DEPOSIT
OVARY		
	MICRO: -MINIMAL	-B/ BROWN PIGMENT
SPLEEN		
	MICRO: -SLIGHT	-CONGESTION
	-SLIGHT	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
STOMACH		
	MICRO: -MINIMAL	-EOSINOPHIL INFILTRATE
	-MINIMAL	-GLAND(S): DILATATION/CYST
THYMUS		
	MICRO: -MINIMAL	-HEMORRHAGE
THYROID GLAND		
	MICRO: -PRESENT	-U/ SQUAMOUS CYST(S)
UTERUS		
	MICRO: -SLIGHT	-EOSINOPHILIC INFILTRATE
	-MINIMAL	-LYMPHOID CELL INFILTRATE
VAGINA		
	MICRO: -SLIGHT	-ACUTE/SUBACUTE INFLAMMATION

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

THE FOLLOWING TISSUES HAD NO MICROSCOPIC ABNORMALITIES OBSERVED:
ADRENAL GLAND, BRAIN, CECUM, CERVICAL SC, COLON, DUODENUM, ESOPHAGUS, EYE, FEMORAL MARROW, FEMUR, HEART, ILEUM, JEJUNUM, LACRIMAL GLAND, LOW COLON/RECTUM, MAMMARY GLAND, MEDIASTINAL LN, MESENTERIC LN, NERVE, OPTIC NERVE, PANCREAS, PARATHYROID GL, PITUITARY GLAND, SALIVARY GLAND, SKELETAL MUSCLE, STERNAL MARROW, STERNUM, THORACIC AORTA, THORACIC SC, TRACHEA, URINARY BLADDER, ZYMBAL'S GLAND

KEY TO NEOPLASMS "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 4518 SEX: FEMALE DOSE GROUP: 4 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 274.8 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
ADRENAL GLAND		
	MICRO: HISTOPATHOLOGICAL COMMENT:	>ONE MEDULLA
LIVER		
	MICRO: -SLIGHT	-CENTRILOBULAR HEPATOCYTES: HYPERTROPHY
	-MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS		
	MICRO: -MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
OVARY		
	MICRO: -MINIMAL	-B/ BROWN PIGMENT
PARATHYROID GL		
	MICRO: -TISSUE MISSING	
SPLEEN		
	MICRO: -MODERATE	-CONGESTION
	-SLIGHT	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
STOMACH		
	MICRO: -MINIMAL	-EOSINOPHIL INFILTRATE
THYROID GLAND		
	MICRO: -PRESENT	-U/ SQUAMOUS CYST(S)
UTERUS		
	MICRO: -SLIGHT	-EOSINOPHILIC INFILTRATE
	-MINIMAL	-LYMPHOID CELL INFILTRATE
VAGINA		
	MICRO: -SLIGHT	-ACUTE/SUBACUTE INFLAMMATION

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

THE FOLLOWING TISSUES HAD NO MICROSCOPIC ABNORMALITIES OBSERVED:
ADRENAL GLAND, BRAIN, CECUM, CERVICAL SC, COLON, DUODENUM, ESOPHAGUS, EYE, FEMORAL MARROW, FEMUR, HEART, ILEUM, JEJUNUM, KIDNEY, LACRIMAL GLAND, LOW COLON/RECTUM, MAMMARY GLAND, MEDIASTINAL LN, MESENTERIC LN, NERVE, OPTIC NERVE, PANCREAS, PITUITARY GLAND, SALIVARY GLAND, SKELETAL MUSCLE, STERNAL MARROW, STERNUM, THORACIC AORTA, THORACIC SC, THYMUS, TRACHEA, URINARY BLADDER, ZYMBAL'S GLAND

KEY TO NEOPLASMS "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 4519 SEX: FEMALE DOSE GROUP: 4 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 289.7 GRAMS

* * * P A T H O L O G Y O B S E R V A T I O N S * * *

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
KIDNEY		
	MICRO: -MINIMAL	-B/ LYMPHOID CELL INFILTRATE
LACRIMAL GLAND		
	MICRO: -MINIMAL	-U/ LYMPHOID CELL INFILTRATE
LIVER		
	MICRO: -SLIGHT	-CENTRILOBULAR HEPATOCYTES: HYPERTROPHY
	-SLIGHT	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS		
	MICRO: -MINIMAL	-PERIBRONCHIAL/PERIVASCULAR LYMPHOID CELL INFILTRATE
	-MINIMAL	-ALVEOLI: MACROPHAGES
OVARY		
	MICRO: -SLIGHT	-B/ BROWN PIGMENT
PANCREAS		
	MICRO: -MINIMAL	-LYMPHOID CELL INFILTRATE
SPLEEN		
	MICRO: -MODERATE	-CONGESTION
	-SLIGHT	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
STOMACH		
	MICRO: -MINIMAL	-EOSINOPHIL INFILTRATE
	-MINIMAL	-GLANDULAR: ACUTE/SUBACUTE INFLAMMATION
	-SLIGHT	-LIMITING RIDGE: HYPERPLASIA
	-SLIGHT	-LIMITING RIDGE: HYPERKERATOSIS
TRACHEA		
	MICRO: -MINIMAL	-LYMPHOID CELL INFILTRATE
UTERUS		
	MICRO: -SLIGHT	-EOSINOPHILIC INFILTRATE
	-MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
	-MINIMAL	-LYMPHOID CELL INFILTRATE
VAGINA		
	MICRO: -SLIGHT	-ACUTE/SUBACUTE INFLAMMATION

ANIMAL NUMBER: 4519 SEX: FEMALE DOSE GROUP: 4 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 289.7 GRAMS

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

THE FOLLOWING TISSUES HAD NO MICROSCOPIC ABNORMALITIES OBSERVED:
ADRENAL GLAND, BRAIN, CECUM, CERVICAL SC, COLON, DUODENUM, ESOPHAGUS, EYE, FEMORAL MARROW, FEMUR, HEART, ILEUM, JEJUNUM, LOW COLON/RECTUM, MAMMARY GLAND, MEDIASTINAL LN, MESENTERIC LN, NERVE, OPTIC NERVE, PARATHYROID GL, PITUITARY GLAND, SALIVARY GLAND, SKELETAL MUSCLE, STERNAL MARROW, STERNUM, THORACIC AORTA, THORACIC SC, THYMUS, THYROID GLAND, URINARY BLADDER, ZYMBAL'S GLAND

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

ANIMAL NUMBER: 4520 SEX: FEMALE DOSE GROUP: 4 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 282.2 GRAMS

*** PATHOLOGY OBSERVATIONS ***

ORGAN NAME	KEYWORDS, SEVERITY, DISTRIBUTION	GROSS FREE-TEXT COMMENTS / HISTOPATHOLOGIC FINDINGS
KIDNEY	MICRO: -MINIMAL	-B/ LYMPHOID CELL INFILTRATE
	-MINIMAL	-B/ MINERAL DEPOSIT
LIVER	MICRO: -SLIGHT	-CENTRILOBULAR HEPATOCYTES: HYPERTROPHY
	-MINIMAL	-EXTRAMEDULLARY HEMATOPOIESIS
LUNGS	MICRO: -MINIMAL	-PULMONARY ARTERY: MINERAL DEPOSIT
	-MINIMAL	-ALVEOLI: MACROPHAGES
	-MINIMAL	-ALVEOLI: BONE SPICULE
MEDIASTINAL LN	MICRO: -SLIGHT	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
MESENTERIC LN	MICRO: -MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
OVARY	MICRO: -MINIMAL	-B/ BROWN PIGMENT
PARATHYROID GL	HISTOPATHOLOGICAL COMMENT:	>ONE PARATHYROID
SPLEEN	MICRO: -SLIGHT	-CONGESTION
	-SLIGHT	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
STOMACH	MICRO: -MINIMAL	-EOSINOPHIL INFILTRATE
	-MINIMAL	-GLAND(S): DILATATION/CYST
THYROID GLAND	MICRO: -MINIMAL	-U/ LYMPHOID CELL INFILTRATE
TRACHEA	MICRO: -MINIMAL	-LYMPHOID CELL INFILTRATE
UTERUS	MICRO: -SLIGHT	-EOSINOPHILIC INFILTRATE
	-MINIMAL	-RETICULOENDOTHELIAL CELLS: BROWN PIGMENT
VAGINA	MICRO: -SLIGHT	-ACUTE/SUBACUTE INFLAMMATION

ANIMAL NUMBER: 4520 SEX: FEMALE DOSE GROUP: 4 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 09/19/96 STUDY DAY OF DEATH: 93 STUDY WEEK OF DEATH: 14 TERMINAL BODY WEIGHT: 282.2 GRAMS

*** ANIMAL HAS NO GROSS ABNORMALITIES OBSERVED ***

THE FOLLOWING TISSUES HAD NO MICROSCOPIC ABNORMALITIES OBSERVED:
ADRENAL GLAND, BRAIN, CECUM, CERVICAL SC, COLON, DUODENUM, ESOPHAGUS, EYE, FEMORAL MARROW, FEMUR, HEART, ILEUM, JEJUNUM, LACRIMAL GLAND, LOW COLON/RECTUM, MAMMARY GLAND, NERVE, OPTIC NERVE, PANCREAS, PARATHYROID GL, PITUITARY GLAND, SALIVARY GLAND, SKELETAL MUSCLE, STERNAL MARROW, STERNUM, THORACIC AORTA, THORACIC SC, THYMUS, URINARY BLADDER, ZYMBAL'S GLAND

KEY TO NEOPLASMS: "M-" MALIGNANT, "B-" BENIGN, "S-" METASTATIC, "I-" INVASIVE, "X-" OTHER

Analytical Report

STUDY TITLE

A SUBCHRONIC (3-MONTH) TOXICITY STUDY OF ULTRANOX®XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

AUTHOR

Brian Pillsbury

REPORT DATE

13 December 1996

STUDY NUMBER

96-2459

Appendix K (cont.)
A Subchronic (3-Month) Toxicity Study Of
Ultranox®Xr-2677 In The Rat Via Oral Gavage Administration

Analytical Report (cont.)

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Analytical Report (cont.)

SIGNATURE PAGE

I, the undersigned, declare that the data presented in this report accurately reflect the data collected and was conducted under GLP guidelines and in accordance with the appropriate Huntingdon Life Sciences SOP's.

Written by: Brian Pillsbury — 6 Jan 97
Brian Pillsbury — Date
Group Leader
Analytical Services Department

I, the undersigned, declare that I have reviewed the report in full and to the best of my knowledge the data presented in this report are scientifically correct and in accordance with the appropriate Huntingdon Life Sciences SOP's.

Reviewed by: L Cojocaru — 06 January 1997
Laura Cojocaru — Date
Supervisor
Analytical Services Department

I, the undersigned, declare that I have reviewed the text and data summary of this report and to the best of my knowledge the data presented in this report are scientifically correct and in accordance with the appropriate Huntingdon Life Sciences SOP's.

Approved by: D. Dadgar — 06/Jan/1997
Dari Dadgar, Ph.D. — Date
VP
Analytical Services Department

Analytical Report (cont.)

QUALITY ASSURANCE STATEMENT

Listed below are the dates that this study was inspected by the Quality Assurance Unit of Huntingdon Life Sciences and the dates findings were reported to the Study Director and Management.

Type of Inspection	Dates of Inspection	Date Submitted to Study Director	Date Reported to Test Facility Management
In Process Audit (Dose Confirmation Analysis)	6 Aug 96	8 Aug 96	3 Sep 96 & 30 Sep 96
Data Review and Final Report	5 Dec 96 & 12 Dec 96	12 Dec 96	17 Dec 96 & 3 Jan 97

Signature: _____
Michael Caulfield
Director, Quality Assurance and
Regulatory Affairs

3 Jan 97
Date

Analytical Report (cont.)

1. Summary

Dose suspension samples of Ultranox XR-2677 in corn oil, received from Huntingdon Life Sciences Pharmacy Department, were assayed using methodology previously validated at Huntingdon Life Sciences (Appendix 1). This methodology involves dilution in BHT stabilized tetrahydrofuran with final determination using a gas chromatograph equipped with an on-column injection port and a flame ionization detector. The validation work for this methodology was carried out and documented with study 95-2424.

This report provides the results of homogeneity, dose confirmation, and stability assays performed for toxicology study 96-2459 and all pertinent supporting documentation.

2. Analytical Method

2.1. Analytical Method (PLSR-029-95 Revised 12 Feb 96)

Adapted from Sponsor methodology and validated at Huntingdon Life Sciences

Huntingdon Life Sciences
Mettlers Road
P.O. Box 2360
East Millstone, NJ
08875-2360

2.2. Study Number

96-2459

Analytical Report (cont.)

2.3. *Sponsor*

GE Specialty Chemicals
1000 DuPont Road
Morgantown, WV 26505

2.4. *Number of Samples*

Following is a table outlining sample intervals and numbers as outlined by the protocol and the actual number of sample assays performed. Following the table is an explanation of any deviations between the theoretical number and interval and the actual.

Interval	Protocol specified Number of Samples	Actual Number of Samples Assayed	Footnote (If discrepancy)
Homogeneity	19	19	--
Stability	9	20	a
Week 1-3	21	26	b,c
Week 4	7	10	d
Week 5-6	0	22	e
Week 7	0	3	f
Week 9	0	7	g
Week 8,13	14	14	--

[a] An additional set of Day 14 stability samples was assayed from the week three batch because the original Day 14 Group IV assay did not meet protocol specified limits In addition both high and low batches were assayed for stability. The protocol only specified low batch.

[b] The Group IV A sample was repeated in duplicate because of an initial result of 113%. The repeat analysis showed the sample to be within acceptable range.

[c] A remix was performed for Group IV when the dose level was changed from 52 to 54 mg/mL.

Analytical Report (cont.)

[d] Group II was resampled and remixed due to low recovery.

[e] Analysis of all dose levels performed at the request of study director due to low Group II recovery for Week 4. Low recoveries and repeat assays performed on the Group II samples.Group II Week 5 was remixed.

[f] Groups I and II assayed due to low recovery on Group II, weeks 4-6, at study director's request.

[g] Performed at study director's request to show consistent mixing results between Weeks 8 and 9.

2.5. Sample Receipt and Analysis

Interval	Date of Preparation	Date Received	Date Assayed	Storage Time
Homogeneity	13 Jun 96	13 Jun 96	13-14 Jun 96	< 24 hrs
Week 1	18 Jun 96	18 Jun 96	18 Jun 96	< 24 hrs
Week 1 Gr IV Remix	20 Jun 96	20 Jun 96	20 Jun 96	< 24 hrs
Week 2	25 Jun 96	25 Jun 96	25 Jun 96	< 24 hrs
Week 3	02 Jul 96	02 Jul 96	02 Jul 96	< 24 hrs
Week 4	09 Jul 96	09 Jul 96	09/10 Jul 96	< 48 hrs
Week 4 Remix Gr II	10 Jul 96	10 Jul 96	10 Jul 96	< 24 hrs
Week 5	16 Jul 96	16 Jul 96	16 Jul 96	< 24 hrs
Week 5 Gr II Remix	18 Jul 96	18 Jul 96	18 Jul 96	< 24 hrs
Week 6	23 Jul 96	23 Jul 96	23 Jul 96	< 24hrs
Week 7	30 Jul 96	30 Jul 96	30 Jul 96	< 24 hrs
Week 8	06 Aug 96	06 Aug 96	06 Aug 96	< 24 hrs
Week 9	13 Aug 96	13 Aug 96	13 Aug 96	< 24 hrs
Week 13	10 Sep 96	10 Sep 96	10 Sep 96	< 24 hrs

2.6. Stability Information

All stock and calibration standards were prepared fresh monthly in THF in the presence of dipentyl phthalate as internal standard and were stored frozen (approximately -20° C). Study samples were shown to be stable for up to 7 days at room temperature (See Section 6 Results).

3. SOP's Used During Conduct Of This Study

SOP Number	Title
MAC-A.1.6.9	Maintenance and Calibration of Balances
MAC-A.1.1.1	Test Substance/Sample Control Procedures
MAC-A.1.2.1	Preparation of Analytical Standards
MAC-A.1.3.3	Standard Curves
MAC-A.1.3.5	Sample Introduction
MAC-A.1.3.6	Chromatographic Integrity and Tolerance Limits
MAC-A.1.4.1	Test Substance Disposal
MAC-A.1.4.3	Study Sample disposal
MAC-A.1.5.1	Project Raw Data File
MAC-A.1.5.2	Protocols and Protocol Sign Sheets
MAC-A.1.5.5	Communication of Analytical Results
MAC-A.1.5.6	Report Preparation Guidelines
MAC-A.1.6.1	Equipment Maintenance and Calibration (Instrument Log Book)
MAC-A.1.6.19	Maintenance and Calibration of Gas Chromatographs
MAC-F.4.3.1	ChemStation Software

Analytical Report (cont.)

4. SOP And Protocol Deviations

The protocol only specified that a fourteen day stability be performed on the low batch. Stability was performed at both the high and low levels.

The Week 4, Group II batch analysis was outside protocol and SOP (MAC-A.1.3.6) limits. The mean % nominal for this dose group was 88.5%.

Because of the above deviation, the batches for Weeks 5, 6 and 7 were also analyzed (All groups for Weeks 5 and 6, Groups I and II for Week 7). All Group II batches for this period were outside the protocol and SOP limits. An additional peak in the chromatography indicated the low recovery was due to oxidation of the test compound. Possible causes for sample oxidation were investigated during Weeks 5, 6 and 7, but no single contributing factor could identified in the dose preparation or analytical procedure. In Week 8, a new column, new reagents and new lot of vehicle were used in analyzing the dose preparation and acceptable results were obtained.

Week 9 samples were assayed to show consistency after the Week 8 results were shown to be acceptable. This is a protocol deviation, as these samples were not initially scheduled for analysis. The overall mean for study for the Group II was, however, within 10% of the nominal.

5. Experimental Design

The data collected for this report was in conjunction with a 13-week subchronic toxicity study in the rat via oral gavage administration. The test material, Ultranox XR-2677 was prepared at concentrations of 0, 6, 18 and 54 mg/mL batches for Groups I, II, III and IV respectively. To achieve these concentrations for dosing, the test material was suspended in corn oil.

The analytical portion was run to show homogeneity and room temperature stability of the dosing suspensions and to monitor dose concentrations at protocol specified intervals.

Analytical Report (cont.)

6. Results

6.1. *Validation Results Included in Homogeneity Table I*

The low dose concentration for this study was less than previously validated dose levels although the dilutions from this level were within the previously validated linear standard range. A complete revalidation was not considered necessary. Injection reproducibility was shown by injecting one of the 6.0 mg/mL homogeneity samples (Group II Bot C) a total of 6 times. The mean and standard deviation for these injections were 97.8% nominal ± 0.207.

6.2. *Homogeneity Results Table I*

Homogeneity batches were prepared and analyzed at 6 and 52 mg/mL concentrations. Both batches were found to be homogeneous as per the protocol. The samples within each batch were within 5% of each other and 5% of nominal for both the low and high levels. Group II (6 mg/mL) gave a mean % nominal value of 98.5% with a standard deviation of 0.669. The Group IV (52 mg/mL) gave a mean % nominal of 98 2% with a standard deviation of 1.67. The dose level was increased during Week 1 of the study to 54 mg/mL but, as this was an increase of less than 4%, it was decided that additional homogeneity analysis was not necessary.

6.3. *Stability Confirmation Table II*

Room temperature stability assays were performed on the homogeneity batch at 4, 7 and 14 days after preparation. The results are as follows;

	% Nominal		
Group	Day 4	Day 7	Day 14
Group II Mean (n=2)	97.4	98.0	93.6
Group IV Mean (n=2)	95.4	92.4	80.6

Due to the sharp decrease in the Group IV values, a second Day 14 assay was performed using the Week 3 dose analysis as a baseline. The Group II and IV samples gave means of 88.8% nominal and 84.4% respectively. From the above data it was determined to be acceptable to use the dose concentrations for a period of seven days.

6.4. *Dose Confirmation Table III*

Samples were assayed in duplicate at the protocol scheduled intervals at weeks 1,2,3,4, 8 and 13. In addition, due to difficulties encountered with oxidation of the Ultranox XR-2677, samples were taken for all dose levels from the Week 5, 6 and 9 batches and Group II samples were taken from the Week 7 batch.

No test material was detected in Group I batches at all intervals. Groups III and IV samples were within acceptable protocol ranges for all intervals (10% of nominal and 10% of each other). Group II samples were outside this criteria for Weeks 4, 5, 6, and 7. Chromotography indicates that the low recovery during these intervals was due to oxidation. Overall study means for % nominal concentrations for each group are the following: Group II (6.0 mg/mL) mean and standard deviation(n-1) for % nominal was 92.7 (std dev = 6.65); Groups III (18.0 mg/mL) and IV (54.0 mg/mL) were 96.6 (std. dev. = 3.86) and 98 9 (std. dev. 4.66), respectively.

6.5. *Chromatograms of Dose Groups Figures I-IV*

Representative chromatograms from the study are presented as Figures I to IV. The initial concentrations of the batches represented are 0.0, 6.0, 18.0, and 54.0 mg/mL for the groups I to IV respectively

6.6. *Typical Calibration Curve Figure V*

A representative standard curve from one of the dose confirmation analyses is presented as Figure V.

Analytical Report (cont.)

Table I Homogeneity Results

Date Prepared: 13 Jun 96
Date Extracted: 13 &14 Jun 96
Date Injected: 14 Jun 96

	mg/mL		%
Sample ID	**Found**	**Added**	**Nominal**
Control	ND[a]	0.0	--
Gr II A Top	5.89	6.00	98.2
Gr II B Top	5.87	6.00	97.8
Gr II C Top	5.91	6.00	98.5
Gr II A Mid	5.92	6.00	98.7
Gr II B Mid	5.90	6.00	98.3
Gr II C Mid	5.89	6.00	98.2
Gr II A Bot	6.01	6.00	100
Gr II B Bot	5.93	6.00	98.8
Gr II C Bot Inj 1	5.88	6.00	98.0
Gr II C Bot Inj 2	5.87	6.00	97.8
Gr II C Bot Inj 3	5.88	6.00	98.0
Gr II C Bot Inj 4	5.88	6.00	98.0
Gr II C Bot Inj 5	5.85	6.00	97.5
Gr II C Bot Inj 6	5.86	6.00	97.7
Gr II C Bot Mean	**5.87**	**6.00**	**97.8**[b]
Gr II C Bot - Std Deviation (n-1)			**0.20**
MEAN			**98.5**
Std Dev (n-1)			**0.669**
% CV			**0.679**

[a]ND = None detected
[b]Mean of Group II C Bot injections used to calculate the Mean and Standard Deviation for Group II homogeneity.

Analytical Report (cont.)

Table I Homogeneity Results-continued

Date Prepared: 13 Jun 96
Date Extracted: 13 & 14 Jun 96
Date Injected: 14 Jun 96

	mg/mL		%
Sample ID	**Found**	**Added**	**Nominal**
Gr IV A Top	52.0	52.0	100
Gr IV B Top	51.0	52.0	98.1
Gr IV C Top	49.4	52.0	95.0
Gr IV A Mid	51.9	52.0	99.8
Gr IV B Mid	51.2	52.0	98.5
Gr IV C Mid	50.4	52.0	96.9
Gr IV A Bot	51.7	52.0	99.4
Gr IV B Bot	51.7	52.0	99.4
Gr IV C Bot	50.4	52.0	96.9
MEAN			**98.2**
Std Dev (n-1)			**1.67**
% CV			**1.70**

Analytical Report (cont.)

Table II Room Temperature Dose Stability Results

Interval: Day 4 **Date Extracted: 17 Jun 96**
Date Prepared: 13 Jun 96 **Date Injected: 17 Jun 96**

Sample ID	Found (mg/mL)	Added (mg/mL)	% Nominal
Control	ND[a]	0.0	--
Gr II A	5.85	6.00	97.5
Gr II B	5.85	6.00	97.5
Gr IV A	49.4	52.0	95.0
Gr IV B	49.8	52.0	95.8

Interval: Day 7 **Date Extracted: 20 Jun 96**
Date Prepared: 13 Jun 96 **Date Injected: 20 Jun 96**

Sample ID	Found (mg/mL)	Added (mg/mL)	% Nominal
Control	ND[a]	0.0	--
Gr II A	5.96	6.00	99.3
Gr II B	5.80	6.00	96.7
Gr IV A	47.9	52.0	92.1
Gr IV B	48.2	52.0	92.7

[a]ND = None detected.

Analytical Report (cont.)

Table II Room Temperature Dose Stability Results

Interval: Day 14 **Date Extracted: 27 Jun 96**
Date Prepared: 13 Jun 96 **Date Injected: 27 Jun 96**

Sample ID	Found (mg/mL)	Added (mg/mL)	% Nominal
Control	ND[a]	0.0	--
Gr II A	5.62	6.00	93.7
Gr II B	5.61	6.00	93.5
Gr IV A	42.1	52.0	81.0
Gr IV B	41.7	52.0	80.2

Interval: Day 14 Reassay[b] **Date Extracted: 16 Jul 96**
Date Prepared: 02 Jun 96 **Date Injected: 16 Jul 96**

Sample ID	Found (mg/mL)	Added (mg/mL)	% Nominal
Control	ND[a]	0.0	--
Gr II A	5.39	6.00	89.8
Gr II B	5.27	6.00	87.8
Gr IV A	45.8	54.0	84.8
Gr IV B	45.3	54.0	83.9

[a]ND = None detected.
[b]Second Day 14 stability taken from Week 3 mix. Day 0 from Week 3 data Table III

Analytical Report (cont.)

Table III Dose Confirmation Results

Interval: Week 1 **Date Extracted: 18 Jun 96**
Date Prepared: 18 Jun 96 **Date Injected: 18 Jun 96**

	mg/mL		%
Sample ID	**Found**	**Added**	**Nominal**
Control	ND[a]	0.0	--
Gr II A	5.87	6.00	97.8
Gr II B	5.89	6.00	98.2
Gr III A	17.9	18.0	99.4
Gr III B	17.9	18.0	99.4
Gr IV A	58.7	52.0	113[b]
Gr IV B	48.4	52.0	93.1[b]

Interval: Week 1 Resample and remix **Date Extracted: 20 Jun 96**
Date Prepared: 18/20 Jun 96 **Date Injected: 20 Jun 96**

	mg/mL		%
Sample ID	**Found**	**Added**	**Nominal**
Control	ND[a]	0.0	--
Gr IV C(Resample)	52.1	52.0	100[b]
Gr IV D(Resample)	50.9	52.0	97.9[b]
Gr IV E (Remix)	53.7	54.0	99.4[b]
Gr IV F (Remix)	51.6	54.0	95.6[b]

[a]ND = None detected.
[b]The Group IV A sample was omitted as a possible extraction error. The mean of the resamples, C and D (99.0%) was then averaged with Group IV E for final number of 99.2 which was used for statistical means and standard deviations. Group IV B was averaged with Group IV F for a second value for this interval of 94.4%.

Analytical Report (cont.)

Table III Dose Confirmation Results-continued

Interval: Week 2 **Date Extracted: 25 Jun 96**
Date Prepared: 25 Jun 96 **Date Injected: 25 Jun 96**

	mg/mL		%
Sample ID	**Found**	**Added**	**Nominal**
Control	ND[a]	0.0	--
Gr II A	5.65	6.00	94.2
Gr II B	5.85	6.00	97.5
Gr III A	17.5	18.0	97.2
Gr III B	17.4	18.0	96.7
Gr IV A	52.4	54.0	97.0
Gr IV B	51.5	54.0	95.4

Interval: Week 3 **Date Extracted: 02 Jul 96**
Date Prepared: 02 Jul 96 **Date Injected: 02 Jul 96**

	mg/mL		%
Sample ID	**Found**	**Added**	**Nominal**
Control	ND[a]	0.0	--
Gr II A	5.89	6.00	98.2
Gr II B	5.90	6.00	98.3
Gr III A	17.4	18.0	96.7
Gr III B	17.5	18.0	97.2
Gr IV A	53.7	54.0	99.4
Gr IV B	53.5	54.0	99.1

[a]ND = None detected.

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Analytical Report (cont.)

Table III Dose Confirmation Results-continued

Interval: Week 4 **Date Extracted: 09/10 Jul 96**
Date Prepared: 09 Jul 96 **Date Injected: 09/10 Jul 96**

	mg/mL		%
Sample ID	**Found**	**Added**	**Nominal**
Control	ND[a]	0.0	--
Gr II A	3.96	6.00	66.0[c]
Gr II A Rediluted	3.94	6.00	65.7[c]
Gr II B Rediluted	3.92	6.00	65.3[c]
Gr III A	16.4	18.0	91.0
Gr III B	16.4	18.0	91.0
Gr IV A	48.9	54.0	90.6
Gr IV B	48.5	54.0	89.8

Interval: Week 4 Remix **Date Extracted: 10 Jul 96**
Date Prepared: 10 Jul 96 **Date Injected: 10 Jul 96**

	mg/mL		%
Sample ID	**Found**	**Added**	**Nominal**
Gr II A Remix	5.24	6.00	87.3
Gr II B Remix	5.38	6.00	89.7

[a]ND = None detected.
[c]The initial Group II mix was not fed to the animals. These numbers are not included in the means and standard deviations.

Analytical Report (cont.)

Table III Dose Confirmation Results-continued

Interval: Week 5 **Date Extracted: 16 Jul 96[b]**
Date Prepared: 16 Jul 96 **Date Injected: 16 Jul 96**

	mg/mL		%
Sample ID	**Found**	**Added**	**Nominal**
Control	ND[a]	0.0	--
Gr II A	5.38	6.00	89.7
Gr II B	5.36	6.00	89.3
Gr II A Resample	4.88	6.00	81.3[d]
Gr II B Resample	4.70	6.00	78.3[d]
Gr III A	16.7	18.0	92.8
Gr III B	16.5	18.0	91.7
Gr IV A	54.0	54.0	100.0
Gr IV B	56.5	54.0	104.6

Interval: Week 5 Gr II Remix **Date Extracted: 18Jul 96**
Date Prepared: 18Jul 96 **Date Injected: 18Jul 96**

	mg/mL		%
Sample ID	**Found**	**Added**	**Nominal**
Gr II A	4.51	6.00	75.2[e]
Gr II B	4.05	6.00	67.5[e]

[a]ND= None detected
[d]Resampled and assayed on 17 Jul 96. Value not included in mean and standard deviation calculations.
[e]Remix not used in the dosing of test animals and therefore not included in mean and standard deviation results.

Analytical Report (cont.)

Table III Dose Confirmation Results-continued

Interval: Week 6 **Date Extracted: 23 Jul 96**
Date Prepared: 23 Jul 96 **Date Injected: 23 Jul 96**

	mg/mL		%
Sample ID	**Found**	**Added**	**Nominal**
Control	ND[a]	0.0	--
Gr II A	4.76	6.00	79.3[f]
Gr II B	4.76	6.00	79.3[f]
Gr II C	4.56	6.00	76.0[f]
Gr II D	4.51	6.00	75.2[f]
Gr II E	5.46	6.00	91.0[f]
Gr II F	5.44	6.00	90.7[f]
Gr III A	16.7	18.0	92.8
Gr III B	16.8	18.0	93.3
Gr IV A	51.6	54.0	95.6
Gr IV B	53.3	54.0	98.7

[a]ND = None detected.
[f] Multiple extractions were prepared by different technicians and using different techniques in an attempt to determine if low recoveries were laboratory error. The mean of these six values (81.9%) was inputted twice for this interval for use in calculating study means and standard deviations.

Analytical Report (cont.)

Table III Dose Confirmation Results-continued

Interval: Week 7 **Date Extracted: 30 Jul 96**
Date Prepared: 30 Jul 96 **Date Injected: 30 Jul 96**

Sample ID	mg/mL Found	Added	% Nominal
Control	ND[a]	0.0	--
Gr II A	4.99	6.00	83.2
Gr II B	4.96	6.00	82.7
Gr II A (Aldrich)	4.89	6.00	81.5[g]
Gr II B (Aldrich)	4.69	6.00	78.2[g]

Interval: Week 8 **Date Extracted: 06 Aug 96**
Date Prepared: 06 Aug 96 **Date Injected: 06 Aug 96**

Sample ID	mg/mL Found	Added	% Nominal
Control	ND[a]	0.0	--
Gr II A	5.82	6.00	97.0
Gr II B	5.81	6.00	96.8
Gr III A	18.42	18.0	102.3
Gr III B	18.62	18.0	103.4
Gr IV A	54.25	54.0	100.5
Gr IV B	56.95	54.0	105.5

[a] ND = None detected
[g]Injected for comparison only. Not included in mean and standard deviation calculations.

Appendix K (cont.)
A Subchronic (3-Month) Toxicity Study Of
Ultranox®Xr-2677 In The Rat Via Oral Gavage Administration

Analytical Report (cont.)

Interval: Week 9 **Date Extracted: 13 Aug 96**
Date Prepared: 13 Aug 96 **Date Injected: 13 Aug 96**

	mg/mL		%
Sample ID	**Found**	**Added**	**Nominal**
Control	ND[a]	0.0	--
Gr II A	6.11	6.00	101.8
Gr II B	6.14	6.00	102.3
Gr III A	18.30	18.0	101.7
Gr III B	17.75	18.0	98.6
Gr IV A	56.85	54.0	105.3
Gr IV B	57.20	54.0	105.9

Interval: Week 13 **Date Extracted: 10 Sep 96**
Date Prepared: 10 Sep 96 **Date Injected: 10 Sep 96**

	mg/mL		%
Sample ID	**Found**	**Added**	**Nominal**
Control	ND[a]	0.0	--
Gr II A	5.51	6.00	91.8
Gr II B	5.68	6.00	94.7
Gr III A	17.47	18.0	97.1
Gr III B	17.43	18.0	96.8
Gr IV A	53.65	54.0	99.4
Gr IV B	53.85	54.0	99.7

[a]ND = None detected.

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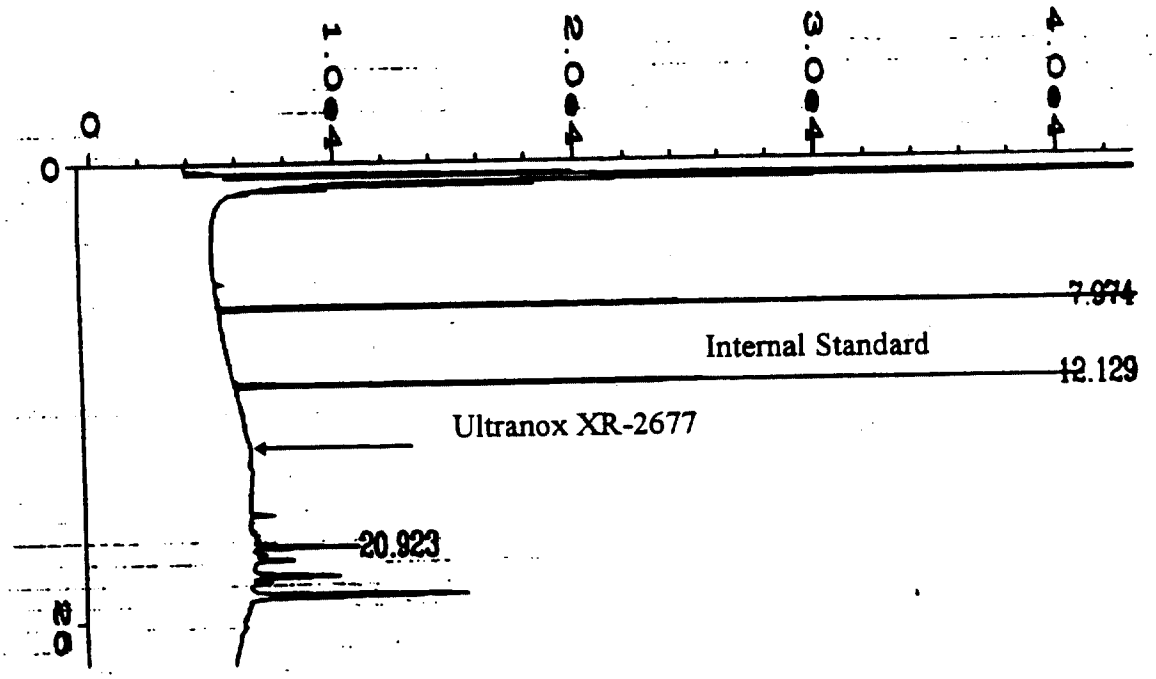
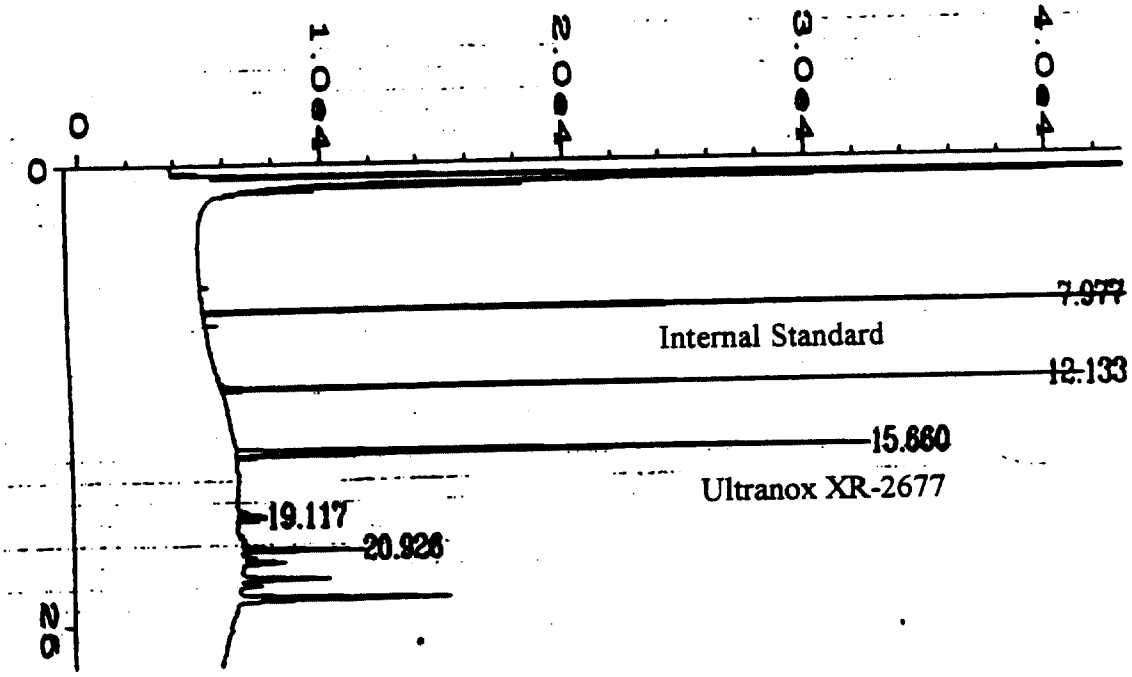
Analytical Report (cont.)

Figure I Chromatogram of Group I (0.0 mg/mL, 50 fold dilution)



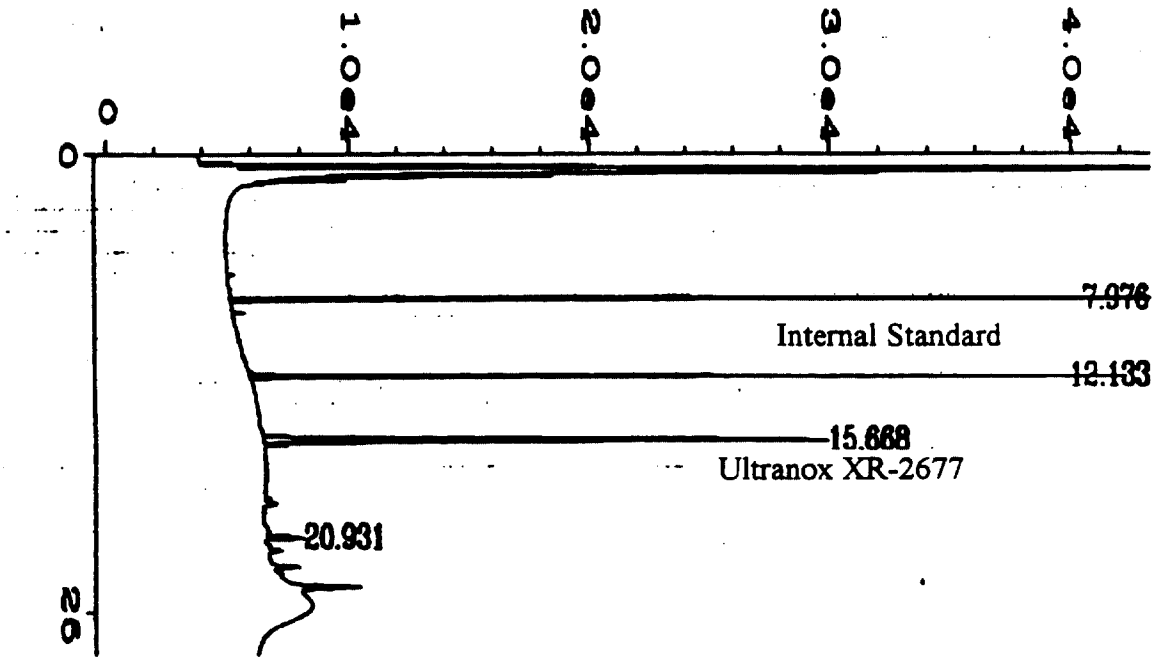
Analytical Report (cont.)

Figure II Chromatogram of Group II (6.00 mg/mL, 50 fold dilution)



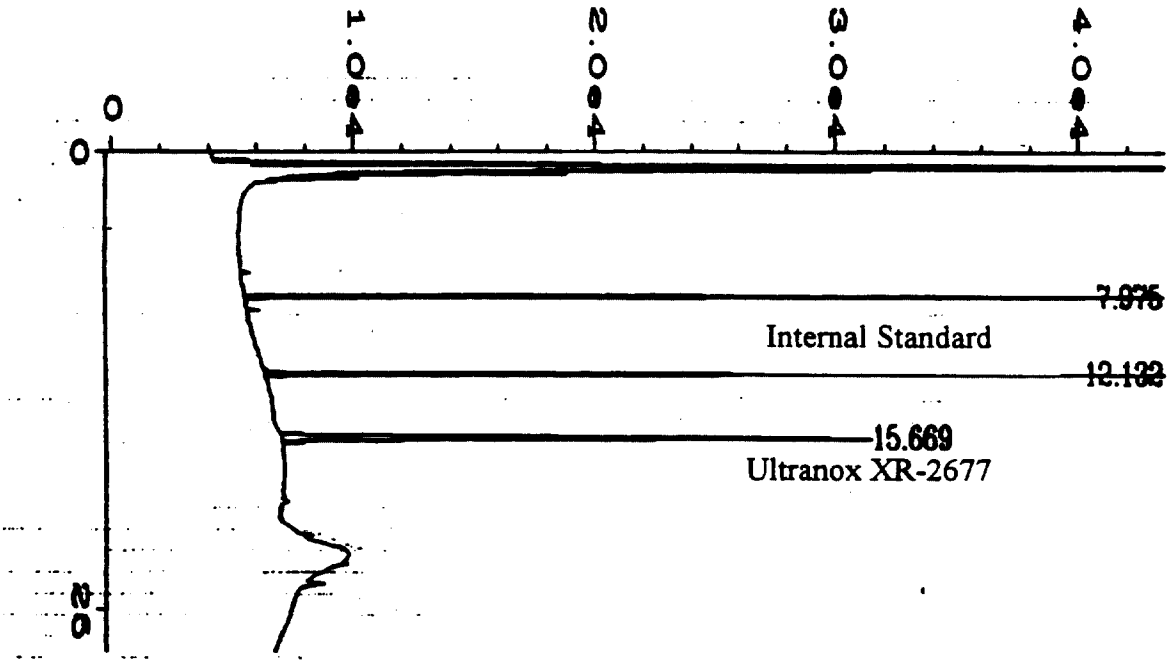
Analytical Report (cont.)

Figure III Chromatogram of Group III (18 mg/mL, 167 fold dilution)



Analytical Report (cont.)

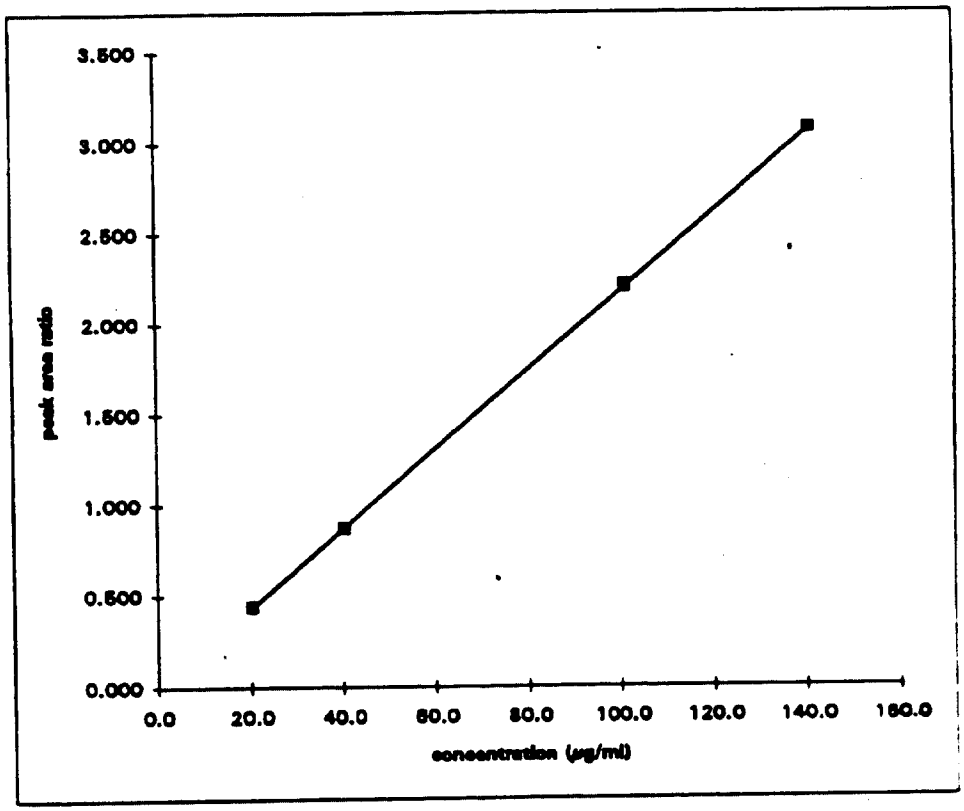
Figure IV Chromatogram of Group IV (54 mg/mL, 500 fold dilution)



Analytical Report (cont.)

Figure V Representative Standard Curve

		estimated values	
slope	0.0218	x	y
cor. coeff	1.000	20.2	0.436
y-int	-0.00830	141	3.06



Analytical Report (cont.)

7. Conclusion

The compound was found to mix homogeniously with corn oil and the suspension was stable for a minimum of 7 days.

The means and standard deviations for the % nominal for all dose groups assayed during the course of the study indicate that the overall results met the study design.

Analytical Report (cont.)

ATTACHMENT I

An Analytical Method for the Determination of

XR-2677 in Corn Oil by Gas Chromatography

PLSR-029-95

Revised 24 June 96

Analytical Report (cont.)

AN ANALYTICAL METHOD FOR THE DETERMINATION OF XR-2677 IN CORN OIL BY GAS CHROMATOGRAPHY

1.0 SCOPE

An analytical procedure is described for the determination of XR-2677 by gas chromatography (GC). The limit of quantification is 10.0 mg/mL (0.5 µL of 20.0 mg/mL standard). This limit was not optimized.

2.0 PRINCIPLE

Quantification of XR-2677 in corn oil was performed by GC using a cool on-column technique with a flame ionization detector. The concentration of XR-2677 was determined utilizing a 15 metre DB-1 column.

3.0 EQUIPMENT

3.1 General laboratory glassware.
3.2 Analytical balance, Mettler AE163.
3.3 Class A volumetric flasks.
3.4 Class A volumetric pipettes ("to contain" and "to dispense").
3.5 Magnetic stir plate and stir bars.
3.6 Gas chromatograph: HP05890 II gas chromatograph, equipped with a flame ionization detector.
HP 3365 Chemstation software on Dell PC.
Equivalent equipment may be used.

Analytical Report (cont.)

4.0 TEST MATERIALS AND REAGENTS

4.1 Test Material XR-2677. Received from Sponsor. Store under Nitrogen in a dessicator at ambient temperature.

4.2 Dipentyl Phthalate (Acros).

4.3 Tetrahydrofuran (HPLC grade), BHT stabilized. Store under Nitrogen.

5.0 PROCEDURE

5.1 Preparation Internal Standard

Dissolve approximately 1.000 g of Dipentyl Phthalate in Tetrahydrofuran and dilute to 100 mL in a volumetric flask. This solution is approximately 10 000 µg/mL. The 10 000 µg/mL solution is then diluted with tetrahydrofuran using a dilution ratio of 1:200 (minimum pipetting volume 1.0 mL) to provide a 50.0 µg/mL solution. The standards should be stored in the freezer and prepared monthly.

5.2 Preparation of External Standards

Dissolve approximately 0.100 g of XR-2677 in 50.0 µg/mL internal standard and dilute to 100 mL in a volumetric flask. This solution is approximately 1000 µg/mL, which is diluted 20.0 mL to 100 mL with 50.0 µg/mL internal standard and brought to volume in a volumetric flask. This solution is approximately 200 µg/mL, which is further diluted with 50.0 µg/mL internal standard using volumetric flasks, as shown on the following page.

Analytical Report (cont.)

5.2 Preparation of External Standards (cont.)

Aliquot of 200 µg/mL Added (mL)	Final Volume (mL)	Concentration (µg/mL)
1.0	10.0	20 0
2.0	10.0	40 0
5.0	10.0	100
7.0	10.0	140

The standards should be stored under nitrogen in a freezer and prepared monthly.

5.3 Preparation of Samples

A dose solution submitted for analysis was stirred for a minimum of five minutes. Sample aliquots were taken from the dose mixture while stirring using 2.0 mL "to contain" pipettes. The pipettes were rinsed directly into 100 mL volumetric flasks and brought to volume with 50.0 µg/mL internal standard (these initial dilutions will be referred as Dilution A). Dilutions A are further diluted with 50.0 µg/mL internal standard using volumetric glassware, as shown below:

Nominal Concentration (mg/mL)	Aliquot of Dilution A Taken (mL)	Final Volume (mL)
Control	NA	NA
6.00	NA	NA
18.0	3.0	10 0
54.0	1.0	10 0

Note: Other dilution schemes may be used provided the final solutions are bracketed within the standard range. The Control is diluted using the same scheme as the lowest dose level group.

Analytical Report (cont.)

6.0 GAS CHROMATOGRAPHIC ANALYSIS

6.1 A standard curve for the analyses was constructed by injecting at least three standards of different concentrations at the beginning of the chromatographic run, a standard after every fourth sample and at the end of the run. Responses to the standards were plotted as peak area versus concentration ratio of XR-2677 standard relative to the 50.0 µg/mL internal standard. A standard correlation coefficient was then calculated by linear regression and the sample concentrations obtained. A typical standard curve is shown in Figure 1. Chromatographic conditions are presented in Table A. Typical chromatograms of XR-2677 are presented in Figures 2 and 3 and a Control in Figure 4.

6.2 Calculations

$$\text{Percentage Difference (\%) (Std.)} = \frac{\text{µg/mL found - std. conc.}}{\text{std. conc.}} \times 100$$

$$\text{mg/mL Found} = \frac{\text{µg/mL found x dilution factor}}{1000}$$

$$\text{Percentage Recovery (\%)} = \frac{\text{mg/mL found}}{\text{mg/mL added}} \times 100$$

Analytical Report (cont.)

7.0 METHOD VALIDATION

In order to validate the method, the calibration standards were tested for linearity and injection reproducibility while the individual dilutions were tested for mixing efficiency and injection reproducibility.

Four standards of different concentrations of XR-2677 were each injected three times and the results are shown below:

Date of Analysis	Slope	Correlation Coefficient	y - Intercept
09 Nov 95	0.0201	0.998	-0.0179
13 Nov 95	0.0195	0.999	0.00329
16 Nov 95	0.0199	0.999	-0.0271

Method validation samples for injection reproducibility were taken from Week 4 concentration confirmation analysis. The nominal concentrations were 20.0 mg/mL and 200 mg/mL respectively in a 300 mL corn oil mix. Two aliquots from each level were sampled and diluted, as described in Section 5.3. All samples were injected once and one sample from each concentration was injected six times. Results of this analysis are presented in Table B.

Analytical Report (cont.)

7.0 METHOD VALIDATION-continued

Further method validation was performed at concentration levels 6.00 mg/mL and 52.0 mg/mL in a 700 mL corn oil mix. Nine aliquots (3 from top, middle and bottom) from each level were sampled and diluted, as outlined in Section 5.3, in order to determine homogeneity and stability. All samples were injected once and one sample from the lowest concentration was injected six times.

8.0 CONCLUSION

The method validation samples were shown to be homogeneous in a 300 mL corn oil mix and have a stability for twelve days, at concentration levels of 20.0 mg/mL and 200 mg/mL, when stored under nitrogen in a dessicator. The results for homogeneity and stability are presented in Tables C, D, E and F.

The further method validation samples were shown to be homogeneous in a 700 mL corn oil mix and have a stability for fourteen days at a concentration level of 6.00 mg/mL and seven days at 52.0 mg/mL, when stored under nitrogen. The results for homogeneity and stability are presented in Tables G, H, I and J.

Analytical Report (cont.)

TABLE A. GC CONDITIONS FOR THE ANALYSIS OF XR-2677

Instrument:	Hewlett Packard 5890 II GC equipped with Flame Ionization Detector.	
	Hewlett Packard 7673 Controller	
	Hewlett Packard 3365 Chemstation software on Dell 433 Personal Computer	
Column:	J & W DB-1 Column (size: 15 m x 0.53 µm ID)	
	Film thickness 1.5 µm.	
Column Temperature:		
Injector:		Oven Track
Detector:		240 °C
Oven:	Initial temp.	50 °C
	Initial time	0.00 min.
	Rate	15 °C/min.
	Intermediate temp.	240 °C
	Intermediate time	5.00 min.
	Final temp.	280 °C
	Final time	7.00 min.
Gas Flows:		
Hydrogen:		~35 mL/min.
Air:		~350 mL/min.
Column Flow (He):		4.0 mL/min.
Auxiliary Flow (He):		~35 mL/min.
Injection Volume:		0.5µL

[a] Parameters and equipment may be changed due to instrument availability and to achieve optimum resolution and sensitivity.

Analytical Report (cont.)

TABLE B. INJECTION REPRODUCIBILITY OF XR-2677

Analysis performed on 05 Dec 95

SAMPLE I.D.	mg/mL ADDED	mg/mL FOUND	RECOVERY (%)
$20A_1$	20.0	20.7	104
$20A_2$	20.0	19.1	95 5
$20A_3$	20.0	18.9	94 5
$20A_4$	20.0	18.7	93 5
$20A_5$	20.0	18.6	93 0
$20A_6$	20.0	18.3	91 5
$200A_1$	200	223	112
$200A_2$	200	207	104
$200A_3$	200	205	103
$200A_4$	200	203	102
$200A_5$	200	201	101
$200A_6$	200	201	101
Control	0.00	ND	-

SAMPLE I.D.	MEAN RECOVERY (%)	S.D. (%)	CoV (%)
$20A_{1-6}$	95.3	4.46	4 68
$200A_{1-6}$	104	4.17	4 01

Note: All figures recorded to 3 significant figures for presentation purposes only
S.D. = Standard Deviation.
CoV = Coefficient of Variation.

Analytical Report (cont.)

TABLE C. HOMOGENEITY AND DAY 0 STABILITY OF XR-2677

Analysis performed on 09 Nov 95

SAMPLE I.D.	mg/mL ADDED	mg/mL FOUND	RECOVERY (%)	MEAN OF T,M,B' (%)
20AT	20.0	19.1	95.3	
20BT	20.0	19.1	95.6	94.5
20CT	20.0	18.5	92.6	
20AM	20.0	18.1	90.4	
20BM	20.0	18.2	90.8	89.6
20CM	20.0	17.5	87.5	
20AB'	20.0	18.5	92.7	
20BB'	20.0	18.4	91.8	91.1
20CB'	20.0	17.7	88.7	
200AT	200	208	104	
200BT	200	208	104	106
200CT	200	218	109	
200AM	200	215	108	
200BM	200	215	107	107
200CM	200	211	106	
200AB'	200	210	105	
200BB'	200	209	104	104
200CB'	200	208	104	
Control	0.00	ND	-	

NOMINAL CONC. (mg/mL)	MEAN RECOVERY (%)	S.D. (%)	CoV (%)
20.0	91.7	2.51	2.74
200	106	1.53	1.45

Note: All figures recorded to 3 significant figures for presentation purposes only
S.D. = Standard Deviation. CoV = Coefficient of Variation.
Key: T=Top, M=Middle, B'=Bottom. A=Left, B=Centre, C=Right.

Analytical Report (cont.)

TABLE D. DAY 4 STABILITY OF XR-2677

Analysis performed on 13 Nov 95

SAMPLE I.D	mg/mL ADDED	mg/mL FOUND	RECOVERY (%)
20A	20.0	19.2	96.0
20B	20.0	18.9	94.5
200A	200	194	97.0
200B	200	203	102
Control	0.00	ND	-

TABLE E. DAY 7 STABILITY OF XR-2677

Analysis performed on 16 Nov 95

SAMPLE I.D	mg/mL ADDED	mg/mL FOUND	RECOVERY (%)
20A	20.0	19.8	99.0
20B	20.0	19.5	97.5
200A	200	206	103
200B	200	210	105
Control	0.00	ND	-

TABLE F. DAY 12 STABILITY OF XR-2677

Analysis performed on 21 Nov 95

SAMPLE I.D.	mg/mL ADDED	mg/mL FOUND	RECOVERY (%)
20A	20.0	20.4	102
20B	20.0	20.3	102
200A	200	207	104
200B	200	188	94.0
Control	0.00	ND	-

Note: All figures recorded to 3 significant figures for presentation purposes only.

Analytical Report (cont.)

TABLE G. HOMOGENEITY AND DAY 0 STABILITY OF XR-2677

Analysis performed on 13 & 14 Jun 96

SAMPLE I.D	mg/mL ADDED	mg/mL FOUND	RECOVERY (%)	MEAN OF T,M,B' (%)
Gp II TA	6.00	5.89	98.2	
Gp II TB	6.00	5.87	97.8	
Gp II TC	6.00	5.91	98.5	98.2
Gp II MA	6.00	5.92	98.7	
Gp II MB	6.00	5.90	98.3	
Gp II M C	6.00	5.89	98.2	98.4
Gp II B'A	6.00	6.01	100	
Gp II B'B	6.00	5.93	98.8	
Gp II B'C_1	6.00	5.88	98.0	98.9
Gp II B'C_2	6.00	5.87	97.8	
Gp II B'C_3	6.00	5.88	98.0	
Gp II B'C_4	6.00	5.88	98.0	
Gp II B'C_5	6.00	5.85	97.5	
Gp II B'C_6	6.00	5.86	97.7	
Gp IV TA	52.0	52.0	100	
Gp IV TB	52.0	51.0	98.1	97.7
Gp IV TC	52.0	49.4	95.0	
Gp IV MA	52.0	51.9	99.8	
Gp IV MB	52.0	51.2	98.5	98.4
Gp IV MC	52.0	50.4	96.9	
Gp IV B'A	52.0	51.7	99.4	
Gp IV B'B	52.0	51.7	99.4	98.6
Gp IV B'C	52.0	50.4	96.9	
CONTROL	0.00	ND	-	-

NOMINAL CONC. (mg/mL)	MEAN RECOVERY (%)	S.D. (%)	CoV (%)
6.00	98.5	0.669	0.679
52.0	98.2	1.67	1.70
INJECTION REPRODUCIBILITY	**MEAN RECOVERY (%)**	**S.D. (%)**	**CoV (%)**
Gp IIB'C_{1-6}	97.8	0.207	0.212

Note: All figures recorded to 3 significant figures for presentation purposes only.
S.D. = Standard Deviation, CoV = Coefficient of Variation.

Key: T=Top, M=Middle, B'=Bottom. A=Left, B=Centre, C=Right.

Analytical Report (cont.)

TABLE H. DAY 4 STABILITY OF XR-2677

Analysis performed on 17 Jun 96

SAMPLE I.D.	mg/mL ADDED	mg/mL FOUND	RECOVERY (%)
Gp IIA	6.00	5.85	97.5
Gp IIB	6.00	5.85	97.5
Gp IVA	52.0	49.4	95.0
Gp IVB	52.0	49.8	95.8
Control	0.00	ND	-

TABLE I. DAY 7 STABILITY OF XR-2677

Analysis performed on 20 Jun 96

SAMPLE I.D.	mg/mL ADDED	mg/mL FOUND	RECOVERY (%)
Gp IIA	6.00	5.96	99.3
Gp IIB	6.00	5.80	96.7
Gp IVA	52.0	47.9	92.1
Gp IVB	52.0	48.2	92.7
Control	0.00	ND	-

TABLE J. DAY 14 STABILITY OF XR-2677

Analysis performed on 27 Jun 96

SAMPLE I.D.	mg/mL ADDED	mg/mL FOUND	RECOVERY (%)
Gp IIA	6.00	5.62	93 7
Gp IIB	6.00	5.61	93 5
Control	0.00	ND	-

Note: All figures recorded to 3 significant figures for presentation purposes only

Analytical Report (cont.)

STANDARD CURVE FOR XR-2677

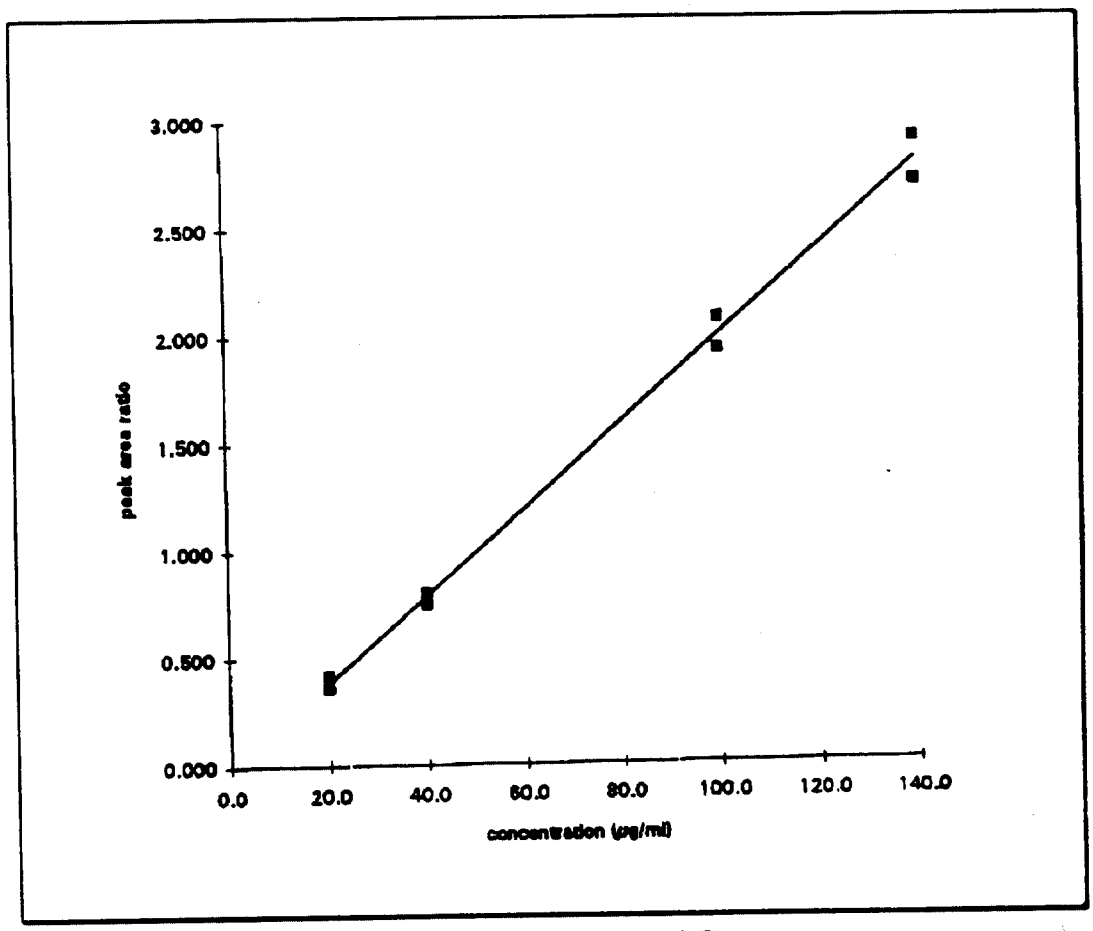


Figure 1: Typical Standard Curve

Analytical Report (cont.)

TYPICAL CHROMATOGRAMS OF XR-2677

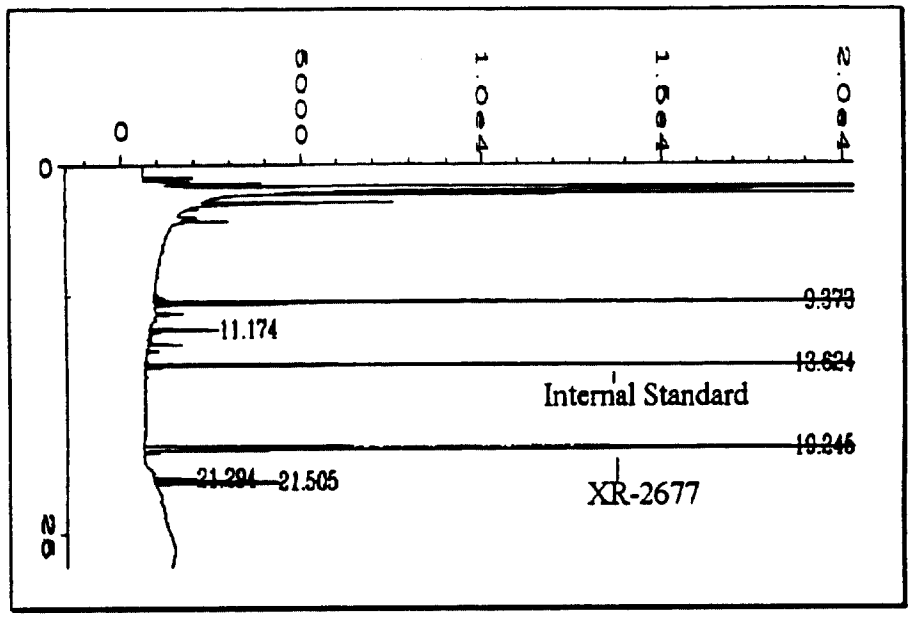


Figure 2: 140µg/mL XR-2677 Standard

Analytical Report (cont.)

TYPICAL CHROMATOGRAMS OF XR-2677 (CONT.)

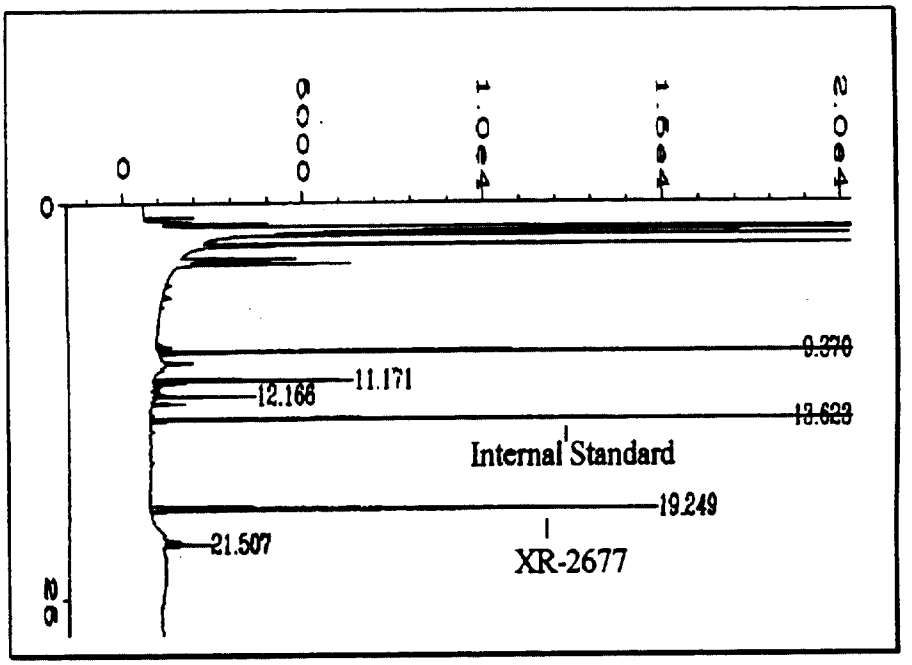


Figure 3: Diluted 200µg/mL XR-2677 in Corn Oil

Analytical Report (cont.)

TYPICAL CHROMATOGRAMS OF XR-2677 (CONT.)

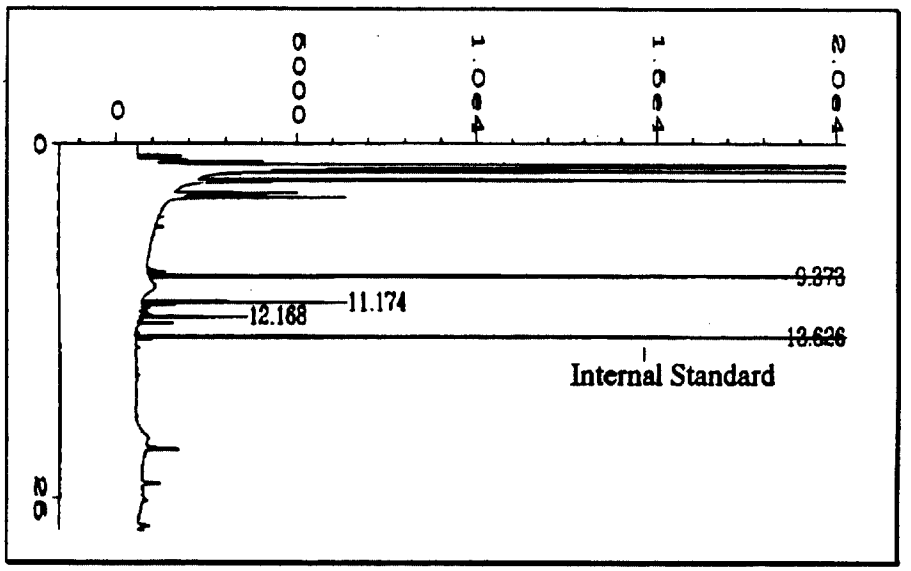


Figure 4: Control

Huntingdon Life Sciences — **Protocol & Protocol Amendment Cover Page**

General Information

Number of Pages:	~~25~~ 24
Sponsor Code:	G-24
Study Number:	96-2459
Study Title:	A Subchronic
(3-Month) Toxicity Study of	
Ultranox®XR-2677 in the Rat via	
Oral Gavage Administration	

Distribution List

RCM	X	Study Director
	X	Sponsor
SUM	X	Study Monitor Supervisor
RB	X	In-Life Study Monitor
SG	X	Pathology Study Monitor
EW	X	In-Life Supervisor
	X	In-Life Primary Technician
RAS	X	Clinical Pathology
MAV	X	Histology
HJ	X	Necropsy
DW	X	Pharmacy
		Diet Preparation (Diet Only)
AHS	X	M.A.C.
RRL	X	In-Life Manager
MC	X	Quality Assurance
NP	X	Contract Accountant

Required Information

Protocol Signed/Dated:	X
Test Material Info.:	X
Humane Treatment Sig:	X
Prestudy (QA) Checklist:	X
Report Scheduling Info:	X

Authorization to Distribute

Study Director: Rosemary Mansell Date: 13 May 96 Date of Distribution: 16 May 96

Amendments

No	Date of Change	Page(s)	Approved By	Date	Date Distributed
1	9 Jul 96	6, 24	Rosemary Mansell	9 Jul 96	9 Jul 96

Huntingdon
Life Sciences

HUNTINGDON LIFE SCIENCES

A SUBCHRONIC (3-MONTH) TOXICITY STUDY OF ULTRANOX®XR-2677 IN THE RAT VIA ORAL GAVAGE ADMINISTRATION

STUDY NO.: 96-2459

ISSUE NO.: 1 (FINAL)

SUBMITTED TO: GE Specialty Chemicals
1000 DuPont Road
Morgantown, WV 26505

ATTENTION: Mr. Stephen S. Dimond
GE Plastics
1 Plastics Avenue
Pittsfield, MA 01201

DATE: April 1996

Huntingdon Life Sciences Inc. PO Box 2360, Mettlers Road, East Millstone, NJ 08875-2360 USA.
Tel: +1 908 873 2550 Fax: +1 908 873 3992

1 INTRODUCTION:

1.1	**STUDY NO.:**	96-2459
1.2	**ISSUE NO.:**	1 (FINAL)
1.3	**STUDY TITLE:**	A Subchronic (3-Month) Toxicity Study of Ultranox®XR-2677 in the Rat via Oral Gavage Administration
1.4	**TEST MATERIAL:**	Ultranox®XR-2677
1.5	**SPONSOR:**	GE Specialty Chemicals P.O. Box 816 1000 DuPont Road Morgantown, WV 26505
1.6	**SPONSOR REPRESENTATIVE:**	Mr. Stephen S. Dimond GE Plastics 1 Plastics Avenue Pittsfield, MA 01201
1.7	**TESTING FACILITY:**	Huntingdon Life Sciences Mettlers Road P.O. Box 2360 East Millstone, NJ 08875-2360

1.8 PURPOSE:

This study is designed to assess the potential subchronic toxicity of Ultranox®XR-2677 when administered orally via gavage to rats for at least 90 days.

2 REGULATORY REFERENCES:

2.1 TEST GUIDELINE:

This study is designed to meet or exceed the requirements of FDA (United States Food and Drug Administration): Toxicological Principles for the Safety Assessment of Direct Food Additives and Color Additives Used in Food. 1986, Appendix II page 19 "Subchronic Oral Toxicity Studies"; OECD (Organization for Economic Cooperation and Development) Test Guideline No. 408 "Subchronic Oral Toxicity - Rodent" Adopted 12 May 1981; TSCA (Toxic Substances Control Act): Health Effects Testing Guidelines; published by the Office of Toxic Substances; Office of Pesticides and Toxic Substances, United States Environmental Protection Agency, Subchronic Oral Toxicity Study, section 798.2650; published September 27, 1985 and amended on May 16, 1989.

2.2 GOOD LABORATORY PRACTICES:

This study will be conducted in compliance with Part 58 of 21 CFR (FDA Good Laboratory Practice Standards); OECD Principles of Good Laboratory Practices (C(81)30 (Final) Annex 2); Part 792 of 40 CFR (EPA Good Laboratory Practices - TSCA).

2.3 FACILITIES MANAGEMENT/ANIMAL HUSBANDRY:

Currently acceptable practices of good animal husbandry will be followed, e.g., Guide for the Care and Use of Laboratory Animals; DHHS Publication No. (NIH) 86-23, Revised 1985. Huntingdon Life Sciences Inc., is fully accredited by the American Association for Accreditation of Laboratory Animal Care (AAALAC).

2.4 ANIMAL WELFARE ACT COMPLIANCE:

This study will comply with all appropriate parts of the Animal Welfare Act regulations: 9 CFR Parts 1 and 2 Final Rules, Federal Register, Volume 54, No. 168, August 31, 1989, pp. 36112-36163 effective October 30, 1989 and 9 CFR Part 3 Animal Welfare Standards; Final Rule, Federal Register, Volume 56, No. 32, February 15, 1991, pp. 6426-6505 effective March 18, 1991. The Sponsor should make particular note of the following:

1. The Sponsor's signature on this protocol documents for the study described, there are no generally accepted non-animal alternatives and the study does not unnecessarily duplicate previous experiments.

2. All procedures used in this study have been designed to avoid discomfort, distress and pain to the animals. All methods are described in this study protocol or in written laboratory standard operating procedures.

3. Any aspects of this study which cause more than momentary or slight pain or distress to the animals will be performed with appropriate sedatives, analgesics or anesthetics unless the withholding of these agents is justified for scientific reasons, in writing by the Sponsor and the Study Director, in which case the procedure will continue for the minimum time necessary.

4. Animals that experience severe or chronic pain or distress that cannot be relieved will be painlessly euthanatized as deemed appropriate by the Testing Facility's veterinary staff and the Study Director. The Sponsor will be advised by the Study Director of all circumstances which could lead to this action in as timely a manner as possible.

5. Methods of euthanasia used during this study are in conformance with the above referenced regulations.

3 QUALITY ASSURANCE MONITORING:

The Huntingdon Life Sciences Quality Assurance Unit will monitor the facilities, equipment, personnel, methods, practices, records and controls used in this study to assure that they are in conformance with this protocol, company SOP's, and the appropriate Good Laboratory Practice regulations.

4 ALTERATION OF DESIGN:

Alterations of this protocol may be made as the study progresses. No changes in the protocol will be made without the consent of the Sponsor. In the event that the Sponsor authorizes a protocol change verbally, such changes will be honored by the Testing Facility and will be followed by a written verification. All protocol modifications will be signed by the Study Director and a Sponsor representative. Any modifications potentially affecting animal welfare will also be signed by two members of the Institutional Animal Care and Use Committee prior to the modification's implementation.

5 STUDY PERSONNEL:

Study Director:	Rosemary Mandella, Ph.D.
Study Pathologist:	Teofilo M. Saulog, D.V.M.
Ophthalmologist:	Lionel F. Rubin, V.M.D., A.C.V.O.

Additional personnel will be documented in the project file and presented in the final report.

6 PROPOSED STUDY DATES:

Study Initiation Date:	Date Study Director signs protocol - see Section 16.2.
Receipt of test animals:	05 June 1996
Initiation of Treatment: (Experimental Start Date)	19 June 1996
Termination of Treatment:	17 and 18 September 1996
Necropsy:	18 and 19 September 1996
Submission of draft final report:	13 December 1996
Experimental Termination: (Date of last data collection)	13 December 1996
Study Completion Date:	Date final report is signed by Study Director.

7 EXPERIMENTAL DESIGN: ① See p. 24. RCM 09 Jul 96

Group	Daily Doses[a]			Number of Animals							
				Initial		Clinical Laboratory Studies 3 Months		Necropsy 3 Months		Microscopic Pathology	
	Dose	Concentration	Volume								
	mg/kg	mg/mL	mL/kg	M	F	M	F	M	F	M	F
I (control)	0	0	b	20	20	10	10	A.S.	A.S.	20	20
II (low-)	30	6	5	20	20	10	10	A.S.	A.S.	A.R.	A.R.
III (mid-)	90	18	5	20	20	10	10	A.S.	A.S.	A.R.	A.R.
IV (high-)	270	52	5	20	20	10	10	A.S.	A.S.	20	20

[a]Doses given represent doses of test material as supplied, i.e., no correction for percent active ingredient will be made unless otherwise indicated by the Sponsor.
[b]Control animals will receive vehicle in the same volume received by the high-dose animals.

A.S. = All Survivors; complete postmortem evaluations will also be performed on animals which are found dead or euthanatized in a moribund condition during the course of the study.
A.R. = As Required: 1) Kidneys, liver and lungs; 2) Target organs/tissues identified by Group IV evaluations (additional cost); 3) Gross lesions (additional cost).
M = Male F = Female

8 TEST AND CONTROL MATERIALS:

8.1 TEST MATERIAL: Ultranox®XR-2677

Description, lot number, storage, expiration date and handling procedures, as well as other pertinent information will be documented in the study data.

8.2 VEHICLE: Corn Oil

Description, lot number, storage, expiration date and handling procedures, as well as other pertinent information will be documented in the study data.

8.3 IDENTIFICATION OF TEST MATERIALS:

Unless otherwise noted, the identity, strength, purity, composition, stability, and method of synthesis, fabrication and/or derivation of each batch of the test material will be documented by the Sponsor before its use in the study. This documentation will be maintained by the Sponsor at the address indicated in Section 1.5 of this protocol.

8.4 ARCHIVAL SAMPLES:

An archival sample from each lot of test and control material will be taken and stored in the Archives of the Testing Facility. If multiple studies are conducted with the same material, a common archival sample may be taken and appropriately labeled.

8.5 UNUSED TEST MATERIAL:

The unused portion of the test and/or control material as well as any unused dose solutions/suspensions and any empty test material containers will be returned to the Sponsor following completion of the study. Materials will be shipped to:

Name: James A Mahood
Process Development Chemist

Address: GE Specialty Chemicals
1000 DuPont Road
Morgantown, WV 26505

Phone: (304) 284-2378

In the event the Sponsor wishes the Testing Facility to arrange for disposal, a cost for this service will be provided.

9 TEST ANIMALS: Albino Rats (Outbred) VAF/Plus®

9.1 STRAIN:

Sprague Dawley - derived (CD®)
[Crl: CD® BR]

9.2 SUPPLIER:

Charles River Laboratories
Documentation of the specific breeding facility will be maintained in the study file.

9.3 JUSTIFICATION FOR TEST SYSTEM SELECTION:

The rat is a rodent animal model commonly utilized in toxicity studies as recommended in the referenced guidelines. In addition, a historical data base is available for comparative evaluation.

9.4 ANIMAL REQUIREMENTS/SPECIFICATIONS:

9.4.1 Number:

	Total	Males	Females
Placed on test	160	80	80

9.4.2 Age:

Approximately 4 weeks at receipt; approximately 6 weeks (and no more than 8 weeks) at initiation of dosing.
Note: Females will be nulliparous and non-pregnant.

9.4.3 Body Weight at Initiation of Dosing:

Males:	140-200 grams
Females:	120-180 grams

9.5 ACCLIMATION PERIOD:

Approximately two weeks; all animals will be checked for viability twice daily. Prior to assignment to study all animals will be examined by a senior staff member to ascertain suitability for study.

9.6 ANIMAL HUSBANDRY:

9.6.1 Housing:

Animals younger than 5 weeks at receipt will be housed 2/cage during the initial week of acclimation. Animals 5 weeks or older will be housed individually in suspended stainless steel wire mesh cages

9.6.2 Food:

Certified Rodent Diet, No. 5002; (Meal) (PMI Feeds, Inc., St. Louis, MO) *ad libitum.*

9.6.3 Water:

Elizabethtown Water Company, Westfield, NJ; *ad libitum*, via automated watering system.

9.6.4 Feed Analysis:

Analytical certification of batches of feed provided by the manufacturer will be maintained on file at the Testing Facility. There are no known contaminants in the feed which are expected to interfere with the results of this study.

9.6.5 Water Analysis:

Monthly water analysis, provided by Elizabethtown Water Company, will be maintained on file at the Testing Facility. Biannual chemical and microbiological analysis of water samples collected from representative rooms in this facility are conducted to assure that water meets standards specified under the EPA National Primary Drinking Water Regulations (40 CFR Part 141). Results are maintained on file. There are no known contaminants in the water which are expected to interfere with the results of this study.

9.6.6 Veterinary Care:

Animals are monitored by the technical staff for any conditions requiring possible veterinary care. If any such conditions are identified, a staff veterinarian will be notified for an examination and evaluation. Any medical veterinary intervention will be made only with approval of the staff veterinarian and the Study Director. The Sponsor will be consulted whenever possible. However, in emergency situations, decisions will be made as needed and the Sponsor will be advised as soon as possible.

9.6.7 Environmental Conditions:

9.6.7.1 Light/Dark Cycle:

Twelve hour light/dark cycle provided via automatic timer.

9.6.7.2 Temperature:

Monitored and recorded twice daily. The desired temperature range is 64-79°F (18-26°C). Temperature will be maintained in this range to the maximum extent possible.

9.6.7.3 Humidity:

Monitored and recorded once daily. The desired humidity range is 40-70%. Humidity will be maintained in this range to the maximum extent possible.

9.7 SELECTION FOR STUDY:

More animals than required for the study will be purchased and acclimated. Animals considered suitable for study on the basis of pretest physical examinations, body weight data and any other pretest evaluations will be randomly assigned to control or treated groups in an attempt to equalize mean group body weights. Individual weights of animals placed on test shall be within ± 20% of the mean weight for each sex. Disposition of all animals not utilized in the study will be maintained in the study file.

9.8 ANIMAL IDENTIFICATION:

Each animal will be assigned a temporary identification number upon receipt. After selection for study, each animal will be ear-tagged by the Testing Facility with a number assigned by the Testing Facility. The number assigned by the Testing Facility plus the study number will comprise the unique animal number for each animal. If the tag is lost, it will be replaced or the animal will be tattooed for identification. Each cage will be provided with a cage card which will be color-coded for dose level identification and will contain the study number and animal number.

10 TEST MATERIAL ADMINISTRATION:

10.1 ROUTE OF ADMINISTRATION:

Oral, via intubation (oral gavage).

10.2 JUSTIFICATION FOR ROUTE OF ADMINISTRATION:

The oral route is one of the potential routes of human exposure to this test material and is the route specified in the referenced guidelines.

10.3 ADMINISTRATION OF TEST AND CONTROL MATERIAL:

The test and control material will be administered by oral intubation, using a ball-tipped intubation needle fitted onto a syringe of appropriate size. Doses will be calculated using the most recent body weights available. A volume of five mL per kg of body weight will be administered to all groups; this will be achieved by varying the concentration for different dose groups.

10.4 FREQUENCY OF ADMINISTRATION:

Once daily, seven days per week.

10.5 DURATION OF ADMINISTRATION:

The test material will be administered for three months. Test material administration will continue through the day prior to necropsy.

10.6 PREPARATION OF DOSING SOLUTIONS:

Appropriate amounts of the test material will be mixed with corn oil to achieve the desired concentrations. Method of preparation, i.e., type of mixer, length of mixing time, etc., will be developed based on physical characteristics of the test material and size of batches required. Fresh dosing solutions will be prepared once weekly. Dosing solutions will be stored at room temperature under nitrogen and desiccated when not in use. Control animals will receive vehicle.

10.7 ANALYSIS OF DOSING SOLUTIONS:

Dosing solutions for the mid- and high-dose groups have been previously shown to be stable for up to 12 days when stored desiccated at room temperature under nitrogen. Stability of the dosing solution for the low-dose group will be established for at least 2 weeks at storage conditions used in this study. Analyses will be performed to confirm homogeneity dosing solutions prepared using the intended preparation procedure and to confirm that solutions of appropriate concentrations are administered to the test animals. Solutions will be analyzed by the Testing Facility (Department of Analytical Chemistry) as described in Appendix B.

11 EXPERIMENTAL EVALUATION:

11.1 OBSERVATIONS:

11.1.1 Viability Checks (In-Cage):

Observations for mortality, general appearance and signs of severe toxic or pharmacologic effects will be made at least twice daily. Animals in extremely poor health or in a possible moribund condition will be identified for further monitoring and possible euthanasia.

11.1.2 Physical Examinations:

Each animal will be removed from its cage and examined twice pretest and once weekly during the study period. Examinations will include observations of general condition, skin and fur, eyes, nose, oral cavity, abdomen and external genitalia as well as evaluations of respiration, and palpation for tissue masses.

11.2 BODY WEIGHTS:

Body weights will be recorded at least twice pretest, weekly during the study and at termination.

11.3 FOOD CONSUMPTION:

Food consumption will be measured (weighed) during the week prior to treatment initiation and weekly throughout the study. Measurements will be obtained over a 6 day interval each week.

11.4 OPHTHALMOSCOPIC EXAMINATION:

All animals will be examined pretest and at study termination. Eyelids, lacrimal apparatus and conjunctiva will be examined grossly; cornea, anterior chamber, lens, vitreous humor, retina and optic disc will be examined by indirect ophthalmoscopy. The eyes will be examined after instillation of a mydriatic such as tropicamide.

11.5 CLINICAL LABORATORY STUDIES:

Blood will be obtained from lightly anesthetized (CO_2/O_2) animals via puncture of the orbital sinus (retrobulbar). Animals will be fasted overnight prior to blood collection. Blood will be collected and studies performed as follows:

11.5.1 Hematology and Coagulation Studies:

Blood for hematology studies will be collected into tubes containing EDTA anticoagulant. Blood for coagulation studies will be collected into tubes containing sodium citrate anticoagulant.

11.5.1.1 Number of Animals: 10/sex/group

11.5.1.2 Collection Intervals: Termination (Month 3)

11.5.1.3 Parameters Evaluated:

erythrocyte count
erythrocyte morphology
hematocrit
hemoglobin concentration
mean corpuscular volume
mean corpuscular hemoglobin
mean corpuscular hemoglobin concentration
leukocyte count (total and differential)
platelet count
prothrombin time
activated partial thromboplastin time
reticulocyte count[a]

11.5.2 Clinical Chemistry:

Blood for clinical chemistry studies will be collected into tubes with no anticoagulant, allowed to clot, and centrifuged to obtain serum.

11.5.2.1 Number of Animals: 10/sex/group

11.5.2.2 Collection Intervals: Termination (Month 3)

11.5.2.3 Parameters Evaluated:

serum alanine aminotransferase
serum aspartate aminotransferase
serum alkaline phosphatase
blood urea nitrogen
bilirubin (total)
glucose (fasting)
total protein
albumin
globulin (calculated as total protein - albumin = globulin)
albumin/globulin ratio (calculated)
gamma-glutamyl transferase
creatinine
sodium
potassium
chloride
calcium
phosphorus, inorganic

---

[a]Smears will be prepared but counts will be made only if indicated by abnormalities in other hematology parameters (additional cost).

11.5.3 Stains:

Slides for differential leukocyte counts will be stained with Wright stain. Slides for reticulocyte counts will be stained with New Methylene Blue.

11.5.4 Retention/Storage of Specimens:

Reticulocyte slides and any remaining (frozen) serum, which may have limited storage stability, will be stored for up to twelve months after completion of assays and will then be discarded. Differential slides will be retained and archived with the study.

12 POSTMORTEM:

12.1 MACROSCOPIC POSTMORTEM EXAMINATIONS:

Complete macroscopic postmortem examinations will be performed on all animals, including animals euthanatized in a moribund condition or found dead; all abnormal observations will be recorded. The necropsy will include examination of the external surface and all orifices; the external surfaces of the brain and spinal cord; the organs and tissues of the cranial, thoracic, abdominal and pelvic cavities and neck; and the remainder of the carcass.

12.2 TIME OF NECROPSY:

12.2.1 Moribund Animals:

Animals showing signs of severe debility, particularly if death appears imminent, will be euthanatized to prevent loss of tissues through autolysis.

12.2.2 Terminal Necropsy:

Necropsy of all animals surviving to study termination will be performed after animals have been treated for the appropriate duration. Necropsy schedules will be established in order to assure that approximately equal numbers of males and females from each group will be examined on each day of necropsy and that examinations of animals of both sexes from each group will be performed at similar times of the day throughout the necropsy period.

12.3 METHOD OF EUTHANASIA:

Exsanguination following carbon dioxide inhalation.

12.4 ORGAN WEIGHTS:

Organs indicated below will be taken from all survivors at the scheduled necropsy, weighed, recorded and organ/body and organ/brain weight ratios calculated. Organs will not be weighed for animals found dead or euthanatized in a moribund condition during the course of the study. Prior to weighing, all organs will be carefully dissected and properly trimmed to remove fat and other contiguous tissue in a uniform manner. Organs will be weighed as soon as possible after dissection to avoid drying. Paired organs will be weighed together.

adrenals
brain
kidneys
liver
ovaries
spleen
testes (with epididymides)
thymus

12.5 TISSUES PRESERVED:

Tissues listed in Appendix A will be obtained at necropsy and preserved for all animals.

12.5.1 Preservatives:

Eyes - glutaraldehyde/paraformaldehyde.
All other tissues - 10% neutral buffered formalin.
Note: Lungs and urinary bladder will be infused with formalin to insure fixation.

12.6 MICROSCOPIC PATHOLOGY EVALUATIONS:

Slides of tissues listed in Appendix A (under Microscopic Examination) will be prepared and examined microscopically for all animals in the control and high-dose groups; slides of these tissues will also be examined for animals in the low- and mid-dose groups that die prior to study termination (additional cost). Lungs, liver, and kidneys will be examined in animals in all dose groups. If microscopic findings indicative of an effect of test material administration are seen in high-dose animals, then examinations will be made of these tissues/organs for low- and mid-dose animals (additional cost). Additional examinations will be made only after consultation with the Sponsor and receipt of authorization from the Sponsor. Target organs will be designated by the Study Director, pathologist and/or Sponsor based on experimental findings; authorization will be obtained from the Sponsor prior to performing examinations. Note: Any abnormalities not noted during macroscopic postmortem examinations which are seen during histological processing will be recorded. Gross lesions will be examined at additional cost.

12.7 STAINS:

Standard stains used, hematoxylin and eosin. Special stains may be employed on selected tissues to aid in making a diagnosis at the discretion of the Study Pathologist. Special stains may be employed at the request of the Sponsor (additional cost).

13 PRESERVATION OF RECORDS AND SPECIMENS:

All data documenting experimental details and study procedures and observations will be recorded and maintained as raw data.

At the completion of the study, all reports, raw data, preserved specimens and retained samples will be maintained in the Testing Facility's Archives for a period of 5 years after submission of the signed final report.

The Sponsor will be contacted in order to determine the final disposition of these materials. The Sponsor is responsible for all costs associated with the storage of these materials beyond 5 years from the issuance of the final report and for any costs associated with the shipment of these materials to the Sponsor or to any other facility designated by the Sponsor.

14 STATISTICAL EVALUATIONS:

The following items will be analyzed statistically in the final report:

mean body weight values and body weight changes (from pretest)
mean food consumption values (presented as grams of food/kg of body weight/day)
mean clinical laboratory values
mean terminal organ weights, organ/body weight ratios and organ/brain weight ratios

14.1 MULTIPLE GROUP ANALYSIS:

Employed when more than one treated group is compared to control.

Statistical evaluation of equality of means will be made by the appropriate one way analysis of variance technique, followed by a multiple comparison procedure if needed. Bartlett's test will be performed to determine if groups have equal variance. If the variances are equal, parametric procedures will be used; if not, nonparametric procedures will be used. The parametric procedures will be the standard one way ANOVA using the F distribution to assess significance. If significant differences among the means are indicated, Dunnett's test will be used to determine which means are significantly different from the control. If a nonparametric procedure for testing equality of means is needed, the Kruskal-Wallis test will be used, and if differences are indicated, a summed rank test (Dunn) will be used to determine which treatments differ from control.

A statistical test for trend in the dose levels will also be performed. In the parametric case (i.e., equal variance), standard regression techniques with a test for trend and lack of fit will be used. In the non-parametric case, Jonckheere's test for monotonic trend will be used.

The test for equal variance (Bartlett's) will be conducted at the 1% two-sided risk level. All other statistical tests will be conducted at the 5% and 1%, two-sided risk levels.

References for these techniques are Snedecor, G.W., Cochran, W.G., *Statistical Methods*, 6th edition, Iowa State Univ. Press (1967), Hollander and Wolfe, *Nonparametric Statistical Methods*, John Wiley and Sons, New York (1973), Dunnett, C.W., *J. Am. Sta. Assn.* 50: 1096-1121 (1955) and *Biometrics* 20: 482 (1964).

Bartlett's Test	pp. 296-298	Snedecor & Cochran
ANOVA	pp. 277-279	Snedecor & Cochran
Dunnett's Test	pp. 1096-1121	Dunnett
	pp. 482-491	Biometrics
Kruskal-Wallis	pp. 114-116	Hollander & Wolfe
Summed Rank Test (Dunn)	p. 131	Hollander & Wolfe
Regression Analysis - Trend	pp. 135-153	Snedecor & Cochran
Lack of fit	pp. 456-459	Snedecor & Cochran
Jonckheere's Statistic	pp. 120-123	Hollander & Wolfe

14.2 TWO GROUP ANALYSIS:

Employed when only one treated group is compared to control.

The variances of the two groups will be tested for equality using the F-test. If the variances are equal, a standard independent two sample t-test will be used to determine equality of means. If the variances differ at the 1% level of significance, Welch's t-test will be used to determine equality of means. T-tests will be conducted at the 5% and 1%, two-sided risk level.

The reference for these techniques is, Gill, J.L., *Design and Analysis of Experiments in the Animal and Medical Sciences*, Iowa State Univ. Press, Ames, Iowa (1978).

F-test	pp. 63-65	Gill
T-test	pp. 67-78	Gill
Welch's t-test	p. 71	Gill

15 REPORTING:

15.1 STATUS REPORTS:

Periodic verbal and written updates on study progress will be provided by the Study Director. In general, written status reports will be submitted weekly for the first 4 weeks and monthly thereafter.

15.2 FINAL REPORT:

One copy of a draft report will be submitted following termination of the study. After receipt and review of the Sponsor's comments, appropriate changes will be made and two copies of a signed, final report will be issued. (Additional copies will be provided at additional cost). The report will include:

Abstract
Introduction
Experimental Design
Materials and Methods
Discussion of study results
Conclusion and No Observed Effect Level (NOEL) statement
Mortality data
Individual animal termination history
Summary of daily animal observations (as appropriate)
Summary of weekly physical examination data
Tables of mean and individual body weights and body weight changes
Tables of mean and individual food consumption
Graphs of body weights and food consumption
Tables of mean and individual hematology and clinical chemistry values
Tables of individual differential leukocyte counts (with mean absolute values of lymphocytes and segmented neutrophils)
Tables of mean and individual organ weights, organ/body and organ/brain weight ratios
Ophthalmology report
Individual and summary tables of macroscopic pathology findings
Individual and summary tables of microscopic pathology findings (if applicable)
Analytical Report (if applicable)
References for experimental methodology
Senior personnel participating in the study
Quality Assurance Statement
Compliance Statement

16 SIGNATURES:

16.1 INSTITUTIONAL ANIMAL CARE AND USE COMMITTEE (IACUC):

The IACUC Protocol Review Subcommittee has reviewed this protocol and found it to be in compliance with all appropriate regulations.

BY: _____ DATE: 25 Apr 96

TITLE: Institutional Animal Care and Use Committee Member

BY: _____ DATE: 25 Apr 96

TITLE: Institutional Animal Care and Use Committee Member
FOR: Huntingdon Life Sciences
Institutional Animal Care and Use Committee

16.2 PROTOCOL REVIEWED AND ACCEPTED:

BY: Rosemary Mandella DATE: 13 May 1996

Rosemary C. Mandella, Ph.D.
TITLE: Study Director
FOR: Huntingdon Life Sciences

BY: Stephen S. Dimond DATE: May 10, 1996

Stephen S. Dimond, B.S.
TITLE: Toxicologist
FOR: GE Specialty Chemicals
1000 DuPont Road
Morgantown, WV 26505

APPENDIX A
Tissues Preserved/Examined Microscopically

No.[a]	Tissue[b]	Preserved	Microscopic Examination (Groups)	
			I, IV	II, III
2	adrenal gland	X	X	
1	aorta (thoracic)	X	X	
2	bone (sternum/femur)	X	X	
2	bone marrow (sternum/femur)[c]	X	X	
3	brain (medulla/pons, cerebrum and cerebellum)	X	X	
2	epididymis	X	X	
1	esophagus	X	X	
4	eye (with optic nerve)	X	X	
1	heart	X	X	
2	kidney	X	X	X
2	lacrimal gland	X	X	
3	large intestine (cecum, colon, and rectum)	X	X	
2	liver	X	X	X
2	lung (with mainstem bronchi)	X	X	X
1	lymph node (mediastinal)	X	X	
1	lymph node (mesenteric)	X	X	
1	mammary gland	X	X	
1	muscle (*biceps femoris*)	X	X	
1	nerve (sciatic)	X	X	
2	ovary	X	X	
1	pancreas	X	X	
1	pituitary	X	X	
1	prostate	X	X	
2	salivary gland (submandibular)	X	X	
2	seminal vesicle	X	X	
3	small intestine (duodenum, ileum, and jejunum)	X	X	
2	spinal cord (cervical, thoracic)	X	X	

APPENDIX A
Tissues Preserved/Examined Microscopically

No.[a]	Tissue[b]	Preserved	Microscopic Examination (Groups)	
			I, IV	II, III
1	spleen	X	X	
1	stomach	X	X	
2	testis	X	X	
1	thymic region	X	X	
2	thyroid (with parathyroids)	X	X	
1	trachea	X	X	
1	urinary bladder	X	X	
2	uterus (body/horns with cervix)	X	X	
1	vagina	X	X	
2	Zymbal's gland	X	X	
	gross lesions[d]	X	X	X
	target organs[e]	X	X	X

[a]Number of organs/sections preserved/examined.
[b]These tissues will also be examined for animals in Groups II and III which die prior to study termination.
[c]Qualitative examination (no differential count).
[d]Examinations performed at additional cost.
[e]Target organs will be designated by the Study Director, Pathologist and/or Sponsor based on experimental findings.

APPENDIX B
ANALYSES OF DOSING SOLUTIONS/SUSPENSIONS

1. METHOD VALIDATION:

The analytical method supplied by the Sponsor was previously validated in the Testing Facility's laboratory. Additional validation may be necessary to cover the concentrations over the range expected to be administered during the study. The data obtained will be evaluated for reproducibility of results obtained using the supplied method. If modifications are necessary, the Sponsor will be notified and must approve such modifications. Means and standard deviations will be computed for multiple extractions and injections.

2. HOMOGENEITY ANALYSES:

Prior to initiation of the study, batches of the low- and high-concentration solutions will be prepared. Three samples each from the top, middle and bottom portion of each mix will be taken for analysis. If the data demonstrate that the mean of the values for the three levels are within ±10% of each other and of the nominal (desired) concentration, the batch is considered homogeneous.

3. STABILITY ANALYSES:

Stability of the test material in the low-dose solution under storage conditions to be used for this study will be determined for at least 2 weeks. Duplicate samples will be assayed 4, 7, and 14 days after preparation (samples for homogeneity assays, evaluated on the day of preparation, will be used to establish concentration at time of preparation). Stability of the test material in the mid- and high-dose solutions under storage conditions to be used for this study was previously determined to be at least 12 days.

4. CONFIRMATION OF CONCENTRATIONS DURING STUDY:

Solutions for all three dose levels will be assayed weekly for the first 4 weeks (one sample per concentration will be taken and two subsamples will be analyzed). Subsequent assays will be performed at monthly intervals for the remainder of the study. The concentration determined in the batch must be within ±10% of the nominal (desired) concentration, and the two samples from each concentration must be within 10% of each other before the mixtures are acceptable. If mixtures are not within the acceptable range, new mixtures will be prepared and analyzed.

APPENDIX B
ANALYSES OF DOSING SOLUTIONS/SUSPENSIONS

SUMMARY:

The number of analyses to be performed is as follows:

Homogeneity Analyses

9 samples per concentration x 2 concentrations	=	18
1 control sample (vehicle)	=	1
Total		19

Stability Analyses

2 samples per concentration x 1 concentrations x 3 intervals	=	6
1 control sample x 3 intervals	=	3
Total		9

Confirmation of Concentration

2 samples per concentration x 3 concentrations x 6 intervals	=	36
1 control sample x 6 intervals	=	6
Total		42

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PROTOCOL AMENDMENT

HUNTINGDON LIFE SCIENCES STUDY NO.: 96-2459 AMENDMENT NO.: 1

STUDY TITLE: A Subchronic (3-Month) Toxicity Study of Ultranox®XR-2677 in the Rat via Oral Gavage Administration

PROTOCOL ISSUE NO.: 1

Change(s)

1. Page 6
   7 EXPERIMENTAL DESIGN:
   Change the concentration of Group IV (high)- from 52 mg/mL to 54 mg/mL.

Reason(s) for Change(s)

1. A concentration of 54 mg/mL at a dose volume of 5 mL/kg is needed to yield a dose of 270 mg/kg.

Amendment approved by:

Rosemary Mandella

Rosemary Mandella, Ph.D.
Study Director
Huntingdon Life Sciences

5 July 1996
Date

Stephen S Dimond

Stephen S. Dimond
Toxicologist
GE Specialty Chemicals

June 28, 1996
Date

Appendix M
A Subchronic (3-Month) Toxicity Study
of Ultranox®XR-2677 in the Rat via Oral Gavage Administration

Testing Facility's Personnel

TITLE/DEPARTMENT	NAME/DEGREE
VICE PRESIDENT, RESEARCH	Ward R. Richter, D.V.M., M.S., A.C.V.P.
VICE PRESIDENT, TOXICOLOGY	Dean E. Rodwell, M.S.
VICE PRESIDENT, ANALYTICAL SERVICES	Dari Dadgar, Ph.D.
DIRECTOR OF TOXICOLOGY	Carol S. Auletta, B.A., D.A.B.T.
DIRECTOR OF QUALITY ASSURANCE	Michael Caulfield
STUDY DIRECTOR	Rosemary C. Mandella, Ph.D.
PATHOLOGIST	Teofilo M. Saulog, D.V.M.
STUDY MONITORS	
In-life	Ronald L. Brzozowski, B.A., AALAS LAT
Pathology	Sonya Gray, A.A.S.
VETERINARIAN	Teresa S. Kusznir, V.M.D.
SUPERVISOR/GROUP LEADER	
Toxicology	Ellen H. Whiting, AALAS LAT
Analytical Services	Laura V. Cojocaru, B.S., Chem. Eng.
Pharmacy	Donald Wagner
Clinical Pathology	Rachel A. Spies, B.A., M.L.T., (A.S.C.P.)
Necropsy	Henning Jonassen, B.S., AALAS LATG
SUBCONTRACTOR	
OPHTHALMOLOGY	Lionel F. Rubin, V.M.D. A.C.V.O.

Appendix N
A Subchronic (3-Month) Toxicity Study
of Ultranox®XR-2677 in the Rat via Oral Gavage Administration

Quality Assurance Statement

Listed below are the dates that this study was inspected by the Quality Assurance Unit of Huntingdon Life Sciences, East Millstone, New Jersey, and the dates that findings were reported to the Study Director and Management.

Type of Inspection	Date(s) of Inspection	Reported to Study Director	Reported to Management
GLP Protocol Review	26 Apr 96	26 Apr 96	08 May 96 and 04 Sep 96
Pharmacy Preparation	18 Jun 96	21 Jun 96	24 Jun 96 and 25 Jul 96
Dosing, Day 1	19 Jun 96	20 Jun 96	27 Jun 96 and 26 Jul 96
Body Weights and Feeder Weights, Week 5	23 Jul 96	23 Jul 96	21 Oct 96 and 29 Oct 96
Terminal Blood Collection & Sacrifice	18 Sep 96	19 Sep 96	25 Sep 96 and 06 Jan 97
Final In-Life Report	6,9-13 Dec 96	13 Dec 96	03 Jan 97 and 06 Jan 97
Pathology Report	12,13 Dec 96	13 Dec 96	17 Dec 96 and 03 Jan 97

Jane Nelson
Quality Assurance Senior Auditor

Date

Appendix 0
A Subchronic (3-Month) Toxicity Study
of Ultranox®XR-2677 in the Rat via Oral Gavage Administration

Statement of Compliance

This study was conducted in compliance with the United States Food and Drug Administration's Good Laboratory Practice Regulations, the United States Environmental Protection Agency's Good Laboratory Practice Standards, and Organization for Economic Cooperation and Development (OECD) Principles of Good Laboratory Practices (C(81)30 (Final) Annex 2).

Rosemary Mandella — 6 Jan 97

Rosemary C. Mandella, Ph.D., D.A.B.T.
Study Director

Date

Appendix P
A Subchronic (3-Month) Toxicity Study
of Ultranox®XR-2677 in the Rat via Oral Gavage Administration

Report Amendments

There are no amendments for this report at this time.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

MAR 11 1997

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

MEMORANDUM

SUBJECT: Review of a 90-Day Oral Gavage Toxicity Study in Rats with 8EHQ-0197-13867 Chemical (Ultranox XR-2677)

FROM: Daljit Sawhney, D.V.M., Ph.D., D.A.B.T.
Toxicology Section
Health Effects Branch
Health and Environmental
Review Division (7403)

TO: Terry O'Bryan, Ph.D.
Section II
Risk Analysis Branch
Chemical Screening and Risk
Assessment Division (7402)

THRU: Deborah Norris, Ph.D, Chief (Acting)
Toxicology Section
Health Effects Branch
Health and Environmental
Review Division (7403)

3-11-97

As per your recent request, I have reviewed the data for the 13-week repeated oral gavage toxicity study in rats with EHQ-0197-13867 chemical (noted pages 2-8 missing). Most of the comments made by the sponsor for the study have certain scientific reasoning. Since the blood and hepatic changes occurred at very low levels and microscopic changes were observed in a dose-related manner, there is evidence of mild toxicity at all dose levels tested. The study and its findings are reviewed and comments are appended.

Conclusion

Sprague-Dawley rats received the 8-E chemical by oral gavage for 90 days at dose levels of 0, 30, 90 and 270 mg/kg/day in corn oil.

Recycled/Recyclable
Printed with Soy/Canola Ink on paper that contains at least 50% recycled fiber

The study showed that the chemical produced no treatment-related mortality. There were no treatment-related clinical inlife abnormal effects. No changes in ocular findings were noted at any of the levels tested with the test substance.

Two target organs, blood and liver, were identified for effects of the chemical in the study. Hematologic changes included dose related increases in prothrombin time (PT) and activated partial thromboplastin time (APTT) that were more pronounced in males than in females. There were dose-related increases in APTT at all dose levels in both genders. This effect was more pronounced in males than females and achieved $p<0.01$ in both genders at two high dose levels. In both genders significantly enlarged ($p<0.01$) livers were seen at all dose levels. Microscopic findings of centrilobular hepatocellular hypertrophy at dose levels of 30, 90 and 270 mg/kg/day were observed. Forestomach of males and females receiving 270 mg/kg/day showed changes associated with increased incidence of acute/subchronic inflammation.

Based on the findings in the 13-week repeated oral gavage study with the 8-E chemical in rats a no-observed-adverse-effect-level (NOAEL) for males and females was not observed. A lowest-observed-adverse-effect-level (LOAEL) for systemic effects was 30 mg/kg/day, the lowest dose tested.

Basis for Conclusion

Sprague-Dawley CD rats weighing respectively 176 g and 273 g, females and males, in groups of 20/gender/group, were orally gavaged with the test substance for 7 days/week for 13 weeks.

The test chemical, CAS#, chemical/physical properties, and purity were not included. The PMN chemical was given to rats in corn oil (vehicle) as a suspension at a dose volume of 5 ml/kg/day, at dose levels 30, 90 and 270 mg/kg/day. The control groups were dosed with vehicle alone. The rationale for the selection of the dose levels in the 13-week study was not included. The study was conducted according to EPA/TSCA and OECD (408) guidelines.

The stability test for the test chemical showed that the substance was stable during ambient temperature storage for 7 days. The concentration verification analysis indicated that dose formulations were within 1-6% of the nominal (desired) concentrations during the study.

Clinical signs, bodyweight, and food intake were assessed on all animals pretest and at selected intervals during the treatment period. Ophthalmoscopic examinations were performed on all animals pretest and at study termination. Hematology and

biochemistry investigations were performed on 10 animals/gender/group at study termination. All rats were necropsied at termination, with weighing of major organs and microscopic examination of collected tissues.

There were no treatment-related deaths during the study. There were no abnormal clinical signs noted in animals receiving the test material. Ophthalmoscopic evaluations detected no abnormalities during Week 13 in any animal. There was no reduction in mean body weight gain or food consumption for male and female rats during the study.

Hematologic changes included dose related increases in prothrombin time and activated partial thromboplastin time that were more pronounced in males than in females. Among the males mean APPT values were increased, compared to control values, 30%, 55% and 96% in the low-, mid- and high-dose groups, respectively. Mean PT values were increased 26%, 58% and 91% compared to control values in males receiving 30, 90 and 90 mg/kg/day, respectively. In females, APTT was increased 38% in the mid-dose group and 64% in the high-dose group; PT was increased in the high-dose group.

Serum clinical chemistry parameters showed no changes of toxicologic significance.

At necropsy gross findings and organ weight analysis for treated animals showed enlarged liver of both genders ($p<0.01$) at all treatment levels of 30, 90 and 270 mg/kg/day. These increases correlated with microscopic evidence of centrilobular hypertrophy.

Treatment-related microscopic changes were observed in the liver and forestomach of treated animals. In liver centrilobular hepatocellular hypertrophy (CHH) lesions were present in a dose-related manner at all treatment levels.

Liver

***Male* (20 animals)**

Lesion Dose (mg/kg/day)

CHH	0	30	90	270
Incidence	0	6	13	16

***Female* (20 animals)**

Lesion	Dose (mg/kg/day)			
CHH	0	30	90	270
Incidence	0	15	20	20

Microscopic changes in the forestomach were limited to males and females in the 270 mg/kg/day dosage group and consisted of edema of the lamina propria (males, 6/20; females, 2/20), diffuse thickening of mucosa (hyperplasia, squamous cell) with associated hyperkeratosis (males, 10/20; females, 4/20) and a slight increase in the incidence of acute/subacute inflammation (males, 4/20).

In summary, based on the findings in the 13-week repeated oral gavage study with the chemical in rats a NOAEL for males and females was not observed. A LOAEL for systemic effects was 30 mg/kg/day in male and female rats.

cc: Bill Lee (7405)

0197-13867

CECATS\TRIAGE TRACKING DBASE ENTRY FORM

CECATS DATA:
Submission # 8EHQ- [redacted] SEQ. [redacted]

TYPE: INT (SUP) FLWP

SUBMITTER NAME: [redacted]

SUB. DATE: [redacted] OTS DATE: [redacted] CSRAD DATE: [redacted]

INFORMATION REQUESTED: FLWP DATE: _____
0501 NO INFO REQUESTED
0502 INFO REQUESTED (TECH)
0503 INFO REQUESTED (VOL ACTIONS)
0504 INFO REQUESTED (REPORTING RATIONALE)

DISPOSITION:
[redacted] REFER TO CHEMICAL SCREENING
0670 CAP NOTICE

VOLUNTARY ACTIONS:
[redacted] NO ACTION REPORTED
0402 STUDIES PLANNED/UNDERWAY
0403 NOTIFICATION OF WORKERS/USERS
0404 LABEL/MSDS CHANGES
0405 PROCESS/HANDLING CHANGES
0406 APP/USE DISCONTINUED
0407 PRODUCTION DISCONTINUED
0408 CONFIDENTIAL

CHEMICAL NAME:
diethylphthalate
([redacted])

CASE [redacted] 161717-32-4

INFORMATION TYPE:		P	F	C
0201	ONCO (HUMAN)	01	02	04
[redacted]	ONCO (ANIMAL)	(01)	02	04
0203	CELL TRANS (IN VITRO)	01	02	04
0204	MUTA (IN VITRO)	01	02	04
0205	MUTA (IN VIVO)	01	02	04
0206	REPRO/TERATO (HUMAN)	01	02	04
0207	REPRO/TERATO (ANIMAL)	01	02	04
0208	NEURO (HUMAN)	01	02	04
0209	NEURO (ANIMAL)	01	02	04
0210	ACUTE TOX. (HUMAN)	01	02	04
0211	CHR. TOX. (HUMAN)	01	02	04
0212	ACUTE TOX. (ANIMAL)	01	02	04
0213	SUB ACUTE TOX (ANIMAL)	01	02	04
0214	SUB CHRONIC TOX (ANIMAL)	01	02	04
[redacted]	CHRONIC TOX (ANIMAL)	(01)	02	04

INFORMATION TYPE:		P	F	C
0216	EPI/CLIN	01	02	04
0217	HUMAN EXPOS (PROD CONTAM)	01	02	04
0218	HUMAN EXPOS (ACCIDENTAL)	01	02	04
0219	HUMAN EXPOS (MONITORING)	01	02	04
0220	ECO/AQUA TOX	01	02	04
0221	ENV. OCCC/REL/FATE	01	02	04
0222	EMER INCI OF ENV CONTAM	01	02	04
0223	RESPONSE REQEST DELAY	01	02	04
0224	PROD/COMP/CHEM ID	01	02	04
0225	REPORTING RATIONALE	01	02	04
0226	CONFIDENTIAL	01	02	04
0227	ALLERG (HUMAN)	01	02	04
0228	ALLERG (ANIMAL)	01	02	04
0239	METAB/PHARMACO (ANIMAL)	01	02	04
0240	METAB/PHARMACO (HUMAN)	01	02	04

INFORMATION TYPE:		P	F	C
0241	IMMUNO (ANIMAL)	01	02	04
0242	IMMUNO (HUMAN)	01	02	04
0243	CHEM/PHYS PROP	01	02	04
0244	CLASTO (IN VITRO)	01	02	04
0245	CLASTO (ANIMAL)	01	02	04
0246	CLASTO (HUMAN)	01	02	04
0247	DNA DAM/REPAIR	01	02	04
0248	PROD/USE/PROC	01	02	04
0251	MSDS	01	02	04
0299	OTHER	01	02	04

TRIAGE DATA: NON-CBI INVENTORY

[redacted]

CAS SR NO

IN TRANSIT

ONGOING REVIEW

YES (DROP/REFER)

NO (CONTINUE)

REVIEW

SPECIES

[redacted] RATS

TOXICOLOGICAL CONCERN:

LOW

MED

HIGH

USE: —

PRODUCTION:

COMMENTS: Rats were exposed via oral gavage to the test material at dose levels of 30, 90 and 270 mg/kg/day for 90 days. Blood and liver toxicities were observed in a dose-related response (liver) at all dose levels tested. The (Coagulation) LOAEL was 30mg/kg/day.