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TRADE SECRET

Study Title

APFO (Linear/Branched), APFO (Linear), and APFO (Branched):
14-Day Oral Gavage Study in Male Rats and Mice

AUTHOR: Carol Finlay, B.A.

ORIGINAL COMPLETED ON: August 1, 2005

REVISION 1 COMPLETED ON: January 12, 2006

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LABORATORY PROJECT ID: DuPont-14162

WORK REQUEST NUMBER: 15073

SERVICE CODE NUMBER: 1025 (Rats) and 879 (Mice)

GOOD LABORATORY PRACTICE COMPLIANCE STATEMENT

This study was conducted in compliance with U.S. EPA TSCA (40 CFR 792) Good Laboratory Practice Standards, which are compatible with current OECD Good Laboratory Practices, except for the items documented below. The items listed do not impact the validity of the study.

1. Linear and Branched APFO were characterized prior to the initiation of this study. Although the characterization was not performed under Good Laboratory Practice Standards, the accuracy of the data is considered sufficient for the purposes of this study.

2. Linear/branched APFO is commercially available and was characterized prior to the initiation of this study. A certificate of analysis was provided. Although the characterization was not performed under Good Laboratory Practice Standards, based on our monitoring, we have no reason to doubt the validity of the analysis.

Study Director: Carol Finlay 1-Aug-2005

Carol Finlay, B.A.
Senior Staff Toxicologist
Haskell Laboratory for Health and Environmental Sciences

Date

QUALITY ASSURANCE DOCUMENTATION

Report Number: DuPont-14162
Work Request Number: 15073
Study Code Number: 1025 (Rats) and 879 (Mice)

The conduct of these studies has been subjected to periodic Quality Assurance inspections. The dates of inspection are indicated below.

Phase Audited	*Audit Dates*	*Date Reported to Study Director*	*Date Reported to Management*
Conduct:	4 Mar 2004	4 Mar 2004	4 Mar 2004
	25 Mar 2004	25 Mar 2004	25 Mar 2004
Report/Records:	28-31 Mar 2005	1 Apr 2005	12 Apr 2005
	4-5 Apr 2005	5 Apr 2005	11 Apr 2005
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	6-8, 11-12 Apr 2005	13 Apr 2005	6 May 2005
	6 May 2005	6 May 2005	9 May 2005
	15, 17, 18, 19 Jul 2005	19 Jul 2005	29 Jul 2005

Reported by: Annet L. Reigel — 1-Aug-2005
Annet L. Reigel, Quality Assurance Auditor — Date

CERTIFICATION

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

Analytical Evaluations by: Charles R. Powley — 29-Jul-2005
Charles R. Powley, Ph.D.
Principal Research Scientist and Manager
Date

Clinical Pathology Evaluation by: Nancy E Everds — 29-July-2005
Nancy E. Everds, D.V.M.
Diplomate A.C.V.P.
Principal Research Scientist
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Biochemical Measurements by: John C O'Connor — 1-Aug-2005
John C. O'Connor, M.S.
Senior Research Toxicologist and Group Manager
Date

Approved by: Scott E. Loveless — 29-JUL-2005
Scott E. Loveless, Ph.D.
Research Manager and Director
Date

Issued by Study Director: Carol Finlay — 1-Aug-2005
Carol Finlay, B.A.
Senior Staff Toxicologist
Date

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DATES

Rat Study Initiation Date:	January 22, 2004
Rat Study Completion Date:	See report cover page
Mouse Study Initiation Date:	February 25, 2004
Mouse Study Completion Date:	See report cover page

RECORDS AND SAMPLE STORAGE

Specimens (if applicable), raw data, the protocols, amendments, and the final report will be retained at Haskell Laboratory, Newark, Delaware, or at Iron Mountain Records Management, Wilmington, Delaware.

MANUSCRIPT FOR PUBLICATION

COMPARATIVE RESPONSES OF RATS AND MICE EXPOSED TO LINEAR/BRANCHED, LINEAR, OR BRANCHED AMMONIUM PERFLUOROOCTANOATE (APFO)

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ABSTRACT

Ammonium perfluorooctanoate (APFO), as formerly used in the production of commercial products, was a mixture of linear and branched isomers in a ratio of approximately 80:20 (linear/branched). The extensive toxicologic database for APFO has been developed essentially using this mixture of isomers. The current production of APFO uses a synthetic process that produces only the linear isomer. The present study was undertaken to compare the biologic activity of linear/branched APFO with that of linear APFO. In addition, a form of APFO consisting of only branched molecules was also evaluated. Rats and mice were given doses by oral gavage ranging from 0.3 to 30 mg/kg of either the linear/branched, linear, or branched APFO for 14 days. Clinical signs, body weights, food consumption, selected hematology and serum lipid parameters, liver and kidney weights, hepatic peroxisomal β-oxidation, and serum PFOA concentrations were evaluated for each of the three test materials in each of the two rodent species. Clinical signs were generally unremarkable in rats and mice dosed with linear/branched, linear, or branched APFO. Mean body weights were 19, 19, and 5% lower than that of controls in rats dosed with 30 mg/kg of linear/branched, linear, and branched APFO, respectively. Similar changes were present in mice (means were 21, 18, and 3% lower than that of controls, respectively). *Ex vivo* hemolysis was seen in rats but not mice. In rats, total cholesterol, HDL, and non-HDL cholesterol decreases were produced by all 3 materials. Triglycerides were decreased to a similar extent with the linear form producing a response at a lower dose. In mice, all 3 forms reduced both total and HDL cholesterol similarly but, unlike in the rat, triglycerides were increased at low doses, but similar to control or decreased at the highest dose. Liver weight increases were seen in both species with all three forms. Increased hepatic β-oxidation activity was seen in both species but was least pronounced in rats given the branched material. In mice, all doses produced increased hepatic beta-oxidation activity with little difference noted either by material form tested or dose. In rats, serum PFOA levels were approximately 50 ppm at the LOEL of 1 mg/kg for linear/branched and branched material, and 20 ppm at the LOEL of 0.3 mg/kg for the linear material (LOELs based primarily upon lipid parameters). In mice, serum PFOA levels were similar for all 3 materials. At the LOEL (0.3 mg/kg, based upon liver weight), serum PFOA levels were 10-14 ppm. In both rats and mice, the overall responses to the linear/branched and the linear forms of PFOA were similar, but the branched form appears to be less potent. Based on these results, the toxicological database developed primarily from testing linear/branched APFO is applicable to linear APFO.

Key Words: APFO, PFOA

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INTRODUCTION

Ammonium perfluorooctanoate (APFO; FC-143, C_8, $C_7F_{15}COO^-NH_4^+$, CAS Registry No. 3825-26-1) is a surfactant used as a processing aid in the production of fluoropolymers. Perfluorooctanoate (PFOA; $C_7F_{15}COO^-$), the dissociation product of APFO, is not metabolized (Vanden Heuvel et al., 1991) and has been identified in blood samples from exposed workers and the general population (Taves et al., 1976; Hansen et al., 2001; Olsen et al., 2003).

A large database of experimental studies on the potential health hazards of PFOA is available, as are recent toxicology reviews (USEPA, 2002; Kennedy et al., 2004). In addition to toxicology studies in laboratory animals, the potential association of APFO exposure with health effects in fluorochemical production workers has been studied since 1976 through medical monitoring and epidemiological investigations (Ubel et al., 1980; Olsen et al., 1998, 2000). Clinical laboratory evaluations including liver tests and hormone concentrations (e.g., estradiol, testosterone, and cholecystokinin) have been normal (Olsen et al., 1998, 2000).

A form of APFO containing both linear and branched components (generally in a ratio of 70-80% linear, 20-30% branched; denoted as linear/branched) has been used in studies to evaluate many biological endpoints. Numerous repeated-dose studies have been conducted with linear/branched APFO in a variety of species (mice, rats, and monkeys), and these have been reviewed recently (Butenhoff et al., 2002; Kennedy et al., 2004; USEPA, 2002). Together, these studies demonstrate that liver is the primary target organ for APFO toxicity. The hepatic changes include increased liver weights due to hepatocellular hypertrophy and proliferation of smooth endoplasmic reticulum and peroxisomes in rodents. Other effects observed in rodents include body weight decreases, increased kidney weights (without histological correlates), and hypolipidemia (decreased triglycerides and cholesterol) in mice (Xie et al., 2003). Studies evaluating genotoxicity, reproductive toxicity, effects on the developing organism, and carcinogenicity have also used this material (reviewed in Kennedy et al., 2004).

The purpose of the current study was to determine if there are substantial differences in the toxicity profile in rats and mice, based on selected endpoints, among the 3 forms of APFO (linear/branched, linear, and branched). The test materials studied were linear/branched APFO (78:22), linear APFO, and branched APFO (58:42 blend of the 2 most prevalent branched forms in linear/branched APFO). Doses for rats and mice were chosen ranging from those expected to be at or near no-observed effect levels to those expected to produce clear effects. This study focused specifically on evaluation of body weights, serum lipid profiles, liver and kidney weights, and hepatic beta-oxidation.

MATERIALS AND METHODS

Test Materials

Linear/branched APFO was provided by 3M Company, Specialty Materials Manufacturing Division (St. Paul, MN). This test material was 77.6% linear. Mole percents of branched content were as follows: 12.6% internal monomethyl (non-alpha); 9% isopropyl; 0.2% *tert*-butyl; 0.1% gem-dimethyl; and 0.1% alpha monomethyl. The certificate of analysis indicated 2.01% lesser-homolog (C_4-C_7) impurities. Homolog distribution was as follows: C_4, 0.01%; C_5, 0.03%; C_6, 0.43%; C_7, 0.57%; C_8, 97.99%; C_9, 0.16%. The sample also included 0.09% monohydro APFO, 0.72% monounsaturated APFO, and 0.3% undefined material that was possibly substituted perfluorocyclo species (0.2% cyclopentyl and 0.1% cyclohexyl). This test material, a white solid, was 97.99% pure.

Linear and branched APFO were provided by DuPont (Wilmington, DE). Linear APFO was a white to slightly opaque liquid in a 20% aqueous solution. Branched APFO was a white solid. It was prepared by combining 58.3% Ammonium 2,2,3,4,4,5,5,6,6,7,7,7-pentadecafluoro-3-(trifluoromethyl)heptanoate (internal mono methyl-non alpha) (referred to as Branch A) with 41.7% Ammonium 2,2,3,3,4,4,5,5,6,7,7,7-pentadecafluoro-6-(trifluoromethyl)heptanoate (isopropyl) (referred to as Branch B) The Branch A material was a mixture of 3- and 4-methyl in a ratio of 92:8.

Animals and Husbandry

The research described in this study was conducted in a laboratory accredited by the Association for the Assessment and Accreditation of Laboratory Animal Care (AAALAC) International and the investigators complied with the regulations and standards of the Animal Welfare Act and adhered to the principles of the Guide for the Care and Use of Laboratory Animals.

Male Crl:CD®(SD)IGS BR rats and Crl:CD®-1(ICR)BR mice were obtained from Charles River Laboratories, Inc. (Raleigh, North Carolina). All rats and mice were housed individually in stainless steel, wire-mesh cages suspended above cage boards. Animal rooms were targeted at a temperature of 22-24°C and a relative humidity of 40-60%, and were artificially illuminated (fluorescent light) on a 12-hour light/dark cycle. Throughout the test period, LLC Certified Rodent LabDiet® 5002 (PMI Nutrition International, Inc., St. Louis, MO) and tap water were available *ad libitum*. Prior to testing, rats and mice were evaluated by clinical observations and body weight determinations during a 4-day quarantine period to assure freedom from potential confounding variables.

Experimental Design

At approximately 8 weeks of age, rats and mice were selected for the study on the basis of adequate body weight gain and freedom from clinical signs of disease or injury. The animals were randomized into 6 groups of 10 male animals so that there were no statistically significant differences among group body weight means. Each animal was assigned an identification number which was recorded on a card (rats) or label (mice) and affixed to the cage. The

animals were tattooed with the identification number. Each test group was administered one of the test materials at daily doses of either 0, 0.3, 1, 3, 10, or 30 mg/kg. Studies with each test material were run as separate experiments, each with its own control group. The dose of the test material administered to the animals was adjusted for the percentage of active material (APFO) such that the dose of APFO was the same. The study was conducted in compliance with U.S. EPA TSCA (40 CFR part 792) Good Laboratory Practices Standards.

Control of bias was minimized by using a concurrent control group for each test material, starting each sub-study within one or two days of each other, having identical study designs, and having day-to-day activities performed by a small pool of personnel. Interanimal variation was minimized by using animals in good health, the same age, of appropriate body weight range, and by randomly assigning animals to groups.

Test Material Administration

All test materials were prepared in NANOpure® water for dosing. The rats and mice were dosed by intragastric intubation for 14 consecutive days at a volume of 10 mL/kg of body weight. Control rats and mice received NANOpure® water only. The animals were dosed at approximately the same time each day. Individual dose volumes were calculated using the body weight obtained prior to dosing.

Analysis of Dosing Preparations

Samples of dosing preparations for linear/branched, linear, and branched APFO at concentrations of 0, 0.03, 0.10, and 3.0 mg/mL were analyzed for uniformity of mixing/concentration verification and stability. Concentrations of compound were measured by high performance liquid chromatography tandem mass spectrometry LLC-MS/MS.

***In Vivo* Parameters**

Body weights for all rats and mice were recorded daily. Observations for clinical signs of toxicity and mortality were conducted at least twice daily throughout the study. Food consumption was measured twice weekly during the study. Body weight gains were calculated from day 0 to day 13. In addition for mice, body weight gain was normalized for differences in liver weights using the following formula:

(final body weight - liver weight) - (body weight day 0 - mean weight of group A control livers)

Collection, processing, and analysis of blood and tissues

Blood samples for clinical pathology and serum PFOA measurements were collected approximately 24 hours after the last dose of APFO. The order of blood collection and euthanasia was stratified across dose groups for each test material; animals dosed with a given test article were sacrificed on the same day. After final body weights were determined, animals were anesthetized by CO_2 anesthesia, and blood was collected from the orbital sinus of each rat and mouse, and from the abdominal vena cava of each rat. Animals were euthanized by exsanguination while under anesthesia. Livers and kidneys were removed and weighed and relative (to body weight) organ weights were calculated.

Clinical Pathology Evaluation

On the first day of necropsy for rats dosed with linear/branched APFO, a dose-related increase in the incidence of hemolysis was noted in the orbital sinus blood samples. In order to further evaluate this finding of hemolysis, blood smears were prepared from additional blood collected from the abdominal vena cava from all remaining rats (half of the animals treated with linear/branched APFO, and all the animals treated with either linear APFO or branched APFO). Wright-Giemsa-stained blood smears were examined microscopically for evaluation of red blood cell morphology.

Sera from orbital sinus samples were used for the determination of lipid parameters in the mouse, and for concentrations of test material in the mouse and rat (stored frozen at -80°C until analyzed). Sera from abdominal vena cava samples were used for the determination of lipid parameters in the rat; vena cava samples were less hemolyzed than orbital sinus samples, so they were used to minimize potential interference by hemoglobin with clinical chemistry assays.

Serum lipid parameters [cholesterol, HDL cholesterol, non-HDL cholesterol (calculated), and triglycerides] were determined on an Olympus® AU640 clinical chemistry analyzer (Melville, NY).

Hepatic Peroxisomal β-oxidation Evaluation

At necropsy, a section of liver was removed from 10 animals/group and hepatic peroxisomes were prepared for β-oxidation analysis, a measure of peroxisome proliferation. A portion of the liver was homogenized (1 g tissue to 4 mL buffer for rats or 8 mL buffer for mice) in buffer containing 50 mM Tris-HCl, 50 mM Trizma-base, 0.25 M sucrose, and 5.4 mM EDTA, pH 7.4. The homogenates were centrifuged at 15,000 x g for 15 min at 4°C to remove cellular debris. The resulting supernatants were removed and centrifuged at 15,000 x g for 15 min at 4°C; these pellets contained the peroxisomal fractions. The peroxisomal pellets were resuspended in homogenization buffer and stored at –80°C until analyzed. Peroxisomal suspensions were diluted to a protein concentration of approximately 0.25 mg/mL (rats) or 0.5 mg/mL (mice) for analysis. Peroxisomal β-oxidation activity was determined using [^{14}C]palmitoyl CoA as the substrate (Lazarow, 1981). Protein content of the peroxisomes was determined before and after analysis by the Biorad method (Bradford, 1976). Final rate calculations were made using the post-assay protein concentrations.

Analytical Procedures

Concentrations of branched and linear PFOA were measured in rat and mouse blood serum samples using a modified version of the method described in Flaherty (2005). Briefly, acetonitrile was added to an aliquot of blood serum to precipitate protein and extract PFOA isomers. A stable isotope internal standard (dual ^{13}C-PFOA) was added to each sample to facilitate quantification. The sample was then analyzed by reversed-phase liquid chromatography with mass spectrometric detection. HPLC conditions were adjusted so that isomers in the branched APFO (Branch A and Branch B) were partially resolved from each other and from linear PFOA. This adjustment

also permitted partial resolution of the components of the mixed linear/branched test material. In all cases, the resolution was adequate to permit individual quantification of linear PFOA, Branch A, and Branch B isomers. The mass spectrometer used was equipped with an electrospray interface operating in the negative ion mode and a triple quadrupole (LC/MS/MS). The parent-to-daughter ion transition representing $M - CO_2$ was monitored for all analytes and the internal standard. The limit of quantification of the analytical method was 5 ppb.

For linear/branched APFO, the serum concentrations of linear and branched APFO were added to determine the total PFOA concentration and the ratio of branched to linear was calculated. For branched APFO, serum was analyzed separately for the 2 branched isomers and added to determine total serum PFOA concentration. The ratio of branched materials (A to B) was calculated.

Statistical Analysis

For each form of APFO preliminary tests were conducted for homogeneity of variance (Levene, 1960) and normality (Shapiro-Wilk, 1965). If data were normally distributed and had homogeneity of variances, a one-way analysis of variance (Snedecor, 1967) was conducted, followed by Dunnett's test (1964). For data that did not show homogeneity of variances, a robust version of Dunnett's test (1980) was used. Non-normally distributed data was analyzed by non-parametric procedures (Kruskal-Wallis test (1952) followed by Dunn's test (1964)). Significance was judged at $p < 0.05$.

To compare the three forms of APFO at each dose a two-factor full factorial ANOVA with dose and formulation was used as a preliminary analysis of each response. The Shapiro-Wilk (Shapiro and Wilk, 1965) and Levene tests (Levene, 1960) were used to assess normality and variance homogeneity, respectively, for each response separately. Where appropriate, a normalizing, variance stabilizing transformation of the response was used, usually a logarithm or square-root transform. The error term used when comparing dose groups from different compounds included both the pooled within-group variance and the between-experiments variance. The three controls were used to estimate the between-experiments variance. REML estimates (Searle et al., 1992) of these variance components were obtained using SAS 9.2 Proc Mixed. Differences between formulations at each dose level and dose effects within each formulation were then obtained from contrasts within the 2-factor ANOVA.

In addition to the comparisons discussed above, regression analyses were also performed to distinguish whether there were statistical differences among the 3 APFO test materials for each endpoint. These analyses were done using both administered dose vs each endpoint as well as individual serum concentrations vs. each endpoint in order to smooth the dose response. Each endpoint was modeled, using a polynomial of degree 1, 2, or 3 with separate intercepts, slopes, and curvatures. Backward elimination methods were used to determine which terms were retained in the final model. If adjustments to the j-th order term, j=1, 2, 3, for different test substances were retained on this basis, then the overall j-th order term was likewise retained whether or not it was significant - see Pack (1993); USEPA (1995); See and Baylor (1998); Kalliomaa et al., (1998); and Slob (2002).

RESULTS

Rats

Clinical Signs/Mortality

All rats dosed with the 3 APFO test materials were free of clinical signs of toxicity and survived until the end of the study.

Body Weights and Body Weight Gains

Statistically significant reductions in mean body weights were observed in rats dosed with 30 mg/kg linear/branched or linear APFO. The changes were associated with statistically significant lower body weight gains in rats dosed with ≥10 mg/kg of linear/branched APFO (Table 1). Mean body weights of rats dosed with 30 mg/kg linear/branched or linear APFO were 73 and 69% of control at mid-study (test day 7), respectively, and 81% of control for both at the end of study (test day 13). Mean body weights of rats dosed with 10 mg/kg of linear/branched APFO were 89% of control only on test day 13. Overall body weight gains (test days 0-13) were 55 and 22% of control, respectively, in rats dosed with 10 or 30 mg/kg linear/branched APFO, and 74 and 15% of control, respectively, in rats dosed with 10 or 30 mg/kg linear APFO. In rats dosed with 3 mg/kg linear APFO or 30 mg/kg branched APFO, there were slight, albeit statistically significant, decreases in mean body weight gain (74-76% of controls) that did not result in statistically significant decreases in mean body weights. Overall, the magnitudes of the decreases in mean body weight gain in rats dosed with linear/branched APFO and linear APFO were similar, while the magnitude of effect in rats dosed with branched APFO was less pronounced.

Food Consumption/Food Efficiency

Mean food consumption and food efficiency (test day 0-13; data not shown) in rats given 30 mg/kg of either linear/branched or linear were similarly reduced (food consumption was 73% and 78% of control, and food efficiency was 24% and 18% of control, respectively, for linear/branched and linear APFO). With the branched material, both food consumption and food efficiency were approximately 90% of control (not statistically significant).

Analysis of Dosing Preparations

The results of analysis indicate that branched/linear, linear, and branched APFO were at the targeted concentrations, adequately mixed, and stable in the vehicle. No test material was detected in the control (0 mg/mL) samples.

Hematology

Numerous serum samples from all treatment groups were hemolyzed, and hemolysis increased with increasing dose (data not shown). Hemolysis in control samples was never greater than trace. In a given rat, hemolysis was more severe in serum samples from the orbital sinus compared to those from the vena cava. Hemolysis greater than

respective control values was observed in vena cava samples from rats dosed with the linear/branched and linear APFO at doses ≥3 mg/kg, and with the branched APFO at doses of 10 and 30 mg/kg. Hemolysis greater than respective control values was observed in orbital sinus samples from rats dosed with linear/branched APFO at ≥0.3 mg/kg, with linear APFO at doses ≥1 mg/kg, and with branched APFO at doses ≥3 mg/kg. To investigate the cause of hemolysis, red blood cell morphology was evaluated on all available peripheral blood smears to determine whether or not the hemolysis occurred *in vivo* (prior to blood collection) or only *in vitro* (during blood collection or processing). There were no treatment-related changes in polychromasia, suggesting that hemolysis occurred only during blood collection, not *in vivo*.

Treatment-related increases in acanthocytes were observed on the peripheral blood smears of rats dosed with linear/branched and linear APFO at doses ≥3 mg/kg, and with the branched APFO at 10 and 30 mg/kg. Treatment-related increases in poikilocytes or schistocytes were observed in rats dosed with linear/branched and branched APFO only at the 30 mg/kg dose, and in rats dosed with linear APFO at doses ≥3 mg/kg. Although for each chemical form there appeared to be a dose-response, acanthocytes, poikilocytes, and schistocytes were never present in high numbers, even at the highest doses.

Clinical Chemistry

Total serum cholesterol concentrations were decreased in rats dosed with ≥0.3 mg/kg linear APFO, and in rats dosed with ≥1 mg/kg linear/branched APFO or branched APFO (Table 2). Serum cholesterol concentrations were less affected at doses of 30 mg/kg than at 3 or 10 mg/kg for each of the 3 test materials. For linear/branched APFO, total cholesterol concentrations were lowest in rats dosed with 3 mg/kg (45% of control). However, for linear and branched APFO, total cholesterol concentrations were similar at doses of 3 and 10 mg/kg (56-60% of control and 56-59% of control, respectively).

HDL cholesterol concentrations were significantly decreased at doses ≥3 mg/kg by each of the 3 test materials. Like total cholesterol, the lowest HDL cholesterol concentrations occurred at doses of 3 or 10 mg/kg for each of the test materials. HDL cholesterol concentrations as a percent of control for these two doses were 52-57% (linear/branched), 58% (linear), and 65-70% (branched). Changes at doses of 30 mg/kg were less prominent than at lower doses for each of the test materials.

Non-HDL cholesterol concentrations were decreased at doses ≥1 mg/kg by each of the 3 test materials. In addition, non-HDL cholesterol concentrations were statistically significantly decreased at doses of 1 mg/kg for linear/branched APFO, and at 0.3 and 1 mg/kg for linear APFO. Like total and HDL cholesterol, the lowest non-HDL cholesterol concentrations occurred at doses of 3 or 10 mg/kg for each of the test materials. Non-HDL cholesterol concentrations as a percent of control for these two doses were 40-60% (linear/branched, excluding an outlier), 52-64% (linear), and 50% (branched). Non-HDL cholesterol changes at doses of 30 mg/kg were less prominent or were not present.

Serum triglyceride concentrations were decreased in rats dosed with ≥0.3 mg/kg linear APFO, and in rats dosed with ≥1 mg/kg linear/branched APFO or branched APFO (Table 2 and Figure 1). Unlike cholesterol, the dose-response for triglyceride concentration for each of the test materials was flat at doses ≥3 mg/kg. At doses ≥3 mg/kg, triglyceride concentrations ranged from 51-67% of control for linear/branched APFO, 72-79% of control for linear APFO, and 53-62% of control for branched APFO.

Organ Weights

Absolute liver weights were significantly increased in rats dosed with ≥1 mg/kg branched APFO or ≥3 mg/kg linear/branched APFO or linear APFO (Table 3). Liver weights relative to body weights were increased in a dose-dependent manner in all groups dosed with the test materials (Table 3 and Figure 2), with the highest relative liver weights at 30 mg/kg (means were 199, 183, and 188% of control for linear/branched, linear, and branched APFO, respectively).

A few instances of statistically significant alterations in absolute or relative kidney weights were observed with all 3 test materials. Overall, the magnitudes of the alterations were small and were not considered treatment-related.

Hepatic Peroxisomal β-Oxidation

In rats, each of the three APFO test materials caused statistically significant increases in hepatic β-oxidation activity (Table 4 and Figure 3). Rats dosed with linear/branched or linear APFO had a dose-dependent increase in hepatic β-oxidation activity that was statistically significant at dosages of ≥1 mg/kg, with the greatest increases at 30 mg/kg (465 and 567% of control, respectively). Hepatic β-oxidation was significantly increased in rats dosed with ≥3 mg/kg branched APFO, with the greatest increase at 30 mg/kg (289% of control). Overall, the linear/branched and linear APFO increased hepatic β-oxidation activity to similar magnitudes, while the branched APFO was less potent.

Serum PFOA Concentrations

Small amounts (<1 µg/ml) of PFOA were detected in sera control rats (Table 5). Overall, serum PFOA concentrations increased proportionally with dose. For example, at doses of 0.3, 1, and 3 mg/kg APFO, serum levels of PFOA were approximately 20, 60, and 100 µg/ml, respectively, for all 3 test materials. However, for branched APFO, the slope of the dose response diminished at the three higher doses compared to linear/branched APFO and linear APFO (Figure 4). For linear/branched APFO, the ratio of linear to branched APFO administered was 3.5. The ratio of linear to branched PFOA in serum increased as the dose increased (from 5.1 at 0.3 mg/kg to 11 at 30 mg/kg). With branched APFO, the ratio of Branch A to Branch B administered was 1.4:1. With increasing dose, the ratio of Branch A to Branch B in serum increased (1.3:1 at 0.3 mg/kg to 2.8:1 at 30 mg/kg).

Regression Analysis

When analyzed by administered dose, there were no statistically significant differences detected between endpoints measured for rats dosed with linear APFO and linear/branched APFO. For most endpoints, especially at higher

doses, the branched form of APFO was statistically different from the linear or linear/branched forms. In general, this regression analysis confirmed the findings of the ANOVA tests concerning the effects of branched APFO on the nutritional endpoints of body weight, body weight gain, and food efficiency.

When analyzed by PFOA serum concentrations, however, there were no differences observed for nutritional endpoints among the three forms of APFO. In contrast, for a given serum concentration of PFOA, relative liver weights were higher and relative kidney weights were lower in rats dosed with branched APFO compared to the other two test materials.

Mice

Clinical Signs/Mortality

No adverse clinical signs of toxicity were observed in mice dosed with either linear/branched APFO or branched APFO. The incidence of enophthalmos (3/10) and lethargy (2/10) was significantly increased in mice dosed with 30 mg/kg linear APFO. No clinical signs were seen in mice given 10 mg/kg linear APFO or less. One mouse dosed with 30 mg/kg linear APFO died during the study; the cause of death was not determined.

Body Weights and Body Weight Gains

Mean body weights were significantly lower compared to controls following 7 and 13 days of dosing with 30 mg/kg of linear/branched APFO (84 and 79% of control) or linear APFO (84 and 82% of control) at both days (Table 1). Overall mean body weight gains were also lower for these two groups. Mean body weights of control mice increased 1 to 2 grams over the course of the study (test days 0-13); however, mean body weights of groups dosed with ≥10 mg/kg linear/branched APFO or linear APFO decreased between 1 and 6 grams. Treatment-related increases in liver weights (Table 3) decreased the apparent magnitude of body weight effects. At necropsy body weight excluding liver weights of mice dosed with 30 mg/kg were 67% of control for linear/branched APFO, 75% of control for linear APFO, and 83% of control for branched APFO (data not shown). Therefore, all 3 groups dosed with 30 mg/kg APFO had significant body weight loss. Mean body weight gains of mice, when adjusted for increased liver weights, were between -1.3 and 0.3 g for control mice and mice dosed with ≤3 mg/kg, respectively. However, body weight gains adjusted for increased liver weights were substantially lower for mice dosed with ≥10 mg/kg of linear/branched and linear (-5.7 to -9.5 g), or dosed with 30 mg/kg of branched (-5.1 g). Other changes in mean body weights or body weight gain were observed but were considered to be unrelated to treatment. Overall, the effects on mean body weight and body weight gain were of similar magnitude in mice dosed with linear/branched APFO and linear APFO. Mean body weights and mean body weight gains were generally less affected in mice dosed with branched APFO, even when adjusted for liver weight increases.

Food Consumption/Food Efficiency

Mean food consumption (test day 0-13; data not shown) was decreased, compared to controls, in mice dosed with linear/branched or linear APFO only at 30 mg/kg (85% and 91% of control, respectively). Over the same time

period in the 30 mg/kg groups, mean food efficiency (g body weight gain/g food consumed) was negative only in the linear/branched form of APFO (data not shown). Food consumption and food efficiency were less affected in mice dosed with branched APFO (food consumption was 95% of control).

Analysis of Dosing Preparations

The results of analysis indicate that branched/linear, linear, and branched APFO were at the targeted concentrations, adequately mixed, and stable in the vehicle. No test material was detected in the control (0 mg/mL) samples.

Clinical Chemistry

Serum total and HDL cholesterol concentrations were decreased (variable statistical significance) in mice dosed with ≥3 mg/kg for each of the test materials (Table 2). The dose-response for both parameters was flat at doses ≥3 mg/kg for each of the three test materials. Concentrations in these groups were 61-82% of control for total cholesterol and 51-71% of control for HDL cholesterol. In addition, HDL cholesterol concentrations in mice dosed with 1 mg/kg of each of the test materials were minimally lower than controls (82-84% of control group means for the three APFO test materials).

There were no treatment-related changes in mean non-HDL cholesterol concentrations in mice. However, mice treated with each of the test materials tended to have wider ranges (both increased and decreased) of non-HDL cholesterol concentrations compared to control mice.

Serum triglyceride concentrations were statistically significantly increased in mice dosed with 0.3, 1, 3, or 10 mg/kg of linear/branched APFO (Table 2 and Figure 1); mean triglyceride concentration was highest at 10 mg/kg (161% of control). In addition, a few mice dosed with linear APFO or branched APFO at doses ≥1 mg/kg had increased triglyceride concentrations, resulting in increases in mean triglyceride concentrations ranging from 111-149% of control. Triglyceride concentrations of mice dosed with 30 mg/kg were either similar to controls (branched - 95% of control group mean) or somewhat less than controls (linear/branched and linear - 86% and 83% of control group mean, respectively).

Organ Weights

As in rats, absolute and relative liver weights were increased in mice dosed with each of the test materials (Table 3 and Figure 2). Absolute liver weights were significantly increased in mice dosed with ≥3 mg/kg of each of the three test materials; maximum mean absolute liver weights occurred at doses of 10 or 30 mg/kg. Relative liver weights were increased (variable statistical significance) in a dose-related manner in mice dosed with ≥0.3 mg/kg of each of the three test materials. Maximum relative liver weights occurred at doses of 30 mg/kg for each test material; means were 356, 325, and 409% of control means for linear/branched, linear, and branched, respectively.

A few instances of statistically significant decreases in absolute or relative kidney weights were observed with linear and linear/branched APFO. Overall, the magnitudes of the alterations were small when normalized for body weight, did not show a dose-dependent effect, and thus were considered to be unrelated to treatment with the test materials.

Hepatic Peroxisomal β-Oxidation

Similar to the effects observed in rats, each of the three forms of APFO caused statistically significant increases in hepatic β-oxidation activity in mice (Table 4). Statistically significant increases in hepatic β-oxidation were observed at doses of ≥0.3 mg/kg for linear/branched and linear APFO and ≥1 mg/kg for branched APFO. The magnitude of the increases was not proportional to the dose administered as the greatest increase was seen at a dose of 1 or 3 mg/kg rather than at 30 mg/kg. Linear/branched and linear APFO caused similar increases in hepatic β-oxidation at 1 and 3 mg/kg (263-273% and 280-287% of control, respectively, for the two test materials), while branched APFO caused the greatest increase at 3 mg/kg (245% of control). Overall, increases in hepatic β-oxidation were of similar magnitude for each of the three APFO test materials.

Serum PFOA Concentration

In the mouse, PFOA serum concentrations increased with increasing dose (Table 5 and Figure 4). The serum concentrations at a given dose of each test material appeared similar, and, like the rat, concentrations of PFOA in mice dosed with linear APFO were higher than those of mice dosed with the other two test materials following exposure to 10 or 30 mg/kg. In mice dosed with linear/branched APFO, the ratio of linear to branched PFOA in the serum increased from 4.1 at a dose of 0.3 mg/kg to 9.9 at a dose of 30 mg/kg. With branched APFO, the ratio of Branch A to Branch B increased from 1.4 at a dose of 0.3 mg/kg to 5 at a dose of 30 mg/kg.

Regression Analysis

Regression analysis results for mice did not differ when analyzed by administered dose or serum PFOA concentration. The regression analysis confirmed the results of pair-wise statistical tests.

DISCUSSION

The purpose of the current study was to determine if there are substantial differences in the toxicity profile, based on selected endpoints, among the three isomeric forms of APFO (linear/branched, linear, and branched). For completeness, both rats and mice were utilized, and a wide range of doses was employed. Because linear/branched APFO is 78% linear APFO, we hypothesized that the toxicity profile of linear/branched and linear APFO would be similar. To determine the contribution of branched APFO to the toxicity of linear/branched APFO, we synthesized a form of APFO that was 100% branched.

Body weight and nutritional parameters, organ weights, and hepatic β-oxidation results in this study were consistent with those of previous studies conducted with linear/branched APFO (reviewed in Kennedy et al., 2004). Branched APFO had the least effect on body weight, body weight gain, and food consumption for both rats and mice

compared to both the linear/branched and linear forms. In the rat, however, these differences were not significant when effects were compared using serum concentrations, rather than administered dose.

Internal dose, defined as serum PFOA concentrations, increased with administered APFO dose for each test material. In rats given equivalent doses, branched APFO resulted in lower serum PFOA concentrations compared to the other two test materials. Possible explanations for this finding might include time of blood collection, absorption differences, or differences in urinary excretion between the branched forms and the other two forms of APFO. Differences in renal excretion of organic anions may be driven by differential affinity for organic anion transporters among the different forms of APFO, which may contribute to the lower relative serum concentrations at higher doses (Kudo and Kawashima, 2003).

The ratio of linear/branched APFO administered daily to rats and mice was approximately 4:1 (80/20%). Following 14 daily doses of 0.3 mg/kg in rats, the serum ratio of linear to branched was 5:1 and this ratio became greater with dose (6.2, 6.9, 8.5, and 11:1 with doses of 1, 3, 10, and 30 mg/kg, respectively). In mice, the same trend was observed with the starting ratio of 3.8-4.4 seen in mice treated with either 0.3, 1, or 3 mg/kg and higher ratios observed with the 2 highest doses (6.6 at 10 mg/kg, 9.9 at 30 mg/kg). The reason for the changing isomer pattern is unknown. Tissue storage of APFO (either linear/branched or linear) is minimal and no particular tissue storage site appears to exist (Johnson, 1984; Kemper, 2003). However, in rats exposed orally to linear/branched APFO, the amount of branched isomer in serum decreases after cessation of dosing (DuPont, unpublished observations). Therefore, this changing isomer pattern most likely reflects altered absorption or preferential clearance of branched APFO.

The branched material tested contained internal mono-methyl non-alpha branching (Branch A) and isopropyl branching (Branch B) in a ratio of 1.4:1 (58.3% Branch A :41.7% Branch B). In serum samples collected after 14 doses, the percentage of mono-methyl branching rose with escalating dose, to 2.8:1 in rats and 5.0:1 in mice receiving 30 mg/kg. Again, the reason for this shift is unknown but is most likely a reflection of changes in absorption and/or clearance of the specific isomers.

The activity of hepatic β-oxidation paralleled serum PFOA concentrations in rats. The increase in activity seen with the branched material was lower than that for the other 2 materials. A 2 to 3 fold increase was seen at 30 mg/kg, the same relative increase as produced by 1 to 3 mg/kg of either the linear/branched or the linear forms. In mice, β-oxidation increases similarly for all 3 materials with a relatively flat dose response as the dose increased from 0.3 to 30 mg/kg. The actual numerical levels of β oxidation were greater in the groups receiving either 1 or 3, not 30 mg/kg. Liver weights in both species increased proportionately to dose suggesting that the liver weight increases are not due solely to peroxisomal proliferation.

Given that APFO exhibits PPAR-α activity (Intrasuksri et al., 1998; Maloney and Waxman, 1999), it was expected that it would lower serum cholesterol and triglycerides levels in rats. Haughom and Spydevold (1992) reported decreases in total cholesterol (50-70% of controls) and triglycerides (60% of controls) after dietary administration of

0.02% APFO (estimated dose of 10 mg/kg). These results are consistent with the current study. Although the dose response in our study varied among the 3 test materials, serum cholesterol concentrations in rats were decreased in the dose range (1 to 10 mg/kg) consistent with that used by Haughom and Spydevold, but were generally less affected at the highest dose (30 mg/kg).

In mice, Xie et al. (2003) reported a decrease in serum cholesterol (80% of controls) in C57BL/6 mice after 7 days of dietary administration of 0.02% APFO (estimated dose of 30 mg/kg). In our study, cholesterol was decreased in mice at doses greater than 3 mg/kg, and thus the effects on cholesterol were consistent with those of Xie et al. In the same experiment, Xie also reported a decrease in serum triglycerides (estimated at 60% of controls). In our study, triglyceride concentrations in mice increased with increasing dose (up to 61% at 10 mg/kg of linear/branched), but were similar to controls or slightly decreased at 30 mg/kg. Therefore, at a similar high dose of 30 mg/kg, triglyceride concentrations were similar between the two studies. The more definitive decrease in triglyceride concentrations reported by Xie et al. may be due to effects of the route of administration (dietary), differing mouse strains, or differing durations of exposure.

Serum lipid perturbations observed in rodents at high doses (30 mg/kg) of linear/branched APFO have not been observed in monkeys. Cynomolgus monkeys dosed with up to 30/20 mg/kg by gavage for up to 6 months showed no treatment-related alterations in serum lipids (Butenhoff et al., 2002). Cynomolgus monkeys are similar to humans with respect to cholesterol and triglyceride metabolism, and have been used as animal models in the development of hypolipidemic pharmacologic agents.

The increase in serum triglycerides in mice at lower concentrations of APFO occurred despite increased hepatic β-oxidation. This finding suggests that in mice, but not in rats or primates, perturbations in lipid metabolism beyond those associated with PPAR-α meditated events underlie this observation. Other investigators have also noted that effects of APFO on hepatic lipid content are different from those of clofibrate, a well-characterized peroxisome proliferating agent (Kawashima et al., 1995). Although dosing with fibrates generally decreases serum cholesterol and triglyceride concentrations in rats and mice, other peroxisomal proliferators have no lipid-lowering effects (Kawashima et al., 1995).

Dose-related *ex vivo* hemolysis in rats (but not mice) was detected in serum samples collected from the orbital sinus and vena cava. This effect was considered to be an *ex vivo* effect because the extensive database on APFO-exposed rats contains no indication of red cell effects despite rigorous investigation of clinical and anatomic pathology endpoints. Sensitive indicators of *in vivo* hemolysis (including, but not limited to, increased splenic weights, increased extramedullary hematopoiesis, increased splenic pigment, decreased red cell mass, increased reticulocytes, increased mean cell volume, and decreased mean cell hemoglobin concentration) have never been affected in any previous toxicity study conducted with APFO. Therefore, hemolysis observed in serum from rats most likely resulted from a test-material related increase in fragility of red cells *ex vivo* during blood collection and/or processing.

Acanthocytes were observed on some blood smears of rats on this study. Acanthocytes are red blood cells with irregular projections, thought to arise as a result of asymmetry between the lipid bilayer hemileaflets of red blood cells (Bull, 2000). They have been associated with altered lipid content of the red cell lipid bilayer, because lipid content of mammalian erythrocytes is reflective of plasma lipid concentrations. Other shape changes (poikilocytes or schistocytes) were observed occasionally on some blood smears of rats on this study. Both of these shape changes were only present in trace amounts and did not appear to have any effect on red cell survival. The morphologic changes were similar with each test material. These morphologic changes, as well as *ex vivo* hemolysis, were likely due to alterations in plasma lipids.

A wide variety of endpoints were examined in rats and mice using a range of doses from 0.3 to 30 mg/kg. For each endpoint the lowest dose tested producing an effect (LOEL) was determined for each of the 3 materials (Table 6). In rats, the LOEL was 1 mg/kg for linear/branched and branched, and 0.3 mg/kg for linear, based on reductions in total cholesterol and triglycerides. In mice, the LOEL was 0.3 mg/kg for all materials, based on liver weight changes and hepatic β-oxidation (and on increases in triglycerides with the linear/branched material). These LOEL doses correspond to serum PFOA levels of approximately 20-50 µg/mL (ppm) in rats and approximately 10-15 µg/mL in mice.

In conclusion, the toxicity profile of linear/branched APFO and linear APFO was similar for the endpoints measured in rats and mice. The observations in this experiment were similar to those seen in other rodent studies. Internal dose, as determined by serum PFOA concentrations, increased with dose for each APFO test material. In rats, branched APFO resulted in considerably lower serum PFOA concentrations compared to the other two test materials. These lower serum PFOA concentrations also correlated with lower hepatic β-oxidation levels. At the highest dose, the ratio of linear to branched forms in serum was twice that of the administered test material, and the ratio of the internal monomethyl isomer to the isopropyl more than doubled. In rats and mice, serum cholesterol generally decreased with increasing doses of test material. In rats, serum triglyceride concentrations decreased with increasing doses of test material. However, in mice, triglyceride concentrations increased up to doses of 10 mg/kg, then decreased at 30 mg/kg. In both rats and mice, the overall responses to the linear/branched and the linear forms of PFOA were similar, but the branched form appears to be less potent. Based on these results, the toxicological database developed primarily from testing linear/branched APFO is applicable to linear APFO.

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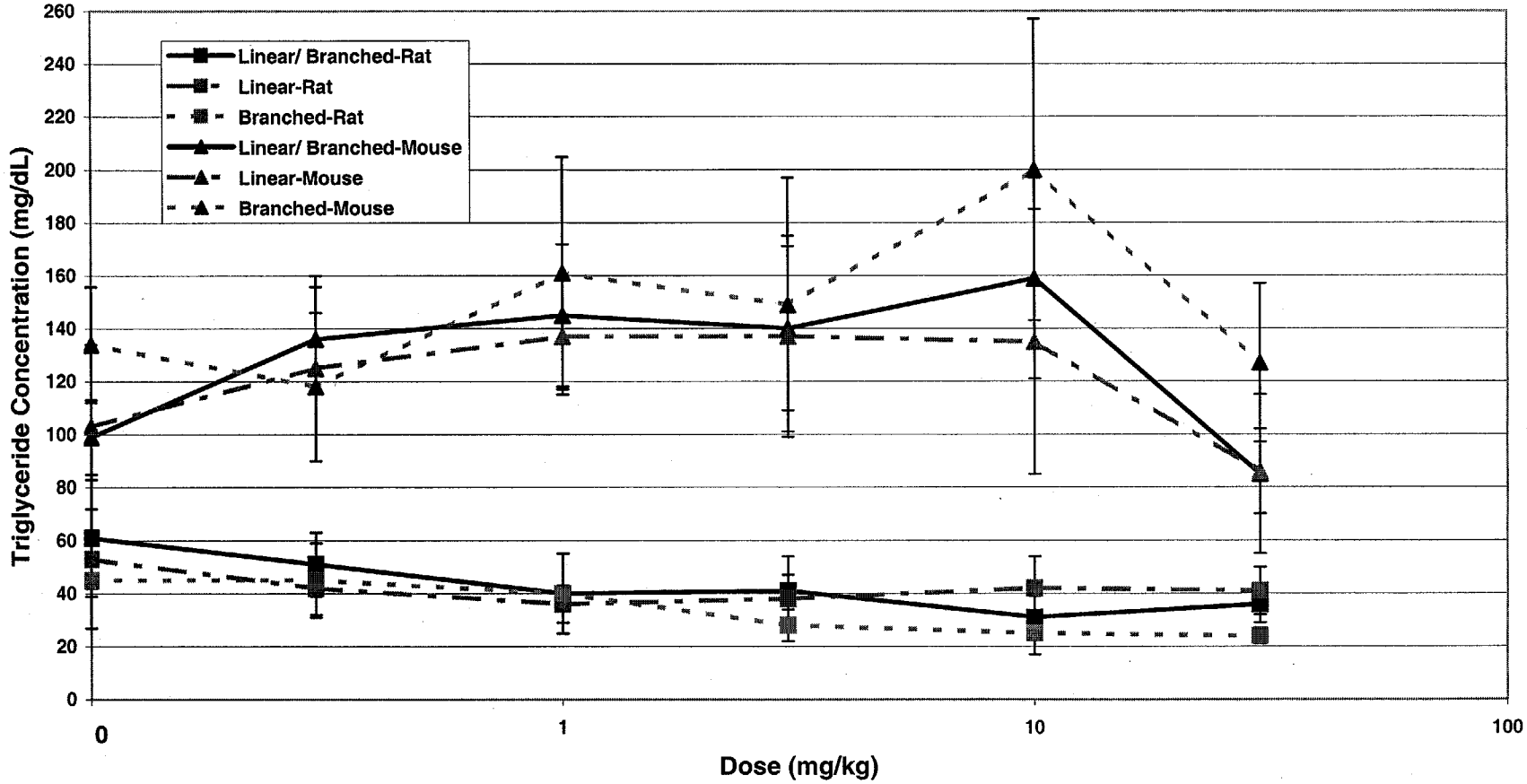
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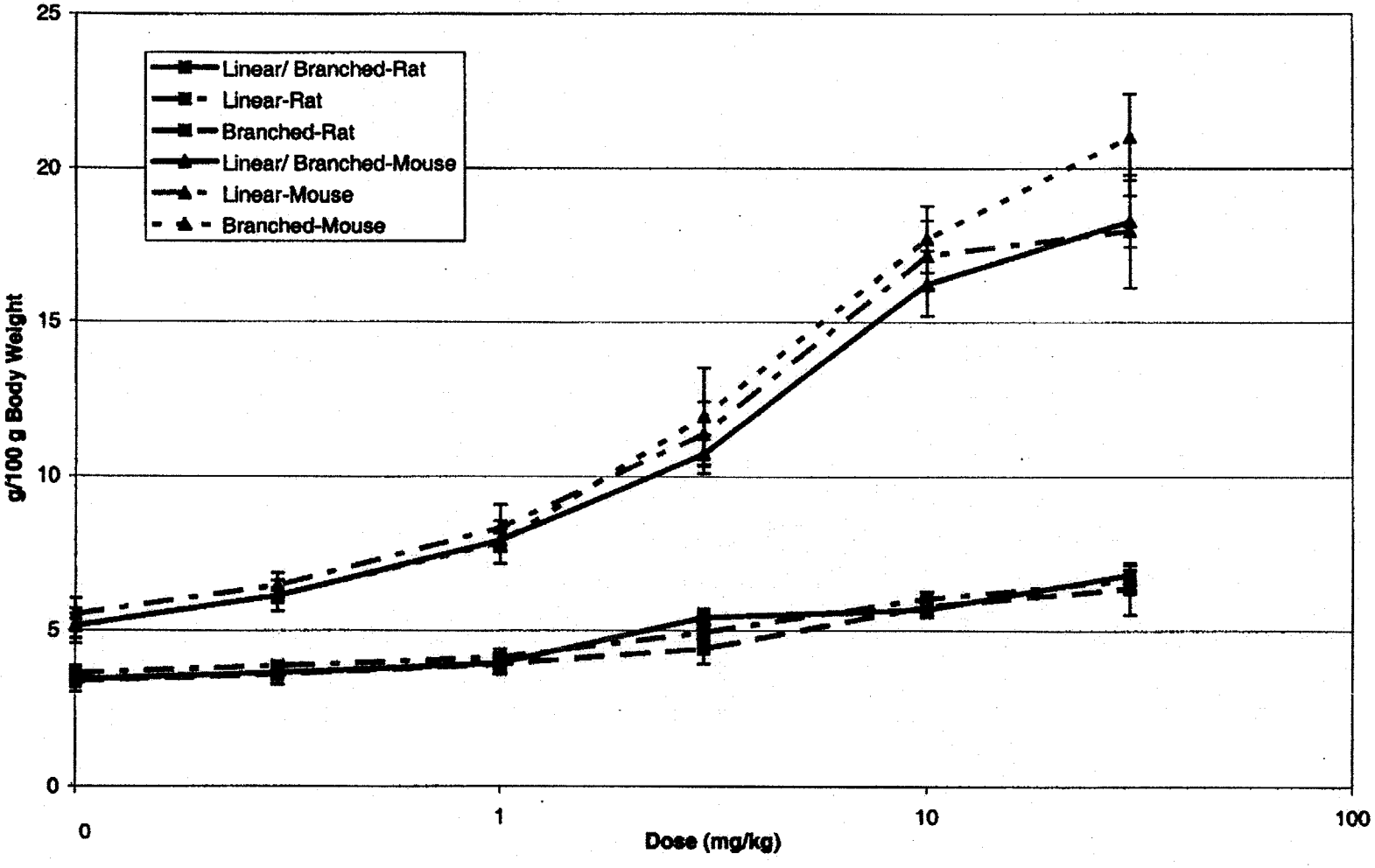
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FIGURES

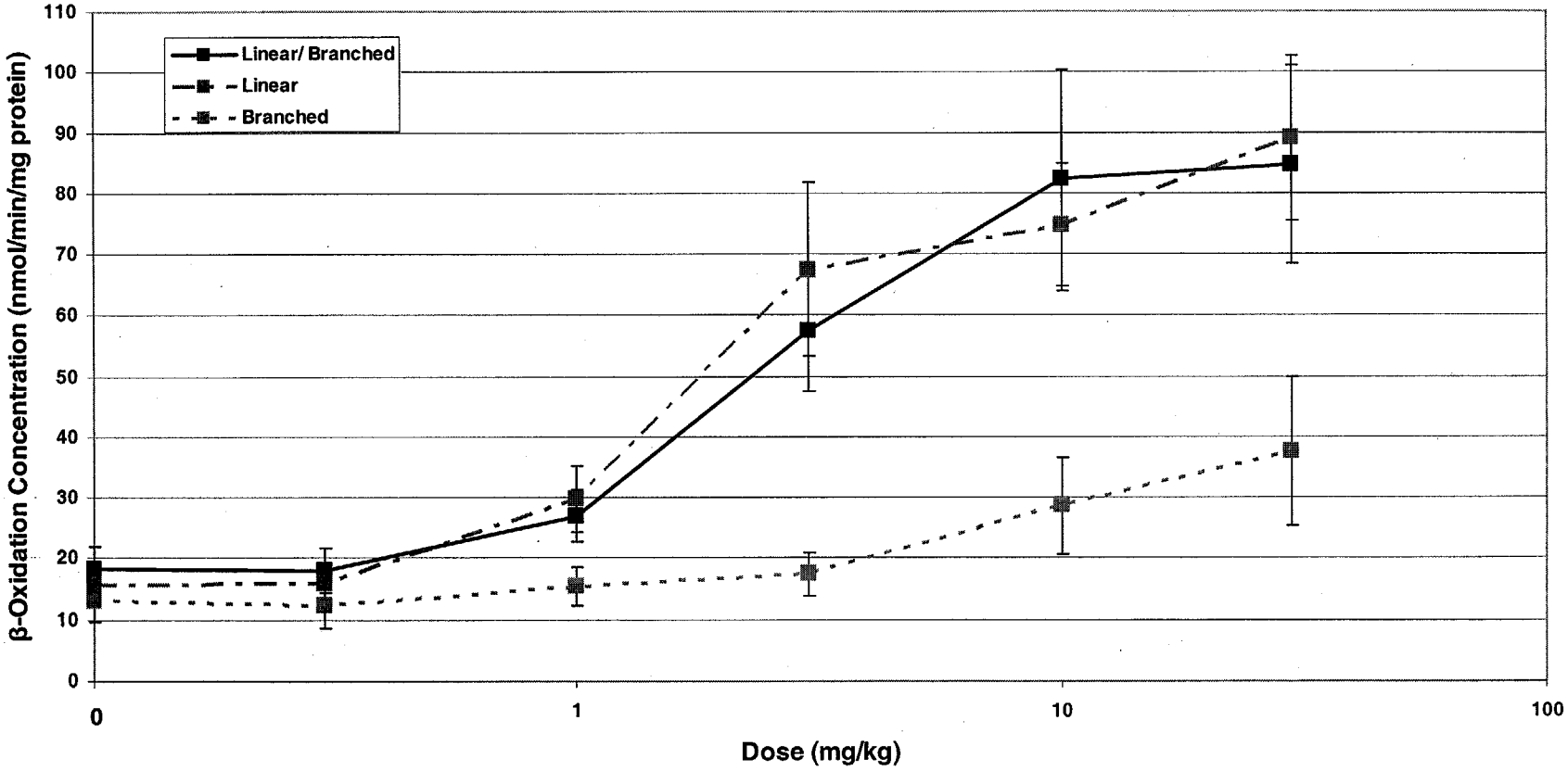
Manuscript Figure 1
Rat and Mouse Serum Triglyceride Concentrations



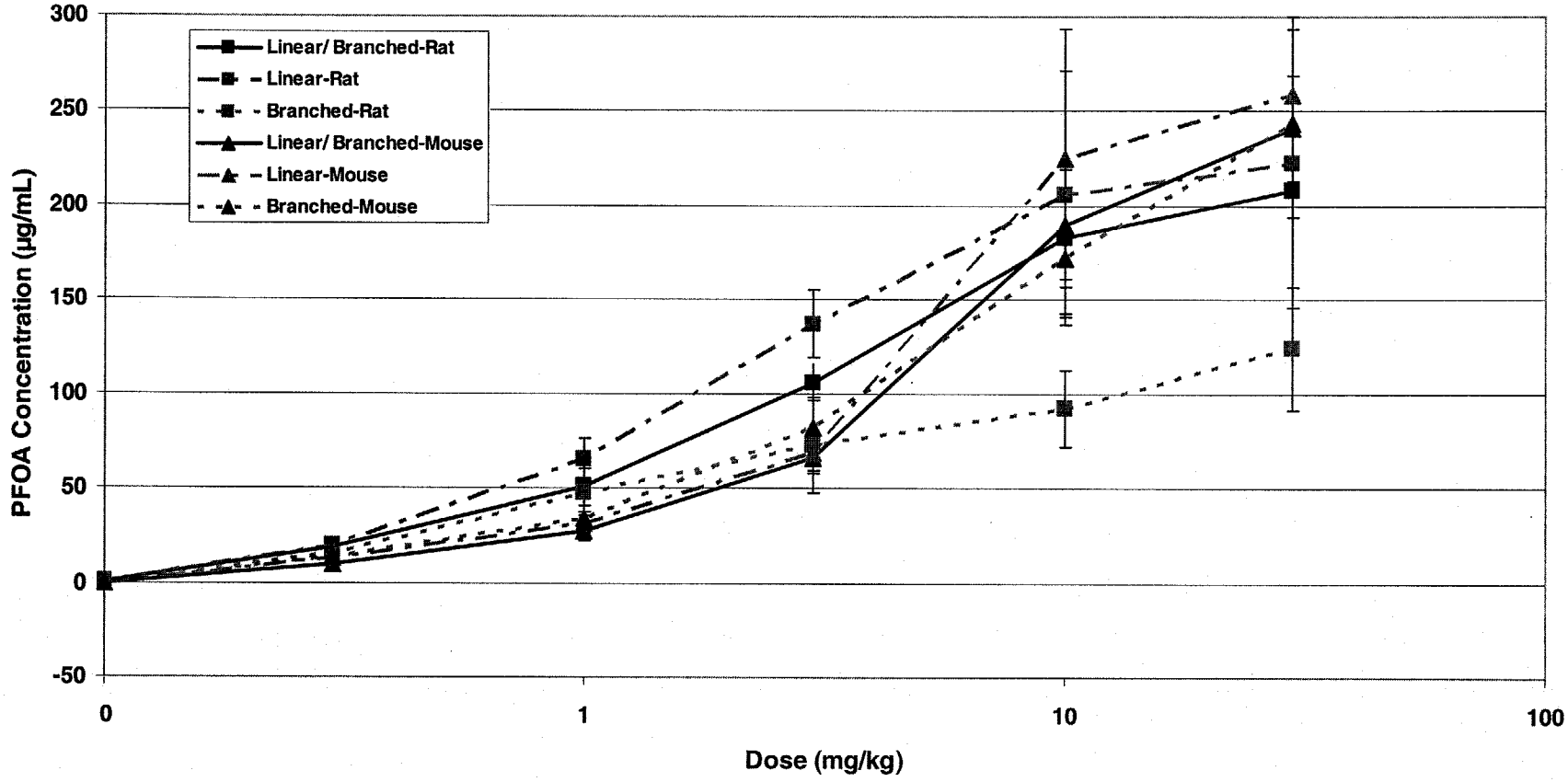
Manuscript Figure 2
Rat and Mouse Liver Weight/Body Weight



Manuscript Figure 3
Rat Hepatic β-Oxidation Concentrations



Manuscript Figure 4
Rat and Mouse Serum PFOA Concentrations



TABLES

Manuscript Table 1
Mean Body Weights and Body Weight Gains
in Rats and Mice Treated with Various Forms of APFO

		Rats				Mice			
Dose (mg/kg)	**Test Material**	**Day 0**	**Day 7**	**Day 13**	**Weight Gain Day 0-13**	**Day 0**	**Day 7**	**Day 13**	**Weight Gain Day 0-13**
0	Linear/Branched	268 ± 13[a]	321 ± 21	354 ± 25	86 ± 14	31 ± 2	32 ± 2	33 ± 2	2 ± 1
	Linear	285 ± 12	331 ± 14	363 ± 13	78 ± 9	31 ± 1	31 ± 2	33 ± 1	1 ± 1
	Branched	285 ± 11	328 ± 20	357 ± 25	72 ± 16	32 ± 2	32 ± 2	33 ± 2	1 ± 1
0.3	Linear/Branched	268 ± 9	315 ± 9	346 ± 13	78 ± 9	31 ± 2	32 ± 2	33 ± 2	1 ± 1
	Linear	282 ± 11	324 ± 14	353 ± 20	70 ± 15	31 ± 2	32 ± 2	33 ± 2	1 ± 1
	Branched	284 ± 16	328 ± 25	359 ± 33	75 ± 19	31 ± 1	33 ± 2	34 ± 2	2 ± 1
1	Linear/Branched	270 ± 10	322 ± 11	351 ± 15	81 ± 13	32 ± 1	32 ± 3	34 ± 3	1 ± 2
	Linear	280 ± 15	321 ± 23	349 ± 32	69 ± 21	32 ± 1	34 ± 1	34 ± 1	2 ± 1
	Branched	289 ± 11	338 ± 24	367 ± 31	78 ± 22	32 ± 1	33 ± 2	34 ± 2	2 ± 1
3	Linear/Branched	272 ± 11	326 ± 20	356 ± 29	84 ± 21	32 ± 2	33 ± 3	34 ± 3	2 ± 1
	Linear	280 ± 11	317 ± 14	339 ± 16	59 ± 14*	32 ± 2	32 ± 3	34 ± 4	2 ± 3
	Branched	285 ± 7	322 ± 14	348 ± 19	64 ± 14	32 ± 1	34 ± 1	35 ± 1*	3 ± 1*
10	Linear/Branched	268 ± 14	296 ± 27	315 ± 35	47 ± 26*	32 ± 1	32 ± 1	29 ± 2*	-2 ± 3*
	Linear	281 ± 14	310 ± 17	339 ± 18	58 ± 17	31 ± 1	32 ± 2	30 ± 3	-1 ± 3
	Branched	282 ± 9	321 ± 15	348 ± 15	67 ± 10	32 ± 2	34 ± 2	35 ± 2*	3 ± 2*
30	Linear/Branched	268 ± 12	233 ± 37*	287 ± 13*	19 ± 16*	31 ± 1	27 ± 2*	26 ± 2*	-6 ± 1*
	Linear	281 ± 14	230 ± 38*	293 ± 22*	12 ± 18*	31 ± 1	26 ± 2*	27 ± 2*	-4 ± 3*
	Branched	284 ± 13	314 ± 14	339 ± 19	55 ± 7*	32 ± 2	32 ± 2	32 ± 2	0 ± 1

* Statistically significant difference from control ($p<0.05$).
a Mean ± standard deviation.

Manuscript Table 2
Summary of Clinical Chemistry Values
in Rats and Mice Treated with Various Forms of APFO

		Rats					Mice			
Dose (mg/kg)	**Test Material**	**Cholesterol (mg/dL)**	**HDL (mg/dL)**	**Non-HDL (mg/dL)**	**Triglycerides (mg/dL)**		**Cholesterol (mg/dL)**	**HDL (mg/dL)**	**Non-HDL (mg/dL)**	**Triglycerides (mg/dL)**
0	Linear/Branched	51 ± 14[a]	21 ± 4	30 ± 11	61 ± 22		145 ± 21	97 ± 12	47 ± 10	99 ± 14
	Linear	45 ± 10	19 ± 4	25 ± 6	53 ± 11		150 ± 25	95 ± 16	56 ± 11	103 ± 31
	Branched	46 ± 8	20 ± 3	26 ± 5	45 ± 18		146 ± 22	94 ± 13	52 ± 10	134 ± 22
0.3	Linear/Branched	49 ± 13	21 ± 4	28 ± 9	51 ± 12		137 ± 24	90 ± 12	47 ± 14	136 ± 20*
	Linear	33 ± 10*	16 ± 3	17 ± 7*	42 ± 10*		147 ± 38	90 ± 19	57 ± 20	125 ± 35
	Branched	42 ± 6	19 ± 2	23 ± 5	45 ± 14		125 ± 26	77 ± 10	48 ± 20	118 ± 28[b]
1	Linear/Branched	33 ± 10	16 ± 3	17 ± 7*	40 ± 15*		138 ± 33	81 ± 14	57 ± 21	145 ± 27*
	Linear	29 ± 11*	15 ± 4	14 ± 7*	36 ± 7*		139 ± 20	78 ± 10	61 ± 13	137 ± 22
	Branched	36 ± 9*	17 ± 4	18 ± 6	40 ± 15		127 ± 39	79 ± 18	48 ± 22	161 ± 44
3	Linear/Branched	23 ± 7*	11 ± 3*	12 ± 5*	41 ± 13		97 ± 23*	55 ± 11*	42 ± 15	140 ± 31*
	Linear	25 ± 4*	11 ± 2*	13 ± 3*	38 ± 9*		97 ± 24*	51 ± 7*	46 ± 20	137 ± 38
	Branched	27 ± 8*	14 ± 2*	13 ± 6*	28 ± 6		96 ± 26*	62 ± 13*	34 ± 13*	149 ± 48
10	Linear/Branched	36 ± 22*	12 ± 4*	24 ± 19	31 ± 8*		114 ± 44	69 ± 27*	45 ± 17	159 ± 38*
	Linear	27 ± 7*	11 ± 7*	16 ± 5*	42 ± 12		116 ± 32	64 ± 15*	52 ± 19	135 ± 50
	Branched	26 ± 10*	13 ± 4*	13 ± 6*	25 ± 8*		120 ± 43	67 ± 21*	54 ± 23	200 ± 57
30	Linear/Branched	41 ± 6	14 ± 2*	26 ± 4	36 ± 7*		88 ± 32*	49 ± 17*	39 ± 16	85 ± 30
	Linear	41 ± 15	15 ± 5	26 ± 10	41 ± 9*		101 ± 33*	56 ± 19*	45 ± 15	86 ± 16
	Branched	34 ± 8*	16 ± 3*	19 ± 5	24 ± 3*		113 ± 17	67 ± 12*	46 ± 7	127 ± 30

* Statistically significant difference from control ($p<0.05$).
a Mean ± standard deviation.
b Excludes one animal considered to be an outlier.

Manuscript Table 3
Liver and Kidney Weights and Liver and Kidney to Body Weight Ratios in Rats and Mice Treated with Various Forms of APFO

		Rats				Mice			
Dose (mg/kg)	**Test Material**	**Liver Wt (g)**	**Liver/Body Wt (g/100g)**	**Kidney Wt (g)**	**Kidney/Body Wt (g/100g)**	**Liver Wt (g)**	**Liver/Body Wt (g/100g)**	**Kidney Wt (g)**	**Kidney/Body Wt (g/100g)**
0	Linear/Branched	11.18 ± 1.78[a]	3.43 ± 0.40	2.84 ± 0.25	0.88 ± 0.05	1.64 ± 0.11	5.14 ± 0.27	0.50 ± 0.04	1.57 ± 0.16
	Linear	12.09 ± 0.96	3.63 ± 0.35	2.89 ± 0.27	0.87 ± 0.06	1.70 ± 0.12	5.52 ± 0.24	0.56 ± 0.05	1.84 ± 0.16
	Branched	11.05 ± 1.43	3.38 ± 0.29	2.63 ± 0.29	0.80 ± 0.06	1.62 ± 0.14	5.14 ± 0.31	0.52 ± 0.04	1.64 ± 0.16
0.3	Linear/Branched	11.57 ± 0.99	3.63 ± 0.23	2.76 ± 0.21	0.86 ± 0.05	1.92 ± 0.14	6.12 ± 0.25	0.54 ± 0.07	1.73 ± 0.18
	Linear	12.54 ± 1.09	3.86 ± 0.14	2.72 ± 0.59	0.83 ± 0.15	2.00 ± 0.11	6.45 ± 0.23*	0.53 ± 0.03	1.71 ± 0.09
	Branched	11.73 ± 1.52	3.58 ± 0.27	2.72 ± 0.34	0.83 ± 0.07	1.95 ± 0.19	6.12 ± 0.34*	0.55 ± 0.04	1.72 ± 0.15
1	Linear/Branched	12.72 ± 1.00	3.94 ± 0.20*	2.91 ± 0.31	0.90 ± 0.07	2.55 ± 0.15	7.92 ± 0.49	0.54 ± 0.06	1.66 ± 0.15
	Linear	13.41 ± 2.16	4.13 ± 0.33*	2.83 ± 0.17	0.88 ± 0.08	2.73 ± 0.14*	8.33 ± 0.31*	0.56 ± 0.08	1.72 ± 0.19
	Branched	13.14 ± 1.75*	3.91 ± 0.33*	2.79 ± 0.31	0.83 ± 0.06	2.53 ± 0.26	7.85 ± 0.85*	0.55 ± 0.05	1.69 ± 0.12
3	Linear/Branched	17.92 ± 2.33*	5.42 ± 0.39*	3.14 ± 0.23*	0.96 ± 0.06*	3.47 ± 0.35*	10.72 ± 0.63*	0.54 ± 0.07	1.66 ± 0.15
	Linear	15.42 ± 1.20*	4.94 ± 0.23*	2.88 ± 0.29	0.92 ± 0.07	3.70 ± 0.49*	11.37 ± 1.06*	0.57 ± 0.09	1.74 ± 0.18
	Branched	14.02 ± 1.24*	4.41 ± 0.37*	2.70 ± 0.25	0.85 ± 0.06	4.03 ± 0.32*	11.94 ± 0.83*	0.53 ± 0.06	1.58 ± 0.18
10	Linear/Branched	16.29 ± 1.72*	5.67 ± 0.52*	2.62 ± 0.27	0.91 ± 0.06	4.61 ± 0.42*	16.27 ± 1.05*	0.45 ± 0.04	1.60 ± 0.08
	Linear	18.81 ± 1.85*	6.03 ± 0.41*	2.94 ± 0.23	0.94 ± 0.06	4.83 ± 0.71*	17.18 ± 1.13*	0.46 ± 0.08*	1.63 ± 0.17*
	Branched	18.55 ± 2.81*	5.77 ± 0.75*	2.84 ± 0.27	0.88 ± 0.07*	5.90 ± 0.63*	17.71 ± 1.81*	0.54 ± 0.04	1.63 ± 0.10
30	Linear/Branched	17.67 ± 1.54*	6.82 ± 0.56*	2.49 ± 0.19*	0.96 ± 0.08*	4.56 ± 0.58*	18.28 ± 1.57*	0.40 ± 0.05*	1.60 ± 0.14
	Linear	17.41 ± 1.59*	6.64 ± 0.51*	2.42 ± 0.19*	0.92 ± 0.07	4.64 ± 0.51*	17.96 ± 1.06*	0.44 ± 0.06*	1.70 ± 0.17
	Branched	19.82 ± 2.62*	6.37 ± 0.70*	2.72 ± 0.21	0.88 ± 0.05*	6.51 ± 0.65*	21.01 ± 1.40*	0.48 ± 0.05	1.57 ± 0.11

* Statistically significant difference from control ($p<0.05$).
a Mean ± standard deviation.

Manuscript Table 4
Summary of Hepatic β-Oxidation Activity
in Rats and Mice Treated with Various Forms of APFO

		Rats		Mice
Dose (mg/kg)	**Test Material**	**Beta-Oxidation Activity (nmol/min/mg protein)**		**Beta-Oxidation Activity (nmol/min/mg protein)**
0	Linear/Branched	18.2 ± 3.8[a]		17.9 ± 5.7
	Linear	15.7 ± 3.6		17.3 ± 4.1
	Branched	13.0 ± 3.3		18.2 ± 4.3
0.3	Linear/Branched	18.0 ± 3.7		34.4 ± 7.4*
	Linear	16.0 ± 3.1		42.0 ± 10.8*
	Branched	12.9 ± 3.8		24.2 ± 3.7
1	Linear/Branched	27.0 ± 4.3*		48.8 ± 8.9*
	Linear	29.8 ± 5.6*		49.6 ± 11.4*
	Branched	15.4 ± 3.1		36.9 ± 10.2*
3	Linear/Branched	57.6 ± 10.0*		47.1 ± 7.1*
	Linear	67.5 ± 14.3*		48.5 ± 10.0*
	Branched	17.4 ± 3.5*		44.5 ± 8.5*
10	Linear/Branched	82.2 ± 18.1*		31.6 ± 7.4*
	Linear	74.8 ± 10.1*		37.2 ± 9.0*
	Branched	28.7 ± 8.0*		42.5 ± 4.4*
30	Linear/Branched	84.7 ± 16.3*		30.7 ± 8.2*
	Linear	89.0 ± 13.6*		31.9 ± 4.5*
	Branched	37.6 ± 12.2*		35.4 ± 9.7*

* Statistically significant difference from control ($p<0.05$).
a Mean ± standard deviation.

Manuscript Table 5
Serum PFOA Concentrations in Rats and Mice Treated with Various Forms of APFO

		Rats				Mice		
Dose (mg/kg)	**Test Substance**	**Mean ± SD (µg/ml)**	**Linear/ Branched Ratio***	**Branch A/ Branch B Ratio****		**Mean ± SD (µg/ml)**	**Linear/ Branched Ratio***	**Branch A/ Branch B Ratio****
0	Linear/Branched	0.37 ± 0.14				0.04 ± 0.02		
	Linear	0.39 ± 0.51				0.07 ± 0.06		
	Branched	0.11 ± 0.24[a]				0.02 ± 0.03		
0.3	Linear/Branched	19 ± 2.5	5.1 ± 1.1	--		10 ± 1.4	4.1 ± 0.50	--
	Linear	20 ± 3.2	--	--		13 ± 2.4	--	--
	Branched	16 ± 3.2	--	1.3 ± 0.16		14 ± 3.5	--	1.4 ± 0.29
1	Linear/Branched	51 ± 10	6.2 ± 1.4	--		27 ± 5.0	3.8 ± 0.49	--
	Linear	65 ± 11	--	--		32 ± 5.2	--	--
	Branched	48 ± 12	--	1.7 ± 0.35		34 ± 10	--	2.1± 0.38
3	Linear/Branched	106 ± 10	6.9 ± 0.85	--		66 ± 8.6	4.4 ± 0.48	--
	Linear	137 ± 18	--	--		69 ± 10	--	--
	Branched	73 ± 25	--	2.0 ± 0.26		82 ± 10	--	3.0 ± 0.36
10	Linear/Branched	183 ± 46	8.5 ± 0.68	--		190 ± 29	6.6 ± 1.1	--
	Linear	206 ± 65	--	--		225 ± 68	--	--
	Branched	92 ± 20	--	2.0 ± 0.37		172 ± 29	--	3.4 ± 0.52
30	Linear/Branched	208 ± 51	11 ± 3.5	--		241 ± 28	9.9 ± 0.84	--
	Linear	223 ± 77	--	--		259 ± 34	--	--
	Branched	124 ± 33	--	2.8 ± 0.38		244 ± 50	--	5.0 ± 1.1

* Ratio of material administered was 3.5

** Ratio of material administered was 1.4

[a] Five of the 10 serum samples labeled as controls could not conclusively be linked to the appropriate animals and were therefore excluded from the calculation of the mean.

Manuscript Table 6
Summary of Effects in Rodents Dosed with APFO
Low Observed Effect Level (mg/kg)

Endpoint	Rats			Mice		
	LOEL (mg/kg)			LOEL (mg/kg)		
	L/B	L	B	L/B	L	B
Survival	>30	>30	>30	>30	30	>30
Clinical Signs	>30	>30	>30	>30	30	>30
Body Weight	10	3	30	10	10	>30
Food Consumption	10	3	>30	30	30	>30
Hemolysis - Vena Cava	3	3	10	NE	NE	NE
Red Cell Morphology	3	3	10	NE	NE	NE
Relative Liver Weight	1	1	1	0.3	0.3	0.3
β-Oxidation	1	1	3	0.3	0.3	0.3
Total Cholesterol	1	0.3	1	3	3	3
Non-HDL Cholesterol	1	3	1	>30	>30	>30
HDL Cholesterol	3	3	3	3	3	3
Triglycerides[a]	1	0.3	1	0.3	1	1
Overall LOEL	1	0.3	1	0.3	0.3	0.3
Serum PFOA at LOEL (μg/ml)	51	20[b]	48	10	13	14

L/B = linear/branched APFO
L = linear APFO
B = branched APFO
NE = not evaluated
a decreased in rats; increased in mice
b serum PFOA at 1 mg/kg was 65 μg/ml

RAT TABLES

RAT TABLES

EXPLANATORY NOTES

STUDY DESIGN

Groups			Dosage (mg/kg)
H-24921 APFO (Linear/Branched)	H-26313 APFO (Linear)	H-26225 APFO (Branched)	
IA	IB	IC	0 (Control)
IIIA	IIIB	IIIC	0.3
VA	VB	VC	1
VIIA	VIIB	VIIC	3
IXA	IXB	IXC	10
XIA	XIB	XIC	30

Abbreviations

mg/kg = mg/kg/day

Summary of Clinical Chemistry Values

CHOL - cholesterol
TRIG - triglycerides
HDL - high-density lipoprotein cholesterol
nonHDL - non-high-density lipoprotein cholesterol

NOTES:

Summary of Clinical Chemistry Values

Groups with identical values may vary in statistical significance, because tabulated statistics are rounded to fewer decimal places than the values used for statistical determination.

Table 1
Homogeneity/Concentration Verification and Stability Analysis for Rat Study

Sample Sample Day	Nominal mg/mL	Measured [a] mg/mL	Mean % Nominal	C.V. (%)	Stability[b] % Nominal
H-24921					
15-Mar-2004	0	ND[c]	---	---	---
	0.03	0.029, 0.029	96.7	0	96.7
	0.10	0.098, 0.095	97.0	2	91.0
	3.0	2.84, 2.69	92.2	4	87.3[d]
H-26313					
16-Mar-2004	0	ND[c]	---	---	---
	0.03	0.030,0.029	96.7	2	100.0
	0.10	0.090, 0.102	96.0	8	97.0
	3.0	2.75, 2.94	95.0	5	97.0
H-26225					
17-Mar-2004	0	ND[c]	---	---	---
	0.03	0.029, 0.031	100.0	4	103.3
	0.10	0.112, 0.105	109.0	5	104.0
	3.0	2.72, 2.91	94.0	5	103.0

a Mean results for the analysis of the duplicate samples.
b Samples held 5 hours at room temperature.
c Denotes none detected.
d Reported results based on re-analysis of the original sample. Original analysis was lower than expected due to aliquot error and not reported.

Table 2
Recovery of H-24921, H-26313, H-26225 Added to Dosing Vehicle for Rat Study

Sample Type	mg/mL			Percent
	Nominal	Measured		Nominal
RECOVERY[A]	0.030	0.033		110.0
RECOVERY[B]	0.030	0.032		106.7
RECOVERY[C]	0.030	0.30		100.0
			Mean	***105.6 ±5.1, C.V. 5%***
RECOVERY[A]	0.10	0.103		103.0
RECOVERY[B]	0.10	0.097		97.0
RECOVERY[C]	0.10	0.100		100.0
			Mean	***100.0 ±3.0, C.V. 0.03%***
RECOVERY[A]	3.00	2.69		89.7
RECOVERY[B]	3.00	2.72		90.7
RECOVERY[C]	3.00	2.94		98.0
			Mean	***92.8 ±4.5, C.V. 5%***

[A] Processed with H-24921 samples from dosing prepared on March 15, 2004.
[B] Processed with H-26313 samples from dosing prepared on March 16, 2004.
[C] Processed with H-26225 samples from dosing prepared on March 17, 2004.

Table 3
Concentration Verification and Stability of H-24921, H-26313, H-26225 in Dosing Solutions for Rat Study

Test Substance Sample Date	mg/mL Nominal	mg/mL Measured	Percent Nominal
H-24921 (3/15/04)			
CONTROL	0.00	ND(A)	----
#1	0.03	0.029	96.7
#2	0.03	0.029	96.7
		Mean(B)***: 0.029 ± 0.00***	***(96.7%)***
		C.V. 0%	
#1	0.10	0.098	98.0
#2	0.10	0.095	95.0
		Mean(B)***: 0.097 ± 0.002***	***(97.0%)***
		C.V. 2%	
#1	3.00	2.84	94.7
#2	3.00	2.69	89.7
		Mean(B)***: 2.77 ± 0.10***	***(92.2%)***
		C.V. 4%	
5 HOUR(C)	0.03	0.029	96.7
	0.10	0.091	91.0
	3.00	2.62(D)	87.3
H-26313 (3/16/04)			
CONTROL	0.00	ND(A)	----
#1	0.03	0.030	100.0
#2	0.03	0.029	96.7
		Mean(B)***: 0.029 ± 0.001***	***(96.7%)***
		C.V. 2%	
#1	0.10	0.090	90.0
#2	0.10	0.102	102.0
		Mean(B)***: 0.096 ± 0.008***	***(96.0%)***
		C.V. 8%	
#1	3.00	2.75	91.7
#2	3.00	2.94	98.0
		Mean(B)***: 2.85 ± 0.13***	***(95.0%)***
		C.V. 5%	
5 HOUR(C)	0.03	0.030	100.0
	0.10	0.097	97.0
	3.00	2.91	97.0

Table 3
Concentration Verification and Stability of H-24921, H-26313, H-26225 in Dosing Solutions for Rat Study (Continued)

Test Substance Sample Date	mg/mL Nominal	mg/mL Measured	Percent Nominal
H-26225 (3/17/04)			
CONTROL	0.00	ND(A)	----
#1	0.03	0.029	96.7
#2	0.03	0.031	103.3
		Mean(B)***: 0.030 ± 0.001***	***(100.0%)***
		C.V. 4%	
#1	0.10	0.112	112.0
#2	0.10	0.105	105.0
		Mean(B)***: 0.109 ± 0.005***	***(109.0%)***
		C.V. 5%	
#1	3.00	2.72	90.7
#2	3.00	2.91	97.0
		Mean(B)***: 2.82 ± 0.13***	***(94.0%)***
		C.V. 5%	
5 HOUR(C)	0.03	0.031	103.3
	0.10	0.104	104.0
	3.00	3.09	103.0

(A) Denotes none detected.
(B) The average measured concentration, average percent of nominal (in parentheses), standard deviation, and coefficient of variation of duplicate samples.
(C) Stability samples held 5 hours a room temperature.
(D) Reported result based on re-analysis of the original sample. Original analysis was lower than expected due to aliquot error and not reported.

Table 4
Summary of Dosing Suspension Analyses for Rat Study

Sample Type	Concentrations and Stability of H-24921, H-26313, H-26225 (mg/mL)		
Nominal:	0.03	0.10	3.00
Concentration			
H-24921 (3/15/2004)			
#1	0.029	0.098	2.84
	(96.7)[a]	(98.0)	(94.7)
#2	0.029	0.095	2.69
	(96.7)	(95.0)	(89.7)
Average Measured Conc[b]	**0.029**	**0.097**	**2.77**
Average Percent Nominal[b]	**(96.7)**	**(97.0)**	**(92.2)**
Standard Deviation[b]	**± 0.00**	**± 0.002**	**± 0.10**
Coefficient of Variation[b]	**0%**	**2%**	**4%**
Stability			
5-hour Room Temperature	0.029	0.091	2.62[c]
	(96.7)	(91.0)	(87.3)
Concentration			
H-26313 (3/16/2004)			
#1	0.030	0.090	2.75
	(100.0)	(90.0)	(91.7)
#2	0.029	0.102	2.94
	(96.7)	(102.0)	(98.0)
Average Measured Conc[b]	**0.029**	**0.096**	**2.85**
Average Percent Nominal[b]	**(96.7)**	**(96.0)**	**(95.0)**
Standard Deviation[b]	**± 0.001**	**± 0.008**	**± 0.13**
Coefficient of Variation[b]	**2%**	**8%**	**5%**
Stability			
5-hour Room Temperature	0.030	0.097	2.91
	(100.0)	(97.0)	(97.0)
Concentration			
H-26225 (3/17/2004)			
#1	0.029	0.112	2.72
	(96.7)	(112.0)	(90.7)
#2	0.031	0.105	2.91
	(103.3)	(105.0)	(97.0)
Average Measured Conc[b]	**0.030**	**0.109**	**2.82**
Average Percent Nominal[b]	**(100.0)**	**(109.0)**	**(94.0)**
Standard Deviation[b]	**± 0.001**	**± 0.005**	**± 0.13**
Coefficient of Variation[b]	**4%**	**5%**	**5%**
Stability			
5-hour Room Temperature	0.031	0.104	3.09
	(103.3)	(104.0)	(103.0)

a Numbers in parentheses are the respective percent of nominal values.

b The average measured concentration, average percent of nominal (in parentheses), standard deviation, and coefficient of variation of duplicate samples.

c Reported result based on re-analysis of the original sample. Original analysis was lower than expected due to aliquot error and not reported.

Table 5
Mean Body Weights (g) of Male Rats Dosed with APFO (Linear/Branched)

Group:	IA	IIIA	VA	VIIA	IXA	XIA
Dosage (mg/kg)	0	0.3	1	3	10	30
DAY0	268.2 13.3(10)	267.9 9.1(10)	270.0 10.4(10)	271.9 10.5(10)	268.0 13.8(10)	268.0 12.0(10)
DAY1	275.6 13.5(10)	271.4 8.6(10)	275.2 10.4(10)	275.7 12.0(10)	271.7 14.9(10)	266.7 11.1(10)
DAY2	283.7 15.0(10)	279.0 8.1(10)	283.5 10.5(10)	286.3 13.5(10)	279.0 15.1(10)	261.7@ 12.3(10)
DAY3	291.8 14.6(10)	287.2 7.9(10)	292.2 11.8(10)	294.0 14.2(10)	283.6 17.2(10)	249.0* 13.7(10)
DAY4	299.5 16.9(10)	295.0 8.4(10)	299.5 10.5(10)	301.7 14.6(10)	284.5 17.0(10)	233.4@ 14.5(10)
DAY5	306.1 17.1(10)	300.2 9.3(10)	304.8 10.4(10)	308.3 16.4(10)	289.5 20.1(10)	227.6* 21.7(10)
DAY6	314.5 17.9(10)	308.8 9.1(10)	315.3 11.3(10)	316.6 18.8(10)	294.1 23.7(10)	226.5* 32.1(10)
DAY7	320.7 21.0(10)	315.4 9.4(10)	321.5 10.6(10)	325.7 20.1(10)	295.9 26.5(10)	233.2* 36.7(10)
DAY8	328.0 19.8(10)	319.8 9.3(10)	326.9 11.1(10)	331.9 21.9(10)	300.1 30.7(10)	248.2* 28.5(10)
DAY9	334.1 19.7(10)	327.9 10.8(10)	333.2 11.3(10)	338.9 23.4(10)	304.1 34.0(10)	258.7* 24.0(10)
DAY10	338.9 20.7(10)	332.3 10.9(10)	338.9 11.4(10)	343.9 23.6(10)	305.8 37.1(10)	266.2* 20.2(10)
DAY11	345.9 22.6(10)	337.3 11.2(10)	344.4 14.2(10)	350.7 24.8(10)	307.5 41.5(10)	277.2* 16.8(10)
DAY12	349.0 22.0(10)	341.2 11.9(10)	347.1 15.9(10)	351.7 26.1(10)	310.4 37.0(10)	282.0* 13.2(10)

Table 5
Mean Body Weights (g) of Male Rats Dosed with APFO (Linear/Branched) (Continued)

Group:	IA	IIIA	VA	VIIA	IXA	XIA
Dosage(mg/kg)	0	0.3	1	3	10	30
DAY13	353.8 25.0(10)	345.6 12.6(10)	350.8 15.3(10)	355.9 28.6(10)	314.7 35.0(10)	286.7* 13.0(10)
DAY14	324.9 21.5(10)	319.0 11.8(10)	322.8 15.8(10)	329.8 25.7(10)	288.7 33.3(10)	258.9* 10.5(10)

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

* Statistically significant difference from control at $p < 0.05$ by Dunnett/Tamhane-Dunnett test.
@ Statistically significant difference from control at $p < 0.05$ by Dunn's test.

Table 6
Mean Body Weights (g) of Male Rats Dosed with APFO (Linear)

Group:	IB	IIIB	VB	VIIB	IXB	XIB
Dosage(mg/kg)	0	0.3	1	3	10	30
DAY0	284.6 12.3(10)	282.2 11.1(10)	279.7 14.6(10)	279.7 11.4(10)	281.1 13.9(10)	281.0 13.5(10)
DAY1	290.3 12.0(10)	286.2 11.3(10)	283.7 14.8(10)	284.2 11.1(10)	284.7 14.9(10)	280.2 13.1(10)
DAY2	297.1 11.5(10)	293.5 11.6(10)	291.1 14.9(10)	289.9 11.2(10)	292.3 14.8(10)	270.5* 15.1(10)
DAY3	306.0 13.4(10)	299.9 12.0(10)	296.4 16.5(10)	294.9 11.7(10)	299.2 14.9(10)	255.4* 16.7(10)
DAY4	311.6 13.7(10)	305.7 13.5(10)	301.5 19.4(10)	300.6 12.2(10)	302.9 14.4(10)	240.0* 16.9(10)
DAY5	315.6 13.6(10)	312.8 13.5(10)	308.3 21.0(10)	305.2 13.1(10)	305.8 12.1(10)	230.6* 25.0(10)
DAY6	327.8 14.3(10)	320.4 14.2(10)	317.1 22.8(10)	312.4 14.1(10)	308.4 14.0(10)	228.1* 31.9(10)
DAY7	331.3 14.2(10)	323.9 14.4(10)	321.0 22.9(10)	317.1 13.6(10)	310.0 17.2(10)	229.6* 38.0(10)
DAY8	341.0 12.9(10)	331.4 15.3(10)	327.3 24.3(10)	320.7 13.3(10)	318.5 22.7(10)	244.6* 36.2(10)
DAY9	343.7 13.5(10)	333.4 16.9(10)	332.2 30.5(10)	325.9 14.6(10)	323.9 18.5(10)	255.2* 32.2(10)
DAY10	350.0 13.9(10)	341.1 17.5(10)	336.9 28.6(10)	329.5 15.1(10)	327.9 18.0(10)	266.4* 29.1(10)
DAY11	353.0 14.7(10)	341.7 18.8(10)	338.8 30.5(10)	331.2 17.3(10)	329.2 17.3(10)	276.8* 26.2(10)
DAY12	356.4 13.8(10)	346.8 19.7(10)	342.1 32.4(10)	334.2 15.0(10)	333.8 17.6(10)	284.5* 24.4(10)

Table 6
Mean Body Weights (g) of Male Rats Dosed with APFO (Linear) (Continued)

Group:	IB	IIIB	VB	VIIB	IXB	XIB
Dosage(mg/kg)	0	0.3	1	3	10	30
DAY13	362.8 13.1(10)	352.7 20.0(10)	348.9 32.5(10)	339.0 16.1(10)	339.4 18.4(10)	292.5* 21.7(10)
DAY14	333.5 12.1(10)	324.8 19.2(10)	323.4 30.5(10)	311.6 14.5(10)	311.9 16.7(10)	262.7* 22.4(10)

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

* Statistically significant difference from control at $p < 0.05$ by Dunnett/Tamhane-Dunnett test.

Table 7
Mean Body Weights (g) of Male Rats Dosed with APFO (Branched)

Group:	IC	IIIC	VC	VIIC	IXC	XIC
Dosage(mg/kg)	0	0.3	1	3	10	30
DAY0	284.9 11.2(10)	284.0 16.3(10)	289.2 11.3(10)	284.6 7.4(10)	281.9 8.5(10)	284.1 13.1(10)
DAY1	288.5 12.6(10)	289.8 17.0(10)	293.3 10.8(10)	287.5 8.5(10)	287.3 8.5(10)	281.1 12.2(10)
DAY2	293.8 13.0(10)	295.4 19.0(10)	299.9 14.2(10)	293.4 10.4(10)	290.6 11.2(10)	280.6 13.3(10)
DAY3	301.4 14.6(10)	302.3 21.1(10)	308.0 15.2(10)	298.6 11.0(10)	295.0 10.9(10)	284.5 15.9(10)
DAY4	309.9 15.6(10)	308.6 23.2(10)	315.4 17.4(10)	306.1 12.0(10)	301.3 12.6(10)	293.5 13.3(10)
DAY5	317.7 17.3(10)	316.5 22.1(10)	326.2 19.7(10)	312.9 12.8(10)	309.7 12.0(10)	305.5 13.5(10)
DAY6	323.5 17.6(10)	322.4 24.8(10)	331.1 21.3(10)	316.8 13.7(10)	314.3 12.0(10)	310.7 13.6(10)
DAY7	328.0 19.9(10)	327.9 25.4(10)	337.6 23.8(10)	322.4 14.3(10)	320.6 14.6(10)	314.3 14.0(10)
DAY8	330.7 19.0(10)	335.4 27.9(10)	343.5 23.2(10)	325.3 15.9(10)	323.7 11.9(10)	315.7 17.2(10)
DAY9	339.0 20.5(10)	340.2 29.7(10)	347.7 24.3(10)	332.8 16.3(10)	332.0 13.8(10)	322.8 17.9(10)
DAY10	339.9 22.1(10)	341.7 30.9(10)	350.0 25.4(10)	334.3 16.3(10)	333.4 13.2(10)	321.9 15.6(10)
DAY11	344.6 23.0(10)	347.5 30.8(10)	355.6 29.2(10)	336.1 16.2(10)	337.0 12.8(10)	327.4 15.7(10)
DAY12	351.7 23.4(10)	352.4 32.0(10)	360.5 27.6(10)	341.8 17.8(10)	342.8 14.5(10)	335.4 17.8(10)

Table 7
Mean Body Weights (g) of Male Rats Dosed with APFO (Branched) (Continued)

Group:	IC	IIIC	VC	VIIC	IXC	XIC
Dosage(mg/kg)	0	0.3	1	3	10	30
DAY13	357.1 24.7(10)	359.0 32.8(10)	367.4 30.7(10)	348.2 18.6(10)	348.5 15.1(10)	339.0 18.7(10)
DAY14	326.8 23.1(10)	327.6 28.8(10)	335.8 27.6(10)	318.3 16.6(10)	320.8 14.5(10)	310.8 15.3(10)

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

There were no statistically significant differences from control at $p < 0.05$.

Table 8
Mean Body Weight Gains (g) of Male Rats Dosed with APFO (Linear/Branched)

Group:	IA	IIIA	VA	VIIA	IXA	XIA
Dosage (mg/kg)	0	0.3	1	3	10	30
DAY0 -DAY1	7.4	3.5*	5.2	3.8	3.7	-1.3*
	2.5(10)	3.9(10)	2.6(10)	3.1(10)	2.3(10)	4.7(10)
DAY1 -DAY2	8.1	7.6	8.3	10.6	7.3	-5.0*
	2.7(10)	2.2(10)	2.7(10)	2.5(10)	2.4(10)	4.7(10)
DAY2 -DAY3	8.1	8.2	8.7	7.7	4.6	-12.7@
	3.0(10)	2.2(10)	3.4(10)	1.5(10)	3.7(10)	7.9(10)
DAY3 -DAY4	7.7	7.8	7.3	7.7	0.8	-15.6@
	3.9(10)	1.9(10)	2.6(10)	2.2(10)	5.2(10)	5.5(10)
DAY4 -DAY5	6.6	5.1	5.3	6.6	5.0	-5.8
	4.8(10)	2.5(10)	2.7(10)	3.5(10)	5.9(10)	12.6(10)
DAY5 -DAY6	8.4	8.6	10.5	8.4	4.6	-1.0
	3.0(10)	2.1(10)	1.2(10)	2.6(10)	6.8(10)	13.3(10)
DAY6 -DAY7	6.2	6.7	6.2	9.1	1.7	6.7
	4.6(10)	1.2(10)	2.2(10)	3.4(10)	4.9(10)	13.1(10)
DAY7 -DAY8	7.3	4.4	5.4	6.2	4.2	15.0
	3.6(10)	2.4(10)	2.6(10)	4.8(10)	8.8(10)	9.3(10)
DAY8 -DAY9	6.0	8.0	6.3	7.1	4.0	10.5
	2.1(10)	2.1(10)	2.7(10)	2.4(10)	7.0(10)	7.2(10)
DAY9 -DAY10	4.8	4.5	5.6	5.0	1.7	7.5
	4.4(10)	2.4(10)	2.4(10)	2.5(10)	4.9(10)	5.5(10)
DAY10 -DAY11	7.1	5.0	5.5	6.8	1.7	11.0*
	3.0(10)	3.8(10)	3.4(10)	2.7(10)	5.0(10)	5.0(10)
DAY11 -DAY12	3.1	3.9	2.6	1.0	2.9	4.8
	1.7(10)	3.0(10)	2.8(10)	3.2(10)	6.9(10)	5.8(10)
DAY12 -DAY13	4.8	4.4	3.8	4.1	4.3	4.7
	4.0(10)	2.6(10)	2.3(10)	4.3(10)	7.3(10)	5.6(10)

Table 8
Mean Body Weight Gains (g) of Male Rats Dosed with APFO (Linear/Branched) (Continued)

Group:	IA	IIIA	VA	VIIA	IXA	XIA
Dosage (mg/kg)	0	0.3	1	3	10	30
DAY13 -DAY14	-28.9	-26.6	-28.0	-26.1	-26.0	-27.8
	5.0(10)	2.9(10)	2.8(10)	3.7(10)	4.4(10)	6.1(10)
DAY0 -DAY13	85.6	77.7	80.8	84.0	46.6*	18.6*
	14.1(10)	9.1(10)	13.3(10)	21.3(10)	26.4(10)	15.7(10)
DAY0 -DAY14	56.8	51.1	52.8	57.9	20.7*	-9.2*
	11.4(10)	8.9(10)	13.5(10)	18.9(10)	26.0(10)	16.1(10)

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

* Statistically significant difference from control at $p < 0.05$ by Dunnett/Tamhane-Dunnett test.
@ Statistically significant difference from control at $p < 0.05$ by Dunn's test.

Table 9
Mean Body Weight Gains (g) of Male Rats Dosed with APFO (Linear)

Group:		IB	IIIB	VB	VIIB	IXB	XIB
Dosage (mg/kg)		0	0.3	1	3	10	30
DAY0	-DAY1	5.7	3.9	4.0	4.5	3.7	-0.8@
		2.2(10)	3.1(10)	2.6(10)	3.1(10)	2.6(10)	5.3(10)
DAY1	-DAY2	6.8	7.4	7.4	5.8	7.6	-9.7@
		2.0(10)	2.6(10)	2.3(10)	2.8(10)	1.3(10)	8.1(10)
DAY2	-DAY3	8.9	6.4	5.3	5.0*	6.9	-15.1*
		2.9(10)	2.4(10)	2.6(10)	2.2(10)	2.9(10)	4.8(10)
DAY3	-DAY4	5.6	5.8	5.1	5.7	3.7	-15.4@
		1.4(10)	2.4(10)	3.8(10)	2.5(10)	5.5(10)	4.3(10)
DAY4	-DAY5	4.0	7.0	6.8	4.5	2.9	-9.4@
		5.7(10)	1.5(10)	3.1(10)	2.7(10)	4.8(10)	11.2(10)
DAY5	-DAY6	12.2	7.6	8.8	7.3	2.5	-2.5*
		5.1(10)	2.5(10)	2.8(10)	3.6(10)	6.7(10)	12.4(10)
DAY6	-DAY7	3.5	3.5	3.9	4.7	1.6	1.5
		3.8(10)	3.1(10)	2.5(10)	2.3(10)	6.7(10)	14.2(10)
DAY7	-DAY8	9.7	7.5	6.3	3.6@	8.5	14.9
		2.2(10)	6.7(10)	3.5(10)	1.9(10)	9.3(10)	6.5(10)
DAY8	-DAY9	2.8	2.0	4.8	5.2	5.4	10.6@
		1.8(10)	9.5(10)	9.9(10)	2.6(10)	6.5(10)	6.0(10)
DAY9	-DAY10	6.3	7.7	4.8	3.6	4.0	11.2
		2.2(10)	1.9(10)	7.0(10)	1.4(10)	2.0(10)	6.4(10)
DAY10	-DAY11	3.0	0.6	1.9	1.7	1.3	10.3*
		2.8(10)	3.9(10)	3.1(10)	3.6(10)	2.9(10)	5.6(10)
DAY11	-DAY12	3.5	5.1	3.3	3.0	4.6	7.8*
		2.9(10)	3.0(10)	2.9(10)	3.0(10)	2.6(10)	5.3(10)
DAY12	-DAY13	6.4	5.9	6.8	4.8	5.6	8.0
		1.9(10)	1.9(10)	2.0(10)	3.8(10)	2.4(10)	4.5(10)

Table 9
Mean Body Weight Gains (g) of Male Rats Dosed with APFO (Linear) (Continued)

Group:	IB	IIIB	VB	VIIB	IXB	XIB
Dosage (mg/kg)	0	0.3	1	3	10	30
DAY13 -DAY14	-29.3	-27.9	-25.6	-27.5	-27.6	-29.8
	4.5(10)	3.2(10)	4.4(10)	4.0(10)	2.9(10)	5.0(10)
DAY0 -DAY13	78.2	70.5	69.3	59.4*	58.4	11.6*
	9.2(10)	15.4(10)	21.2(10)	14.0(10)	17.0(10)	17.7(10)
DAY0 -DAY14	48.9	42.5	43.7	31.9	30.8	-18.2*
	7.2(10)	14.3(10)	19.0(10)	12.1(10)	16.8(10)	18.3(10)

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

* Statistically significant difference from control at $p < 0.05$ by Dunnett/Tamhane-Dunnett test.
@ Statistically significant difference from control at $p < 0.05$ by Dunn's test.

Table 10
Mean Body Weight Gains (g) of Male Rats Dosed with APFO (Branched)

Group:	IC	IIIC	VC	VIIC	IXC	XIC
Dosage (mg/kg)	0	0.3	1	3	10	30
DAY0 -DAY1	3.6	5.9	4.1	2.9	5.4	-3.0*
	3.7(10)	2.8(10)	4.0(10)	2.4(10)	2.7(10)	3.3(10)
DAY1 -DAY2	5.4	5.6	6.7	5.9	3.3	-0.5
	2.5(10)	3.5(10)	4.2(10)	2.5(10)	3.9(10)	7.0(10)
DAY2 -DAY3	7.5	6.9	8.1	5.2	4.4	3.8
	3.1(10)	3.3(10)	2.2(10)	2.5(10)	2.4(10)	7.5(10)
DAY3 -DAY4	8.6	6.3	7.4	7.5	6.2	9.0
	2.5(10)	4.6(10)	4.3(10)	3.0(10)	3.6(10)	5.3(10)
DAY4 -DAY5	7.7	7.9	10.8	6.9	8.4	12.1*
	3.3(10)	2.0(10)	3.6(10)	3.6(10)	3.1(10)	3.8(10)
DAY5 -DAY6	5.8	5.9	5.0	3.9	4.7	5.2
	2.1(10)	3.8(10)	2.9(10)	3.2(10)	1.6(10)	2.3(10)
DAY6 -DAY7	4.5	5.5	6.4	5.6	6.3	3.6
	3.6(10)	2.7(10)	2.9(10)	3.0(10)	2.9(10)	4.1(10)
DAY7 -DAY8	2.7	7.4*	6.0	2.9	3.1	1.3
	2.3(10)	3.3(10)	3.0(10)	3.5(10)	4.1(10)	5.7(10)
DAY8 -DAY9	8.3	4.9	4.2*	7.5	8.3	7.1
	2.8(10)	3.1(10)	2.7(10)	3.6(10)	3.6(10)	3.5(10)
DAY9 -DAY10	0.9	1.5	2.3	1.6	1.5	-0.9
	2.6(10)	4.7(10)	3.5(10)	4.6(10)	2.9(10)	4.5(10)
DAY10 -DAY11	4.7	5.8	5.6	1.8	3.6	5.5
	2.5(10)	3.0(10)	4.3(10)	5.8(10)	3.1(10)	3.8(10)
DAY11 -DAY12	7.1	5.0	4.8	5.7	5.8	7.9
	1.5(10)	3.2(10)	3.7(10)	3.0(10)	2.8(10)	3.5(10)
DAY12 -DAY13	5.3	6.6	7.0	6.4	5.7	3.6
	2.7(10)	3.6(10)	3.9(10)	2.7(10)	1.7(10)	2.6(10)

Table 10
Mean Body Weight Gains (g) of Male Rats Dosed with APFO (Branched) (Continued)

Group:	IC	IIIC	VC	VIIC	IXC	XIC
Dosage(mg/kg)	0	0.3	1	3	10	30
DAY13 -DAY14	-30.3	-31.4	-31.6	-29.9	-27.6	-28.2
	3.8(10)	5.5(10)	4.7(10)	5.6(10)	2.6(10)	4.2(10)
DAY0 -DAY13	72.2	75.0	78.2	63.6	66.6	54.9@
	15.8(10)	19.1(10)	21.8(10)	14.1(10)	9.7(10)	7.4(10)
DAY0 -DAY14	41.9	43.6	46.6	33.7	38.9	26.7
	15.0(10)	15.3(10)	19.0(10)	13.2(10)	8.6(10)	4.6(10)

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

* Statistically significant difference from control at $p < 0.05$ by Dunnett/Tamhane-Dunnett test.
@ Statistically significant difference from control at $p < 0.05$ by Dunn's test.

Table 11
Mean Daily Food Consumption (g/day) by Male Rats Dosed with APFO (Linear/Branched)

Group:	IA	IIIA	VA	VIIA	IXA	XIA
Dosage(mg/kg)	0	0.3	1	3	10	30
DAY0-DAY3	25.2 1.7(10)	25.2 2.0(10)	25.3 1.3(10)	25.7 2.3(10)	23.6 2.3(10)	17.1* 2.2(10)
DAY3-DAY7	26.4 2.9(10)	25.8 1.1(10)	26.7 1.3(10)	26.8 2.9(10)	21.0@ 2.7(10)	10.7@ 8.0(10)
DAY7-DAY10	27.1 2.1(10)	26.6 1.1(10)	29.4 7.5(10)	30.1 3.9(10)	24.3 7.6(10)	25.4 4.1(10)
DAY10-DAY13	26.1 2.2(10)	25.5 1.7(10)	26.3 2.1(10)	26.8 3.2(10)	21.8* 2.5(10)	26.5 4.0(10)
DAY0-DAY13	26.2 2.1(10)	25.8 1.1(10)	26.9 2.6(10)	27.3 2.8(10)	22.6* 3.0(10)	19.2* 2.2(10)

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

* Statistically significant difference from control at $p < 0.05$ by Dunnett/Tamhane-Dunnett test.
@ Statistically significant difference from control at $p < 0.05$ by Dunn's test.

Table 12
Mean Daily Food Consumption (g/day) by Male Rats Dosed with APFO (Linear)

Group:	IB	IIIB	VB	VIIB	IXB	XIB
Dosage(mg/kg)	0	0.3	1	3	10	30
DAY0-DAY3	26.3 1.9(10)	25.7 2.2(10)	26.3 3.0(10)	23.7 1.3(10)	25.8 2.6(10)	14.8* 3.2(10)
DAY3-DAY7	25.7 1.7(10)	25.5 2.0(10)	27.6 4.7(10)	23.5 2.0(10)	22.8 4.4(10)	13.3* 7.8(10)
DAY7-DAY10	27.1 2.1(10)	26.1 2.0(10)	26.7 3.8(10)	24.6 2.5(10)	27.9 4.2(10)	27.0 3.1(10)
DAY10-DAY13	25.8 2.3(10)	25.8 2.1(10)	26.4 3.9(10)	23.1 2.2(10)	26.0 1.9(10)	29.2 2.3(10)
DAY0-DAY13	26.2 1.8(10)	25.7 1.9(10)	26.8 3.4(10)	23.7* 1.8(10)	25.4 2.0(10)	20.5* 3.0(10)

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

* Statistically significant difference from control at $p < 0.05$ by Dunnett/Tamhane-Dunnett test.

Table 13
Mean Daily Food Consumption (g/day) by Male Rats Dosed with APFO (Branched)

Group:	IC	IIIC	VC	VIIC	IXC	XIC
Dosage (mg/kg)	0	0.3	1	3	10	30
DAY0-DAY3	25.8 2.8(9)	27.0 3.4(10)	26.9 2.7(10)	25.9 2.1(10)	26.2 3.3(10)	22.1 5.9(10)
DAY3-DAY7	27.0 4.0(10)	24.1 4.3(10)	27.1 3.6(10)	24.7 2.6(10)	23.6 2.2(10)	23.4@ 1.2(10)
DAY7-DAY10	27.1 4.8(10)	26.2 3.5(10)	26.4 3.3(10)	25.2 2.4(10)	26.4 1.1(10)	22.8@ 1.9(10)
DAY10-DAY13	27.3 3.9(10)	26.3 2.5(10)	27.2 3.8(10)	26.2 5.1(10)	25.8 1.8(10)	24.6 2.0(10)
DAY0-DAY13	26.2 3.1(9)	25.8 2.6(10)	26.9 3.2(10)	25.4 2.1(10)	25.4 1.8(10)	23.3 1.6(10)

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

@ Statistically significant difference from control at $p < 0.05$ by Dunn's test.

Table 14
Mean Daily Food Efficiency of Male Rats Dosed with APFO (Linear/Branched)

(g Body Weight Gain/g Food Consumed)

Group:	IA	IIIA	VA	VIIA	IXA	XIA
Dosage(mg/kg)	0	0.3	1	3	10	30
DAY0-DAY3	0.311 0.053(10)	0.257 0.072(10)	0.292 0.069(10)	0.285 0.047(10)	0.219 0.054(10)	-0.390@ 0.285(10)
DAY3-DAY7	0.272 0.062(10)	0.273 0.032(10)	0.274 0.038(10)	0.293 0.050(10)	0.136 0.144(10)	-3.791 5.879(10)
DAY7-DAY10	0.224 0.063(10)	0.212 0.041(10)	0.202 0.045(10)	0.203 0.057(10)	-0.172 1.186(10)	0.435 0.286(10)
DAY10-DAY13	0.188 0.058(10)	0.173 0.033(10)	0.149 0.061(10)	0.145 0.055(10)	0.136 0.193(10)	0.242 0.133(10)
DAY0-DAY13	0.251 0.028(10)	0.235 0.022(10)	0.236 0.032(10)	0.238 0.034(10)	0.157* 0.080(10)	0.059* 0.051(10)

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

* Statistically significant difference from control at $p < 0.05$ by Dunnett/Tamhane-Dunnett test.
@ Statistically significant difference from control at $p < 0.05$ by Dunn's test.

Table 15
Mean Daily Food Efficiency of Male Rats Dosed with APFO (Linear)

(g Body Weight Gain/g Food Consumed)

Group:	IB	IIIB	VB	VIIB	IXB	XIB
Dosage(mg/kg)	0	0.3	1	3	10	30
DAY0-DAY3	0.271 0.053(10)	0.229 0.067(10)	0.213 0.046(10)	0.214 0.066(10)	0.237 0.066(10)	-0.660@ 0.486(10)
DAY3-DAY7	0.246 0.026(10)	0.233 0.038(10)	0.221 0.056(10)	0.236 0.050(10)	0.099 0.195(10)	-3.593@ 9.644(10)
DAY7-DAY10	0.231 0.039(10)	0.218 0.060(10)	0.193 0.064(10)	0.168 0.037(10)	0.213 0.064(10)	0.463 0.175(10)
DAY10-DAY13	0.163 0.056(10)	0.148 0.047(10)	0.146 0.058(10)	0.135 0.052(10)	0.147 0.053(10)	0.298* 0.107(10)
DAY0-DAY13	0.230 0.019(10)	0.209 0.035(10)	0.195 0.041(10)	0.192 0.037(10)	0.177* 0.049(10)	0.041* 0.063(10)

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

* Statistically significant difference from control at $p < 0.05$ by Dunnett/Tamhane-Dunnett test.
@ Statistically significant difference from control at $p < 0.05$ by Dunn's test.

Table 16
Mean Daily Food Efficiency of Male Rats Dosed with APFO (Branched)

(g Body Weight Gain/g Food Consumed)

Group: Dosage(mg/kg)	IC 0	IIIC 0.3	VC 1	VIIC 3	IXC 10	XIC 30
DAY0-DAY3	0.198 0.063(9)	0.228 0.069(10)	0.231 0.043(10)	0.180 0.072(10)	0.168 0.054(10)	-0.015@ 0.223(10)
DAY3-DAY7	0.245 0.040(10)	0.276 0.096(10)	0.268 0.065(10)	0.240 0.055(10)	0.268 0.044(10)	0.317 0.081(10)
DAY7-DAY10	0.147 0.040(10)	0.170 0.065(10)	0.156 0.053(10)	0.155 0.060(10)	0.163 0.050(10)	0.109 0.061(10)
DAY10-DAY13	0.209 0.023(10)	0.217 0.035(10)	0.210 0.039(10)	0.177 0.084(10)	0.192 0.046(10)	0.228 0.054(10)
DAY0-DAY13	0.204 0.027(9)	0.223 0.044(10)	0.221 0.030(10)	0.192 0.040(10)	0.202 0.023(10)	0.182 0.022(10)

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

@ Statistically significant difference from control at $p < 0.05$ by Dunn's test.

Table 17
Summary of Clinical Observations for Male Rats Dosed with APFO (Linear/Branched)

Treatment Group	IA	IIIA	VA	VIIA	IXA	XIA
Dose (mg/kg)	0	0.3	1	3	10	30
Animal Count	10	10	10	10	10	10
Hair Loss						
Forelimb						
Right						
Incidence	0	0	0	0	0	1 (10%)
Mean onset (Days)						10
Forelimb						
Left						
Incidence	0	0	1 (10%)	0	0	0
Mean onset (Days)			2			
TOTALS						
Incidence	0 (0%)	0 (0%)	1 (10%)	0 (0%)	0 (0%)	1 (10%)
Mean onset (Days)			2			10

Incidence - The number of animals (percent of group) for which an observation was recorded.
Mean onset (Days) - The mean of the test days each observation was first recorded for that group.

There were no statistically significant differences from control at $p < 0.05$.

Table 18
Summary of Clinical Observations for Male Rats Dosed with APFO (Linear)

Treatment Group	IB	IIIB	VB	VIIB	IXB	XIB
Dose (mg/kg)	0	0.3	1	3	10	30
Animal Count	10	10	10	10	10	10
Hair Loss						
Forepaw						
Left						
Incidence	0	0	0	1 (10%)	0	0
Mean onset (Days)				10		
Forepaw						
Bilateral						
Incidence	2 (20%)	0	1 (10%)	0	0	0
Mean onset (Days)	9		9			
Forelimb						
Left						
Incidence	0	0	0	1 (10%)	0	0
Mean onset (Days)				10		
Forelimb						
Bilateral						
Incidence	1 (10%)	0	1 (10%)	0	0	0
Mean onset (Days)	0		0			
TOTALS						
Incidence	2 (20%)	0 (0%)	1 (10%)	1 (10%)	0 (0%)	0 (0%)
Mean onset (Days)	6		5	10		

Incidence - The number of animals (percent of group) for which an observation was recorded.
Mean onset (Days) - The mean of the test days each observation was first recorded for that group.

There were no statistically significant differences from control at $p < 0.05$.

Table 19
Summary of Clinical Observations for Male Rats Dosed with APFO (Branched)

Treatment Group	IC	IIIC	VC	VIIC	IXC	XIC
Dose (mg/kg)	0	0.3	1	3	10	30
Animal Count	10	10	10	10	10	10
Hair Loss						
Forepaw						
Right						
Incidence	0	0	0	1 (10%)	0	0
Mean onset (Days)				9		
Forepaw						
Bilateral						
Incidence	0	0	0	0	1 (10%)	0
Mean onset (Days)					12	
Forelimb						
Left						
Incidence	1 (10%)	0	0	0	0	0
Mean onset (Days)	12					
Forelimb						
Bilateral						
Incidence	0	0	0	0	1 (10%)	0
Mean onset (Days)					12	
TOTALS						
Incidence	1 (10%)	0 (0%)	0 (0%)	1 (10%)	1 (10%)	0 (0%)
Mean onset (Days)	12			9	12	

Table 19
Summary of Clinical Observations for Male Rats Dosed with APFO (Branched) (Continued)

Treatment Group	IC	IIIC	VC	VIIC	IXC	XIC
Dose (mg/kg)	0	0.3	1	3	10	30
Animal Count	10	10	10	10	10	10
Wound						
Superficial						
Shoulder						
Left						
Incidence	0 (0%)	0 (0%)	1 (10%)	0 (0%)	0 (0%)	0 (0%)
Mean onset (Days)			12			

Incidence - The number of animals (percent of group) for which an observation was recorded.
Mean onset (Days) - The mean of the test days each observation was first recorded for that group.

There were no statistically significant differences from control at $p < 0.05$.

Table 20
Percent Survival of Male Rats

DAYS ON TEST	Group I 0 mg/kg	Group III 0.3 mg/kg	Group V 1 mg/kg	Group VII 3 mg/kg	Group IX 10 mg/kg	Group XI 30 mg/kg
APFO (Linear/Branched) - A						
0	100	100	100	100	100	100
7	100	100	100	100	100	100
14	100	100	100	100	100	100
Number at study start	10	10	10	10	10	10
Sacrificed by design	10	10	10	10	10	10
Alive on test day 14	10	10	10	10	10	10
APFO (Linear) - B						
0	100	100	100	100	100	100
7	100	100	100	100	100	100
14	100	100	100	100	100	100
Number at study start	10	10	10	10	10	10
Sacrificed by design	10	10	10	10	10	10
Alive on test day 14	10	10	10	10	10	10
APFO (Branched) - C						
0	100	100	100	100	100	100
7	100	100	100	100	100	100
14	100	100	100	100	100	100
Number at study start	10	10	10	10	10	10
Sacrificed by design	10	10	10	10	10	10
Alive on test day 14	10	10	10	10	10	10

Percent Survival = (Number of Rats Alive/Number of Rats at Risk)*100

There were no statistically significant decreases in survival at $p < 0.05$ by Cochran-Armitage trend test.

Table 21
Summary of Clinical Chemistry Values for Male Rats Dosed with APFO (Linear/Branched)

	Group IA 0 mg/kg	Group IIIA 0.3 mg/kg	Group VA 1 mg/kg	Group VIIA 3 mg/kg	Group IXA 10 mg/kg	Group XIA 30 mg/kg
CHOL (mg/dL)						
DAY 14	51	49	33	23@	36@	41
	14(10)	13(10)	10(10)	7(10)	22(10)	6(10)
TRIG (mg/dL)						
DAY 14	61	51	40@	41	31@	36@
	22(10)	12(10)	15(10)	13(10)	5(10)	7(10)
HDL (mg/dL)						
DAY 14	21	21	16	11@	12@	14@
	4(10)	4(10)	3(10)	3(10)	4(10)	2(10)
non-HDL (mg/dL)						
DAY 14	30	28	17@	12@	24	26
	11(10)	9(10)	7(10)	5(10)	19(10)	4(10)

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

@ Statistically significant difference from control at $p < 0.05$ by Dunn's test.

Table 22
Summary of Clinical Chemistry Values for Male Rats Dosed with APFO (Linear)

	Group IB 0 mg/kg	Group IIIB 0.3 mg/kg	Group VB 1 mg/kg	Group VIIB 3 mg/kg	Group IXB 10 mg/kg	Group XIB 30 mg/kg
CHOL (mg/dL)						
DAY 14	45	33*	29*	25*	27*	41
	10(10)	10(10)	11(10)	4(10)	7(10)	15(10)
TRIG (mg/dL)						
DAY 14	53	42*	36*	38*	42	41*
	11(10)	10(10)	7(10)	9(10)	12(10)	9(10)
HDL (mg/dL)						
DAY 14	19	16	15	11*	11*	15
	4(10)	3(10)	4(10)	2(10)	2(10)	5(10)
non-HDL (mg/dL)						
DAY 14	25	17*	14*	13*	16*	26
	6(10)	7(10)	7(10)	3(10)	5(10)	10(10)

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

* Statistically significant difference from control at $p < 0.05$ by Dunnett/Tamhane-Dunnett test.

Table 23
Summary of Clinical Chemistry Values for Male Rats Dosed with APFO (Branched)

	Group IC 0 mg/kg	Group IIIC 0.3 mg/kg	Group VC 1 mg/kg	Group VIIC 3 mg/kg	Group IXC 10 mg/kg	Group XIC 30 mg/kg
CHOL (mg/dL)						
DAY 14	46	42	36*	27*	26*	34*
	8(10)	6(10)	9(10)	8(10)	10(10)	8(10)
TRIG (mg/dL)						
DAY 14	45	45	40	28	25@	24@
	18(10)	14(10)	15(10)	6(10)	8(10)	3(10)
HDL (mg/dL)						
DAY 14	20	19	17	14*	13*	16*
	3(10)	2(10)	4(10)	2(10)	4(10)	3(10)
non-HDL (mg/dL)						
DAY 14	26	23	18	13@	13@	19
	5(10)	5(10)	6(10)	6(10)	6(10)	5(10)

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

* Statistically significant difference from control at $p < 0.05$ by Dunnett/Tamhane-Dunnett test.
@ Statistically significant difference from control at $p < 0.05$ by Dunn's test.

Table 24
Mean Final Body and Organ Weights for Male Rats Dosed with APFO (Linear/Branched)

Mean Final Body and Absolute (g) and Relative Organ Weights (% of body weight)

Group:	IA	IIIA	VA	VIIA	IXA	XIA
Dosage (mg/kg)	0	0.3	1	3	10	30
Test						
LIVER	11.183	11.573	12.720	17.925*	16.291*	17.666*
	1.778(10)	0.988(10)	1.001(10)	2.329(10)	1.724(10)	1.535(9)
KIDNEYS	2.844	2.757	2.909	3.144*	2.618	2.494*
	0.247(10)	0.208(10)	0.311(10)	0.233(10)	0.266(10)	0.189(9)
FINAL BODY WEIGHT	324.9	319.0	322.8	329.8	288.7*	258.9*
	21.5(10)	11.8(10)	15.8(10)	25.7(10)	33.3(10)	10.5(10)
LIVER/FINAL BODY * 100	3.431	3.625	3.938*	5.424*	5.672*	6.819*
	0.401(10)	0.229(10)	0.198(10)	0.390(10)	0.515(10)	0.562(9)
KIDNEYS/FINAL BODY * 100	0.875	0.864	0.900	0.955*	0.910	0.963*
	0.047(10)	0.048(10)	0.070(10)	0.060(10)	0.060(10)	0.081(9)

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

* Statistically significant difference from control at $p < 0.05$ by Dunnett/Tamhane-Dunnett test.

Table 25
Mean Final Body and Organ Weights for Male Rats Dosed with APFO (Linear)

Mean Final Body and Absolute (g) and Relative Organ Weights (% of body weight)

Group:	IB	IIIB	VB	VIIB	IXB	XIB
Dosage(mg/kg)	0	0.3	1	3	10	30
Test						
LIVER	12.089	12.539	13.410	15.417*	18.813*	17.414*
	0.958(10)	1.090(10)	2.165(10)	1.201(10)	1.853(10)	1.586(10)
KIDNEYS	2.889	2.723	2.830	2.881	2.937	2.419@
	0.266(10)	0.586(10)	0.174(10)	0.294(10)	0.233(10)	0.189(10)
FINAL BODY WEIGHT	333.5	324.8	323.4	311.6	311.9	262.7*
	12.1(10)	19.2(10)	30.5(10)	14.5(10)	16.7(10)	22.4(10)
LIVER/FINAL BODY * 100	3.631	3.855	4.129*	4.944*	6.028*	6.642*
	0.347(10)	0.139(10)	0.332(10)	0.228(10)	0.407(10)	0.507(10)
KIDNEYS/FINAL BODY * 100	0.866	0.834	0.880	0.924	0.942	0.923
	0.062(10)	0.151(10)	0.079(10)	0.070(10)	0.059(10)	0.071(10)

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

* Statistically significant difference from control at $p < 0.05$ by Dunnett/Tamhane-Dunnett test.
@ Statistically significant difference from control at $p < 0.05$ by Dunn's test.

Table 26
Mean Final Body and Organ Weights for Male Rats Dosed with APFO (Branched)

Mean Final Body and Absolute (g) and Relative Organ Weights (% of body weight)

Group:	IC	IIIC	VC	VIIC	IXC	XIC
Dosage(mg/kg)	0	0.3	1	3	10	30
Test						
LIVER	11.049	11.733	13.139*	14.024*	18.553*	19.816*
	1.429(10)	1.516(10)	1.753(10)	1.236(10)	2.809(10)	2.623(10)
KIDNEYS	2.632	2.715	2.793	2.703	2.835	2.721
	0.289(10)	0.340(10)	0.309(10)	0.253(10)	0.272(10)	0.208(10)
FINAL BODY WEIGHT	326.8	327.6	335.8	318.3	320.8	310.8
	23.1(10)	28.8(10)	27.6(10)	16.6(10)	14.5(10)	15.3(10)
LIVER/FINAL BODY * 100	3.375	3.577	3.906*	4.412*	5.771*	6.366*
	0.288(10)	0.267(10)	0.330(10)	0.374(10)	0.745(10)	0.704(10)
KIDNEYS/FINAL BODY * 100	0.804	0.828	0.831	0.849	0.883*	0.875*
	0.056(10)	0.067(10)	0.060(10)	0.061(10)	0.066(10)	0.052(10)

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

* Statistically significant difference from control at $p < 0.05$ by Dunnett/Tamhane-Dunnett test.

Table 27
Incidences of Gross Observations in Male Rats Dosed with APFO (Linear/Branched)

		LESION INCIDENCE (Numeric)					
		Males					
LESIONS	TREATMENT per day	0 mg/kg IA	0.3 mg/kg IIIA	1 mg/kg VA	3 mg/kg VIIA	10 mg/kg IXA	30 mg/kg XIA
LIVER		(10)	(10)	(10)	(10)	(10)	(10)
NO ABNORMALITY DETECTED		10	10	10	10	9	9
DISCOLORATION						1	1
KIDNEYS		(10)	(10)	(10)	(10)	(10)	(10)
NO ABNORMALITY DETECTED		10	10	10	10	10	10

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

Table 28
Incidences of Gross Observations in Male Rats Dosed with APFO (Linear)

	LESION INCIDENCE (Numeric)					
	Males					
LESIONS / TREATMENT per day	0 mg/kg IB	0.3 mg/kg IIIB	1 mg/kg VB	3 mg/kg VIIB	10 mg/kg IXB	30 mg/kg XIB
LIVER	(10)	(10)	(10)	(10)	(10)	(10)
NO ABNORMALITY DETECTED	10	10	10	10	9	10
DISCOLORATION					1	
KIDNEYS	(10)	(10)	(10)	(10)	(10)	(10)
NO ABNORMALITY DETECTED	10	10	10	10	10	10

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

Table 29
Incidences of Gross Observations in Male Rats Dosed with APFO (Branched)

		LESION INCIDENCE (Numeric)					
		Males					
LESIONS	TREATMENT per day	0 mg/kg IC	0.3 mg/kg IIIC	1 mg/kg VC	3 mg/kg VIIC	10 mg/kg IXC	30 mg/kg XIC
LIVER		(10)	(10)	(10)	(10)	(10)	(10)
NO ABNORMALITY DETECTED		10	10	10	10	10	9
DISCOLORATION							1
KIDNEYS		(10)	(10)	(10)	(10)	(10)	(10)
NO ABNORMALITY DETECTED		10	10	10	10	10	10

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

Table 30
Summary of Peroxisomal Beta-Oxidation Activity in Male Rats

		Hepatic Peroxisomal Beta-Oxidation Activity (nmol/min/mg protein)		
Group	Dosage (mg/kg/day)	APFO (Linear/Branched)	APFO (Linear)	APFO (Branched)
I	0	18.2 ± 3.8 [a]	15.7 ± 3.6	13.0 ± 3.3
III	0.3	18.0 ± 3.7	16.0 ± 3.1	12.9 ± 3.8
V	1	27.0 ± 4.3*	29.8 ± 5.6*	15.4 ± 3.1
VII	3	57.6 ± 10.0*	67.5 ± 14.3*	17.4 ± 3.5*
IX	10	82.2 ± 18.1*	74.8 ± 10.1*	28.7 ± 8.0*
XI	30	84.7 ± 16.3*	89.0 ± 13.6*	37.6 ± 12.2*

a Mean ± standard deviation. The n = 10 for each group.

* Statistically significant difference from control ($p < 0.05$) by Dunnett's test.

Table 31
Summary of % Relative Liver Weights in Male Rats

		Relative Liver Weights to Full Body Weights (%)		
Group	Dosage (mg/kg/day)	APFO (Linear/Branched)	APFO (Linear)	APFO (Branched)
I	0	3.4 ± 0.4[a]	3.6 ± 0.3	3.4 ± 0.3
III	0.3	3.6 ± 0.2	3.9 ± 0.1	3.6 ± 0.3
V	1	3.9 ± 0.2*	4.1 ± 0.3*	3.9 ± 0.3*
VII	3	5.4 ± 0.4*	4.9 ± 0.2*	4.4 ± 0.4*
IX	10	5.7 ± 0.5*	6.0 ± 0.4*	5.8 ± 0.7*
XI	30	6.8 ± 0.6[b]*	6.6 ± 0.5*	6.4 ± 0.7*

a Mean ± standard deviation. The n = 10 for each group.
b The n = 9.

* Statistically significant difference from control ($p < 0.05$) Dunnett's test.

RAT FIGURES

Figure 1
Mean Body Weights of Male Rats Dosed with APFO (Linear/Branched)

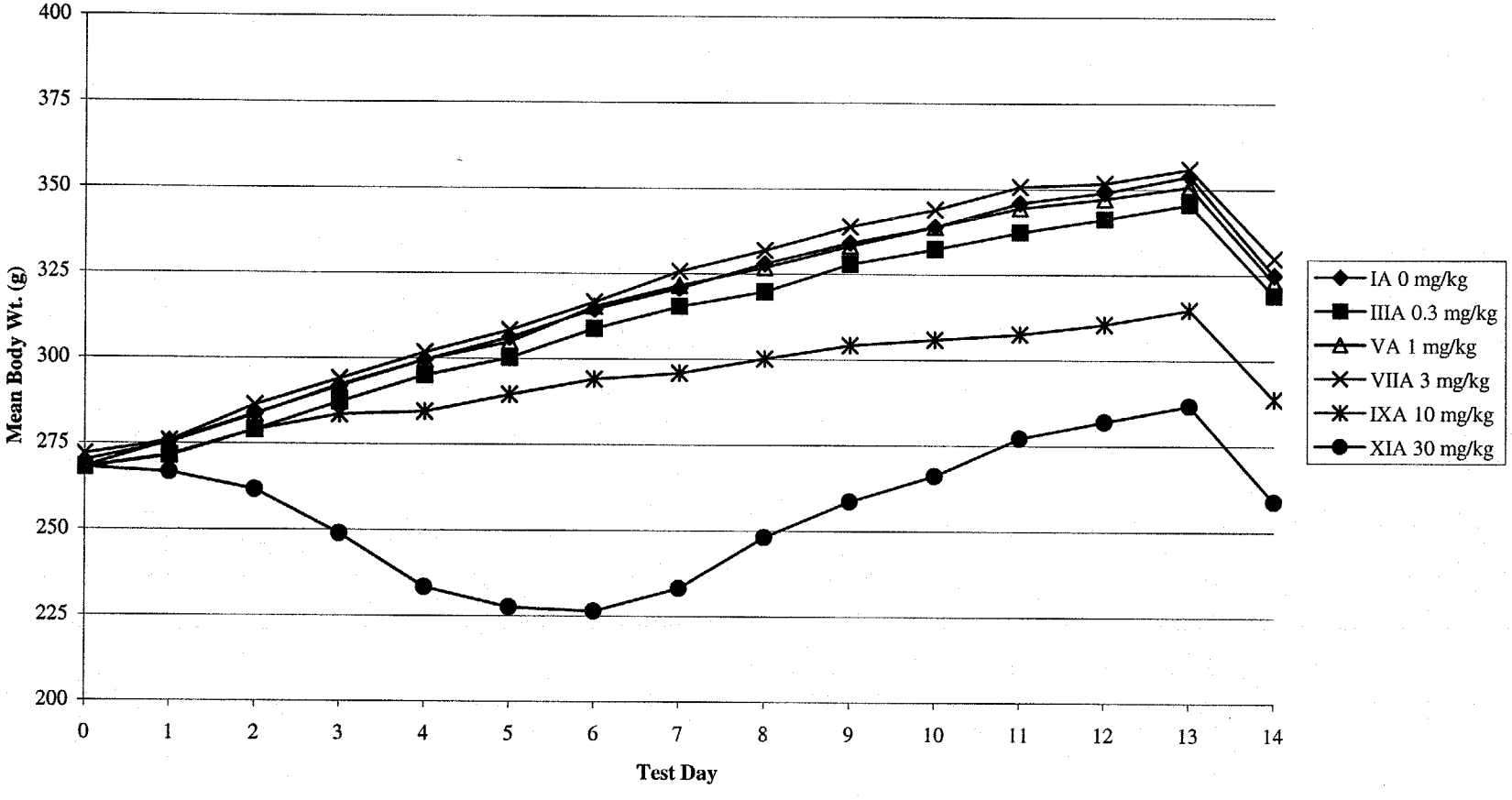


Figure 2
Mean Body Weights of Male Rats Dosed with APFO (Linear)

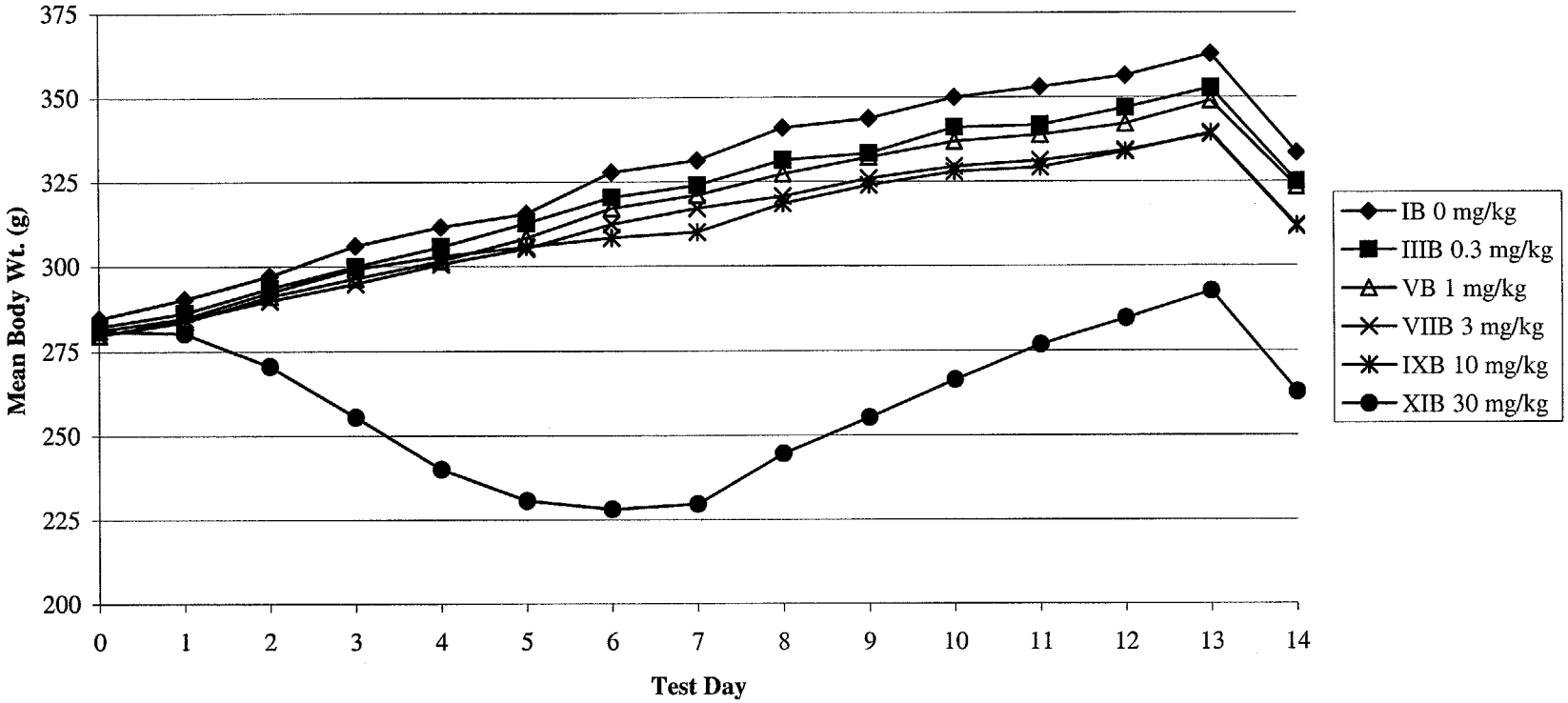
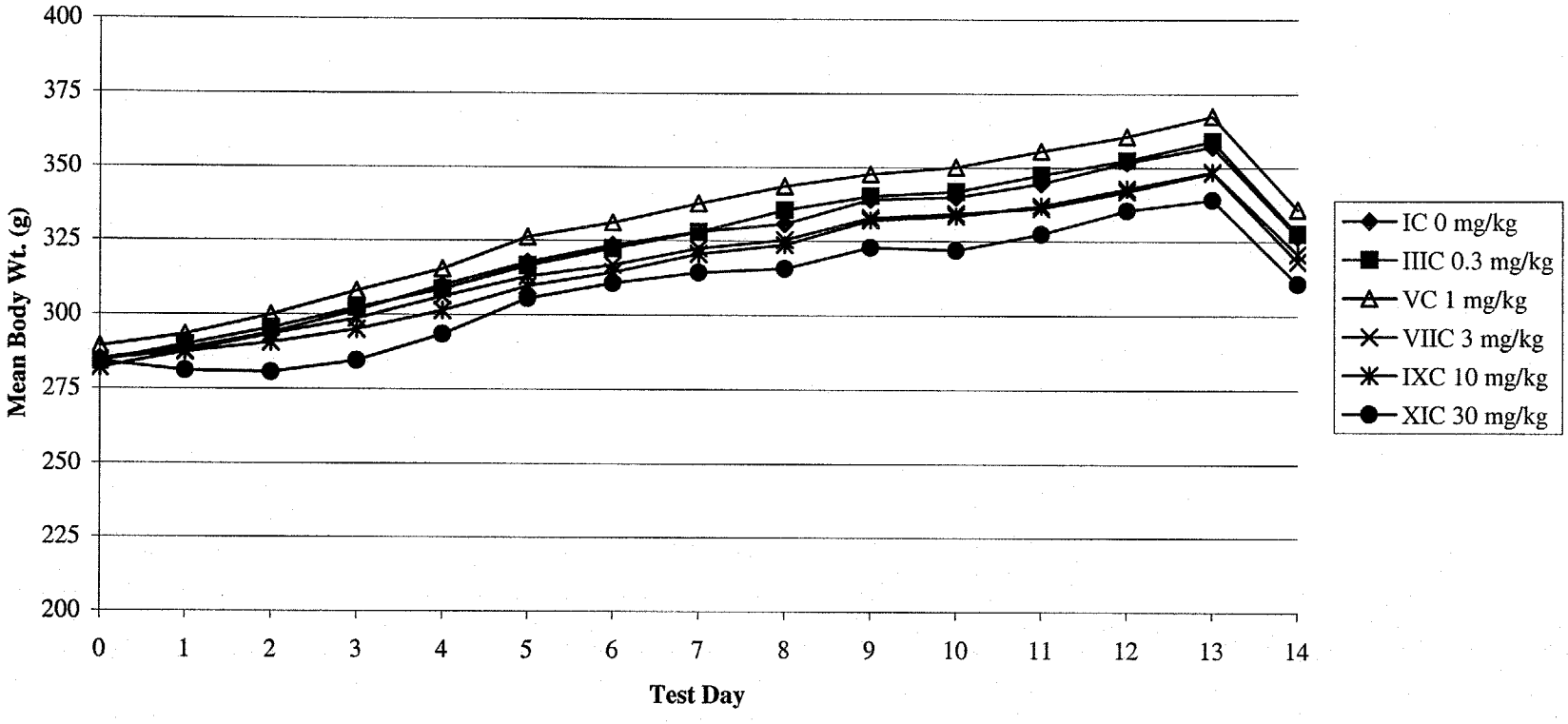


Figure 3
Mean Body Weights of Male Rats Dosed with APFO (Branched)



RAT APPENDICES

Appendix A
Individual PFOA Serum Concentrations for Rats

INDIVIDUAL PFOA SERUM CONCENTRATIONS FOR RATS

EXPLANATORY NOTES

STUDY DESIGN

Groups			Dosage (mg/kg)
H-24921 APFO (Linear/Branched)	H-26313 APFO (Linear)	H-26225 APFO (Branched)	
IA	IB	IC	0 (Control)
IIIA	IIIB	IIIC	0.3
VA	VB	VC	1
VIIA	VIIB	VIIC	3
IXA	IXB	IXC	10
XIA	XIB	XIC	30

Groups may also be identified by the group number only (I, III, etc.) with the test substance described in the title (APFO (Linear/Branched), APFO (Linear), or APFO (Branched).

Abbreviations

mg/kg = mg/kg/day
L = Linear
B = Branched
Avg = Average
s dev = standard deviation
N/A = Not applicable

Note

H-26225 is comprised of two components, H-26203 and H-26204.

Individual PFOA Serum Concentrations for Rats

Group	Dose Level	ID	µg/mL Linear	µg/mL Branched	L+B	L/B
IA	0 mg/kg	101	0.249	0.405	0.654	**0.62**
		102	0.153	0.229	0.382	**0.67**
		103	0.187	0.260	0.447	**0.72**
		104	0.262	0.257	0.520	**1.02**
		105	0.218	0.265	0.483	**0.82**
		106	0.102	0.121	0.223	**0.84**
		107	0.101	0.155	0.256	**0.65**
		108	0.086	0.087	0.173	**0.99**
		109	0.234	0.196	0.430	**1.19**
		110	0.083	0.084	0.167	**0.98**
		Avg.	0.168	0.206	0.373	**0.85**
				s dev	0.138	**0.18**
IIIA	0.3 mg/kg	301	19.1	4.4	23.7	**4.38**
		302	13.8	2.8	16.7	**4.84**
		303	17.0	4.2	21.2	**4.09**
		304	14.9	3.5	18.5	**4.35**
		305	17.0	4.2	21.4	**4.13**
		306	15.3	2.8	18.2	**5.43**
		307	15.9	3.3	19.2	**4.88**
		308	16.9	3.2	20.1	**5.21**
		309	15.5	2.7	18.2	**5.76**
		310	13.5	1.7	15.2	**7.89**
		Avg.	16.0	3.3	19.2	**5.10**
				s dev	2.5	**1.13**

Individual PFOA Serum Concentrations for Rats

Group	Dose Level	ID	µg/mL Linear	µg/mL Branched	L+B	L/B
VA	1.0 mg/kg	501	45.6	9.8	55.4	**4.64**
		502	43.3	7.3	50.6	**5.91**
		503	44.6	8.0	52.6	**5.56**
		504	38.5	6.3	44.8	**6.07**
		505	61.3	12.8	74.1	**4.77**
		506	46.5	8.3	54.9	**5.59**
		507	43.4	6.5	49.9	**6.70**
		508	33.8	5.7	39.5	**5.93**
		509	45.2	6.2	51.4	**7.23**
		510	32.8	3.4	36.2	**9.61**
		Avg.	43.5	7.4	50.9	**6.20**
				s dev	10.3	**1.43**
VIIA	3.0 mg/kg	701	92.3	14.0	106.2	**6.61**
		702	92.3	14.4	106.7	**6.43**
		703	83.4	13.4	96.8	**6.23**
		704	80.3	13.3	93.6	**6.03**
		705	86.3	12.5	98.8	**6.90**
		706	104.9	16.9	121.8	**6.19**
		707	100.1	12.7	112.8	**7.89**
		708	106.2	16.6	122.8	**6.38**
		709	89.3	12.2	101.5	**7.32**
		710	90.3	10.4	100.7	**8.68**
		Avg.	92.5	13.6	106.2	**6.86**
				s dev	10.1	**0.85**

Individual PFOA Serum Concentrations for Rats

Group	Dose Level	ID	µg/mL Linear	µg/mL Branched	L+B	L/B
IXA	10 mg/kg	901	121	15.1	135.7	**8.01**
		902	161	18.2	178.9	**8.85**
		903	206	25.5	231.8	**8.10**
		904	94	11.0	105.1	**8.59**
		905	147	17.0	164.0	**8.66**
		906	163	16.3	178.8	**10.00**
		907	188	22.6	210.8	**8.35**
		908	223	29.9	252.6	**7.46**
		909	142	16.6	158.1	**8.52**
		910	194	24.5	219.0	**7.95**
		Avg.	164	20	183	**8.45**
				s dev	45.5	**0.68**
XIA	30 mg/kg	1101	133	13	146.3	**9.85**
		1102	229	27	256.7	**8.43**
		1103	193	19	211.9	**10.09**
		1104	135	14	148.8	**9.70**
		1105	182	18	199.3	**10.24**
		1106	198	19	217.2	**10.30**
		1107	124	6	129.6	**20.89**
		1108	227	22	249.9	**10.15**
		1109	232	18	250.0	**12.94**
		1110	247	23	269.3	**10.88**
		Avg.	190	18	208	**11.35**
				s dev	50.9	**3.54**

Test substance H24921 L/B ratio = 0.78/0.22 = 3.55

ng/mL values corrected for standard composition and converted to µg/mL by multiplying linear values by 0.00078 and branched values by 0.00022.

Individual PFOA Serum Concentrations for Rats

Group	Dose Level	ID	µg/mL Linear
IB	0 mg/kg	101	0.236
		102	0.199
		103	0.192
		104	0.275
		105	0.230
		106	0.303
		107	0.191
		108	0.181
		109	0.260
		110	1.846
		Avg.	0.391
		s dev	0.513
IIIB	0.3 mg/kg	301	24.0
		302	21.9
		303	23.2
		304	20.9
		305	20.9
		306	19.9
		307	14.8
		308	15.5
		309	22.6
		310	17.6
		Avg.	20.1
		s dev	3.2

Individual PFOA Serum Concentrations for Rats

Group	Dose Level	ID	µg/mL Linear
VB	1.0 mg/kg	501	73.0
		502	86.9
		503	65.7
		504	52.0
		505	71.6
		506	49.9
		507	57.4
		508	71.2
		509	64.5
		510	56.4
		Avg.	64.9
		s dev	11.3
VIIB	3.0 mg/kg	701	124
		702	108
		703	131
		704	164
		705	132
		706	125
		707	153
		708	162
		709	133
		710	136
		Avg.	137
		s dev	18

Individual PFOA Serum Concentrations for Rats

Group	Dose Level	ID	µg/mL Linear
IXB	10 mg/kg	901	115
		902	254
		903	230
		904	337
		905	225
		906	192
		907	171
		908	238
		909	129
		910	170
		Avg.	206
		s dev	65
XIB	30 mg/kg	1101	291
		1102	206
		1103	185
		1104	244
		1105	363
		1106	88
		1107	165
		1108	290
		1109	205
		1110	190
		Avg.	223
		s dev	77

Individual PFOA Serum Concentrations for Rats

Group	Dose Level	ID	µg/mL H26203	µg/mL H26204	H26203 + H26204	**H26204/ H26203**
IC	0 mg/kg	101	*	*	*	**N/A**
		102	*	*	*	**N/A**
		103	*	*	*	**N/A**
		104	*	*	*	**N/A**
		105	*	*	*	**N/A**
		106	0.00	0.00	0.00	**N/A**
		107	0.11	0.43	0.54	**N/A**
		108	0.00	0.00	0.00	**N/A**
		109	0.02	0	0.02	**N/A**
		110	0.00	0.00	0.00	**N/A**
		Avg.			0.11	
				s dev	0.24	
IIIC	0.3 mg/kg	301	5.6	6.5	12.1	**1.17**
		302	6.1	8.1	14.3	**1.32**
		303	8.3	10.4	18.7	**1.27**
		304	6.6	9.8	16.4	**1.49**
		305	9.4	13.2	22.6	**1.40**
		306	6.8	8.2	15.0	**1.20**
		307	6.5	5.8	12.3	**0.91**
		308	7.7	10.3	18.0	**1.34**
		309	6.2	8.0	14.1	**1.29**
		310	7.6	8.7	16.3	**1.15**
		Avg.	7.1	8.9	16.0	**1.25**
				s dev	3.19	**0.16**

* Five of the 10 serum samples labeled as controls could not conclusively be linked to the appropriate animals and were therefore excluded from the calculation of the mean.

Individual PFOA Serum Concentrations for Rats

Group	Dose Level	ID	µg/mL H26203	µg/mL H26204	H26203 + H26204	**H26204/ H26203**
VC	1.0 mg/kg	501	16.3	31.4	47.6	**1.93**
		502	21.7	46.2	67.9	**2.14**
		503	18.5	41.6	60.1	**2.25**
		504	17.0	31.2	48.2	**1.84**
		505	19.4	38.5	58.0	**1.98**
		506	20.9	26.0	46.9	**1.25**
		507	18.6	29.4	48.0	**1.58**
		508	11.5	15.2	26.7	**1.33**
		509	16.7	25.2	41.9	**1.51**
		510	13.6	19.9	33.5	**1.46**
		Avg.	17.4	30.5	47.9	**1.73**
				s dev	12.22	**0.35**
VIIC	3.0 mg/kg	701	39.8	79.6	119.4	**2.00**
		702	25.8	59.1	84.9	**2.29**
		703	22.2	44.3	66.5	**2.00**
		704	29.8	64.2	94.0	**2.16**
		705	24.0	55.9	79.9	**2.33**
		706	18.0	29.9	47.9	**1.66**
		707	12.2	26.2	38.4	**2.14**
		708	31.7	53.8	85.4	**1.70**
		709	20.7	40.8	61.5	**1.98**
		710	18.5	29.8	48.3	**1.61**
		Avg.	24.3	48.4	72.6	**1.99**
				s dev	24.84	**0.26**

Individual PFOA Serum Concentrations for Rats

Group	Dose Level	ID	µg/mL H26203	µg/mL H26204	H26203 + H26204	**H26204/ H26203**
IXC	10 mg/kg	901	34	72	105	**2.14**
		902	37	65	102	**1.77**
		903	21	26	46	**1.23**
		904	30	48	78	**1.61**
		905	29	60	89	**2.07**
		906	25	59	83	**2.37**
		907	30	58	87	**1.93**
		908	31	75	106	**2.39**
		909	36	76	112	**2.12**
		910	32	76	108	**2.35**
		Avg.	30	61	92	**2.00**
				s dev	20	**0.37**
XIC	30 mg/kg	1101	39	93	131	**2.41**
		1102	40	116	155	**2.92**
		1103	29	104	133	**3.62**
		1104	47	139	186	**2.99**
		1105	18	53	71	**2.96**
		1106	38	105	143	**2.75**
		1107	29	83	112	**2.86**
		1108	27	78	105	**2.87**
		1109	27	63	90	**2.31**
		1110	34	83	116	**2.44**
		Avg.	33	92	124	**2.81**
				s dev	33	**0.38**

Test substance H26225 ratio = 58% H26204/42% H26203 = 1.38

Appendix B
Individual Body Weights for Rats

INDIVIDUAL BODY WEIGHTS FOR RATS

EXPLANATORY NOTES

STUDY DESIGN

Groups			Dosage (mg/kg)
H-24921 APFO (Linear/Branched)	H-26313 APFO (Linear)	H-26225 APFO (Branched)	
IA	IB	IC	0 (Control)
IIIA	IIIB	IIIC	0.3
VA	VB	VC	1
VIIA	VIIB	VIIC	3
IXA	IXB	IXC	10
XIA	XIB	XIC	30

Groups may also be identified by the group number only (I, III, etc.) with the test substance described in the title (APFO (Linear/Branched), APFO (Linear), or APFO (Branched).

Abbreviations

mg/kg = mg/kg/day

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Individual Body Weights for Rats

	Body Weight g Day 0	Body Weight g Day 1	Body Weight g Day 2	Body Weight g Day 3	Body Weight g Day 4	Body Weight g Day 5	Body Weight g Day 6	Body Weight g Day 7	Body Weight g Day 8
Male, IA 0 mg/kg									
101	259.8	265.5	275.3	286.5	295.2	301.2	310.7	315.2	325.6
102	295.8	300.8	309.8	315.1	326.5	329.7	339.8	348.6	357.5
103	249.4	254.5	261.2	271.1	279.0	283.4	291.9	295.1	305.1
104	269.2	279.2	286.3	297.2	299.8	314.2	315.5	318.7	329.2
105	259.8	265.1	271.1	278.9	286.5	284.3	292.9	295.5	303.9
106	257.7	270.0	272.8	279.7	286.1	294.3	303.7	301.6	312.2
107	267.1	274.2	282.0	287.8	294.4	302.4	310.4	318.7	324.4
108	268.5	275.4	286.1	297.4	301.2	313.5	320.5	332.7	335.2
109	282.7	292.7	305.1	314.8	331.0	334.0	347.4	357.5	362.7
110	271.8	278.3	287.2	289.4	295.1	303.9	312.2	323.8	324.6
Male, IIIA 0.3 mg/kg									
301	258.6	268.0	278.2	288.7	292.4	295.9	308.4	315.0	319.7
302	284.2	290.3	294.7	301.6	311.9	318.3	326.4	334.5	335.5
303	253.8	262.5	269.7	277.6	285.2	290.1	297.4	305.0	310.5
304	270.4	269.2	277.8	288.6	294.7	302.4	306.8	312.8	317.8
305	264.7	266.9	276.6	286.0	295.7	295.2	304.2	309.1	310.0
306	268.9	268.6	275.2	279.7	287.1	291.0	299.7	306.4	310.5
307	271.6	277.6	286.9	294.3	303.0	310.8	319.9	325.2	328.4
308	276.3	275.5	284.6	290.1	298.6	303.2	311.3	318.7	325.7
309	259.1	260.4	267.2	275.5	284.5	290.8	301.6	307.0	311.6
310	271.2	275.1	278.8	289.9	297.0	303.8	311.8	320.3	328.7
Male, VA 1 mg/kg									
501	260.8	267.3	272.7	283.4	290.6	297.5	306.5	315.3	326.5
502	284.6	290.5	300.0	305.0	312.9	313.5	325.5	330.6	335.8
503	255.9	259.2	269.6	275.1	287.6	292.9	302.3	312.3	315.9
504	275.1	276.7	285.3	292.2	301.5	307.3	317.8	320.7	323.9
505	265.8	270.8	278.4	282.3	289.4	289.6	298.4	303.8	307.4
506	267.6	274.7	277.2	284.5	292.2	299.2	309.3	316.8	321.8
507	278.4	280.5	290.1	302.2	307.1	313.3	325.4	329.4	331.9
508	281.3	290.6	298.9	312.0	315.4	321.2	331.4	338.0	346.1
509	275.1	277.9	286.9	298.9	306.7	313.3	324.7	331.7	336.4
510	255.7	263.8	276.1	286.8	291.6	300.1	311.7	316.6	323.3

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Individual Body Weights for Rats

	Body Weight g Day 9	Body Weight g Day 10	Body Weight g Day 11	Body Weight g Day 12	Body Weight g Day 13	Body Weight g Day 14
Male, IA 0 mg/kg						
101	331.7	324.6	333.7	335.9	337.4	310.7
102	360.3	365.9	378.8	380.2	391.7	354.4
103	311.0	315.8	319.0	323.4	323.4	294.1
104	334.1	340.8	348.2	349.9	357.9	327.7
105	307.4	310.5	314.7	318.0	318.1	293.8
106	321.6	329.1	337.0	338.4	344.8	322.3
107	330.7	337.5	345.4	349.2	354.1	328.5
108	340.2	348.3	351.9	356.2	365.3	331.6
109	370.9	376.0	385.2	386.8	392.2	357.7
110	332.7	340.0	345.2	351.9	353.0	328.5
Male, IIIA 0.3 mg/kg						
301	327.0	331.6	342.5	344.5	347.4	323.8
302	346.4	349.2	354.1	358.9	364.7	335.5
303	315.6	321.2	322.0	325.7	332.6	303.7
304	326.7	328.0	335.2	339.0	341.4	312.9
305	318.1	319.6	322.9	324.5	329.5	301.7
306	316.2	322.3	333.5	331.6	334.4	312.8
307	339.6	346.0	347.3	351.1	360.5	330.1
308	331.4	340.3	343.5	348.3	349.1	323.3
309	319.4	324.6	325.5	334.6	337.4	313.8
310	338.1	340.5	346.5	353.5	359.2	332.5
Male, VA 1 mg/kg						
501	330.1	336.0	345.6	351.4	354.4	327.0
502	337.0	344.8	350.6	351.6	353.5	324.5
503	326.0	330.8	332.8	333.1	338.1	306.9
504	330.9	340.7	345.8	347.1	352.2	321.0
505	311.9	315.4	315.7	316.0	317.9	292.5
506	327.6	334.7	336.4	334.9	343.6	318.0
507	341.2	342.4	351.6	353.9	358.7	327.6
508	352.9	358.0	366.9	372.2	372.7	349.4
509	344.6	349.6	357.9	362.9	366.4	339.6
510	330.2	336.4	340.9	347.4	350.5	321.3

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Individual Body Weights for Rats

	Body Weight g Day 0	Body Weight g Day 1	Body Weight g Day 2	Body Weight g Day 3	Body Weight g Day 4	Body Weight g Day 5	Body Weight g Day 6	Body Weight g Day 7	Body Weight g Day 8
Male, VIIA 3 mg/kg									
701	264.6	264.7	273.4	280.7	290.3	296.5	304.2	312.4	317.0
702	292.1	295.3	306.6	313.8	321.8	327.4	338.1	345.2	362.6
703	261.8	264.2	274.3	279.9	288.6	296.2	303.0	311.0	319.0
704	287.2	296.8	312.8	321.8	332.7	345.9	360.4	374.6	380.5
705	264.2	265.1	278.6	286.4	295.7	301.3	306.2	314.2	321.1
706	269.7	270.2	278.6	286.3	292.2	302.3	309.3	321.4	320.1
707	269.0	274.6	283.7	292.6	300.6	302.3	310.5	324.9	330.6
708	277.4	280.8	290.9	298.2	302.3	306.5	314.2	318.5	320.6
709	270.7	276.2	286.7	297.4	302.1	311.3	319.2	325.3	330.0
710	262.1	269.1	277.4	283.1	290.6	293.0	301.1	309.5	317.1
Male, IXA 10 mg/kg									
901	266.8	271.6	279.2	284.4	286.4	284.7	290.9	294.2	295.3
902	294.8	298.5	308.7	312.5	313.6	325.9	336.0	339.1	344.7
903	245.8	244.7	256.3	254.7	255.8	256.4	256.2	252.7	256.4
904	271.7	277.9	283.9	291.5	296.8	302.8	310.1	312.6	322.4
905	253.0	257.5	261.9	264.3	267.1	272.5	280.0	280.5	285.4
906	270.2	275.6	280.1	288.2	280.1	295.5	285.6	277.3	259.0
907	274.1	279.7	285.5	296.6	296.4	302.5	316.8	326.8	336.7
908	278.3	279.4	288.9	291.8	284.2	292.2	296.0	300.5	303.5
909	268.5	273.3	280.3	286.3	294.7	294.9	302.7	304.7	318.7
910	256.9	258.7	265.2	266.1	269.6	267.5	266.9	270.2	278.9
Male, XIA 30 mg/kg									
1101	263.7	266.7	267.0	250.6	232.8	218.6	204.9	193.7	216.7
1102	288.5	290.8	290.2	276.1	251.3	236.9	222.5	215.0	239.0
1103	257.3	255.6	251.6	244.3	230.5	243.2	257.2	269.4	271.2
1104	281.0	272.0	266.1	241.4	226.0	212.4	200.6	198.1	221.1
1105	251.4	251.3	251.4	241.3	231.0	247.3	257.8	269.4	269.7
1106	263.6	263.0	253.6	243.5	222.9	206.9	201.8	220.1	238.2
1107	263.3	258.7	248.1	232.4	214.9	201.3	191.7	216.8	236.0
1108	280.6	272.7	266.4	254.7	239.8	229.2	247.9	269.9	281.9
1109	271.9	271.2	258.7	238.0	221.5	209.9	198.5	192.3	215.1
1110	259.0	264.9	263.4	267.5	262.9	269.9	282.4	287.5	293.4

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Individual Body Weights for Rats

	Body Weight g Day 9	Body Weight g Day 10	Body Weight g Day 11	Body Weight g Day 12	Body Weight g Day 13	Body Weight g Day 14
Male, VIIA 3 mg/kg						
701	320.1	326.6	333.4	330.9	340.9	317.0
702	368.8	370.7	378.6	383.8	386.5	357.1
703	324.9	332.6	335.5	338.6	338.1	318.9
704	392.1	400.2	409.1	412.0	424.8	392.3
705	326.4	331.3	339.0	336.9	339.5	315.6
706	328.8	332.5	342.5	343.8	345.4	317.9
707	339.3	344.2	354.1	349.3	355.0	329.2
708	327.6	329.0	331.8	333.4	333.4	308.3
709	338.7	341.6	348.5	352.3	354.6	325.5
710	322.5	330.2	334.6	336.1	340.3	316.0
Male, IXA 10 mg/kg						
901	304.1	309.3	309.1	309.7	311.3	285.5
902	354.0	357.5	360.9	363.9	367.3	333.5
903	264.3	267.5	265.4	268.6	265.4	241.9
904	328.2	332.7	337.7	340.6	342.7	318.5
905	292.9	296.0	297.8	302.3	302.1	278.0
906	244.6	233.0	225.9	247.0	270.4	241.6
907	338.2	340.1	350.3	348.4	350.4	323.0
908	305.6	310.4	310.0	305.9	311.7	281.4
909	326.2	327.4	335.1	333.8	341.0	317.1
910	282.9	283.8	282.8	283.4	284.3	266.6
Male, XIA 30 mg/kg						
1101	235.8	245.4	261.9	271.1	276.6	255.9
1102	253.4	264.0	276.7	282.0	293.5	253.3
1103	273.7	273.7	284.4	284.5	283.1	256.4
1104	238.2	244.8	265.4	269.7	273.0	249.4
1105	271.3	278.2	283.8	282.6	285.1	259.7
1106	255.8	267.7	277.4	291.0	302.2	266.4
1107	239.2	250.4	265.2	271.8	272.2	245.1
1108	294.2	300.5	306.5	306.8	311.2	280.4
1109	229.9	244.7	252.3	264.7	277.5	252.8
1110	295.6	292.4	298.7	295.6	292.2	269.2

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Individual Body Weights for Rats

	Body Weight g Day 0	Body Weight g Day 1	Body Weight g Day 2	Body Weight g Day 3	Body Weight g Day 4	Body Weight g Day 5	Body Weight g Day 6	Body Weight g Day 7	Body Weight g Day 8
Male, IB 0 mg/kg									
101	278.2	283.5	293.5	304.9	311.8	304.5	322.0	332.3	340.4
102	267.8	277.2	283.8	293.5	298.1	303.8	314.1	317.8	327.1
103	288.6	296.3	304.6	317.1	326.0	322.5	344.0	345.9	355.1
104	286.7	294.3	300.0	309.2	313.8	322.2	333.2	333.4	344.3
105	292.3	297.9	302.3	312.6	316.9	317.6	335.1	339.6	347.9
106	269.9	276.5	285.1	289.9	295.2	298.8	310.4	310.0	325.4
107	277.3	280.4	286.6	294.3	299.5	309.7	315.4	321.4	330.4
108	287.0	291.4	294.9	299.6	304.6	311.4	318.6	325.3	334.7
109	310.7	316.3	322.6	334.9	339.8	346.6	354.5	358.5	366.4
110	287.0	289.2	297.7	304.1	310.3	318.8	330.7	328.3	338.0
Male, IIIB 0.3 mg/kg									
301	275.2	277.5	280.3	282.6	283.2	291.5	293.9	295.4	299.9
302	267.6	275.4	281.6	290.9	295.1	300.0	307.9	316.0	321.3
303	296.3	296.5	306.3	310.8	320.1	326.5	332.3	339.7	345.4
304	274.6	273.7	284.2	291.4	296.1	302.2	310.5	317.1	325.7
305	297.3	300.8	307.7	317.6	322.9	330.9	337.4	337.8	345.2
306	268.6	271.7	279.6	286.0	292.2	300.8	309.3	310.1	319.0
307	279.6	287.2	298.5	306.8	314.1	319.7	331.0	332.6	327.7
308	283.2	285.7	291.9	296.7	304.6	311.2	321.3	321.0	343.8
309	294.5	301.4	308.0	312.2	317.2	323.6	329.9	334.7	342.9
310	285.4	291.6	297.2	304.3	311.9	321.4	330.1	334.4	342.7
Male, VB 1 mg/kg									
501	269.1	277.8	281.2	284.2	285.5	291.7	297.0	300.9	306.2
502	250.0	252.1	260.1	263.4	260.6	264.6	270.8	275.6	280.9
503	283.1	284.4	291.2	300.4	304.0	312.0	317.0	324.2	329.1
504	277.4	281.4	289.7	297.3	304.1	311.2	319.3	325.8	328.7
505	301.1	308.5	314.9	322.7	331.5	339.2	351.9	355.0	368.1
506	274.9	280.3	292.0	297.0	306.5	318.0	330.3	334.2	343.4
507	272.4	276.4	281.6	282.6	290.1	291.2	301.5	299.7	308.8
508	286.2	289.9	299.6	303.3	309.3	313.2	321.7	327.4	328.2
509	296.9	297.5	305.2	312.0	318.9	326.6	338.3	340.3	347.6
510	285.7	288.5	295.5	301.5	304.6	315.0	322.9	326.8	332.2

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	Body Weight g Day 9	Body Weight g Day 10	Body Weight g Day 11	Body Weight g Day 12	Body Weight g Day 13	Body Weight g Day 14
Male, IB 0 mg/kg						
101	344.5	348.0	351.1	350.7	356.4	331.4
102	331.9	337.0	338.5	345.8	353.3	318.4
103	359.2	369.2	375.5	380.2	385.0	348.3
104	347.4	354.0	359.2	364.7	370.7	343.5
105	351.8	358.5	359.2	360.7	369.4	334.9
106	324.6	333.6	334.9	340.0	345.4	320.4
107	332.2	339.7	342.4	343.5	351.4	324.9
108	335.4	340.1	339.5	345.5	351.1	322.5
109	368.3	374.9	376.2	375.3	378.3	353.2
110	341.9	345.0	353.1	357.7	366.7	337.1
Male, IIIB 0.3 mg/kg						
301	299.6	306.6	303.7	307.0	312.8	286.1
302	321.5	326.4	331.7	334.2	338.2	306.0
303	346.4	350.6	357.1	362.1	370.5	338.0
304	329.7	338.2	339.1	344.3	351.9	325.9
305	350.7	360.4	356.4	360.2	368.4	342.3
306	318.2	327.1	321.3	328.8	336.0	310.0
307	351.8	360.2	361.7	373.8	378.6	346.0
308	329.0	335.8	336.7	342.0	344.9	319.9
309	341.7	350.8	351.3	356.5	361.1	334.7
310	345.4	355.0	357.6	358.9	364.4	338.8
Male, VB 1 mg/kg						
501	303.7	311.5	307.7	305.3	311.9	292.1
502	277.7	282.9	282.6	286.3	290.0	268.0
503	328.4	334.6	338.6	339.9	348.1	327.5
504	332.9	341.4	339.5	344.1	351.6	330.9
505	375.2	381.8	388.0	394.4	399.0	371.5
506	374.9	360.6	365.3	372.8	379.1	347.8
507	310.1	313.8	317.8	318.4	327.6	297.4
508	331.8	336.7	338.1	341.2	346.3	319.2
509	351.8	361.1	363.7	366.8	374.3	347.1
510	335.0	344.7	346.3	351.7	361.4	332.2

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Individual Body Weights for Rats

	Body Weight g Day 0	Body Weight g Day 1	Body Weight g Day 2	Body Weight g Day 3	Body Weight g Day 4	Body Weight g Day 5	Body Weight g Day 6	Body Weight g Day 7	Body Weight g Day 8
Male, VIIB 3 mg/kg									
701	275.8	284.4	286.0	290.8	292.9	299.3	306.3	308.8	310.0
702	262.8	265.5	273.3	279.7	284.8	287.9	291.8	297.4	301.7
703	288.9	291.3	298.9	299.6	302.8	307.0	312.9	319.9	321.9
704	282.8	293.2	300.0	306.2	313.7	322.7	329.9	334.4	339.1
705	288.9	293.8	299.0	306.4	311.4	315.8	320.4	326.7	327.5
706	267.6	272.6	283.0	289.8	298.4	297.0	304.7	313.1	317.6
707	275.8	280.6	286.3	290.4	299.5	304.2	319.2	323.2	329.0
708	289.1	292.5	297.9	302.6	305.9	312.3	315.3	316.0	321.8
709	297.1	296.4	302.3	309.1	317.0	320.9	332.6	335.4	337.4
710	267.8	271.3	272.5	274.8	279.9	284.6	291.3	296.5	301.4
Male, IXB 10 mg/kg									
901	282.5	287.3	296.5	308.1	312.4	319.6	327.5	336.6	342.6
902	254.6	260.3	268.5	274.5	279.7	286.6	290.4	298.1	303.4
903	289.9	291.2	298.5	300.1	306.1	306.1	292.6	278.7	269.4
904	266.4	266.6	276.3	282.7	284.4	292.0	297.5	298.6	302.7
905	287.6	290.2	297.3	301.2	308.1	309.5	312.3	311.3	329.3
906	274.6	277.5	283.8	292.6	295.0	301.7	307.2	306.3	319.4
907	271.7	273.0	278.8	287.3	292.7	298.4	305.3	313.1	312.4
908	292.9	295.6	302.0	308.3	316.6	310.6	317.0	315.4	333.0
909	299.2	306.5	314.8	320.8	310.0	306.6	301.7	306.2	327.0
910	291.2	299.0	306.6	316.6	324.2	327.2	332.2	335.3	345.5
Male, XIB 30 mg/kg									
1101	280.3	281.4	272.7	251.8	237.8	219.9	209.6	200.2	222.4
1102	269.4	266.4	256.2	234.4	218.0	205.7	191.0	178.7	190.4
1103	280.2	282.2	277.0	270.8	251.9	235.2	223.2	208.6	223.8
1104	277.0	277.1	259.9	240.1	223.0	210.3	198.3	209.5	232.3
1105	293.0	279.1	259.2	245.7	227.7	213.0	220.3	236.4	260.0
1106	252.1	252.9	245.0	232.6	224.0	213.8	223.2	243.2	248.5
1107	280.4	284.9	277.5	263.1	244.0	229.0	217.8	208.6	227.0
1108	289.4	294.1	294.9	277.8	261.8	252.2	241.3	230.0	237.6
1109	301.3	298.9	276.2	263.1	244.4	238.3	254.0	272.6	283.8
1110	286.5	284.5	286.1	274.2	267.3	288.2	302.4	308.3	319.7

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Individual Body Weights for Rats

	Body Weight g Day 9	Body Weight g Day 10	Body Weight g Day 11	Body Weight g Day 12	Body Weight g Day 13	Body Weight g Day 14
Male, VIIB 3 mg/kg						
701	312.2	318.1	317.2	319.4	325.4	299.2
702	308.2	311.5	311.0	319.9	320.6	297.0
703	326.1	329.5	327.6	331.1	336.6	305.5
704	348.6	354.5	358.6	358.9	372.5	336.6
705	335.7	337.6	336.4	338.4	340.3	312.8
706	324.5	326.6	329.3	334.1	338.6	308.1
707	333.1	337.0	345.8	344.0	347.4	322.8
708	323.5	326.1	325.6	329.3	334.5	310.9
709	342.9	347.2	353.2	354.1	354.3	330.5
710	304.3	307.0	307.7	313.1	320.0	292.3
Male, IXB 10 mg/kg						
901	349.6	351.7	352.0	361.7	366.5	337.5
902	308.6	310.2	310.2	314.2	321.3	296.7
903	288.6	296.0	302.9	309.8	314.4	288.0
904	311.0	315.4	317.1	320.6	323.3	300.2
905	324.3	328.8	329.8	333.8	342.7	309.6
906	328.9	329.8	332.7	337.2	344.7	318.4
907	315.8	320.1	317.8	321.5	325.1	298.6
908	332.2	337.8	334.6	341.4	344.2	315.4
909	332.7	336.2	339.1	339.3	344.1	316.6
910	347.1	352.7	355.7	358.9	367.8	337.5
Male, XIB 30 mg/kg						
1101	242.9	246.5	253.3	273.6	275.5	247.8
1102	200.8	218.1	240.1	249.3	264.6	226.7
1103	238.6	254.4	268.6	273.1	282.2	257.5
1104	243.2	258.2	264.9	277.2	288.8	252.5
1105	266.8	283.1	285.4	292.3	296.1	266.1
1106	257.9	261.0	268.6	269.3	281.3	257.0
1107	245.9	256.3	269.0	275.6	287.0	258.6
1108	246.1	264.5	279.3	285.4	291.0	261.2
1109	288.2	298.8	308.1	313.9	320.4	296.0
1110	321.6	323.3	330.3	335.5	338.5	303.9

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Individual Body Weights for Rats

	Body Weight g Day 0	Body Weight g Day 1	Body Weight g Day 2	Body Weight g Day 3	Body Weight g Day 4	Body Weight g Day 5	Body Weight g Day 6	Body Weight g Day 7	Body Weight g Day 8
Male, IC 0 mg/kg									
101	282.0	287.3	293.0	303.4	311.9	319.3	328.2	329.9	335.8
102	291.6	288.3	293.6	301.2	311.7	315.2	322.9	327.8	333.7
103	294.7	300.7	312.1	321.2	331.3	339.9	344.4	353.9	353.6
104	282.1	283.6	291.2	303.1	312.2	320.6	325.3	332.1	333.9
105	276.4	282.5	287.5	291.7	295.1	305.4	311.2	314.2	318.3
106	298.1	308.9	312.2	323.6	332.1	342.8	349.5	358.2	360.0
107	286.2	288.2	292.7	298.3	307.5	310.6	318.5	315.7	319.7
108	275.0	277.4	281.0	288.6	293.5	301.0	307.2	312.9	315.3
109	298.7	301.9	304.4	308.0	319.6	332.9	336.2	341.7	340.9
110	263.8	265.9	270.7	274.7	284.5	288.8	291.2	293.4	296.0
Male, IIIC 0.3 mg/kg									
301	286.3	290.5	300.5	309.7	314.4	323.3	329.6	336.4	342.0
302	281.9	286.8	287.1	298.6	299.0	308.0	313.9	316.8	321.8
303	321.6	325.5	336.4	346.6	355.0	359.1	373.2	378.0	388.6
304	272.5	275.6	279.0	283.7	286.4	292.8	299.6	302.7	306.8
305	288.4	295.4	304.4	313.2	321.0	329.1	333.3	342.7	349.6
306	277.2	284.6	287.1	292.6	296.4	306.3	311.2	312.8	321.5
307	294.7	307.1	311.9	317.9	334.9	342.6	349.4	356.5	370.2
308	271.1	274.2	278.0	283.0	291.7	298.6	305.5	308.8	316.6
309	283.6	291.0	295.6	303.3	306.8	313.9	318.4	325.9	335.0
310	262.2	267.3	273.8	273.9	280.3	291.6	290.2	298.8	301.4
Male, VC 1 mg/kg									
501	290.3	289.2	298.8	308.5	316.5	324.5	327.9	332.3	338.4
502	282.9	285.3	290.9	298.8	306.1	318.6	324.5	329.2	337.5
503	295.4	302.2	306.9	313.7	316.5	324.1	325.4	332.0	333.3
504	278.3	284.5	285.5	294.4	304.1	312.9	314.7	322.8	326.4
505	291.7	287.8	294.5	304.6	304.2	310.5	318.7	321.8	331.9
506	292.7	297.4	306.3	311.1	322.7	332.6	337.3	344.7	347.7
507	314.5	317.8	331.7	344.0	358.7	377.3	386.7	400.4	404.8
508	276.4	285.1	287.1	293.3	299.0	310.9	312.6	317.9	323.3
509	291.7	298.2	309.3	316.4	322.6	333.2	339.2	344.5	351.9
510	278.3	285.2	288.3	295.0	303.3	317.0	324.4	330.0	340.0

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Individual Body Weights for Rats

	Body Weight g Day 9	Body Weight g Day 10	Body Weight g Day 11	Body Weight g Day 12	Body Weight g Day 13	Body Weight g Day 14
Male, IC 0 mg/kg						
101	345.4	347.4	353.6	358.8	364.1	339.1
102	341.7	340.4	346.8	353.4	360.7	325.6
103	360.6	366.7	369.9	377.1	387.9	353.5
104	342.5	341.0	349.5	357.9	362.6	334.1
105	326.4	326.2	325.6	333.9	339.9	311.5
106	372.2	374.1	380.5	387.4	393.6	362.1
107	322.0	324.4	328.1	336.7	336.9	308.2
108	322.0	319.1	324.9	331.0	335.5	302.2
109	353.1	355.8	360.3	369.5	373.4	340.1
110	304.1	303.6	306.6	311.4	315.9	291.3
Male, IIIC 0.3 mg/kg						
301	348.1	345.8	353.2	360.7	364.0	331.1
302	326.1	326.4	331.7	333.8	340.7	313.1
303	398.8	396.6	401.4	409.9	414.5	378.6
304	309.8	307.9	310.9	320.8	324.9	298.0
305	357.2	362.9	370.4	376.9	380.7	352.7
306	326.0	323.9	329.3	334.4	340.5	306.2
307	373.0	384.7	388.0	392.4	405.4	361.9
308	324.9	323.5	336.5	340.3	345.8	316.9
309	337.1	339.2	342.7	344.9	358.2	326.6
310	301.4	306.4	310.7	310.2	315.1	290.5
Male, VC 1 mg/kg						
501	342.3	347.4	350.6	354.8	364.2	329.5
502	346.1	344.9	350.4	358.7	362.3	333.9
503	340.0	339.6	342.9	352.8	355.9	330.2
504	329.2	329.0	335.8	338.3	343.3	316.3
505	334.0	342.4	346.8	348.4	354.6	321.2
506	351.9	353.3	355.5	357.5	366.7	329.8
507	412.6	417.7	434.0	434.8	450.9	410.3
508	327.3	329.3	329.9	337.1	344.1	312.9
509	351.8	357.0	364.3	365.8	372.0	342.2
510	342.1	339.5	346.2	356.5	360.3	331.7

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Individual Body Weights for Rats

	Body Weight g Day 0	Body Weight g Day 1	Body Weight g Day 2	Body Weight g Day 3	Body Weight g Day 4	Body Weight g Day 5	Body Weight g Day 6	Body Weight g Day 7	Body Weight g Day 8
Male, VIIC 3 mg/kg									
701	290.1	296.4	304.5	310.0	314.2	325.5	326.7	334.9	338.9
702	281.5	287.1	295.6	298.0	305.2	313.2	318.6	328.0	327.7
703	286.3	287.3	290.7	293.1	298.5	301.7	307.2	312.3	314.1
704	275.1	274.6	276.2	278.8	282.1	288.0	286.1	288.7	288.2
705	282.2	285.9	292.5	302.1	308.4	318.8	320.6	329.9	328.9
706	289.7	291.7	298.2	302.4	316.2	318.8	324.9	327.3	331.0
707	283.8	287.2	296.0	304.7	312.0	320.3	321.9	329.4	337.8
708	286.8	292.6	298.0	302.2	310.5	322.2	325.5	329.2	338.1
709	297.8	299.4	306.5	312.5	321.3	323.3	331.8	332.9	334.5
710	272.3	272.7	275.7	282.1	292.2	297.3	304.5	310.9	313.7
Male, IXC 10 mg/kg									
901	294.3	302.4	311.4	313.7	323.9	328.6	333.9	343.3	340.9
902	287.5	288.8	294.6	300.2	302.7	315.8	317.6	325.5	320.7
903	284.9	289.7	291.1	292.0	295.2	301.1	305.4	308.4	313.8
904	282.3	291.2	291.0	298.4	305.8	316.4	321.2	330.2	333.4
905	269.7	278.7	279.0	283.2	290.2	298.0	302.4	305.7	313.6
906	287.4	293.8	303.0	307.0	317.6	325.8	330.6	341.1	342.4
907	285.4	288.7	290.8	293.1	301.0	304.5	311.5	318.2	322.6
908	265.7	271.3	272.5	275.9	283.2	295.1	297.9	303.0	308.3
909	280.9	284.1	282.5	290.7	289.6	298.3	305.2	307.5	315.0
910	280.9	283.8	289.8	296.0	303.3	312.9	317.7	323.1	326.4
Male, XIC 30 mg/kg									
1101	277.2	268.8	273.9	274.4	286.9	297.5	301.2	307.3	301.7
1102	281.6	283.4	284.9	286.0	289.7	304.2	311.1	314.5	314.6
1103	304.9	302.1	305.7	305.0	315.0	327.3	333.3	333.9	345.3
1104	277.1	274.0	258.4	257.1	276.5	294.0	298.1	304.0	294.7
1105	271.6	267.9	273.1	276.8	285.6	290.1	293.7	295.0	298.9
1106	286.1	283.1	279.4	271.1	285.3	300.2	305.9	309.0	309.3
1107	298.4	292.4	294.7	303.1	311.7	321.3	328.0	325.9	328.4
1108	279.4	278.0	282.3	288.5	295.4	304.7	313.6	318.3	320.2
1109	299.5	294.4	284.9	303.7	306.9	322.8	323.4	335.9	338.7
1110	264.7	266.9	268.8	278.8	281.6	293.0	299.1	299.6	305.0

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Individual Body Weights for Rats

	Body Weight g Day 9	Body Weight g Day 10	Body Weight g Day 11	Body Weight g Day 12	Body Weight g Day 13	Body Weight g Day 14
Male, VIIC 3 mg/kg						
701	343.1	343.6	348.9	353.8	360.1	331.3
702	336.4	333.8	340.9	348.4	355.3	323.6
703	326.7	320.0	328.3	333.7	335.7	313.8
704	292.9	296.0	296.5	298.7	305.5	275.5
705	330.7	337.2	336.8	338.7	344.4	321.6
706	342.3	341.3	345.9	349.8	360.8	324.4
707	343.1	347.8	337.1	341.4	351.0	316.1
708	344.4	350.5	348.8	360.5	366.4	334.4
709	346.2	344.2	350.7	358.5	365.5	328.5
710	321.7	328.8	327.0	334.5	337.1	313.5
Male, IXC 10 mg/kg						
901	357.0	353.3	361.7	371.6	379.4	349.9
902	331.1	337.1	339.1	340.8	349.6	324.0
903	320.3	321.5	326.5	330.1	334.6	307.5
904	341.5	342.4	340.1	348.5	353.2	321.6
905	318.7	318.3	323.7	327.8	332.1	302.9
906	350.3	350.9	351.7	359.0	363.1	333.5
907	324.8	326.7	333.1	342.8	346.9	323.0
908	316.8	316.1	320.3	324.7	329.9	301.9
909	323.8	328.2	332.3	336.5	343.3	319.9
910	335.3	339.8	341.7	346.0	352.5	324.0
Male, XIC 30 mg/kg						
1101	310.6	316.9	320.4	323.4	327.5	302.2
1102	317.2	318.4	325.0	333.1	337.8	307.6
1103	356.0	346.4	350.6	361.7	368.8	334.7
1104	308.4	305.6	314.9	325.0	322.4	299.7
1105	301.1	298.5	308.3	312.7	316.3	290.9
1106	315.1	316.5	319.1	330.0	333.9	308.0
1107	337.3	339.1	341.9	355.1	359.3	331.7
1108	326.1	325.5	330.9	336.6	342.0	310.4
1109	345.3	339.7	351.3	360.0	361.7	327.0
1110	310.9	312.4	312.0	316.0	320.0	295.7

Appendix C
Individual Food Consumption for Rats

INDIVIDUAL FOOD CONSUMPTION FOR RATS

EXPLANATORY NOTES

STUDY DESIGN

Groups			Dosage (mg/kg)
H-24921 APFO (Linear/Branched)	H-26313 APFO (Linear)	H-26225 APFO (Branched)	
IA	IB	IC	0 (Control)
IIIA	IIIB	IIIC	0.3
VA	VB	VC	1
VIIA	VIIB	VIIC	3
IXA	IXB	IXC	10
XIA	XIB	XIC	30

Abbreviations

mg/kg = mg/kg/day

g/anm/day = grams/animal/day

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Individual Food Consumption for Rats

	Food Cons. g/anm/day Day 3	Food Cons. g/anm/day Day 7	Food Cons. g/anm/day Day 10	Food Cons. g/anm/day Day 13
Male, IA 0 mg/kg				
101	25.3	26.5	26.5	25.1
102	26.6	27.7	29.3	28.7
103	22.9	23.7	27.3	23.1
104	25.3	30.1	28.1	25.5
105	25.4	23.7	24.3	23.9
106	24.9	24.1	25.3	26.0
107	23.9	24.4	26.0	25.5
108	25.7	26.4	26.4	25.7
109	29.0	32.2	31.5	30.5
110	23.4	25.7	26.3	27.0
Male, IIIA 0.3 mg/kg				
301	26.8	27.5	27.8	28.8
302	22.7	26.2	25.9	26.5
303	23.6	25.3	26.0	23.4
304	23.3	23.9	25.8	24.4
305	26.6	26.6	25.7	23.3
306	26.4	26.4	27.7	26.1
307	23.8	26.7	25.1	26.3
308	23.6	24.4	26.9	25.1
309	28.6	25.0	28.0	24.5
310	26.9	26.5	27.5	26.2
Male, VA 1 mg/kg				
501	23.6	25.2	27.4	25.7
502	24.5	25.3	24.8	26.0
503	24.4	27.3	28.4	24.8
504	25.4	28.3	27.7	27.5
505	25.4	25.0	24.5	21.7
506	24.8	27.9	27.9	27.9
507	26.0	27.5	27.4	26.1
508	26.3	26.6	28.4	27.9
509	28.3	28.5	50.5	29.0
510	24.7	25.8	27.4	26.3

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Individual Food Consumption for Rats

	Food Cons. g/anm/day Day 3	Food Cons. g/anm/day Day 7	Food Cons. g/anm/day Day 10	Food Cons. g/anm/day Day 13
Male, VIIA 3 mg/kg				
701	23.3	25.6	27.2	26.2
702	28.2	28.7	32.5	29.4
703	23.9	25.6	28.9	24.8
704	30.0	33.7	35.1	34.3
705	24.0	24.9	25.3	24.5
706	23.5	26.8	33.0	25.0
707	26.0	27.3	31.1	29.3
708	26.6	26.5	26.5	25.1
709	27.4	25.9	35.5	25.8
710	24.0	22.9	25.4	23.9
Male, IXA 10 mg/kg				
901	27.4	25.0	30.4	23.7
902	25.3	23.5	29.7	24.1
903	21.7	17.0	24.8	18.1
904	23.7	22.9	25.3	25.0
905	20.5	20.5	22.8	21.3
906	24.7	20.0	4.2	19.3
907	24.4	22.6	29.2	23.4
908	24.5	19.7	27.9	20.8
909	23.7	22.3	26.3	24.0
910	19.9	16.7	22.5	18.7
Male, XIA 30 mg/kg				
1101	17.2	3.4	24.2	29.4
1102	21.1	1.0	20.4	26.7
1103	14.2	17.9	22.1	22.2
1104	16.1	1.7	32.3	29.8
1105	17.9	18.9	24.4	19.8
1106	14.2	14.6	29.2	32.1
1107	15.4	11.8	26.0	27.8
1108	17.3	16.9	30.8	25.3
1109	17.8	1.0	21.9	29.6
1110	19.7	19.7	22.8	22.5

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Individual Food Consumption for Rats

	Food Cons. g/anm/day Day 3	Food Cons. g/anm/day Day 7	Food Cons. g/anm/day Day 10	Food Cons. g/anm/day Day 13
Male, IB 0 mg/kg				
101	28.0	25.5	29.4	25.6
102	25.9	26.1	26.0	25.4
103	28.7	28.5	30.1	29.5
104	27.0	26.5	29.0	27.5
105	24.3	23.8	25.1	24.1
106	24.7	23.5	25.0	23.7
107	28.1	25.3	27.4	24.4
108	22.9	23.7	24.0	23.8
109	27.1	26.1	26.7	24.3
110	25.9	28.0	28.4	29.4
Male, IIIB 0.3 mg/kg				
301	21.5	21.7	23.5	23.7
302	24.1	24.8	23.2	23.6
303	27.5	27.8	27.7	28.4
304	29.0	25.2	27.1	26.6
305	27.5	26.5	27.5	27.4
306	25.0	25.1	25.4	23.5
307	26.6	28.2	29.6	29.5
308	24.2	24.2	25.4	24.2
309	24.7	24.2	25.3	25.1
310	26.6	27.4	26.0	25.7
Male, VB 1 mg/kg				
501	25.0	23.4	23.1	20.7
502	22.8	21.5	20.9	21.2
503	25.7	24.8	25.6	26.4
504	24.3	35.3	30.5	25.5
505	28.8	29.9	31.5	31.0
506	28.0	28.9	31.8	31.1
507	25.4	25.9	26.2	24.8
508	22.8	24.0	23.1	24.8
509	27.9	28.0	25.7	31.3
510	32.7	34.8	28.2	27.6

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Individual Food Consumption for Rats

	Food Cons. g/anm/day Day 3	Food Cons. g/anm/day Day 7	Food Cons. g/anm/day Day 10	Food Cons. g/anm/day Day 13
Male, VIIB 3 mg/kg				
701	24.9	22.9	22.5	22.3
702	23.7	23.3	24.2	23.4
703	22.5	21.5	23.1	21.6
704	25.4	26.7	27.7	27.7
705	23.1	22.1	21.8	19.6
706	23.4	22.7	23.7	22.9
707	23.7	25.9	23.9	24.1
708	25.4	24.3	27.1	24.6
709	23.2	25.1	29.2	24.0
710	21.5	20.5	22.6	20.9
Male, IXB 10 mg/kg				
901	26.3	26.0	34.6	27.1
902	23.1	22.0	22.1	24.6
903	31.6	19.9	31.4	29.0
904	27.2	32.5	25.4	23.2
905	22.2	19.9	23.7	24.1
906	25.8	22.5	31.4	26.3
907	23.7	24.3	23.8	24.5
908	25.3	20.7	27.1	26.1
909	26.5	15.9	31.4	28.1
910	26.6	24.3	27.6	26.8
Male, XIB 30 mg/kg				
1101	16.4	26.2	24.9	29.0
1102	15.8	0.5	22.6	28.8
1103	16.8	13.7	23.1	28.1
1104	11.5	20.0	31.7	34.6
1105	9.1	8.6	29.3	28.2
1106	11.2	10.1	25.6	27.0
1107	16.7	10.2	26.2	30.0
1108	19.2	5.5	26.9	27.3
1109	13.8	17.7	30.9	31.6
1110	17.4	20.8	28.9	27.7

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Individual Food Consumption for Rats

	Food Cons. g/anm/day Day 3	Food Cons. g/anm/day Day 7	Food Cons. g/anm/day Day 10	Food Cons. g/anm/day Day 13
Male, IC 0 mg/kg				
101	26.2	25.6	26.3	26.3
102	24.3	25.7	24.3	26.6
103	NM	36.2	30.0	34.4
104	27.7	30.1	29.9	30.6
105	22.9	24.1	23.2	24.3
106	30.6	29.5	31.0	30.8
107	23.9	25.0	23.1	23.8
108	23.4	24.5	24.1	25.4
109	29.4	27.0	37.2	29.3
110	23.5	22.6	21.7	21.6
Male, IIIC 0.3 mg/kg				
301	25.8	26.8	26.1	25.9
302	23.7	23.3	22.0	23.2
303	29.0	28.1	29.9	29.0
304	31.9	24.2	26.0	26.9
305	27.6	14.1	29.4	28.8
306	24.7	23.2	23.8	24.5
307	27.7	30.0	31.8	28.8
308	31.6	24.0	24.5	27.6
309	26.8	25.4	27.5	26.8
310	21.2	22.0	21.2	21.6
Male, VC 1 mg/kg				
501	26.6	27.6	25.9	24.9
502	24.7	26.7	28.3	28.2
503	25.6	23.9	23.3	25.5
504	24.0	23.9	23.1	24.3
505	26.4	24.5	25.6	25.4
506	27.3	27.7	24.7	25.0
507	33.9	35.9	34.4	36.9
508	27.2	24.4	24.4	25.2
509	26.1	28.0	26.4	26.9
510	27.2	28.1	27.9	29.5

Key: NM = Not Measurable

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Individual Food Consumption for Rats

	Food Cons. g/anm/day Day 3	Food Cons. g/anm/day Day 7	Food Cons. g/anm/day Day 10	Food Cons. g/anm/day Day 13
Male, VIIC 3 mg/kg				
701	27.4	24.0	24.1	23.1
702	24.9	23.9	24.3	24.6
703	23.3	21.6	24.2	24.8
704	28.7	20.7	20.9	26.2
705	28.4	29.6	24.2	26.8
706	25.2	24.8	23.9	24.3
707	24.7	25.3	26.7	19.2
708	26.5	26.2	29.0	39.0
709	27.7	26.7	26.8	28.0
710	22.8	23.9	28.1	25.6
Male, IXC 10 mg/kg				
901	29.1	25.9	27.4	29.8
902	25.3	23.6	25.2	25.4
903	27.3	21.1	27.8	23.7
904	25.8	25.4	26.8	25.4
905	22.6	23.3	26.1	26.2
906	25.8	25.1	26.2	24.9
907	29.0	22.6	27.7	27.2
908	23.2	22.9	25.2	24.0
909	21.7	19.7	24.7	24.5
910	32.4	26.8	27.0	26.8
Male, XIC 30 mg/kg				
1101	18.6	21.6	21.5	23.9
1102	20.3	24.1	22.2	24.3
1103	23.1	24.2	28.0	28.0
1104	11.4	25.3	22.5	25.7
1105	25.3	21.4	21.6	22.7
1106	34.5	23.4	22.2	24.9
1107	19.4	23.5	23.2	25.8
1108	23.0	24.3	23.5	24.9
1109	24.4	24.0	22.1	25.5
1110	21.4	22.8	21.7	20.7

Appendix D
Individual Clinical Observations and Mortality Records for Rats

INDIVIDUAL CLINICAL OBSERVATIONS AND MORTALITY RECORDS FOR RATS

EXPLANATORY NOTES

STUDY DESIGN

Groups			Dosage (mg/kg)
H-24921 APFO (Linear/Branched)	H-26313 APFO (Linear)	H-26225 APFO (Branched)	
IA	IB	IC	0 (Control)
IIIA	IIIB	IIIC	0.3
VA	VB	VC	1
VIIA	VIIB	VIIC	3
IXA	IXB	IXC	10
XIA	XIB	XIC	30

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Individual Clinical Observations and Mortality Records for Rats

Sex	Group	Animal	Observation	Days
M	IA	101	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IA	102	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IA	103	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IA	104	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IA	105	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IA	106	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IA	107	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IA	108	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IA	109	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IA	110	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IIIA	301	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IIIA	302	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IIIA	303	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IIIA	304	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14

Study: 15073 1025

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Individual Clinical Observations and Mortality Records for Rats

Sex	Group	Animal	Observation	Days
M	IIIA	305	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IIIA	306	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IIIA	307	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IIIA	308	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IIIA	309	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IIIA	310	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VA	501	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VA	502	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VA	503	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VA	504	General observation, No Abnormality Detected	0-1
			Hair Loss, Forelimb, Left	2-14
			Sacrificed by design	14
M	VA	505	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VA	506	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VA	507	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VA	508	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14

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Individual Clinical Observations and Mortality Records for Rats

Sex	Group	Animal	Observation	Days
M	VA	509	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VA	510	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VIIA	701	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VIIA	702	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VIIA	703	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VIIA	704	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VIIA	705	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VIIA	706	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VIIA	707	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VIIA	708	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VIIA	709	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VIIA	710	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IXA	901	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IXA	902	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IXA	903	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14

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Individual Clinical Observations and Mortality Records for Rats

Sex	Group	Animal	Observation	Days
M	IXA	904	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IXA	905	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IXA	906	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IXA	907	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IXA	908	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IXA	909	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IXA	910	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	XIA	1101	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	XIA	1102	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	XIA	1103	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	XIA	1104	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	XIA	1105	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	XIA	1106	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	XIA	1107	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14

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Individual Clinical Observations and Mortality Records for Rats

Sex	Group	Animal	Observation	Days
M	XIA	1108	General observation, No Abnormality Detected	0-9
			Hair Loss, Forelimb, Right	10-14
			Sacrificed by design	14
M	XIA	1109	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	XIA	1110	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14

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Individual Clinical Observations and Mortality Records for Rats

Sex	Group	Animal	Observation	Days
M	IB	101	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IB	102	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IB	103	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IB	104	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IB	105	Hair Loss, Forelimb, Bilateral	0-14
			Hair Loss, Forepaw, Bilateral	9-14
			Sacrificed by design	14
M	IB	106	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IB	107	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IB	108	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IB	109	General observation, No Abnormality Detected	0-8
			Hair Loss, Forepaw, Bilateral	9-14
			Sacrificed by design	14
M	IB	110	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IIIB	301	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IIIB	302	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IIIB	303	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14

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Individual Clinical Observations and Mortality Records for Rats

Sex	Group	Animal	Observation	Days
M	IIIB	304	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IIIB	305	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IIIB	306	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IIIB	307	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IIIB	308	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IIIB	309	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IIIB	310	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VB	501	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VB	502	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VB	503	Hair Loss, Forelimb, Bilateral	0-14
			Hair Loss, Forepaw, Bilateral	9-14
			Sacrificed by design	14
M	VB	504	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VB	505	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VB	506	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VB	507	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14

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Individual Clinical Observations and Mortality Records for Rats

Sex	Group	Animal	Observation	Days
M	VB	508	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VB	509	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VB	510	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VIIB	701	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VIIB	702	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VIIB	703	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VIIB	704	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VIIB	705	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VIIB	706	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VIIB	707	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VIIB	708	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VIIB	709	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VIIB	710	General observation, No Abnormality Detected	0-9
			Hair Loss, Forelimb, Left	10-14
			Hair Loss, Forepaw, Left	10-14
			Sacrificed by design	14

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Individual Clinical Observations and Mortality Records for Rats

Sex	Group	Animal	Observation	Days
M	IXB	901	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IXB	902	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IXB	903	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IXB	904	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IXB	905	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IXB	906	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IXB	907	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IXB	908	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IXB	909	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IXB	910	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	XIB	1101	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	XIB	1102	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	XIB	1103	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	XIB	1104	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	XIB	1105	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14

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Individual Clinical Observations and Mortality Records for Rats

Sex	Group	Animal	Observation	Days
M	XIB	1106	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	XIB	1107	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	XIB	1108	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	XIB	1109	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	XIB	1110	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14

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Individual Clinical Observations and Mortality Records for Rats

Sex	Group	Animal	Observation	Days
M	IC	101	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IC	102	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IC	103	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IC	104	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IC	105	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IC	106	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IC	107	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IC	108	General observation, No Abnormality Detected	0-11
			Hair Loss, Forelimb, Left	12-14
			Sacrificed by design	14
M	IC	109	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IC	110	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IIIC	301	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IIIC	302	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IIIC	303	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IIIC	304	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14

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Individual Clinical Observations and Mortality Records for Rats

Sex	Group	Animal	Observation	Days
M	IIIC	305	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IIIC	306	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IIIC	307	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IIIC	308	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IIIC	309	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IIIC	310	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VC	501	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VC	502	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VC	503	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VC	504	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VC	505	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VC	506	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VC	507	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VC	508	General observation, No Abnormality Detected	0-11
			Wound, Superficial, Shoulder, Left	12-14
			Sacrificed by design	14

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Individual Clinical Observations and Mortality Records for Rats

Sex	Group	Animal	Observation	Days
M	VC	509	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VC	510	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VIIC	701	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VIIC	702	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VIIC	703	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VIIC	704	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VIIC	705	General observation, No Abnormality Detected	0-8
			Hair Loss, Forepaw, Right	9-14
			Sacrificed by design	14
M	VIIC	706	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VIIC	707	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VIIC	708	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VIIC	709	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VIIC	710	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IXC	901	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IXC	902	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14

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Individual Clinical Observations and Mortality Records for Rats

Sex	Group	Animal	Observation	Days
M	IXC	903	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IXC	904	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IXC	905	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IXC	906	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IXC	907	General observation, No Abnormality Detected	0-11
			Hair Loss, Forelimb, Bilateral	12-14
			Hair Loss, Forepaw, Bilateral	12-14
			Sacrificed by design	14
M	IXC	908	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IXC	909	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IXC	910	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	XIC	1101	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	XIC	1102	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	XIC	1103	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	XIC	1104	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	XIC	1105	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14

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Individual Clinical Observations and Mortality Records for Rats

Sex	Group	Animal	Observation	Days
M	XIC	1106	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	XIC	1107	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	XIC	1108	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	XIC	1109	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	XIC	1110	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14

Appendix E
Individual Animal Clinical Pathology Data for Rats

INDIVIDUAL ANIMAL CLINICAL PATHOLOGY DATA FOR RATS

EXPLANATORY NOTES

STUDY DESIGN

Groups			
H-24921 APFO (Linear/Branched)	H-26313 APFO (Linear)	H-26225 APFO (Branched)	Dosage (mg/kg)
IA	IB	IC	0 (Control)
IIIA	IIIB	IIIC	0.3
VA	VB	VC	1
VIIA	VIIB	VIIC	3
IXA	IXB	IXC	10
XIA	XIB	XIC	30

ABBREVIATIONS

General:

mg/kg - mg/kg/day
Mod - moderate

Individual Red Blood Cell Morphology Values:

ANIS - anisocytosis
MIC - microcytes
MAC - macrocytes
POLY - polychromasia
HYPO - hypochromasia
ECHI - echinocytes
ACAN - acanthocytes
TARG - target cells
RX - rouleaux
HJB - Howell-Jolly body
OTHR - other red blood cell morphology
\- - not observed or not examined; see whole blood sample condition
SCH - schistocyte
POIK - poikilocytosis

Individual Clinical Chemistry Values:

SHEM - hemolysis from *vena cava* sample
SLIP - lipemia from *vena cava* sample
SICT - icterus from *vena cava* sample
CHOL - cholesterol
TRIG - triglycerides
HDL - high-density lipoprotein cholesterol
nonHDL - non-high-density lipoprotein cholesterol
HEM - hemolysis from orbital sinus sample
LIP - lipemia from orbital sinus sample
ICT - icterus from orbital sinus sample

INDIVIDUAL ANIMAL CLINICAL PATHOLOGY DATA FOR RATS

EXPLANATORY NOTES (Continued)

NOTES:

During the collection of blood and tissues for H-24921 Set A animals, a decision to prepare blood smears was made. All remaining animals are included in the appendix.

When individual animal data are not reported, it may be due to one of the following reasons or other reasons, all of which are explained in the study records:

the sample was clotted (CLOT)
there was insufficient sample for testing (QNS)
a valid result could not be obtained (RNV)
the sample was not suitable for testing
the animal died prior to sample collection
no sample was available for testing (NSR)
not performed (NP)

Individual Animal Clinical Pathology Data for Rats

Male, Group IA - 0 mg/kg H-24921 - Day 14

Animal	ANIS	MIC	MAC	POLY	HYPO	ECHI	ACAN	TARG	RX	HJB	OTHR
108	-	-	-	-	-	-	Trace	-	-	-	
109	-	-	-	-	-	-	-	-	-	-	
110	-	-	-	-	-	-	-	-	-	-	

Male, Group IIIA - 0.3 mg/kg H-24921 - Day 14

Animal	ANIS	MIC	MAC	POLY	HYPO	ECHI	ACAN	TARG	RX	HJB	OTHR
307	-	-	-	-	-	-	-	-	-	-	
308	-	-	-	-	-	-	Trace	-	-	-	
309	-	-	-	-	-	-	-	-	-	-	
310	-	-	-	-	-	-	-	-	-	-	

Male, Group VA - 1 mg/kg H-24921 - Day 14

Animal	ANIS	MIC	MAC	POLY	HYPO	ECHI	ACAN	TARG	RX	HJB	OTHR
507	-	-	-	-	-	-	-	-	-	-	
508	-	-	-	-	-	-	-	-	-	-	
509	-	-	-	-	-	-	Trace	-	-	-	
510	-	-	-	-	-	-	-	-	-	-	

Individual Animal Clinical Pathology Data for Rats

Male, Group VIIA - 3 mg/kg H-24921 - Day 14

Animal	ANIS	MIC	MAC	POLY	HYPO	ECHI	ACAN	TARG	RX	HJB	OTHR
707	-	-	-	-	-	-	-	-	-	-	
708	-	-	-	-	-	-	Mod	-	-	-	
709	-	-	-	-	-	-	Trace	-	-	-	
710	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	

Male, Group IXA - 10 mg/kg H-24921 - Day 14

Animal	ANIS	MIC	MAC	POLY	HYPO	ECHI	ACAN	TARG	RX	HJB	OTHR
907	-	-	-	-	-	-	Few	-	-	-	
908	-	-	-	-	-	-	Trace	-	-	-	
909	-	-	-	-	-	-	Trace	-	-	-	
910	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	

Male, Group XIA - 30 mg/kg H-24921 - Day 14

Animal	ANIS	MIC	MAC	POLY	HYPO	ECHI	ACAN	TARG	RX	HJB	OTHR
1106	-	-	-	-	-	-	Few	-	-	-	
1107	-	-	-	Trace	-	-	Trace	-	-	-	
1108	-	-	-	-	-	-	-	-	-	-	
1109	Trace	Trace	-	-	-	-	Mod	-	-	-	SCH-TRACE; POIK-TRACE
1110	-	-	-	-	-	-	Trace	-	-	-	

Individual Animal Clinical Pathology Data for Rats

Male, Group IB - 0 mg/kg H-26313 - Day 14

Animal	ANIS	MIC	MAC	POLY	HYPO	ECHI	ACAN	TARG	RX	HJB	OTHR
101	-	-	-	-	-	-	-	-	-	-	
102	-	-	-	-	-	-	-	-	-	-	
103	-	-	-	-	-	-	-	-	-	-	
104	-	-	-	-	-	-	-	-	-	-	
105	-	-	-	-	-	-	-	-	-	-	
106	-	-	-	-	-	-	-	-	-	-	
107	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	
108	-	-	-	-	-	-	-	-	-	-	
109	-	-	-	-	-	-	Trace	-	-	-	
110	-	-	-	-	-	-	-	-	-	-	

Male, Group IIIB - 0.3 mg/kg H-26313 - Day 14

Animal	ANIS	MIC	MAC	POLY	HYPO	ECHI	ACAN	TARG	RX	HJB	OTHR
301	-	-	-	-	-	-	-	-	-	-	
302	-	-	-	-	-	-	-	-	-	-	
303	-	-	-	-	-	-	Trace	-	-	-	
304	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	
305	-	-	-	-	-	-	-	-	-	-	
306	-	-	-	-	-	-	-	-	-	-	
307	-	-	-	-	-	-	Trace	-	-	-	
308	-	-	-	-	-	-	-	-	-	-	
309	-	-	-	-	-	-	-	-	-	-	
310	-	-	-	-	-	-	-	-	-	-	

Individual Animal Clinical Pathology Data for Rats

Male, Group VB - 1 mg/kg H-26313 - Day 14

Animal	ANIS	MIC	MAC	POLY	HYPO	ECHI	ACAN	TARG	RX	HJB	OTHR
501	-	-	-	-	-	-	-	-	-	-	
502	-	-	-	-	-	-	-	-	-	-	
503	-	-	-	-	-	-	-	-	-	-	
504	-	-	-	-	-	-	Trace	-	-	-	
505	-	-	-	-	-	-	-	-	-	-	
506	-	-	-	-	-	-	Trace	-	-	-	
507	-	-	-	-	-	-	-	-	-	-	
508	-	-	-	-	-	-	-	-	-	-	
509	-	-	-	-	-	-	Trace	-	-	-	
510	-	-	-	-	-	-	Trace	-	-	-	

Male, Group VIIB - 3 mg/kg H-26313 - Day 14

Animal	ANIS	MIC	MAC	POLY	HYPO	ECHI	ACAN	TARG	RX	HJB	OTHR
701	-	-	-	-	-	-	-	-	-	-	
702	-	-	-	-	-	-	Trace	-	-	-	
703	-	-	-	-	-	-	Trace	-	-	-	
704	-	-	-	-	-	-	Trace	-	-	-	
705	-	-	-	-	-	-	-	-	-	-	
706	-	-	-	-	-	-	Trace	-	-	-	
707	-	-	-	-	-	-	-	-	-	-	
708	-	-	-	-	-	-	-	-	-	-	
709	-	-	-	-	-	-	Trace	-	-	-	POIK-TRACE
710	-	-	-	-	-	-	Trace	-	-	-	POIK-TRACE

Individual Animal Clinical Pathology Data for Rats

Male, Group IXB - 10 mg/kg H-26313 - Day 14

Animal	ANIS	MIC	MAC	POLY	HYPO	ECHI	ACAN	TARG	RX	HJB	OTHR
901	-	-	-	-	-	-	Trace	-	-	-	
902	-	-	-	-	-	-	-	-	-	-	
903	-	-	-	-	-	-	Few	-	-	-	POIK-TRACE
904	-	-	-	-	-	-	-	-	-	-	POIK-TRACE
905	-	-	-	-	-	-	Trace	-	-	-	POIK-TRACE
906	-	-	-	-	-	-	Few	-	-	-	POIK-TRACE
907	-	-	-	-	-	-	-	-	-	-	
908	-	-	-	-	-	-	Trace	-	-	-	POIK-TRACE
909	-	-	-	-	-	-	Few	-	-	-	POIK-TRACE
910	-	-	-	-	-	-	Few	-	-	-	POIK-TRACE

Male, Group XIB - 30 mg/kg H-26313 - Day 14

Animal	ANIS	MIC	MAC	POLY	HYPO	ECHI	ACAN	TARG	RX	HJB	OTHR
1101	-	-	-	-	-	-	Few	-	-	-	
1102	-	-	-	-	-	-	-	-	-	-	
1103	-	-	-	-	-	-	Few	-	-	-	POIK-TRACE
1104	-	-	-	-	-	-	-	-	-	-	
1105	-	-	-	-	-	-	-	-	-	-	
1106	-	-	-	-	-	-	Trace	-	-	-	POIK-TRACE
1107	-	-	-	-	-	-	Trace	-	-	-	
1108	-	-	-	-	-	-	Few	-	-	-	
1109	-	-	-	-	-	-	Few	-	-	-	POIK-TRACE
1110	-	-	-	-	-	-	Mod	-	-	-	POIK-TRACE

Individual Animal Clinical Pathology Data for Rats

Male, Group IC - 0 mg/kg H-26225 - Day 14

Animal	ANIS	MIC	MAC	POLY	HYPO	ECHI	ACAN	TARG	RX	HJB	OTHR
101	Trace	Trace	-	-	-	-	-	-	-	-	
102	-	-	-	-	-	-	-	-	-	-	
103	-	-	-	-	-	-	-	-	-	-	POIK-TRACE
104	-	-	-	-	-	-	Trace	-	-	-	
105	-	-	-	-	-	-	-	-	-	-	
106	-	-	-	-	-	-	-	-	-	-	
107	-	-	-	-	-	-	-	-	-	-	
108	-	-	-	-	-	-	-	-	-	-	
109	-	-	-	Trace	-	-	-	-	-	-	
110	-	-	-	-	-	-	-	-	-	-	

Male, Group IIIC - 0.3 mg/kg H-26225 - Day 14

Animal	ANIS	MIC	MAC	POLY	HYPO	ECHI	ACAN	TARG	RX	HJB	OTHR
301	-	-	-	-	-	-	-	-	-	-	
302	-	-	-	-	-	-	-	-	-	-	
303	-	-	-	-	-	-	Trace	-	-	-	
304	-	-	-	-	-	-	-	-	-	-	
305	-	-	-	-	-	-	Trace	-	-	-	
306	-	-	-	-	-	-	-	-	-	-	
307	-	-	-	-	-	-	-	-	-	-	
308	-	-	-	-	-	-	Trace	-	-	-	
309	-	-	-	-	-	-	Few	-	-	-	
310	-	-	-	-	-	-	-	-	-	-	

Individual Animal Clinical Pathology Data for Rats

Male, Group VC - 1 mg/kg H-26225 - Day 14

Animal	ANIS	MIC	MAC	POLY	HYPO	ECHI	ACAN	TARG	RX	HJB	OTHR
501	-	-	-	-	-	-	Trace	-	-	-	
502	-	-	-	-	-	-	Trace	-	-	-	
503	-	-	-	-	-	-	Trace	-	-	-	
504	-	-	-	-	-	-	Trace	-	-	-	POIK-TRACE
505	-	-	-	-	-	-	-	-	-	-	
506	-	-	-	-	-	-	Trace	-	-	-	
507	-	-	-	-	-	-	-	-	-	-	
508	-	-	-	-	-	-	-	-	-	-	
509	-	-	-	-	-	-	-	-	-	-	
510	-	-	-	-	-	-	Trace	-	-	-	

Male, Group VIC -3 mg/kg H-26225 - Day 14

Animal	ANIS	MIC	MAC	POLY	HYPO	ECHI	ACAN	TARG	RX	HJB	OTHR
701	-	-	-	-	-	-	Trace	-	-	-	
702	-	-	-	-	-	-	-	-	-	-	
703	-	-	-	-	-	-	Trace	-	-	-	
704	-	-	-	-	-	-	-	-	-	-	
705	-	-	-	-	-	-	-	-	-	-	
706	-	-	-	-	-	-	Trace	-	-	-	
707	-	-	-	-	-	-	-	-	-	-	
708	-	-	-	-	-	-	-	-	-	-	
709	-	-	-	-	-	-	Trace	-	-	-	
710	-	-	-	-	-	-	Trace	-	-	-	

Individual Animal Clinical Pathology Data for Rats

Male, Group IXC - 10 mg/kg H-26225 - Day 14

Animal	ANIS	MIC	MAC	POLY	HYPO	ECHI	ACAN	TARG	RX	HJB	OTHR
901	-	-	-	Trace	-	-	-	-	-	-	
902	-	-	-	-	-	-	-	-	-	-	POIK-TRACE
903	-	-	-	-	-	-	Trace	-	-	-	
904	-	-	-	-	-	-	Trace	-	-	-	
905	-	-	-	-	-	-	Trace	-	-	-	
906	-	-	-	-	-	-	-	-	-	-	
907	-	-	-	-	-	-	Trace	-	-	-	
908	-	-	-	-	-	-	Mod	-	-	-	
909	-	-	-	-	-	-	Few	-	-	-	
910	-	-	-	-	-	-	-	-	-	-	

Male, Group XIC - 30 mg/kg H-26225 - Day 14

Animal	ANIS	MIC	MAC	POLY	HYPO	ECHI	ACAN	TARG	RX	HJB	OTHR
1101	-	-	-	-	-	Mod	Mod	-	-	-	
1102	-	-	-	-	-	-	Trace	-	-	-	
1103	-	-	-	-	-	-	Few	-	-	-	SCH-TRACE
1104	-	-	-	-	-	-	Trace	-	-	-	
1105	-	-	-	-	-	-	Trace	-	-	-	POIK-TRACE
1106	-	-	-	-	-	-	Trace	-	-	-	
1107	-	-	-	-	-	-	-	-	-	-	
1108	-	-	-	-	-	-	Trace	-	-	-	
1109	-	-	-	-	-	-	Few	-	-	-	POIK-TRACE
1110	-	-	-	-	-	-	Few	-	-	-	POIK-TRACE

Individual Animal Clinical Pathology Data for Rats

Male, Group IA - 0 mg/kg H-24921 - Day 14

Animal	SHEM	SLIP	SICT	CHOL mg/dL	TRIG mg/dL	HDL mg/dL	nonHDL mg/dL
101	None	None	None	37	46	18	19
102	None	None	None	38	38	19	19
103	None	None	None	63	53	25	38
104	None	None	None	76	77	29	47
105	None	None	None	38	52	19	19
106	None	None	None	40	107	19	21
107	None	None	None	55	34	20	35
108	None	None	None	65	73	24	41
109	None	None	None	59	70	24	35
110	None	None	None	39	60	17	22

Male, Group IIIA - 0.3 mg/kg H-24921 - Day 14

Animal	SHEM	SLIP	SICT	CHOL mg/dL	TRIG mg/dL	HDL mg/dL	nonHDL mg/dL
301	None	None	None	38	41	15	23
302	None	None	None	74	33	29	45
303	None	None	None	33	43	16	17
304	None	None	None	36	58	17	19
305	None	None	None	57	42	25	32
306	None	None	None	38	52	18	20
307	None	None	None	52	70	22	30
308	None	None	None	56	48	23	33
309	None	None	None	56	60	23	33
310	None	None	None	46	63	20	26

Individual Animal Clinical Pathology Data for Rats

Male, Group VA - 1 mg/kg H-24921 - Day 14

Animal	SHEM	SLIP	SICT	CHOL mg/dL	TRIG mg/dL	HDL mg/dL	nonHDL mg/dL
501	None	None	None	42	35	19	23
502	None	None	None	27	29	15	12
503	None	None	None	26	32	15	11
504	None	None	None	30	58	16	14
505	None	None	None	24	31	13	11
506	None	None	None	25	26	13	12
507	None	None	None	26	29	15	11
508	None	None	None	48	40	19	29
509	None	None	None	48	66	22	26
510	None	None	None	36	58	16	20

Male, Group VIIA - 3 mg/kg H-24921 - Day 14

Animal	SHEM	SLIP	SICT	CHOL mg/dL	TRIG mg/dL	HDL mg/dL	nonHDL mg/dL
701	None	None	None	20	24	11	9
702	None	None	None	22	53	13	9
703	Trace	None	None	39	38	18	21
704	None	None	None	26	66	13	13
705	Trace	None	None	22	28	11	11
706	None	None	None	16	34	8	8
707	None	None	None	15	50	8	7
708	None	None	None	16	29	7	9
709	None	None	None	25	40	12	13
710	None	None	None	30	43	12	18

Individual Animal Clinical Pathology Data for Rats

Male, Group IXA - 10 mg/kg H-24921 - Day 14

Animal	SHEM	SLIP	SICT	CHOL mg/dL	TRIG mg/dL	HDL mg/dL	nonHDL mg/dL
901	Trace	None	None	30	31	12	18
902	Trace	None	None	30	34	14	16
903	Trace	None	None	28	38	10	18
904	Trace	None	None	19	21	10	9
905	None	None	None	23	31	12	11
906	Small	None	None	95	33	22	73
907	None	None	None	45	29	12	33
908	None	None	None	25	26	9	16
909	None	None	None	23	34	10	13
910	None	None	None	39	33	11	28

Male, Group XIA - 30 mg/kg H-24921 - Day 14

Animal	SHEM	SLIP	SICT	CHOL mg/dL	TRIG mg/dL	HDL mg/dL	nonHDL mg/dL
1101	Small	None	None	40	24	15	25
1102	Trace	None	None	47	38	15	32
1103	Trace	None	None	42	33	16	26
1104	Trace	None	None	36	32	13	23
1105	Trace	None	None	42	37	13	29
1106	None	None	None	49	46	18	31
1107	None	None	None	39	35	15	24
1108	None	None	None	34	34	10	24
1109	Trace	None	None	45	33	15	30
1110	None	None	None	31	50	12	19

Individual Animal Clinical Pathology Data for Rats

Male, Group IB - 0 mg/kg H-26313 - Day 14

Animal	SHEM	SLIP	SICT	CHOL mg/dL	TRIG mg/dL	HDL mg/dL	nonHDL mg/dL
101	None	None	None	46	38	20	26
102	None	None	None	40	58	20	20
103	None	None	None	47	54	22	25
104	None	None	None	64	67	27	37
105	None	None	None	37	53	16	21
106	None	None	None	53	54	22	31
107	None	None	None	38	44	17	21
108	None	None	None	28	50	12	16
109	None	None	None	43	71	17	26
110	None	None	None	50	41	21	29

Male, Group IIIB - 0.3 mg/kg H-26313 - Day 14

Animal	SHEM	SLIP	SICT	CHOL mg/dL	TRIG mg/dL	HDL mg/dL	nonHDL mg/dL
301	None	None	None	24	28	12	12
302	None	None	None	22	35	12	10
303	None	None	None	28	55	16	12
304	None	None	None	29	43	15	14
305	None	None	None	31	39	16	15
306	None	None	None	42	34	19	23
307	None	None	None	53	37	22	31
308	None	None	None	24	39	13	11
309	None	None	None	40	51	18	22
310	None	None	None	33	57	15	18

Individual Animal Clinical Pathology Data for Rats

Male, Group VB - 1 mg/kg H-26313 - Day 14

Animal	SHEM	SLIP	SICT	CHOL mg/dL	TRIG mg/dL	HDL mg/dL	nonHDL mg/dL
501	None	None	None	19	31	11	8
502	None	None	None	13	32	9	4
503	None	None	None	33	37	17	16
504	None	None	None	40	29	17	23
505	None	None	None	28	48	16	12
506	None	None	None	28	42	16	12
507	None	None	None	25	33	13	12
508	None	None	None	25	29	14	11
509	None	None	None	30	34	15	15
510	None	None	None	51	49	24	27

Male, Group VIIB - 3 mg/kg H-26313 - Day 14

Animal	SHEM	SLIP	SICT	CHOL mg/dL	TRIG mg/dL	HDL mg/dL	nonHDL mg/dL
701	None	None	None	23	30	12	11
702	None	None	None	23	32	13	10
703	None	None	None	17	33	9	8
704	None	None	None	33	44	15	18
705	Trace	None	None	25	31	10	15
706	None	None	None	27	40	12	15
707	Trace	None	None	25	30	10	15
708	None	None	None	28	42	12	16
709	None	None	None	20	33	9	11
710	None	None	None	24	60	11	13

Individual Animal Clinical Pathology Data for Rats

Male, Group IXB - 10 mg/kg H-26313 - Day 14

Animal	SHEM	SLIP	SICT	CHOL mg/dL	TRIG mg/dL	HDL mg/dL	nonHDL mg/dL
901	None	None	None	20	34	9	11
902	None	None	None	21	47	9	12
903	None	None	None	30	39	13	17
904	Trace	None	None	33	25	14	19
905	None	None	None	17	27	9	8
906	None	None	None	22	57	10	12
907	Trace	None	None	27	50	10	17
908	None	None	None	32	45	13	19
909	None	None	None	32	38	12	20
910	None	None	None	39	59	13	26

Male, Group XIB - 30 mg/kg H-26313 - Day 14

Animal	SHEM	SLIP	SICT	CHOL mg/dL	TRIG mg/dL	HDL mg/dL	nonHDL mg/dL
1101	None	None	None	50	57	17	33
1102	Trace	None	None	51	35	18	33
1103	None	None	None	67	29	22	45
1104	None	None	None	57	43	23	34
1105	Trace	None	None	32	39	10	22
1106	None	None	None	39	43	18	21
1107	None	None	None	31	50	14	17
1108	Trace	None	None	39	43	11	28
1109	None	None	None	21	40	8	13
1110	None	None	None	24	30	9	15

Individual Animal Clinical Pathology Data for Rats

Male, Group IC - 0 mg/kg H-26225 - Day 14

Animal	SHEM	SLIP	SICT	CHOL mg/dL	TRIG mg/dL	HDL mg/dL	nonHDL mg/dL
101	None	None	None	63	43	27	36
102	None	None	None	51	50	23	28
103	None	None	None	37	66	18	19
104	None	None	None	37	29	16	21
105	None	None	None	45	35	18	27
106	None	None	None	45	26	21	24
107	None	None	None	40	40	17	23
108	None	None	None	52	83	23	29
109	None	None	None	48	46	20	28
110	None	None	None	41	29	19	22

Male, Group IIIC - 0.3 mg/kg H-26225 - Day 14

Animal	SHEM	SLIP	SICT	CHOL mg/dL	TRIG mg/dL	HDL mg/dL	nonHDL mg/dL
301	None	None	None	34	42	16	18
302	None	None	None	36	43	17	19
303	None	None	None	49	66	19	30
304	None	None	None	39	23	18	21
305	None	None	None	44	42	21	23
306	None	None	None	39	23	19	20
307	None	None	None	51	56	21	30
308	None	None	None	46	43	19	27
309	None	None	None	32	56	15	17
310	None	None	None	45	57	20	25

Individual Animal Clinical Pathology Data for Rats

Male, Group VC - 1 mg/kg H-26225 - Day 14

Animal	SHEM	SLIP	SICT	CHOL mg/dL	TRIG mg/dL	HDL mg/dL	nonHDL mg/dL
501	None	None	None	36	33	16	20
502	None	None	None	33	35	18	15
503	None	None	None	27	37	14	13
504	None	None	None	34	34	18	16
505	None	None	None	32	22	17	15
506	None	None	None	25	40	13	12
507	Trace	None	None	57	76	26	31
508	None	None	None	46	49	19	27
509	None	None	None	38	44	18	20
510	None	None	None	30	31	15	15

Male, Group VIIC - 3 mg/kg H-26225 - Day 14

Animal	SHEM	SLIP	SICT	CHOL mg/dL	TRIG mg/dL	HDL mg/dL	nonHDL mg/dL
701	None	None	None	31	17	16	15
702	None	None	None	35	33	18	17
703	None	None	None	25	25	12	13
704	None	None	None	19	29	13	6
705	None	None	None	24	21	13	11
706	None	None	None	19	38	12	7
707	None	None	None	42	30	17	25
708	None	None	None	19	25	11	8
709	None	None	None	24	35	13	11
710	None	None	None	27	30	13	14

Individual Animal Clinical Pathology Data for Rats

Male, Group IXC - 10 mg/kg H-26225 - Day 14

Animal	SHEM	SLIP	SICT	CHOL mg/dL	TRIG mg/dL	HDL mg/dL	nonHDL mg/dL
901	None	None	None	35	35	18	17
902	None	None	None	34	37	16	18
903	None	None	None	17	20	10	7
904	None	None	None	22	29	12	10
905	Trace	None	None	11	18	8	3
906	None	None	None	30	28	15	15
907	Trace	None	None	20	14	10	10
908	None	None	None	27	23	14	13
909	None	None	None	43	27	18	25
910	None	None	None	21	18	11	10

Male, Group XIC - 30 mg/kg H-26225 - Day 14

Animal	SHEM	SLIP	SICT	CHOL mg/dL	TRIG mg/dL	HDL mg/dL	nonHDL mg/dL
1101	None	None	None	23	22	13	10
1102	None	None	None	36	25	17	19
1103	None	None	None	40	24	18	22
1104	None	None	None	37	24	18	19
1105	Trace	None	None	26	24	13	13
1106	None	None	None	36	28	16	20
1107	Trace	None	None	30	18	13	17
1108	None	None	None	28	27	13	15
1109	None	None	None	49	26	22	27
1110	None	None	None	39	20	16	23

Individual Animal Clinical Pathology Data for Rats

Male, Group IA - 0 mg/kg H-24921 - Day 14

Animal	HEM	LIP	ICT
101	Trace	None	None
102	None	None	None
103	None	None	None
104	None	None	None
105	None	None	None
106	Trace	None	None
107	None	None	None
108	None	None	None
109	None	None	None
110	None	None	None

Male, Group IIIA - 0.3 mg/kg H-24921 - Day 14

Animal	HEM	LIP	ICT
301	Trace	None	None
302	Trace	None	None
303	Trace	None	None
304	Trace	None	None
305	Trace	None	None
306	Trace	None	None
307	None	None	None
308	Trace	None	None
309	Trace	None	None
310	None	None	None

Individual Animal Clinical Pathology Data for Rats

Male, Group VA - 1 mg/kg H-24921 - Day 14

Animal	HEM	LIP	ICT
501	Trace	None	None
502	Trace	None	None
503	None	None	None
504	None	None	None
505	Trace	None	None
506	Trace	None	None
507	None	None	None
508	Trace	None	None
509	Trace	None	None
510	Trace	None	None

Male, Group VIIA - 3 mg/kg H-24921 - Day 14

Animal	HEM	LIP	ICT
701	Trace	None	None
702	None	None	None
703	Trace	None	None
704	None	None	None
705	Trace	None	None
706	Trace	None	None
707	None	None	None
708	Trace	None	None
709	Trace	None	None
710	Trace	None	None

Individual Animal Clinical Pathology Data for Rats

Male, Group IXA - 10 mg/kg H-24921 - Day 14

Animal	HEM	LIP	ICT
901	Small	None	None
902	Trace	None	None
903	Small	None	None
904	Moderate	None	None
905	Trace	None	None
906	Moderate	None	None
907	Small	None	None
908	Moderate	None	None
909	Small	None	None
910	Trace	None	None

Male, Group XIA - 30 mg/kg H-24921 - Day 14

Animal	HEM	LIP	ICT
1101	Moderate	None	None
1102	Moderate	None	None
1103	Small	None	None
1104	Moderate	None	None
1105	Small	None	None
1106	Small	None	None
1107	Moderate	None	None
1108	Trace	None	None
1109	Small	None	None
1110	None	None	None

Individual Animal Clinical Pathology Data for Rats

Male, Group IB - 0 mg/kg H-26313 - Day 14

Animal	HEM	LIP	ICT
101	None	None	None
102	None	None	None
103	None	None	None
104	None	None	None
105	None	None	None
106	None	None	None
107	None	None	None
108	Trace	None	None
109	Trace	None	None
110	None	None	None

Male, Group IIIB - 0.3 mg/kg H-26313 - Day 14

Animal	HEM	LIP	ICT
301	Trace	None	None
302	None	None	None
303	Trace	None	None
304	None	None	None
305	Trace	None	None
306	None	None	None
307	None	None	None
308	None	None	None
309	None	None	None
310	None	None	None

Individual Animal Clinical Pathology Data for Rats

Male, Group VB - 1 mg/kg H-26313 - Day 14

Animal	HEM	LIP	ICT
501	Trace	None	None
502	Trace	None	None
503	None	None	None
504	Trace	None	None
505	None	None	None
506	Trace	None	None
507	None	None	None
508	Trace	None	None
509	Trace	None	None
510	Trace	None	None

Male, Group VIIB - 3 mg/kg H-26313 - Day 14

Animal	HEM	LIP	ICT
701	Trace	None	None
702	Trace	None	None
703	Trace	None	None
704	Trace	None	None
705	Small	None	None
706	Trace	None	None
707	Trace	None	None
708	Trace	None	None
709	Trace	None	None
710	Trace	None	None

Individual Animal Clinical Pathology Data for Rats

Male, Group IXB - 10 mg/kg H-26313 - Day 14

Animal	HEM	LIP	ICT
901	Trace	None	None
902	Trace	None	None
903	Moderate	None	None
904	Small	None	None
905	Trace	None	None
906	None	None	None
907	Small	None	None
908	Trace	None	None
909	Trace	None	None
910	None	None	None

Male, Group XIB - 30 mg/kg H-26313 - Day 14

Animal	HEM	LIP	ICT
1101	Trace	None	None
1102	Small	None	None
1103	Small	None	None
1104	Small	None	None
1105	Moderate	None	None
1106	Trace	None	None
1107	Small	None	None
1108	Small	None	None
1109	Moderate	None	None
1110	Moderate	None	None

Individual Animal Clinical Pathology Data for Rats

Male, Group IC - 0 mg/kg H-26225 - Day 14

Animal	HEM	LIP	ICT
101	Trace	None	None
102	None	None	None
103	None	None	None
104	Trace	None	None
105	None	None	None
106	None	None	None
107	Trace	None	None
108	None	None	None
109	Trace	None	None
110	None	None	None

Male, Group IIIC - 0.3 mg/kg H-26225 - Day 14

Animal	HEM	LIP	ICT
301	Trace	None	None
302	Small	None	None
303	Trace	None	None
304	Trace	None	None
305	Trace	None	None
306	Trace	None	None
307	None	None	None
308	None	None	None
309	None	None	None
310	Trace	None	None

Individual Animal Clinical Pathology Data for Rats

Male, Group VC - 1 mg/kg H-26225 - Day 14

Animal	HEM	LIP	ICT
501	None	None	None
502	Trace	None	None
503	None	None	None
504	None	None	None
505	Trace	None	None
506	Trace	None	None
507	Trace	None	None
508	None	None	None
509	None	None	None
510	None	None	None

Male, Group VIIC - 3 mg/kg H-26225 - Day 14

Animal	HEM	LIP	ICT
701	Trace	None	None
702	Small	None	None
703	Trace	None	None
704	Trace	None	None
705	Trace	None	None
706	None	None	None
707	Small	None	None
708	Trace	None	None
709	Trace	None	None
710	None	None	None

Individual Animal Clinical Pathology Data for Rats

Male, Group IXC - 10 mg/kg H-26225 - Day 14

Animal	HEM	LIP	ICT
901	Trace	None	None
902	Trace	None	None
903	Trace	None	None
904	Small	None	None
905	Trace	None	None
906	Trace	None	None
907	Small	None	None
908	Moderate	None	None
909	Trace	None	None
910	None	None	None

Male, Group XIC - 30 mg/kg H-26225 - Day 14

Animal	HEM	LIP	ICT
1101	Small	None	None
1102	Trace	None	None
1103	Trace	None	None
1104	Small	None	None
1105	Trace	None	None
1106	Moderate	None	None
1107	Small	None	None
1108	Small	None	None
1109	None	None	None
1110	Trace	None	None

Appendix F
Individual Animal Body and Organ Weights for Rats

INDIVIDUAL ANIMAL FINAL BODY AND ORGAN WEIGHTS FOR RATS

EXPLANATORY NOTES

STUDY DESIGN

Groups			Dosage (mg/kg)
H-24921 APFO (Linear/Branched)	H-26313 APFO (Linear)	H-26225 APFO (Branched)	
IA	IB	IC	0 (Control)
IIIA	IIIB	IIIC	0.3
VA	VB	VC	1
VIIA	VIIB	VIIC	3
IXA	IXB	IXC	10
XIA	XIB	XIC	30

Abbreviations

mg/kg = mg/kg/day
FBW = Final Body Weight

Note

1025 = Rats

Organ Weight Listing
Study:15073 1025 A

Individual Animal & Summary Stats Report
PLACES 2000 v1.400

Group : IA 0 mg/kg Treatment : 0 mg/kg IA Sex :MALES

ANIMAL	FBW (Gms)	KIDNEYS (Gms)	KIDNEYS %FBW	LIVER (Gms)	LIVER %FBW
101	310.70	2.462	0.7924	8.251	2.6556
102	354.40	3.154	0.8900	12.025	3.3931
103	294.10	2.629	0.8939	10.247	3.4842
104	327.70	2.795	0.8529	11.603	3.5407
105	293.80	2.613	0.8894	9.985	3.3986
106	322.30	2.634	0.8173	10.253	3.1812
107	328.50	2.967	0.9032	11.246	3.4234
108	331.60	3.034	0.9150	13.241	3.9931
109	357.70	3.030	0.8471	14.506	4.0554
110	328.50	3.118	0.9492	10.471	3.1875
Mean	324.93	2.844	0.8750	11.183	3.4313
S.D.	21.471	0.247	0.0473	1.778	0.4008

Group : IIIA 0.3 mg/kg Treatment : 0.3 mg/kg IIIA Sex :MALES

ANIMAL	FBW (Gms)	KIDNEYS (Gms)	KIDNEYS %FBW	LIVER (Gms)	LIVER %FBW
301	323.80	2.691	0.8311	10.221	3.1566
302	335.50	2.977	0.8873	12.735	3.7958
303	303.70	2.521	0.8301	11.189	3.6842
304	312.90	2.745	0.8773	11.395	3.6417
305	301.70	2.340	0.7756	10.324	3.4219
306	312.80	2.797	0.8942	10.972	3.5077
307	330.10	2.810	0.8513	11.960	3.6231
308	323.30	3.067	0.9487	12.058	3.7297
309	313.80	2.822	0.8993	11.534	3.6756
310	332.50	2.796	0.8409	13.337	4.0111
Mean	319.01	2.757	0.8636	11.573	3.6248
S.D.	11.810	0.208	0.0481	0.988	0.2285

FBW - Final Body Weight

Organ Weight Listing
Study:15073 1025 A

Individual Animal & Summary Stats Report
PLACES 2000 v1.400

Group : VA 1 mg/kg Treatment : 1 mg/kg VA Sex :MALES

ANIMAL	FBW (Gms)	KIDNEYS (Gms)	KIDNEYS %FBW	LIVER (Gms)	LIVER %FBW
501	327.00	2.958	0.9046	12.546	3.8367
502	324.50	2.833	0.8730	13.151	4.0527
503	306.90	2.846	0.9273	12.193	3.9730
504	321.00	2.846	0.8866	11.304	3.5215
505	292.50	2.358	0.8062	10.945	3.7419
506	318.00	3.041	0.9563	12.763	4.0135
507	327.60	3.028	0.9243	13.839	4.2244
508	349.40	3.585	1.0260	13.954	3.9937
509	339.60	2.656	0.7821	13.351	3.9314
510	321.30	2.940	0.9150	13.150	4.0927
Mean	322.78	2.909	0.9001	12.720	3.9381
S.D.	15.751	0.311	0.0701	1.001	0.1976

Group : VIIA 3 mg/kg Treatment : 3 mg/kg VIIA Sex :MALES

ANIMAL	FBW (Gms)	KIDNEYS (Gms)	KIDNEYS %FBW	LIVER (Gms)	LIVER %FBW
701	317.00	3.290	1.0379	16.222	5.1174
702	357.10	3.250	0.9101	18.230	5.1050
703	318.90	2.929	0.9185	17.227	5.4020
704	392.30	3.514	0.8957	23.449	5.9773
705	315.60	2.737	0.8672	17.220	5.4563
706	317.90	3.341	1.0510	17.338	5.4539
707	329.20	3.267	0.9924	18.886	5.7369
708	308.30	2.981	0.9669	16.565	5.3730
709	325.50	3.153	0.9687	19.258	5.9164
710	316.00	2.977	0.9421	14.851	4.6997
Mean	329.78	3.144	0.9550	17.925	5.4238
S.D.	25.710	0.233	0.0601	2.329	0.3904

FBW - Final Body Weight

Organ Weight Listing
Study:15073 1025 A

Individual Animal & Summary Stats Report
PLACES 2000 v1.400

Group : IXA 10 mg/kg Treatment : 10 mg/kg IXA Sex :MALES

ANIMAL	FBW (Gms)	KIDNEYS (Gms)	KIDNEYS %FBW	LIVER (Gms)	LIVER %FBW
901	285.50	2.733	0.9573	15.544	5.4445
902	333.50	2.869	0.8603	17.737	5.3184
903	241.90	2.351	0.9719	14.930	6.1720
904	318.50	2.651	0.8323	14.680	4.6091
905	278.00	2.303	0.8284	15.669	5.6363
906	241.60	2.235	0.9251	14.302	5.9197
907	323.00	3.059	0.9471	17.183	5.3198
908	281.40	2.775	0.9861	16.646	5.9154
909	317.10	2.704	0.8527	20.082	6.3330
910	266.60	2.501	0.9381	16.134	6.0518
Mean	288.71	2.618	0.9099	16.291	5.6720
S.D.	33.255	0.266	0.0603	1.724	0.5146

Group : XIA 30 mg/kg Treatment : 30 mg/kg XIA Sex :MALES

ANIMAL	FBW (Gms)	KIDNEYS (Gms)	KIDNEYS %FBW	LIVER (Gms)	LIVER %FBW
1101	255.90	NW		NW	
1102	253.30	2.276	0.8985	18.737	7.3972
1103	256.40	2.331	0.9091	16.320	6.3651
1104	249.40	2.369	0.9499	15.230	6.1067
1105	259.70	2.457	0.9461	15.890	6.1186
1106	266.40	2.515	0.9441	19.311	7.2489
1107	245.10	2.473	1.0090	17.482	7.1326
1108	280.40	2.511	0.8955	18.817	6.7108
1109	252.80	2.925	1.1570	19.304	7.6361
1110	269.20	2.588	0.9614	17.905	6.6512
Mean	258.86	2.494	0.9634	17.666	6.8186
S.D.	10.487	0.189	0.0808	1.535	0.5622

*** Listing Complete ***

NW - Not Weighed
FBW - Final Body Weight

Organ Weight Listing — Individual Animal & Summary Stats Report
Study:15073 1025 B — PLACES 2000 v1.400

Group : IB 0 mg/kg Treatment : 0 mg/kg IB Sex :MALES

ANIMAL	FBW (Gms)	KIDNEYS (Gms)	KIDNEYS %FBW	LIVER (Gms)	LIVER %FBW
101	331.40	2.690	0.8117	11.345	3.4234
102	318.40	2.924	0.9183	12.960	4.0704
103	348.30	3.147	0.9035	12.234	3.5125
104	343.50	3.060	0.8908	12.030	3.5022
105	334.90	2.584	0.7716	10.798	3.2242
106	320.40	2.822	0.8808	14.126	4.4089
107	324.90	2.645	0.8141	11.287	3.4740
108	322.50	2.558	0.7932	11.493	3.5637
109	353.20	3.259	0.9227	12.377	3.5042
110	337.10	3.203	0.9502	12.239	3.6307
Mean	333.46	2.889	0.8657	12.089	3.6314
S.D.	12.115	0.266	0.0625	0.958	0.3468

Group : IIIB 0.3 mg/kg Treatment : 0.3 mg/kg IIIB Sex :MALES

ANIMAL	FBW (Gms)	KIDNEYS (Gms)	KIDNEYS %FBW	LIVER (Gms)	LIVER %FBW
301	286.10	2.184	0.7634	10.111	3.5341
302	306.00	1.327	0.4337	11.811	3.8598
303	338.00	2.951	0.8731	13.322	3.9414
304	325.90	2.852	0.8751	12.330	3.7834
305	342.30	3.355	0.9801	13.143	3.8396
306	310.00	2.602	0.8394	12.121	3.9100
307	346.00	3.091	0.8934	13.568	3.9214
308	319.90	2.737	0.8556	12.061	3.7702
309	334.70	3.064	0.9154	13.246	3.9576
310	338.80	3.070	0.9061	13.676	4.0366
Mean	324.77	2.723	0.8335	12.539	3.8554
S.D.	19.205	0.586	0.1512	1.090	0.1390

FBW - Final Body Weight

Organ Weight Listing
Study:15073 1025 B

Individual Animal & Summary Stats Report
PLACES 2000 v1.400

Group : VB 1 mg/kg Treatment : 1 mg/kg VB Sex :MALES

ANIMAL	FBW (Gms)	KIDNEYS (Gms)	KIDNEYS %FBW	LIVER (Gms)	LIVER %FBW
501	292.10	2.634	0.9017	10.663	3.6505
502	268.00	2.878	1.0739	11.023	4.1131
503	327.50	2.772	0.8464	12.679	3.8715
504	330.90	2.837	0.8574	14.022	4.2375
505	371.50	3.138	0.8447	17.696	4.7634
506	347.80	3.091	0.8887	15.895	4.5702
507	297.40	2.782	0.9354	12.058	4.0545
508	319.20	2.650	0.8302	12.318	3.8590
509	347.10	2.860	0.8240	14.022	4.0398
510	332.20	2.656	0.7995	13.728	4.1325
Mean	323.37	2.830	0.8802	13.410	4.1292
S.D.	30.484	0.174	0.0790	2.165	0.3318

Group : VIIB 3 mg/kg Treatment : 3 mg/kg VIIB Sex :MALES

ANIMAL	FBW (Gms)	KIDNEYS (Gms)	KIDNEYS %FBW	LIVER (Gms)	LIVER %FBW
701	299.20	2.785	0.9308	14.578	4.8723
702	297.00	2.970	1.0000	13.363	4.4993
703	305.50	2.497	0.8173	14.185	4.6432
704	336.60	3.236	0.9614	17.154	5.0963
705	312.80	2.689	0.8597	15.044	4.8095
706	308.10	3.058	0.9925	15.874	5.1522
707	322.80	2.931	0.9080	16.441	5.0932
708	310.90	2.861	0.9202	15.870	5.1045
709	330.50	3.347	1.0127	16.721	5.0593
710	292.30	2.435	0.8330	14.937	5.1102
Mean	311.57	2.881	0.9236	15.417	4.9440
S.D.	14.524	0.294	0.0698	1.201	0.2278

FBW - Final Body Weight

Organ Weight Listing
Study:15073 1025 B

Individual Animal & Summary Stats Report
PLACES 2000 v1.400

Group : IXB 10 mg/kg Treatment : 10 mg/kg IXB Sex :MALES

ANIMAL	FBW (Gms)	KIDNEYS (Gms)	KIDNEYS %FBW	LIVER (Gms)	LIVER %FBW
901	337.50	3.228	0.9564	19.971	5.9173
902	296.70	2.905	0.9791	17.937	6.0455
903	288.00	2.783	0.9663	17.977	6.2420
904	300.20	3.045	1.0143	17.369	5.7858
905	309.60	2.911	0.9402	17.043	5.5048
906	318.40	2.993	0.9400	19.541	6.1372
907	298.60	2.808	0.9404	17.466	5.8493
908	315.40	2.556	0.8104	20.760	6.5821
909	316.60	2.782	0.8787	17.408	5.4984
910	337.50	3.357	0.9947	22.658	6.7135
Mean	311.85	2.937	0.9421	18.813	6.0276
S.D.	16.695	0.233	0.0592	1.853	0.4072

Group : XIB 30 mg/kg Treatment : 30 mg/kg XIB Sex :MALES

ANIMAL	FBW (Gms)	KIDNEYS (Gms)	KIDNEYS %FBW	LIVER (Gms)	LIVER %FBW
1101	247.80	2.459	0.9923	16.723	6.7486
1102	226.70	2.264	0.9987	16.351	7.2126
1103	257.50	2.407	0.9348	17.577	6.8260
1104	252.50	2.430	0.9624	17.379	6.8828
1105	266.10	2.586	0.9718	18.471	6.9414
1106	257.00	1.991	0.7747	13.903	5.4097
1107	258.60	2.332	0.9018	17.418	6.7355
1108	261.20	2.517	0.9636	17.806	6.8170
1109	296.00	2.637	0.8909	19.815	6.6943
1110	303.90	2.565	0.8440	18.700	6.1533
Mean	262.73	2.419	0.9235	17.414	6.6421
S.D.	22.407	0.189	0.0715	1.586	0.5075

*** Listing Complete ***

FBW - Final Body Weight

Organ Weight Listing
Study:15073 1025 C

Individual Animal & Summary Stats Report
PLACES 2000 v1.400

Group : IC 0 mg/kg Treatment : 0 mg/kg IC Sex :MALES

ANIMAL	FBW (Gms)	KIDNEYS (Gms)	KIDNEYS %FBW	LIVER (Gms)	LIVER %FBW
101	339.10	2.660	0.7844	10.913	3.2182
102	325.60	2.666	0.8188	10.659	3.2736
103	353.50	2.782	0.7870	13.563	3.8368
104	334.10	2.760	0.8261	13.134	3.9312
105	311.50	2.550	0.8186	10.262	3.2944
106	362.10	2.866	0.7915	11.369	3.1397
107	308.20	2.657	0.8621	9.440	3.0629
108	302.20	2.115	0.6999	10.025	3.3173
109	340.10	3.067	0.9018	11.724	3.4472
110	291.30	2.194	0.7532	9.399	3.2266
Mean	326.77	2.632	0.8043	11.049	3.3748
S.D.	23.064	0.289	0.0559	1.429	0.2881

Group : IIIC 0.3 mg/kg Treatment : 0.3 mg/kg IIIC Sex :MALES

ANIMAL	FBW (Gms)	KIDNEYS (Gms)	KIDNEYS %FBW	LIVER (Gms)	LIVER %FBW
301	331.10	2.464	0.7442	11.198	3.3821
302	313.10	2.905	0.9278	12.033	3.8432
303	378.60	3.174	0.8384	14.810	3.9118
304	298.00	2.440	0.8188	11.747	3.9419
305	352.70	3.265	0.9257	12.035	3.4122
306	306.20	2.386	0.7792	9.481	3.0963
307	361.90	2.836	0.7836	13.248	3.6607
308	316.90	2.378	0.7504	11.236	3.5456
309	326.60	2.879	0.8815	11.568	3.5419
310	290.50	2.419	0.8327	9.971	3.4324
Mean	327.56	2.715	0.8282	11.733	3.5768
S.D.	28.783	0.340	0.0667	1.516	0.2672

FBW - Final Body Weight

Organ Weight Listing — Individual Animal & Summary Stats Report
Study:15073 1025 C — PLACES 2000 v1.400

Group : VC 1 mg/kg Treatment : 1 mg/kg VC Sex :MALES

ANIMAL	FBW (Gms)	KIDNEYS (Gms)	KIDNEYS %FBW	LIVER (Gms)	LIVER %FBW
501	329.50	2.666	0.8091	11.549	3.5050
502	333.90	2.978	0.8919	14.688	4.3989
503	330.20	2.788	0.8443	12.814	3.8807
504	316.30	2.583	0.8166	12.358	3.9071
505	321.20	2.339	0.7282	12.602	3.9234
506	329.80	2.605	0.7899	11.059	3.3532
507	410.30	3.357	0.8182	16.665	4.0617
508	312.90	2.552	0.8156	11.399	3.6430
509	342.20	2.896	0.8463	14.074	4.1128
510	331.70	3.162	0.9533	14.177	4.2740
Mean	335.80	2.793	0.8313	13.139	3.9060
S.D.	27.561	0.309	0.0600	1.753	0.3303

Group : VIIC 3 mg/kg Treatment : 3 mg/kg VIIC Sex :MALES

ANIMAL	FBW (Gms)	KIDNEYS (Gms)	KIDNEYS %FBW	LIVER (Gms)	LIVER %FBW
701	331.30	3.113	0.9396	16.405	4.9517
702	323.60	2.743	0.8477	14.858	4.5915
703	313.80	2.704	0.8617	13.346	4.2530
704	275.50	2.388	0.8668	13.492	4.8973
705	321.60	2.358	0.7332	13.427	4.1751
706	324.40	2.507	0.7728	11.964	3.6880
707	316.10	2.693	0.8519	13.271	4.1984
708	334.40	3.080	0.9211	14.440	4.3182
709	328.50	2.785	0.8478	15.160	4.6149
710	313.50	2.654	0.8466	13.879	4.4271
Mean	318.27	2.703	0.8489	14.024	4.4115
S.D.	16.628	0.253	0.0607	1.236	0.3742

FBW - Final Body Weight

Organ Weight Listing
Study:15073 1025 C

Individual Animal & Summary Stats Report
PLACES 2000 v1.400

Group : IXC 10 mg/kg Treatment : 10 mg/kg IXC Sex :MALES

ANIMAL	FBW (Gms)	KIDNEYS (Gms)	KIDNEYS %FBW	LIVER (Gms)	LIVER %FBW
901	349.90	3.031	0.8662	21.150	6.0446
902	324.00	3.133	0.9670	19.557	6.0361
903	307.50	2.596	0.8442	16.421	5.3402
904	321.60	2.665	0.8287	21.062	6.5491
905	302.90	2.787	0.9201	14.927	4.9280
906	333.50	3.068	0.9199	18.361	5.5055
907	323.00	2.767	0.8567	15.425	4.7755
908	301.90	2.323	0.7695	15.340	5.0812
909	319.90	2.782	0.8696	21.646	6.7665
910	324.00	3.193	0.9855	21.644	6.6802
Mean	320.82	2.835	0.8827	18.553	5.7707
S.D.	14.489	0.272	0.0657	2.809	0.7455

Group : XIC 30 mg/kg Treatment : 30 mg/kg XIC Sex :MALES

ANIMAL	FBW (Gms)	KIDNEYS (Gms)	KIDNEYS %FBW	LIVER (Gms)	LIVER %FBW
1101	302.20	2.419	0.8005	17.853	5.9077
1102	307.60	2.769	0.9002	22.471	7.3053
1103	334.70	2.908	0.8688	22.453	6.7084
1104	299.70	2.576	0.8595	18.502	6.1735
1105	290.90	2.717	0.9340	14.825	5.0963
1106	308.00	2.449	0.7951	22.759	7.3893
1107	331.70	3.089	0.9313	19.202	5.7890
1108	310.40	2.876	0.9265	19.875	6.4030
1109	327.00	2.745	0.8394	22.138	6.7700
1110	295.70	2.657	0.8985	18.080	6.1143
Mean	310.79	2.721	0.8754	19.816	6.3657
S.D.	15.311	0.208	0.0516	2.623	0.7045

*** Listing Complete ***

FBW - Final Body Weight

Appendix G
Individual Animal Gross Observations for Rats

INDIVIDUAL ANIMAL GROSS OBSERVATIONS FOR RATS

EXPLANATORY NOTES

STUDY DESIGN

Groups			Dosage (mg/kg)
H-24921 APFO (Linear/Branched)	H-26313 APFO (Linear)	H-26225 APFO (Branched)	
IA	IB	IC	0 (Control)
IIIA	IIIB	IIIC	0.3
VA	VB	VC	1
VIIA	VIIB	VIIC	3
IXA	IXB	IXC	10
XIA	XIB	XIC	30

Abbreviation

mg/kg = mg/kg/day

Note

1025 = Rats

Date:21-JUN-04

Individual Animal Listing
Showing animal data for individual animals
STUDY : 15073 1025 A (* APPROVED PROTOCOL *)
Dose Group : IA 0 mg/kg Treatment: 0 mg/kg IA Sex: Males

Animal Ref	Macroscopic Findings Only
101	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
102	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
103	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
104	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
105	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS

Date:21-JUN-04

Individual Animal Listing
Showing animal data for individual animals
STUDY : 15073 1025 A (* APPROVED PROTOCOL *)
Dose Group : IA 0 mg/kg Treatment: 0 mg/kg IA Sex: Males

Animal Ref	Macroscopic Findings Only
106	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
107	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
108	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
109	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
110	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS

Date:21-JUN-04

Individual Animal Listing
Showing animal data for individual animals
STUDY : 15073 1025 A (* APPROVED PROTOCOL *)
Dose Group : IIIA 0.3 mg/kg Treatment: 0.3 mg/kg IIIA Sex: Males

Animal Ref	Macroscopic Findings Only
301	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
302	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
303	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
304	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
305	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS

Date:21-JUN-04

Individual Animal Listing
Showing animal data for individual animals
STUDY : 15073 1025 A (* APPROVED PROTOCOL *)
Dose Group : IIIA 0.3 mg/kg Treatment: 0.3 mg/kg IIIA Sex: Males

Animal Ref	Macroscopic Findings Only
306	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
307	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
308	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
309	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
310	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS

Date:21-JUN-04

Individual Animal Listing
Showing animal data for individual animals
STUDY : 15073 1025 A (* APPROVED PROTOCOL *)
Dose Group : VA 1 mg/kg Treatment: 1 mg/kg VA Sex: Males

Animal Ref	Macroscopic Findings Only
501	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
502	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
503	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
504	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
505	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS

Date:21-JUN-04

Individual Animal Listing
Showing animal data for individual animals
STUDY : 15073 1025 A (* APPROVED PROTOCOL *)
Dose Group : VA 1 mg/kg Treatment: 1 mg/kg VA Sex: Males

Animal Ref	Macroscopic Findings Only
506	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
507	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
508	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
509	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
510	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS

Date:21-JUN-04

Individual Animal Listing
Showing animal data for individual animals
STUDY : 15073 1025 A (* APPROVED PROTOCOL *)
Dose Group : VIIA 3 mg/kg Treatment: 3 mg/kg VIIA Sex: Males

Animal Ref	Macroscopic Findings Only
701	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
702	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
703	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
704	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
705	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS

Date:21-JUN-04

Individual Animal Listing
Showing animal data for individual animals
STUDY : 15073 1025 A (* APPROVED PROTOCOL *)
Dose Group : VIIA 3 mg/kg Treatment: 3 mg/kg VIIA Sex: Males

Animal Ref	Macroscopic Findings Only
706	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
707	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
708	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
709	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
710	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS

Date:21-JUN-04

Individual Animal Listing
Showing animal data for individual animals
STUDY : 15073 1025 A (* APPROVED PROTOCOL *)
Dose Group : IXA 10 mg/kg Treatment: 10 mg/kg IXA Sex: Males

Animal Ref	Macroscopic Findings Only
901	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
902	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
903	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
904	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
905	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS

Date:21-JUN-04

Individual Animal Listing
Showing animal data for individual animals
STUDY : 15073 1025 A (* APPROVED PROTOCOL *)
Dose Group : IXA 10 mg/kg Treatment: 10 mg/kg IXA Sex: Males

Animal Ref	Macroscopic Findings Only
906	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
907	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
908	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
909	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy LIVER : DISCOLORATION, TAN, MIDDLE. No Macroscopic Abnormality Observed : KIDNEYS
910	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS

Date:21-JUN-04

Individual Animal Listing
Showing animal data for individual animals
STUDY : 15073 1025 A (* APPROVED PROTOCOL *)
Dose Group : XIA 30 mg/kg Treatment: 30 mg/kg XIA Sex: Males

Animal Ref	Macroscopic Findings Only
1101	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
1102	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy LIVER : DISCOLORATION, TAN, MIDDLE. No Macroscopic Abnormality Observed : KIDNEYS
1103	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
1104	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
1105	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS

Date:21-JUN-04

Individual Animal Listing
Showing animal data for individual animals
STUDY : 15073 1025 A (* APPROVED PROTOCOL *)
Dose Group : XIA 30 mg/kg Treatment: 30 mg/kg XIA Sex: Males

Animal Ref	Macroscopic Findings Only
1106	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
1107	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
1108	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
1109	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
1110	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS

*** Listing Complete ***

Date:21-JUN-04

Individual Animal Listing
Showing animal data for individual animals
STUDY : 15073 1025 B (* APPROVED PROTOCOL *)
Dose Group : IB 0 mg/kg Treatment: 0 mg/kg IB Sex: Males

Animal Ref	Macroscopic Findings Only
101	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy
	No Macroscopic Abnormality Observed : LIVER, KIDNEYS
102	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy
	No Macroscopic Abnormality Observed : LIVER, KIDNEYS
103	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy
	No Macroscopic Abnormality Observed : LIVER, KIDNEYS
104	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy
	No Macroscopic Abnormality Observed : LIVER, KIDNEYS
105	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy
	No Macroscopic Abnormality Observed : LIVER, KIDNEYS

Date:21-JUN-04

Individual Animal Listing
Showing animal data for individual animals

STUDY : 15073 1025 B (* APPROVED PROTOCOL *)
Dose Group : IB 0 mg/kg Treatment: 0 mg/kg IB Sex: Males

Animal Ref	Macroscopic Findings Only
106	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
107	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
108	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
109	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
110	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS

Date:21-JUN-04

Individual Animal Listing
Showing animal data for individual animals
STUDY : 15073 1025 B (* APPROVED PROTOCOL *)
Dose Group : IIIB 0.3 mg/kg Treatment: 0.3 mg/kg IIIB Sex: Males

Animal Ref	Macroscopic Findings Only
301	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
302	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
303	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
304	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
305	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS

Date:21-JUN-04

Individual Animal Listing
Showing animal data for individual animals
STUDY : 15073 1025 B (* APPROVED PROTOCOL *)
Dose Group : IIIB 0.3 mg/kg Treatment: 0.3 mg/kg IIIB Sex: Males

Animal Ref	Macroscopic Findings Only
306	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
307	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
308	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
309	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
310	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS

Date:21-JUN-04

Individual Animal Listing
Showing animal data for individual animals
STUDY : 15073 1025 B (* APPROVED PROTOCOL *)
Dose Group : VB 1 mg/kg Treatment: 1 mg/kg VB Sex: Males

Animal Ref	Macroscopic Findings Only
501	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
502	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
503	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
504	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
505	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS

Date:21-JUN-04

Individual Animal Listing
Showing animal data for individual animals
STUDY : 15073 1025 B (* APPROVED PROTOCOL *)
Dose Group : VB 1 mg/kg Treatment: 1 mg/kg VB Sex: Males

Animal Ref	Macroscopic Findings Only
506	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
507	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
508	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
509	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
510	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS

Date:21-JUN-04

Individual Animal Listing
Showing animal data for individual animals
STUDY : 15073 1025 B (* APPROVED PROTOCOL *)
Dose Group : VIIB 3 mg/kg Treatment: 3 mg/kg VIIB Sex: Males

Animal Ref	Macroscopic Findings Only
701	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
702	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
703	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
704	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
705	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS

Date:21-JUN-04

Individual Animal Listing
Showing animal data for individual animals
STUDY : 15073 1025 B (* APPROVED PROTOCOL *)
Dose Group : VIIB 3 mg/kg Treatment: 3 mg/kg VIIB Sex: Males

Animal Ref	Macroscopic Findings Only
706	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
707	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
708	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
709	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
710	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS

Date:21-JUN-04

Individual Animal Listing
Showing animal data for individual animals
STUDY : 15073 1025 B (* APPROVED PROTOCOL *)
Dose Group : IXB 10 mg/kg Treatment: 10 mg/kg IXB Sex: Males

Animal Ref	Macroscopic Findings Only
901	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
902	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
903	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
904	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
905	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS

Date:21-JUN-04

Individual Animal Listing
Showing animal data for individual animals
STUDY : 15073 1025 B (* APPROVED PROTOCOL *)
Dose Group : IXB 10 mg/kg Treatment: 10 mg/kg IXB Sex: Males

Animal Ref	Macroscopic Findings Only
906	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
907	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
908	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy LIVER : DISCOLORATION, TAN, MOTTLED. No Macroscopic Abnormality Observed : KIDNEYS
909	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
910	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS

Date:21-JUN-04

Individual Animal Listing
Showing animal data for individual animals
STUDY : 15073 1025 B (* APPROVED PROTOCOL *)
Dose Group : XIB 30 mg/kg Treatment: 30 mg/kg XIB Sex: Males

Animal Ref	Macroscopic Findings Only
1101	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
1102	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
1103	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
1104	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
1105	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS

Date:21-JUN-04

Individual Animal Listing
Showing animal data for individual animals

STUDY : 15073 1025 B (* APPROVED PROTOCOL *)
Dose Group : XIB 30 mg/kg Treatment: 30 mg/kg XIB Sex: Males

Animal Ref	Macroscopic Findings Only
1106	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
1107	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
1108	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
1109	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
1110	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS

*** Listing Complete ***

Date:21-JUN-04

Individual Animal Listing
Showing animal data for individual animals
STUDY : 15073 1025 C (* APPROVED PROTOCOL *)
Dose Group : IC 0 mg/kg Treatment: 0 mg/kg IC Sex: Males

Animal Ref	Macroscopic Findings Only
101	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
102	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
103	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
104	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
105	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS

Date:21-JUN-04

Individual Animal Listing
Showing animal data for individual animals

STUDY : 15073 1025 C (* APPROVED PROTOCOL *)
Dose Group : IC 0 mg/kg Treatment: 0 mg/kg IC Sex: Males

Animal Ref	Macroscopic Findings Only
106	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
107	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
108	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
109	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
110	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS

Date:21-JUN-04

Individual Animal Listing
Showing animal data for individual animals
STUDY : 15073 1025 C (* APPROVED PROTOCOL *)
Dose Group : IIIC 0.3 mg/kg Treatment: 0.3 mg/kg IIIC Sex: Males

Animal Ref	Macroscopic Findings Only
301	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
302	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
303	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
304	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
305	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS

Date:21-JUN-04

Individual Animal Listing
Showing animal data for individual animals

STUDY : 15073 1025 C (* APPROVED PROTOCOL *)
Dose Group : IIIC 0.3 mg/kg Treatment: 0.3 mg/kg IIIC Sex: Males

Animal Ref	Macroscopic Findings Only
306	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
307	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
308	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
309	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
310	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS

Date:21-JUN-04

Individual Animal Listing
Showing animal data for individual animals
STUDY : 15073 1025 C (* APPROVED PROTOCOL *)
Dose Group : VC 1 mg/kg Treatment: 1 mg/kg VC Sex: Males

Animal Ref	Macroscopic Findings Only
501	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy
	No Macroscopic Abnormality Observed : LIVER, KIDNEYS
502	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy
	No Macroscopic Abnormality Observed : LIVER, KIDNEYS
503	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy
	No Macroscopic Abnormality Observed : LIVER, KIDNEYS
504	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy
	No Macroscopic Abnormality Observed : LIVER, KIDNEYS
505	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy
	No Macroscopic Abnormality Observed : LIVER, KIDNEYS

Date:21-JUN-04

Individual Animal Listing
Showing animal data for individual animals
STUDY : 15073 1025 C (* APPROVED PROTOCOL *)
Dose Group : VC 1 mg/kg Treatment: 1 mg/kg VC Sex: Males

Animal Ref	Macroscopic Findings Only
506	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
507	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
508	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
509	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
510	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS

Date:21-JUN-04

Individual Animal Listing
Showing animal data for individual animals
STUDY : 15073 1025 C (* APPROVED PROTOCOL *)
Dose Group : VIIC 3 mg/kg Treatment: 3 mg/kg VIIC Sex: Males

Animal Ref	Macroscopic Findings Only
701	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
702	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
703	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
704	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
705	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS

Date:21-JUN-04

Individual Animal Listing
Showing animal data for individual animals
STUDY : 15073 1025 C (* APPROVED PROTOCOL *)
Dose Group : VIIC 3 mg/kg Treatment: 3 mg/kg VIIC Sex: Males

Animal Ref	Macroscopic Findings Only
706	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
707	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
708	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
709	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
710	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS

Date:21-JUN-04

Individual Animal Listing
Showing animal data for individual animals
STUDY : 15073 1025 C (* APPROVED PROTOCOL *)
Dose Group : IXC 10 mg/kg Treatment: 10 mg/kg IXC Sex: Males

Animal Ref	Macroscopic Findings Only
901	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
902	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
903	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
904	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
905	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS

Date:21-JUN-04

Individual Animal Listing
Showing animal data for individual animals
STUDY : 15073 1025 C (* APPROVED PROTOCOL *)
Dose Group : IXC 10 mg/kg Treatment: 10 mg/kg IXC Sex: Males

Animal Ref	Macroscopic Findings Only
906	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
907	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
908	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
909	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
910	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS

Date:21-JUN-04

Individual Animal Listing
Showing animal data for individual animals
STUDY : 15073 1025 C (* APPROVED PROTOCOL *)
Dose Group : XIC 30 mg/kg Treatment: 30 mg/kg XIC Sex: Males

Animal Ref	Macroscopic Findings Only
1101	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
1102	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
1103	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
1104	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
1105	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS

Date:21-JUN-04

Individual Animal Listing
Showing animal data for individual animals
STUDY : 15073 1025 C (* APPROVED PROTOCOL *)
Dose Group : XIC 30 mg/kg Treatment: 30 mg/kg XIC Sex: Males

Animal Ref	Macroscopic Findings Only
1106	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy LIVER : DISCOLORATION, TAN, MOTTLED. No Macroscopic Abnormality Observed : KIDNEYS
1107	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
1108	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
1109	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
1110	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS

*** Listing Complete ***

Appendix H
Individual Rat Beta-Oxidation Data

INDIVIDUAL RAT BETA-OXIDATION DATA

EXPLANATORY NOTES

STUDY DESIGN

Groups			Dosage (mg/kg)
H-24921 APFO (Linear/Branched)	H-26313 APFO (Linear)	H-26225 APFO (Branched)	
IA	IB	IC	0 (Control)
IIIA	IIIB	IIIC	0.3
VA	VB	VC	1
VIIA	VIIB	VIIC	3
IXA	IXB	IXC	10
XIA	XIB	XIC	30

Abbreviation

mg/kg = mg/kg/day

Individual Rat Beta-Oxidation Data

Group	Animal Number	Beta-Oxidation Rate (nmol/min/mg protein)
IA	101	17.09
	102	16.93
	103	14.95
	104	14.94
	105	14.80
	106	17.65
	107	26.05
	108	23.38
	109	19.60
	110	16.86
IIIA	301	13.86
	302	16.63
	303	16.25
	304	17.26
	305	16.30
	306	16.40
	307	23.65
	308	20.47
	309	24.58
	310	14.57
VA	501	29.38
	502	28.73
	503	25.82
	504	18.98
	505	30.82
	506	30.12
	507	27.36
	508	31.74
	509	20.56
	510	26.09

Individual Rat Beta-Oxidation Data

Group	Animal Number	Beta-Oxidation Rate (nmol/min/mg protein)
VIIA	701	59.93
	702	54.79
	703	74.45
	704	40.52
	705	54.04
	706	58.77
	707	70.55
	708	62.69
	709	50.56
	710	49.92
IXA	901	82.72
	902	101.91
	903	115.55
	904	52.42
	905	79.18
	906	97.52
	907	72.55
	908	75.17
	909	72.86
	910	72.37
XIA	1101	93.91
	1102	102.06
	1103	97.54
	1104	64.77
	1105	100.30
	1106	71.03
	1107	68.73
	1108	65.20
	1109	80.42
	1110	103.40

Individual Rat Beta-Oxidation Data

Group	Animal Number	Beta-Oxidation Rate (nmol/min/mg protein)
IB	101	19.29
	102	18.22
	103	12.37
	104	9.81
	105	17.61
	106	21.27
	107	14.46
	108	15.40
	109	16.78
	110	12.00
IIIB	301	15.71
	302	21.72
	303	14.39
	304	12.43
	305	20.50
	306	15.49
	307	16.59
	308	14.98
	309	12.22
	310	15.71
VB	501	29.03
	502	28.05
	503	24.26
	504	33.97
	505	38.22
	506	28.10
	507	26.60
	508	39.73
	509	25.55
	510	24.29

Individual Rat Beta-Oxidation Data

Group	Animal Number	Beta-Oxidation Rate (nmol/min/mg protein)
VIIB	701	56.15
	702	48.99
	703	58.17
	704	47.97
	705	88.36
	706	81.91
	707	73.75
	708	70.33
	709	66.61
	710	82.36
IXB	901	59.47
	902	79.42
	903	85.31
	904	66.29
	905	91.07
	906	82.03
	907	62.62
	908	74.45
	909	71.19
	910	75.80
XIB		
	1101	101.30
	1102	106.79
	1103	85.94
	1104	82.90
	1105	96.87
	1106	73.28
	1107	96.05
	1108	97.16
	1109	87.73
	1110	61.90

Individual Rat Beta-Oxidation Data

Group	Animal Number	Beta-Oxidation Rate (nmol/min/mg protein)
IC	101	13.35
	102	10.36
	103	8.61
	104	14.46
	105	14.85
	106	12.64
	107	13.82
	108	20.48
	109	11.52
	110	10.28
IIIC	301	14.43
	302	18.14
	303	10.07
	304	8.14
	305	10.92
	306	11.54
	307	17.73
	308	17.80
	309	10.64
	310	9.54
VC	501	13.74
	502	16.13
	503	13.83
	504	12.00
	505	14.66
	506	11.25
	507	17.63
	508	19.42
	509	14.43
	510	20.70

Individual Rat Beta-Oxidation Data

Group	Animal Number	Beta-Oxidation Rate (nmol/min/mg protein)
VIIC	701	21.69
	702	21.80
	703	18.34
	704	14.05
	705	15.09
	706	17.25
	707	13.08
	708	22.29
	709	17.23
	710	13.59
IXC	901	26.89
	902	34.80
	903	30.64
	904	43.61
	905	18.41
	906	18.69
	907	27.67
	908	20.55
	909	34.37
	910	31.61
XIC		
	1101	32.28
	1102	59.10
	1103	27.60
	1104	44.94
	1105	21.14
	1106	50.85
	1107	37.19
	1108	46.31
	1109	26.51
	1110	29.94

Individual Rat Beta-Oxidation Liver Data

Group	Animal Number	Relative Liver to Full Body Weight (%)
IA	101	2.7
	102	3.4
	103	3.5
	104	3.5
	105	3.4
	106	3.2
	107	3.4
	108	4.0
	109	4.1
	110	3.2
IIIA	301	3.2
	302	3.8
	303	3.7
	304	3.6
	305	3.4
	306	3.5
	307	3.6
	308	3.7
	309	3.7
	310	4.0
VA	501	3.8
	502	4.1
	503	4.0
	504	3.5
	505	3.7
	506	4.0
	507	4.2
	508	4.0
	509	3.9
	510	4.1

Individual Rat Beta-Oxidation Liver Data

Group	Animal Number	Relative Liver to Full Body Weight (%)
VIIA	701	5.1
	702	5.1
	703	5.4
	704	6.0
	705	5.5
	706	5.5
	707	5.7
	708	5.4
	709	5.9
	710	4.7
IXA	901	5.4
	902	5.3
	903	6.2
	904	4.6
	905	5.6
	906	5.9
	907	5.3
	908	5.9
	909	6.3
	910	6.1
XIA	1101	No data
	1102	7.4
	1103	6.4
	1104	6.1
	1105	6.1
	1106	7.2
	1107	7.1
	1108	6.7
	1109	7.6
	1110	6.7

Individual Rat Beta-Oxidation Liver Data

Group	Animal Number	Relative Liver to Full Body Weight (%)
IB	101	3.4
	102	4.1
	103	3.5
	104	3.5
	105	3.2
	106	4.4
	107	3.5
	108	3.6
	109	3.5
	110	3.6
IIIB	301	3.5
	302	3.9
	303	3.9
	304	3.8
	305	3.8
	306	3.9
	307	3.9
	308	3.8
	309	4.0
	310	4.0
VB	501	3.7
	502	4.1
	503	3.9
	504	4.2
	505	4.8
	506	4.6
	507	4.1
	508	3.9
	509	4.0
	510	4.1

Individual Rat Beta-Oxidation Liver Data

Group	Animal Number	Relative Liver to Full Body Weight (%)
VIIB	701	4.9
	702	4.5
	703	4.6
	704	5.1
	705	4.8
	706	5.2
	707	5.1
	708	5.1
	709	5.1
	710	5.1
IXB	901	5.9
	902	6.0
	903	6.2
	904	5.8
	905	5.5
	906	6.1
	907	5.8
	908	6.6
	909	5.5
	910	6.7
XIB		
	1101	6.7
	1102	7.2
	1103	6.8
	1104	6.9
	1105	6.9
	1106	5.4
	1107	6.7
	1108	6.8
	1109	6.7
	1110	6.2

Individual Rat Beta-Oxidation Liver Data

Group	Animal Number	Relative Liver to Full Body Weight (%)
IC	101	3.2
	102	3.3
	103	3.8
	104	3.9
	105	3.3
	106	3.1
	107	3.1
	108	3.3
	109	3.4
	110	3.2
IIIC	301	3.4
	302	3.8
	303	3.9
	304	3.9
	305	3.4
	306	3.1
	307	3.7
	308	3.5
	309	3.5
	310	3.4
VC	501	3.5
	502	4.4
	503	3.9
	504	3.9
	505	3.9
	506	3.4
	507	4.1
	508	3.6
	509	4.1
	510	4.3

Individual Rat Beta-Oxidation Liver Data

Group	Animal Number	Relative Liver to Full Body Weight (%)
VIIC	701	5.0
	702	4.6
	703	4.3
	704	4.9
	705	4.2
	706	3.7
	707	4.2
	708	4.3
	709	4.6
	710	4.4
IXC	901	6.0
	902	6.0
	903	5.3
	904	6.5
	905	4.9
	906	5.5
	907	4.8
	908	5.1
	909	6.8
	910	6.7
XIC		
	1101	5.9
	1102	7.3
	1103	6.7
	1104	6.2
	1105	5.1
	1106	7.4
	1107	5.8
	1108	6.4
	1109	6.8
	1110	6.1

MOUSE TABLES

MOUSE TABLES

EXPLANATORY NOTES

STUDY DESIGN

Groups			Dosage (mg/kg)
H-24921 APFO (Linear/Branched)	H-26313 APFO (Linear)	H-26225 APFO (Branched)	
IA	IB	IC	0 (Control)
IIIA	IIIB	IIIC	0.3
VA	VB	VC	1
VIIA	VIIB	VIIC	3
IXA	IXB	IXC	10
XIA	XIB	XIC	30

Abbreviations

mg/kg = mg/kg/day

Summary of Clinical Chemistry Values

CHOL - cholesterol
TRIG - triglycerides
HDL - high-density lipoprotein cholesterol
nonHDL - non-high-density lipoprotein cholesterol

Clinical Chemistry Note

Groups with identical values may vary in statistical significance, because tabulated statistics are rounded to fewer decimal places than the values used for statistical determination.

Table 1
Homogeneity/Concentration Verification and Stability Analysis for Mouse Study

Sample Sample Day	Nominal mg/mL	Measured [a] mg/mL	Mean % Nominal	C.V. (%)	Stability[b] % Nominal
H-24921					
1-Mar-2004	0	ND[c]	---	---	---
	0.03	0.027, 0.028	93.3	2	90.0
	0.10	0.090, 0.096	93.0	5	92.0[d]
	3.0	2.81, 2.69	91.7	3	90.3
H-26313					
2-Mar-2004	0	ND[c]	---	---	---
	0.03	0.031, 0.033	106.7	5	103.3
	0.10	0.104[e], 0.108	106.0	3	111.0
	3.0	3.22, 3.22	107.3	0	100.3
H-26225					
3-Mar-2004	0	ND[c]	---	---	---
	0.03	0.031, 0.032	106.7	0.5	100.0
	0.10	0.101, 0.111	106.0	7	102.0
	3.0	3.34, 3.09	107.0	6	104.7

a Mean results for the analysis of the duplicate samples.
b Samples held 5 hours at room temperature.
c Denotes none detected.
d Reported results based on re-analysis of the original sample. Original analysis was lower than expected due to aliquot error and not reported.
e Reported results based on re-analysis of the original sample. Original analysis was higher than expected due to aliquot error and not reported.

Table 2
Recovery of H-24921, H-26313, H-26225 Added to Dosing Vehicle for Mouse Study

Sample Type	mg/mL		Percent
	Nominal	Measured	Nominal
RECOVERY[a]	0.030	0.031	103.3
RECOVERY[b]	0.030	0.032[d]	106.7
RECOVERY[c]	0.030	0.033	110.0
		Mean	***106.7 ±3.4, C.V. 3%***
RECOVERY[a]	0.10	0.108[e]	108.0
RECOVERY[b]	0.10	0.109	109.0
RECOVERY[c]	0.10	0.110	110.0
		Mean	***109.0 ±1.0, C.V. 1%***
RECOVERY[a]	3.00	2.75	91.7
RECOVERY[b]	3.00	3.17	105.6
RECOVERY[c]	3.00	3.08	102.7
		Mean	***100.0 ±7.3, C.V. 7%***

a Processed with H-24921 samples from dosing prepared on March 1, 2004.
b Processed with H-26313 samples from dosing prepared on March 2, 2004.
c Processed with H-26225 samples from dosing prepared on March 3, 2004.
d Reported result from reanalysis of original sample. The original analysis was higher than expected due to aliquot error and not reported.
e Reported result from reanalysis of original sample. The original analysis was lower than expected due to aliquot error and not reported.

Table 3
Concentration Verification and Stability of H-24921, H-26313, H-26225 in Dosing Solutions for Mouse Study

Test Substance Sample Date	mg/mL Nominal		Measured	Percent Nominal
H-24921 (3/1/04)				
CONTROL	0.00		ND[a]	----
#1	0.03		0.027	90.0
#2	0.03		0.028	93.3
		Mean[b]:	***0.028 ±0.001 C.V. 2%***	***(93.3%)***
#1	0.10		0.090	90.0
#2	0.10		0.096	96.0
		Mean[b]:	***0.093 ±0.004 C.V. 5%***	***(93.0%)***
#1	3.00		2.81	93.7
#2	3.00		2.69	89.7
		Mean[b]:	***2.75 ±0.09 C.V. 3%***	***(91.7%)***
5 HOUR[c]	0.03		0.027	90.0
	0.10		0.092[d]	92.0
	3.00		2.71	90.3
H-26313 (3/2/04)				
CONTROL	0.00		ND[a]	----
#1	0.03		0.031	103.3
#2	0.03		0.033	110.0
		Mean[b]:	***0.032 ±0.001 C.V. 5%***	***(106.7%)***
#1	0.10		0.104[e]	104.0
#2	0.10		0.108	108.0
		Mean[b]:	***0.106 ±0.003 C.V. 3%***	***(106.0%)***
#1	3.00		3.22	107.3
#2	3.00		3.22	107.3
		Mean[b]:	***3.22 ±0.00 C.V. 0%***	***(107.3%)***
5 HOUR[c]	0.03		0.031	103.3
	0.10		0.111	111.0
	3.00		3.01	100.3

Table 3
Concentration Verification and Stability of H-24921, H-26313, H-26225 in Dosing Solutions for Mouse Study (Continued)

Test Substance Sample Date	mg/mL Nominal		Measured	Percent Nominal
H-26225 (3/3/04) CONTROL	0.00		ND[a]	----
#1	0.03		0.031	103.3
#2	0.03		0.032	106.7
		Mean[b]:	***0.032 ±0.0002 C.V. 0.5%***	***(106.7%)***
#1	0.10		0.101	101.0
#2	0.10		0.111	111.0
		Mean[b]:	***0.106 ±0.007 C.V. 7%***	***(106.0%)***
#1	3.00		3.34	111.3
#2	3.00		3.09	103.0
		Mean[b]:	***3.21 ±0.182 C.V. 6%***	***(107.0%)***
5 HOUR[c]	0.03		0.030	100.0
	0.10		0.102	102.0
	3.00		3.14	104.7

a Denotes none detected.
b The average measured concentration, average percent of nominal (in parentheses), standard deviation, and coefficient of variation of duplicate samples.
c Stability samples held 5 hours a room temperature.
d Reported result based on re-analysis of the original sample. Original analysis was lower than expected due to aliquot error and not reported.
e Reported result based on re-analysis of the original sample. Original analysis was higher than expected due to aliquot error and not reported.

Table 4
Summary of Dosing Suspension Analysis for Mouse Study

Sample Type	Concentrations and Stability of H-24921, H-26313, H-26225 (mg/mL)		
Nominal:	0.03	0.10	3.00
Concentration			
H-24921 (3/1/2004)			
#1	0.027	0.090	2.81
	(90.0)[a]	(90.0)	(93.7)
#2	0.028	0.096	2.69
	(93.3)	(96.0)	(89.7)
Average Measured Conc.[b]	**0.028**	**0.093**	**2.75**
Average Percent Nominal[b]	**(93.3)**	**(93.0)**	**(91.7)**
Standard Deviation[b]	**± 0.001**	**± 0.004**	**± 0.09**
Coefficient of Variation[b]	**2%**	**5%**	**3%**
Stability			
5-hour Room Temperature	0.027	0.092[c]	2.71
	(90.0)	(92.0)	(90.3)
Concentration			
H-26313 (3/2/2004)			
#1	0.031	0.104[d]	3.22
	(103.3)	(104.0)	(107.3)
#2	0.033	0.108	3.22
	(110.0)	(108.0)	(107.3)
Average Measured Conc.[b]	**0.032**	**0.106**	**3.22**
Average Percent Nominal[b]	**(106.7)**	**(106.0)**	**(107.3)**
Standard Deviation[b]	**± 0.001**	**± 0.003**	**± 0.00**
Coefficient of Variation[b]	**5%**	**3%**	**0%**
Stability			
5-hour Room Temperature	0.031	0.111	3.01
	(103.3)	(111.0)	(100.3)
Concentration			
H-26225 (3/3/2004)			
#1	0.031	0.101	3.34
	(103.3)	(101.0)	(111.3)
#2	0.032	0.111	3.09
	(106.7)	(111.0)	(103.0)
Average Measured Conc.[b]	**0.032**	**0.106**	**3.21**
Average Percent Nominal[b]	**(106.7)**	**(106.0)**	**(107.0)**
Standard Deviation[b]	**± 0.0002**	**± 0.007**	**± 0.182**
Coefficient of Variation[b]	**0.5%**	**7%**	**6%**
Stability			
5-hour Room Temperature	0.030	0.102	3.14
	(100.0)	(102.0)	(104.7)

a Numbers in parentheses are the respective percent of nominal values.
b The average measured concentration, average percent of nominal (in parentheses), standard deviation, and coefficient of variation of duplicate samples.
c Reported result based on re-analysis of the original sample. Original analysis was lower than expected due to aliquot error and not reported.
d Reported result based on re-analysis of the original sample. Original analysis was higher than expected due to aliquot error and not reported.

Table 5
Mean Body Weights (g) of Male Mice Dosed with APFO (Linear/Branched)

Group:	IA	IIIA	VA	VIIA	IXA	XIA
Dosage(mg/kg)	0	0.3	1	3	10	30
Test						
DAY0	31.2 2.2(10)	31.4 1.6(10)	32.1 1.4(10)	31.8 1.8(10)	31.7 1.4(10)	31.4 1.4(10)
DAY1	30.5 2.2(10)	31.0 1.7(10)	31.4 1.7(10)	31.2 1.7(10)	30.8 1.0(10)	30.5 1.2(10)
DAY2	30.5 2.1(10)	30.4 1.7(10)	31.3 1.8(10)	31.3 1.8(10)	30.9 1.1(10)	30.8 1.0(10)
DAY3	30.8 2.9(10)	31.4 1.6(10)	32.1 1.9(10)	32.1 1.9(10)	31.3 1.0(10)	30.6 1.4(10)
DAY4	31.5 1.8(9)	31.3 1.8(10)	31.9 2.6(10)	32.0 2.9(10)	32.0 1.2(10)	30.7 1.4(10)
DAY5	31.7 1.7(9)	31.3 1.8(10)	31.7 2.8(10)	31.7 3.1(10)	31.6 1.0(10)	28.7@ 1.5(10)
DAY6	31.9 1.9(9)	31.6 1.8(10)	32.0 3.1(10)	32.1 3.2(10)	31.6 0.7(10)	27.6@ 1.7(10)
DAY7	32.1 1.9(9)	31.9 1.7(10)	32.3 3.1(10)	32.7 3.0(10)	31.5 0.9(10)	27.4@ 1.8(10)
DAY8	32.0 1.9(9)	31.5 1.7(10)	32.4 3.1(10)	32.7 2.8(10)	31.6 1.5(10)	27.4@ 2.1(10)
DAY9	32.0 1.8(9)	31.0 1.8(10)	32.2 3.2(10)	32.8 2.6(10)	30.9 1.4(10)	27.1@ 2.1(10)
DAY10	32.6 2.0(9)	32.1 1.7(10)	32.7 2.8(10)	33.0 2.7(10)	30.7 1.8(10)	26.7@ 2.0(10)
DAY11	33.0 1.8(9)	32.7 1.9(10)	33.2 2.8(10)	33.5 2.4(10)	30.8 2.1(10)	26.5* 1.9(10)
DAY12	32.8 2.0(9)	32.3 1.9(10)	33.1 2.7(10)	33.5 2.6(10)	30.1* 2.0(10)	25.8* 1.8(10)

Table 5
Mean Body Weights (g) of Male Mice Dosed with APFO (Linear/Branched) (Continued)

Group:	IA	IIIA	VA	VIIA	IXA	XIA
Dosage(mg/kg)	0	0.3	1	3	10	30
Test						
DAY13	33.1 2.0(9)	32.6 1.8(10)	33.5 2.6(10)	33.7 2.7(10)	29.4* 2.1(10)	25.6* 1.8(10)
DAY14	31.9 1.9(9)	31.5 1.7(10)	32.2 2.0(10)	32.4 2.6(10)	28.3 1.9(10)	24.9@ 1.7(10)

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

@ Statistically significant difference from control $p < 0.05$ by Dunn's test.
* Statistically significant difference from control $p < 0.05$ by Dunnett's test.

Table 6
Mean Body Weights (g) of Male Mice Dosed with APFO (Linear)

Group:	IB	IIIB	VB	VIIB	IXB	XIB
Dosage(mg/kg)	0	0.3	1	3	10	30
Test						
DAY0	31.3 1.4(10)	31.4 1.5(10)	31.9 1.1(10)	31.6 1.6(10)	31.1 1.2(10)	31.3 1.3(10)
DAY1	31.0 1.6(10)	30.9 1.3(10)	31.6 1.1(10)	31.7 1.9(10)	31.2 1.4(10)	32.1 1.3(10)
DAY2	30.9 1.4(10)	31.0 1.4(10)	32.0 1.1(10)	31.8 2.1(10)	31.9 1.4(10)	32.4 1.4(10)
DAY3	31.0 1.5(10)	31.8 1.5(10)	32.4 1.2(10)	32.2 2.7(10)	32.7 1.7(10)	32.8 1.1(10)
DAY4	30.4 1.7(10)	31.3 1.5(10)	32.1 1.1(10)	31.9 2.9(10)	32.6* 1.7(10)	30.4 1.2(10)
DAY5	30.7 1.7(10)	31.5 1.4(10)	32.6 1.1(10)	32.1 3.1(10)	32.6 1.7(10)	28.8 1.5(10)
DAY6	31.3 2.0(10)	32.2 1.4(10)	33.3 1.0(10)	32.9 3.4(10)	33.0 2.0(10)	27.7* 1.9(10)
DAY7	31.0 1.8(10)	31.9 1.5(10)	33.5 1.2(10)	32.3 3.3(10)	31.7 2.3(10)	25.7* 2.1(10)
DAY8	30.8 1.2(10)	31.2 1.3(10)	32.6 1.3(10)	32.3 3.1(10)	31.9 2.0(10)	26.0* 2.3(10)
DAY9	31.1 1.2(10)	31.6 1.3(10)	33.1* 1.3(10)	32.8 3.4(10)	31.0 2.4(10)	26.0* 2.3(10)
DAY10	31.5 1.4(10)	31.8 1.2(10)	33.5 1.4(10)	33.0 3.6(10)	31.0 2.6(10)	26.7* 2.1(9)
DAY11	31.5 1.4(10)	31.8 1.4(10)	33.5 1.2(10)	33.1 3.7(10)	30.6 2.5(10)	26.1* 1.8(9)
DAY12	31.8 1.3(10)	32.1 1.4(10)	33.8 1.2(10)	33.4 3.5(10)	30.1 2.6(10)	26.3* 1.9(9)

Table 6
Mean Body Weights (g) of Male Mice Dosed with APFO (Linear) (Continued)

Group:	IB	IIIB	VB	VIIB	IXB	XIB
Dosage (mg/kg)	0	0.3	1	3	10	30
Test						
DAY13	32.6 1.4(10)	32.7 1.5(10)	34.2 1.1(10)	34.0 3.5(10)	30.1 3.0(10)	27.2* 1.9(9)
DAY14	30.7 1.3(10)	31.0 1.1(10)	32.8* 1.1(10)	32.5 3.4(10)	28.0 2.8(10)	25.8* 1.7(9)

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

* Statistically significant difference from control $p < 0.05$ by Dunnett's test.

Table 7
Mean Body Weights (g) of Male Mice Dosed with APFO (Branched)

Group:	IC	IIIC	VC	VIIC	IXC	XIC
Dosage (mg/kg)	0	0.3	1	3	10	30
Test						
DAY0	31.5 2.1(10)	31.3 1.1(10)	32.1 1.3(10)	32.1 1.3(10)	31.7 1.6(10)	31.6 1.5(10)
DAY1	31.0 1.8(10)	31.1 1.5(10)	31.3 1.3(10)	31.9 1.2(10)	31.0 1.9(10)	31.3 1.5(10)
DAY2	31.4 1.7(10)	32.0 1.6(10)	32.0 1.6(10)	32.8 1.3(10)	31.9 2.1(10)	32.5 1.5(10)
DAY3	31.3 1.6(10)	31.6 1.7(10)	31.6 1.4(10)	32.3 1.4(10)	31.6 2.1(10)	32.4 1.4(10)
DAY4	31.1 1.7(10)	31.7 1.7(10)	31.7 1.4(10)	32.4 1.2(10)	31.9 2.1(10)	32.2 1.6(10)
DAY5	31.9 1.7(10)	32.4 1.8(10)	32.3 1.5(10)	33.4 1.3(10)	32.8 1.9(10)	33.0 1.7(10)
DAY6	31.4 1.8(10)	32.2 1.9(10)	32.1 1.4(10)	33.2 1.3(10)	32.8 2.1(10)	31.6 1.8(10)
DAY7	32.1 1.7(10)	32.6 2.0(10)	32.6 1.6(10)	33.9 1.2(10)	33.9 2.0(10)	32.2 1.8(10)
DAY8	31.7 1.8(10)	32.2 1.9(10)	32.1 1.5(10)	33.4 1.2(10)	33.5 1.9(10)	31.1 1.6(10)
DAY9	31.8 2.0(10)	32.8 1.9(10)	32.5 1.6(10)	34.0* 1.2(10)	34.0* 1.8(10)	31.9 1.3(10)
DAY10	31.7 1.8(10)	32.6 2.0(10)	32.5 1.4(10)	33.6 1.2(10)	34.0* 1.7(10)	31.1 1.9(10)
DAY11	31.9 1.8(10)	32.7 1.8(10)	32.7 1.6(10)	33.9* 1.1(10)	34.0* 1.7(10)	31.4 1.9(10)
DAY12	32.7 1.8(10)	33.7 2.0(10)	33.7 1.5(10)	35.4* 1.4(10)	35.3* 1.7(10)	32.7 1.6(10)

Table 7
Mean Body Weights (g) of Male Mice Dosed with APFO (Branched) (Continued)

Group:	IC	IIIC	VC	VIIC	IXC	XIC
Dosage(mg/kg)	0	0.3	1	3	10	30
Test						
DAY13	32.8 2.1(10)	33.8 1.8(10)	33.6 1.6(10)	34.9* 1.1(10)	34.9* 1.5(10)	32.0 2.0(10)
DAY14	31.5 1.9(10)	31.9 1.8(10)	32.3 1.6(10)	33.7* 1.1(10)	33.3 1.3(10)	31.0 2.1(10)

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

* Statistically significant difference from control $p < 0.05$ by Dunnett's test.

Table 8
Mean Body Weight Gains (g) of Male Mice Dosed with APFO (Linear/Branched)

Group:	IA	IIIA	VA	VIIA	IXA	XIA
Dosage(mg/kg)	0	0.3	1	3	10	30
Test						
DAY0 -DAY1	-0.6 0.3(10)	-0.4 0.6(10)	-0.7 0.6(10)	-0.7 0.5(10)	-0.9 0.7(10)	-0.9 0.5(10)
DAY1 -DAY2	-0.1 0.4(10)	-0.5* 0.3(10)	-0.1 0.3(10)	0.2 0.4(10)	0.1 0.2(10)	0.3 0.6(10)
DAY2 -DAY3	0.3 1.2(10)	0.9 0.3(10)	0.8 1.6(10)	0.8 0.4(10)	0.4 0.5(10)	-0.2 0.7(10)
DAY3 -DAY4	-0.1 0.4(9)	-0.1 0.4(10)	-0.2 1.0(10)	-0.2 1.3(10)	0.7@ 0.5(10)	0.1 0.6(10)
DAY4 -DAY5	0.2 0.3(9)	0.0 0.3(10)	-0.2 0.4(10)	-0.3 0.6(10)	-0.4 0.6(10)	-2.0* 0.8(10)
DAY5 -DAY6	0.2 0.6(9)	0.3 0.2(10)	0.3 0.4(10)	0.4 0.3(10)	-0.0 0.7(10)	-1.1* 0.6(10)
DAY6 -DAY7	0.2 0.3(9)	0.4 0.4(10)	0.3 0.2(10)	0.6 0.4(10)	-0.0 0.6(10)	-0.3 0.5(10)
DAY7 -DAY8	-0.2 0.3(9)	-0.4 0.4(10)	0.1 0.5(10)	0.0 0.5(10)	0.0 0.9(10)	0.0 0.8(10)
DAY8 -DAY9	0.0 0.4(9)	-0.5* 0.3(10)	-0.2 0.2(10)	0.1 0.5(10)	-0.6 0.9(10)	-0.3 0.7(10)
DAY9 -DAY10	0.6 0.4(9)	1.0 0.4(10)	0.5 0.5(10)	0.1 0.3(10)	-0.2* 0.7(10)	-0.4* 0.4(10)
DAY10 -DAY11	0.4 0.2(9)	0.6 0.3(10)	0.4 0.3(10)	0.5 0.3(10)	0.1 1.0(10)	-0.2 0.6(10)
DAY11 -DAY12	-0.2 0.3(9)	-0.3 0.4(10)	-0.1 0.5(10)	0.0 0.5(10)	-0.7 0.7(10)	-0.7 0.6(10)
DAY12 -DAY13	0.3 0.3(9)	0.2 0.3(10)	0.4 0.2(10)	0.1 0.3(10)	-0.7@ 1.0(10)	-0.2 0.5(10)
DAY13 -DAY14	-1.2 0.6(9)	-1.1 0.2(10)	-1.2 0.8(10)	-1.3 0.6(10)	-1.0 0.5(10)	-0.7 0.3(10)

Table 8
Mean Body Weight Gains (g) of Male Mice Dosed with APFO (Linear/Branched) (Continued)

Group:	IA	IIIA	VA	VIIA	IXA	XIA
Dosage (mg/kg)	0	0.3	1	3	10	30
Test						
DAY0 -DAY7	0.5	0.6	0.2	0.8	-0.2	-4.1@
	0.7(9)	1.0(10)	2.8(10)	1.7(10)	1.5(10)	1.2(10)
DAY7 -DAY13	0.9	0.6	1.1	1.0	-2.2*	-1.8*
	0.5(9)	0.5(10)	1.1(10)	0.9(10)	1.6(10)	0.5(10)
DAY0 -DAY13	1.5	1.2	1.4	1.8	-2.3@	-5.8@
	0.7(9)	1.3(10)	2.3(10)	1.2(10)	2.7(10)	1.1(10)
DAY0 -DAY14	0.3	0.1	0.2	0.5	-3.4@	-6.5@
	0.6(9)	1.2(10)	1.7(10)	1.3(10)	2.5(10)	1.1(10)

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

@ Statistically significant difference from control $p < 0.05$ by Dunn's test.
* Statistically significant difference from control $p < 0.05$ by Dunnett's test.

Table 9
Mean Body Weight Gains (g) of Male Mice Dosed with APFO (Linear)

Group:	IB	IIIB	VB	VIIB	IXB	XIB
Dosage(mg/kg)	0	0.3	1	3	10	30
Test						
DAY0 -DAY1	-0.3	-0.5	-0.3	0.1	0.1	0.8@
	0.5(10)	0.4(10)	0.3(10)	0.5(10)	0.5(10)	0.4(10)
DAY1 -DAY2	-0.1	0.1	0.4	0.1	0.7@	0.3
	0.5(10)	0.2(10)	0.4(10)	1.4(10)	0.4(10)	0.3(10)
DAY2 -DAY3	0.1	0.8	0.4	0.4	0.7	0.4
	1.3(10)	0.3(10)	0.4(10)	0.8(10)	0.4(10)	1.0(10)
DAY3 -DAY4	-0.6	-0.6	-0.3	-0.3	-0.1	-2.3*
	0.7(10)	0.3(10)	0.7(10)	0.4(10)	0.5(10)	0.8(10)
DAY4 -DAY5	0.3	0.2	0.5	0.3	-0.1	-1.7@
	0.2(10)	0.2(10)	0.4(10)	0.4(10)	0.1(10)	1.1(10)
DAY5 -DAY6	0.6	0.7	0.8	0.8	0.4	-1.1*
	0.4(10)	0.3(10)	0.3(10)	0.4(10)	0.6(10)	0.9(10)
DAY6 -DAY7	-0.3	-0.3	0.1	-0.5	-1.2	-2.0@
	0.6(10)	0.3(10)	0.3(10)	0.4(10)	0.7(10)	1.3(10)
DAY7 -DAY8	-0.2	-0.7	-0.9@	-0.0	0.1	0.4
	0.7(10)	0.3(10)	0.3(10)	0.4(10)	0.5(10)	1.4(10)
DAY8 -DAY9	0.3	0.4	0.5	0.5	-0.9@	-0.0
	0.3(10)	0.4(10)	0.2(10)	0.4(10)	0.8(10)	0.9(10)
DAY9 -DAY10	0.4	0.3	0.4	0.2	-0.0	0.3
	0.4(10)	0.2(10)	0.3(10)	0.4(10)	0.7(10)	0.6(9)
DAY10 -DAY11	0.0	-0.0	0.0	0.1	-0.3	-0.6
	0.4(10)	0.3(10)	0.4(10)	0.4(10)	0.7(10)	1.0(9)
DAY11 -DAY12	0.3	0.2	0.3	0.3	-0.6*	0.2
	0.3(10)	0.4(10)	0.4(10)	0.3(10)	0.9(10)	0.8(9)
DAY12 -DAY13	0.8	0.6	0.4	0.5	0.0	0.9
	0.3(10)	0.3(10)	0.5(10)	0.6(10)	0.9(10)	0.7(9)
DAY13 -DAY14	-1.9	-1.7	-1.5	-1.4	-2.1	-1.4
	0.3(10)	0.5(10)	0.4(10)	0.6(10)	0.9(10)	0.8(9)

Table 9
Mean Body Weight Gains (g) of Male Mice Dosed with APFO (Linear) (Continued)

Group:	IB	IIIB	VB	VIIB	IXB	XIB
Dosage (mg/kg)	0	0.3	1	3	10	30
Test						
DAY0 -DAY7	-0.3	0.5	1.6	0.8	0.6	-5.6@
	2.0(10)	0.6(10)	0.7(10)	2.7(10)	1.5(10)	2.5(10)
DAY7 -DAY13	1.6	0.8	0.8	1.6	-1.6*	1.1
	1.0(10)	0.4(10)	0.4(10)	0.7(10)	1.4(10)	1.4(9)
DAY0 -DAY13	1.3	1.3	2.4	2.4	-1.0	-3.9@
	1.4(10)	0.7(10)	0.7(10)	2.8(10)	2.6(10)	2.6(9)
DAY0 -DAY14	-0.6	-0.5	0.9*	1.0	-3.1*	-5.3*
	1.2(10)	0.7(10)	1.0(10)	2.6(10)	2.2(10)	2.5(9)

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

@ Statistically significant difference from control $p < 0.05$ by Dunn's test.
* Statistically significant difference from control $p < 0.05$ by Dunnett's test.

Table 10
Mean Body Weight Gains (g) of Male Mice Dosed with APFO (Branched)

Group:	IC	IIIC	VC	VIIC	IXC	XIC
Dosage(mg/kg)	0	0.3	1	3	10	30
Test						
DAY0 -DAY1	-0.6	-0.1	-0.8	-0.3	-0.7	-0.4
	0.6(10)	0.9(10)	0.4(10)	0.4(10)	1.6(10)	0.4(10)
DAY1 -DAY2	0.4	0.8	0.7	0.9*	0.9*	1.3*
	0.3(10)	0.4(10)	0.5(10)	0.3(10)	0.4(10)	0.3(10)
DAY2 -DAY3	-0.1	-0.4	-0.4	-0.5	-0.3	-0.1
	0.5(10)	0.3(10)	0.5(10)	0.3(10)	0.5(10)	0.6(10)
DAY3 -DAY4	-0.2	0.1	0.1	0.0	0.4*	-0.2
	0.4(10)	0.2(10)	0.3(10)	0.3(10)	0.4(10)	0.8(10)
DAY4 -DAY5	0.8	0.7	0.7	1.0	0.9	0.8
	0.2(10)	0.3(10)	0.3(10)	0.5(10)	0.4(10)	0.7(10)
DAY5 -DAY6	-0.5	-0.2	-0.2	-0.2	-0.1	-1.5*
	0.4(10)	0.4(10)	0.4(10)	0.3(10)	0.5(10)	0.7(10)
DAY6 -DAY7	0.7	0.4	0.5	0.7	1.2	0.7
	0.4(10)	0.4(10)	0.4(10)	0.2(10)	0.8(10)	0.7(10)
DAY7 -DAY8	-0.4	-0.3	-0.5	-0.5	-0.5	-1.1*
	0.4(10)	0.4(10)	0.4(10)	0.4(10)	0.8(10)	0.6(10)
DAY8 -DAY9	0.1	0.5	0.4	0.6	0.5	0.7*
	0.4(10)	0.4(10)	0.3(10)	0.4(10)	0.6(10)	0.7(10)
DAY9 -DAY10	-0.1	-0.2	-0.0	-0.3	0.0	-0.8*
	0.5(10)	0.4(10)	0.3(10)	0.4(10)	0.6(10)	0.8(10)
DAY10 -DAY11	0.2	0.1	0.2	0.3	-0.0	0.4
	0.2(10)	0.3(10)	0.3(10)	0.3(10)	0.6(10)	0.3(10)
DAY11 -DAY12	0.8	0.9	1.0	1.4*	1.3*	1.3*
	0.3(10)	0.4(10)	0.5(10)	0.4(10)	0.5(10)	0.6(10)
DAY12 -DAY13	0.1	0.1	-0.1	-0.5*	-0.4*	-0.7*
	0.5(10)	0.4(10)	0.3(10)	0.4(10)	0.5(10)	0.6(10)
DAY13 -DAY14	-1.3	-1.9	-1.3	-1.2	-1.5	-1.1
	0.4(10)	0.5(10)	0.4(10)	0.3(10)	0.6(10)	0.8(10)

Table 10
Mean Body Weight Gains (g) of Male Mice Dosed with APFO (Branched) (Continued)

Group:	IC	IIIC	VC	VIIC	IXC	XIC
Dosage (mg/kg)	0	0.3	1	3	10	30
Test						
DAY0 -DAY7	0.5	1.3	0.5	1.8*	2.2*	0.6
	0.7(10)	1.4(10)	0.7(10)	0.8(10)	1.3(10)	1.2(10)
DAY7 -DAY13	0.8	1.2	1.0	1.0	0.9	-0.2*
	0.7(10)	0.7(10)	0.5(10)	0.7(10)	1.4(10)	0.8(10)
DAY0 -DAY13	1.3	2.5	1.5	2.8*	3.1*	0.4
	0.9(10)	1.1(10)	0.6(10)	0.8(10)	1.7(10)	1.4(10)
DAY0 -DAY14	-0.0	0.6	0.2	1.6*	1.6*	-0.7
	0.9(10)	1.3(10)	0.7(10)	0.8(10)	1.2(10)	1.7(10)

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

* Statistically significant difference from control $p < 0.05$ by Dunnett's test.

Table 11
Mean Daily Food Consumption (g/day) by Male Mice Dosed with APFO (Linear/Branched)

Group:	IA	IIIA	VA	VIIA	IXA	XIA
Dosage(mg/kg)	0	0.3	1	3	10	30
Test						
DAY0-DAY3	5.3 0.8(10)	5.4 0.4(10)	5.5 0.5(10)	5.6 0.3(10)	6.2 0.9(10)	5.4 1.1(10)
DAY3-DAY7	5.4 0.4(9)	5.3 0.4(10)	5.3 1.2(10)	5.3 0.8(10)	5.0 0.5(10)	4.3@ 0.7(10)
DAY7-DAY10	5.2 0.8(9)	5.2 0.9(10)	5.3 0.6(10)	5.0 0.3(10)	6.1 1.1(10)	5.2 1.1(10)
DAY10-DAY13	5.8 0.6(9)	5.7 0.6(10)	5.8 0.6(10)	5.7 0.4(10)	5.4 0.9(10)	4.2* 0.6(10)
DAY0-DAY7	5.4 0.3(9)	5.4 0.3(10)	5.4 0.9(10)	5.4 0.4(10)	5.5 0.5(10)	4.8 0.7(10)
DAY7-DAY13	5.5 0.6(9)	5.5 0.7(10)	5.6 0.5(10)	5.3 0.3(10)	5.7 1.0(10)	4.7* 0.7(10)
DAY0-DAY13	5.5 0.4(9)	5.4 0.5(10)	5.5 0.7(10)	5.4 0.3(10)	5.6 0.7(10)	4.7* 0.4(10)

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

@ Statistically significant difference from control $p < 0.05$ by Dunn's test.
* Statistically significant difference from control $p < 0.05$ by Dunnett's test.

Table 12
Mean Daily Food Consumption (g/day) by Male Mice Dosed with APFO (Linear)

Group:	IB	IIIB	VB	VIIB	IXB	XIB
Dosage (mg/kg)	0	0.3	1	3	10	30
Test						
DAY0-DAY3	5.4 0.7(10)	5.2 0.4(10)	5.5 0.5(10)	5.2 1.1(10)	5.6 0.5(10)	5.6 0.4(10)
DAY3-DAY7	5.4 0.9(10)	5.5 0.6(10)	5.6 0.4(10)	5.5 0.9(10)	5.4 0.5(10)	4.0@ 1.4(10)
DAY7-DAY10	5.1 0.7(10)	4.9 0.7(10)	5.4 0.5(10)	5.3 0.6(10)	6.0@ 0.4(10)	4.9 1.2(10)
DAY10-DAY13	5.6 0.9(10)	5.4 0.8(10)	6.0 1.0(10)	5.5 0.6(10)	5.2 1.0(10)	4.7 0.8(9)
DAY0-DAY7	5.4 0.7(10)	5.4 0.5(10)	5.6 0.3(10)	5.4 0.9(10)	5.5 0.5(10)	4.7 0.7(10)
DAY7-DAY13	5.3 0.7(10)	5.1 0.6(10)	5.7 0.7(10)	5.4 0.6(10)	5.6 0.5(10)	5.0 0.3(9)
DAY0-DAY13	5.4 0.6(10)	5.3 0.5(10)	5.6 0.5(10)	5.4 0.7(10)	5.5 0.5(10)	4.9 0.4(9)

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

@ Statistically significant difference from control $p < 0.05$ by Dunn's test.

Table 13
Mean Daily Food Consumption (g/day) by Male Mice Dosed with APFO (Branched)

Group:	IC	IIIC	VC	VIIC	IXC	XIC
Dosage (mg/kg)	0	0.3	1	3	10	30
Test						
DAY0-DAY3	5.8 0.6(10)	5.6 0.8(10)	5.4 0.6(10)	5.8 0.5(10)	5.6 1.3(10)	5.7 0.6(10)
DAY3-DAY7	5.4 0.3(10)	5.5 0.4(10)	5.2 0.3(10)	5.7 0.3(10)	5.3 0.7(10)	4.7 0.8(10)
DAY7-DAY10	5.8 0.6(10)	5.8 0.5(10)	5.5 0.4(10)	6.1 0.4(10)	6.3 0.5(10)	5.4 0.6(10)
DAY10-DAY13	5.5 0.7(10)	5.4 0.3(10)	5.3 0.4(10)	5.6 0.4(10)	5.5 0.5(10)	5.4 1.0(10)
DAY0-DAY7	5.6 0.2(10)	5.5 0.5(10)	5.3 0.4(10)	5.7 0.3(10)	5.4 0.8(10)	5.2 0.6(10)
DAY7-DAY13	5.7 0.6(10)	5.6 0.4(10)	5.4 0.3(10)	5.9 0.2(10)	5.9 0.3(10)	5.4 0.7(10)
DAY0-DAY13	5.6 0.4(10)	5.5 0.4(10)	5.3 0.3(10)	5.8 0.2(10)	5.6 0.5(10)	5.3 0.6(10)

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

There were no statistically significant differences at $p < 0.05$.

Table 14
Mean Daily Food Efficiency of Male Mice Dosed with APFO (Linear/Branched)

(g Body Weight Gain/g Food Consumed)

Group:	IA	IIIA	VA	VIIA	IXA	XIA
Dosage(mg/kg)	0	0.3	1	3	10	30
Test						
DAY0-DAY3	-0.038 0.107(10)	-0.002 0.044(10)	-0.006 0.096(10)	0.017 0.016(10)	-0.024 0.036(10)	-0.074 0.145(10)
DAY3-DAY7	0.027 0.026(9)	0.026 0.014(10)	-0.022 0.164(10)	0.013 0.112(10)	0.010 0.076(10)	-0.190@ 0.096(10)
DAY7-DAY10	0.030 0.029(9)	0.008 0.026(10)	0.028 0.042(10)	0.019 0.061(10)	-0.055* 0.083(10)	-0.047* 0.059(10)
DAY10-DAY13	0.027 0.013(9)	0.030 0.022(10)	0.043 0.042(10)	0.040 0.013(10)	-0.090@ 0.066(10)	-0.094@ 0.061(10)
DAY0-DAY7	0.013 0.018(9)	0.014 0.026(10)	-0.011 0.122(10)	0.019 0.051(10)	-0.005 0.042(10)	-0.128@ 0.056(10)
DAY7-DAY13	0.029 0.018(9)	0.019 0.015(10)	0.036 0.039(10)	0.031 0.029(10)	-0.071* 0.061(10)	-0.065* 0.025(10)
DAY0-DAY13	0.021 0.010(9)	0.016 0.017(10)	0.016 0.039(10)	0.025 0.018(10)	-0.035@ 0.043(10)	-0.096@ 0.024(10)

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

@ Statistically significant difference from control $p < 0.05$ by Dunn's test.
* Statistically significant difference from control $p < 0.05$ by Dunnett's test.

Table 15
Mean Daily Food Efficiency of Male Mice Dosed with APFO (Linear)

(g Body Weight Gain/g Food Consumed)

Group:	IB	IIIB	VB	VIIB	IXB	XIB
Dosage (mg/kg)	0	0.3	1	3	10	30
Test						
DAY0-DAY3	-0.029	0.026	0.030	-0.004	0.093@	0.087@
	0.119(10)	0.021(10)	0.018(10)	0.244(10)	0.036(10)	0.055(10)
DAY3-DAY7	-0.005	0.002	0.048	-0.000	-0.047	-0.536@
	0.029(10)	0.024(10)	0.026(10)	0.052(10)	0.055(10)	0.368(10)
DAY7-DAY10	0.038	-0.003	-0.000	0.038	-0.044*	0.037
	0.053(10)	0.025(10)	0.028(10)	0.031(10)	0.049(10)	0.080(9)
DAY10-DAY13	0.066	0.052	0.045	0.061	-0.064@	0.024
	0.033(10)	0.024(10)	0.028(10)	0.035(10)	0.075(10)	0.112(9)
DAY0-DAY7	-0.016	0.012	0.041@	0.002	0.014	0.183
	0.068(10)	0.015(10)	0.018(10)	0.116(10)	0.039(10)	0.116(10)
DAY7-DAY13	0.052	0.027	0.023	0.050	-0.051*	0.037
	0.033(10)	0.014(10)	0.013(10)	0.021(10)	0.045(10)	0.047(9)
DAY0-DAY13	0.017	0.019	0.033	0.028	-0.016	0.062@
	0.019(10)	0.010(10)	0.010(10)	0.050(10)	0.036(10)	0.044(9)

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

@ Statistically significant difference from control $p < 0.05$ by Dunn's test.
* Statistically significant difference from control $p < 0.05$ by Dunnett's test.

Table 16
Mean Daily Food Efficiency of Male Mice Dosed with APFO (Branched)

(g Body Weight Gain/g Food Consumed)

Group:	IC	IIIC	VC	VIIC	IXC	XIC
Dosage(mg/kg)	0	0.3	1	3	10	30
Test						
DAY0-DAY3	-0.016	0.013	-0.032	0.011	-0.037	0.043@
	0.043(10)	0.060(10)	0.028(10)	0.039(10)	0.180(10)	0.040(10)
DAY3-DAY7	0.035	0.044	0.050	0.070@	0.114@	-0.011
	0.018(10)	0.021(10)	0.021(10)	0.018(10)	0.061(10)	0.054(10)
DAY7-DAY10	-0.020	0.002	-0.008	-0.017	0.005	-0.069*
	0.029(10)	0.027(10)	0.032(10)	0.033(10)	0.050(10)	0.053(10)
DAY10-DAY13	0.066	0.073	0.069	0.074	0.050	0.057
	0.035(10)	0.029(10)	0.024(10)	0.017(10)	0.046(10)	0.045(10)
DAY0-DAY7	0.013	0.031	0.014	0.045*	0.055*	0.015
	0.017(10)	0.032(10)	0.019(10)	0.018(10)	0.031(10)	0.034(10)
DAY7-DAY13	0.022	0.037	0.030	0.027	0.026	-0.006
	0.020(10)	0.024(10)	0.015(10)	0.019(10)	0.039(10)	0.025(10)
DAY0-DAY13	0.018	0.034	0.022	0.037*	0.042*	0.005
	0.011(10)	0.013(10)	0.009(10)	0.010(10)	0.023(10)	0.021(10)

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

@ Statistically significant difference from control $p < 0.05$ by Dunn's test.
* Statistically significant difference from control $p < 0.05$ by Dunnett's test.

Table 17
Summary of Clinical Observations for Male Mice Dosed with APFO (Linear/Branched)

Treatment Group:	IA	IIIA	VA	VIIA	IXA	XIA
Dose	0 mg/kg	0.3 mg/kg	1 mg/kg	3 mg/kg	10 mg/kg	30 mg/kg
Animal Count	10	10	10	10	10	10
Mass Inguen						
Right						
Mass #1						
Not Ulcerated						
Incidence	0	0	0	1 (10%)	0	0
Mean onset (Days)				9		
Eye Observations						
Enophthalmus						
Incidence	0	0	1 (10%)	0	0	1 (10%)
Mean onset (Days)			3			6
Discharge						
Eye right						
Incidence	0	0	1 (10%)	0	0	0
Mean onset (Days)			4			
Lethargic						
Incidence	0	0	0	0	0	1 (10%)
Mean onset (Days)						12
Stain Fur/Skin						
Incidence	0	0	0	1 (10%)	0	0
Mean onset (Days)				3		

Table 17
Summary of Clinical Observations for Male Mice Dosed with APFO (Linear/Branched) (Continued)

Treatment Group:	IA	IIIA	VA	VIIA	IXA	XIA
Dose	0 mg/kg	0.3 mg/kg	1 mg/kg	3 mg/kg	10 mg/kg	30 mg/kg
Animal Count	10	10	10	10	10	10
Swollen Observations						
Forelimb						
Incidence	0	0	1 (10%)	0	0	0
Mean onset (Days)			3			
Abdomen						
Incidence	0	0	0	0	0	1 (10%)
Mean onset (Days)						13

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

There were no statistically significant differences at $p < 0.05$.

Table 18
Summary of Clinical Observations for Male Mice Dosed with APFO (Linear)

Treatment Group:	IB	IIIB	VB	VIIB	IXB	XIB
Dose	0 mg/kg	0.3 mg/kg	1 mg/kg	3 mg/kg	10 mg/kg	30 mg/kg
Animal Count	10	10	10	10	10	10
Eye Observations						
Enophthalmus						
Incidence	0	0	0	0	0	3 (30%) #
Mean onset (Days)						11
Carriage						
High						
Incidence	0	0	0	0	0	1 (10%)
Mean onset (Days)						8
Pale						
Incidence	0	0	0	0	0	1 (10%)
Mean onset (Days)						9
Lethargic						
Incidence	0	0	0	0	1 (10%)	2 (20%) #
Mean onset (Days)					12	10
Stain Fur/Skin						
Incidence	1 (10%)	0	0	1 (10%)	0	1 (10%)
Mean onset (Days)	6			6		8

Table 18
Summary of Clinical Observations for Male Mice Dosed with APFO (Linear) (Continued)

Treatment Group:	IB	IIIB	VB	VIIB	IXB	XIB
Dose	0 mg/kg	0.3 mg/kg	1 mg/kg	3 mg/kg	10 mg/kg	30 mg/kg
Animal Count	10	10	10	10	10	10
Swollen Observations						
Shoulder						
Incidence	0	0	0	1 (10%)	0	0
Mean onset (Days)				3		
Forelimb						
Incidence	0	0	0	1 (10%)	0	0
Mean onset (Days)				3		

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

Statistically significant difference from control at $p < 0.05$ by Jonckheere-Terpstra trend test.

Table 19
Summary of Clinical Observations for Male Mice Dosed with APFO (Branched)

Treatment Group:	IC	IIIC	VC	VIIC	IXC	XIC
Dose	0 mg/kg	0.3 mg/kg	1 mg/kg	3 mg/kg	10 mg/kg	30 mg/kg
Animal Count	10	10	10	10	10	10
Mass Perineum						
Mass #1						
Not Ulcerated						
Incidence	0	0	1 (10%)	0	0	0
Mean onset (Days)			4			
Eye Observations						
Enophthalmus						
Incidence	1 (10%)	0	0	0	1 (10%)	0
Mean onset (Days)	5				10	
Hair Loss						
Incidence	0	0	1 (10%)	0	0	0
Mean onset (Days)			10			
Stain Fur/Skin						
Incidence	0	0	0	0	1 (10%)	0
Mean onset (Days)					7	

Table 19
Summary of Clinical Observations for Male Mice Dosed with APFO (Branched) (Continued)

Treatment Group:	IC	IIIC	VC	VIIC	IXC	XIC
Dose	0 mg/kg	0.3 mg/kg	1 mg/kg	3 mg/kg	10 mg/kg	30 mg/kg
Animal Count	10	10	10	10	10	10
Swollen Observations						
Neck						
Incidence	0	0	0	0	1 (10%)	0
Mean onset (Days)					12	
Face						
Incidence	0	0	0	0	1 (10%)	0
Mean onset (Days)					10	

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

There were no statistically significant differences at $p < 0.05$.

Table 20
Percent Survival of Male Mice

DAYS ON TEST	Group I 0 mg/kg	Group III 0.3 mg/kg	Group V 1 mg/kg	Group VII 3 mg/kg	Group IX 10 mg/kg	Group XI 30 mg/kg
APFO (Linear/Branched) – A						
0	100	100	100	100	100	100
7	90	100	100	100	100	100
14	90	100	100	100	100	100
Number at study start	10	10	10	10	10	10
Found dead	1	0	0	0	0	0
Sacrificed by design	9	10	10	10	10	10
Alive on test day 14	9	10	10	10	10	10
APFO (Linear) – B						
0	100	100	100	100	100	100
7	100	100	100	100	100	100
14	100	100	100	100	100	90
Number at study start	10	10	10	10	10	10
Found dead	0	0	0	0	0	1
Sacrificed by design	10	10	10	10	10	9
Alive on test day 14	10	10	10	10	10	9
APFO (Branched) – C						
0	100	100	100	100	100	100
7	100	100	100	100	100	100
14	100	100	100	100	100	100
Number at study start	10	10	10	10	10	10
Found dead	0	0	0	0	0	0
Sacrificed by design	10	10	10	10	10	10
Alive on test day 14	10	10	10	10	10	10

Percent Survival = (Number of Mice Alive/Number of Mice at Risk)*100
Number of Mice at Risk = Number at Study Start – Number Sacrificed by Design

There were no statistically significant decreases in survival at $p < 0.05$ by Cochran-Armitage trend test.

Table 21
Summary of Clinical Chemistry Values for Male Mice Dosed with APFO (Linear/Branched)

	Group IA 0 mg/kg	Group IIIA 0.3 mg/kg	Group VA 1 mg/kg	Group VIIA 3 mg/kg	Group IXA 10 mg/kg	Group XIA 30 mg/kg
CHOL (mg/dL)						
DAY 14	145	137	138	97@	114	88@
	21(9)	24(10)	33(10)	23(10)	44(10)	32(10)
TRIG (mg/dL)						
DAY 14	99	136@	145@	140@	159@	85
	14(9)	20(10)	27(10)	31(10)	38(10)	30(10)
HDL (mg/dL)						
DAY 14	97	90	81	55@	69@	49@
	12(9)	12(10)	14(10)	11(10)	27(10)	17(10)
nonHDL (mg/dL)						
DAY 14	47	47	57	42	45	39
	10(9)	14(10)	21(10)	15(10)	17(10)	16(10)

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

@ Statistically significant difference from control at $p < 0.05$ by Dunn's test.

Table 22
Summary of Clinical Chemistry Values for Male Mice Dosed with APFO (Linear)

	Group IB 0 mg/kg	Group IIIB 0.3 mg/kg	Group VB 1 mg/kg	Group VIIB 3 mg/kg	Group IXB 10 mg/kg	Group XIB 30 mg/kg
CHOL (mg/dL)						
DAY 14	150	147	139	97@	116	101@
	25(10)	38(10)	20(10)	24(10)	32(10)	33(9)
TRIG (mg/dL)						
DAY 14	103	125	137	137	135	86
	31(10)	35(10)	22(10)	38(10)	50(10)	16(9)
HDL (mg/dL)						
DAY 14	95	90	78	51*	64*	56*
	16(10)	19(10)	10(10)	7(10)	15(10)	19(9)
nonHDL (mg/dL)						
DAY 14	56	57	61	46	52	45
	11(10)	20(10)	13(10)	20(10)	19(10)	15(9)

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

* Statistically significant difference from control at $p < 0.05$ by Dunnett/Tamhane-Dunnett test.
@ Statistically significant difference from control at $p < 0.05$ by Dunn's test.

Table 23
Summary of Clinical Chemistry Values for Male Mice Dosed with APFO (Branched)

	Group IC 0 mg/kg	Group IIIC 0.3 mg/kg	Group VC 1 mg/kg	Group VIIC 3 mg/kg	Group IXC 10 mg/kg	Group XIC 30 mg/kg
CHOL (mg/dL)						
DAY 14	146	125	127	96*	120	113
	22(10)	26(10)	39(10)	26(10)	43(10)	17(10)
TRIG (mg/dL)						
DAY 14	134	118	161	149	200	127
	22(10)	28 (9)[a]	44(10)	48(10)	57(10)	30(10)
HDL (mg/dL)						
DAY 14	94	77	79	62*	67*	67*
	13(10)	10(10)	18(10)	13(10)	21(10)	12(10)
nonHDL (mg/dL)						
DAY 14	52	48	48	34@	54	46
	10(10)	20(10)	22(10)	13(10)	23(10)	7(10)

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

a Excludes one animal considered to be an outlier.

* Statistically significant difference from control at $p < 0.05$ by Dunnett/Tamhane-Dunnett test.
@ Statistically significant difference from control at $p < 0.05$ by Dunn's test.

Table 24
Mean Final Body and Organ Weights for Male Mice Dosed with APFO (Linear/Branched)

Mean Final Body, Absolute and Relative Organ Weights (grams)

Group:	IA	IIIA	VA	VIIA	IXA	XIA
Dosage(mg/kg)	0	0.3	1	3	10	30
Test						
LIVER	1.639	1.925	2.547	3.469@	4.609@	4.557@
	0.113(9)	0.138(10)	0.150(10)	0.352(10)	0.421(10)	0.583(10)
KIDNEYS	0.498	0.544	0.536	0.539	0.452	0.401*
	0.039(9)	0.069(10)	0.060(10)	0.074(10)	0.041(9)	0.053(10)
FINAL BODY WEIGHT	31.9	31.5	32.2	32.4	28.3	24.9@
	1.9(9)	1.7(10)	2.0(10)	2.6(10)	1.9(10)	1.7(10)
LIVER/ FINAL BODY * 100	5.143	6.115	7.918	10.716@	16.272@	18.283@
	0.274(9)	0.245(10)	0.487(10)	0.632(10)	1.051(10)	1.569(10)
KIDNEYS/ FINAL BODY * 100	1.567	1.727	1.662	1.661	1.599	1.605
	0.163(9)	0.180(10)	0.146(10)	0.150(10)	0.082(9)	0.137(10)

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

* Parametric comparison to control (Dunnett/Tamhane-Dunnett) significant
@ Nonparametric comparison to control (Dunn's) significant

Table 25
Mean Final Body and Organ Weights for Male Mice Dosed with APFO (Linear)

Mean Final Body, Absolute and Relative Organ Weights (grams)

Group:	IB	IIIB	VB	VIIB	IXB	XIB
Dosage(mg/kg)	0	0.3	1	3	10	30
Test						
LIVER	1.697	1.998	2.729@	3.695@	4.833@	4.639@
	0.125(10)	0.112(10)	0.143(10)	0.491(10)	0.711(10)	0.508(9)
KIDNEYS	0.565	0.529	0.563	0.566	0.461*	0.440*
	0.055(10)	0.031(10)	0.076(10)	0.087(10)	0.084(10)	0.058(9)
FINAL BODY WEIGHT						
	30.7	30.9	32.8*	32.5	28.0	25.8*
	1.3(10)	1.1(10)	1.1(10)	3.4(10)	2.8(10)	1.7(9)
LIVER/						
FINAL BODY * 100	5.517	6.452*	8.329*	11.369*	17.181*	17.957*
	0.243(10)	0.233(10)	0.307(10)	1.060(10)	1.129(10)	1.059(9)
KIDNEYS/						
FINAL BODY * 100	1.837	1.710	1.715	1.741	1.633*	1.705
	0.159(10)	0.087(10)	0.189(10)	0.185(10)	0.170(10)	0.169(9)

Data summarized as: Mean
Standard Deviation (n)

* Parametric comparison to control (Dunnett/Tamhane-Dunnett) significant
@ Nonparametric comparison to control (Dunn's) significant

Table 26
Mean Final Body and Organ Weights for Male Mice Dosed with APFO (Branched)

Mean Final Body, Absolute and Relative Organ Weights (grams)

Group:	IC	IIIC	VC	VIIC	IXC	XIC
Dosage(mg/kg)	0	0.3	1	3	10	30
Test						
LIVER	1.620	1.954	2.531	4.027@	5.898@	6.507@
	0.138(10)	0.186(10)	0.264(10)	0.317(10)	0.634(10)	0.654(10)
KIDNEYS	0.516	0.549	0.547	0.531	0.543	0.485
	0.041(10)	0.045(10)	0.048(10)	0.057(10)	0.035(10)	0.054(10)
FINAL BODY WEIGHT						
	31.5	31.9	32.3	33.7*	33.3	30.9
	1.9(10)	1.8(10)	1.6(10)	1.1(10)	1.3(10)	2.1(10)
LIVER/						
FINAL BODY * 100	5.139	6.123*	7.853*	11.945*	17.708*	21.013*
	0.311(10)	0.344(10)	0.850(10)	0.832(10)	1.807(10)	1.395(10)
KIDNEYS/						
FINAL BODY * 100	1.641	1.724	1.694	1.578	1.631	1.566
	0.160(10)	0.148(10)	0.115(10)	0.184(10)	0.101(10)	0.109(10)

Data summarized as: Mean
Standard Deviation (n)

* Parametric comparison to control (Dunnett/Tamhane-Dunnett) significant
@ Nonparametric comparison to control (Dunn's) significant

Table 27
Incidences of Gross Observations in Male Mice Dosed with APFO (Linear/Branched)

LESIONS	TREATMENT	LESION INCIDENCE (Numeric) Males					
		0 mg/kg IA	0.3 mg/kg IIIA	1 mg/kg VA	3 mg/kg VIIA	10 mg/kg IXA	30 mg/kg XIA
LIVER		(10)	(10)	(10)	(10)	(10)	(10)
NO ABNORMALITY DETECTED		10	10	10	9	6	6
DISCOLORATION					1	4	4
KIDNEYS		(10)	(10)	(10)	(10)	(10)	(10)
NO ABNORMALITY DETECTED		10	10	10	10	10	10
SKIN		(1)					
STAIN, YELLOW, VENTRAL BODY.		1					

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

Table 28
Incidences of Gross Observations in Male Mice Dosed with APFO (Linear)

		LESION INCIDENCE (Numeric)					
		Males					
LESIONS	TREATMENT per day	0 mg/kg IB	0.3 mg/kg IIIB	1 mg/kg VB	3 mg/kg VIIB	10 mg/kg IXB	30 mg/kg XIB
LIVER		(10)	(10)	(10)	(10)	(10)	(10)
NO ABNORMALITY DETECTED		10	10	10	9	3	3
DISCOLORATION					1	7	7
KIDNEYS		(10)	(10)	(10)	(10)	(10)	(10)
NO ABNORMALITY DETECTED		10	10	10	10	10	10
SKIN							(1)
STAIN, YELLOW, VENTRAL BODY.							1

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

Table 29
Incidences of Gross Observations in Male Mice Dosed with APFO (Branched)

		LESION INCIDENCE (Numeric)					
		Males					
LESIONS	TREATMENT per day	0 mg/kg IC	0.3 mg/kg IIIC	1 mg/kg VC	3 mg/kg VIIC	10 mg/kg IXC	30 mg/kg XIC
LIVER		(10)	(10)	(10)	(10)	(10)	(10)
NO ABNORMALITY DETECTED		10	10	10	10	5	3
DISCOLORATION						5	7
KIDNEYS		(10)	(10)	(10)	(10)	(10)	(10)
NO ABNORMALITY DETECTED		10	10	10	10	10	10

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

Table 30
Summary of Peroxisomal Beta-Oxidation Activity in Male Mice

Group	Dosage (mg/kg/day)	Hepatic Peroxisomal Beta-Oxidation Activity (nmol/min/mg protein)		
		APFO (Linear/Branched)[a]	APFO (Linear)[a]	APFO (Branched)[a]
I	0	17.9 ± 5.7 [b]	17.3 ± 4.1	18.2 ± 4.3
III	0.3	34.4 ± 7.4*	42.0 ± 10.8*	24.2 ± 3.7
V	1	48.8 ± 8.9*	49.6 ± 11.4*	36.9 ± 10.2*
VII	3	47.1 ± 7.1*	48.5 ± 10.0*	44.5 ± 8.5*
IX	10	31.6 ± 7.4*	37.2 ± 9.0*	42.5 ± 4.4*
XI	30	30.7 ± 8.2*	31.9 ± 4.5[b]*	35.4 ± 9.7*

[a]Mean ± standard deviation. The n = 10 for each group unless otherwise noted.

[b]The n = 9.

Statistically significant difference from control ($p < 0.05$) by Dunnett's test (*)

Table 31
Summary of % Relative Liver Weights in Male Mice

Group	Dosage (mg/kg/day)	Relative Liver Weights to Full Body Weights (%)		
		APFO (Linear/Branched)[a]	APFO (Linear)[a]	APFO (Branched)[a]
I	0	5.1 ± 0.3[b]	5.5 ± 0.2	5.1 ± 0.3
III	0.3	6.1 ± 0.2	6.5 ± 0.2*	6.1 ± 0.3*
V	1	7.9 ± 0.5	8.3 ± 0.3*	7.9 ± 0.9*
VII	3	10.7 ± 0.6@	11.4 ± 1.1*	11.9 ± 0.8*
IX	10	16.3 ± 1.1@	17.2 ± 1.1*	17.7 ± 1.8*
XI	30	18.3 ± 1.6@	18.0 ± 1.1[b]*	21.0 ± 1.4*

[a]Mean ± standard deviation. The n = 10 for each group unless otherwise noted.

[b]The n = 9.

Statistically significant difference from control ($p < 0.05$) by Dunnett's test (*) or Dunn's test (@).

MOUSE FIGURES

Figure 1
Mean Body Weights of Male Mice Dosed with APFO (Linear/Branched)

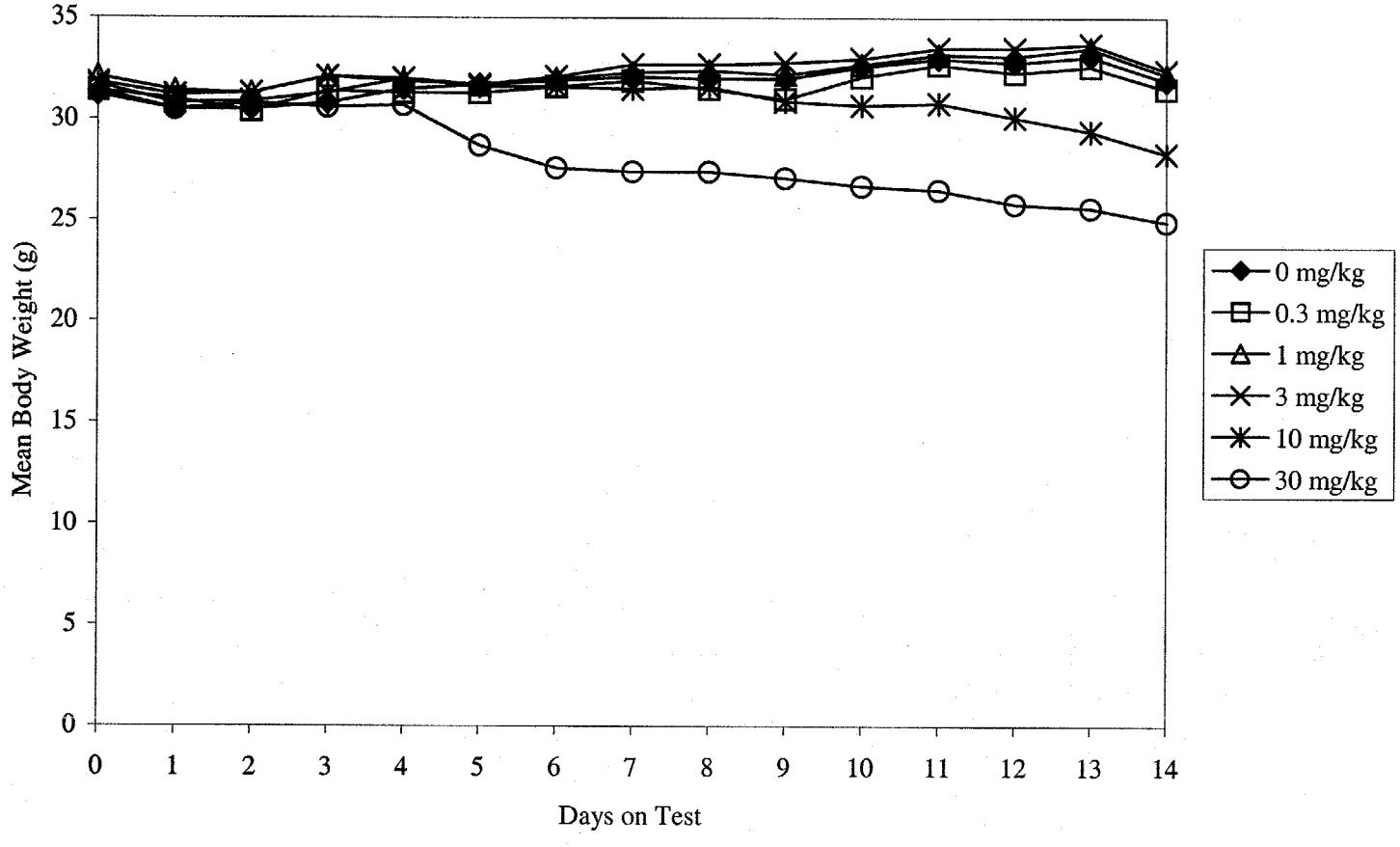


Figure 2
Mean Body Weights of Male Mice Dosed with APFO (Linear)

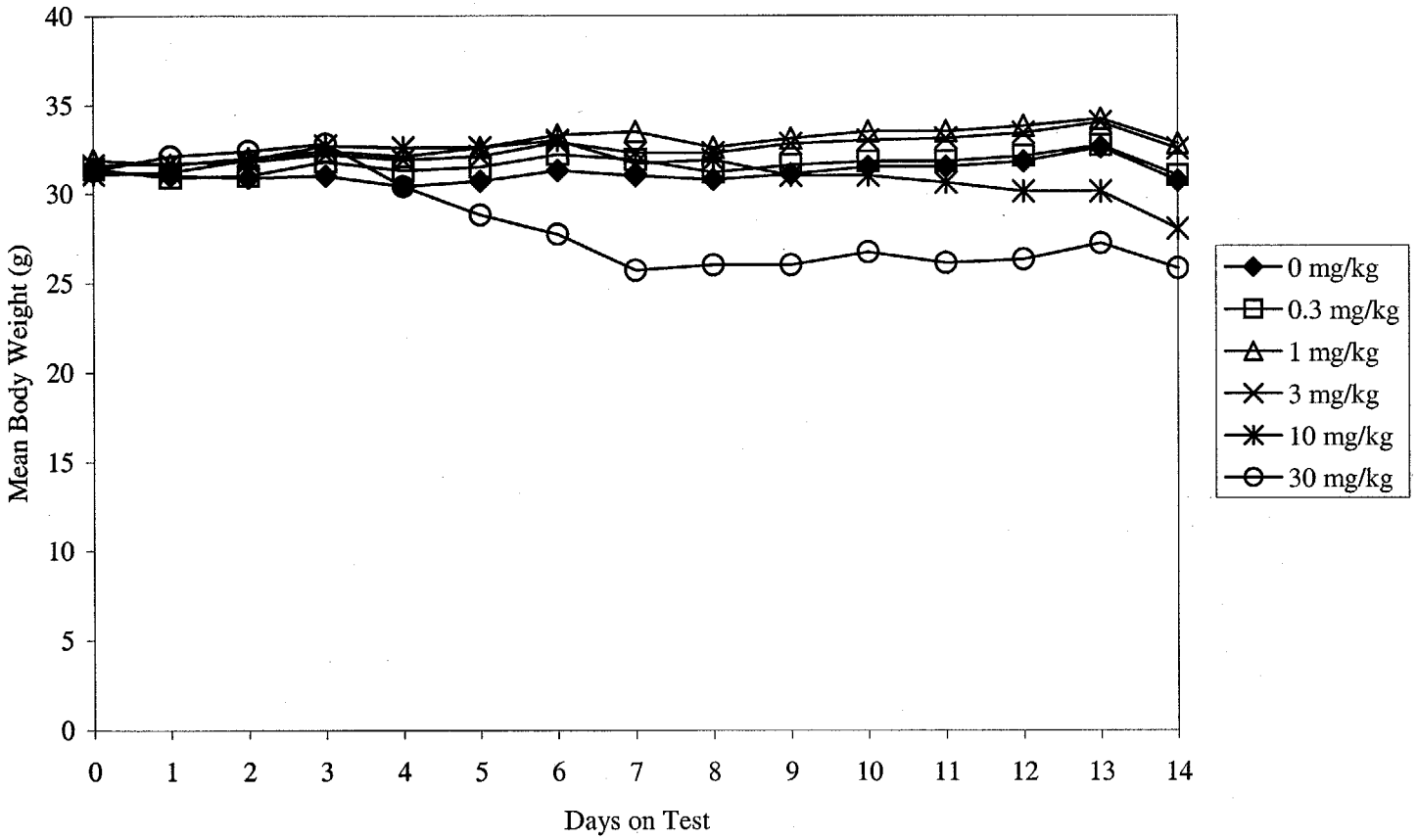
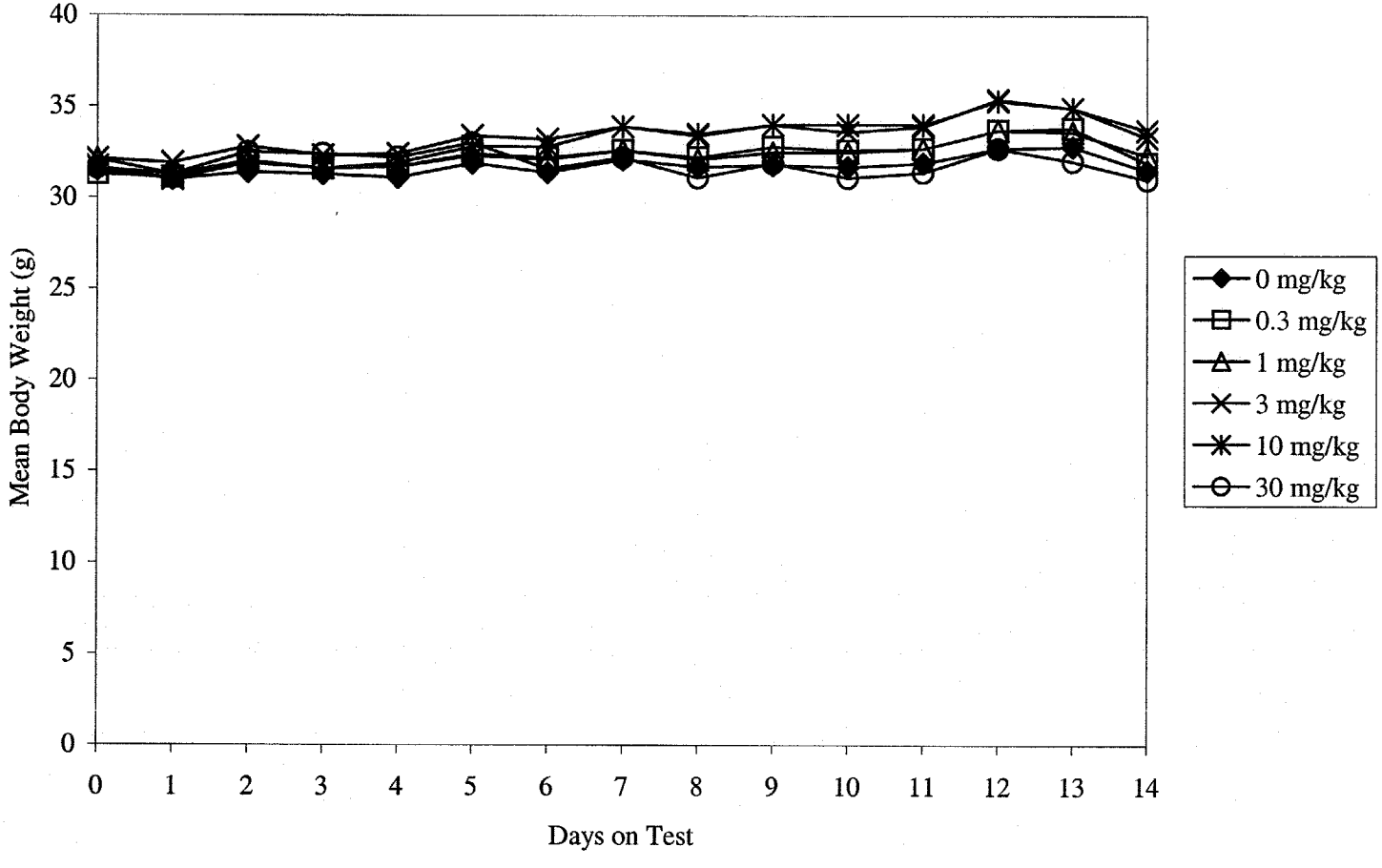


Figure 3
Mean Body Weights of Male Mice Dosed with APFO (Branched)



MOUSE APPENDICES

Appendix A
Individual PFOA Serum Concentrations for Mice

INDIVIDUAL PFOA SERUM CONCENTRATIONS FOR MICE

EXPLANATORY NOTES

STUDY DESIGN

Groups			Dosage (mg/kg)
H-24921 APFO (Linear/Branched)	H-26313 APFO (Linear)	H-26225 APFO (Branched)	
IA	IB	IC	0 (Control)
IIIA	IIIB	IIIC	0.3
VA	VB	VC	1
VIIA	VIIB	VIIC	3
IXA	IXB	IXC	10
XIA	XIB	XIC	30

Abbreviations

mg/kg = mg/kg/day
Ctrl = Control
L = Linear
B = Branched
Avg. = Average
S dev = Standard deviation
QNS = Quantity not sufficient for analysis
NSR = No sample received
N/A = Not Applicable

Note:

H-26225 is comprised of two components, H-26203 and H-26204.

Individual PFOA Serum Concentrations for Mice

Group	Dose Level	ID	µg/mL Linear	µg/mL Branched	L+B	**L/B**
IA	Ctrl	101	NSR	NSR	N/A	**N/A**
		102	0.041	0.016	0.057	**2.50**
		103	0.029	0.010	0.039	**3.02**
		104	0.067	0.018	0.085	**3.79**
		105	0.040	0.012	0.052	**3.28**
		106	0.019	0.007	0.026	**2.67**
		107	0.013	0.000	0.013	*
		108	0.017	0.000	0.017	*
		109	0.013	0.009	0.022	**1.36**
		110	0.011	0.008	0.019	**1.36**
		Avg.	0.028	0.009	0.037	**2.57**
				s dev	0.024	**0.92**
IIIA	0.3 mg/kg	301	8.1	2.4	10.5	**3.37**
		302	7.8	1.8	9.6	**4.35**
		303	6.5	1.6	8.1	**4.20**
		304	8.1	2.3	10.4	**3.55**
		305	9.7	2.8	12.6	**3.42**
		306	9.4	2.0	11.4	**4.62**
		307	8.8	2.1	10.9	**4.21**
		308	7.2	1.7	8.8	**4.33**
		309	9.5	2.0	11.5	**4.83**
		310	7.3	1.7	9.0	**4.31**
		Avg.	8.2	2.0	10.3	**4.12**
				s dev	1.4	**0.50**
VA	1.0 mg/kg	501	11.1	3.2	14.3	**3.48**
		502	23.2	5.4	28.6	**4.31**
		503	23.8	6.2	30.0	**3.82**
		504	23.3	6.9	30.2	**3.37**
		505	22.2	5.6	27.9	**3.95**
		506	20.6	7.0	27.6	**2.92**
		507	21.6	5.5	27.1	**3.94**
		508	17.7	4.4	22.1	**4.01**
		509	26.0	5.6	31.6	**4.67**
		510	20.9	5.3	26.2	**3.95**
		Avg.	21.0	5.5	26.6	**3.84**
				s dev	5.0	**0.49**

* Ratio not determined (divide by zero error).

Individual PFOA Serum Concentrations for Mice

Group	Dose Level	ID	µg/mL Linear	µg/mL Branched	L+B	L/B
VIIA	3.0 mg/kg	701	45.0	9.0	53.9	**5.02**
		702	56.1	12.8	69.0	**4.38**
		703	58.1	14.5	72.6	**4.01**
		704	47.7	13.2	60.9	**3.60**
		705	58.1	14.6	72.7	**3.98**
		706	41.3	10.3	51.5	**4.02**
		707	56.1	12.1	68.2	**4.64**
		708	55.4	11.0	66.4	**5.04**
		709	53.7	12.0	65.7	**4.48**
		710	65.7	14.0	79.7	**4.68**
		Avg.	53.7	12.3	66.1	**4.39**
				s dev	8.6	**0.48**
IXA	10 mg/kg	901	155	29.6	184.4	**5.23**
		902	193	33.5	226.8	**5.77**
		903	166	25.8	192.0	**6.44**
		904	160	23.5	183.0	**6.80**
		905	213	39.6	252.2	**5.38**
		906	146	19.7	165.4	**7.38**
		907	171	23.7	194.4	**7.21**
		908	147	20.6	167.8	**7.15**
		909	146	24.4	170.9	**6.00**
		910	151	16.9	167.6	**8.94**
		Avg.	165	26	190	**6.63**
				s dev	28.5	**1.12**
XIA	30 mg/kg	1101	198	22.3	220.3	**8.88**
		1102	246	26.2	271.8	**9.36**
		1103	191	20.3	211.2	**9.43**
		1104	233	26.9	259.9	**8.67**
		1105	208	21.2	228.8	**9.81**
		1106	222	21.7	244.0	**10.25**
		1107	204	20.1	224.5	**10.19**
		1108	193	17.6	210.4	**10.98**
		1109	218	22.4	240.1	**9.71**
		1110	272	24.2	296.6	**11.26**
		Avg.	218	22	241	**9.9**
				s dev	28.0	**0.84**

Note: Test substance H24921 L/B ratio = 0.78/0.22 = 3.55
ng/mL values corrected for standard composition and converted to µg/mL by multiplying linear values by 0.00078 and branched values by 0.00022

Individual PFOA Serum Concentrations for Mice

Group	Dose Level	ID	µg/mL Linear
IB	Ctrl	101	0.077
		102	0.037
		103	0.218
		104	0.062
		105	0.131
		106	0.035
		107	0.018
		108	0.038
		109	0.022
		110	0.030
		Avg.	0.067
		s dev	0.060
IIIB	0.3 mg/kg	301	12.4
		302	11.5
		303	18.1
		304	13.3
		305	14.3
		306	10.9
		307	11.7
		308	10.4
		309	QNS
		310	11.2
		Avg.	12.6
		s dev	2.4
VB	1.0 mg/kg	501	34.3
		502	42.1
		503	31.0
		504	38.4
		505	31.8
		506	30.9
		507	25.1
		508	32.9
		509	28.0
		510	26.6
		Avg.	32.1
		s dev	5.2

Individual PFOA Serum Concentrations for Mice

Group	Dose Level	ID	µg/mL Linear
VIIB	3.0 mg/kg	701	77
		702	63
		703	78
		704	66
		705	71
		706	61
		707	83
		708	50
		709	68
		710	72
		Avg.	69
		s dev	10
IXB	10 mg/kg	901	197
		902	132
		903	134
		904	235
		905	372
		906	233
		907	216
		908	233
		909	266
		910	231
		Avg.	225
		s dev	68
XIB	30 mg/kg	1101	253
		1102	276
		1103	297
		1104	218
		1105	NSR
		1106	298
		1107	253
		1108	286
		1109	246
		1110	203
		Avg.	259
		s dev	34

Individual PFOA Serum Concentrations for Mice

Group	Dose Level	ID	µg/mL H26203	µg/mL H26204	H26203 + H26204	**H26204/H26203**
IC	Ctrl	101	*	*	0.079	**N/A**
		102	*	*	0.043	**N/A**
		103	*	*	0.027	**N/A**
		104	*	*	0.029	**N/A**
		105	*	*	0.017	**N/A**
		106	*	*	0.000	**N/A**
		107	*	*	0.000	**N/A**
		108	*	*	0.000	**N/A**
		109	*	*	0.000	**N/A**
		110	*	*	0.000	**N/A**
		Avg.	*	*	0.02	**N/A**
				s dev	0.03	
IIIC	0.3 mg/kg	301	6.2	9.4	15.6	**1.53**
		302	6.2	10.8	17.0	**1.74**
		303	7.3	14.3	21.6	**1.97**
		304	5.8	8.2	14.0	**1.42**
		305	5.0	7.7	12.7	**1.54**
		306	6.1	7.7	13.8	**1.26**
		307	5.1	6.4	11.5	**1.25**
		308	4.3	5.7	10.1	**1.31**
		309	6.2	6.9	13.1	**1.11**
		310	5.0	4.9	9.9	**0.99**
		Avg.	5.7	8.2	13.9	**1.41**
				s dev	3.52	**0.29**
VC	1.0 mg/kg	501	14.4	34.9	49.4	**2.42**
		502	12.1	28.1	40.2	**2.33**
		503	12.4	29.8	42.2	**2.40**
		504	11.5	24.2	35.7	**2.11**
		505	11.4	27.0	38.4	**2.38**
		506	11.3	26.7	38.0	**2.35**
		507	8.3	15.3	23.5	**1.84**
		508	9.5	14.3	23.8	**1.51**
		509	8.8	17.2	26.0	**1.94**
		510	7.8	10.8	18.6	**1.38**
		Avg.	10.8	22.8	33.6	**2.07**
				s dev	10.0	**0.38**

* A total branched content was determined instead of individual values.

Individual PFOA Serum Concentrations for Mice

Group	Dose Level	ID	µg/mL H26203	µg/mL H26204	H26203 + H26204	**H26204/H26203**
VIIC	3.0 mg/kg	701	25.0	73.9	98.8	**2.96**
		702	15.4	50.0	65.4	**3.24**
		703	22.4	76.2	98.5	**3.40**
		704	18.0	63.2	81.2	**3.51**
		705	20.1	65.6	85.7	**3.27**
		706	20.0	59.6	79.7	**2.97**
		707	24.1	59.0	83.2	**2.44**
		708	21.4	57.0	78.3	**2.67**
		709	19.8	53.7	73.5	**2.71**
		710	21.5	57.6	79.1	**2.67**
		Avg.	20.8	61.6	82.3	**2.99**
				s dev	10.3	**0.36**
IXC	10 mg/kg	901	38	145	183	**3.87**
		902	41	171	212	**4.14**
		903	35	136	171	**3.87**
		904	36	115	151	**3.19**
		905	47	184	232	**3.90**
		906	38	112	150	**2.96**
		907	33	107	139	**3.27**
		908	40	119	160	**2.94**
		909	39	114	154	**2.91**
		910	46	125	170	**2.73**
		Avg.	39	133	172	**3.38**
				s dev	29	**0.52**
XIC	30 mg/kg	1101	48	276	324	**5.79**
		1102	39	213	252	**5.43**
		1103	40	260	301	**6.43**
		1104	33	204	236	**6.21**
		1105	43	257	300	**5.95**
		1106	44	170	214	**3.87**
		1107	34	154	189	**4.50**
		1108	42	155	197	**3.66**
		1109	36	145	182	**4.02**
		1110	50	194	244	**3.89**
		Avg.	41	203	244	**4.97**
				s dev	50	**1.09**

Note: Test substance H26225 ratio = 58% H26204/42% H26203 = 1.38

Appendix B
Individual Body Weights for Mice

INDIVIDUAL BODY WEIGHTS FOR MICE

EXPLANATORY NOTES

STUDY DESIGN

Groups			Dosage (mg/kg)
H-24921 APFO (Linear/Branched)	H-26313 APFO (Linear)	H-26225 APFO (Branched)	
IA	IB	IC	0 (Control)
IIIA	IIIB	IIIC	0.3
VA	VB	VC	1
VIIA	VIIB	VIIC	3
IXA	IXB	IXC	10
XIA	XIB	XIC	30

Abbreviations

mg/kg = mg/kg/day

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Individual Body Weights for Mice

	Body Weight g Day 0	Body Weight g Day 1	Body Weight g Day 2	Body Weight g Day 3	Body Weight g Day 4	Body Weight g Day 5	Body Weight g Day 6	Body Weight g Day 7	Body Weight g Day 8
Male, IA 0 mg/kg									
101	27.3	27.0	26.9	24.0	NM				
102	29.6	28.5	29.1	29.4	29.2	29.5	29.7	29.8	29.9
103	30.7	30.2	29.7	31.0	30.4	30.9	31.0	30.7	31.0
104	29.7	29.5	29.3	29.4	29.4	30.0	29.2	29.8	29.8
105	32.1	31.3	31.8	32.3	32.6	32.8	33.8	34.0	33.5
106	34.8	33.9	33.7	34.1	33.8	33.8	34.3	34.3	34.2
107	33.3	33.0	32.6	33.3	32.8	33.3	33.1	33.7	33.6
108	29.3	28.4	28.4	29.4	29.7	29.6	30.3	30.4	29.5
109	32.1	31.3	31.2	32.0	32.5	32.4	32.0	32.6	32.5
110	32.8	32.2	32.0	32.8	32.8	33.0	33.9	33.8	33.6
Male, IIIA 0.3 mg/kg									
301	28.3	28.5	27.8	29.0	29.3	29.2	29.6	29.7	28.9
302	30.8	29.5	29.0	30.0	29.7	30.0	30.0	30.6	30.5
303	30.6	30.9	30.6	32.0	32.7	33.0	33.4	33.2	33.1
304	30.8	29.6	29.0	29.8	29.0	29.2	29.7	30.0	29.8
305	33.3	32.4	32.0	32.6	32.4	32.4	32.8	32.7	32.3
306	33.6	33.1	33.1	34.1	34.3	34.2	34.2	34.8	33.8
307	31.9	31.3	30.5	31.8	31.7	31.0	31.2	32.2	31.1
308	31.0	30.3	29.8	30.8	30.7	30.6	31.0	31.5	30.9
309	30.5	30.3	29.8	30.4	30.1	30.2	30.1	30.7	30.8
310	33.1	33.7	32.7	33.3	33.3	33.5	33.9	34.0	33.9
Male, VA 1 mg/kg									
501	31.9	32.3	32.0	28.5	25.5	24.7	24.2	24.5	24.5
502	31.4	30.6	30.2	31.9	31.8	31.8	32.6	32.8	32.1
503	31.4	29.7	29.6	31.2	31.3	30.8	31.2	31.4	31.5
504	30.0	29.2	29.2	31.0	31.2	31.2	31.5	31.6	31.6
505	32.8	31.9	32.1	33.4	33.3	33.9	34.5	34.9	35.2
506	34.8	34.0	33.8	34.5	34.5	34.2	34.8	34.9	34.2
507	31.7	31.3	30.8	31.9	32.3	31.9	31.8	32.2	33.1
508	31.0	30.4	30.0	31.5	31.6	31.7	31.9	32.6	33.3
509	31.8	30.7	30.9	32.0	32.3	32.0	32.3	32.4	32.7
510	34.0	34.1	34.4	35.0	35.2	35.1	35.4	35.7	35.9

Key: NM = Not Measurable

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Individual Body Weights for Mice

	Body Weight g Day 9	Body Weight g Day 10	Body Weight g Day 11	Body Weight g Day 12	Body Weight g Day 13	Body Weight g Day 14
Male, IA 0 mg/kg						
101						
102	30.5	30.7	31.2	31.0	31.4	30.7
103	31.6	31.8	32.3	31.8	32.4	30.6
104	29.6	29.8	30.6	30.0	30.1	30.1
105	33.7	34.7	35.0	35.2	35.1	33.6
106	34.1	35.1	35.3	35.4	35.6	34.4
107	33.3	34.3	34.5	34.3	34.5	33.7
108	29.4	30.4	31.1	30.7	30.8	29.1
109	32.3	32.7	32.9	32.8	33.6	31.8
110	33.4	33.8	34.1	33.9	34.1	33.0
Male, IIIA 0.3 mg/kg						
301	28.8	29.5	30.0	30.1	30.2	29.1
302	29.8	31.0	31.3	31.0	31.2	29.9
303	32.7	33.7	34.9	34.9	34.6	33.4
304	28.9	30.1	30.7	30.1	30.4	29.3
305	31.9	32.9	33.3	32.6	33.4	32.3
306	33.4	34.6	35.4	34.6	34.9	33.5
307	31.1	31.7	32.5	31.6	31.9	31.2
308	30.5	31.4	32.3	32.2	32.7	31.9
309	29.7	31.5	31.6	31.4	31.6	30.6
310	33.5	34.1	34.8	34.8	34.9	33.6
Male, VA 1 mg/kg						
501	24.1	25.9	26.7	27.3	27.9	28.2
502	31.8	32.1	32.0	32.1	32.4	31.5
503	31.3	32.0	32.5	32.0	32.6	31.4
504	31.5	31.8	32.2	31.7	32.3	31.6
505	34.9	35.8	36.5	35.7	36.2	34.5
506	34.0	34.5	34.9	34.4	34.5	33.8
507	32.8	33.0	33.0	32.9	33.3	31.3
508	32.9	33.2	34.0	34.0	34.4	33.0
509	32.8	32.8	33.0	33.2	33.1	31.9
510	35.6	36.0	36.7	37.4	37.8	35.1

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Individual Body Weights for Mice

	Body Weight g Day 0	Body Weight g Day 1	Body Weight g Day 2	Body Weight g Day 3	Body Weight g Day 4	Body Weight g Day 5	Body Weight g Day 6	Body Weight g Day 7	Body Weight g Day 8
Male, VIIA 3 mg/kg									
701	28.7	28.9	28.7	28.9	25.2	23.7	23.9	24.9	25.8
702	30.2	29.1	29.5	30.5	30.3	30.6	31.4	31.9	31.6
703	32.2	31.9	31.4	32.6	33.2	33.0	33.6	34.5	34.1
704	30.1	29.4	29.9	30.2	30.6	30.3	30.4	31.7	31.0
705	33.3	32.2	33.0	33.6	33.9	33.9	34.3	34.9	35.2
706	34.0	33.8	34.3	34.8	35.0	34.0	34.5	35.4	34.7
707	32.6	32.3	32.4	33.1	33.6	33.1	33.3	33.8	34.5
708	31.0	30.2	29.7	30.8	31.0	31.0	31.4	31.7	31.8
709	32.2	31.4	31.6	32.3	32.7	33.0	32.9	33.3	33.6
710	33.9	32.5	32.8	34.3	34.0	34.1	34.8	34.5	34.5
Male, IXA 10 mg/kg									
901	29.0	28.7	28.6	29.4	30.1	29.9	30.7	30.9	30.6
902	30.5	29.9	30.0	30.9	31.6	31.0	31.1	30.9	31.0
903	31.2	30.9	30.8	30.3	31.8	31.3	31.8	32.8	32.8
904	31.4	30.2	30.5	31.0	31.1	31.4	31.4	32.0	31.9
905	32.6	32.0	32.3	31.9	32.2	30.9	31.1	30.6	29.7
906	32.9	31.4	31.7	32.1	32.5	32.7	32.8	31.7	33.8
907	31.1	30.9	30.7	31.2	31.7	31.3	31.1	30.7	29.6
908	31.4	30.5	31.0	31.3	31.4	31.4	31.3	31.5	32.6
909	32.9	31.0	31.1	31.4	32.5	32.6	32.9	33.4	33.1
910	33.9	32.0	32.2	33.0	34.6	33.2	31.4	30.9	30.5
Male, XIA 30 mg/kg									
1101	30.5	29.8	29.8	29.9	29.6	29.0	27.7	27.1	27.2
1102	30.5	29.9	30.7	30.5	30.5	28.1	27.1	26.1	25.3
1103	30.3	29.1	29.6	29.1	29.3	26.7	24.8	24.9	24.6
1104	29.5	29.1	30.0	30.3	29.1	26.9	25.2	24.5	24.4
1105	33.0	32.1	31.5	31.9	31.9	29.4	28.5	29.1	28.3
1106	32.7	30.8	30.3	28.4	29.5	28.8	27.9	27.3	27.6
1107	32.8	32.0	32.6	32.8	33.2	31.3	29.9	29.8	29.3
1108	30.9	30.5	30.4	29.7	30.2	27.2	27.2	27.1	27.4
1109	30.7	29.7	30.7	30.8	30.7	28.9	28.7	29.0	29.4
1110	33.4	32.0	32.3	32.1	32.5	30.6	29.4	28.7	30.6

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Individual Body Weights for Mice

	Body Weight g Day 9	Body Weight g Day 10	Body Weight g Day 11	Body Weight g Day 12	Body Weight g Day 13	Body Weight g Day 14
Male, VIIA 3 mg/kg						
701	26.9	27.2	28.1	28.1	27.7	26.0
702	31.1	31.0	31.7	31.1	31.4	30.7
703	34.3	35.2	35.7	35.5	35.9	33.8
704	31.2	31.0	31.9	31.2	31.7	31.4
705	35.3	35.6	35.7	36.0	36.1	34.7
706	35.2	35.0	35.1	35.9	36.1	34.0
707	34.2	34.4	34.8	34.3	34.8	33.8
708	31.9	31.9	32.6	32.9	32.8	32.0
709	33.3	33.5	34.0	34.6	34.4	33.1
710	34.8	34.8	35.2	35.5	35.6	34.1
Male, IXA 10 mg/kg						
901	30.8	30.6	32.1	30.9	30.6	29.1
902	29.9	30.5	30.0	29.6	29.5	27.8
903	32.0	33.1	32.8	31.6	30.2	28.9
904	31.6	32.0	32.3	31.1	31.1	30.3
905	30.2	29.3	28.4	27.3	26.7	25.8
906	32.2	32.4	34.0	32.5	32.3	31.0
907	29.7	28.5	28.0	26.9	26.6	26.8
908	31.1	30.6	31.2	31.9	28.8	28.0
909	33.2	32.5	31.2	31.0	31.1	30.0
910	28.6	27.8	28.0	27.7	26.9	25.6
Male, XIA 30 mg/kg						
1101	26.5	26.2	25.6	25.1	24.7	23.9
1102	24.9	24.7	24.4	24.3	23.9	22.8
1103	25.9	25.7	25.0	24.1	24.1	24.0
1104	23.6	23.2	23.4	22.6	22.6	22.1
1105	28.5	28.6	28.3	27.5	26.9	26.1
1106	27.7	27.6	27.9	27.3	26.4	26.2
1107	28.8	28.6	27.4	27.7	28.2	27.1
1108	26.0	25.5	26.2	25.1	25.3	24.7
1109	28.7	28.4	28.9	28.0	27.3	26.5
1110	30.3	28.9	28.3	26.3	26.5	25.5

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Individual Body Weights for Mice

	Body Weight g Day 0	Body Weight g Day 1	Body Weight g Day 2	Body Weight g Day 3	Body Weight g Day 4	Body Weight g Day 5	Body Weight g Day 6	Body Weight g Day 7	Body Weight g Day 8
Male, IB 0 mg/kg									
101	29.5	29.0	29.1	29.6	28.9	29.1	29.4	28.9	29.4
102	32.2	31.4	32.2	32.3	32.1	32.6	33.8	32.7	31.6
103	30.7	30.7	30.5	30.9	31.0	31.1	31.5	31.5	31.0
104	30.9	31.1	30.7	31.2	31.0	31.1	31.1	31.2	31.3
105	33.8	33.2	33.0	29.4	27.2	27.6	27.7	28.7	29.7
106	32.0	31.3	30.7	31.3	30.4	30.5	31.3	30.5	30.3
107	33.2	33.6	32.6	33.6	32.5	32.9	33.8	33.4	32.6
108	29.8	29.5	30.0	30.3	29.7	30.1	31.0	30.7	30.2
109	31.0	31.2	31.5	32.5	32.2	32.6	33.6	33.4	32.8
110	30.1	29.0	29.0	29.1	29.0	29.7	30.0	29.0	29.5
Male, IIIB 0.3 mg/kg									
301	29.5	29.1	28.7	29.6	29.5	29.9	30.4	30.1	29.5
302	31.6	31.6	31.7	32.7	32.1	32.5	33.0	32.6	32.2
303	30.2	30.2	30.3	31.1	30.2	30.3	30.9	30.9	30.1
304	30.8	30.4	30.7	31.1	30.6	31.0	31.8	31.6	30.8
305	34.4	33.6	33.9	34.8	34.2	33.9	34.0	34.4	33.6
306	33.5	32.4	32.6	33.7	33.2	33.4	34.5	34.2	32.7
307	31.1	30.2	30.1	31.2	30.3	30.3	30.8	30.2	29.8
308	30.5	30.4	30.6	30.8	30.7	31.0	31.8	31.3	31.0
309	30.9	30.4	30.5	31.3	30.8	31.1	31.9	31.7	30.9
310	31.6	31.0	30.7	31.9	31.0	31.3	32.5	31.8	30.9
Male, VB 1 mg/kg									
501	30.4	30.3	30.2	31.1	30.6	31.4	32.1	32.3	31.4
502	31.0	30.2	30.3	30.9	30.0	30.3	31.4	31.1	29.9
503	31.4	31.4	31.4	32.2	31.8	32.2	32.6	33.1	31.7
504	32.7	32.3	32.8	33.5	32.8	33.4	34.1	34.3	33.3
505	33.9	34.0	33.8	34.5	33.0	34.2	34.6	34.7	34.1
506	33.4	32.7	33.2	34.0	33.9	33.6	34.6	35.1	34.2
507	31.8	31.3	31.9	32.1	32.4	33.0	33.5	33.2	32.3
508	31.2	31.2	32.0	31.9	31.8	32.0	33.4	33.5	32.9
509	31.4	31.4	32.1	31.8	32.2	32.7	33.2	33.4	32.8
510	31.5	31.0	31.8	31.7	32.4	32.8	33.7	33.8	33.2

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Individual Body Weights for Mice

	Body Weight g Day 9	Body Weight g Day 10	Body Weight g Day 11	Body Weight g Day 12	Body Weight g Day 13	Body Weight g Day 14
Male, IB 0 mg/kg						
101	29.6	29.1	29.4	29.9	30.9	28.7
102	32.5	33.0	33.3	33.6	34.1	31.9
103	31.1	32.3	32.0	32.0	32.7	30.8
104	31.5	31.8	31.8	32.0	33.3	31.2
105	30.5	31.0	31.6	32.1	32.9	31.0
106	30.4	30.7	30.8	30.8	31.3	29.8
107	32.7	33.1	33.0	33.0	34.1	32.4
108	30.6	30.9	31.2	31.2	32.1	30.3
109	32.7	33.3	32.9	33.5	34.4	32.1
110	29.8	30.1	29.4	30.1	30.6	29.1
Male, IIIB 0.3 mg/kg						
301	29.5	30.1	30.2	30.3	30.5	29.3
302	32.4	32.3	32.5	32.6	33.3	31.4
303	30.5	31.1	31.0	30.8	31.5	30.5
304	31.1	31.2	31.0	31.2	32.0	30.5
305	33.5	33.8	34.0	33.8	34.8	32.6
306	33.7	33.8	34.1	34.8	35.4	32.7
307	30.7	30.9	30.2	31.0	31.4	29.9
308	31.1	31.4	31.3	32.0	32.5	30.7
309	31.5	31.8	31.9	32.1	33.3	31.1
310	31.5	31.9	32.0	32.0	32.3	30.8
Male, VB 1 mg/kg						
501	31.7	31.7	32.6	32.2	32.8	31.5
502	30.6	30.8	31.0	31.4	32.5	30.6
503	32.2	32.9	33.1	33.6	34.1	32.7
504	33.5	33.6	33.8	34.2	34.1	32.4
505	34.7	35.2	34.7	35.1	35.7	33.7
506	34.4	35.1	34.9	35.1	35.7	34.3
507	32.8	33.3	32.9	33.5	33.9	32.4
508	33.6	34.1	34.0	34.9	34.3	33.7
509	33.6	33.7	33.4	33.9	34.4	33.1
510	33.5	34.2	34.4	34.1	34.9	33.2

Study: 15073 879 B

Print Date: 16-Apr-2004
Print Time: 09:56:46

Individual Body Weights for Mice

	Body Weight g Day 0	Body Weight g Day 1	Body Weight g Day 2	Body Weight g Day 3	Body Weight g Day 4	Body Weight g Day 5	Body Weight g Day 6	Body Weight g Day 7	Body Weight g Day 8
Male, VIIB 3 mg/kg									
701	29.2	29.3	29.6	30.0	29.6	30.1	31.0	30.1	29.9
702	30.6	30.0	31.0	31.5	31.2	32.0	32.3	32.5	32.0
703	30.9	31.7	32.4	33.4	33.1	33.0	34.2	33.6	33.7
704	33.2	34.0	34.9	36.1	35.6	36.0	36.9	36.7	36.6
705	31.6	31.9	31.4	31.9	32.3	32.5	33.6	32.9	32.7
706	34.7	35.3	35.5	36.0	36.1	36.7	37.6	36.9	36.5
707	31.9	32.4	28.9	27.2	26.3	25.7	25.7	25.5	26.3
708	31.7	31.2	32.4	33.3	32.7	33.1	34.2	33.2	32.9
709	30.1	29.8	30.4	31.0	30.4	30.5	30.7	30.1	30.3
710	31.8	31.4	31.6	31.5	31.4	31.7	32.6	31.8	32.2
Male, IXB 10 mg/kg									
901	29.9	29.3	30.3	30.7	30.7	30.7	30.3	28.0	28.9
902	31.7	31.0	32.1	33.1	33.4	33.2	34.5	33.3	32.9
903	30.0	30.8	31.5	31.6	32.3	32.2	32.1	31.9	32.5
904	32.1	31.9	33.1	34.2	33.9	33.9	33.7	32.2	32.2
905	33.0	33.6	34.7	36.0	35.5	35.6	36.9	36.5	35.9
906	31.9	32.6	32.9	33.9	33.9	34.0	34.0	32.5	32.7
907	31.5	31.9	32.2	32.6	33.0	32.8	32.9	31.1	31.6
908	29.9	30.0	30.5	31.2	31.2	30.9	31.7	30.9	31.5
909	31.7	31.7	32.0	32.6	32.2	32.3	33.3	31.7	31.1
910	29.3	29.3	30.1	30.8	30.0	29.9	30.1	29.3	29.2
Male, XIB 30 mg/kg									
1101	29.3	30.4	30.9	32.1	30.6	29.3	29.2	25.5	25.9
1102	32.2	32.3	32.3	33.3	30.8	28.7	27.0	23.6	23.4
1103	29.7	30.5	30.5	30.8	28.5	27.7	28.4	26.7	27.7
1104	32.9	33.8	34.5	33.6	31.4	29.5	29.0	27.9	24.8
1105	32.9	33.2	33.4	33.6	30.5	25.9	24.1	22.0	23.2
1106	32.1	33.5	33.9	33.9	31.3	30.4	28.7	26.8	29.3
1107	31.6	32.4	32.6	33.7	30.3	29.4	28.4	26.0	26.2
1108	30.3	31.2	31.4	31.6	28.3	26.8	24.7	23.7	24.4
1109	30.0	30.7	31.3	33.1	31.9	30.8	29.1	25.6	25.8
1110	31.7	32.6	33.2	31.8	30.7	29.3	28.5	28.9	29.7

Study: 15073 879 B

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Individual Body Weights for Mice

	Body Weight g Day 9	Body Weight g Day 10	Body Weight g Day 11	Body Weight g Day 12	Body Weight g Day 13	Body Weight g Day 14
Male, VIIB 3 mg/kg						
701	30.2	30.7	30.9	31.4	31.6	29.9
702	32.3	32.2	32.9	32.9	32.7	30.6
703	34.1	34.4	34.6	35.0	35.0	34.1
704	37.5	37.4	37.9	37.8	37.7	37.1
705	33.6	34.0	34.1	34.3	34.5	33.3
706	37.7	38.0	38.5	38.7	39.7	37.9
707	26.3	25.4	25.5	26.0	27.0	26.7
708	33.4	33.6	33.4	33.5	35.1	33.2
709	30.3	31.0	31.0	31.6	32.6	30.7
710	32.6	32.9	32.1	32.9	33.6	31.8
Male, IXB 10 mg/kg						
901	27.2	27.8	27.0	26.5	25.6	23.7
902	33.0	32.1	32.4	31.6	32.8	30.5
903	30.4	30.6	31.8	29.5	31.2	28.4
904	32.0	31.4	30.6	30.0	29.7	27.5
905	35.7	36.9	35.9	35.6	36.0	33.3
906	32.3	32.7	31.7	31.4	31.9	30.3
907	29.8	29.8	29.2	28.5	28.5	25.7
908	30.9	30.8	30.8	31.4	30.4	28.3
909	29.9	29.0	29.0	27.6	27.0	27.2
910	28.4	28.4	28.0	28.6	28.0	25.5
Male, XIB 30 mg/kg						
1101	26.2	27.3	26.0	25.9	27.9	26.2
1102	23.4	23.5	22.7	23.2	23.5	23.2
1103	27.8	27.4	28.0	28.9	29.1	27.1
1104	27.0	27.8	27.0	26.4	27.5	25.8
1105	23.2	NM				
1106	29.6	29.7	27.7	27.5	28.3	26.1
1107	25.7	25.7	24.7	24.8	26.4	24.7
1108	24.0	25.2	24.8	24.4	24.8	24.1
1109	24.3	24.5	25.7	27.7	29.0	28.9
1110	29.1	29.1	28.3	27.9	28.1	26.0

Key: NM = Not Measurable

Study: 15073 879 C

Print Date: 16-Apr-2004
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Individual Body Weights for Mice

	Body Weight g Day 0	Body Weight g Day 1	Body Weight g Day 2	Body Weight g Day 3	Body Weight g Day 4	Body Weight g Day 5	Body Weight g Day 6	Body Weight g Day 7	Body Weight g Day 8
Male, IC 0 mg/kg									
101	31.2	30.3	30.7	30.7	30.3	31.1	30.6	31.4	30.6
102	27.9	27.7	28.4	28.2	27.9	28.8	28.3	29.0	28.6
103	30.2	30.9	31.3	31.6	30.9	31.9	30.8	32.3	31.3
104	31.7	30.8	30.9	31.7	31.2	32.0	31.3	32.0	31.6
105	32.6	31.3	31.6	31.8	31.3	32.1	32.0	32.6	32.2
106	29.1	29.0	29.6	29.3	29.1	30.0	29.0	29.8	29.4
107	31.5	31.0	31.4	31.5	31.4	31.8	31.6	32.2	31.7
108	34.2	33.6	34.2	33.7	33.6	34.5	34.0	34.1	34.7
109	32.6	31.8	32.7	31.7	32.3	33.1	32.6	33.4	33.1
110	34.3	33.4	33.2	32.9	33.1	33.6	33.6	33.9	33.5
Male, IIIC 0.3 mg/kg									
301	31.3	32.1	32.4	32.0	32.3	32.9	32.7	32.8	32.8
302	29.4	28.8	29.2	29.1	29.2	29.9	29.5	30.0	29.8
303	31.6	31.5	32.5	32.0	32.1	33.2	32.4	33.0	33.1
304	31.6	30.5	32.1	31.6	31.9	32.3	32.3	33.3	32.3
305	31.7	31.8	32.8	33.1	32.9	33.9	33.2	34.1	33.3
306	30.3	29.7	30.4	29.4	29.4	29.7	29.5	29.8	29.9
307	30.0	29.6	30.3	29.8	29.6	30.4	30.2	30.3	30.1
308	31.6	33.6	34.8	34.2	34.4	35.3	35.3	35.9	35.8
309	32.3	31.2	32.1	31.8	31.8	32.3	32.1	32.2	31.6
310	33.0	32.5	33.0	32.8	33.2	33.6	34.3	34.2	33.7
Male, VC 1 mg/kg									
501	32.8	32.3	33.4	33.0	32.9	33.2	33.4	34.2	33.2
502	30.5	30.1	30.5	30.0	29.8	30.7	30.7	31.0	30.2
503	31.1	30.2	30.2	30.3	30.1	30.9	30.4	30.9	31.0
504	33.3	32.8	33.7	32.5	32.5	32.7	32.9	32.8	32.4
505	32.2	31.1	32.3	31.8	32.2	33.1	32.3	32.9	31.9
506	31.5	30.5	30.7	30.6	30.9	31.1	31.3	31.6	31.8
507	30.9	30.6	30.6	31.1	31.8	32.2	32.2	32.4	32.2
508	32.8	31.9	33.1	32.3	31.9	32.9	32.2	32.9	32.5
509	31.1	29.8	30.6	30.1	30.2	31.0	30.7	31.4	30.5
510	34.8	33.6	34.4	34.3	34.3	35.4	35.1	36.3	35.6

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Individual Body Weights for Mice

	Body Weight g Day 9	Body Weight g Day 10	Body Weight g Day 11	Body Weight g Day 12	Body Weight g Day 13	Body Weight g Day 14
Male, IC 0 mg/kg						
101	30.9	30.7	31.0	32.2	32.1	31.2
102	28.4	29.0	29.4	29.8	29.4	28.6
103	31.7	31.4	31.8	32.8	32.7	31.7
104	31.1	31.3	31.4	32.5	32.6	31.4
105	31.9	32.3	32.4	32.8	32.4	31.3
106	29.8	29.5	29.6	30.0	30.0	28.6
107	32.2	31.3	31.8	32.5	33.8	31.5
108	35.4	34.9	35.3	35.8	36.2	34.9
109	33.5	33.2	33.4	34.2	34.4	32.8
110	33.0	33.3	33.3	34.3	34.7	33.1
Male, IIIC 0.3 mg/kg						
301	32.6	32.3	32.6	33.0	33.3	32.0
302	30.1	30.4	30.9	31.3	31.6	29.9
303	34.0	33.6	33.8	34.4	34.5	33.0
304	33.2	32.6	32.6	33.8	33.5	31.6
305	33.8	33.9	34.0	35.8	35.1	33.1
306	30.6	30.2	30.7	31.8	32.3	30.3
307	30.5	29.8	30.2	30.9	31.0	29.4
308	35.9	36.0	35.8	36.7	36.5	35.1
309	32.7	32.4	32.4	33.4	33.8	30.8
310	34.1	34.7	34.4	35.5	36.0	33.5
Male, VC 1 mg/kg						
501	33.7	33.4	33.9	35.4	35.3	33.7
502	31.0	31.0	31.1	32.4	32.4	31.0
503	31.2	31.1	31.3	32.2	32.1	31.0
504	33.1	33.6	33.3	34.4	34.3	32.1
505	32.6	32.3	32.4	33.5	33.0	32.3
506	32.0	32.0	32.1	33.3	32.9	31.9
507	32.0	32.4	32.8	32.8	33.1	31.8
508	32.5	32.8	33.1	34.5	34.3	32.5
509	30.9	30.9	30.8	32.1	31.8	30.5
510	36.1	35.6	36.1	36.5	36.9	36.0

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Individual Body Weights for Mice

	Body Weight g Day 0	Body Weight g Day 1	Body Weight g Day 2	Body Weight g Day 3	Body Weight g Day 4	Body Weight g Day 5	Body Weight g Day 6	Body Weight g Day 7	Body Weight g Day 8
Male, VIIC 3 mg/kg									
701	30.9	30.4	31.1	30.4	30.7	31.9	31.8	32.6	31.6
702	30.2	30.6	31.9	31.6	31.8	33.0	32.6	33.2	33.4
703	32.0	31.3	32.1	31.9	32.2	33.2	32.5	33.4	32.8
704	33.2	32.3	33.6	33.1	32.6	34.7	34.2	34.9	34.1
705	33.0	33.0	34.3	33.8	33.8	35.3	35.2	35.9	35.2
706	29.9	29.8	30.6	29.9	30.2	30.9	30.9	31.7	31.4
707	32.4	32.4	33.4	33.4	33.1	33.6	33.8	34.9	34.0
708	33.2	32.9	34.0	33.7	33.5	34.0	34.2	34.6	34.4
709	33.5	32.8	33.2	32.6	32.6	33.6	33.8	34.1	33.8
710	32.8	33.1	33.8	32.9	33.2	33.9	33.3	33.8	33.0
Male, IXC 10 mg/kg									
901	33.2	32.5	33.7	32.7	33.5	34.7	33.9	35.7	34.4
902	30.9	29.8	30.0	29.5	29.6	30.8	30.1	31.3	30.8
903	28.5	28.7	29.1	29.2	29.8	30.6	30.2	31.3	31.1
904	32.8	27.6	28.4	28.4	28.6	30.1	30.5	32.9	32.0
905	33.5	33.4	34.0	34.5	34.3	35.1	36.0	36.9	35.9
906	31.2	31.1	32.4	31.4	32.2	33.2	33.0	34.7	33.7
907	30.2	29.9	30.8	30.3	30.9	31.3	31.3	32.5	32.0
908	32.8	32.8	34.3	34.1	34.6	34.9	35.2	36.6	35.5
909	31.8	32.4	33.3	32.9	33.3	34.1	34.2	34.1	35.4
910	32.4	32.1	32.9	32.7	32.5	33.6	33.5	33.4	33.9
Male, XIC 30 mg/kg									
1101	30.6	31.0	31.8	31.8	32.2	32.2	31.1	31.6	30.2
1102	30.1	29.4	31.0	31.5	32.5	32.5	32.2	32.5	31.8
1103	31.8	31.5	32.3	33.0	32.0	32.6	30.4	32.0	30.9
1104	32.2	31.9	33.4	32.9	33.0	33.4	31.5	31.8	30.4
1105	29.6	29.2	30.7	31.0	30.6	32.3	30.5	31.8	30.6
1106	31.5	31.4	32.5	31.8	30.2	31.9	29.2	30.5	30.5
1107	30.6	30.2	31.2	30.6	30.0	30.2	29.4	29.5	28.4
1108	33.2	32.9	34.5	34.9	34.6	35.4	34.1	34.4	33.5
1109	32.2	31.3	32.7	32.0	32.5	33.9	32.6	32.2	31.4
1110	34.6	33.9	35.3	34.5	34.5	35.8	34.5	35.9	33.7

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Individual Body Weights for Mice

	Body Weight g Day 9	Body Weight g Day 10	Body Weight g Day 11	Body Weight g Day 12	Body Weight g Day 13	Body Weight g Day 14
Male, VIIC 3 mg/kg						
701	31.8	31.2	32.0	33.1	32.7	31.8
702	33.8	33.2	33.8	34.4	34.5	32.9
703	33.7	33.5	33.6	35.2	35.1	34.3
704	34.9	34.8	35.0	36.6	35.7	34.6
705	35.4	34.9	35.2	37.0	35.9	34.4
706	32.0	32.2	32.4	33.4	33.3	32.0
707	34.1	34.2	34.2	35.7	35.0	34.1
708	34.7	34.7	35.2	36.9	36.4	35.4
709	34.6	33.8	34.3	35.8	35.1	33.7
710	34.5	33.7	33.6	35.4	35.0	33.9
Male, IXC 10 mg/kg						
901	34.5	33.8	33.7	34.1	33.8	33.4
902	31.3	30.9	31.3	32.3	32.0	31.0
903	31.9	32.0	32.5	34.4	34.3	32.3
904	32.2	33.7	32.2	34.4	33.8	32.8
905	36.8	36.6	36.6	37.7	36.8	35.6
906	34.9	34.5	35.1	36.4	35.6	33.6
907	33.5	33.5	33.2	34.4	34.2	32.3
908	35.5	35.9	35.7	37.0	36.7	35.0
909	35.5	35.4	35.4	37.0	35.6	33.6
910	33.8	33.8	33.9	35.2	35.7	33.5
Male, XIC 30 mg/kg						
1101	31.6	30.6	31.2	32.3	32.2	31.0
1102	31.7	31.4	31.5	33.1	32.1	31.8
1103	31.3	29.1	29.6	31.2	30.8	29.4
1104	32.0	31.7	32.0	33.6	32.7	32.6
1105	32.1	31.0	31.3	32.3	31.3	30.5
1106	31.0	30.7	30.7	31.6	30.9	28.6
1107	29.4	27.8	28.5	31.0	29.1	27.9
1108	33.1	33.4	34.4	34.9	34.4	32.3
1109	31.9	30.8	30.7	31.5	30.5	30.5
1110	34.5	34.4	34.5	35.9	36.1	34.9

Appendix C
Individual Food Consumption for Mice

INDIVIDUAL FOOD CONSUMPTION FOR MICE

EXPLANATORY NOTES

STUDY DESIGN

Groups			Dosage (mg/kg)
H-24921 APFO (Linear/Branched)	H-26313 APFO (Linear)	H-26225 APFO (Branched)	
IA	IB	IC	0 (Control)
IIIA	IIIB	IIIC	0.3
VA	VB	VC	1
VIIA	VIIB	VIIC	3
IXA	IXB	IXC	10
XIA	XIB	XIC	30

Abbreviations

mg/kg = mg/kg/day

g/anm/day = grams/animal/day

Study: 15073 879 A

Print Date: 16-Apr-2004
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Individual Food Consumption for Mice

	Food Cons. g/anm/day Day 3	Food Cons. g/anm/day Day 7	Food Cons. g/anm/day Day 10	Food Cons. g/anm/day Day 13
Male, IA 0 mg/kg				
101	3.2			
102	5.1	5.1	5.1	5.3
103	5.1	4.8	4.7	5.3
104	5.1	4.9	4.5	5.4
105	5.4	5.6	5.4	5.9
106	5.8	5.3	5.6	5.6
107	6.1	5.6	6.0	6.1
108	5.9	5.6	6.6	7.0
109	5.5	5.9	4.4	6.4
110	5.5	5.6	4.7	5.3
Male, IIIA 0.3 mg/kg				
301	5.6	5.2	4.7	5.3
302	5.3	5.3	4.2	5.6
303	5.9	5.7	6.3	6.3
304	5.5	4.9	5.5	5.5
305	5.2	4.8	4.3	5.7
306	5.8	6.3	5.8	6.1
307	5.8	5.3	5.4	4.9
308	4.8	5.3	4.8	5.6
309	5.3	5.0	4.5	5.3
310	5.0	5.7	6.9	7.1
Male, VA 1 mg/kg				
501	4.2	2.1	4.2	4.8
502	4.9	5.6	6.1	5.4
503	5.8	5.5	5.8	5.9
504	6.0	5.7	5.0	5.6
505	5.2	6.2	5.9	6.3
506	5.7	6.1	5.4	5.7
507	5.5	5.3	5.0	5.4
508	5.6	5.5	5.3	6.1
509	6.0	5.6	5.0	5.6
510	5.6	5.9	5.6	6.9

Study: 15073 879 A

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Individual Food Consumption for Mice

	Food Cons. g/anm/day Day 3	Food Cons. g/anm/day Day 7	Food Cons. g/anm/day Day 10	Food Cons. g/anm/day Day 13
Male, VIIA 3 mg/kg				
701	5.9	3.4	5.0	4.9
702	5.0	6.1	4.8	5.5
703	5.2	5.2	4.9	5.7
704	6.0	5.4	5.2	5.9
705	5.4	6.2	5.6	6.1
706	5.7	5.2	4.8	6.3
707	5.9	5.6	5.2	5.6
708	5.3	5.3	4.6	5.4
709	5.7	5.7	4.6	5.7
710	5.8	5.6	5.2	5.7
Male, IXA 10 mg/kg				
901	6.8	5.0	6.1	5.8
902	5.3	4.9	6.2	5.0
903	5.4	5.0	6.8	6.2
904	6.4	5.8	7.6	6.4
905	6.6	3.9	5.2	4.3
906	7.2	5.3	6.2	6.6
907	5.5	4.9	4.2	4.0
908	7.7	5.1	7.4	6.0
909	5.8	5.6	6.1	4.8
910	5.4	4.5	4.7	4.5
Male, XIA 30 mg/kg				
1101	5.1	4.9	3.2	4.7
1102	5.8	4.5	4.7	3.4
1103	4.6	3.1	5.0	4.2
1104	5.1	4.2	3.8	3.9
1105	5.2	5.2	6.3	3.7
1106	3.1	3.7	6.7	5.0
1107	6.7	4.5	5.1	4.0
1108	7.1	4.8	5.2	4.3
1109	5.7	5.0	6.1	5.2
1110	5.7	3.8	5.6	3.6

Study: 15073 879 B

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Individual Food Consumption for Mice

	Food Cons. g/anm/day Day 3	Food Cons. g/anm/day Day 7	Food Cons. g/anm/day Day 10	Food Cons. g/anm/day Day 13
Male, IB 0 mg/kg				
101	5.2	5.5	4.6	5.0
102	5.4	6.4	6.0	7.7
103	5.5	5.9	5.5	4.8
104	5.1	5.2	5.0	5.6
105	4.2	3.4	5.0	5.5
106	5.4	5.0	4.8	4.7
107	6.7	5.5	4.8	5.9
108	5.4	6.0	5.1	5.3
109	6.4	6.5	6.2	6.3
110	4.8	4.9	3.5	5.3
Male, IIIB 0.3 mg/kg				
301	4.9	5.5	5.0	5.1
302	5.5	6.5	5.3	5.4
303	5.0	5.4	3.8	5.1
304	4.6	5.0	4.1	4.5
305	6.0	5.7	6.1	6.3
306	5.6	6.8	4.8	7.1
307	5.0	5.1	5.1	5.5
308	5.6	5.5	5.2	5.4
309	5.2	5.3	4.4	5.2
310	5.0	4.7	4.8	4.6
Male, VB 1 mg/kg				
501	5.1	5.9	5.0	5.6
502	5.2	5.1	5.3	5.1
503	5.8	5.8	5.9	6.7
504	5.8	5.4	5.1	5.6
505	6.4	5.9	6.2	8.4
506	5.9	5.9	5.4	6.3
507	5.5	5.2	4.4	5.3
508	4.7	5.3	5.6	5.6
509	5.6	5.6	5.5	5.4
510	5.2	6.2	5.4	5.7

Study: 15073 879 B

Print Date: 16-Apr-2004
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Individual Food Consumption for Mice

	Food Cons. g/anm/day Day 3	Food Cons. g/anm/day Day 7	Food Cons. g/anm/day Day 10	Food Cons. g/anm/day Day 13
Male, VIIB 3 mg/kg				
701	5.0	5.3	4.8	5.3
702	5.5	5.8	4.9	5.4
703	5.6	5.7	5.3	5.5
704	6.1	6.5	6.0	5.8
705	5.4	6.2	5.8	5.6
706	5.4	5.9	5.2	6.8
707	2.3	3.3	4.0	4.3
708	6.0	6.0	5.1	5.6
709	5.6	5.4	6.0	5.8
710	5.0	5.3	5.6	4.9
Male, IXB 10 mg/kg				
901	4.6	4.4	6.0	4.1
902	5.7	6.0	6.3	6.1
903	5.5	5.6	5.7	6.4
904	6.0	5.6	6.5	4.3
905	5.9	6.0	6.5	6.8
906	5.8	5.4	5.9	5.3
907	5.3	5.3	5.6	4.3
908	5.9	5.3	5.3	6.0
909	6.4	5.6	6.4	4.3
910	5.0	5.2	5.5	4.8
Male, XIB 30 mg/kg				
1101	5.7	4.3	5.3	4.9
1102	6.3	3.3	5.8	4.2
1103	5.5	4.1	4.7	5.5
1104	5.5	4.3	5.8	3.8
1105	5.0	2.2	1.6	
1106	5.7	4.9	5.4	3.8
1107	5.4	5.1	5.2	4.6
1108	6.0	2.1	5.3	4.0
1109	5.8	3.5	4.5	5.6
1110	4.8	6.8	5.3	5.6

Study: 15073 879 C

Print Date: 16-Apr-2004
Print Time: 10:02:22

Individual Food Consumption for Mice

	Food Cons. g/anm/day Day 3	Food Cons. g/anm/day Day 7	Food Cons. g/anm/day Day 10	Food Cons. g/anm/day Day 13
Male, IC 0 mg/kg				
101	5.1	5.8	5.4	5.2
102	5.4	5.5	5.1	4.5
103	7.1	5.3	7.0	6.6
104	6.0	5.9	5.7	6.1
105	5.6	5.3	6.0	5.0
106	6.2	5.0	5.3	4.8
107	6.1	5.6	6.4	6.3
108	5.5	5.2	5.3	5.1
109	5.4	5.5	5.5	5.4
110	5.5	5.6	5.9	6.3
Male, IIIC 0.3 mg/kg				
301	6.2	5.6	5.4	5.2
302	5.7	5.2	5.5	5.3
303	6.0	5.7	6.2	5.1
304	5.3	5.5	5.8	5.2
305	5.1	5.9	5.8	5.8
306	3.9	4.8	4.7	4.9
307	5.3	5.0	6.5	5.3
308	6.8	6.2	6.4	6.0
309	6.2	5.5	5.7	5.7
310	5.2	5.4	5.6	5.5
Male, VC 1 mg/kg				
501	5.9	5.2	5.3	5.4
502	5.7	5.5	5.5	5.7
503	4.8	4.9	5.4	4.9
504	6.0	5.4	5.4	5.7
505	5.9	5.3	5.2	4.9
506	4.3	4.9	5.3	5.7
507	5.2	5.3	5.9	4.8
508	5.3	4.7	4.7	5.1
509	5.3	5.1	6.1	4.8
510	5.7	5.6	5.8	5.6

Study: 15073 879 C

Print Date: 16-Apr-2004
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Individual Food Consumption for Mice

	Food Cons. g/anm/day Day 3	Food Cons. g/anm/day Day 7	Food Cons. g/anm/day Day 10	Food Cons. g/anm/day Day 13
Male, VIIC 3 mg/kg				
701	5.3	5.6	5.4	6.0
702	6.0	5.9	6.5	5.5
703	5.7	5.6	6.1	5.7
704	5.2	5.4	5.6	5.6
705	6.1	6.0	6.2	5.9
706	5.2	5.6	6.5	5.9
707	6.5	6.2	6.7	4.9
708	6.2	5.3	6.2	5.7
709	5.9	5.8	6.0	6.0
710	5.7	5.2	5.7	5.1
Male, IXC 10 mg/kg				
901	6.6	5.3	6.5	5.6
902	5.2	5.6	6.6	5.5
903	5.2	4.9	5.6	5.6
904	2.8	4.6	5.7	5.0
905	6.6	5.4	6.8	5.1
906	6.4	4.8	6.1	6.1
907	6.7	5.8	7.0	4.8
908	6.7	6.6	6.3	6.1
909	4.5	5.8	6.6	5.5
910	5.6	4.5	5.8	5.9
Male, XIC 30 mg/kg				
1101	6.4	4.4	4.7	6.0
1102	5.6	6.0	6.3	6.6
1103	6.6	6.4	5.6	5.7
1104	5.5	4.0	5.3	4.7
1105	5.2	4.9	5.2	4.5
1106	5.0	4.2	5.2	5.7
1107	6.2	4.1	5.6	4.1
1108	6.3	5.0	6.1	7.3
1109	5.3	4.4	5.8	4.9
1110	5.2	4.3	4.5	4.9

Appendix D
Individual Clinical Observations and Mortality Records for Mice

INDIVIDUAL CLINICAL OBSERVATIONS AND MORTALITY RECORDS FOR MICE

EXPLANATORY NOTES

STUDY DESIGN

Groups			Dosage (mg/kg)
H-24921 APFO (Linear/Branched)	H-26313 APFO (Linear)	H-26225 APFO (Branched)	
IA	IB	IC	0 (Control)
IIIA	IIIB	IIIC	0.3
VA	VB	VC	1
VIIA	VIIB	VIIC	3
IXA	IXB	IXC	10
XIA	XIB	XIC	30

Study: 15073 879 A

Print Date: 20-Apr-2004
Print Time: 13:00:53

Individual Clinical Observations for Mice

Sex	Group	Animal	Observation	Days
M	IA	101	General observation, No Abnormality Detected	0-4
			Found dead in cage.	4
M	IA	102	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IA	103	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IA	104	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IA	105	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IA	106	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IA	107	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IA	108	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IA	109	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IA	110	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14

Study: 15073 879 A

Print Date: 20-Apr-2004
Print Time: 13:00:53

Individual Clinical Observations for Mice

Sex	Group	Animal	Observation	Days
M	IIIA	301	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IIIA	302	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IIIA	303	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IIIA	304	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IIIA	305	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IIIA	306	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IIIA	307	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IIIA	308	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IIIA	309	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IIIA	310	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14

Study: 15073 879 A

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Individual Clinical Observations for Mice

Sex	Group	Animal	Observation	Days
M	VA	501	General observation, No Abnormality Detected	0-2
			Eye Observations, Enophthalmus, Right	3-14
			Discharge, Eye right, Black	4-5
			Swollen Observations, Forelimb, Right	3-5
			Sacrificed by design	14
M	VA	502	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VA	503	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VA	504	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VA	505	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VA	506	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VA	507	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VA	508	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VA	509	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VA	510	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14

Study: 15073 879 A

Print Date: 20-Apr-2004
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Individual Clinical Observations for Mice

Sex	Group	Animal	Observation	Days
M	VIIA	701	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VIIA	702	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VIIA	703	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VIIA	704	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VIIA	705	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VIIA	706	General observation, No Abnormality Detected	0-2,6-8
			Stain Fur/Skin, Neck, Yellow	3-6
			Mass Inguen, Right, Mass #1, Not Ulcerated, 1.0 cm	10-14
			Mass Inguen, Right, Mass #1, Not Ulcerated, 0.5 cm	9-9
			Sacrificed by design	14
M	VIIA	707	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VIIA	708	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VIIA	709	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VIIA	710	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14

Study: 15073 879 A

Print Date: 20-Apr-2004
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Individual Clinical Observations for Mice

Sex	Group	Animal	Observation	Days
M	IXA	901	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IXA	902	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IXA	903	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IXA	904	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IXA	905	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IXA	906	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IXA	907	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IXA	908	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IXA	909	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IXA	910	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14

Study: 15073 879 A

Print Date: 20-Apr-2004
Print Time: 13:00:53

Individual Clinical Observations for Mice

Sex	Group	Animal	Observation	Days
M	XIA	1101	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	XIA	1102	General observation, No Abnormality Detected	0-5,8-11
			Eye Observations, Enophthalmus, Bilateral	12-14
			Eye Observations, Enophthalmus, Right	6-7
			Lethargic	12-14
			Sacrificed by design	14
M	XIA	1103	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	XIA	1104	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	XIA	1105	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	XIA	1106	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	XIA	1107	General observation, No Abnormality Detected	0-12
			Swollen Observations, Abdomen	13-14
			Sacrificed by design	14
M	XIA	1108	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	XIA	1109	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	XIA	1110	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14

Study: 15073 879 B

Print Date: 19-Apr-2004
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Individual Clinical Observations for Mice

Sex	Group	Animal	Observation	Days
M	IB	101	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IB	102	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IB	103	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IB	104	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IB	105	General observation, No Abnormality Detected	0-5,8-14
			Stain Fur/Skin, Neck, Yellow	6-7
			Sacrificed by design	14
M	IB	106	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IB	107	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IB	108	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IB	109	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IB	110	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14

Study: 15073 879 B

Print Date: 19-Apr-2004
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Individual Clinical Observations for Mice

Sex	Group	Animal	Observation	Days
M	IIIB	301	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IIIB	302	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IIIB	303	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IIIB	304	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IIIB	305	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IIIB	306	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IIIB	307	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IIIB	308	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IIIB	309	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IIIB	310	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14

Study: 15073 879 B

Print Date: 19-Apr-2004
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Individual Clinical Observations for Mice

Sex	Group	Animal	Observation	Days
M	VB	501	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VB	502	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VB	503	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VB	504	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VB	505	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VB	506	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VB	507	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VB	508	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VB	509	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VB	510	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14

Study: 15073 879 B

Print Date: 19-Apr-2004
Print Time: 14:12:30

Individual Clinical Observations for Mice

Sex	Group	Animal	Observation	Days
M	VIIB	701	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VIIB	702	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VIIB	703	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VIIB	704	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VIIB	705	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VIIB	706	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VIIB	707	General observation, No Abnormality Detected	0-2,5
			Stain Fur/Skin, Dorsal Body, Yellow	6-14
			Swollen Observations, Forelimb, Right	3-4
			Swollen Observations, Shoulder, Right	3-4
			Sacrificed by design	14
M	VIIB	708	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VIIB	709	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VIIB	710	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14

Study: 15073 879 B

Print Date: 19-Apr-2004
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Individual Clinical Observations for Mice

Sex	Group	Animal	Observation	Days
M	IXB	901	General observation, No Abnormality Detected	0-11,12-14
			Lethargic	12
			Sacrificed by design	14
M	IXB	902	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IXB	903	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IXB	904	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IXB	905	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IXB	906	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IXB	907	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IXB	908	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IXB	909	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IXB	910	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14

Study: 15073 879 B

Print Date: 19-Apr-2004
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Individual Clinical Observations for Mice

Sex	Group	Animal	Observation	Days
M	XIB	1101	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	XIB	1102	General observation, No Abnormality Detected	0-12,14
			Eye Observations, Enophthalmus, Bilateral	13
			Sacrificed by design	14
M	XIB	1103	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	XIB	1104	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	XIB	1105	General observation, No Abnormality Detected	0-6
			Eye Observations, Enophthalmus, Bilateral	7-9
			Lethargic	8
			Carriage, High	8-9
			Pale	9
			Stain Fur/Skin, Ventral body, Yellow	8-9
			Found dead in cage.	10
M	XIB	1106	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	XIB	1107	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	XIB	1108	General observation, No Abnormality Detected	0-11
			Eye Observations, Enophthalmus, Bilateral	12-14
			Lethargic	12
			Sacrificed by design	14
M	XIB	1109	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	XIB	1110	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14

Study: 15073 879 C

Print Date: 20-Apr-2004
Print Time: 13:02:08

Individual Clinical Observations for Mice

Sex	Group	Animal	Observation	Days
M	IC	101	General observation, No Abnormality Detected	0-4
			Eye Observations, Enophthalmus, Left	5-14
			Sacrificed by design	14
M	IC	102	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IC	103	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IC	104	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IC	105	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IC	106	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IC	107	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IC	108	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IC	109	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IC	110	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14

Study: 15073 879 C

Print Date: 20-Apr-2004
Print Time: 13:02:08

Individual Clinical Observations for Mice

Sex	Group	Animal	Observation	Days
M	IIIC	301	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IIIC	302	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IIIC	303	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IIIC	304	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IIIC	305	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IIIC	306	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IIIC	307	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IIIC	308	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IIIC	309	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IIIC	310	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14

Study: 15073 879 C

Print Date: 20-Apr-2004
Print Time: 13:02:08

Individual Clinical Observations for Mice

Sex	Group	Animal	Observation	Days
M	VC	501	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VC	502	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VC	503	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VC	504	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VC	505	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VC	506	General observation, No Abnormality Detected	0-3
			Hair Loss, Perineum	10-14
			Mass Perineum, Mass #1, Not Ulcerated, 1.0 cm	9
			Mass Perineum, Mass #1, Not Ulcerated, 0.5 cm	4-7,10-11
			Mass Perineum, Mass #1, Not Ulcerated, 0.2 cm	12-14
			Mass Perineum, Mass #1, Not Ulcerated, .7cm	8
			Sacrificed by design	14
M	VC	507	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VC	508	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VC	509	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VC	510	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14

Study: 15073 879 C

Print Date: 20-Apr-2004
Print Time: 13:02:08

Individual Clinical Observations for Mice

Sex	Group	Animal	Observation	Days
M	VIIC	701	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VIIC	702	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VIIC	703	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VIIC	704	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VIIC	705	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VIIC	706	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VIIC	707	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VIIC	708	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VIIC	709	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	VIIC	710	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14

Study: 15073 879 C

Print Date: 20-Apr-2004
Print Time: 13:02:08

Individual Clinical Observations for Mice

Sex	Group	Animal	Observation	Days
M	IXC	901	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IXC	902	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IXC	903	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IXC	904	General observation, No Abnormality Detected	0-9,11
			Eye Observations, Enophthalmus, Right	10
			Swollen Observations, Face	10
			Swollen Observations, Neck	12-14
			Sacrificed by design	14
M	IXC	905	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IXC	906	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IXC	907	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IXC	908	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	IXC	909	General observation, No Abnormality Detected	0-6,12-14
			Stain Fur/Skin, Neck, Yellow	7-11
			Sacrificed by design	14
M	IXC	910	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14

Study: 15073 879 C

Print Date: 20-Apr-2004
Print Time: 13:02:08

Individual Clinical Observations for Mice

Sex	Group	Animal	Observation	Days
M	XIC	1101	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	XIC	1102	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	XIC	1103	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	XIC	1104	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	XIC	1105	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	XIC	1106	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	XIC	1107	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	XIC	1108	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	XIC	1109	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14
M	XIC	1110	General observation, No Abnormality Detected	0-14
			Sacrificed by design	14

Appendix E
Individual Animal Clinical Pathology Data for Mice

INDIVIDUAL ANIMAL CLINICAL PATHOLOGY DATA FOR MICE

EXPLANATORY NOTES

STUDY DESIGN

Groups			Dosage (mg/kg)
H-24921 APFO (Linear/Branched)	H-26313 APFO (Linear)	H-26225 APFO (Branched)	
IA	IB	IC	0 (Control)
IIIA	IIIB	IIIC	0.3
VA	VB	VC	1
VIIA	VIIB	VIIC	3
IXA	IXB	IXC	10
XIA	XIB	XIC	30

ABBREVIATIONS:

General:

mg/kg - mg/kg/day
NSR - no sample received for testing
NP - not taken or not performed

Individual Clinical Chemistry Values:

HEM - hemolysis
LIP - lipemia
ICT - icterus
CHOL - cholesterol
TRIG - triglycerides
HDL - high-density lipoprotein cholesterol
nonHDL - non-high-density lipoprotein cholesterol

NOTES:

When individual animal data are not reported, it may be due to one of the following reasons or other reasons, all of which are explained in the study records:

the sample was clotted (CLOT)
there was insufficient sample for testing (QNS)
a valid result could not be obtained (RNV)
the sample was not suitable for testing
the animal died prior to sample collection
no sample was available for testing (NSR)

Individual Animal Clinical Pathology Data for Mice

Male,	Group	IA	- 0 mg/kg H-24921 -			Day	14
Animal	HEM	LIP	ICT	CHOL mg/dL	TRIG mg/dL	HDL mg/dL	nonHDL mg/dL
101	NSR	NP	NP	NP	NP	NP	NP
102	None	None	None	113	87	77	36
103	None	None	None	134	88	95	39
104	Trace	None	None	157	121	104	53
105	Trace	None	None	137	98	97	40
106	None	None	None	168	103	109	59
107	None	None	None	151	112	100	51
108	None	None	None	121	93	85	36
109	None	None	None	143	76	94	49
110	None	None	None	177	111	115	62

Male,	Group	IIIA	-0.3 mg/kg H-24921-			Day	14
Animal	HEM	LIP	ICT	CHOL mg/dL	TRIG mg/dL	HDL mg/dL	nonHDL mg/dL
301	Trace	None	None	146	146	97	49
302	None	None	None	111	150	75	36
303	None	None	None	150	156	99	51
304	Small	None	None	115	113	83	32
305	Small	None	None	185	140	111	74
306	None	None	None	110	98	75	35
307	None	None	None	132	118	93	39
308	None	None	None	140	133	88	52
309	None	None	None	120	152	78	42
310	None	None	None	161	149	97	64

Male,	Group	VA	- 1 mg/kg H-24921 -			Day	14
Animal	HEM	LIP	ICT	CHOL mg/dL	TRIG mg/dL	HDL mg/dL	nonHDL mg/dL
501	None	None	None	98	119	62	36
502	None	None	None	131	132	83	48
503	Trace	None	None	149	143	80	69
504	None	None	None	173	141	91	82
505	Trace	None	None	93	115	66	27
506	None	None	None	115	139	69	46
507	None	None	None	136	142	91	45
508	Trace	None	None	200	151	106	94
509	None	None	None	160	151	91	69
510	None	None	None	127	214	72	55

Individual Animal Clinical Pathology Data for Mice

Male, Group VIIA - 3 mg/kg H-24921 - Day 14

Animal	HEM	LIP	ICT	CHOL mg/dL	TRIG mg/dL	HDL mg/dL	nonHDL mg/dL
701	None	None	None	71	96	47	24
702	Small	None	None	121	150	66	55
703	None	None	None	92	138	60	32
704	Trace	None	None	98	160	60	38
705	None	None	None	109	109	70	39
706	None	None	None	70	124	40	30
707	None	None	None	73	123	44	29
708	None	None	None	101	205	50	51
709	None	None	None	97	159	47	50
710	Trace	None	None	140	133	67	73

Male, Group IXA - 10 mg/kg H-24921 - Day 14

Animal	HEM	LIP	ICT	CHOL mg/dL	TRIG mg/dL	HDL mg/dL	nonHDL mg/dL
901	None	None	None	90	148	52	38
902	None	None	None	111	214	64	47
903	None	None	None	73	164	46	27
904	None	None	None	109	145	70	39
905	None	None	None	171	149	108	63
906	None	None	None	94	180	57	37
907	Trace	None	None	122	227	76	46
908	None	None	None	69	127	44	25
909	None	None	None	96	116	49	47
910	Trace	None	Trace	208	121	125	83

Male, Group XIA - 30 mg/kg H-24921 - Day 14

Animal	HEM	LIP	ICT	CHOL mg/dL	TRIG mg/dL	HDL mg/dL	nonHDL mg/dL
1101	None	None	None	73	83	44	29
1102	None	None	Trace	98	51	60	38
1103	Trace	None	None	66	110	37	29
1104	None	None	None	85	54	52	33
1105	None	None	None	106	93	64	42
1106	None	None	None	60	93	29	31
1107	None	None	None	102	138	56	46
1108	None	None	None	45	59	24	21
1109	None	None	None	162	114	82	80
1110	None	None	Moderate	85	58	45	40

Individual Animal Clinical Pathology Data for Mice

Male, Group IB - 0 mg/kg H-26313 - Day 14

Animal	HEM	LIP	ICT	CHOL mg/dL	TRIG mg/dL	HDL mg/dL	nonHDL mg/dL
101	Trace	None	None	159	96	107	52
102	None	None	None	133	93	90	43
103	Trace	None	None	197	151	119	78
104	None	None	None	136	138	87	49
105	None	None	None	134	91	77	57
106	Trace	None	None	129	62	83	46
107	None	None	None	173	71	111	62
108	None	None	None	116	74	71	45
109	None	None	None	150	108	93	57
110	Trace	None	None	173	141	107	66

Male, Group IIIB -0.3 mg/kg H-26313- Day 14

Animal	HEM	LIP	ICT	CHOL mg/dL	TRIG mg/dL	HDL mg/dL	nonHDL mg/dL
301	Trace	None	None	137	113	90	47
302	None	None	None	118	121	78	40
303	Trace	None	None	140	79	88	52
304	None	None	None	103	135	64	39
305	Trace	None	None	151	141	90	61
306	None	None	None	163	125	91	72
307	None	None	None	149	158	91	58
308	None	None	None	151	130	87	64
309	None	None	None	242	187	138	104
310	None	None	None	115	64	79	36

Male, Group VB - 1 mg/kg H-26313 - Day 14

Animal	HEM	LIP	ICT	CHOL mg/dL	TRIG mg/dL	HDL mg/dL	nonHDL mg/dL
501	None	None	None	141	111	89	52
502	None	None	None	125	123	68	57
503	None	None	None	137	129	82	55
504	None	None	None	138	160	69	69
505	Trace	None	None	137	165	82	55
506	None	None	None	117	111	72	45
507	None	None	None	158	149	91	67
508	Trace	None	None	129	113	68	61
509	None	None	None	185	148	93	92
510	None	None	None	123	158	68	55

Individual Animal Clinical Pathology Data for Mice

Male,	Group	VIIB	- 3 mg/kg H-26313 -			Day	14
Animal	HEM	LIP	ICT	CHOL mg/dL	TRIG mg/dL	HDL mg/dL	nonHDL mg/dL
701	None	None	None	72	103	51	21
702	None	None	None	113	173	55	58
703	None	None	None	71	105	44	27
704	None	None	None	96	122	59	37
705	None	None	None	133	157	55	78
706	None	None	None	69	160	37	32
707	None	None	Trace	81	75	51	30
708	None	None	None	135	133	62	73
709	None	None	None	102	135	47	55
710	None	None	None	98	202	46	52

Male,	Group	IXB	- 10 mg/kg H-26313 -			Day	14
Animal	HEM	LIP	ICT	CHOL mg/dL	TRIG mg/dL	HDL mg/dL	nonHDL mg/dL
901	None	None	None	100	75	58	42
902	None	None	None	148	235	68	80
903	None	None	None	105	149	68	37
904	None	None	None	57	62	33	24
905	None	None	None	129	156	68	61
906	None	None	Trace	135	144	74	61
907	None	None	None	95	111	53	42
908	None	None	None	98	119	55	43
909	Trace	None	None	169	175	87	82
910	None	None	None	122	128	75	47

Male,	Group	XIB	- 30 mg/kg H-26313 -			Day	14
Animal	HEM	LIP	ICT	CHOL mg/dL	TRIG mg/dL	HDL mg/dL	nonHDL mg/dL
1101	None	None	None	100	104	61	39
1102	None	None	Trace	80	84	43	37
1103	None	None	None	162	73	88	74
1104	None	None	Trace	59	74	30	29
1105	NSR	NP	NP	NP	NP	NP	NP
1106	None	None	None	75	70	39	36
1107	None	None	Small	78	64	49	29
1108	None	None	Trace	136	106	75	61
1109	None	None	Trace	97	97	49	48
1110	None	None	None	120	101	66	54

Individual Animal Clinical Pathology Data for Mice

Male, Group IC - 0 mg/kg H-26225 - Day 14

Animal	HEM	LIP	ICT	CHOL mg/dL	TRIG mg/dL	HDL mg/dL	nonHDL mg/dL
101	None	None	None	130	95	88	42
102	Trace	None	None	182	141	120	62
103	None	None	None	141	134	97	44
104	Trace	None	None	140	151	91	49
105	Trace	None	None	153	106	98	55
106	Trace	None	None	123	162	81	42
107	None	None	None	116	151	76	40
108	Trace	None	None	181	137	110	71
109	None	None	None	150	113	89	61
110	None	None	None	148	150	92	56

Male, Group IIIC -0.30 mg/kg H-26225 - Day 14

Animal	HEM	LIP	ICT	CHOL mg/dL	TRIG mg/dL	HDL mg/dL	nonHDL mg/dL
301	None	Trace	None	182	710	83	99
302	Trace	None	None	118	131	78	40
303	Trace	None	None	115	127	79	36
304	Trace	None	None	104	94	65	39
305	Trace	None	None	118	174	73	45
306	Trace	None	None	97	117	67	30
307	None	None	None	122	97	83	39
308	None	None	None	144	112	89	55
309	Trace	None	None	101	78	62	39
310	None	None	None	148	129	92	56

Male, Group VC - 1 mg/kg H-26225 - Day 14

Animal	HEM	LIP	ICT	CHOL mg/dL	TRIG mg/dL	HDL mg/dL	nonHDL mg/dL
501	None	None	None	138	157	83	55
502	Trace	None	None	102	118	74	28
503	None	None	None	185	270	100	85
504	None	None	None	187	179	104	83
505	Trace	None	None	149	138	91	58
506	None	None	None	80	144	52	28
507	None	None	None	74	176	50	24
508	None	None	None	115	163	75	40
509	None	None	None	103	112	74	29
510	None	None	None	136	152	85	51

Individual Animal Clinical Pathology Data for Mice

Male, Group VIIC - 3 mg/kg H-26225 - Day 14

Animal	HEM	LIP	ICT	CHOL mg/dL	TRIG mg/dL	HDL mg/dL	nonHDL mg/dL
701	None	None	None	119	159	74	45
702	None	None	None	57	100	45	12
703	None	None	None	126	228	73	53
704	None	None	None	88	153	57	31
705	None	Trace	None	90	232	60	30
706	None	None	None	85	107	55	30
707	None	None	None	77	138	51	26
708	None	None	None	128	99	80	48
709	None	None	None	68	146	44	24
710	None	None	None	121	128	77	44

Male, Group IXC - 10 mg/kg H-26225 - Day 14

Animal	HEM	LIP	ICT	CHOL mg/dL	TRIG mg/dL	HDL mg/dL	nonHDL mg/dL
901	None	Trace	None	125	258	74	51
902	None	None	None	72	161	47	25
903	None	None	None	79	141	52	27
904	None	None	None	75	266	35	40
905	None	None	None	114	249	64	50
906	None	None	None	119	164	68	51
907	None	Trace	None	105	230	50	55
908	None	None	None	149	114	88	61
909	None	None	None	153	256	81	72
910	None	None	None	211	162	106	105

Male, Group XIC - 30 mg/kg H-26225 - Day 14

Animal	HEM	LIP	ICT	CHOL mg/dL	TRIG mg/dL	HDL mg/dL	nonHDL mg/dL
1101	None	None	None	132	145	81	51
1102	None	None	None	130	106	84	46
1103	None	None	None	96	117	54	42
1104	None	None	None	108	137	60	48
1105	None	None	None	85	113	55	30
1106	Trace	None	None	93	116	50	43
1107	None	None	None	123	75	77	46
1108	None	None	None	108	160	65	43
1109	None	None	None	121	117	69	52
1110	None	None	None	130	182	72	58

Appendix F
Individual Animal Final Body and Organ Weights for Mice

INDIVIDUAL ANIMAL FINAL BODY AND ORGAN WEIGHTS FOR MICE

EXPLANATORY NOTES

STUDY DESIGN

Groups			Dosage (mg/kg)
H-24921 APFO (Linear/Branched)	H-26313 APFO (Linear)	H-26225 APFO (Branched)	
IA	IB	IC	0 (Control)
IIIA	IIIB	IIIC	0.3
VA	VB	VC	1
VIIA	VIIB	VIIC	3
IXA	IXB	IXC	10
XIA	XIB	XIC	30

Abbreviations

mg/kg = mg/kg/day
FBW = Final Body Weight

Note

879 = Mice

Organ Weight Listing — Individual Animal & Summary Stats Report
Study:15073/24921/879A — PLACES 2000 v1.400

Group : IA 0 mg/kg Treatment : 0 mg/kg IA Sex :MALES

ANIMAL	FBW (Gms)	KIDNEYS (Gms)	KIDNEYS %FBW	LIVER (Gms)	LIVER %FBW
102	30.700	0.530	1.7264	1.721	5.6059
103	30.600	0.535	1.7484	1.608	5.2549
104	30.100	0.475	1.5781	1.507	5.0066
105	33.600	0.471	1.4018	1.795	5.3423
106	34.400	0.527	1.5320	1.709	4.9680
107	33.700	0.475	1.4095	1.733	5.1424
108	29.100	0.516	1.7732	1.536	5.2784
109	31.800	0.423	1.3302	1.474	4.6352
110	33.000	0.529	1.6030	1.669	5.0576
Mean	31.889	0.498	1.5669	1.639	5.1435
S.D.	1.864	0.039	0.1627	0.113	0.2737

Group : IIIA 0.3 mg/kg Treatment : 0.3 mg/kg IIIA Sex :MALES

ANIMAL	FBW (Gms)	KIDNEYS (Gms)	KIDNEYS %FBW	LIVER (Gms)	LIVER %FBW
301	29.100	0.433	1.4880	1.764	6.0619
302	29.900	0.562	1.8796	1.923	6.4314
303	33.400	0.591	1.7695	2.176	6.5150
304	29.300	0.547	1.8669	1.777	6.0648
305	32.300	0.511	1.5820	2.029	6.2817
306	33.500	0.547	1.6328	1.999	5.9672
307	31.200	0.472	1.5128	1.918	6.1474
308	31.900	0.540	1.6928	1.826	5.7241
309	30.600	0.547	1.7876	1.789	5.8464
310	33.600	0.691	2.0565	2.052	6.1071
Mean	31.480	0.544	1.7269	1.925	6.1147
S.D.	1.728	0.069	0.1798	0.138	0.2452

FBW - Final Body Weight

Organ Weight Listing
Study:15073/24921/879A

Individual Animal & Summary Stats Report
PLACES 2000 v1.400

Group : VA 1 mg/kg Treatment : 1 mg/kg VA Sex :MALES

ANIMAL	FBW (Gms)	KIDNEYS (Gms)	KIDNEYS %FBW	LIVER (Gms)	LIVER %FBW
501	28.200	0.531	1.8830	2.468	8.7518
502	31.500	0.490	1.5556	2.339	7.4254
503	31.400	0.462	1.4713	2.570	8.1847
504	31.600	0.523	1.6551	2.576	8.1519
505	34.500	0.564	1.6348	2.398	6.9507
506	33.800	0.572	1.6923	2.764	8.1775
507	31.300	0.458	1.4633	2.400	7.6677
508	33.000	0.549	1.6636	2.622	7.9455
509	31.900	0.548	1.7179	2.551	7.9969
510	35.100	0.662	1.8860	2.782	7.9259
Mean	32.230	0.536	1.6623	2.547	7.9178
S.D.	1.980	0.060	0.1457	0.150	0.4872

Group : VIIA 3 mg/kg Treatment : 3 mg/kg VIIIA Sex :MALES

ANIMAL	FBW (Gms)	KIDNEYS (Gms)	KIDNEYS %FBW	LIVER (Gms)	LIVER %FBW
701	26.000	0.392	1.5077	2.651	10.196
702	30.700	0.496	1.6156	3.388	11.036
703	33.800	0.635	1.8787	3.264	9.6568
704	31.400	0.535	1.7038	3.416	10.879
705	34.700	0.595	1.7147	3.649	10.516
706	34.000	0.628	1.8471	3.947	11.609
707	33.800	0.533	1.5769	3.379	9.9970
708	32.000	0.525	1.6406	3.691	11.534
709	33.100	0.577	1.7432	3.598	10.870
710	34.100	0.472	1.3842	3.707	10.871
Mean	32.360	0.539	1.6613	3.469	10.717
S.D.	2.585	0.074	0.1502	0.352	0.6318

FBW - Final Body Weight

Organ Weight Listing
Study:15073/24921/879A

Individual Animal & Summary Stats Report
PLACES 2000 v1.400

Group : IXA 10 mg/kg Treatment : 10 mg/kg IXA Sex :MALES

ANIMAL	FBW	KIDNEYS		LIVER	
	(Gms)	(Gms)	%FBW	(Gms)	%FBW
901	29.100	0.489	1.6804	4.241	14.574
902	27.800	0.450	1.6187	4.760	17.122
903	28.900	NW		4.455	15.415
904	30.300	0.493	1.6271	5.070	16.733
905	25.800	0.406	1.5736	4.589	17.787
906	31.000	0.505	1.6290	5.004	16.142
907	26.800	0.380	1.4179	4.274	15.948
908	28.000	0.452	1.6143	4.371	15.611
909	30.000	0.463	1.5433	5.322	17.740
910	25.600	0.432	1.6875	4.006	15.648
Mean	28.330	0.452	1.5991	4.609	16.272
S.D.	1.865	0.041	0.0816	0.421	1.0515

Group : XIA 30 mg/kg Treatment : 30 mg/kg XIA Sex :MALES

ANIMAL	FBW	KIDNEYS		LIVER	
	(Gms)	(Gms)	%FBW	(Gms)	%FBW
1101	23.900	0.334	1.3975	4.283	17.921
1102	22.800	0.364	1.5965	4.360	19.123
1103	24.000	0.370	1.5417	4.148	17.283
1104	22.100	0.339	1.5339	3.960	17.919
1105	26.100	0.450	1.7241	4.867	18.648
1106	26.200	0.405	1.5458	4.452	16.992
1107	27.100	0.463	1.7085	5.955	21.974
1108	24.700	0.371	1.5020	4.481	18.142
1109	26.500	0.429	1.6189	4.951	18.683
1110	25.500	0.480	1.8824	4.116	16.141
Mean	24.890	0.401	1.6051	4.557	18.283
S.D.	1.666	0.053	0.1368	0.583	1.5691

*** Listing Complete ***

NW - Not Weighed
FBW - Final Body Weight

Organ Weight Listing
Study:15073/26313/879B

Individual Animal & Summary Stats Report
PLACES 2000 v1.400

Group : IB 0 mg/kg Treatment : 0 mg/kg IB Sex :MALES

ANIMAL	FBW (Gms)	KIDNEYS (Gms)	KIDNEYS %FBW	LIVER (Gms)	LIVER %FBW
101	28.700	0.512	1.7840	1.458	5.0801
102	31.900	0.594	1.8621	1.783	5.5893
103	30.800	0.543	1.7630	1.698	5.5130
104	31.200	0.628	2.0128	1.792	5.7436
105	31.000	0.575	1.8548	1.816	5.8581
106	29.800	0.461	1.5470	1.563	5.2450
107	32.400	0.528	1.6296	1.744	5.3827
108	30.300	0.584	1.9274	1.641	5.4158
109	32.100	0.646	2.0125	1.852	5.7695
110	29.100	0.576	1.9794	1.622	5.5739
Mean	30.730	0.565	1.8373	1.697	5.5171
S.D.	1.254	0.055	0.1586	0.125	0.2434

Group : IIIB 0.3 mg/kg Treatment : 0.3 mg/kg IIIB Sex :MALES

ANIMAL	FBW (Gms)	KIDNEYS (Gms)	KIDNEYS %FBW	LIVER (Gms)	LIVER %FBW
301	29.300	0.490	1.6724	1.845	6.2969
302	31.400	0.498	1.5860	1.919	6.1115
303	30.500	0.530	1.7377	1.910	6.2623
304	30.500	0.522	1.7115	1.978	6.4852
305	32.600	0.581	1.7822	2.203	6.7577
306	32.700	0.525	1.6055	2.119	6.4801
307	29.900	0.505	1.6890	1.952	6.5284
308	30.700	0.544	1.7720	2.113	6.8827
309	31.100	0.518	1.6656	1.955	6.2862
310	30.800	0.578	1.8766	1.981	6.4318
Mean	30.950	0.529	1.7098	1.998	6.4523
S.D.	1.071	0.031	0.0867	0.112	0.2335

FBW - Final Body Weight

Organ Weight Listing
Study:15073/26313/879B

Individual Animal & Summary Stats Report
PLACES 2000 v1.400

Group : VB 1 mg/kg Treatment : 1 mg/kg VB Sex :MALES

ANIMAL	FBW (Gms)	KIDNEYS (Gms)	KIDNEYS %FBW	LIVER (Gms)	LIVER %FBW
501	31.500	0.548	1.7397	2.507	7.9587
502	30.600	0.439	1.4346	2.592	8.4706
503	32.700	0.595	1.8196	2.870	8.7768
504	32.400	0.542	1.6728	2.648	8.1728
505	33.700	0.611	1.8131	2.882	8.5519
506	34.300	0.721	2.1020	2.805	8.1778
507	32.400	0.508	1.5679	2.576	7.9506
508	33.700	0.508	1.5074	2.776	8.2374
509	33.100	0.563	1.7009	2.913	8.8006
510	33.200	0.595	1.7922	2.720	8.1928
Mean	32.760	0.563	1.7150	2.729	8.3290
S.D.	1.104	0.076	0.1892	0.143	0.3068

Group : VIIB 3 mg/kg Treatment : 3 mg/kg VIIB Sex :MALES

ANIMAL	FBW (Gms)	KIDNEYS (Gms)	KIDNEYS %FBW	LIVER (Gms)	LIVER %FBW
701	29.900	0.517	1.7291	2.942	9.8395
702	30.600	0.529	1.7288	3.405	11.127
703	34.100	0.542	1.5894	3.649	10.701
704	37.100	0.653	1.7601	4.205	11.334
705	33.300	0.476	1.4294	3.969	11.919
706	37.900	0.763	2.0132	4.669	12.319
707	26.700	0.502	1.8801	3.621	13.562
708	33.200	0.502	1.5120	3.523	10.611
709	30.700	0.584	1.9023	3.255	10.603
710	31.800	0.593	1.8648	3.712	11.673
Mean	32.530	0.566	1.7409	3.695	11.369
S.D.	3.362	0.087	0.1850	0.491	1.0600

FBW - Final Body Weight

Organ Weight Listing
Study:15073/26313/879B

Individual Animal & Summary Stats Report
PLACES 2000 v1.400

Group : IXB 10 mg/kg Treatment : 10 mg/kg IXB Sex :MALES

ANIMAL	FBW (Gms)	KIDNEYS (Gms)	KIDNEYS %FBW	LIVER (Gms)	LIVER %FBW
901	23.700	0.296	1.2489	3.729	15.734
902	30.500	0.511	1.6754	5.422	17.777
903	28.400	0.496	1.7465	4.339	15.278
904	27.500	0.488	1.7745	4.970	18.073
905	33.300	0.583	1.7508	6.274	18.841
906	30.300	0.554	1.8284	5.215	17.211
907	25.700	0.420	1.6342	4.628	18.008
908	28.300	0.459	1.6219	4.772	16.862
909	27.200	0.407	1.4963	4.822	17.728
910	25.500	0.395	1.5490	4.157	16.302
Mean	28.040	0.461	1.6326	4.833	17.181
S.D.	2.804	0.084	0.1700	0.711	1.1293

Group : XIB 30 mg/kg Treatment : 30 mg/kg XIB Sex :MALES

ANIMAL	FBW (Gms)	KIDNEYS (Gms)	KIDNEYS %FBW	LIVER (Gms)	LIVER %FBW
1101	26.200	0.537	2.0496	4.953	18.905
1102	23.200	0.390	1.6810	4.078	17.578
1103	27.100	0.418	1.5424	5.126	18.915
1104	25.800	0.415	1.6085	4.590	17.791
1106	26.100	0.423	1.6207	4.729	18.119
1107	24.700	0.448	1.8138	4.503	18.231
1108	24.100	0.369	1.5311	4.108	17.046
1109	28.900	0.534	1.8478	5.548	19.197
1110	26.000	0.429	1.6500	4.116	15.831
Mean	25.789	0.440	1.7050	4.639	17.957
S.D.	1.675	0.058	0.1687	0.508	1.0594

*** Listing Complete ***

FBW - Final Body Weight

Organ Weight Listing
Study:15073/26225/879C

Individual Animal & Summary Stats Report
PLACES 2000 v1.400

Group : IC 0 mg/kg Treatment : 0 mg/kg IC Sex :MALES

ANIMAL	FBW (Gms)	KIDNEYS (Gms)	KIDNEYS %FBW	LIVER (Gms)	LIVER %FBW
101	31.200	0.526	1.6859	1.660	5.3205
102	28.600	0.495	1.7308	1.483	5.1853
103	31.700	0.524	1.6530	1.740	5.4890
104	31.400	0.541	1.7229	1.639	5.2197
105	31.300	0.569	1.8179	1.637	5.2300
106	28.600	0.522	1.8252	1.320	4.6154
107	31.500	0.424	1.3460	1.766	5.6063
108	34.900	0.510	1.4613	1.769	5.0688
109	32.800	0.485	1.4787	1.603	4.8872
110	33.100	0.560	1.6918	1.578	4.7674
Mean	31.510	0.516	1.6414	1.620	5.1390
S.D.	1.909	0.041	0.1600	0.138	0.3112

Group : IIIC 0.3 mg/kg Treatment : 0.3 mg/kg IIIC Sex :MALES

ANIMAL	FBW (Gms)	KIDNEYS (Gms)	KIDNEYS %FBW	LIVER (Gms)	LIVER %FBW
301	32.000	0.544	1.7000	2.071	6.4719
302	29.900	0.467	1.5619	1.724	5.7659
303	33.000	0.545	1.6515	2.130	6.4545
304	31.600	0.557	1.7627	1.803	5.7057
305	33.100	0.503	1.5196	2.040	6.1631
306	30.300	0.520	1.7162	1.779	5.8713
307	29.400	0.597	2.0306	1.858	6.3197
308	35.100	0.577	1.6439	2.142	6.1026
309	30.800	0.555	1.8019	1.765	5.7305
310	33.500	0.620	1.8507	2.226	6.6448
Mean	31.870	0.549	1.7239	1.954	6.1230
S.D.	1.812	0.045	0.1483	0.186	0.3438

FBW - Final Body Weight

Organ Weight Listing
Study:15073/26225/879C

Individual Animal & Summary Stats Report
PLACES 2000 v1.400

Group : VC 1 mg/kg Treatment : 1 mg/kg VC Sex :MALES

ANIMAL	FBW (Gms)	KIDNEYS (Gms)	KIDNEYS %FBW	LIVER (Gms)	LIVER %FBW
501	33.700	0.535	1.5875	2.729	8.0979
502	31.000	0.590	1.9032	2.484	8.0129
503	31.000	0.546	1.7613	2.553	8.2355
504	32.100	0.542	1.6885	2.673	8.3271
505	32.300	0.489	1.5139	3.042	9.4180
506	31.900	0.509	1.5956	2.707	8.4859
507	31.800	0.538	1.6918	2.296	7.2201
508	32.500	0.564	1.7354	2.266	6.9723
509	30.500	0.503	1.6492	2.177	7.1377
510	36.000	0.653	1.8139	2.384	6.6222
Mean	32.280	0.547	1.6940	2.531	7.8530
S.D.	1.590	0.048	0.1154	0.264	0.8504

Group : VIIC 3 mg/kg Treatment : 3 mg/kg VIIC Sex :MALES

ANIMAL	FBW (Gms)	KIDNEYS (Gms)	KIDNEYS %FBW	LIVER (Gms)	LIVER %FBW
701	31.800	0.515	1.6195	3.982	12.522
702	32.900	0.594	1.8055	3.620	11.003
703	34.300	0.515	1.5015	4.375	12.755
704	34.600	0.508	1.4682	3.677	10.627
705	34.400	0.506	1.4709	3.934	11.436
706	32.000	0.514	1.6063	3.722	11.631
707	34.100	0.544	1.5953	4.569	13.399
708	35.400	0.489	1.3814	4.332	12.237
709	33.700	0.465	1.3798	4.075	12.092
710	33.900	0.663	1.9558	3.983	11.749
Mean	33.710	0.531	1.5784	4.027	11.945
S.D.	1.149	0.057	0.1840	0.317	0.8320

FBW - Final Body Weight

Organ Weight Listing — Individual Animal & Summary Stats Report
Study:15073/26225/879C — PLACES 2000 v1.400

Group : IXC 10 mg/kg Treatment : 10 mg/kg IXC Sex :MALES

ANIMAL	FBW (Gms)	KIDNEYS (Gms)	KIDNEYS %FBW	LIVER (Gms)	LIVER %FBW
901	33.400	0.493	1.4760	5.837	17.476
902	31.000	0.528	1.7032	5.024	16.206
903	32.300	0.521	1.6130	5.995	18.560
904	32.800	0.517	1.5762	5.779	17.619
905	35.600	0.525	1.4747	6.243	17.537
906	33.600	0.546	1.6250	5.167	15.378
907	32.300	0.542	1.6780	5.840	18.080
908	35.000	0.598	1.7086	5.488	15.680
909	33.600	0.560	1.6667	6.370	18.958
910	33.500	0.600	1.7910	7.232	21.588
Mean	33.310	0.543	1.6313	5.898	17.708
S.D.	1.331	0.035	0.1012	0.634	1.8065

Group : XIC 30 mg/kg Treatment : 30 mg/kg XIC Sex :MALES

ANIMAL	FBW (Gms)	KIDNEYS (Gms)	KIDNEYS %FBW	LIVER (Gms)	LIVER %FBW
1101	31.000	0.464	1.4968	6.693	21.590
1102	31.800	0.504	1.5849	6.595	20.739
1103	29.400	0.492	1.6735	5.740	19.524
1104	32.600	0.554	1.6994	6.489	19.905
1105	30.500	0.482	1.5803	6.524	21.390
1106	28.600	0.457	1.5979	5.535	19.353
1107	27.900	0.386	1.3835	6.304	22.595
1108	32.300	0.452	1.3994	6.309	19.533
1109	30.500	0.481	1.5770	6.959	22.816
1110	34.900	0.582	1.6676	7.918	22.688
Mean	30.950	0.485	1.5660	6.507	21.013
S.D.	2.068	0.054	0.1092	0.654	1.3945

*** Listing Complete ***

FBW - Final Body Weight

Appendix G
Individual Animal Gross Observations for Mice

INDIVIDUAL ANIMAL GROSS OBSERVATIONS FOR MICE

EXPLANATORY NOTES

STUDY DESIGN

Groups			Dosage (mg/kg)
H-24921 APFO (Linear/Branched)	H-26313 APFO (Linear)	H-26225 APFO (Branched)	
IA	IB	IC	0 (Control)
IIIA	IIIB	IIIC	0.3
VA	VB	VC	1
VIIA	VIIB	VIIC	3
IXA	IXB	IXC	10
XIA	XIB	XIC	30

Abbreviations

mg/kg = mg/kg/day

Note
879 = Mice

Date:19-MAY-04

Individual Animal Listing
Showing animal data for individual animals
STUDY : 15073/24921/879A (* APPROVED PROTOCOL *)
Dose Group : IA 0 mg/kg Treatment: 0 mg/kg IA Sex: Males

Animal Ref	Findings
101	Found Dead Duration of dosing-days: 4 Animal is signed off from necropsy
	SKIN : STAIN, YELLOW, VENTRAL BODY, WET.
	No Macroscopic Abnormality Observed : LIVER, KIDNEYS
102	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy
	No Macroscopic Abnormality Observed : LIVER, KIDNEYS
103	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy
	No Macroscopic Abnormality Observed : LIVER, KIDNEYS
104	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy
	No Macroscopic Abnormality Observed : LIVER, KIDNEYS
105	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy
	No Macroscopic Abnormality Observed : LIVER, KIDNEYS

Date:19-MAY-04

Individual Animal Listing
Showing animal data for individual animals
STUDY : 15073/24921/879A (* APPROVED PROTOCOL *)
Dose Group : IA 0 mg/kg Treatment: 0 mg/kg IA Sex: Males

Animal Ref	Findings
106	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy
	No Macroscopic Abnormality Observed : LIVER, KIDNEYS
107	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy
	No Macroscopic Abnormality Observed : LIVER, KIDNEYS
108	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy
	No Macroscopic Abnormality Observed : LIVER, KIDNEYS
109	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy
	No Macroscopic Abnormality Observed : LIVER, KIDNEYS
110	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy
	No Macroscopic Abnormality Observed : LIVER, KIDNEYS

Date:19-MAY-04

Individual Animal Listing
Showing animal data for individual animals
STUDY : 15073/24921/879A (* APPROVED PROTOCOL *)
Dose Group : IIIA 0.3 mg/kg Treatment: 0.3 mg/kg IIIA Sex: Males

Animal Ref	Findings
301	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
302	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
303	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
304	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
305	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
306	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS

Date:19-MAY-04

Individual Animal Listing
Showing animal data for individual animals
STUDY : 15073/24921/879A (* APPROVED PROTOCOL *)
Dose Group : IIIA 0.3 mg/kg Treatment: 0.3 mg/kg IIIA Sex: Males

Animal Ref	Findings
307	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
308	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
309	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
310	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS

Date:19-MAY-04

Individual Animal Listing
Showing animal data for individual animals
STUDY : 15073/24921/879A (* APPROVED PROTOCOL *)
Dose Group : VA 1 mg/kg Treatment: 1 mg/kg VA Sex: Males

Animal Ref	Findings
501	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
502	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
503	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
504	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
505	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
506	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS

Date:19-MAY-04

Individual Animal Listing
Showing animal data for individual animals
STUDY : 15073/24921/879A (* APPROVED PROTOCOL *)
Dose Group : VA 1 mg/kg Treatment: 1 mg/kg VA Sex: Males

Animal Ref	Findings
507	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
508	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
509	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
510	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS

Date:19-MAY-04

Individual Animal Listing
Showing animal data for individual animals

STUDY : 15073/24921/879A (* APPROVED PROTOCOL *)
Dose Group : VIIA 3 mg/kg Treatment: 3 mg/kg VIIIA Sex: Males

Animal Ref	Findings
701	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
702	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
703	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
704	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
705	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
706	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS

Date:19-MAY-04

Individual Animal Listing
Showing animal data for individual animals
STUDY : 15073/24921/879A (* APPROVED PROTOCOL *)
Dose Group : VIIA 3 mg/kg Treatment: 3 mg/kg VIIIA Sex: Males

Animal Ref	Findings
707	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
708	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
709	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
710	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy LIVER : DISCOLORATION, TAN, FEW. No Macroscopic Abnormality Observed : KIDNEYS

Date:19-MAY-04

Individual Animal Listing
Showing animal data for individual animals
STUDY : 15073/24921/879A (* APPROVED PROTOCOL *)
Dose Group : IXA 10 mg/kg Treatment: 10 mg/kg IXA Sex: Males

Animal Ref	Findings
901	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
902	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
903	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy LIVER : DISCOLORATION, TAN, MOTTLED. No Macroscopic Abnormality Observed : KIDNEYS
904	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
905	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy LIVER : DISCOLORATION, TAN, MOTTLED, mild. No Macroscopic Abnormality Observed : KIDNEYS

Date:19-MAY-04

Individual Animal Listing
Showing animal data for individual animals
STUDY : 15073/24921/879A (* APPROVED PROTOCOL *)
Dose Group : IXA 10 mg/kg Treatment: 10 mg/kg IXA Sex: Males

Animal Ref	Findings
906	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy
	No Macroscopic Abnormality Observed : LIVER, KIDNEYS
907	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy
	No Macroscopic Abnormality Observed : LIVER, KIDNEYS
908	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy
	No Macroscopic Abnormality Observed : LIVER, KIDNEYS
909	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy
	LIVER : DISCOLORATION, TAN, MOTTLED, severe.
	No Macroscopic Abnormality Observed : KIDNEYS
910	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy
	LIVER : DISCOLORATION, YELLOW, MIDDLE, 3MM DIA.
	No Macroscopic Abnormality Observed : KIDNEYS

Date:19-MAY-04

Individual Animal Listing
Showing animal data for individual animals

STUDY : 15073/24921/879A (* APPROVED PROTOCOL *)
Dose Group : XIA 30 mg/kg Treatment: 30 mg/kg XIA Sex: Males

Animal Ref	Findings
1101	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
1102	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy LIVER : DISCOLORATION, YELLOW, FEW, < 3MM DIA. No Macroscopic Abnormality Observed : KIDNEYS
1103	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
1104	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy LIVER : DISCOLORATION, TAN, MOTTLED, mild. No Macroscopic Abnormality Observed : KIDNEYS
1105	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS

Date:19-MAY-04

Individual Animal Listing
Showing animal data for individual animals

STUDY : 15073/24921/879A (* APPROVED PROTOCOL *)
Dose Group : XIA 30 mg/kg Treatment: 30 mg/kg XIA Sex: Males

Animal Ref	Findings
1106	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
1107	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy LIVER : DISCOLORATION, TAN, MOTTLED. No Macroscopic Abnormality Observed : KIDNEYS
1108	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy LIVER : DISCOLORATION, TAN, MOTTLED, mild. No Macroscopic Abnormality Observed : KIDNEYS
1109	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
1110	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS

*** Listing Complete ***

Date:19-MAY-04

Individual Animal Listing
Showing animal data for individual animals
STUDY : 15073/26313/879B (* APPROVED PROTOCOL *)
Dose Group : IB 0 mg/kg Treatment: 0 mg/kg IB Sex: Males

Animal Ref	Findings
101	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy
	No Macroscopic Abnormality Observed : LIVER, KIDNEYS
102	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy
	No Macroscopic Abnormality Observed : LIVER, KIDNEYS
103	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy
	No Macroscopic Abnormality Observed : LIVER, KIDNEYS
104	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy
	No Macroscopic Abnormality Observed : LIVER, KIDNEYS
105	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy
	No Macroscopic Abnormality Observed : LIVER, KIDNEYS
106	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy
	No Macroscopic Abnormality Observed : LIVER, KIDNEYS

Date:19-MAY-04

Individual Animal Listing
Showing animal data for individual animals
STUDY : 15073/26313/879B (* APPROVED PROTOCOL *)
Dose Group : IB 0 mg/kg Treatment: 0 mg/kg IB Sex: Males

Animal Ref	Findings
107	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
108	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
109	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
110	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS

Date:19-MAY-04

Individual Animal Listing
Showing animal data for individual animals
STUDY : 15073/26313/879B (* APPROVED PROTOCOL *)
Dose Group : IIIB 0.3 mg/kg Treatment: 0.3 mg/kg IIIB Sex: Males

Animal Ref	Findings
301	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
302	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
303	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
304	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
305	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
306	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS

Date:19-MAY-04

Individual Animal Listing
Showing animal data for individual animals
STUDY : 15073/26313/879B (* APPROVED PROTOCOL *)
Dose Group : IIIB 0.3 mg/kg Treatment: 0.3 mg/kg IIIB Sex: Males

Animal Ref	Findings
307	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
308	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
309	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
310	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS

Date:19-MAY-04

Individual Animal Listing
Showing animal data for individual animals
STUDY : 15073/26313/879B (* APPROVED PROTOCOL *)
Dose Group : VB 1 mg/kg Treatment: 1 mg/kg VB Sex: Males

Animal Ref	Findings
501	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy
	No Macroscopic Abnormality Observed : LIVER, KIDNEYS
502	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy
	No Macroscopic Abnormality Observed : LIVER, KIDNEYS
503	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy
	No Macroscopic Abnormality Observed : LIVER, KIDNEYS
504	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy
	No Macroscopic Abnormality Observed : LIVER, KIDNEYS
505	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy
	No Macroscopic Abnormality Observed : LIVER, KIDNEYS
506	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy
	No Macroscopic Abnormality Observed : LIVER, KIDNEYS

Date:19-MAY-04

Individual Animal Listing
Showing animal data for individual animals
STUDY : 15073/26313/879B (* APPROVED PROTOCOL *)
Dose Group : VB 1 mg/kg Treatment: 1 mg/kg VB Sex: Males

Animal Ref	Findings
507	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
508	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
509	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
510	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS

Date:19-MAY-04

Individual Animal Listing
Showing animal data for individual animals

STUDY : 15073/26313/879B (* APPROVED PROTOCOL *)
Dose Group : VIIB 3 mg/kg Treatment: 3 mg/kg VIIB Sex: Males

Animal Ref	Findings
701	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
702	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
703	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
704	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
705	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
706	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS

Date:19-MAY-04

Individual Animal Listing
Showing animal data for individual animals
STUDY : 15073/26313/879B (* APPROVED PROTOCOL *)
Dose Group : VIIB 3 mg/kg Treatment: 3 mg/kg VIIB Sex: Males

Animal Ref	Findings
707	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
708	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
709	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
710	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy LIVER : DISCOLORATION, TAN, MOTTLED. No Macroscopic Abnormality Observed : KIDNEYS

Date:19-MAY-04

Individual Animal Listing
Showing animal data for individual animals
STUDY : 15073/26313/879B (* APPROVED PROTOCOL *)
Dose Group : IXB 10 mg/kg Treatment: 10 mg/kg IXB Sex: Males

Animal Ref	Findings
901	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy
	LIVER : DISCOLORATION, TAN, MOTTLED, MIDDLE LOBE.
	No Macroscopic Abnormality Observed : KIDNEYS
902	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy
	No Macroscopic Abnormality Observed : LIVER, KIDNEYS
903	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy
	No Macroscopic Abnormality Observed : LIVER, KIDNEYS
904	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy
	No Macroscopic Abnormality Observed : LIVER, KIDNEYS
905	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy
	LIVER : DISCOLORATION, TAN, MOTTLED.
	No Macroscopic Abnormality Observed : KIDNEYS

Date:19-MAY-04

Individual Animal Listing
Showing animal data for individual animals
STUDY : 15073/26313/879B (* APPROVED PROTOCOL *)
Dose Group : IXB 10 mg/kg Treatment: 10 mg/kg IXB Sex: Males

Animal Ref	Findings
906	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy
	LIVER : DISCOLORATION, TAN, MOTTLED.
	No Macroscopic Abnormality Observed : KIDNEYS
907	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy
	LIVER : DISCOLORATION, TAN, MOTTLED.
	No Macroscopic Abnormality Observed : KIDNEYS
908	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy
	LIVER : DISCOLORATION, TAN, MOTTLED.
	No Macroscopic Abnormality Observed : KIDNEYS
909	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy
	LIVER : DISCOLORATION, TAN, MOTTLED.
	No Macroscopic Abnormality Observed : KIDNEYS

Date:19-MAY-04

Individual Animal Listing
Showing animal data for individual animals
STUDY : 15073/26313/879B (* APPROVED PROTOCOL *)
Dose Group : IXB 10 mg/kg Treatment: 10 mg/kg IXB Sex: Males

Animal Ref	Findings
910	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy
	LIVER : DISCOLORATION, TAN, MOTTLED.
	No Macroscopic Abnormality Observed : KIDNEYS

Date:19-MAY-04

Individual Animal Listing
Showing animal data for individual animals
STUDY : 15073/26313/879B (* APPROVED PROTOCOL *)
Dose Group : XIB 30 mg/kg Treatment: 30 mg/kg XIB Sex: Males

Animal Ref	Findings
1101	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy
	LIVER : DISCOLORATION, TAN, MOTTLED.
	No Macroscopic Abnormality Observed : KIDNEYS
1102	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy
	No Macroscopic Abnormality Observed : LIVER, KIDNEYS
1103	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy
	LIVER : DISCOLORATION, TAN, MOTTLED.
	No Macroscopic Abnormality Observed : KIDNEYS
1104	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy
	LIVER : DISCOLORATION, TAN, MOTTLED.
	No Macroscopic Abnormality Observed : KIDNEYS

Date:19-MAY-04

Individual Animal Listing
Showing animal data for individual animals
STUDY : 15073/26313/879B (* APPROVED PROTOCOL *)
Dose Group : XIB 30 mg/kg Treatment: 30 mg/kg XIB Sex: Males

Animal Ref	Findings
1105	Found Dead Duration of dosing-days: 10 Animal is signed off from necropsy
	SKIN : STAIN, YELLOW, VENTRAL BODY.
	No Macroscopic Abnormality Observed : LIVER, KIDNEYS
1106	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy
	LIVER : DISCOLORATION, TAN, MOTTLED.
	No Macroscopic Abnormality Observed : KIDNEYS
1107	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy
	LIVER : DISCOLORATION, TAN, MOTTLED.
	No Macroscopic Abnormality Observed : KIDNEYS
1108	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy
	LIVER : DISCOLORATION, TAN, MOTTLED.
	No Macroscopic Abnormality Observed : KIDNEYS

Date:19-MAY-04

Individual Animal Listing
Showing animal data for individual animals

STUDY : 15073/26313/879B (* APPROVED PROTOCOL *)
Dose Group : XIB 30 mg/kg Treatment: 30 mg/kg XIB Sex: Males

Animal Ref	Findings
1109	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy LIVER : DISCOLORATION, TAN, MOTTLED. No Macroscopic Abnormality Observed : KIDNEYS
1110	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS

*** Listing Complete ***

Date:19-MAY-04

Individual Animal Listing
Showing animal data for individual animals
STUDY : 15073/26225/879C (* APPROVED PROTOCOL *)
Dose Group : IC 0 mg/kg Treatment: 0 mg/kg IC Sex: Males

Animal Ref	Findings
101	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
102	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
103	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
104	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
105	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
106	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS

Date:19-MAY-04

Individual Animal Listing
Showing animal data for individual animals
STUDY : 15073/26225/879C (* APPROVED PROTOCOL *)
Dose Group : IC 0 mg/kg Treatment: 0 mg/kg IC Sex: Males

Animal Ref	Findings
107	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy
	No Macroscopic Abnormality Observed : LIVER, KIDNEYS
108	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy
	No Macroscopic Abnormality Observed : LIVER, KIDNEYS
109	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy
	No Macroscopic Abnormality Observed : LIVER, KIDNEYS
110	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy
	No Macroscopic Abnormality Observed : LIVER, KIDNEYS

Date:19-MAY-04

Individual Animal Listing
Showing animal data for individual animals

STUDY : 15073/26225/879C (* APPROVED PROTOCOL *)
Dose Group : IIIC 0.3 mg/kg Treatment: 0.3 mg/kg IIIC Sex: Males

Animal Ref	Findings
301	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
302	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
303	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
304	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
305	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
306	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS

Date:19-MAY-04

Individual Animal Listing
Showing animal data for individual animals
STUDY : 15073/26225/879C (* APPROVED PROTOCOL *)
Dose Group : IIIC 0.3 mg/kg Treatment: 0.3 mg/kg IIIC Sex: Males

Animal Ref	Findings
307	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
308	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
309	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
310	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS

Date:19-MAY-04

Individual Animal Listing
Showing animal data for individual animals
STUDY : 15073/26225/879C (* APPROVED PROTOCOL *)
Dose Group : VC 1 mg/kg Treatment: 1 mg/kg VC Sex: Males

Animal Ref	Findings
501	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
502	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
503	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
504	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
505	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
506	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS

Date:19-MAY-04

Individual Animal Listing
Showing animal data for individual animals
STUDY : 15073/26225/879C (* APPROVED PROTOCOL *)
Dose Group : VC 1 mg/kg Treatment: 1 mg/kg VC Sex: Males

Animal Ref	Findings
507	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
508	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
509	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
510	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS

Date:19-MAY-04

Individual Animal Listing
Showing animal data for individual animals
STUDY : 15073/26225/879C (* APPROVED PROTOCOL *)
Dose Group : VIIC 3 mg/kg Treatment: 3 mg/kg VIIC Sex: Males

Animal Ref	Findings
701	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
702	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
703	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
704	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
705	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
706	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS

Date:19-MAY-04

Individual Animal Listing
Showing animal data for individual animals
STUDY : 15073/26225/879C (* APPROVED PROTOCOL *)
Dose Group : VIIC 3 mg/kg Treatment: 3 mg/kg VIIC Sex: Males

Animal Ref	Findings
707	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
708	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
709	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
710	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS

Date:19-MAY-04

Individual Animal Listing
Showing animal data for individual animals
STUDY : 15073/26225/879C (* APPROVED PROTOCOL *)
Dose Group : IXC 10 mg/kg Treatment: 10 mg/kg IXC Sex: Males

Animal Ref	Findings
901	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
902	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
903	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
904	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy LIVER : DISCOLORATION, TAN, FEW. No Macroscopic Abnormality Observed : KIDNEYS
905	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy LIVER : DISCOLORATION, TAN, MOTTLED. No Macroscopic Abnormality Observed : KIDNEYS

Date:19-MAY-04

Individual Animal Listing
Showing animal data for individual animals
STUDY : 15073/26225/879C (* APPROVED PROTOCOL *)
Dose Group : IXC 10 mg/kg Treatment: 10 mg/kg IXC Sex: Males

Animal Ref	Findings
906	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
907	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
908	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy LIVER : DISCOLORATION, TAN, MOTTLED. No Macroscopic Abnormality Observed : KIDNEYS
909	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy LIVER : DISCOLORATION, TAN, MOTTLED. No Macroscopic Abnormality Observed : KIDNEYS

Date:19-MAY-04

Individual Animal Listing
Showing animal data for individual animals
STUDY : 15073/26225/879C (* APPROVED PROTOCOL *)
Dose Group : IXC 10 mg/kg Treatment: 10 mg/kg IXC Sex: Males

Animal Ref	Findings
910	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy
	LIVER : DISCOLORATION, TAN, MOTTLED.
	No Macroscopic Abnormality Observed : KIDNEYS

Date:19-MAY-04

Individual Animal Listing
Showing animal data for individual animals

STUDY : 15073/26225/879C (* APPROVED PROTOCOL *)
Dose Group : XIC 30 mg/kg Treatment: 30 mg/kg XIC Sex: Males

Animal Ref	Findings
1101	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
1102	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy LIVER : DISCOLORATION, TAN, FEW. No Macroscopic Abnormality Observed : KIDNEYS
1103	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
1104	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy No Macroscopic Abnormality Observed : LIVER, KIDNEYS
1105	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy LIVER : DISCOLORATION, TAN, MOTTLED. No Macroscopic Abnormality Observed : KIDNEYS

Date:19-MAY-04

Individual Animal Listing
Showing animal data for individual animals
STUDY : 15073/26225/879C (* APPROVED PROTOCOL *)
Dose Group : XIC 30 mg/kg Treatment: 30 mg/kg XIC Sex: Males

Animal Ref	Findings
1106	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy LIVER : DISCOLORATION, TAN, MOTTLED. No Macroscopic Abnormality Observed : KIDNEYS
1107	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy LIVER : DISCOLORATION, TAN, MOTTLED. No Macroscopic Abnormality Observed : KIDNEYS
1108	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy LIVER : DISCOLORATION, TAN, MOTTLED. No Macroscopic Abnormality Observed : KIDNEYS
1109	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy LIVER : DISCOLORATION, TAN, MOTTLED. No Macroscopic Abnormality Observed : KIDNEYS

Date:19-MAY-04

Individual Animal Listing
Showing animal data for individual animals
STUDY : 15073/26225/879C (* APPROVED PROTOCOL *)
Dose Group : XIC 30 mg/kg Treatment: 30 mg/kg XIC Sex: Males

Animal Ref	Findings
1110	Terminal Sacrifice Killed on Day : 14 Animal is signed off from necropsy
	LIVER : DISCOLORATION, TAN, MOTTLED.
	No Macroscopic Abnormality Observed : KIDNEYS

*** Listing Complete ***

Appendix H
Individual Mouse Beta-Oxidation Data

INDIVIDUAL MOUSE BETA-OXIDATION DATA

EXPLANATORY NOTES

STUDY DESIGN

Groups			Dosage (mg/kg)
H-24921 APFO (Linear/Branched)	H-26313 APFO (Linear)	H-26225 APFO (Branched)	
IA	IB	IC	0 (Control)
IIIA	IIIB	IIIC	0.3
VA	VB	VC	1
VIIA	VIIB	VIIC	3
IXA	IXB	IXC	10
XIA	XIB	XIC	30

Abbreviations

mg/kg = mg/kg/day

INDIVIDUAL BETA-OXIDATION DATA IN MALE MICE DOSED WITH APFO (LINEAR/BRANCHED)

Group	Animal Number	Beta-Oxidation Rate (nmol/min/mg protein)
IA	102	10.85
	103	19.04
	104	13.05
	105	27.37
	106	16.40
	107	25.21
	108	12.99
	109	21.25
	110	15.00
IIIA	301	29.17
	302	26.26
	303	21.84
	304	36.38
	305	39.63
	306	41.56
	307	44.52
	308	40.53
	309	34.51
	310	29.77
VA	501	36.01
	502	42.53
	503	54.62
	504	50.01
	505	58.28
	506	60.65
	507	50.46
	508	47.96
	509	34.28
	510	53.56

INDIVIDUAL BETA-OXIDATION DATA IN MALE MICE DOSED WITH APFO (LINEAR/BRANCHED)

Group	Animal Number	Beta-Oxidation Rate (nmol/min/mg protein)
VIIA	701	46.41
	702	42.99
	703	35.97
	704	39.28
	705	48.21
	706	58.01
	707	43.32
	708	48.10
	709	55.76
	710	53.41
IXA	901	28.79
	902	27.58
	903	33.48
	904	29.15
	905	28.00
	906	36.66
	907	19.74
	908	29.69
	909	47.64
	910	35.77
XIA	1101	21.65
	1102	20.27
	1103	35.41
	1104	31.31
	1105	24.91
	1106	28.68
	1107	25.89
	1108	38.33
	1109	46.83
	1110	33.38

INDIVIDUAL BETA-OXIDATION DATA IN MALE MICE DOSED WITH APFO (LINEAR)

Group	Animal Number	Beta-Oxidation Rate (nmol/min/mg protein)
IB	101	13.89
	102	10.96
	103	23.43
	104	13.44
	105	16.38
	106	21.91
	107	16.69
	108	20.50
	109	15.43
	110	20.84
IIIB	301	27.42
	302	29.39
	303	49.64
	304	33.36
	305	41.32
	306	47.64
	307	36.67
	308	42.53
	309	49.88
	310	62.52
VB	501	36.57
	502	36.78
	503	52.01
	504	44.25
	505	56.64
	506	53.11
	507	36.80
	508	47.49
	509	69.02
	510	63.29

INDIVIDUAL BETA-OXIDATION DATA IN MALE MICE DOSED WITH APFO (LINEAR)

Group	Animal Number	Beta-Oxidation Rate (nmol/min/mg protein)
VIIB	701	36.18
	702	45.22
	703	44.09
	704	45.97
	705	64.10
	706	53.13
	707	38.44
	708	38.50
	709	58.57
	710	60.45
IXB	901	23.13
	902	37.93
	903	31.61
	904	42.59
	905	54.84
	906	39.08
	907	30.96
	908	32.25
	909	45.77
	910	33.79
XIB	1101	32.59
	1102	34.53
	1103	33.85
	1104	32.73
	1106	24.13
	1107	39.67
	1108	29.76
	1109	32.96
	1110	27.22

INDIVIDUAL BETA-OXIDATION DATA IN MALE MICE DOSED WITH APFO (BRANCHED)

Group	Animal Number	Beta-Oxidation Rate (nmol/min/mg protein)
IC	101	11.54
	102	19.31
	103	21.67
	104	18.20
	105	15.59
	106	14.19
	107	16.63
	108	16.02
	109	25.79
	110	23.01
IIIC	301	23.43
	302	21.83
	303	24.14
	304	21.80
	305	26.22
	306	32.93
	307	24.79
	308	25.84
	309	19.95
	310	21.35
VC	501	33.55
	502	25.95
	503	36.55
	504	38.84
	505	56.70
	506	50.80
	507	33.79
	508	34.79
	509	35.10
	510	22.70

INDIVIDUAL BETA-OXIDATION DATA IN MALE MICE DOSED WITH APFO (BRANCHED)

Group	Animal Number	Beta-Oxidation Rate (nmol/min/mg protein)
VIIC	701	31.72
	702	42.65
	703	35.95
	704	40.98
	705	55.19
	706	54.86
	707	48.97
	708	35.87
	709	45.86
	710	53.07
IXC	901	41.68
	902	47.20
	903	44.50
	904	39.06
	905	46.50
	906	43.82
	907	39.29
	908	35.54
	909	38.12
	910	48.83
XIC	1101	28.59
	1102	30.44
	1103	23.43
	1104	26.33
	1105	36.80
	1106	37.56
	1107	35.04
	1108	33.41
	1109	54.60
	1110	48.30

INDIVIDUAL RELATIVE LIVER TO FULL BODY WEIGHT (FOR BETA-OXIDATION) IN MALE MICE DOSED WITH APFO (LINEAR/BRANCHED)

Group	Animal Number	Relative Liver to Full Body Weight (%)
IA	102	5.6
	103	5.3
	104	5.0
	105	5.3
	106	5.0
	107	5.1
	108	5.3
	109	4.6
	110	5.1
IIIA	301	6.1
	302	6.4
	303	6.5
	304	6.1
	305	6.3
	306	6.0
	307	6.1
	308	5.7
	309	5.8
	310	6.1
VA	501	8.8
	502	7.4
	503	8.2
	504	8.2
	505	7.0
	506	8.2
	507	7.7
	508	7.9
	509	8.0
	510	7.9

INDIVIDUAL RELATIVE LIVER TO FULL BODY WEIGHT (FOR BETA-OXIDATION) IN MALE MICE DOSED WITH APFO (LINEAR/BRANCHED)

Group	Animal Number	Relative Liver to Full Body Weight (%)
VIIA	701	10.2
	702	11.0
	703	9.7
	704	10.9
	705	10.5
	706	11.6
	707	10.0
	708	11.5
	709	10.9
	710	10.9
IXA	901	14.6
	902	17.1
	903	15.4
	904	16.7
	905	17.8
	906	16.1
	907	15.9
	908	15.6
	909	17.7
	910	15.6
XIA	1101	17.9
	1102	19.1
	1103	17.3
	1104	17.9
	1105	18.6
	1106	17.0
	1107	22.0
	1108	18.1
	1109	18.7
	1110	16.1

INDIVIDUAL RELATIVE LIVER TO FULL BODY WEIGHT (FOR BETA-OXIDATION) IN MALE MICE DOSED WITH APFO (LINEAR)

Group	Animal Number	Relative Liver to Full Body Weight (%)
IB	101	5.1
	102	5.6
	103	5.5
	104	5.7
	105	5.9
	106	5.2
	107	5.4
	108	5.4
	109	5.8
	110	5.6
IIIB	301	6.3
	302	6.1
	303	6.3
	304	6.5
	305	6.8
	306	6.5
	307	6.5
	308	6.9
	309	6.3
	310	6.4
VB	501	8.0
	502	8.5
	503	8.8
	504	8.2
	505	8.6
	506	8.2
	507	8.0
	508	8.2
	509	8.8
	510	8.2

INDIVIDUAL RELATIVE LIVER TO FULL BODY WEIGHT (FOR BETA-OXIDATION) IN MALE MICE DOSED WITH APFO (LINEAR)

Group	Animal Number	Relative Liver to Full Body Weight (%)
VIIB	701	9.8
	702	11.1
	703	10.7
	704	11.3
	705	11.9
	706	12.3
	707	13.6
	708	10.6
	709	10.6
	710	11.7
IXB	901	15.7
	902	17.8
	903	15.3
	904	18.1
	905	18.8
	906	17.2
	907	18.0
	908	16.9
	909	17.7
	910	16.3
XIB	1101	18.9
	1102	17.6
	1103	18.9
	1104	17.8
	1106	18.1
	1107	18.2
	1108	17.0
	1109	19.2
	1110	15.8

INDIVIDUAL RELATIVE LIVER TO FULL BODY WEIGHT (FOR BETA-OXIDATION) IN MALE MICE DOSED WITH APFO (BRANCHED)

Group	Animal Number	Relative Liver to Full Body Weight (%)
IC	101	5.3
	102	5.2
	103	5.5
	104	5.2
	105	5.2
	106	4.6
	107	5.6
	108	5.1
	109	4.9
	110	4.8
IIIC	301	6.5
	302	5.8
	303	6.5
	304	5.7
	305	6.2
	306	5.9
	307	6.3
	308	6.1
	309	5.7
	310	6.6
VC	501	8.1
	502	8.0
	503	8.2
	504	8.3
	505	9.4
	506	8.5
	507	7.2
	508	7.0
	509	7.1
	510	6.6

INDIVIDUAL RELATIVE LIVER TO FULL BODY WEIGHT (FOR BETA-OXIDATION) IN MALE MICE DOSED WITH APFO (BRANCHED)

Group	Animal Number	Relative Liver to Full Body Weight (%)
VIIC	701	12.5
	702	11.0
	703	12.8
	704	10.6
	705	11.4
	706	11.6
	707	13.4
	708	12.2
	709	12.1
	710	11.7
IXC	901	17.5
	902	16.2
	903	18.6
	904	17.6
	905	17.5
	906	15.4
	907	18.1
	908	15.7
	909	19.0
	910	21.6
XIC	1101	21.6
	1102	20.7
	1103	19.5
	1104	19.9
	1105	21.4
	1106	19.4
	1107	22.6
	1108	19.5
	1109	22.8
	1110	22.7

Appendix I
Revision 1

REVISION 1 QUALITY ASSURANCE DOCUMENTATION

Report Number: DuPont-14162
Work Request Number: 15073
Study Code Number: 1025 (Rats) and 879 (Mice)

The conduct of this study has been subjected to periodic Quality Assurance inspections. The dates of inspection are indicated below.

Phase Audited	*Audit Dates*	*Date Reported to Study Director*	*Date Reported to Management*
Report Revision 1:	5 Jan 2006	5 Jan 2006	11 Jan 2006

Reported by: Annet L. Reigel 12 JAN 2006

Annet L. Reigel — **Date**
Quality Assurance Auditor

REVISION 1 EXPLANATION

The report was revised as follows:

Page	
31	Manuscript Figure 2: Error bars corrected
402	Appendix I: Revision 1 added.

The following pages were revised to reflect these changes.

Page	
1	Title Page
8	Table of Contents

REVISION 1 CERTIFICATION

Study Director: Carol Finlay 12-Jan-2006

Carol Finlay, B.A.
Senior Staff Toxicologist

Date