

# Statistical Report

Project #: E2190.01  
Project Title: Two Year Chronic Toxicology Study of Bisphenol A (BPA) [CAS # 80-05-7]  
Administered by Gavage to Sprague-Dawley Rats (NCTR) from Gestational Day  
6 Until Birth and Directly to F1 Pups from Postnatal Day 1 (PND 1); Continuous  
and Stop Dose (PND 21) Exposures  
PI: Barry Delclos  
Task: Statistical Analysis of Neoplastic and Non-neoplastic Lesions (Terminal  
Sacrifice)  
Statistician: Paul Felton, Division of Bioinformatics and Biostatistics  
Reviewer: Peter Maisha, Division of Bioinformatics and Biostatistics

Signatures:

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Statistician

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Date

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Reviewer

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Date

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Team Leader – Statistical Support Group

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Date

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## **Statistical Analysis of Neoplastic and Non-neoplastic Lesions (Terminal Sacrifice)**

### **1. Objectives**

#### **1.1 Project Objectives**

The goal of this study is to study the long term toxicity of orally administered Bisphenol-A (BPA) over a broad dose range.

#### **1.2 Analysis Objectives**

The objective of this analysis is to determine the effects on histopathology of a broad range of continuous and stop doses of BPA after two years. Statistical analyses of data from continuous doses of the reference estrogen EE<sub>2</sub> are also presented.

### **2. Experimental Design**

The study design consisted of first generation female and male rats (F<sub>0</sub>) for up to 600 mating pairs randomized to treatment groups in 5 litters. The goal of the F<sub>0</sub> matings was to obtain 352 study litters, 50 per dose group for vehicle controls and five BPA dose groups, 2.5, 25, 250, 2500, and 25000 µg/kg bw/day, and 26 for each of two EE<sub>2</sub> dose groups, 0.05 and 0.5 µg/kg bw/day. Dams were dosed daily from gestation day (GD) 6 until parturition. Dosing was by gavage for F<sub>0</sub> dams and F<sub>1</sub> pups, the second study generation. Litters were culled to 10 pups on PND 1. There were two study dosing arms of F<sub>1</sub> animals, daily continuous dosing to termination, and daily dose stopped at post-natal day (PND) 21. There was a vehicle control group and five BPA groups (2.5, 25, 250, 2500, and 25000 µg/kg) for each study dosing arm, and EE<sub>2</sub> daily dose groups (0.05 and 0.50 µg/kg) for the continuous dosing arm only. From the F<sub>1</sub> litters, pups were allocated at weaning, PND 21, to the Terminal (1 year) and terminal (2 year) sacrifices for the core study. For vehicle and BPA terminal sacrifice groups, there were 50 pups each; for the Terminal sacrifice and the EE<sub>2</sub> terminal sacrifice groups, there were 20-26 pups each. Pups within litter and sex were assigned to different dosing arms and sacrifice times.

### **3. Statistical Methods**

Statistical analyses were performed separately for the BPA study arms, stop dose and continuous dose, and for the EE<sub>2</sub> continuous dose.

For neoplasm and non-neoplasm incidence, the poly-3 age-adjusted test (Bailer & Portier, 1988) with variance correction (Bieler & Williams, 1993) and the NIEHS continuity-correction (Peddada & Kissling, 2006) was used to test for linear dose trend and to compare dosed groups to the vehicle control.

In addition, non-neoplastic lesion severity is available for many of the lesions found. Therefore, the Jonckheere-Terpstra test (Jonckheere (1954) and Terpstra (1952)) was run to test for monotonic dose trend, followed by Shirley's test (Shirley, 1977 and Williams, 1986) to compare

treated groups to controls. This combination of tests will be referred to as JT/SW. JT/SW presumes a monotonic dose response. Part of the purpose of this study is to consider potential low-dose effects, especially in the low BPA analysis. JT/SW is blind to this effect. Therefore, the nonparametric relative effects method [RTE] (Brunner, Domhof, Langer, 2002) was used to test for non-monotonic effects. This method can account for severity and does allow for trend tests and contrasts. The RTE test (as well as JT/SW) can be very sensitive to small differences in severity.

Lesions with an incidence of four or more in any treatment group (or two or more for an EE<sub>2</sub> group) were included in each analysis. The tests for the comparisons to vehicle are one-sided while the trend tests are two-sided. No adjustments are made for multiplicity.

For analysis of each endpoint, a sensitivity analysis was also performed. During initial preweaning of animals, 263 core study 2 year terminal sacrifice animals (56 in vehicle control, 175 in BPA 2.5, 25, 250, 2500, and 25000 µg/kg bw/day, and 32 in EE<sub>2</sub> µg/kg bw/day dose groups) were held in the same rooms as a special BPA 250,000 µg/kg bw/day high dose requested by an academic laboratory. In consultation with the Principal Investigator, to address the possibility of inadvertent exposure of the core study animals, a sensitivity analysis excluding these 263 animals was also performed to test the robustness of the results. Additional statistically significant pairwise comparisons from the sensitivity analysis are reported in the text.

## 4. Results

Tables are included in Appendix A1. Generally, simple incidence refers to all animals for which the given tissue was microscopically examined, poly-k incidence refers to the number of animals with lesions as a proportion of the number of mortality-adjusted animals examined, terminal incidence refers to animals which survived to scheduled sacrifice, time-to-first indicates the number of study days of the earliest observance of the lesion, and severity profile summarizes the number of animals with minimal, mild, moderate, and marked lesion severity.

For females, there were 602 lesions assessed in 31 tissues examined. For males, 631 lesions were assessed in 33 tissues examined.

The results of poly-3 analysis of lesion incidence and RTE analysis are discussed below. Results of JT/SW are presented in the tables for reference, but are not discussed.

### 4.1 BPA Treatments Stop Dose Arm

Results of the poly-3 analysis of neoplasms for the comparison of BPA to vehicle control for the stop dose arm are given in Tables 1 (females) and 2 (males). For females, there was a significantly greater incidence of mammary gland adenocarcinoma, and adenocarcinoma or adenoma, for the stop dose 2.5 µg/kg BPA group (p=0.016 and p=0.018, respectively) compared to the vehicle control group. For stop dose males, there was a significant (p=0.008) BPA linear trend for liver malignant lymphoma, although no BPA treated group was significantly different from the control. Similarly, there was a significant linear dose trend for malignant lymphoma of

the dorsal/lateral lobe prostate ( $p=0.002$ ), bone marrow ( $p=0.005$ ), spleen ( $p=0.009$ ), and the kidney ( $p=0.007$ ), with a significantly higher incidence in the dorsal/lateral lobe prostate for the 25,000  $\mu\text{g}/\text{kg}$  BPA group ( $p=0.038$ ).

Results of the poly-3 analysis of non-neoplasms for the comparison of BPA to vehicle control for the stop dose arm are given in Tables 7 (females) and 8 (males). For females, there was a significantly greater incidence of liver lipidosis tension for the 2.5  $\mu\text{g}/\text{kg}$  BPA group ( $p=0.019$ ) and the 250  $\mu\text{g}/\text{kg}$  BPA group ( $p=0.032$ ) compared to the vehicle control group. There was a significantly greater incidence of thyroid gland ultimobranchial cyst in the 250  $\mu\text{g}/\text{kg}$  BPA group ( $p=0.038$ ) and in the 2500  $\mu\text{g}/\text{kg}$  BPA group ( $p=0.017$ ) compared to controls. There was a significantly greater incidence of kidney renal tubule cyst in the 2.5  $\mu\text{g}/\text{kg}$  BPA group ( $p=0.036$ ) compared to controls. There was an additional significant dose trend for incidence of liver cystic degeneration ( $p=0.007$ ). In addition, the RTE test for differences in severity was significant for liver cystic degeneration at 2500  $\mu\text{g}/\text{kg}$  ( $p=0.014$ ) and at 25,000  $\mu\text{g}/\text{kg}$  ( $p=0.042$ ), liver mineralization at 2.5  $\mu\text{g}/\text{kg}$  ( $p=0.015$ ), liver lipidosis tension at 25,000  $\mu\text{g}/\text{kg}$  ( $p=0.030$ ), heart cardiomyopathy at 2.5 ( $p=0.043$ ), 250 ( $p=0.034$ ), 2500 ( $p=0.024$ ), and 25,000  $\mu\text{g}/\text{kg}$  ( $p=0.004$ ), adrenal cortex hypertrophy at 25,000  $\mu\text{g}/\text{kg}$  ( $p=0.011$ ), pituitary gland pars distalis hyperplasia at 2.5  $\mu\text{g}/\text{kg}$  ( $p=0.023$ ) and 25  $\mu\text{g}/\text{kg}$  ( $p=0.020$ ), uterus endometrium cystic hyperplasia at 2500  $\mu\text{g}/\text{kg}$  ( $p=0.014$ ), thymus atrophy at 25  $\mu\text{g}/\text{kg}$  ( $p=0.038$ ) and 2500  $\mu\text{g}/\text{kg}$  ( $p=0.039$ ), and kidney nephropathy at 25,000  $\mu\text{g}/\text{kg}$  ( $p=0.041$ ). Additional BPA dose trends for severity were significant for heart cardiomyopathy ( $p=0.007$ ), adrenal cortex hypertrophy ( $p=0.032$ ), uterus endometrium cystic hyperplasia ( $p=0.023$ ), and kidney nephropathy ( $p=0.006$ ).

For males, there was a significantly greater incidence of pancreas pigmentation for the 2.5  $\mu\text{g}/\text{kg}$  BPA group ( $p=0.018$ ), pancreas polyarteritis for the 2500  $\mu\text{g}/\text{kg}$  group ( $p=0.035$ ), adrenal medulla hyperplasia for the 2500  $\mu\text{g}/\text{kg}$  group ( $p=0.030$ ), pituitary gland pars distalis cyst for the 250  $\mu\text{g}/\text{kg}$  group ( $p=0.047$ ), pituitary gland pars distalis hyperplasia for the 25,000  $\mu\text{g}/\text{kg}$  group ( $p=0.020$ ), testes polyarteritis for the 2500  $\mu\text{g}/\text{kg}$  group ( $p=0.038$ ), bone marrow hypocellularity for the 250  $\mu\text{g}/\text{kg}$  group ( $p=0.046$ ) and for the 25,000  $\mu\text{g}/\text{kg}$  group ( $p=0.035$ ), and spleen lymphoid hyperplasia for the 250  $\mu\text{g}/\text{kg}$  group ( $p=0.039$ ). BPA dose trends for incidence were significant for pancreas polyarteritis ( $p=0.013$ ), heart cardiomyopathy ( $p=0.022$ ), adrenal medulla hyperplasia ( $p=0.016$ ), parathyroid gland hyperplasia ( $p=0.018$ ), pituitary gland pars distalis hyperplasia ( $p=0.018$ ), testes polyarteritis ( $p=0.012$ ), spleen lymphoid hyperplasia ( $p=0.026$ ), kidney renal tubule cyst ( $p=0.012$ ), and kidney transitional epithelium hyperplasia ( $p=0.043$ ). In addition, the RTE test for differences in severity was significant for liver angiectasis at 25  $\mu\text{g}/\text{kg}$  ( $p=0.047$ ), coagulating gland atrophy at 25  $\mu\text{g}/\text{kg}$  ( $p=0.040$ ), and spleen lymphoid hyperplasia at 2500  $\mu\text{g}/\text{kg}$  ( $p=0.039$ ).

## **4.2 BPA Treatments Continuous Dose Arm**

Results of the poly-3 analysis of neoplasms for the comparison of BPA to vehicle control for the continuous dose arm are given in Tables 3 (females) and 4 (males). There was no statistically different incidence of neoplasms for any BPA group for either females or males.

Results of the analysis of non-neoplasms for the comparison of BPA to vehicle control for the continuous dose arm are given in Tables 9 (females) and 10 (males). For females, there was a significantly greater incidence of vagina epithelium degeneration for the 2500  $\mu\text{g}/\text{kg}$  BPA group ( $p=0.038$ ) compared to the vehicle control group. There was a significantly greater incidence of vagina epithelium hyperplasia in the 25  $\mu\text{g}/\text{kg}$  group ( $p=0.014$ ), the 2500  $\mu\text{g}/\text{kg}$  group ( $p=0.026$ ), and the 25,000  $\mu\text{g}/\text{kg}$  group ( $p=0.026$ ) compared to controls. There was a significantly greater incidence of kidney nephropathy in the 2.5  $\mu\text{g}/\text{kg}$  BPA group ( $p=0.033$ ). There was a significant BPA dose trend for uterus lumen dilatation ( $p=0.020$ ), vagina epithelium hyperplasia ( $p=0.006$ ), and thymus atrophy ( $p=0.016$ ). In addition, the RTE test for differences in severity was significant for liver angiectasis at 25,000  $\mu\text{g}/\text{kg}$  ( $p=0.040$ ), thyroid gland follicular cell hyperplasia at 2.5  $\mu\text{g}/\text{kg}$  ( $p=0.015$ ), vagina epithelium degeneration at 2.5  $\mu\text{g}/\text{kg}$  ( $p=0.022$ ), bone marrow hypocellularity at 25,000  $\mu\text{g}/\text{kg}$  ( $p=0.035$ ), mammary gland atypical focus at 2.5  $\mu\text{g}/\text{kg}$  ( $p=0.024$ ), and kidney nephropathy at 25,000  $\mu\text{g}/\text{kg}$  ( $p=0.027$ ). There was an additional significant trend for lung histiocyte cellular infiltration ( $p=0.042$ ).

For males, there was a significantly greater incidence of liver angiectasis for the 2.5  $\mu\text{g}/\text{kg}$  BPA group ( $p=0.016$ ) compared to the vehicle control group. There was a significantly greater incidence of parathyroid gland hyperplasia for the 25  $\mu\text{g}/\text{kg}$  group ( $p=0.004$ ), of pituitary gland pars distalis hyperplasia for the 25,000  $\mu\text{g}/\text{kg}$  group ( $p=0.022$ ), and of thyroid gland c-cell hyperplasia for the 2500  $\mu\text{g}/\text{kg}$  group ( $p=0.003$ ), compared to controls. There was a significantly greater incidence of dorsal/lateral lobe prostate suppurative inflammation for the 2.5  $\mu\text{g}/\text{kg}$  group ( $p=0.027$ ), and of mammary gland alveolus dilatation for the 2.5  $\mu\text{g}/\text{kg}$  group ( $p=0.028$ ). There was a significantly greater incidence of kidney renal tubule cyst for the 250  $\mu\text{g}/\text{kg}$  group ( $p=0.024$ ) and for the 2500  $\mu\text{g}/\text{kg}$  group ( $p=0.033$ ), and of kidney transitional epithelium hyperplasia for the 25  $\mu\text{g}/\text{kg}$  group ( $p=0.006$ ), compared to controls. There was a significant BPA dose trend for pituitary gland pars distalis multilocular cyst ( $p=0.007$ ), for pituitary gland pars distalis hyperplasia ( $p=0.005$ ), and for thyroid gland c-cell hyperplasia ( $p=0.039$ ). In addition, the RTE test for differences in severity was significant for liver lipidosis tension at 25,000  $\mu\text{g}/\text{kg}$  ( $p=0.025$ ), parathyroid gland hyperplasia at 250  $\mu\text{g}/\text{kg}$  ( $p=0.039$ ), pituitary gland pars distalis hyperplasia for the 25  $\mu\text{g}/\text{kg}$  group ( $p=0.043$ ), thyroid gland follicular cell hyperplasia at 25  $\mu\text{g}/\text{kg}$  ( $p=0.015$ ), epididymis polyarteritis at 2500  $\mu\text{g}/\text{kg}$  ( $p=0.013$ ), ventral lobe prostate epithelium hyperplasia at 250  $\mu\text{g}/\text{kg}$  ( $p=0.027$ ), kidney mineralization at 250  $\mu\text{g}/\text{kg}$  ( $p=0.035$ ), and for kidney nephropathy at 2500  $\mu\text{g}/\text{kg}$  ( $p=0.045$ ). There was a significant severity trend, based on the RTE test, for adrenal cortex hypertrophy ( $p=0.046$ ).

### **4.3 *EE<sub>2</sub> Treatments Continuous Dose Arm***

Results of the poly-3 analysis of neoplasms for the comparison of EE<sub>2</sub> to vehicle control for the continuous dose arm are given in Tables 5 (females) and 6 (males). For females, there was a significantly greater incidence of mammary gland adenocarcinoma for the 0.5  $\mu\text{g}/\text{kg}$  EE<sub>2</sub> group ( $p<0.001$ ) compared to the vehicle control group. There were significant EE<sub>2</sub> dose trends for adrenal medulla benign pheochromocytoma ( $p=0.048$ ) and thyroid gland c-cell adenoma ( $p=0.036$ ), as well as for mammary gland adenocarcinoma ( $p<0.001$ ). There was no statistically different incidence of neoplasms for either EE<sub>2</sub> group for males.

Results of the analysis of non-neoplasms for the comparison of EE<sub>2</sub> to vehicle control for the continuous dose arm are given in Tables 11 (females) and 12 (males). For females, based on the poly-3 tests, there was a significantly greater incidence of lesions compared to the 0.50 µg/kg EE<sub>2</sub> group for liver lipidosis tension for (p=0.026), adrenal cortex cystic degeneration (p=0.017), pituitary gland angiectasis (p<0.001), pituitary gland hemorrhage (p=0.023), uterus atrophy (p=0.033), spleen pigmentation (p<0.001), mammary gland alveolus dilatation (p<0.001), mammary gland duct dilatation (p<0.001), brain stem compression (p<0.001), and brain stem hemorrhage (p=0.009), for the 0.5 µg/kg EE<sub>2</sub> group compared to the vehicle control group. There was a significantly greater incidence of liver cytoplasmic vacuolization (p=0.031), thyroid gland follicular cell hyperplasia (p=0.034) uterus endometrium hyperplasia (p=0.040), and kidney cortex cyst (p=0.045) in the 0.05 µg/kg EE<sub>2</sub> group compared to controls. There was an additional significant dose trend for liver basophilic focus (p=0.036), pancreas acinar cell hyperplasia (p=0.038), adrenal cortex pigmentation (0.038), thyroid gland ultimobranchial cyst (p=0.048), ovary cyst (p=0.049), ovary bursa cyst (p=0.049), uterus endometrium cyst (p=0.038), uterus squamous metaplasia (p=0.046), bone marrow myeloid hyperplasia (p=0.038), and mammary gland galactocele (p=0.038). In addition, the RTE test for differences in severity was significant for pancreas acinar cell hyperplasia at 0.5 µg/kg (p=0.032), heart cardiomyopathy at 0.5 µg/kg (p=0.035), adrenal cortex angiectasis at 0.5 µg/kg (p=0.024), adrenal cortex pigmentation at 0.5 µg/kg (p=0.032), adrenal medulla hyperplasia at 0.5 µg/kg (p=0.044), ovary atrophy at 0.5 µg/kg (p<0.001), vagina atrophy at 0.5 µg/kg (p=0.035), bone marrow myeloid cell hyperplasia at 0.5 µg/kg (p=0.032), brain cerebrum ventricle dilatation at 0.5 µg/kg (p=0.035), and kidney nephropathy at 0.05 µg/kg (p=0.006).

For males, there was a significantly greater incidence for the 0.5 µg/kg EE<sub>2</sub> group of liver cytoplasmic vacuolization (p=0.037), and pituitary gland pars distalis hyperplasia (p=0.027), compared to the vehicle control group. There was a significantly greater incidence for the 0.05 µg/kg EE<sub>2</sub> group of adrenal cortex hypertrophy (p=0.005), thyroid gland c-cell hyperplasia (p=0.009), and kidney renal tubule cyst (p=0.002), compared to the vehicle control group. There was an additional dose trend for heart osseous metaplasia (p=0.049). In addition, the RTE test for differences in severity was significant for parathyroid gland hyperplasia at 0.5 µg/kg (p=0.029) and epididymis cellular lymphocyte infiltration at 0.5 µg/kg (p=0.045).

#### **4.4 Sensitivity Analysis**

The results of the sensitivity analysis, excluding animals housed in the same room as animals exposed to BPA 250,000 µg/kg bw/day high dose, produced results very similar to the full analysis. There were a few significant results observed in the full analysis which were not observed in the sensitivity analysis, presumably due to the lesser statistical power of the data subset.

For stop dose females, there was a significant BPA dose trend for liver mixed cell focus (p=0.036) which was not significant in the full analysis. There was a significant poly-3 (p=0.049) difference in heart cardiomyopathy for stop dose females in the 25,000 µg/kg BPA group (27/30.8) compared to controls (22/31.6); a nonsignificant difference for the full analysis where 35 of 39.7 poly-3 adjusted animals had the lesion in the BPA group compared to 32 of 42.9 in the control group. There was a significant poly-3 (p=0.025) difference in adrenal cortex

hyperplasia for stop dose females in the 25,000  $\mu\text{g}/\text{kg}$  BPA group (7/24.8) compared to controls (1/23.6); a nonsignificant difference for the full analysis where 7 of 32.6 poly-3 animals had the lesion in the BPA group compared to 3 of 31.8 in the control group. There was a significant poly-3 ( $p=0.038$ ) difference in uterus endometrium cystic hyperplasia for stop dose females in the 2500  $\mu\text{g}/\text{kg}$  BPA group (23/34.3) compared to controls (12/28.2); a nonsignificant difference for the full analysis where 28 of 42.5 animals had the lesion in the BPA group compared to 18 of 38.3 in the control group. There was a significant ( $p=0.029$ ) BPA dose trend for vagina poly morphonuclear cellular infiltration which was nonsignificant in the full analysis.

For stop dose males there was a significant ( $p=0.048$ ) BPA dose trend for pituitary gland pars distalis cyst which was nonsignificant in the full analysis. There was a significant poly-3 ( $p=0.041$ ) difference in pituitary gland pars distalis hypertrophy for stop dose males in the 25,000  $\mu\text{g}/\text{kg}$  BPA group (4/21.7) compared to controls (0/24.3); a nonsignificant difference for the full analysis where 4 of 28.5 poly-3 adjusted animals had the lesion in the BPA group compared to 1 of 35.1 in the control group. There was a significant poly-3 ( $p=0.046$ ) difference in epididymis exfoliated germ cell for stop dose males in the 2500  $\mu\text{g}/\text{kg}$  BPA group (16/32.4) compared to controls (7/27.3); a nonsignificant difference for the full analysis where 17 of 39.8 poly-3 adjusted animals had the lesion in the BPA group compared to 12 of 39.0 in the control group.

There was a significant poly-3 ( $p=0.027$ ) difference in pituitary gland pars distalis hyperplasia for continuous dose females in the 25  $\mu\text{g}/\text{kg}$  BPA group (30/37.0) compared to controls (18/30.8); a nonsignificant difference for the full analysis where 32 of 40.6 poly-3 animals had the lesion in the BPA group compared to 27 of 43.6 in the control group. There was a significant poly-3 ( $p=0.035$ ) difference in uterus lumen dilatation for continuous dose females in the 25,000  $\mu\text{g}/\text{kg}$  BPA group (5/26.8) compared to controls (0/24.0); a nonsignificant difference for the full analysis where 6 of 33.0 animals had the lesion in the BPA group compared to 2 of 35.6 in the control group. There was a significant ( $p=0.033$ ) poly-3 difference in kidney renal tubule cyst for continuous dose females in the 250  $\mu\text{g}/\text{kg}$  BPA group (15/32.9) compared to controls (5/24.8); a nonsignificant difference for the full analysis where 15 of 36.1 animals had the lesion in the BPA group compared to 9 of 36.2 in the control group.

There was a significant ( $p=0.045$ ) poly-3 BPA dose trend in adrenal medulla hyperplasia for continuous dose males. There was a significant ( $p=0.040$ ) poly-3 difference in testes polyarteritis for continuous dose males in the 25  $\mu\text{g}/\text{kg}$  BPA group (16/30.7) compared to controls (7/25.9); a nonsignificant difference for the full analysis where 16 of 34.8 poly-3 animals had the lesion in the BPA group compared to 12 of 35.2 in the control group; a significant ( $p=0.020$ ) difference in the 250  $\mu\text{g}/\text{kg}$  BPA group (19/34.4) compared to controls (7/25.9); a nonsignificant difference for the full analysis where 20 of 37.8 animals had the lesion in the BPA group compared to 12 of 35.2 in the control group; and a significant ( $p=0.47$ ) dose trend which was nonsignificant in the full analysis.

There was a significant ( $p=0.029$ ) poly-3 difference in adrenal cortex angiectasis for continuous dose females in the 0.5  $\mu\text{g}/\text{kg}$  EE<sub>2</sub> group (7/11.9) compared to controls (6/25.7); a nonsignificant difference for the full analysis where 9 of 18.7 poly-3 animals had the lesion in the BPA group compared to 9 of 37.3 in the control group. There was a significant ( $p=0.013$ ) poly-3 difference



(and significant dose trend;  $p=0.008$ ) in uterus lumen dilatation for continuous dose females in the 0.5  $\mu\text{g}/\text{kg}$  EE<sub>2</sub> group (3/10.5) compared to controls (0/24.0); a nonsignificant difference for the full analysis where 3 of 16.0 animals had the lesion in the BPA group compared to 2 of 35.6 in the control group.

There was a significant ( $p=0.046$ ) EE<sub>2</sub> dose trend for males regarding parathyroid gland hyperplasia. There was a significant ( $p=0.042$ ) poly-3 difference in pituitary gland angiectasis for continuous dose males in the 0.05  $\mu\text{g}/\text{kg}$  EE<sub>2</sub> group (5/14.2) compared to controls (2/24.2); a nonsignificant difference for the full analysis where 7 of 19.1 animals had the lesion in the BPA group compared to 6 of 33.5 in the control group.

## 5. Conclusions

For females, there was a significantly ( $p=0.016$ ) greater incidence of mammary gland adenocarcinoma for the stop dose 2.5  $\mu\text{g}/\text{kg}$  BPA group (poly-3 adjusted incidence of 11/33.3 or 33.0%) compared to the vehicle control group (poly-3 incidence of 3/32.3 or 9.3%). There is no significant dose difference compared to controls for animals continuously dosed with BPA.

For males, there was a significantly ( $p=0.038$ ) greater incidence of dorsal/lateral lobe prostrate malignant lymphoma for the stop dose 25,000  $\mu\text{g}/\text{kg}$  BPA group (poly-3 adjusted incidence of 4/29.1 or 13.8%) compared to the vehicle control group (poly-3 incidence of 0/35.1 or 0.0%). In addition, there is a significant dose trend for malignant lymphoma of the liver, the dorsal/lateral lobe prostrate, bone marrow, spleen, and kidney. However, the incidence of malignant lymphoma never exceeds five (16.8%) for any tissue in any treatment group. There is no significant dose difference for malignant lymphoma compared to controls for animals continuously dosed with BPA.

For females, there was a significantly ( $p<0.001$ ) greater incidence of mammary gland adenocarcinoma for the continuous dose 0.5  $\mu\text{g}/\text{kg}$  EE<sub>2</sub> group (poly-3 incidence of 10/17.6 or 56.9%) compared to the vehicle control group (poly-3 incidence of 4/34.4 or 11.6%). For EE<sub>2</sub> treated males, there was no lesion with significantly greater incidence than for vehicle controls.

There were a number of significantly greater incidences of non-neoplasms for various BPA dose groups compared to controls, for both females and males, none of which were repeated across treatment arms nor consistent across dose groups.

For females, based on the poly-3 tests, there was a significantly greater incidence of lesions compared to the 0.50  $\mu\text{g}/\text{kg}$  EE<sub>2</sub> group for liver lipidosis tension for ( $p=0.026$ ), adrenal cortex cystic degeneration ( $p=0.017$ ), pituitary gland angiectasis ( $p<0.001$ ), pituitary gland hemorrhage ( $p=0.023$ ), uterus atrophy ( $p=0.033$ ), spleen pigmentation ( $p<0.001$ ), mammary gland alveolus dilatation ( $p<0.001$ ), mammary gland duct dilatation ( $p<0.001$ ), brain stem compression ( $p<0.001$ ), brain stem hemorrhage ( $p=0.009$ ), and kidney nephropathy ( $p=0.025$ ) for the 0.5  $\mu\text{g}/\text{kg}$  EE<sub>2</sub> group compared to the vehicle control group. There was a significantly greater incidence of thyroid gland follicular cell hyperplasia ( $p=0.007$ ) uterus endometrium hyperplasia ( $p=0.040$ ), and kidney cortex cyst ( $p=0.045$ ) in the 0.05  $\mu\text{g}/\text{kg}$  EE<sub>2</sub> group compared to controls.

For males, there was a significantly greater incidence for the 0.5 µg/kg EE<sub>2</sub> group of liver cytoplasmic vacuolization (p=0.037), and pituitary gland pars distalis hyperplasia (p=0.027), compared to the vehicle control group. There was a significantly greater incidence for the 0.05 µg/kg EE<sub>2</sub> group of adrenal cortex hypertrophy (p=0.005), thyroid gland c-cell hyperplasia (p=0.009), and kidney renal tubule cyst (p=0.002), compared to the vehicle control group.

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## **Appendices**

### ***A1 Statistical Tables***

Table 1. Neoplasms by Body System for Terminal Sacrifice Females Bisphenol-A Stop Dose Arm

System and Neoplasm		Treatment (ug/kg)					
Lesion	Statistic	Control	2.5	25	250	2500	25000
<b>Endocrine System</b>							
Pituitary Gland * Adenoma, Pars Distalis	Simple Incidence	23/49 (46.9%)	16/50 (32.0%)	14/48 (29.2%)	20/50 (40.0%)	20/50 (40.0%)	20/46 (43.5%)
	Poly-K Incidence	23/38.5 (59.8%)	16/36.3 (44.1%)	14/33.5 (41.8%)	20/39.4 (50.8%)	20/38.5 (51.9%)	20/35.5 (56.3%)
	Terminal Incidence	7/11 (63.6%)	5/12 (41.7%)	8/13 (61.5%)	6/13 (46.2%)	9/17 (52.9%)	6/13 (46.2%)
	Time-to-First	502	397	442	448	520	445
	Poly-K P-Value	0.470	0.112N	0.081N	0.271N	0.308N	0.469N
<b>Genital System</b>							
Uterus * Polyp Stromal	Simple Incidence	7/49 (14.3%)	4/49 (8.2%)	5/48 (10.4%)	6/49 (12.2%)	4/49 (8.2%)	1/46 (2.2%)
	Poly-K Incidence	7/33.0 (21.2%)	4/32.3 (12.4%)	5/32.5 (15.4%)	6/35.9 (16.7%)	4/35.8 (11.2%)	1/31.0 (3.2%)
	Terminal Incidence	2/11 (18.2%)	1/12 (8.3%)	1/13 (7.7%)	1/13 (7.7%)	1/17 (5.9%)	0/13 (0.0%)
	Time-to-First	467	446	461	497	539	706
	Poly-K P-Value	0.041N*	0.263N	0.384N	0.433N	0.207N	0.032N*
<b>Integumentary System</b>							
Mammary Gland * Adenocarcinoma	Simple Incidence	3/50 (6.0%)	11/50 (22.0%)	5/48 (10.4%)	7/49 (14.3%)	9/50 (18.0%)	5/46 (10.9%)
	Poly-K Incidence	3/32.3 (9.3%)	11/33.3 (33.0%)	5/32.1 (15.6%)	7/35.4 (19.8%)	9/36.6 (24.6%)	5/32.0 (15.6%)
	Terminal Incidence	1/11 (9.1%)	2/12 (16.7%)	2/13 (15.4%)	0/13 (0.0%)	5/17 (29.4%)	0/13 (0.0%)
	Time-to-First	681	573	458	450	488	615
	Poly-K P-Value	0.453	0.016 *	0.348	0.189	0.083	0.346
Mammary Gland * Adenocarcinoma or Adenoma	Simple Incidence	4/50 (8.0%)	12/50 (24.0%)	5/48 (10.4%)	9/49 (18.4%)	9/50 (18.0%)	6/46 (13.0%)
	Poly-K Incidence	4/33.0 (12.1%)	12/33.3 (36.0%)	5/32.1 (15.6%)	9/35.9 (25.0%)	9/36.6 (24.6%)	6/32.8 (18.3%)
	Terminal Incidence	1/11 (9.1%)	3/12 (25.0%)	2/13 (15.4%)	1/13 (7.7%)	5/17 (29.4%)	0/13 (0.0%)
	Time-to-First	514	573	458	450	488	463
	Poly-K P-Value	0.483	0.018 *	0.482	0.140	0.149	0.360
Mammary Gland * Adenocarcinoma or Fibroadenoma	Simple Incidence	45/50 (90.0%)	46/50 (92.0%)	38/48 (79.2%)	43/49 (87.8%)	38/50 (76.0%)	38/46 (82.6%)
	Poly-K Incidence	45/47.8 (94.2%)	46/47.7 (96.5%)	38/42.8 (88.9%)	43/47.0 (91.5%)	38/46.3 (82.1%)	38/41.5 (91.6%)
	Terminal Incidence	9/11 (81.8%)	11/12 (91.7%)	11/13 (84.6%)	11/13 (84.6%)	12/17 (70.6%)	12/13 (92.3%)
	Time-to-First	385	400	339	448	390	383
	Poly-K P-Value	0.040N*	0.479	0.265N	0.451N	0.051N	0.468N
Mammary Gland * Fibroadenoma	Simple Incidence	43/50 (86.0%)	45/50 (90.0%)	37/48 (77.1%)	42/49 (85.7%)	36/50 (72.0%)	34/46 (73.9%)
	Poly-K Incidence	43/47.7 (90.2%)	45/47.5 (94.6%)	37/42.2 (87.8%)	42/46.2 (90.9%)	36/45.5 (79.1%)	34/40.6 (83.7%)
	Terminal Incidence	8/11 (72.7%)	11/12 (91.7%)	11/13 (84.6%)	11/13 (84.6%)	12/17 (70.6%)	12/13 (92.3%)
	Time-to-First	385	400	339	448	390	383
	Poly-K P-Value	0.021N*	0.319	0.489N	0.600	0.099N	0.257N

P-values for dose trend are presented in the "Control" column.

N indicates a negative trend or negative treatment comparison to control with corresponding lower-tail p-values.

Table 2. Neoplasms by Body System for Terminal Sacrifice Males Bisphenol-A Stop Dose Arm

System and Neoplasm		Treatment (ug/kg)					
Lesion	Statistic	Control	2.5	25	250	2500	25000
<b>Alimentary System</b>							
Liver * Lymphoma Malignant	Simple Incidence	1/50 ( 2.0%)	0/48 ( 0.0%)	1/48 ( 2.1%)	3/50 ( 6.0%)	2/50 ( 4.0%)	5/46 (10.9%)
	Poly-K Incidence	1/37.5 ( 2.7%)	0/33.4 ( 0.0%)	1/35.6 ( 2.8%)	3/32.9 ( 9.1%)	2/37.4 ( 5.3%)	5/30.0 (16.7%)
	Terminal Incidence	0/17 ( 0.0%)	0/16 ( 0.0%)	0/16 ( 0.0%)	0/13 ( 0.0%)	0/15 ( 0.0%)	0/9 ( 0.0%)
	Time-to-First	518	----	393	399	426	253
	Poly-K P-Value	0.008 **	0.523N	0.750	0.258	0.499	0.055
<b>Endocrine System</b>							
Adrenal Medulla * Pheochromocytoma Benign	Simple Incidence	4/47 ( 8.5%)	2/46 ( 4.3%)	5/48 (10.4%)	5/49 (10.2%)	0/50 ( 0.0%)	4/44 ( 9.1%)
	Poly-K Incidence	4/36.0 (11.1%)	2/32.5 ( 6.2%)	5/35.2 (14.2%)	5/30.6 (16.3%)	0/35.8 ( 0.0%)	4/26.3 (15.2%)
	Terminal Incidence	2/17 (11.8%)	1/16 ( 6.3%)	4/16 (25.0%)	4/13 (30.8%)	0/15 ( 0.0%)	3/9 (33.3%)
	Time-to-First	643	637	587	686	----	706
	Poly-K P-Value	0.437N	0.384N	0.487	0.397	0.059N	0.462
Islets, Pancreatic * Adenocarcinoma or Adenoma	Simple Incidence	4/48 ( 8.3%)	4/47 ( 8.5%)	2/48 ( 4.2%)	4/48 ( 8.3%)	1/50 ( 2.0%)	4/44 ( 9.1%)
	Poly-K Incidence	4/36.5 (10.9%)	4/33.0 (12.1%)	2/35.0 ( 5.7%)	4/30.8 (13.0%)	1/35.9 ( 2.8%)	4/28.2 (14.2%)
	Terminal Incidence	3/17 (17.6%)	2/16 (12.5%)	1/16 ( 6.3%)	2/13 (15.4%)	0/15 ( 0.0%)	1/9 (11.1%)
	Time-to-First	680	671	682	609	706	537
	Poly-K P-Value	0.405N	0.588	0.356N	0.547	0.181N	0.496
Islets, Pancreatic * Adenoma	Simple Incidence	4/48 ( 8.3%)	4/47 ( 8.5%)	2/48 ( 4.2%)	4/48 ( 8.3%)	1/50 ( 2.0%)	4/44 ( 9.1%)
	Poly-K Incidence	4/36.5 (10.9%)	4/33.0 (12.1%)	2/35.0 ( 5.7%)	4/30.8 (13.0%)	1/35.9 ( 2.8%)	4/28.2 (14.2%)
	Terminal Incidence	3/17 (17.6%)	2/16 (12.5%)	1/16 ( 6.3%)	2/13 (15.4%)	0/15 ( 0.0%)	1/9 (11.1%)
	Time-to-First	680	671	682	609	706	537
	Poly-K P-Value	0.405N	0.588	0.356N	0.547	0.181N	0.496
Pituitary Gland * Adenoma, Pars Distalis	Simple Incidence	29/46 (63.0%)	22/48 (45.8%)	19/48 (39.6%)	19/49 (38.8%)	19/50 (38.0%)	17/43 (39.5%)
	Poly-K Incidence	29/39.9 (72.7%)	22/38.4 (57.2%)	19/37.7 (50.4%)	19/34.3 (55.4%)	19/40.1 (47.4%)	17/30.8 (55.2%)
	Terminal Incidence	13/17 (76.5%)	8/16 (50.0%)	9/16 (56.3%)	9/13 (69.2%)	5/15 (33.3%)	5/9 (55.6%)
	Time-to-First	552	529	477	558	551	465
	Poly-K P-Value	0.023N*	0.098N	0.026N*	0.074N	0.012N*	0.082N
<b>Genital System</b>							
Prostate, Dorsal/Lateral Lobe * Lymphoma Malignant	Simple Incidence	0/46 ( 0.0%)	0/48 ( 0.0%)	0/48 ( 0.0%)	3/50 ( 6.0%)	2/49 ( 4.1%)	4/45 ( 8.9%)
	Poly-K Incidence	0/35.1 ( 0.0%)	0/33.4 ( 0.0%)	0/34.8 ( 0.0%)	3/32.9 ( 9.1%)	2/37.4 ( 5.3%)	4/29.1 (13.8%)
	Terminal Incidence	0/17 ( 0.0%)	0/16 ( 0.0%)	0/16 ( 0.0%)	0/13 ( 0.0%)	0/15 ( 0.0%)	0/9 ( 0.0%)
	Time-to-First	----	----	----	399	426	253
	Poly-K P-Value	0.002 **	-----	-----	0.106	0.251	0.038 *
Prostate, Ventral Lobe * Adenocarcinoma or Adenoma	Simple Incidence	4/48 ( 8.3%)	4/47 ( 8.5%)	4/47 ( 8.5%)	2/50 ( 4.0%)	4/49 ( 8.2%)	6/45 (13.3%)
	Poly-K Incidence	4/35.7 (11.2%)	4/33.0 (12.1%)	4/34.1 (11.7%)	2/30.8 ( 6.5%)	4/36.5 (11.0%)	6/28.7 (20.9%)
	Terminal Incidence	2/17 (11.8%)	2/16 (12.5%)	4/16 (25.0%)	2/13 (15.4%)	1/15 ( 6.7%)	1/9 (11.1%)
	Time-to-First	675	679	724 (T)	724 (T)	593	530
	Poly-K P-Value	0.273	0.601	0.619	0.407N	0.635N	0.233

Table 2. Neoplasms by Body System for Terminal Sacrifice Males Bisphenol-A Stop Dose Arm

System and Neoplasm		Treatment (ug/kg)					
		Control	2.5	25	250	2500	25000
Lesion	Statistic						
Prostate, Ventral Lobe * Adenoma	Simple Incidence	4/48 ( 8.3%)	4/47 ( 8.5%)	4/47 ( 8.5%)	2/50 ( 4.0%)	4/49 ( 8.2%)	6/45 ( 13.3%)
	Poly-K Incidence	4/35.7 ( 11.2%)	4/33.0 ( 12.1%)	4/34.1 ( 11.7%)	2/30.8 ( 6.5%)	4/36.5 ( 11.0%)	6/28.7 ( 20.9%)
	Terminal Incidence	2/17 ( 11.8%)	2/16 ( 12.5%)	4/16 ( 25.0%)	2/13 ( 15.4%)	1/15 ( 6.7%)	1/9 ( 11.1%)
	Time-to-First	675	679	724 (T)	724 (T)	593	530
	Poly-K P-Value	0.273	0.601	0.619	0.407N	0.635N	0.233
<b>Hematopoietic System</b>							
Bone Marrow * Lymphoma Malignant	Simple Incidence	1/47 ( 2.1%)	0/47 ( 0.0%)	0/46 ( 0.0%)	3/50 ( 6.0%)	2/49 ( 4.1%)	5/45 ( 11.1%)
	Poly-K Incidence	1/36.1 ( 2.8%)	0/32.6 ( 0.0%)	0/34.3 ( 0.0%)	3/32.9 ( 9.1%)	2/37.4 ( 5.3%)	5/29.7 ( 16.8%)
	Terminal Incidence	0/17 ( 0.0%)	0/16 ( 0.0%)	0/16 ( 0.0%)	0/13 ( 0.0%)	0/15 ( 0.0%)	0/9 ( 0.0%)
	Time-to-First	518	----	----	399	426	253
	Poly-K P-Value	0.005 **	0.520N	0.510N	0.271	0.512	0.059
Spleen * Lymphoma Malignant	Simple Incidence	1/47 ( 2.1%)	0/47 ( 0.0%)	1/47 ( 2.1%)	3/49 ( 6.1%)	2/49 ( 4.1%)	5/45 ( 11.1%)
	Poly-K Incidence	1/36.1 ( 2.8%)	0/32.6 ( 0.0%)	1/35.4 ( 2.8%)	3/32.5 ( 9.2%)	2/37.4 ( 5.3%)	5/29.7 ( 16.8%)
	Terminal Incidence	0/17 ( 0.0%)	0/16 ( 0.0%)	0/16 ( 0.0%)	0/13 ( 0.0%)	0/15 ( 0.0%)	0/9 ( 0.0%)
	Time-to-First	518	----	393	399	426	253
	Poly-K P-Value	0.009 **	0.520N	0.757	0.267	0.512	0.059
<b>Urinary System</b>							
Kidney * Lymphoma Malignant	Simple Incidence	1/50 ( 2.0%)	0/48 ( 0.0%)	1/48 ( 2.1%)	3/50 ( 6.0%)	2/50 ( 4.0%)	5/45 ( 11.1%)
	Poly-K Incidence	1/37.5 ( 2.7%)	0/33.4 ( 0.0%)	1/35.6 ( 2.8%)	3/32.9 ( 9.1%)	2/37.4 ( 5.3%)	5/29.7 ( 16.8%)
	Terminal Incidence	0/17 ( 0.0%)	0/16 ( 0.0%)	0/16 ( 0.0%)	0/13 ( 0.0%)	0/15 ( 0.0%)	0/9 ( 0.0%)
	Time-to-First	518	----	393	399	426	253
	Poly-K P-Value	0.007 **	0.523N	0.750	0.258	0.499	0.053

P-values for dose trend are presented in the "Control" column.

N indicates a negative trend or negative treatment comparison to control with corresponding lower-tail p-values.

**Table 3. Neoplasms by Body System for Terminal Sacrifice Females Bisphenol-A Continuous Dose Arm**

<i>System and Neoplasm</i>		<i>Treatment (ug/kg)</i>					
<i>Lesion</i>	<i>Statistic</i>	<i>Control</i>	<i>2.5</i>	<i>25</i>	<i>250</i>	<i>2500</i>	<i>25000</i>
<b>Endocrine System</b>							
Pituitary Gland * Adenoma, Pars Distalis	Simple Incidence	21/50 (42.0%)	22/48 (45.8%)	12/46 (26.1%)	20/49 (40.8%)	19/49 (38.8%)	21/46 (45.7%)
	Poly-K Incidence	21/39.9 (52.7%)	22/37.1 (59.2%)	12/31.4 (38.2%)	20/36.6 (54.7%)	19/34.1 (55.8%)	21/35.4 (59.3%)
	Terminal Incidence	7/16 (43.8%)	12/19 (63.2%)	4/14 (28.6%)	8/13 (61.5%)	5/10 (50.0%)	4/8 (50.0%)
	Time-to-First	477	497	434	561	456	510
	Poly-K P-Value	0.313	0.356	0.153N	0.523	0.487	0.356
<b>Genital System</b>							
Uterus * Polyp Stromal	Simple Incidence	5/50 (10.0%)	3/48 (6.3%)	7/45 (15.6%)	2/49 (4.1%)	4/48 (8.3%)	3/46 (6.5%)
	Poly-K Incidence	5/36.4 (13.7%)	3/34.6 (8.7%)	7/29.5 (23.7%)	2/33.5 (6.0%)	4/29.2 (13.7%)	3/32.2 (9.3%)
	Terminal Incidence	1/16 (6.3%)	0/19 (0.0%)	4/14 (28.6%)	0/13 (0.0%)	0/10 (0.0%)	0/8 (0.0%)
	Time-to-First	506	321	441	542	673	569
	Poly-K P-Value	0.333N	0.383N	0.231	0.247N	0.638N	0.424N
<b>Integumentary System</b>							
Mammary Gland * Adenocarcinoma	Simple Incidence	4/50 (8.0%)	6/48 (12.5%)	6/46 (13.0%)	5/49 (10.2%)	9/50 (18.0%)	3/46 (6.5%)
	Poly-K Incidence	4/34.4 (11.6%)	6/32.9 (18.2%)	6/30.4 (19.8%)	5/34.6 (14.5%)	9/31.3 (28.8%)	3/31.2 (9.6%)
	Terminal Incidence	3/16 (18.8%)	6/19 (31.6%)	1/14 (7.1%)	0/13 (0.0%)	3/10 (30.0%)	0/8 (0.0%)
	Time-to-First	673	719 (T)	434	377	561	685
	Poly-K P-Value	0.412	0.336	0.286	0.504	0.071	0.555N
Mammary Gland * Adenocarcinoma or Adenoma	Simple Incidence	6/50 (12.0%)	7/48 (14.6%)	8/46 (17.4%)	6/49 (12.2%)	10/50 (20.0%)	4/46 (8.7%)
	Poly-K Incidence	6/34.9 (17.2%)	7/32.9 (21.3%)	8/30.4 (26.4%)	6/34.8 (17.2%)	10/31.3 (31.9%)	4/31.8 (12.6%)
	Terminal Incidence	4/16 (25.0%)	7/19 (36.8%)	3/14 (21.4%)	0/13 (0.0%)	4/10 (40.0%)	0/8 (0.0%)
	Time-to-First	564	719 (T)	434	377	561	542
	Poly-K P-Value	0.513N	0.452	0.271	0.624	0.126	0.428N
Mammary Gland * Adenocarcinoma or Fibroadenoma	Simple Incidence	41/50 (82.0%)	40/48 (83.3%)	34/46 (73.9%)	41/49 (83.7%)	35/50 (70.0%)	38/46 (82.6%)
	Poly-K Incidence	41/47.0 (87.2%)	40/43.7 (91.5%)	34/38.7 (87.8%)	41/46.5 (88.2%)	35/42.3 (82.7%)	38/42.2 (90.1%)
	Terminal Incidence	13/16 (81.3%)	17/19 (89.5%)	12/14 (85.7%)	10/13 (76.9%)	7/10 (70.0%)	7/8 (87.5%)
	Time-to-First	431	321	434	261	419	467
	Poly-K P-Value	0.421N	0.366	0.608	0.573	0.366N	0.457
Mammary Gland * Fibroadenoma	Simple Incidence	41/50 (82.0%)	40/48 (83.3%)	33/46 (71.7%)	39/49 (79.6%)	35/50 (70.0%)	38/46 (82.6%)
	Poly-K Incidence	41/47.0 (87.2%)	40/43.7 (91.5%)	33/38.4 (86.0%)	39/45.3 (86.1%)	35/42.3 (82.7%)	38/42.2 (90.1%)
	Terminal Incidence	13/16 (81.3%)	17/19 (89.5%)	12/14 (85.7%)	10/13 (76.9%)	7/10 (70.0%)	7/8 (87.5%)
	Time-to-First	431	321	434	261	419	467
	Poly-K P-Value	0.410N	0.366	0.567N	0.565N	0.366N	0.457

P-values for dose trend are presented in the "Control" column.

N indicates a negative trend or negative treatment comparison to control with corresponding lower-tail p-values.

**Table 4. Neoplasms by Body System for Terminal Sacrifice Males Bisphenol-A Continuous Dose Arm**

<i>System and Neoplasm</i>		<i>Treatment (ug/kg)</i>					
<i>Lesion</i>	<i>Statistic</i>	<i>Control</i>	<i>2.5</i>	<i>25</i>	<i>250</i>	<i>2500</i>	<i>25000</i>
<b>Endocrine System</b>							
Islets, Pancreatic * Adenocarcinoma or Adenoma	Simple Incidence	2/50 ( 4.0%)	3/46 ( 6.5%)	7/48 ( 14.6%)	1/48 ( 2.1%)	4/49 ( 8.2%)	5/45 ( 11.1%)
	Poly-K Incidence	2/33.7 ( 5.9%)	3/33.4 ( 9.0%)	7/32.9 ( 21.3%)	1/32.3 ( 3.1%)	4/33.4 ( 12.0%)	5/28.8 ( 17.4%)
	Terminal Incidence	2/15 ( 13.3%)	2/16 ( 12.5%)	4/17 ( 23.5%)	1/14 ( 7.1%)	2/16 ( 12.5%)	3/11 ( 27.3%)
	Time-to-First	726 (T)	674	617	726 (T)	694	650
	Poly-K P-Value	0.181	0.496	0.066	0.515N	0.330	0.150
Islets, Pancreatic * Adenoma	Simple Incidence	2/50 ( 4.0%)	3/46 ( 6.5%)	7/48 ( 14.6%)	1/48 ( 2.1%)	4/49 ( 8.2%)	5/45 ( 11.1%)
	Poly-K Incidence	2/33.7 ( 5.9%)	3/33.4 ( 9.0%)	7/32.9 ( 21.3%)	1/32.3 ( 3.1%)	4/33.4 ( 12.0%)	5/28.8 ( 17.4%)
	Terminal Incidence	2/15 ( 13.3%)	2/16 ( 12.5%)	4/17 ( 23.5%)	1/14 ( 7.1%)	2/16 ( 12.5%)	3/11 ( 27.3%)
	Time-to-First	726 (T)	674	617	726 (T)	694	650
	Poly-K P-Value	0.181	0.496	0.066	0.515N	0.330	0.150
Pituitary Gland * Adenoma, Pars Distalis	Simple Incidence	21/48 ( 43.8%)	25/48 ( 52.1%)	23/48 ( 47.9%)	21/50 ( 42.0%)	21/50 ( 42.0%)	17/45 ( 37.8%)
	Poly-K Incidence	21/36.9 ( 56.9%)	25/37.6 ( 66.6%)	23/38.4 ( 59.8%)	21/38.4 ( 54.7%)	21/38.0 ( 55.2%)	17/33.7 ( 50.5%)
	Terminal Incidence	7/14 ( 50.0%)	10/16 ( 62.5%)	8/17 ( 47.1%)	9/14 ( 64.3%)	8/16 ( 50.0%)	4/11 ( 36.4%)
	Time-to-First	494	613	412	460	546	386
	Poly-K P-Value	0.147N	0.254	0.490	0.515N	0.535N	0.374N
<b>Genital System</b>							
Prostate, Ventral Lobe * Adenocarcinoma or Adenoma	Simple Incidence	6/50 ( 12.0%)	7/48 ( 14.6%)	2/48 ( 4.2%)	4/49 ( 8.2%)	2/49 ( 4.1%)	6/46 ( 13.0%)
	Poly-K Incidence	6/34.4 ( 17.4%)	7/34.4 ( 20.3%)	2/32.3 ( 6.2%)	4/32.9 ( 12.1%)	2/33.1 ( 6.0%)	6/29.4 ( 20.4%)
	Terminal Incidence	3/15 ( 20.0%)	4/16 ( 25.0%)	2/17 ( 11.8%)	2/14 ( 14.3%)	2/16 ( 12.5%)	3/11 ( 27.3%)
	Time-to-First	603	683	726 (T)	713	726 (T)	613
	Poly-K P-Value	0.287N	0.499	0.148N	0.394N	0.139N	0.506
Prostate, Ventral Lobe * Adenoma	Simple Incidence	6/50 ( 12.0%)	7/48 ( 14.6%)	2/48 ( 4.2%)	4/49 ( 8.2%)	2/49 ( 4.1%)	6/46 ( 13.0%)
	Poly-K Incidence	6/34.4 ( 17.4%)	7/34.4 ( 20.3%)	2/32.3 ( 6.2%)	4/32.9 ( 12.1%)	2/33.1 ( 6.0%)	6/29.4 ( 20.4%)
	Terminal Incidence	3/15 ( 20.0%)	4/16 ( 25.0%)	2/17 ( 11.8%)	2/14 ( 14.3%)	2/16 ( 12.5%)	3/11 ( 27.3%)
	Time-to-First	603	683	726 (T)	713	726 (T)	613
	Poly-K P-Value	0.287N	0.499	0.148N	0.394N	0.139N	0.506
<b>Nervous System</b>							
Brain, Cerebrum * Granular Cell Tumor Benign	Simple Incidence	0/50 ( 0.0%)	0/48 ( 0.0%)	0/48 ( 0.0%)	4/49 ( 8.2%)	1/49 ( 2.0%)	0/46 ( 0.0%)
	Poly-K Incidence	0/33.7 ( 0.0%)	0/34.0 ( 0.0%)	0/32.3 ( 0.0%)	4/33.9 ( 11.8%)	1/33.3 ( 3.0%)	0/28.5 ( 0.0%)
	Terminal Incidence	0/15 ( 0.0%)	0/16 ( 0.0%)	0/17 ( 0.0%)	1/14 ( 7.1%)	0/16 ( 0.0%)	0/11 ( 0.0%)
	Time-to-First	----	----	----	600	676	----
	Poly-K P-Value	0.162	-----	-----	0.058	0.498	-----

P-values for dose trend are presented in the “Control” column.

N indicates a negative trend or negative treatment comparison to control with corresponding lower-tail p-values.



<i>Table 5. Neoplasms by Body System for Terminal Sacrifice Females EE2 Continuous Dose Arm</i>				
<i>System and Neoplasm</i>		<i>Treatment (ug/kg)</i>		
<i>Lesion</i>	<i>Statistic</i>	<i>Control</i>	<i>0.05</i>	<i>0.50</i>
<b>Endocrine System</b>				
Adrenal Medulla * Pheochromocytoma Benign	Simple Incidence	0/50 ( 0.0%)	1/26 ( 3.8%)	2/26 ( 7.7%)
	Poly-K Incidence	0/34.2 ( 0.0%)	1/15.9 ( 6.3%)	2/15.7 ( 12.7%)
	Terminal Incidence	0/16 ( 0.0%)	1/7 ( 14.3%)	1/4 ( 25.0%)
	Time-to-First	----	728 (T)	527
	Poly-K P-Value	0.048 *	0.349	0.088
Pituitary Gland * Adenoma,Pars Distalis	Simple Incidence	21/50 ( 42.0%)	10/26 ( 38.5%)	17/26 ( 65.4%)
	Poly-K Incidence	21/39.9 ( 52.7%)	10/18.3 ( 54.6%)	17/23.2 ( 73.3%)
	Terminal Incidence	7/16 ( 43.8%)	4/7 ( 57.1%)	2/4 ( 50.0%)
	Time-to-First	477	484	360
	Poly-K P-Value	0.055	0.561	0.068
Pituitary Gland * Carcinoma,Pars Distalis	Simple Incidence	1/50 ( 2.0%)	0/26 ( 0.0%)	3/26 ( 11.5%)
	Poly-K Incidence	1/34.6 ( 2.9%)	0/15.9 ( 0.0%)	3/16.1 ( 18.7%)
	Terminal Incidence	0/16 ( 0.0%)	0/7 ( 0.0%)	0/4 ( 0.0%)
	Time-to-First	615	----	610
	Poly-K P-Value	0.053	0.652N	0.084
Thyroid Gland * Adenoma,C-Cell	Simple Incidence	0/50 ( 0.0%)	0/26 ( 0.0%)	2/25 ( 8.0%)
	Poly-K Incidence	0/34.2 ( 0.0%)	0/15.9 ( 0.0%)	2/15.2 ( 13.2%)
	Terminal Incidence	0/16 ( 0.0%)	0/7 ( 0.0%)	0/4 ( 0.0%)
	Time-to-First	----	----	610
	Poly-K P-Value	0.036 *	-----	0.083
<b>Genital System</b>				
Uterus * Polyp Stromal	Simple Incidence	5/50 ( 10.0%)	3/26 ( 11.5%)	1/26 ( 3.8%)
	Poly-K Incidence	5/36.4 ( 13.7%)	3/17.4 ( 17.2%)	1/15.7 ( 6.4%)
	Terminal Incidence	1/16 ( 6.3%)	0/7 ( 0.0%)	0/4 ( 0.0%)
	Time-to-First	506	485	527
	Poly-K P-Value	0.383N	0.529	0.389N

<i>Table 5. Neoplasms by Body System for Terminal Sacrifice Females EE2 Continuous Dose Arm</i>				
<i>System and Neoplasm</i>	<i>Treatment (ug/kg)</i>			
<i>Lesion</i>	<i>Statistic</i>	<i>Control</i>	<i>0.05</i>	<i>0.50</i>
<b>Integumentary System</b>				
Mammary Gland * Adenocarcinoma	Simple Incidence	4/50 ( 8.0%)	2/26 ( 7.7%)	10/26 ( 38.5%)
	Poly-K Incidence	4/34.4 ( 11.6%)	2/16.8 ( 11.9%)	10/17.6 ( 56.9%)
	Terminal Incidence	3/16 ( 18.8%)	0/7 ( 0.0%)	3/4 ( 75.0%)
	Time-to-First	673	490	488
	Poly-K P-Value	<.001 ***	0.667	<.001 ***
Mammary Gland * Adenocarcinoma or Fibroadenoma	Simple Incidence	41/50 ( 82.0%)	19/26 ( 73.1%)	18/26 ( 69.2%)
	Poly-K Incidence	41/47.0 ( 87.2%)	19/23.0 ( 82.7%)	18/21.7 ( 82.9%)
	Terminal Incidence	13/16 ( 81.3%)	5/7 ( 71.4%)	3/4 ( 75.0%)
	Time-to-First	431	460	360
	Poly-K P-Value	0.347N	0.438N	0.453N
Mammary Gland * Fibroadenoma	Simple Incidence	41/50 ( 82.0%)	18/26 ( 69.2%)	14/26 ( 53.8%)
	Poly-K Incidence	41/47.0 ( 87.2%)	18/22.3 ( 80.8%)	14/20.2 ( 69.2%)
	Terminal Incidence	13/16 ( 81.3%)	5/7 ( 71.4%)	2/4 ( 50.0%)
	Time-to-First	431	460	360
	Poly-K P-Value	0.041N*	0.354N	0.056N
<b>Nervous System</b>				
Brain, Brain Stem * Carcinoma,Deep Invasion	Simple Incidence	1/50 ( 2.0%)	0/26 ( 0.0%)	3/26 ( 11.5%)
	Poly-K Incidence	1/34.6 ( 2.9%)	0/15.9 ( 0.0%)	3/16.1 ( 18.7%)
	Terminal Incidence	0/16 ( 0.0%)	0/7 ( 0.0%)	0/4 ( 0.0%)
	Time-to-First	615	----	610
	Poly-K P-Value	0.053	0.652N	0.084

P-values for dose trend are presented in the "Control" column.

N indicates a negative trend or negative treatment comparison to control with corresponding lower-tail p-values.

<b>Table 6. Neoplasms by Body System for Terminal Sacrifice Males EE2 Continuous Dose Arm</b>				
<b>System and Neoplasm</b>		<b>Treatment (ug/kg)</b>		
<b>Lesion</b>	<b>Statistic</b>	<b>Control</b>	<b>0.05</b>	<b>0.50</b>
<b>Alimentary System</b>				
Liver * Lymphoma Malignant	Simple Incidence	2/50 ( 4.0%)	2/26 ( 7.7%)	1/25 ( 4.0%)
	Poly-K Incidence	2/35.1 ( 5.7%)	2/19.3 (10.4%)	1/20.0 ( 5.0%)
	Terminal Incidence	0/15 ( 0.0%)	0/9 ( 0.0%)	0/12 ( 0.0%)
	Time-to-First	486	369	473
	Poly-K P-Value	0.610N	0.465	0.695N
Pancreas * Lymphoma Malignant	Simple Incidence	2/50 ( 4.0%)	2/26 ( 7.7%)	1/25 ( 4.0%)
	Poly-K Incidence	2/35.1 ( 5.7%)	2/19.3 (10.4%)	1/20.0 ( 5.0%)
	Terminal Incidence	0/15 ( 0.0%)	0/9 ( 0.0%)	0/12 ( 0.0%)
	Time-to-First	486	369	473
	Poly-K P-Value	0.610N	0.465	0.695N
<b>Endocrine System</b>				
Adrenal Cortex * Lymphoma Malignant	Simple Incidence	1/50 ( 2.0%)	2/26 ( 7.7%)	1/26 ( 3.8%)
	Poly-K Incidence	1/34.4 ( 2.9%)	2/19.3 (10.4%)	1/20.3 ( 4.9%)
	Terminal Incidence	0/15 ( 0.0%)	0/9 ( 0.0%)	0/12 ( 0.0%)
	Time-to-First	494	369	473
	Poly-K P-Value	0.458	0.299	0.642
Pituitary Gland * Adenoma,Pars Distalis	Simple Incidence	21/48 (43.8%)	12/26 (46.2%)	6/26 (23.1%)
	Poly-K Incidence	21/36.9 (56.9%)	12/19.9 (60.2%)	6/20.8 (28.9%)
	Terminal Incidence	7/14 (50.0%)	6/9 (66.7%)	3/12 (25.0%)
	Time-to-First	494	543	518
	Poly-K P-Value	0.030N*	0.517	0.029N*
Pituitary Gland * Lymphoma Malignant	Simple Incidence	2/48 ( 4.2%)	2/26 ( 7.7%)	1/26 ( 3.8%)
	Poly-K Incidence	2/33.7 ( 5.9%)	2/19.3 (10.4%)	1/20.3 ( 4.9%)
	Terminal Incidence	0/14 ( 0.0%)	0/9 ( 0.0%)	0/12 ( 0.0%)
	Time-to-First	486	369	473
	Poly-K P-Value	0.588N	0.482	0.676N
<b>Genital System</b>				
Prostate, Ventral Lobe * Adenoma	Simple Incidence	6/50 (12.0%)	2/26 ( 7.7%)	2/26 ( 7.7%)
	Poly-K Incidence	6/34.4 (17.4%)	2/17.6 (11.4%)	2/20.7 ( 9.7%)
	Terminal Incidence	3/15 (20.0%)	2/9 (22.2%)	0/12 ( 0.0%)
	Time-to-First	603	725 (T)	462
	Poly-K P-Value	0.264N	0.433N	0.344N
Prostate, Ventral Lobe * Adenoma or Adenocarcinoma	Simple Incidence	6/50 (12.0%)	2/26 ( 7.7%)	2/26 ( 7.7%)
	Poly-K Incidence	6/34.4 (17.4%)	2/17.6 (11.4%)	2/20.7 ( 9.7%)
	Terminal Incidence	3/15 (20.0%)	2/9 (22.2%)	0/12 ( 0.0%)
	Time-to-First	603	725 (T)	462
	Poly-K P-Value	0.264N	0.433N	0.344N

<b>Table 6. Neoplasms by Body System for Terminal Sacrifice Males EE2 Continuous Dose Arm</b>				
<b>System and Neoplasm</b>	<b>Treatment (ug/kg)</b>			
<b>Lesion</b>	<b>Statistic</b>	<b>Control</b>	<b>0.05</b>	<b>0.50</b>
<b>Hematopoietic System</b>				
Bone Marrow * Lymphoma Malignant	Simple Incidence	2/48 ( 4.2%)	2/26 ( 7.7%)	1/25 ( 4.0%)
	Poly-K Incidence	2/34.3 ( 5.8%)	2/19.3 ( 10.4%)	1/20.0 ( 5.0%)
	Terminal Incidence	0/15 ( 0.0%)	0/9 ( 0.0%)	0/12 ( 0.0%)
	Time-to-First	486	369	473
	Poly-K P-Value	0.601N	0.474	0.687N
Spleen * Lymphoma Malignant	Simple Incidence	2/49 ( 4.1%)	2/26 ( 7.7%)	1/25 ( 4.0%)
	Poly-K Incidence	2/34.3 ( 5.8%)	2/19.3 ( 10.4%)	1/20.0 ( 5.0%)
	Terminal Incidence	0/15 ( 0.0%)	0/9 ( 0.0%)	0/12 ( 0.0%)
	Time-to-First	486	369	473
	Poly-K P-Value	0.601N	0.474	0.688N
Spleen * Sarcoma	Simple Incidence	0/49 ( 0.0%)	2/26 ( 7.7%)	0/25 ( 0.0%)
	Poly-K Incidence	0/32.9 ( 0.0%)	2/18.8 ( 10.6%)	0/19.3 ( 0.0%)
	Terminal Incidence	0/15 ( 0.0%)	0/9 ( 0.0%)	0/12 ( 0.0%)
	Time-to-First	----	459	----
	Poly-K P-Value	0.588	0.117	-----
Thymus * Lymphoma Malignant	Simple Incidence	2/50 ( 4.0%)	2/24 ( 8.3%)	1/25 ( 4.0%)
	Poly-K Incidence	2/35.1 ( 5.7%)	2/17.6 ( 11.4%)	1/19.3 ( 5.2%)
	Terminal Incidence	0/15 ( 0.0%)	0/9 ( 0.0%)	0/11 ( 0.0%)
	Time-to-First	486	369	473
	Poly-K P-Value	0.602	0.428	0.706N
<b>Integumentary System</b>				
Mammary Gland * Fibroma	Simple Incidence	2/50 ( 4.0%)	0/25 ( 0.0%)	2/25 ( 8.0%)
	Poly-K Incidence	2/34.1 ( 5.9%)	0/16.6 ( 0.0%)	2/19.3 ( 10.4%)
	Terminal Incidence	1/15 ( 6.7%)	0/8 ( 0.0%)	2/12 ( 16.7%)
	Time-to-First	622	----	726 (T)
	Poly-K P-Value	0.407	0.406N	0.477
<b>Urinary System</b>				
Kidney * Lymphoma Malignant	Simple Incidence	2/50 ( 4.0%)	2/26 ( 7.7%)	1/26 ( 3.8%)
	Poly-K Incidence	2/35.1 ( 5.7%)	2/19.3 ( 10.4%)	1/20.3 ( 4.9%)
	Terminal Incidence	0/15 ( 0.0%)	0/9 ( 0.0%)	0/12 ( 0.0%)
	Time-to-First	486	369	473
	Poly-K P-Value	0.605N	0.465	0.690N

P-values for dose trend are presented in the "Control" column.

N indicates a negative trend or negative treatment comparison to control with corresponding lower-tail p-values.

<i>Table 7. Nonneoplasms by Body System for Terminal Sacrifice Females Bisphenol-A Stop Dose Arm</i>							
<i>System and Nonneoplasm</i>	<i>Treatment (ug/kg)</i>						
<i>Lesion</i>	<i>Statistic</i>	<i>Control</i>	<i>2.5</i>	<i>25</i>	<i>250</i>	<i>2500</i>	<i>25000</i>
<b>Alimentary System</b>							
Liver * Angiectasis	Simple Incidence	3/49 ( 6.1%)	6/50 ( 12.0%)	1/48 ( 2.1%)	5/50 ( 10.0%)	5/50 ( 10.0%)	3/46 ( 6.5%)
	Poly-K Incidence	3/31.6 ( 9.5%)	6/32.5 ( 18.4%)	1/30.9 ( 3.2%)	5/35.4 ( 14.1%)	5/35.5 ( 14.1%)	3/31.9 ( 9.4%)
	Terminal Incidence	1/11 ( 9.1%)	3/12 ( 25.0%)	0/13 ( 0.0%)	0/13 ( 0.0%)	3/17 ( 17.6%)	1/13 ( 7.7%)
	Time-to-First	662	563	612	555	642	566
	Poly-K P-Value	0.509N	0.248	0.310N	0.418	0.419	0.661N
	Severity Profile	1 2 0 0	1 5 0 0	0 1 0 0	2 3 0 0	2 1 1 1	0 2 1 0
	JT/SW P-Value	0.431	0.151	0.490	0.305	0.308	0.407
	RTE P-Value	0.436	0.142	0.236N	0.243	0.230	0.453
Liver * Basophilic Focus	Simple Incidence	22/49 ( 44.9%)	26/50 ( 52.0%)	25/48 ( 52.1%)	28/50 ( 56.0%)	22/50 ( 44.0%)	23/46 ( 50.0%)
	Poly-K Incidence	22/37.9 ( 58.0%)	26/38.2 ( 68.0%)	25/38.3 ( 65.2%)	28/42.7 ( 65.5%)	22/40.1 ( 54.9%)	23/37.8 ( 60.8%)
	Terminal Incidence	6/11 ( 54.5%)	9/12 ( 75.0%)	8/13 ( 61.5%)	7/13 ( 53.8%)	9/17 ( 52.9%)	6/13 ( 46.2%)
	Time-to-First	385	400	461	448	447	463
	Poly-K P-Value	0.353N	0.231	0.326	0.308	0.479N	0.493
Liver * Clear Cell Focus	Simple Incidence	9/49 ( 18.4%)	10/50 ( 20.0%)	9/48 ( 18.8%)	7/50 ( 14.0%)	13/50 ( 26.0%)	9/46 ( 19.6%)
	Poly-K Incidence	9/35.6 ( 25.3%)	10/32.9 ( 30.4%)	9/32.5 ( 27.7%)	7/35.5 ( 19.7%)	13/38.7 ( 33.6%)	9/34.0 ( 26.5%)
	Terminal Incidence	2/11 ( 18.2%)	6/12 ( 50.0%)	4/13 ( 30.8%)	3/13 ( 23.1%)	5/17 ( 29.4%)	2/13 ( 15.4%)
	Time-to-First	467	561	562	473	470	446
	Poly-K P-Value	0.438	0.416	0.521	0.390N	0.294	0.563
Liver * Cyst,Biliary Tract	Simple Incidence	4/49 ( 8.2%)	1/50 ( 2.0%)	0/48 ( 0.0%)	1/50 ( 2.0%)	2/50 ( 4.0%)	0/46 ( 0.0%)
	Poly-K Incidence	4/32.2 ( 12.4%)	1/31.4 ( 3.2%)	0/30.5 ( 0.0%)	1/34.5 ( 2.9%)	2/34.9 ( 5.7%)	0/30.9 ( 0.0%)
	Terminal Incidence	1/11 ( 9.1%)	0/12 ( 0.0%)	0/13 ( 0.0%)	0/13 ( 0.0%)	2/17 ( 11.8%)	0/13 ( 0.0%)
	Time-to-First	624	660	----	540	726 (T)	----
	Poly-K P-Value	0.051N	0.181N	0.064N	0.154N	0.298N	0.062N
Liver * Degeneration,Cystic	Simple Incidence	2/49 ( 4.1%)	1/50 ( 2.0%)	6/48 ( 12.5%)	5/50 ( 10.0%)	8/50 ( 16.0%)	7/46 ( 15.2%)
	Poly-K Incidence	2/32.0 ( 6.2%)	1/31.7 ( 3.2%)	6/32.0 ( 18.8%)	5/35.3 ( 14.2%)	8/37.5 ( 21.3%)	7/32.3 ( 21.7%)
	Terminal Incidence	0/11 ( 0.0%)	0/12 ( 0.0%)	2/13 ( 15.4%)	0/13 ( 0.0%)	1/17 ( 5.9%)	2/13 ( 15.4%)
	Time-to-First	533	573	458	525	520	593
	Poly-K P-Value	0.007 **	0.504N	0.124	0.253	0.071	0.072
	Severity Profile	2 0 0 0	1 0 0 0	6 0 0 0	5 0 0 0	6 2 0 0	7 0 0 0
	JT/SW P-Value	0.004 **	0.726	0.049 * <sup>1</sup>	0.105	0.020 *	0.036 *
	RTE P-Value	0.004 **	0.365N	0.087	0.157	0.014 *	0.042 *

**Table 7. Nonneoplasms by Body System for Terminal Sacrifice Females Bisphenol-A Stop Dose Arm**

<b>System and Nonneoplasm</b>	<b>Statistic</b>	<b>Treatment (ug/kg)</b>					
		<b>Control</b>	<b>2.5</b>	<b>25</b>	<b>250</b>	<b>2500</b>	<b>25000</b>
Liver * Fatty Change	Simple Incidence	19/49 (38.8%)	17/50 (34.0%)	17/48 (35.4%)	18/50 (36.0%)	11/50 (22.0%)	15/46 (32.6%)
	Poly-K Incidence	19/38.7 (49.1%)	17/37.7 (45.1%)	17/37.5 (45.3%)	18/38.4 (46.9%)	11/36.8 (29.9%)	15/36.1 (41.5%)
	Terminal Incidence	3/11 (27.3%)	2/12 (16.7%)	2/13 (15.4%)	4/13 (30.8%)	5/17 (29.4%)	4/13 (30.8%)
	Time-to-First	259	397	458	461	520	446
	Poly-K P-Value	0.114N	0.449N	0.459N	0.516N	0.061N	0.328N
	Severity Profile	1 5 1 1 2	3 6 7 1	3 5 7 2	4 9 4 1	2 3 4 2	0 9 5 1
	JT/SW P-Value	0.078N	0.209N	0.297N	0.254N	0.032N* <sup>1</sup>	0.102N
	RTE P-Value	0.084N	0.208N	0.282N	0.204N	0.026N*	0.179N
Liver * Fibrosis,Biliary Tract	Simple Incidence	7/49 (14.3%)	6/50 (12.0%)	8/48 (16.7%)	7/50 (14.0%)	5/50 (10.0%)	8/46 (17.4%)
	Poly-K Incidence	7/32.4 (21.6%)	6/32.4 (18.5%)	8/32.8 (24.4%)	7/35.9 (19.5%)	5/35.8 (14.0%)	8/31.8 (25.2%)
	Terminal Incidence	3/11 (27.3%)	3/12 (25.0%)	3/13 (23.1%)	1/13 (7.7%)	1/17 (5.9%)	4/13 (30.8%)
	Time-to-First	634	537	540	541	646	634
	Poly-K P-Value	0.494N	0.500N	0.511	0.534N	0.304N	0.483
	Severity Profile	6 1 0 0	3 2 1 0	6 2 0 0	7 0 0 0	3 1 1 0	6 2 0 0
	JT/SW P-Value	0.449	0.594	0.427	0.555	0.677	0.433
	RTE P-Value	0.436	0.410N	0.358	0.469N	0.294N	0.323
Liver * Hematopoietic Cell Proliferation	Simple Incidence	3/49 (6.1%)	1/50 (2.0%)	3/48 (6.3%)	2/50 (4.0%)	4/50 (8.0%)	2/46 (4.3%)
	Poly-K Incidence	3/32.9 (9.1%)	1/31.3 (3.2%)	3/32.6 (9.2%)	2/34.7 (5.8%)	4/35.7 (11.2%)	2/32.1 (6.2%)
	Terminal Incidence	0/11 (0.0%)	0/12 (0.0%)	0/13 (0.0%)	1/13 (7.7%)	2/17 (11.8%)	0/13 (0.0%)
	Time-to-First	467	702	461	450	504	463
	Poly-K P-Value	0.473	0.321N	0.661	0.475N	0.545	0.512N
	Severity Profile	3 0 0 0	0 1 0 0	2 1 0 0	2 0 0 0	2 2 0 0	2 0 0 0
	JT/SW P-Value	0.385	0.843	0.561	0.713	0.426	0.625
	RTE P-Value	0.397	0.237N	0.479	0.320N	0.323	0.351N
Liver * Hepatodiaphragmatic Nodule	Simple Incidence	2/49 (4.1%)	5/50 (10.0%)	1/48 (2.1%)	6/50 (12.0%)	3/50 (6.0%)	4/46 (8.7%)
	Poly-K Incidence	2/32.0 (6.3%)	5/32.8 (15.3%)	1/30.5 (3.3%)	6/35.3 (17.0%)	3/36.1 (8.3%)	4/32.2 (12.4%)
	Terminal Incidence	1/11 (9.1%)	1/12 (8.3%)	1/13 (7.7%)	2/13 (15.4%)	1/17 (5.9%)	2/13 (15.4%)
	Time-to-First	492	484	727 (T)	540	141	393
	Poly-K P-Value	0.341	0.220	0.517N	0.160	0.556	0.337
Liver * Hyperplasia,Bile Duct	Simple Incidence	20/49 (40.8%)	11/50 (22.0%)	18/48 (37.5%)	19/50 (38.0%)	18/50 (36.0%)	17/46 (37.0%)
	Poly-K Incidence	20/35.7 (56.0%)	11/32.6 (33.7%)	18/37.3 (48.2%)	19/38.4 (49.4%)	18/39.8 (45.2%)	17/34.4 (49.5%)
	Terminal Incidence	9/11 (81.8%)	7/12 (58.3%)	5/13 (38.5%)	6/13 (46.2%)	6/17 (35.3%)	8/13 (61.5%)
	Time-to-First	259	613	442	448	447	485
	Poly-K P-Value	0.485N	0.039N*	0.321N	0.360N	0.226N	0.369N
	Severity Profile	10 8 1 1	3 5 2 1	7 7 4 0	7 7 5 0	6 9 1 2	8 6 3 0
	JT/SW P-Value	0.324	0.955	0.640	0.627	0.689	0.717
	RTE P-Value	0.327	0.060N	0.452N	0.493N	0.410N	0.386N

**Table 7. Nonneoplasms by Body System for Terminal Sacrifice Females Bisphenol-A Stop Dose Arm**

<b>System and Nonneoplasm</b>		<b>Treatment (ug/kg)</b>					
<b>Lesion</b>	<b>Statistic</b>	<b>Control</b>	<b>2.5</b>	<b>25</b>	<b>250</b>	<b>2500</b>	<b>25000</b>
Liver * Infiltration Cellular, Mononuclear Cell	Simple Incidence	29/49 ( 59.2%)	28/50 ( 56.0%)	33/48 ( 68.8%)	25/50 ( 50.0%)	31/50 ( 62.0%)	31/46 ( 67.4%)
	Poly-K Incidence	29/39.7 ( 73.0%)	28/38.9 ( 72.0%)	33/41.5 ( 79.5%)	25/39.8 ( 62.7%)	31/41.0 ( 75.6%)	31/37.2 ( 83.3%)
	Terminal Incidence	9/11 ( 81.8%)	11/12 ( 91.7%)	10/13 ( 76.9%)	9/13 ( 69.2%)	15/17 ( 88.2%)	13/13 ( 100.0%)
	Time-to-First	259	427	442	450	447	462
	Poly-K P-Value	0.215	0.570N	0.313	0.205N	0.496	0.166
	Severity Profile	22 6 1 0	18 10 0 0	26 7 0 0	16 9 0 0	25 5 1 0	23 8 0 0
	JT/SW P-Value	0.328	0.491	0.280	0.583	0.593	0.299
	RTE P-Value	0.320	0.485	0.234	0.294N	0.463	0.222
Liver * Inflammation, Chronic Active	Simple Incidence	2/49 ( 4.1%)	3/50 ( 6.0%)	1/48 ( 2.1%)	3/50 ( 6.0%)	0/50 ( 0.0%)	4/46 ( 8.7%)
	Poly-K Incidence	2/32.0 ( 6.3%)	3/32.5 ( 9.2%)	1/30.9 ( 3.2%)	3/35.1 ( 8.5%)	0/34.9 ( 0.0%)	4/33.2 ( 12.0%)
	Terminal Incidence	1/11 ( 9.1%)	0/12 ( 0.0%)	0/13 ( 0.0%)	0/13 ( 0.0%)	0/17 ( 0.0%)	0/13 ( 0.0%)
	Time-to-First	499	561	608	541	----	445
	Poly-K P-Value	0.460	0.508	0.512N	0.543	0.217N	0.352
	Severity Profile	2 0 0 0	2 1 0 0	0 1 0 0	1 2 0 0	---	1 3 0 0
	JT/SW P-Value	0.371	0.326	0.574	0.397	0.689	0.173
	RTE P-Value	0.343	0.318	0.329N	0.311	0.221N	0.095
Liver * Mineralization	Simple Incidence	1/49 ( 2.0%)	4/50 ( 8.0%)	0/48 ( 0.0%)	1/50 ( 2.0%)	0/50 ( 0.0%)	0/46 ( 0.0%)
	Poly-K Incidence	1/31.6 ( 3.2%)	4/33.5 ( 11.9%)	0/30.5 ( 0.0%)	1/34.6 ( 2.9%)	0/34.9 ( 0.0%)	0/30.9 ( 0.0%)
	Terminal Incidence	0/11 ( 0.0%)	0/12 ( 0.0%)	0/13 ( 0.0%)	0/13 ( 0.0%)	0/17 ( 0.0%)	0/13 ( 0.0%)
	Time-to-First	628	478	----	525	----	----
	Poly-K P-Value	0.028N*	0.192	0.507N	0.742N	0.481N	0.505N
	Severity Profile	1 0 0 0	2 2 0 0	---	0 1 0 0	---	---
	JT/SW P-Value	0.029N*	0.914N	0.350N	0.491N	0.341N	0.330N
	RTE P-Value	0.035N*	0.015 *	0.239N	0.500	0.237N	0.242N
Liver * Mixed Cell Focus	Simple Incidence	1/49 ( 2.0%)	2/50 ( 4.0%)	1/48 ( 2.1%)	1/50 ( 2.0%)	0/50 ( 0.0%)	4/46 ( 8.7%)
	Poly-K Incidence	1/31.8 ( 3.1%)	2/31.2 ( 6.4%)	1/30.6 ( 3.3%)	1/34.0 ( 2.9%)	0/34.9 ( 0.0%)	4/32.1 ( 12.5%)
	Terminal Incidence	0/11 ( 0.0%)	2/12 ( 16.7%)	0/13 ( 0.0%)	0/13 ( 0.0%)	0/17 ( 0.0%)	2/13 ( 15.4%)
	Time-to-First	582	725 (T)	708	707	----	463
	Poly-K P-Value	0.222	0.493	0.754	0.747N	0.482N	0.177
Liver * Tension Lipidosis	Simple Incidence	4/49 ( 8.2%)	13/50 ( 26.0%)	5/48 ( 10.4%)	13/50 ( 26.0%)	6/50 ( 12.0%)	10/46 ( 21.7%)
	Poly-K Incidence	4/32.6 ( 12.3%)	13/36.2 ( 35.9%)	5/32.3 ( 15.5%)	13/39.2 ( 33.2%)	6/35.8 ( 16.8%)	10/33.8 ( 29.6%)
	Terminal Incidence	1/11 ( 9.1%)	2/12 ( 16.7%)	1/13 ( 7.7%)	2/13 ( 15.4%)	3/17 ( 17.6%)	4/13 ( 30.8%)
	Time-to-First	502	484	568	450	642	393
	Poly-K P-Value	0.276	0.019 *	0.493	0.032 *	0.426	0.070
	Severity Profile	1 0 2 1	0 3 4 6	0 2 2 1	0 3 4 6	0 0 1 5	0 1 4 5
	JT/SW P-Value	0.155	0.008 ** 1	0.090	0.010 * 1	0.080	0.044 *
	RTE P-Value	0.149	0.008 **	0.396	0.009 **	0.255	0.030 *

**Table 7. Nonneoplasms by Body System for Terminal Sacrifice Females Bisphenol-A Stop Dose Arm**

<b>System and Nonneoplasm</b>	<b>Lesion</b>	<b>Statistic</b>	<b>Treatment (ug/kg)</b>				
			<b>Control</b>	<b>2.5</b>	<b>25</b>	<b>250</b>	<b>2500</b>
Liver * Vacuolization Cytoplasmic	Simple Incidence	12/49 ( 24.5%)	19/50 ( 38.0%)	15/48 ( 31.3%)	9/50 ( 18.0%)	16/50 ( 32.0%)	12/46 ( 26.1%)
	Poly-K Incidence	12/35.2 ( 34.1%)	19/36.5 ( 52.0%)	15/36.1 ( 41.5%)	9/37.0 ( 24.3%)	16/38.6 ( 41.4%)	12/33.3 ( 36.0%)
	Terminal Incidence	3/11 ( 27.3%)	8/12 ( 66.7%)	3/13 ( 23.1%)	2/13 ( 15.4%)	7/17 ( 41.2%)	4/13 ( 30.8%)
	Time-to-First	468	474	461	450	542	485
	Poly-K P-Value	0.288N	0.083	0.337	0.252N	0.335	0.534
	Severity Profile	6 5 0 1	7 12 0 0	6 9 0 0	3 6 0 0	6 10 0 0	0 11 0 1
	JT/SW P-Value	0.462N	0.932N	0.849N	0.336N	0.689N	0.752N
	RTE P-Value	0.465N	0.064	0.229	0.267N	0.195	0.292
Pancreas * Degeneration,Acinus	Simple Incidence	36/49 ( 73.5%)	34/49 ( 69.4%)	34/47 ( 72.3%)	35/49 ( 71.4%)	34/49 ( 69.4%)	34/46 ( 73.9%)
	Poly-K Incidence	36/43.4 ( 82.9%)	34/42.3 ( 80.3%)	34/43.2 ( 78.6%)	35/45.2 ( 77.4%)	34/44.7 ( 76.0%)	34/41.8 ( 81.4%)
	Terminal Incidence	10/11 ( 90.9%)	10/12 ( 83.3%)	9/13 ( 69.2%)	10/13 ( 76.9%)	12/17 ( 70.6%)	11/13 ( 84.6%)
	Time-to-First	259	397	339	448	390	383
	Poly-K P-Value	0.336N	0.488N	0.401N	0.338N	0.282N	0.546N
	Severity Profile	10 7 11 8	10 10 8 6	20 8 3 3	14 8 9 4	13 12 3 6	8 12 7 7
	JT/SW P-Value	0.398N	0.225N	0.031N* <sup>1</sup>	0.083N	0.099N	0.180N
	RTE P-Value	0.415N	0.225N	0.021N*	0.146N	0.103N	0.455N
Pancreas * Infiltration Cellular,Lymphocyte	Simple Incidence	32/49 ( 65.3%)	32/49 ( 65.3%)	27/47 ( 57.4%)	28/49 ( 57.1%)	32/49 ( 65.3%)	30/46 ( 65.2%)
	Poly-K Incidence	32/42.9 ( 74.6%)	32/40.7 ( 78.6%)	27/39.6 ( 68.2%)	28/42.2 ( 66.3%)	32/43.9 ( 73.0%)	30/39.5 ( 76.0%)
	Terminal Incidence	7/11 ( 63.6%)	10/12 ( 83.3%)	9/13 ( 69.2%)	8/13 ( 61.5%)	12/17 ( 70.6%)	10/13 ( 76.9%)
	Time-to-First	385	397	339	448	390	445
	Poly-K P-Value	0.425N	0.420	0.332N	0.260N	0.531N	0.547
	Severity Profile	12 14 6 0	15 11 6 0	18 8 1 0	15 10 3 0	22 5 5 0	11 17 2 0
	JT/SW P-Value	0.308N	0.386N	0.042N* <sup>1</sup>	0.071N	0.104N	0.179N
	RTE P-Value	0.319N	0.382N	0.035N*	0.086N	0.151N	0.423N
Pancreas * Inflammation,Chronic Active	Simple Incidence	4/49 ( 8.2%)	1/49 ( 2.0%)	1/47 ( 2.1%)	1/49 ( 2.0%)	2/49 ( 4.1%)	2/46 ( 4.3%)
	Poly-K Incidence	4/32.3 ( 12.4%)	1/31.8 ( 3.1%)	1/30.7 ( 3.3%)	1/33.5 ( 3.0%)	2/34.7 ( 5.8%)	2/30.9 ( 6.5%)
	Terminal Incidence	2/11 ( 18.2%)	0/12 ( 0.0%)	0/13 ( 0.0%)	1/13 ( 7.7%)	1/17 ( 5.9%)	2/13 ( 15.4%)
	Time-to-First	502	400	528	728 (T)	686	726 (T)
	Poly-K P-Value	0.288N	0.178N	0.190N	0.163N	0.301N	0.354N
	Severity Profile	0 2 1 1	0 1 0 0	0 1 0 0	1 0 0 0	0 1 1 0	0 2 0 0
	JT/SW P-Value	0.271N	0.083N	0.077N	0.060N	0.088N	0.114N
	RTE P-Value	0.280N	0.041N*	0.051N	0.033N*	0.121N	0.179N
Pancreas * Lipomatosis	Simple Incidence	3/49 ( 6.1%)	6/49 ( 12.2%)	7/47 ( 14.9%)	4/49 ( 8.2%)	6/49 ( 12.2%)	6/46 ( 13.0%)
	Poly-K Incidence	3/32.6 ( 9.2%)	6/32.3 ( 18.6%)	7/32.0 ( 21.9%)	4/34.8 ( 11.5%)	6/35.6 ( 16.9%)	6/31.9 ( 18.8%)
	Terminal Incidence	1/11 ( 9.1%)	3/12 ( 25.0%)	2/13 ( 15.4%)	1/13 ( 7.7%)	4/17 ( 23.5%)	3/13 ( 23.1%)
	Time-to-First	509	561	540	505	496	566
	Poly-K P-Value	0.296	0.229	0.139	0.536	0.282	0.222
	Severity Profile	0 1 1 1	0 3 2 1	0 3 4 0	0 4 0 0	0 3 2 1	0 0 3 3
	JT/SW P-Value	0.208	0.155	0.109	0.247	0.223	0.161
	RTE P-Value	0.211	0.187	0.101	0.412	0.190	0.117



**Table 7. Nonneoplasms by Body System for Terminal Sacrifice Females Bisphenol-A Stop Dose Arm**

System and Nonneoplasm	Statistic	Treatment (ug/kg)					
		Control	2.5	25	250	2500	25000
<b>Pancreas * Pigmentation</b>							
Simple Incidence	15/49 (30.6%)	13/49 (26.5%)	6/47 (12.8%)	8/49 (16.3%)	11/49 (22.4%)	8/46 (17.4%)	
Poly-K Incidence	15/38.3 (39.2%)	13/36.1 (36.0%)	6/32.1 (18.7%)	8/35.3 (22.6%)	11/39.5 (27.8%)	8/33.1 (24.2%)	
Terminal Incidence	4/11 (36.4%)	3/12 (25.0%)	3/13 (23.1%)	3/13 (23.1%)	3/17 (17.6%)	4/13 (30.8%)	
Time-to-First	259	400	461	535	390	445	
Poly-K P-Value	0.056N	0.483N	0.047N*	0.093N	0.199N	0.129N	
Severity Profile	14 1 0 0	12 1 0 0	5 1 0 0	6 2 0 0	9 2 0 0	6 2 0 0	
JT/SW P-Value	0.080N	0.332N	0.026N* <sup>1</sup>	0.040N* <sup>1</sup>	0.083N	0.088N	
RTE P-Value	0.084N	0.317N	0.018N*	0.055N	0.184N	0.067N	
<b>Cardiovascular System</b>							
<b>Heart * Cardiomyopathy</b>							
Simple Incidence	32/50 (64.0%)	37/50 (74.0%)	38/48 (79.2%)	37/50 (74.0%)	35/50 (70.0%)	35/46 (76.1%)	
Poly-K Incidence	32/42.9 (74.5%)	37/42.9 (86.3%)	38/43.1 (88.1%)	37/44.0 (84.2%)	35/44.0 (79.6%)	35/39.7 (88.2%)	
Terminal Incidence	9/11 (81.8%)	11/12 (91.7%)	11/13 (84.6%)	11/13 (84.6%)	15/17 (88.2%)	12/13 (92.3%)	
Time-to-First	259	446	442	450	141	393	
Poly-K P-Value	0.166	0.101	0.062	0.167	0.366	0.064	
Severity Profile	26 3 3 0	22 13 2 0	29 7 2 0	21 14 2 0	17 13 5 0	16 14 5 0	
JT/SW P-Value	0.006 **	0.038 * <sup>1</sup>	0.053	0.030 *	0.029 *	0.004 **	
RTE P-Value	0.007 **	0.043 *	0.092	0.034 *	0.024 *	0.004 **	
<b>Endocrine System</b>							
<b>Adrenal Cortex * Angiectasis</b>							
Simple Incidence	6/49 (12.2%)	10/49 (20.4%)	8/48 (16.7%)	2/50 (4.0%)	6/50 (12.0%)	10/46 (21.7%)	
Poly-K Incidence	6/33.1 (18.1%)	10/34.5 (29.0%)	8/32.2 (24.8%)	2/34.9 (5.7%)	6/36.0 (16.7%)	10/33.0 (30.3%)	
Terminal Incidence	2/11 (18.2%)	2/12 (16.7%)	3/13 (23.1%)	0/13 (0.0%)	3/17 (17.6%)	5/13 (38.5%)	
Time-to-First	502	474	573	540	506	469	
Poly-K P-Value	0.506	0.217	0.356	0.110N	0.563N	0.186	
Severity Profile	0 3 2 1	0 6 3 1	1 5 1 1	0 2 0 0	0 4 2 0	0 8 1 1	
JT/SW P-Value	0.469	0.148	0.263	0.553	0.597	0.146	
RTE P-Value	0.445	0.125	0.297	0.101N	0.466N	0.115	
<b>Adrenal Cortex * Degeneration,Cystic</b>							
Simple Incidence	27/49 (55.1%)	28/49 (57.1%)	32/48 (66.7%)	32/50 (64.0%)	33/50 (66.0%)	25/46 (54.3%)	
Poly-K Incidence	27/39.0 (69.3%)	28/39.2 (71.4%)	32/40.4 (79.3%)	32/41.7 (76.7%)	33/41.6 (79.4%)	25/36.7 (68.0%)	
Terminal Incidence	8/11 (72.7%)	8/12 (66.7%)	10/13 (76.9%)	10/13 (76.9%)	15/17 (88.2%)	8/13 (61.5%)	
Time-to-First	492	484	442	450	506	469	
Poly-K P-Value	0.383	0.521	0.194	0.289	0.186	0.556N	
Severity Profile	4 7 4 12	4 15 3 6	3 12 7 10	5 8 5 14	2 11 10 10	3 12 5 5	
JT/SW P-Value	0.396	0.695	0.236	0.264	0.236	0.426	
RTE P-Value	0.423	0.263N	0.208	0.206	0.164	0.240N	

**Table 7. Nonneoplasms by Body System for Terminal Sacrifice Females Bisphenol-A Stop Dose Arm**

<i>System and Nonneoplasm</i>	<i>Treatment (ug/kg)</i>						
<i>Lesion</i>	<i>Statistic</i>	<i>Control</i>	<i>2.5</i>	<i>25</i>	<i>250</i>	<i>2500</i>	<i>25000</i>
Adrenal Cortex * Hyperplasia	Simple Incidence	3/49 ( 6.1%)	5/49 ( 10.2%)	4/48 ( 8.3%)	7/50 ( 14.0%)	3/50 ( 6.0%)	7/46 ( 15.2%)
	Poly-K Incidence	3/31.8 ( 9.4%)	5/32.2 ( 15.5%)	4/31.6 ( 12.7%)	7/35.2 ( 19.9%)	3/35.8 ( 8.4%)	7/32.6 ( 21.5%)
	Terminal Incidence	0/11 ( 0.0%)	2/12 ( 16.7%)	0/13 ( 0.0%)	3/13 ( 23.1%)	1/17 ( 5.9%)	3/13 ( 23.1%)
	Time-to-First	628	563	540	540	496	558
	Poly-K P-Value	0.216	0.358	0.496	0.193	0.609N	0.157
	Severity Profile	1 2 0 0	1 2 1 1	4 0 0 0	2 5 0 0	0 2 1 0	4 2 0 1
	JT/SW P-Value	0.154	0.218	0.345	0.115	0.322	0.097
	RTE P-Value	0.146	0.233	0.388	0.095	0.490	0.077
Adrenal Cortex * Hypertrophy	Simple Incidence	1/49 ( 2.0%)	0/49 ( 0.0%)	1/48 ( 2.1%)	2/50 ( 4.0%)	0/50 ( 0.0%)	4/46 ( 8.7%)
	Poly-K Incidence	1/32.0 ( 3.1%)	0/31.0 ( 0.0%)	1/31.3 ( 3.2%)	2/34.2 ( 5.8%)	0/34.9 ( 0.0%)	4/31.0 ( 12.9%)
	Terminal Incidence	0/11 ( 0.0%)	0/12 ( 0.0%)	0/13 ( 0.0%)	0/13 ( 0.0%)	0/17 ( 0.0%)	3/13 ( 23.1%)
	Time-to-First	499	---	442	690	---	702
	Poly-K P-Value	0.062	0.506N	0.758	0.524	0.483N	0.164
	Severity Profile	1 0 0 0	---	1 0 0 0	0 1 1 0	---	0 2 2 0
	JT/SW P-Value	0.042 *	0.841	0.576	0.306	0.635	0.027 *
	RTE P-Value	0.032 *	0.271N	0.495	0.184	0.270N	0.011 *
Adrenal Cortex * Vacuolization Cytoplasmic	Simple Incidence	4/49 ( 8.2%)	3/49 ( 6.1%)	3/48 ( 6.3%)	6/50 ( 12.0%)	5/50 ( 10.0%)	6/46 ( 13.0%)
	Poly-K Incidence	4/32.3 ( 12.4%)	3/31.9 ( 9.4%)	3/31.7 ( 9.5%)	6/36.1 ( 16.6%)	5/35.8 ( 14.0%)	6/33.0 ( 18.2%)
	Terminal Incidence	2/11 ( 18.2%)	0/12 ( 0.0%)	0/13 ( 0.0%)	1/13 ( 7.7%)	2/17 ( 11.8%)	1/13 ( 7.7%)
	Time-to-First	468	537	540	461	630	446
	Poly-K P-Value	0.172	0.506N	0.510N	0.440	0.567	0.379
	Severity Profile	2 0 1 1	0 2 1 0	1 1 1 0	0 6 0 0	2 3 0 0	1 3 1 1
	JT/SW P-Value	0.122	0.649	0.736	0.316	0.416	0.270
	RTE P-Value	0.120	0.372N	0.372N	0.258	0.397	0.189
Adrenal Medulla * Hyperplasia	Simple Incidence	7/49 ( 14.3%)	5/50 ( 10.0%)	4/48 ( 8.3%)	8/48 ( 16.7%)	8/50 ( 16.0%)	5/45 ( 11.1%)
	Poly-K Incidence	7/32.0 ( 21.9%)	5/31.4 ( 15.9%)	4/30.9 ( 12.9%)	8/34.6 ( 23.1%)	8/36.0 ( 22.2%)	5/31.2 ( 16.0%)
	Terminal Incidence	4/11 ( 36.4%)	4/12 ( 33.3%)	2/13 ( 15.4%)	2/13 ( 15.4%)	5/17 ( 29.4%)	2/13 ( 15.4%)
	Time-to-First	533	660	644	541	504	650
	Poly-K P-Value	0.511	0.386N	0.270N	0.569	0.604	0.392N
	Severity Profile	5 2 0 0	3 1 1 0	1 2 1 0	5 3 0 0	6 2 0 0	2 2 1 0
	JT/SW P-Value	0.380	0.730	0.847	0.449	0.497	0.610
	RTE P-Value	0.388	0.279N	0.220N	0.357	0.406	0.355N
Parathyroid Gland * Hyperplasia	Simple Incidence	5/45 ( 11.1%)	3/49 ( 6.1%)	8/47 ( 17.0%)	7/47 ( 14.9%)	5/47 ( 10.6%)	7/46 ( 15.2%)
	Poly-K Incidence	5/31.0 ( 16.1%)	3/31.9 ( 9.4%)	8/32.7 ( 24.4%)	7/34.3 ( 20.4%)	5/33.7 ( 14.8%)	7/33.0 ( 21.2%)
	Terminal Incidence	1/11 ( 9.1%)	0/12 ( 0.0%)	2/13 ( 15.4%)	0/12 ( 0.0%)	3/16 ( 18.8%)	3/13 ( 23.1%)
	Time-to-First	259	573	528	485	496	383
	Poly-K P-Value	0.282	0.336N	0.301	0.449	0.580N	0.420
	Severity Profile	3 0 1 1	1 2 0 0	5 3 0 0	3 4 0 0	0 3 1 1	5 2 0 0
	JT/SW P-Value	0.210	0.805	0.240	0.319	0.428	0.411
	RTE P-Value	0.220	0.234N	0.216	0.297	0.487	0.306

**Table 7. Nonneoplasms by Body System for Terminal Sacrifice Females Bisphenol-A Stop Dose Arm**

<i>System and Nonneoplasm</i>		<i>Treatment (ug/kg)</i>					
<i>Lesion</i>	<i>Statistic</i>	<i>Control</i>	<i>2.5</i>	<i>25</i>	<i>250</i>	<i>2500</i>	<i>25000</i>
Pituitary Gland * Angiectasis	Simple Incidence	12/49 ( 24.5%)	11/50 ( 22.0%)	8/48 ( 16.7%)	12/50 ( 24.0%)	14/50 ( 28.0%)	11/46 ( 23.9%)
	Poly-K Incidence	12/35.3 ( 34.0%)	11/34.5 ( 31.8%)	8/32.7 ( 24.4%)	12/38.4 ( 31.3%)	14/37.6 ( 37.2%)	11/33.9 ( 32.5%)
	Terminal Incidence	4/11 ( 36.4%)	4/12 ( 33.3%)	4/13 ( 30.8%)	2/13 ( 15.4%)	7/17 ( 41.2%)	4/13 ( 30.8%)
	Time-to-First	502	397	488	448	520	445
	Poly-K P-Value	0.419	0.526N	0.269N	0.500N	0.482	0.550N
	Severity Profile	0 0 0 12	0 0 1 10	0 1 2 5	0 3 1 8	0 1 2 11	0 2 5 4
	JT/SW P-Value	0.465	0.636	0.846	0.733	0.512	0.684
	RTE P-Value	0.475	0.361N	0.134N	0.383N	0.392	0.323N
Pituitary Gland * Cyst,Pars Distalis	Simple Incidence	4/49 ( 8.2%)	6/50 ( 12.0%)	10/48 ( 20.8%)	3/50 ( 6.0%)	5/50 ( 10.0%)	4/46 ( 8.7%)
	Poly-K Incidence	4/33.2 ( 12.0%)	6/32.8 ( 18.3%)	10/34.9 ( 28.6%)	3/35.5 ( 8.5%)	5/36.1 ( 13.9%)	4/32.6 ( 12.3%)
	Terminal Incidence	1/11 ( 9.1%)	2/12 ( 16.7%)	1/13 ( 7.7%)	0/13 ( 0.0%)	2/17 ( 11.8%)	1/13 ( 7.7%)
	Time-to-First	519	474	461	461	470	446
	Poly-K P-Value	0.271N	0.357	0.076	0.464N	0.553	0.636
	Pituitary Gland * Hyperplasia,Pars Distalis	Simple Incidence	25/49 ( 51.0%)	32/50 ( 64.0%)	34/48 ( 70.8%)	26/50 ( 52.0%)	28/50 ( 56.0%)
Poly-K Incidence		25/42.2 ( 59.2%)	32/43.5 ( 73.5%)	34/45.0 ( 75.5%)	26/43.3 ( 60.1%)	28/45.3 ( 61.8%)	21/39.1 ( 53.7%)
Terminal Incidence		4/11 ( 36.4%)	7/12 ( 58.3%)	5/13 ( 38.5%)	6/13 ( 46.2%)	7/17 ( 41.2%)	6/13 ( 46.2%)
Time-to-First		385	400	339	461	390	383
Poly-K P-Value		0.099N	0.104	0.069	0.560	0.490	0.385N
Severity Profile		3 7 7 8	0 5 11 16	2 6 14 12	0 6 9 11	3 7 5 13	1 3 7 10
JT/SW P-Value		0.231N	0.979N	0.995N	0.851N	0.884N	0.704N
RTE P-Value		0.224N	0.023 *	0.020 *	0.272	0.213	0.448
Thyroid Gland * Hyperplasia,C-Cell	Simple Incidence	26/48 ( 54.2%)	29/49 ( 59.2%)	17/45 ( 37.8%)	23/48 ( 47.9%)	28/50 ( 56.0%)	24/46 ( 52.2%)
	Poly-K Incidence	26/40.5 ( 64.2%)	29/42.0 ( 69.0%)	17/34.9 ( 48.8%)	23/39.8 ( 57.8%)	28/42.6 ( 65.7%)	24/38.9 ( 61.7%)
	Terminal Incidence	7/11 ( 63.6%)	7/12 ( 58.3%)	4/13 ( 30.8%)	6/13 ( 46.2%)	9/17 ( 52.9%)	6/13 ( 46.2%)
	Time-to-First	259	397	505	448	504	383
	Poly-K P-Value	0.410N	0.403	0.117N	0.352N	0.536	0.502N
	Severity Profile	8 15 2 1	15 11 1 2	11 5 0 1	15 7 1 0	10 12 4 2	11 11 2 0
	JT/SW P-Value	0.403N	0.462N	0.017N* <sup>1</sup>	0.043N* <sup>1</sup>	0.180N	0.230N
	RTE P-Value	0.408N	0.487N	0.017N*	0.079N	0.420	0.284N
Thyroid Gland * Hyperplasia,Follicular Cell	Simple Incidence	4/48 ( 8.3%)	4/49 ( 8.2%)	7/45 ( 15.6%)	6/48 ( 12.5%)	5/50 ( 10.0%)	4/46 ( 8.7%)
	Poly-K Incidence	4/32.8 ( 12.2%)	4/32.0 ( 12.5%)	7/31.6 ( 22.2%)	6/35.4 ( 17.0%)	5/35.9 ( 13.9%)	4/33.2 ( 12.1%)
	Terminal Incidence	0/11 ( 0.0%)	1/12 ( 8.3%)	1/13 ( 7.7%)	0/13 ( 0.0%)	2/17 ( 11.8%)	0/13 ( 0.0%)
	Time-to-First	519	622	540	450	520	383
	Poly-K P-Value	0.501N	0.634	0.229	0.415	0.558	0.641N
	Severity Profile	0 2 2 0	1 3 0 0	0 5 2 0	0 4 2 0	0 3 2 0	0 3 1 0
	JT/SW P-Value	0.439	0.542	0.160	0.250	0.339	0.416
	RTE P-Value	0.449	0.453N	0.147	0.261	0.399	0.491

**Table 7. Nonneoplasms by Body System for Terminal Sacrifice Females Bisphenol-A Stop Dose Arm**

<b>System and Nonneoplasm</b>	<b>Treatment (ug/kg)</b>						
<b>Lesion</b>	<b>Statistic</b>	<b>Control</b>	<b>2.5</b>	<b>25</b>	<b>250</b>	<b>2500</b>	<b>25000</b>
Thyroid Gland * Ultimobranchial Cyst	Simple Incidence	2/48 ( 4.2%)	7/49 ( 14.3%)	2/45 ( 4.4%)	9/48 ( 18.8%)	11/50 ( 22.0%)	3/46 ( 6.5%)
	Poly-K Incidence	2/31.4 ( 6.4%)	7/33.4 ( 21.0%)	2/29.5 ( 6.8%)	9/36.1 ( 24.9%)	11/38.6 ( 28.5%)	3/32.1 ( 9.3%)
	Terminal Incidence	0/11 ( 0.0%)	2/12 ( 16.7%)	1/13 ( 7.7%)	2/13 ( 15.4%)	4/17 ( 23.5%)	1/13 ( 7.7%)
	Time-to-First	602	446	651	448	141	446
	Poly-K P-Value	0.140	0.085	0.673	0.038 *	0.017 *	0.510
<b>Genital System</b>							
Ovary * Atrophy	Simple Incidence	47/49 ( 95.9%)	48/49 ( 98.0%)	46/47 ( 97.9%)	50/50 (100.0%)	49/50 ( 98.0%)	44/46 ( 95.7%)
	Poly-K Incidence	47/47.5 ( 98.9%)	48/48.1 ( 99.8%)	46/46.1 ( 99.8%)	50/50.0 (100.0%)	49/49.0 (100.0%)	44/44.8 ( 98.2%)
	Terminal Incidence	11/11 (100.0%)	12/12 (100.0%)	13/13 (100.0%)	13/13 (100.0%)	17/17 (100.0%)	13/13 (100.0%)
	Time-to-First	259	397	442	448	390	383
	Poly-K P-Value	0.469N	0.922	0.927	0.885	0.890	0.800N
	Severity Profile	1 23 16 7	0 34 11 3	1 28 11 6	1 33 7 9	0 25 16 8	0 23 12 9
	JT/SW P-Value	0.134	0.942	0.867	0.895	0.455	0.514
	RTE P-Value	0.132	0.064N	0.216N	0.213N	0.349	0.423
Ovary * Cyst	Simple Incidence	6/49 ( 12.2%)	8/49 ( 16.3%)	5/47 ( 10.6%)	9/50 ( 18.0%)	5/50 ( 10.0%)	6/46 ( 13.0%)
	Poly-K Incidence	6/32.1 ( 18.7%)	8/33.8 ( 23.7%)	5/31.5 ( 15.9%)	9/36.1 ( 24.9%)	5/35.5 ( 14.1%)	6/31.7 ( 18.9%)
	Terminal Incidence	2/11 ( 18.2%)	1/12 ( 8.3%)	1/13 ( 7.7%)	3/13 ( 23.1%)	4/17 ( 23.5%)	2/13 ( 15.4%)
	Time-to-First	573	397	581	497	496	634
	Poly-K P-Value	0.379N	0.423	0.515N	0.370	0.426N	0.619
Ovary * Cyst,Follicle	Simple Incidence	4/49 ( 8.2%)	4/49 ( 8.2%)	2/47 ( 4.3%)	1/50 ( 2.0%)	2/50 ( 4.0%)	4/46 ( 8.7%)
	Poly-K Incidence	4/32.0 ( 12.5%)	4/33.5 ( 11.9%)	2/30.2 ( 6.6%)	1/34.6 ( 2.9%)	2/35.7 ( 5.6%)	4/32.4 ( 12.3%)
	Terminal Incidence	2/11 ( 18.2%)	0/12 ( 0.0%)	2/13 ( 15.4%)	0/13 ( 0.0%)	0/17 ( 0.0%)	1/13 ( 7.7%)
	Time-to-First	582	400	724 (T)	505	568	383
	Poly-K P-Value	0.306N	0.622N	0.361N	0.152N	0.285N	0.641N
Ovary * Hyperplasia,Sertoliform	Simple Incidence	6/49 ( 12.2%)	4/49 ( 8.2%)	5/47 ( 10.6%)	6/50 ( 12.0%)	7/50 ( 14.0%)	6/46 ( 13.0%)
	Poly-K Incidence	6/32.0 ( 18.8%)	4/31.2 ( 12.8%)	5/31.4 ( 15.9%)	6/34.6 ( 17.3%)	7/35.9 ( 19.5%)	6/32.7 ( 18.4%)
	Terminal Incidence	3/11 ( 27.3%)	3/12 ( 25.0%)	3/13 ( 23.1%)	4/13 ( 30.8%)	5/17 ( 29.4%)	1/13 ( 7.7%)
	Time-to-First	602	660	461	609	390	513
	Poly-K P-Value	0.381	0.378N	0.513N	0.567N	0.594	0.610N
	Severity Profile	1 1 2 2	2 1 1 0	2 3 0 0	3 3 0 0	5 2 0 0	3 1 2 0
	JT/SW P-Value	0.322	0.774	0.734	0.695	0.598	0.627
	RTE P-Value	0.325	0.231N	0.358N	0.429N	0.468	0.494

**Table 7. Nonneoplasms by Body System for Terminal Sacrifice Females Bisphenol-A Stop Dose Arm**

<b>System and Nonneoplasm</b>		<b>Treatment (ug/kg)</b>					
<b>Lesion</b>	<b>Statistic</b>	<b>Control</b>	<b>2.5</b>	<b>25</b>	<b>250</b>	<b>2500</b>	<b>25000</b>
Uterus * Atrophy	Simple Incidence	10/49 ( 20.4%)	6/49 ( 12.2%)	4/48 ( 8.3%)	7/49 ( 14.3%)	7/49 ( 14.3%)	9/46 ( 19.6%)
	Poly-K Incidence	10/32.8 ( 30.5%)	6/32.6 ( 18.4%)	4/32.0 ( 12.5%)	7/34.0 ( 20.6%)	7/35.4 ( 19.8%)	9/33.3 ( 27.0%)
	Terminal Incidence	5/11 ( 45.5%)	2/12 ( 16.7%)	1/13 ( 7.7%)	6/13 ( 46.2%)	4/17 ( 23.5%)	2/13 ( 15.4%)
	Time-to-First	502	561	539	602	630	558
	Poly-K P-Value	0.497N	0.192N	0.066N	0.254N	0.224N	0.483N
	Severity Profile	0 0 7 3	0 0 5 1	0 0 4 0	0 0 6 1	0 0 6 1	0 0 8 1
	JT/SW P-Value	0.467	0.870	0.970	0.916	0.928	0.730
	RTE P-Value	0.454	0.106N	0.033N*	0.167N	0.166N	0.424N
Uterus * Dilatation,Lumen	Simple Incidence	3/49 ( 6.1%)	6/49 ( 12.2%)	2/48 ( 4.2%)	4/49 ( 8.2%)	2/49 ( 4.1%)	0/46 ( 0.0%)
	Poly-K Incidence	3/32.5 ( 9.2%)	6/33.0 ( 18.2%)	2/31.3 ( 6.4%)	4/33.8 ( 11.8%)	2/35.2 ( 5.7%)	0/30.9 ( 0.0%)
	Terminal Incidence	0/11 ( 0.0%)	2/12 ( 16.7%)	1/13 ( 7.7%)	3/13 ( 23.1%)	1/17 ( 5.9%)	0/13 ( 0.0%)
	Time-to-First	522	484	442	672	496	----
	Poly-K P-Value	0.034N*	0.242	0.518N	0.521	0.463N	0.125N
	Severity Profile	0 0 1 2	0 0 0 6	0 0 0 2	0 0 0 4	0 0 1 1	---
	JT/SW P-Value	0.038N*	0.861N	0.436N	0.635N	0.453N	0.140N
	RTE P-Value	0.033N*	0.069	0.349N	0.323	0.332N	0.084N
Uterus * Hyperplasia,Cystic,Endometrium	Simple Incidence	18/49 ( 36.7%)	23/49 ( 46.9%)	22/48 ( 45.8%)	25/49 ( 51.0%)	28/49 ( 57.1%)	24/46 ( 52.2%)
	Poly-K Incidence	18/38.3 ( 47.0%)	23/38.1 ( 60.4%)	22/37.1 ( 59.2%)	25/41.6 ( 60.0%)	28/42.5 ( 65.8%)	24/38.6 ( 62.2%)
	Terminal Incidence	4/11 ( 36.4%)	7/12 ( 58.3%)	7/13 ( 53.8%)	6/13 ( 46.2%)	9/17 ( 52.9%)	7/13 ( 53.8%)
	Time-to-First	468	446	446	461	447	383
	Poly-K P-Value	0.071	0.157	0.188	0.161	0.058	0.119
	Severity Profile	3 8 5 2	1 18 4 0	1 15 5 1	3 15 6 1	0 18 6 4	4 11 6 3
	JT/SW P-Value	0.019 *	0.218	0.242	0.140	0.017 *	0.045 *
	RTE P-Value	0.023 *	0.244	0.215	0.124	0.014 *	0.080
Uterus * Hyperplasia,Endometrium	Simple Incidence	18/49 ( 36.7%)	14/49 ( 28.6%)	17/48 ( 35.4%)	14/49 ( 28.6%)	12/49 ( 24.5%)	10/46 ( 21.7%)
	Poly-K Incidence	18/38.8 ( 46.4%)	14/37.4 ( 37.5%)	17/37.0 ( 46.0%)	14/39.2 ( 35.7%)	12/38.5 ( 31.2%)	10/33.6 ( 29.7%)
	Terminal Incidence	3/11 ( 27.3%)	2/12 ( 16.7%)	4/13 ( 30.8%)	1/13 ( 7.7%)	4/17 ( 23.5%)	5/13 ( 38.5%)
	Time-to-First	259	397	461	448	390	446
	Poly-K P-Value	0.044N*	0.281N	0.580N	0.225N	0.118N	0.103N
	Severity Profile	6 12 0 0	8 6 0 0	7 9 0 1	6 7 1 0	2 10 0 0	1 8 1 0
	JT/SW P-Value	0.087N	0.136N	0.312N	0.230N	0.157N	0.109N
	RTE P-Value	0.093N	0.140N	0.429N	0.182N	0.122N	0.089N
Uterus * Metaplasia,Squamous	Simple Incidence	5/49 ( 10.2%)	1/49 ( 2.0%)	2/48 ( 4.2%)	2/49 ( 4.1%)	4/49 ( 8.2%)	3/46 ( 6.5%)
	Poly-K Incidence	5/33.1 ( 15.1%)	1/31.7 ( 3.2%)	2/30.8 ( 6.5%)	2/34.8 ( 5.8%)	4/36.2 ( 11.1%)	3/32.6 ( 9.2%)
	Terminal Incidence	1/11 ( 9.1%)	0/12 ( 0.0%)	1/13 ( 7.7%)	0/13 ( 0.0%)	1/17 ( 5.9%)	0/13 ( 0.0%)
	Time-to-First	502	474	651	497	447	383
	Poly-K P-Value	0.466N	0.106N	0.240N	0.191N	0.444N	0.361N
	Severity Profile	3 2 0 0	1 0 0 0	1 1 0 0	0 2 0 0	3 1 0 0	3 0 0 0
	JT/SW P-Value	0.483N	0.045N* <sup>1</sup>	0.073N	0.083N	0.155N	0.186N
	RTE P-Value	0.488N	0.045N*	0.119N	0.129N	0.328N	0.214N

**Table 7. Nonneoplasms by Body System for Terminal Sacrifice Females Bisphenol-A Stop Dose Arm**

System and Nonneoplasm	Statistic	Treatment (ug/kg)					
		Control	2.5	25	250	2500	25000
Vagina * Degeneration,Epithelium	Simple Incidence	5/49 ( 10.2%)	4/50 ( 8.0%)	5/47 ( 10.6%)	2/49 ( 4.1%)	5/49 ( 10.2%)	3/46 ( 6.5%)
	Poly-K Incidence	5/32.9 ( 15.2%)	4/32.8 ( 12.2%)	5/31.4 ( 15.9%)	2/33.4 ( 6.0%)	5/36.2 ( 13.8%)	3/31.9 ( 9.4%)
	Terminal Incidence	2/11 ( 18.2%)	1/12 ( 8.3%)	2/13 ( 15.4%)	1/13 ( 7.7%)	2/17 ( 11.8%)	1/13 ( 7.7%)
	Time-to-First	495	446	600	707	390	566
	Poly-K P-Value	0.271N	0.503N	0.605	0.204N	0.572N	0.370N
	Severity Profile	0 1 2 2	0 2 1 1	0 2 1 2	0 0 2 0	0 1 2 2	0 0 3 0
	JT/SW P-Value	0.296N	0.337N	0.503N	0.167N	0.386N	0.340N
	RTE P-Value	0.293N	0.331N	0.478	0.130N	0.500	0.253N
Vagina * Hyperplasia,Epithelium	Simple Incidence	6/49 ( 12.2%)	10/50 ( 20.0%)	3/47 ( 6.4%)	7/49 ( 14.3%)	7/49 ( 14.3%)	7/46 ( 15.2%)
	Poly-K Incidence	6/33.7 ( 17.8%)	10/35.4 ( 28.3%)	3/31.8 ( 9.4%)	7/35.9 ( 19.5%)	7/37.6 ( 18.6%)	7/34.6 ( 20.2%)
	Terminal Incidence	0/11 ( 0.0%)	3/12 ( 25.0%)	1/13 ( 7.7%)	2/13 ( 15.4%)	1/17 ( 5.9%)	1/13 ( 7.7%)
	Time-to-First	492	446	442	461	390	383
	Poly-K P-Value	0.459N	0.224	0.264N	0.551	0.587	0.523
	Severity Profile	0 3 2 1	0 5 4 1	0 1 1 1	0 2 4 1	0 1 5 1	0 0 5 2
	JT/SW P-Value	0.391	0.152	0.508	0.465	0.467	0.391
	RTE P-Value	0.380	0.149	0.219N	0.371	0.359	0.290
Vagina * Infiltration Cellular,Polymorphonuclear	Simple Incidence	8/49 ( 16.3%)	4/50 ( 8.0%)	6/47 ( 12.8%)	3/49 ( 6.1%)	13/49 ( 26.5%)	8/46 ( 17.4%)
	Poly-K Incidence	8/34.6 ( 23.1%)	4/32.9 ( 12.2%)	6/32.0 ( 18.8%)	3/34.2 ( 8.8%)	13/38.1 ( 34.2%)	8/33.6 ( 23.8%)
	Terminal Incidence	1/11 ( 9.1%)	1/12 ( 8.3%)	2/13 ( 15.4%)	1/13 ( 7.7%)	6/17 ( 35.3%)	2/13 ( 15.4%)
	Time-to-First	467	446	570	540	504	446
	Poly-K P-Value	0.136	0.192N	0.446N	0.094N	0.212	0.588
	Severity Profile	1 3 2 2	0 1 2 1	0 2 1 3	0 0 3 0	1 7 3 2	0 3 2 3
	JT/SW P-Value	0.102	0.888	0.760	0.934	0.109	0.291
	RTE P-Value	0.103	0.130N	0.341N	0.085N	0.090	0.413
Vagina * Mucification,Epithelium	Simple Incidence	40/49 ( 81.6%)	46/50 ( 92.0%)	37/47 ( 78.7%)	44/49 ( 89.8%)	39/49 ( 79.6%)	34/46 ( 73.9%)
	Poly-K Incidence	40/45.8 ( 87.3%)	46/48.1 ( 95.6%)	37/42.4 ( 87.2%)	44/47.9 ( 91.9%)	39/44.6 ( 87.5%)	34/39.7 ( 85.6%)
	Terminal Incidence	8/11 ( 72.7%)	11/12 ( 91.7%)	11/13 ( 84.6%)	11/13 ( 84.6%)	15/17 ( 88.2%)	12/13 ( 92.3%)
	Time-to-First	467	339	458	448	470	445
	Poly-K P-Value	0.236N	0.119	0.634N	0.339	0.624	0.541N
	Severity Profile	0 7 12 21	1 7 15 23	0 9 9 19	2 12 12 18	0 8 9 22	1 5 11 17
	JT/SW P-Value	0.123N	0.782N	0.362N	0.406N	0.482N	0.267N
	RTE P-Value	0.127N	0.211	0.305N	0.355N	0.462N	0.198N

**Table 7. Nonneoplasms by Body System for Terminal Sacrifice Females Bisphenol-A Stop Dose Arm**

<b>System and Nonneoplasm</b>		<b>Treatment (ug/kg)</b>					
<b>Lesion</b>	<b>Statistic</b>	<b>Control</b>	<b>2.5</b>	<b>25</b>	<b>250</b>	<b>2500</b>	<b>25000</b>
<b>Hematopoietic System</b>							
Spleen * Hematopoietic Cell Proliferation	Simple Incidence	32/49 (65.3%)	33/50 (66.0%)	29/47 (61.7%)	35/49 (71.4%)	31/49 (63.3%)	32/46 (69.6%)
	Poly-K Incidence	32/42.7 (75.0%)	33/42.6 (77.4%)	29/40.3 (72.0%)	35/44.8 (78.2%)	31/43.5 (71.3%)	32/40.8 (78.4%)
	Terminal Incidence	8/11 (72.7%)	8/12 (66.7%)	9/13 (69.2%)	7/13 (53.8%)	10/17 (58.8%)	9/13 (69.2%)
	Time-to-First	259	446	442	450	447	383
	Poly-K P-Value	0.483	0.497	0.474N	0.457	0.441N	0.450
	Severity Profile	3 10 14 5	3 12 14 4	5 14 5 5	4 13 13 5	2 14 8 7	5 15 7 5
	JT/SW P-Value	0.428N	0.439N	0.167N	0.431N	0.465N	0.475N
	RTE P-Value	0.430N	0.448N	0.144N	0.397	0.380N	0.355N
Spleen * Pigmentation	Simple Incidence	31/49 (63.3%)	34/50 (68.0%)	38/47 (80.9%)	35/49 (71.4%)	32/49 (65.3%)	32/46 (69.6%)
	Poly-K Incidence	31/41.4 (74.9%)	34/43.2 (78.7%)	38/43.3 (87.7%)	35/44.8 (78.1%)	32/43.7 (73.3%)	32/40.7 (78.5%)
	Terminal Incidence	8/11 (72.7%)	10/12 (83.3%)	11/13 (84.6%)	10/13 (76.9%)	11/17 (64.7%)	10/13 (76.9%)
	Time-to-First	385	397	339	448	141	383
	Poly-K P-Value	0.433N	0.431	0.079	0.460	0.533N	0.444
	Severity Profile	5 18 5 3	11 13 3 7	7 21 5 5	8 16 7 4	5 12 10 5	8 12 9 3
	JT/SW P-Value	0.232	0.432	0.071	0.166	0.206	0.248
	RTE P-Value	0.248	0.419	0.069	0.243	0.207	0.273
Thymus * Atrophy	Simple Incidence	48/49 (98.0%)	48/50 (96.0%)	47/48 (97.9%)	47/50 (94.0%)	47/49 (95.9%)	42/46 (91.3%)
	Poly-K Incidence	48/48.7 (98.6%)	48/48.8 (98.3%)	47/47.5 (99.0%)	47/49.6 (94.7%)	47/48.2 (97.6%)	42/43.6 (96.4%)
	Terminal Incidence	11/11 (100.0%)	12/12 (100.0%)	13/13 (100.0%)	11/13 (84.6%)	16/17 (94.1%)	13/13 (100.0%)
	Time-to-First	259	397	339	448	447	393
	Poly-K P-Value	0.173N	0.808N	0.841	0.285N	0.660N	0.489N
	Severity Profile	0 2 9 37	0 1 7 40	0 0 4 43	1 0 6 40	0 0 3 44	0 0 4 38
	JT/SW P-Value	0.135	0.313	0.044 * <sup>1</sup>	0.173	0.046 * <sup>1</sup>	0.135
	RTE P-Value	0.145	0.294	0.038 *	0.312	0.039 *	0.222
<b>Integumentary System</b>							
Mammary Gland * Atypical Focus	Simple Incidence	6/50 (12.0%)	2/50 (4.0%)	6/48 (12.5%)	8/49 (16.3%)	7/50 (14.0%)	5/46 (10.9%)
	Poly-K Incidence	6/33.0 (18.2%)	2/32.0 (6.2%)	6/32.4 (18.5%)	8/36.2 (22.1%)	7/35.8 (19.6%)	5/32.6 (15.3%)
	Terminal Incidence	3/11 (27.3%)	0/12 (0.0%)	3/13 (23.1%)	2/13 (15.4%)	4/17 (23.5%)	2/13 (15.4%)
	Time-to-First	629	593	483	448	582	446
	Poly-K P-Value	0.321	0.134N	0.614	0.458	0.566	0.507N
	Severity Profile	1 4 1 0	0 1 1 0	1 5 0 0	3 4 1 0	0 5 0 2	2 3 0 0
	JT/SW P-Value	0.233	0.924	0.559	0.340	0.410	0.529
	RTE P-Value	0.244	0.117N	0.480	0.271	0.352	0.407N

**Table 7. Nonneoplasms by Body System for Terminal Sacrifice Females Bisphenol-A Stop Dose Arm**

<i>System and Nonneoplasm</i>	<i>Treatment (ug/kg)</i>						
<i>Lesion</i>	<i>Statistic</i>	<i>Control</i>	<i>2.5</i>	<i>25</i>	<i>250</i>	<i>2500</i>	<i>25000</i>
Mammary Gland * Dilatation,Alveolus	Simple Incidence	8/50 ( 16.0%)	4/50 ( 8.0%)	4/48 ( 8.3%)	8/49 ( 16.3%)	3/50 ( 6.0%)	7/46 ( 15.2%)
	Poly-K Incidence	8/34.8 ( 23.0%)	4/33.7 ( 11.9%)	4/30.5 ( 13.1%)	8/34.9 ( 22.9%)	3/35.7 ( 8.4%)	7/34.9 ( 20.1%)
	Terminal Incidence	3/11 ( 27.3%)	0/12 ( 0.0%)	4/13 ( 30.8%)	3/13 ( 23.1%)	1/17 ( 5.9%)	0/13 ( 0.0%)
	Time-to-First	492	397	724 (T)	541	563	383
	Poly-K P-Value	0.402N	0.182N	0.235N	0.611N	0.082N	0.498N
	Severity Profile	0 4 0	0 4 0 0	0 2 2 0	0 6 2 0	1 2 0 0	1 6 0 0
	JT/SW P-Value	0.401N	0.093N	0.116N	0.256N	0.055N	0.216N
	RTE P-Value	0.420N	0.085N	0.110N	0.493N	0.046N*	0.390N
Mammary Gland * Dilatation,Duct	Simple Incidence	16/50 ( 32.0%)	5/50 ( 10.0%)	9/48 ( 18.8%)	9/49 ( 18.4%)	7/50 ( 14.0%)	11/46 ( 23.9%)
	Poly-K Incidence	16/37.0 ( 43.3%)	5/34.5 ( 14.5%)	9/33.7 ( 26.7%)	9/35.3 ( 25.5%)	7/36.4 ( 19.2%)	11/36.2 ( 30.4%)
	Terminal Incidence	5/11 ( 45.5%)	0/12 ( 0.0%)	3/13 ( 23.1%)	3/13 ( 23.1%)	2/17 ( 11.8%)	1/13 ( 7.7%)
	Time-to-First	492	397	442	541	563	383
	Poly-K P-Value	0.186N	0.005N**	0.104N	0.081N	0.019N*	0.174N
	Severity Profile	0 9 4 3	0 5 0 0	2 4 2 1	0 6 3 0	0 6 1 0	0 7 4 0
	JT/SW P-Value	0.228N	0.002N**	0.011N*	0.017N*	0.008N**	0.027N*
	RTE P-Value	0.249N	0.001N**	0.032N*	0.033N*	0.006N**	0.135N
Mammary Gland * Hyperplasia,Lobular	Simple Incidence	41/50 ( 82.0%)	40/50 ( 80.0%)	39/48 ( 81.3%)	39/49 ( 79.6%)	36/50 ( 72.0%)	38/46 ( 82.6%)
	Poly-K Incidence	41/45.5 ( 90.1%)	40/46.1 ( 86.8%)	39/42.7 ( 91.2%)	39/45.0 ( 86.7%)	36/45.4 ( 79.3%)	38/41.6 ( 91.4%)
	Terminal Incidence	9/11 ( 81.8%)	9/12 ( 75.0%)	13/13 (100.0%)	10/13 ( 76.9%)	12/17 ( 70.6%)	12/13 ( 92.3%)
	Time-to-First	467	397	458	448	470	383
	Poly-K P-Value	0.291N	0.421N	0.589	0.419N	0.105N	0.575
	Severity Profile	1 8 15 17	0 8 12 20	3 14 11 11	2 9 13 15	3 5 7 21	2 10 9 17
	JT/SW P-Value	0.357N	0.621N	0.091N	0.201N	0.297N	0.370N
	RTE P-Value	0.378N	0.396	0.088N	0.287N	0.353N	0.443N
<b>Nervous System</b>							
Brain, Brain Stem * Compression	Simple Incidence	15/49 ( 30.6%)	14/50 ( 28.0%)	11/48 ( 22.9%)	11/50 ( 22.0%)	17/50 ( 34.0%)	14/46 ( 30.4%)
	Poly-K Incidence	15/34.3 ( 43.7%)	14/36.4 ( 38.5%)	11/33.4 ( 33.0%)	11/37.5 ( 29.4%)	17/38.2 ( 44.5%)	14/34.6 ( 40.4%)
	Terminal Incidence	6/11 ( 54.5%)	4/12 ( 33.3%)	6/13 ( 46.2%)	1/13 ( 7.7%)	7/17 ( 41.2%)	4/13 ( 30.8%)
	Time-to-First	502	339	442	450	520	445
	Poly-K P-Value	0.512	0.415N	0.243N	0.144N	0.571	0.486N
	Severity Profile	2 7 2 4	2 4 5 3	3 4 2 2	4 1 4 2	5 5 3 4	2 3 7 2
	JT/SW P-Value	0.390	0.583	0.800	0.875	0.509	0.573
	RTE P-Value	0.389	0.410N	0.179N	0.163N	0.391	0.481



**Table 7. Nonneoplasms by Body System for Terminal Sacrifice Females Bisphenol-A Stop Dose Arm**

<b>System and Nonneoplasm</b>	<b>Treatment (ug/kg)</b>						
<b>Lesion</b>	<b>Statistic</b>	<b>Control</b>	<b>2.5</b>	<b>25</b>	<b>250</b>	<b>2500</b>	<b>25000</b>
Brain, Cerebrum * Dilatation, Ventricle	Simple Incidence	5/49 (10.2%)	5/50 (10.0%)	3/48 (6.3%)	2/50 (4.0%)	5/50 (10.0%)	6/46 (13.0%)
	Poly-K Incidence	5/32.3 (15.5%)	5/33.5 (14.9%)	3/32.0 (9.4%)	2/34.9 (5.7%)	5/36.4 (13.7%)	6/33.2 (18.1%)
	Terminal Incidence	1/11 (9.1%)	1/12 (8.3%)	0/13 (0.0%)	0/13 (0.0%)	0/17 (0.0%)	1/13 (7.7%)
	Time-to-First	602	397	510	541	590	445
	Poly-K P-Value	0.462	0.612N	0.358N	0.181N	0.556N	0.519
	Severity Profile	2 3 0 0	4 1 0 0	1 2 0 0	1 0 1 0	2 3 0 0	3 3 0 0
	JT/SW P-Value	0.374	0.540	0.737	0.857	0.653	0.430
	RTE P-Value	0.359	0.462N	0.249N	0.149N	0.486N	0.320
<b>Urinary System</b>							
Kidney * Casts Protein	Simple Incidence	5/49 (10.2%)	5/50 (10.0%)	5/47 (10.6%)	7/49 (14.3%)	5/50 (10.0%)	4/46 (8.7%)
	Poly-K Incidence	5/33.3 (15.0%)	5/32.4 (15.4%)	5/31.3 (16.0%)	7/37.1 (18.9%)	5/35.7 (14.0%)	4/31.8 (12.6%)
	Terminal Incidence	2/11 (18.2%)	1/12 (8.3%)	2/13 (15.4%)	1/13 (7.7%)	2/17 (11.8%)	3/13 (23.1%)
	Time-to-First	495	537	570	461	630	383
	Poly-K P-Value	0.428N	0.617	0.594	0.455	0.589N	0.531N
	Severity Profile	4 1 0 0	4 1 0 0	5 0 0 0	4 2 0 1	3 2 0 0	3 1 0 0
	JT/SW P-Value	0.481N	0.487N	0.583N	0.715N	0.637N	0.543N
	RTE P-Value	0.474N	0.487N	0.487	0.240	0.500	0.410N
Kidney * Cyst, Cortex	Simple Incidence	7/49 (14.3%)	10/50 (20.0%)	9/47 (19.1%)	7/49 (14.3%)	8/50 (16.0%)	5/46 (10.9%)
	Poly-K Incidence	7/33.7 (20.8%)	10/34.8 (28.7%)	9/32.4 (27.7%)	7/35.0 (20.0%)	8/37.9 (21.1%)	5/32.8 (15.3%)
	Terminal Incidence	2/11 (18.2%)	2/12 (16.7%)	4/13 (30.8%)	3/13 (23.1%)	3/17 (17.6%)	1/13 (7.7%)
	Time-to-First	502	411	505	541	390	462
	Poly-K P-Value	0.176N	0.310	0.350	0.588N	0.600	0.395N
Kidney * Cyst, Renal Tubule	Simple Incidence	7/49 (14.3%)	15/50 (30.0%)	11/47 (23.4%)	8/49 (16.3%)	16/50 (32.0%)	11/46 (23.9%)
	Poly-K Incidence	7/33.6 (20.8%)	15/34.9 (43.0%)	11/34.3 (32.1%)	8/36.1 (22.1%)	16/39.6 (40.4%)	11/34.4 (32.0%)
	Terminal Incidence	2/11 (18.2%)	6/12 (50.0%)	2/13 (15.4%)	3/13 (23.1%)	8/17 (47.1%)	4/13 (30.8%)
	Time-to-First	509	474	339	461	141	446
	Poly-K P-Value	0.283	0.036 *	0.212	0.564	0.054	0.216
Kidney * Hyperplasia, Transitional Epithelium	Simple Incidence	5/49 (10.2%)	6/50 (12.0%)	2/47 (4.3%)	5/49 (10.2%)	4/50 (8.0%)	8/46 (17.4%)
	Poly-K Incidence	5/32.4 (15.4%)	6/32.4 (18.5%)	2/30.6 (6.5%)	5/34.1 (14.7%)	4/35.6 (11.2%)	8/32.1 (24.9%)
	Terminal Incidence	1/11 (9.1%)	3/12 (25.0%)	1/13 (7.7%)	4/13 (30.8%)	2/17 (11.8%)	3/13 (23.1%)
	Time-to-First	514	561	540	541	568	621
	Poly-K P-Value	0.287	0.499	0.233N	0.602N	0.441N	0.257
	Severity Profile	4 1 0 0	6 0 0 0	2 0 0 0	3 2 0 0	4 0 0 0	2 5 0 1
	JT/SW P-Value	0.190	0.404	0.730	0.604	0.717	0.129
	RTE P-Value	0.175	0.401	0.160N	0.487	0.351N	0.101

**Table 7. Nonneoplasms by Body System for Terminal Sacrifice Females Bisphenol-A Stop Dose Arm**

<i>System and Nonneoplasm</i>	<i>Treatment (ug/kg)</i>						
<i>Lesion</i>	<i>Statistic</i>	<i>Control</i>	<i>2.5</i>	<i>25</i>	<i>250</i>	<i>2500</i>	<i>25000</i>
Kidney * Mineralization	Simple Incidence	28/49 ( 57.1%)	22/50 ( 44.0%)	28/47 ( 59.6%)	26/49 ( 53.1%)	23/50 ( 46.0%)	23/46 ( 50.0%)
	Poly-K Incidence	28/40.7 ( 68.8%)	22/39.1 ( 56.2%)	28/38.9 ( 72.0%)	26/42.4 ( 61.3%)	23/42.4 ( 54.3%)	23/39.1 ( 58.9%)
	Terminal Incidence	8/11 ( 72.7%)	5/12 ( 41.7%)	10/13 ( 76.9%)	7/13 ( 53.8%)	5/17 ( 29.4%)	8/13 ( 61.5%)
	Time-to-First	467	446	339	448	447	393
	Poly-K P-Value	0.132N	0.156N	0.473	0.301N	0.113N	0.227N
	Severity Profile	20 7 0 1	14 7 1 0	18 9 0 1	17 8 1 0	11 9 3 0	13 9 1 0
	JT/SW P-Value	0.481N	0.146N	0.445N	0.489N	0.440N	0.485N
	RTE P-Value	0.478N	0.158N	0.344	0.414N	0.337N	0.388N
Kidney * Nephropathy	Simple Incidence	28/49 ( 57.1%)	25/50 ( 50.0%)	25/47 ( 53.2%)	29/49 ( 59.2%)	33/50 ( 66.0%)	30/46 ( 65.2%)
	Poly-K Incidence	28/39.2 ( 71.4%)	25/41.3 ( 60.5%)	25/38.4 ( 65.1%)	29/40.9 ( 71.0%)	33/43.3 ( 76.3%)	30/39.9 ( 75.1%)
	Terminal Incidence	7/11 ( 63.6%)	6/12 ( 50.0%)	6/13 ( 46.2%)	8/13 ( 61.5%)	14/17 ( 82.4%)	9/13 ( 69.2%)
	Time-to-First	259	400	442	485	447	446
	Poly-K P-Value	0.094	0.190N	0.347N	0.588N	0.390	0.449
	Severity Profile	17 8 1 2	16 4 2 3	17 3 5 0	22 5 1 1	15 11 3 4	10 11 6 3
	JT/SW P-Value	0.006 **	0.741	0.771	0.719	0.105	0.056
	RTE P-Value	0.006 **	0.276N	0.324N	0.392N	0.083	0.041 *

P-values for dose trend are presented in the "Control" column.

N indicates a negative trend or negative treatment comparison to control with corresponding lower-tail p-values.

<sup>1</sup> Nonsignificant SW test due to the assumption of monotonicity.

**Table 8. Nonneoplasms by Body System for Terminal Sacrifice Males Bisphenol-A Stop Dose Arm**

<b>System and Nonneoplasm</b>		<b>Treatment (ug/kg)</b>						
		<b>Statistic</b>	<b>Control</b>	<b>2.5</b>	<b>25</b>	<b>250</b>	<b>2500</b>	<b>25000</b>
<b>Lesion</b>								
<b>Alimentary System</b>								
Liver * Angiectasis	Simple Incidence	3/50 ( 6.0%)	4/48 ( 8.3%)	8/48 ( 16.7%)	5/50 ( 10.0%)	4/50 ( 8.0%)	3/46 ( 6.5%)	
	Poly-K Incidence	3/37.3 ( 8.0%)	4/34.6 ( 11.5%)	8/36.1 ( 22.2%)	5/31.5 ( 15.9%)	4/36.5 ( 11.0%)	3/28.7 ( 10.5%)	
	Terminal Incidence	1/17 ( 5.9%)	2/16 ( 12.5%)	2/16 ( 12.5%)	3/13 ( 23.1%)	2/15 ( 13.3%)	1/9 ( 11.1%)	
	Time-to-First	666	395	638	558	631	445	
	Poly-K P-Value	0.448	0.459	0.082	0.263	0.488	0.537	
	Severity Profile	0 2 0 1	1 2 1 0	2 6 0 0	0 5 0 0	0 3 1 0	1 2 0 0	
	JT/SW P-Value	0.444N	0.661N	0.907N	0.849N	0.771N	0.661N	
	RTE P-Value	0.432N	0.357	0.047 *	0.255	0.367	0.488	
Liver * Basophilic Focus	Simple Incidence	9/50 ( 18.0%)	4/48 ( 8.3%)	5/48 ( 10.4%)	9/50 ( 18.0%)	11/50 ( 22.0%)	5/46 ( 10.9%)	
	Poly-K Incidence	9/38.0 ( 23.7%)	4/34.8 ( 11.5%)	5/35.6 ( 14.0%)	9/32.7 ( 27.5%)	11/38.0 ( 29.0%)	5/28.4 ( 17.6%)	
	Terminal Incidence	3/17 ( 17.6%)	2/16 ( 12.5%)	2/16 ( 12.5%)	4/13 ( 30.8%)	4/15 ( 26.7%)	1/9 ( 11.1%)	
	Time-to-First	621	395	539	443	482	641	
	Poly-K P-Value	0.242	0.143N	0.221N	0.460	0.395	0.385N	
Liver * Clear Cell Focus	Simple Incidence	7/50 ( 14.0%)	9/48 ( 18.8%)	11/48 ( 22.9%)	10/50 ( 20.0%)	10/50 ( 20.0%)	7/46 ( 15.2%)	
	Poly-K Incidence	7/38.3 ( 18.3%)	9/34.2 ( 26.3%)	11/37.4 ( 29.4%)	10/33.2 ( 30.1%)	10/36.0 ( 27.7%)	7/28.4 ( 24.6%)	
	Terminal Incidence	4/17 ( 23.5%)	7/16 ( 43.8%)	5/16 ( 31.3%)	5/13 ( 38.5%)	8/15 ( 53.3%)	5/9 ( 55.6%)	
	Time-to-First	483	608	489	443	700	539	
	Poly-K P-Value	0.241	0.291	0.188	0.181	0.240	0.372	
Liver * Degeneration,Cystic	Simple Incidence	28/50 ( 56.0%)	24/48 ( 50.0%)	25/48 ( 52.1%)	20/50 ( 40.0%)	30/50 ( 60.0%)	18/46 ( 39.1%)	
	Poly-K Incidence	28/42.3 ( 66.2%)	24/39.1 ( 61.4%)	25/40.6 ( 61.6%)	20/38.1 ( 52.6%)	30/41.3 ( 72.7%)	18/31.1 ( 57.8%)	
	Terminal Incidence	11/17 ( 64.7%)	11/16 ( 68.8%)	9/16 ( 56.3%)	7/13 ( 53.8%)	10/15 ( 66.7%)	6/9 ( 66.7%)	
	Time-to-First	448	395	477	343	482	474	
	Poly-K P-Value	0.461N	0.404N	0.411N	0.135N	0.332	0.297N	
	Severity Profile	13 14 1 0	15 7 0 2	11 10 2 2	14 5 0 1	12 17 1 0	5 11 2 0	
	JT/SW P-Value	0.286N	0.191N	0.371N	0.032N* <sup>1</sup>	0.327N	0.161N	
	RTE P-Value	0.275N	0.202N	0.440N	0.030N*	0.295	0.119N	
Liver * Fatty Change	Simple Incidence	5/50 ( 10.0%)	2/48 ( 4.2%)	7/48 ( 14.6%)	6/50 ( 12.0%)	1/50 ( 2.0%)	1/46 ( 2.2%)	
	Poly-K Incidence	5/38.9 ( 12.9%)	2/34.4 ( 5.8%)	7/36.2 ( 19.3%)	6/33.4 ( 17.9%)	1/36.2 ( 2.8%)	1/28.1 ( 3.6%)	
	Terminal Incidence	0/17 ( 0.0%)	0/16 ( 0.0%)	2/16 ( 12.5%)	0/13 ( 0.0%)	0/15 ( 0.0%)	0/9 ( 0.0%)	
	Time-to-First	552	529	516	343	631	507	
	Poly-K P-Value	0.128N	0.265N	0.326	0.393	0.116N	0.192N	
	Severity Profile	1 3 1 0	0 0 0 2	2 2 1 2	2 1 1 2	0 0 0 1	0 0 0 1	
	JT/SW P-Value	0.071N	0.150N	0.562N	0.658N	0.111N	0.105N	
	RTE P-Value	0.070N	0.187N	0.168	0.341	0.085N	0.096N	

**Table 8. Nonneoplasms by Body System for Terminal Sacrifice Males Bisphenol-A Stop Dose Arm**

<i>System and Nonneoplasm</i>	<i>Treatment (ug/kg)</i>						
<i>Lesion</i>	<i>Statistic</i>	<i>Control</i>	<i>2.5</i>	<i>25</i>	<i>250</i>	<i>2500</i>	<i>25000</i>
Liver * Fibrosis,Biliary Tract	Simple Incidence	24/50 ( 48.0%)	19/48 ( 39.6%)	20/48 ( 41.7%)	12/50 ( 24.0%)	17/50 ( 34.0%)	18/46 ( 39.1%)
	Poly-K Incidence	24/40.4 ( 59.5%)	19/36.5 ( 52.1%)	20/38.4 ( 52.1%)	12/35.3 ( 34.0%)	17/38.2 ( 44.5%)	18/31.4 ( 57.3%)
	Terminal Incidence	10/17 ( 58.8%)	11/16 ( 68.8%)	9/16 ( 56.3%)	2/13 ( 15.4%)	7/15 ( 46.7%)	6/9 ( 66.7%)
	Time-to-First	555	516	495	468	507	487
	Poly-K P-Value	0.157N	0.327N	0.324N	0.017N*	0.121N	0.525N
	Severity Profile	14 10 0 0	11 8 0 0	14 5 1 0	9 3 0 0	12 5 0 0	11 7 0 0
	JT/SW P-Value	0.065N	0.214N	0.255N	0.005N** 1	0.021N* 1	0.056N
	RTE P-Value	0.068N	0.197N	0.212N	0.005N**	0.050N*	0.169N
Liver * Hepatodiaphragmatic Nodule	Simple Incidence	3/50 ( 6.0%)	3/48 ( 6.3%)	1/48 ( 2.1%)	5/50 ( 10.0%)	4/50 ( 8.0%)	5/46 ( 10.9%)
	Poly-K Incidence	3/37.6 ( 8.0%)	3/34.3 ( 8.7%)	1/35.2 ( 2.8%)	5/33.1 ( 15.1%)	4/37.7 ( 10.6%)	5/28.8 ( 17.4%)
	Terminal Incidence	2/17 ( 11.8%)	1/16 ( 6.3%)	0/16 ( 0.0%)	1/13 ( 7.7%)	0/15 ( 0.0%)	2/9 ( 22.2%)
	Time-to-First	448	575	607	399	517	558
	Poly-K P-Value	0.102	0.621	0.328N	0.284	0.501	0.217
Liver * Hyperplasia,Bile Duct	Simple Incidence	19/50 ( 38.0%)	20/48 ( 41.7%)	19/48 ( 39.6%)	12/50 ( 24.0%)	20/50 ( 40.0%)	13/46 ( 28.3%)
	Poly-K Incidence	19/39.5 ( 48.1%)	20/38.8 ( 51.6%)	19/38.9 ( 48.8%)	12/34.0 ( 35.3%)	20/40.3 ( 49.6%)	13/30.0 ( 43.3%)
	Terminal Incidence	10/17 ( 58.8%)	9/16 ( 56.3%)	9/16 ( 56.3%)	6/13 ( 46.2%)	7/15 ( 46.7%)	5/9 ( 55.6%)
	Time-to-First	554	435	495	443	465	492
	Poly-K P-Value	0.298N	0.465	0.565	0.182N	0.535	0.438N
	Severity Profile	11 6 2 0	7 9 3 1	6 10 3 0	6 5 1 0	10 5 5 0	1 8 2 2
	JT/SW P-Value	0.233N	0.770N	0.787N	0.123N	0.434N	0.460N
	RTE P-Value	0.226N	0.238	0.311	0.099N	0.344	0.362N
Liver * Hyperplasia,Oval Cell	Simple Incidence	3/50 ( 6.0%)	1/48 ( 2.1%)	5/48 ( 10.4%)	0/50 ( 0.0%)	1/50 ( 2.0%)	3/46 ( 6.5%)
	Poly-K Incidence	3/37.2 ( 8.1%)	1/33.7 ( 3.0%)	5/35.6 ( 14.0%)	0/30.8 ( 0.0%)	1/35.8 ( 2.8%)	3/28.3 ( 10.6%)
	Terminal Incidence	2/17 ( 11.8%)	0/16 ( 0.0%)	2/16 ( 12.5%)	0/13 ( 0.0%)	1/15 ( 6.7%)	0/9 ( 0.0%)
	Time-to-First	616	660	552	----	727 (T)	492
	Poly-K P-Value	0.435N	0.340N	0.329	0.155N	0.317N	0.531
	Severity Profile	1 2 0 0	0 0 0 1	3 2 0 0	---	1 0 0 0	1 2 0 0
	JT/SW P-Value	0.348N	0.173N	0.603N	0.095N	0.132N	0.295N
	RTE P-Value	0.368N	0.196N	0.126	0.070N	0.131N	0.450
Liver * Infiltration Cellular,Mononuclear Cell	Simple Incidence	34/50 ( 68.0%)	40/48 ( 83.3%)	37/48 ( 77.1%)	33/50 ( 66.0%)	33/50 ( 66.0%)	29/46 ( 63.0%)
	Poly-K Incidence	34/43.3 ( 78.6%)	40/44.0 ( 90.9%)	37/43.7 ( 84.8%)	33/41.6 ( 79.4%)	33/42.3 ( 78.1%)	29/37.0 ( 78.4%)
	Terminal Incidence	15/17 ( 88.2%)	16/16 ( 100.0%)	14/16 ( 87.5%)	11/13 ( 84.6%)	12/15 ( 80.0%)	7/9 ( 77.8%)
	Time-to-First	483	349	477	403	482	445
	Poly-K P-Value	0.164N	0.064	0.300	0.580	0.591N	0.611N
	Severity Profile	19 15 0 0	27 13 0 0	19 18 0 0	26 7 0 0	23 10 0 0	15 13 1 0
	JT/SW P-Value	0.073N	0.790N	0.892N	0.138N	0.206N	0.312N
	RTE P-Value	0.073N	0.198	0.132	0.119N	0.215N	0.400N

**Table 8. Nonneoplasms by Body System for Terminal Sacrifice Males Bisphenol-A Stop Dose Arm**

<i>System and Nonneoplasm</i>	<i>Lesion</i>	<i>Statistic</i>	<i>Treatment (ug/kg)</i>				
			<i>Control</i>	<i>2.5</i>	<i>25</i>	<i>250</i>	<i>2500</i>
Liver * Vacuolization Cytoplasmic	Simple Incidence	14/50 (28.0%)	9/48 (18.8%)	17/48 (35.4%)	12/50 (24.0%)	12/50 (24.0%)	13/46 (28.3%)
	Poly-K Incidence	14/38.7 (36.2%)	9/34.1 (26.4%)	17/39.2 (43.4%)	12/33.7 (35.6%)	12/39.0 (30.7%)	13/33.3 (39.1%)
	Terminal Incidence	9/17 (52.9%)	7/16 (43.8%)	7/16 (43.8%)	6/13 (46.2%)	5/15 (33.3%)	3/9 (33.3%)
	Time-to-First	483	558	404	474	482	121
	Poly-K P-Value	0.449	0.254N	0.332	0.579N	0.393N	0.495
	Severity Profile	4 9 1 0	3 4 2 0	5 12 0 0	6 5 1 0	6 6 0 0	9 4 0 0
	JT/SW P-Value	0.373N	0.152N	0.534N	0.355N	0.349N	0.408N
	RTE P-Value	0.383N	0.155N	0.212	0.273N	0.262N	0.375N
Pancreas * Basophilic Focus	Simple Incidence	1/47 (2.1%)	1/46 (2.2%)	4/47 (8.5%)	2/49 (4.1%)	0/50 (0.0%)	1/44 (2.3%)
	Poly-K Incidence	1/35.5 (2.8%)	1/32.1 (3.1%)	4/34.0 (11.8%)	2/31.4 (6.4%)	0/35.8 (0.0%)	1/27.5 (3.6%)
	Terminal Incidence	1/17 (5.9%)	1/16 (6.3%)	4/16 (25.0%)	0/13 (0.0%)	0/15 (0.0%)	0/9 (0.0%)
	Time-to-First	726 (T)	725 (T)	724 (T)	443	----	600
	Poly-K P-Value	0.409N	0.739	0.162	0.457	0.498N	0.702
	Pancreas * Degeneration,Acinus	Simple Incidence	41/47 (87.2%)	38/46 (82.6%)	34/47 (72.3%)	41/49 (83.7%)	41/50 (82.0%)
Poly-K Incidence		41/45.1 (90.9%)	38/43.0 (88.5%)	34/43.6 (77.9%)	41/46.6 (88.1%)	41/45.6 (89.9%)	34/39.0 (87.3%)
Terminal Incidence		17/17 (100.0%)	14/16 (87.5%)	13/16 (81.3%)	11/13 (84.6%)	14/15 (93.3%)	9/9 (100.0%)
Time-to-First		392	349	393	343	432	358
Poly-K P-Value		0.472N	0.486N	0.059N	0.451N	0.581N	0.414N
Severity Profile		8 10 15 8	8 10 13 7	4 15 9 6	9 18 9 5	9 18 9 5	9 11 9 5
JT/SW P-Value		0.028N*	0.273N	0.072N	0.081N	0.071N	0.053N
RTE P-Value		0.031N*	0.264N	0.053N	0.078N	0.058N	0.044N*
Pancreas * Infiltration Cellular,Lymphocyte	Simple Incidence	37/47 (78.7%)	35/46 (76.1%)	32/47 (68.1%)	37/49 (75.5%)	40/50 (80.0%)	32/44 (72.7%)
	Poly-K Incidence	37/44.1 (83.9%)	35/41.4 (84.6%)	32/41.6 (77.0%)	37/44.1 (83.8%)	40/45.8 (87.3%)	32/39.4 (81.3%)
	Terminal Incidence	15/17 (88.2%)	13/16 (81.3%)	13/16 (81.3%)	11/13 (84.6%)	13/15 (86.7%)	7/9 (77.8%)
	Time-to-First	392	349	477	343	432	358
	Poly-K P-Value	0.495	0.594	0.276N	0.619N	0.432	0.485N
	Severity Profile	11 20 6 0	11 19 5 0	13 12 7 0	14 23 0 0	16 21 2 1	15 12 5 0
	JT/SW P-Value	0.122N	0.353N	0.142N	0.141N	0.195N	0.132N
	RTE P-Value	0.119N	0.352N	0.103N	0.120N	0.263N	0.104N
Pancreas * Lipomatosis	Simple Incidence	13/47 (27.7%)	9/46 (19.6%)	15/47 (31.9%)	9/49 (18.4%)	10/50 (20.0%)	13/44 (29.5%)
	Poly-K Incidence	13/38.0 (34.2%)	9/33.4 (27.0%)	15/36.2 (41.5%)	9/33.3 (27.0%)	10/37.4 (26.8%)	13/30.8 (42.2%)
	Terminal Incidence	6/17 (35.3%)	5/16 (31.3%)	6/16 (37.5%)	3/13 (23.1%)	3/15 (20.0%)	3/9 (33.3%)
	Time-to-First	552	558	477	506	602	474
	Poly-K P-Value	0.438	0.339N	0.339	0.342N	0.321N	0.330
	Severity Profile	0 5 5 3	0 2 5 2	0 4 9 2	0 5 3 1	0 2 4 4	0 4 6 3
	JT/SW P-Value	0.474N	0.203N	0.518N	0.156N	0.228N	0.395N
	RTE P-Value	0.498	0.206N	0.312	0.133N	0.238N	0.401

**Table 8. Nonneoplasms by Body System for Terminal Sacrifice Males Bisphenol-A Stop Dose Arm**

<i>System and Nonneoplasm</i>		<i>Treatment (ug/kg)</i>					
<i>Lesion</i>	<i>Statistic</i>	<i>Control</i>	<i>2.5</i>	<i>25</i>	<i>250</i>	<i>2500</i>	<i>25000</i>
Pancreas * Pigmentation	Simple Incidence	23/47 ( 48.9%)	33/46 ( 71.7%)	20/47 ( 42.6%)	28/49 ( 57.1%)	23/50 ( 46.0%)	21/44 ( 47.7%)
	Poly-K Incidence	23/41.4 ( 55.5%)	33/42.3 ( 78.0%)	20/40.6 ( 49.3%)	28/43.1 ( 65.0%)	23/41.6 ( 55.3%)	21/34.7 ( 60.5%)
	Terminal Incidence	8/17 ( 47.1%)	12/16 ( 75.0%)	8/16 ( 50.0%)	6/13 ( 46.2%)	9/15 ( 60.0%)	3/9 ( 33.3%)
	Time-to-First	392	349	393	343	432	358
	Poly-K P-Value	0.312N	0.018 *	0.360N	0.241	0.581N	0.417
	Severity Profile	20 3 0 0	23 10 0 0	15 5 0 0	24 3 1 0	16 7 0 0	12 9 0 0
	JT/SW P-Value	0.289N	0.996N	0.453N	0.722N	0.694N	0.765N
	RTE P-Value	0.288N	0.005 **	0.379N	0.218	0.447	0.284
Pancreas * Polyarteritis	Simple Incidence	0/47 ( 0.0%)	1/46 ( 2.2%)	1/47 ( 2.1%)	2/49 ( 4.1%)	5/50 ( 10.0%)	2/44 ( 4.5%)
	Poly-K Incidence	0/35.5 ( 0.0%)	1/32.1 ( 3.1%)	1/34.6 ( 2.9%)	2/31.6 ( 6.3%)	5/37.9 ( 13.2%)	2/28.3 ( 7.1%)
	Terminal Incidence	0/17 ( 0.0%)	1/16 ( 6.3%)	0/16 ( 0.0%)	0/13 ( 0.0%)	1/15 ( 6.7%)	0/9 ( 0.0%)
	Time-to-First	----	726 (T)	512	497	432	474
	Poly-K P-Value	0.013 *	0.480	0.495	0.211	0.035 *	0.189
	Severity Profile	---	0 0 0 1	1 0 0 0	1 0 0 1	1 2 1 1	1 0 0 1
	JT/SW P-Value	0.018 *	0.156	0.228	0.104	0.006 **	0.042 *
	RTE P-Value	0.025 *	0.289	0.301	0.121	0.007 **	0.153
<b>Cardiovascular System</b>							
Blood Vessel * Mineralization	Simple Incidence	8/50 ( 16.0%)	2/48 ( 4.2%)	6/48 ( 12.5%)	4/50 ( 8.0%)	7/50 ( 14.0%)	4/46 ( 8.7%)
	Poly-K Incidence	8/39.0 ( 20.5%)	2/34.1 ( 5.9%)	6/37.3 ( 16.1%)	4/32.1 ( 12.5%)	7/38.3 ( 18.3%)	4/28.0 ( 14.3%)
	Terminal Incidence	1/17 ( 5.9%)	1/16 ( 6.3%)	0/16 ( 0.0%)	2/13 ( 15.4%)	0/15 ( 0.0%)	1/9 ( 11.1%)
	Time-to-First	574	481	477	498	517	593
	Poly-K P-Value	0.521N	0.067N	0.419N	0.280N	0.517N	0.371N
	Severity Profile	0 0 1 7	0 0 0 2	0 1 2 3	1 1 0 2	0 1 1 5	1 0 0 3
	JT/SW P-Value	0.356N	0.028N* <sup>1</sup>	0.122N	0.100N	0.187N	0.151N
	RTE P-Value	0.359N	0.027N*	0.259N	0.074N	0.356N	0.108N
Heart * Cardiomyopathy	Simple Incidence	45/50 ( 90.0%)	44/48 ( 91.7%)	45/48 ( 93.8%)	48/50 ( 96.0%)	47/50 ( 94.0%)	41/46 ( 89.1%)
	Poly-K Incidence	45/48.1 ( 93.5%)	44/45.7 ( 96.3%)	45/46.0 ( 97.9%)	48/48.9 ( 98.2%)	47/47.4 ( 99.1%)	41/41.7 ( 98.2%)
	Terminal Incidence	16/17 ( 94.1%)	16/16 ( 100.0%)	16/16 ( 100.0%)	13/13 ( 100.0%)	15/15 ( 100.0%)	9/9 ( 100.0%)
	Time-to-First	47	349	404	343	432	445
	Poly-K P-Value	0.022 *	0.433	0.261	0.217	0.142	0.243
	Severity Profile	8 20 11 6	13 18 7 6	10 16 12 7	15 21 10 2	12 13 12 10	9 16 10 6
	JT/SW P-Value	0.371	0.787	0.408	0.750	0.342	0.535
	RTE P-Value	0.372	0.219N	0.343	0.153N	0.258	0.428N

**Table 8. Nonneoplasms by Body System for Terminal Sacrifice Males Bisphenol-A Stop Dose Arm**

System and Nonneoplasm	Lesion	Statistic	Treatment (ug/kg)				
			Control	2.5	25	250	2500
Heart * Mineralization	Simple Incidence	9/50 ( 18.0%)	1/48 ( 2.1%)	6/48 ( 12.5%)	2/50 ( 4.0%)	7/50 ( 14.0%)	4/46 ( 8.7%)
	Poly-K Incidence	9/39.6 ( 22.7%)	1/34.1 ( 2.9%)	6/37.3 ( 16.1%)	2/32.1 ( 6.2%)	7/38.3 ( 18.3%)	4/28.7 ( 13.9%)
	Terminal Incidence	1/17 ( 5.9%)	0/16 ( 0.0%)	0/16 ( 0.0%)	0/13 ( 0.0%)	0/15 ( 0.0%)	0/9 ( 0.0%)
	Time-to-First	555	481	477	498	517	480
	Poly-K P-Value	0.398N	0.014N*	0.325N	0.053N	0.419N	0.274N
	Severity Profile	0 1 3 5	0 0 0 1	0 1 3 2	0 1 0 1	0 1 1 5	0 1 1 2
	JT/SW P-Value	0.287N	0.005N** 1	0.050N	0.008N** 1	0.065N	0.071N
	RTE P-Value	0.294N	0.006N**	0.164N	0.009N**	0.259N	0.064N
<b>Endocrine System</b>							
Adrenal Cortex * Hyperplasia	Simple Incidence	5/47 ( 10.6%)	7/47 ( 14.9%)	6/48 ( 12.5%)	4/49 ( 8.2%)	5/50 ( 10.0%)	4/44 ( 9.1%)
	Poly-K Incidence	5/35.5 ( 14.1%)	7/34.1 ( 20.5%)	6/35.4 ( 16.9%)	4/31.4 ( 12.7%)	5/36.1 ( 13.9%)	4/28.1 ( 14.2%)
	Terminal Incidence	4/17 ( 23.5%)	3/16 ( 18.8%)	4/16 ( 25.0%)	2/13 ( 15.4%)	4/15 ( 26.7%)	0/9 ( 0.0%)
	Time-to-First	714	575	587	573	664	539
	Poly-K P-Value	0.359N	0.345	0.498	0.579N	0.624N	0.633
	Severity Profile	4 1 0 0	1 5 1 0	0 4 2 0	2 2 0 0	2 3 0 0	3 0 1 0
	JT/SW P-Value	0.238N	0.779N	0.764N	0.474N	0.556N	0.559N
	RTE P-Value	0.238N	0.215	0.321	0.370N	0.486N	0.423N
Adrenal Cortex * Hypertrophy	Simple Incidence	2/47 ( 4.3%)	2/47 ( 4.3%)	0/48 ( 0.0%)	4/49 ( 8.2%)	3/50 ( 6.0%)	2/44 ( 4.5%)
	Poly-K Incidence	2/36.0 ( 5.5%)	2/33.3 ( 6.0%)	0/34.8 ( 0.0%)	4/32.0 ( 12.5%)	3/36.3 ( 8.3%)	2/27.6 ( 7.2%)
	Terminal Incidence	1/17 ( 5.9%)	1/16 ( 6.3%)	0/16 ( 0.0%)	1/13 ( 7.7%)	1/15 ( 6.7%)	0/9 ( 0.0%)
	Time-to-First	552	516	----	474	624	600
	Poly-K P-Value	0.245	0.667	0.244N	0.281	0.503	0.595
	Severity Profile	1 0 0 1	2 0 0 0	---	1 2 1 0	1 2 0 0	1 1 0 0
	JT/SW P-Value	0.270	0.509	0.822	0.216	0.336	0.434
	RTE P-Value	0.281	0.487N	0.164N	0.202	0.344	0.479
Adrenal Cortex * Vacuolization Cytoplasmic	Simple Incidence	21/47 ( 44.7%)	20/47 ( 42.6%)	19/48 ( 39.6%)	18/49 ( 36.7%)	18/50 ( 36.0%)	20/44 ( 45.5%)
	Poly-K Incidence	21/40.4 ( 52.0%)	20/36.3 ( 55.2%)	19/39.2 ( 48.5%)	18/36.3 ( 49.6%)	18/39.4 ( 45.7%)	20/33.5 ( 59.7%)
	Terminal Incidence	9/17 ( 52.9%)	12/16 ( 75.0%)	9/16 ( 56.3%)	7/13 ( 53.8%)	7/15 ( 46.7%)	5/9 ( 55.6%)
	Time-to-First	448	481	489	403	507	445
	Poly-K P-Value	0.486	0.479	0.465N	0.509N	0.364N	0.325
	Severity Profile	5 12 4 0	2 14 4 0	7 11 0 1	3 11 4 0	7 10 1 0	3 14 3 0
	JT/SW P-Value	0.314N	0.505N	0.248N	0.300N	0.157N	0.359N
	RTE P-Value	0.335N	0.499	0.209N	0.259N	0.119N	0.441

**Table 8. Nonneoplasms by Body System for Terminal Sacrifice Males Bisphenol-A Stop Dose Arm**

<i>System and Nonneoplasm</i>	<i>Treatment (ug/kg)</i>						
<i>Lesion</i>	<i>Statistic</i>	<i>Control</i>	<i>2.5</i>	<i>25</i>	<i>250</i>	<i>2500</i>	<i>25000</i>
Adrenal Medulla * Hyperplasia	Simple Incidence	8/47 (17.0%)	9/46 (19.6%)	10/48 (20.8%)	7/49 (14.3%)	17/50 (34.0%)	11/44 (25.0%)
	Poly-K Incidence	8/36.5 (21.9%)	9/33.9 (26.6%)	10/37.5 (26.7%)	7/31.0 (22.6%)	17/38.6 (44.1%)	11/28.4 (38.8%)
	Terminal Incidence	4/17 (23.5%)	3/16 (18.8%)	3/16 (18.8%)	5/13 (38.5%)	8/15 (53.3%)	3/9 (33.3%)
	Time-to-First	605	589	534	632	517	539
	Poly-K P-Value	0.016 *	0.427	0.416	0.591	0.030 *	0.108
	Severity Profile	2 5 1 0	4 3 1 1	6 1 2 1	2 4 1 0	8 5 1 3	3 7 0 1
	JT/SW P-Value	0.059	0.390	0.412	0.569	0.029 * <sup>1</sup>	0.099
	RTE P-Value	0.066	0.399	0.360	0.369N	0.025 *	0.182
Parathyroid Gland * Hyperplasia	Simple Incidence	22/49 (44.9%)	17/46 (37.0%)	27/46 (58.7%)	23/49 (46.9%)	30/50 (60.0%)	23/43 (53.5%)
	Poly-K Incidence	22/41.9 (52.5%)	17/36.6 (46.4%)	27/39.4 (68.6%)	23/38.0 (60.5%)	30/44.1 (68.0%)	23/34.1 (67.4%)
	Terminal Incidence	6/16 (37.5%)	8/16 (50.0%)	9/16 (56.3%)	7/13 (53.8%)	7/15 (46.7%)	5/9 (55.6%)
	Time-to-First	392	395	477	403	432	445
	Poly-K P-Value	0.018 *	0.374N	0.092	0.301	0.095	0.127
	Severity Profile	1 8 7 6	2 10 0 5	4 15 5 3	8 8 5 2	3 12 6 9	7 7 5 4
	JT/SW P-Value	0.122	0.863	0.344	0.643	0.120	0.314
	RTE P-Value	0.131	0.119N	0.285	0.232N	0.090	0.464
Pituitary Gland * Angiectasis	Simple Incidence	14/46 (30.4%)	6/48 (12.5%)	7/48 (14.6%)	9/49 (18.4%)	10/50 (20.0%)	6/43 (14.0%)
	Poly-K Incidence	14/37.1 (37.7%)	6/34.8 (17.2%)	7/35.5 (19.7%)	9/32.1 (28.1%)	10/37.4 (26.8%)	6/29.3 (20.5%)
	Terminal Incidence	7/17 (41.2%)	2/16 (12.5%)	3/16 (18.8%)	6/13 (46.2%)	4/15 (26.7%)	1/9 (11.1%)
	Time-to-First	554	555	667	558	555	465
	Poly-K P-Value	0.194N	0.042N*	0.070N	0.272N	0.217N	0.101N
	Severity Profile	0 2 3 9	0 1 0 5	0 0 0 7	0 0 1 8	0 0 1 9	0 0 1 5
	JT/SW P-Value	0.163N	0.021N* <sup>1</sup>	0.030N* <sup>1</sup>	0.050N* <sup>1</sup>	0.073N	0.039N*
	RTE P-Value	0.147N	0.020N*	0.036N*	0.089N	0.131N	0.029N*
Pituitary Gland * Cyst,Pars Distalis	Simple Incidence	4/46 (8.7%)	6/48 (12.5%)	5/48 (10.4%)	10/49 (20.4%)	11/50 (22.0%)	5/43 (11.6%)
	Poly-K Incidence	4/35.8 (11.2%)	6/34.7 (17.3%)	5/35.1 (14.3%)	10/33.6 (29.7%)	11/38.6 (28.5%)	5/29.1 (17.2%)
	Terminal Incidence	1/17 (5.9%)	4/16 (25.0%)	4/16 (25.0%)	2/13 (15.4%)	6/15 (40.0%)	1/9 (11.1%)
	Time-to-First	555	449	648	468	426	537
	Poly-K P-Value	0.056	0.346	0.487	0.047 *	0.053	0.369
Pituitary Gland * Hyperplasia,Pars Distalis	Simple Incidence	12/46 (26.1%)	16/48 (33.3%)	18/48 (37.5%)	15/49 (30.6%)	19/50 (38.0%)	19/43 (44.2%)
	Poly-K Incidence	12/37.2 (32.3%)	16/38.2 (41.9%)	18/40.8 (44.1%)	15/37.3 (40.2%)	19/38.9 (48.9%)	19/32.7 (58.1%)
	Terminal Incidence	5/17 (29.4%)	6/16 (37.5%)	5/16 (31.3%)	2/13 (15.4%)	9/15 (60.0%)	6/9 (66.7%)
	Time-to-First	392	395	393	468	482	480
	Poly-K P-Value	0.018 *	0.259	0.194	0.312	0.097	0.020 *
	Severity Profile	0 6 3 3	5 4 6 1	4 8 2 4	3 6 3 3	3 9 5 2	4 8 3 4
	JT/SW P-Value	0.073	0.315	0.213	0.346	0.214	0.081
	RTE P-Value	0.074	0.337	0.192	0.395	0.183	0.064



**Table 8. Nonneoplasms by Body System for Terminal Sacrifice Males Bisphenol-A Stop Dose Arm**

<i>System and Nonneoplasm</i>	<i>Treatment (ug/kg)</i>						
<i>Lesion</i>	<i>Statistic</i>	<i>Control</i>	<i>2.5</i>	<i>25</i>	<i>250</i>	<i>2500</i>	<i>25000</i>
Pituitary Gland * Hypertrophy,Pars Distalis	Simple Incidence	1/46 ( 2.2%)	2/48 ( 4.2%)	3/48 ( 6.3%)	3/49 ( 6.1%)	1/50 ( 2.0%)	4/43 ( 9.3%)
	Poly-K Incidence	1/35.1 ( 2.8%)	2/33.7 ( 5.9%)	3/35.3 ( 8.5%)	3/31.6 ( 9.5%)	1/35.8 ( 2.8%)	4/28.5 ( 14.1%)
	Terminal Incidence	0/17 ( 0.0%)	1/16 ( 6.3%)	1/16 ( 6.3%)	1/13 ( 7.7%)	1/15 ( 6.7%)	0/9 ( 0.0%)
	Time-to-First	675	660	582	540	727 (T)	537
	Poly-K P-Value	0.149	0.486	0.306	0.266	0.757N	0.118
	Severity Profile	0 0 1 0	0 1 1 0	1 2 0 0	0 3 0 0	0 1 0 0	0 4 0 0
	JT/SW P-Value	0.166	0.297	0.208	0.240	0.360	0.083
	RTE P-Value	0.150	0.330	0.242	0.217	0.476N	0.084
Thyroid Gland * Hyperplasia,C-Cell	Simple Incidence	12/43 ( 27.9%)	18/45 ( 40.0%)	11/44 ( 25.0%)	19/45 ( 42.2%)	18/48 ( 37.5%)	13/42 ( 31.0%)
	Poly-K Incidence	12/36.4 ( 33.0%)	18/35.2 ( 51.1%)	11/33.8 ( 32.6%)	19/35.2 ( 53.9%)	18/39.3 ( 45.8%)	13/31.0 ( 41.9%)
	Terminal Incidence	4/17 ( 23.5%)	8/16 ( 50.0%)	5/16 ( 31.3%)	6/13 ( 46.2%)	9/15 ( 60.0%)	3/9 ( 33.3%)
	Time-to-First	483	395	539	343	432	445
	Poly-K P-Value	0.210	0.085	0.588N	0.052	0.176	0.304
	Severity Profile	4 7 1 0	10 6 2 0	4 5 1 1	11 6 2 0	10 7 1 0	5 6 1 1
	JT/SW P-Value	0.359	0.168	0.421	0.159	0.233	0.322
	RTE P-Value	0.361	0.170	0.396N	0.128	0.239	0.383
Thyroid Gland * Hyperplasia,Follicular Cell	Simple Incidence	6/43 ( 14.0%)	6/45 ( 13.3%)	9/44 ( 20.5%)	10/45 ( 22.2%)	6/48 ( 12.5%)	7/42 ( 16.7%)
	Poly-K Incidence	6/34.7 ( 17.3%)	6/34.0 ( 17.7%)	9/35.5 ( 25.4%)	10/32.3 ( 31.0%)	6/36.6 ( 16.4%)	7/28.9 ( 24.3%)
	Terminal Incidence	1/17 ( 5.9%)	0/16 ( 0.0%)	1/16 ( 6.3%)	0/13 ( 0.0%)	1/15 ( 6.7%)	1/9 ( 11.1%)
	Time-to-First	392	529	477	403	602	474
	Poly-K P-Value	0.303	0.609	0.295	0.148	0.586N	0.354
	Severity Profile	0 3 3 0	0 2 4 0	0 2 6 1	0 3 7 0	0 3 3 0	0 3 4 0
	JT/SW P-Value	0.416	0.517	0.208	0.181	0.358	0.400
	RTE P-Value	0.401	0.488N	0.169	0.138	0.429N	0.364
Thyroid Gland * Ultimobranchial Cyst	Simple Incidence	3/43 ( 7.0%)	5/45 ( 11.1%)	5/44 ( 11.4%)	2/45 ( 4.4%)	5/48 ( 10.4%)	4/42 ( 9.5%)
	Poly-K Incidence	3/33.5 ( 9.0%)	5/32.8 ( 15.2%)	5/33.1 ( 15.1%)	2/29.2 ( 6.8%)	5/36.2 ( 13.8%)	4/28.0 ( 14.3%)
	Terminal Incidence	2/17 ( 11.8%)	2/16 ( 12.5%)	3/16 ( 18.8%)	0/13 ( 0.0%)	2/15 ( 13.3%)	0/9 ( 0.0%)
	Time-to-First	518	529	404	403	652	253
	Poly-K P-Value	0.401	0.341	0.346	0.562N	0.397	0.401
<b>Genital System</b>							
Coagulating Gland * Atrophy	Simple Incidence	1/45 ( 2.2%)	1/45 ( 2.2%)	4/44 ( 9.1%)	1/50 ( 2.0%)	2/48 ( 4.2%)	2/44 ( 4.5%)
	Poly-K Incidence	1/34.8 ( 2.9%)	1/31.6 ( 3.2%)	4/33.2 ( 12.0%)	1/31.4 ( 3.2%)	2/36.1 ( 5.5%)	2/27.3 ( 7.3%)
	Terminal Incidence	0/17 ( 0.0%)	0/16 ( 0.0%)	1/16 ( 6.3%)	0/13 ( 0.0%)	0/15 ( 0.0%)	0/9 ( 0.0%)
	Time-to-First	643	671	516	517	631	700
	Poly-K P-Value	0.311	0.740	0.161	0.738	0.513	0.416
	Severity Profile	0 0 1 0	0 0 1 0	0 1 1 2	0 1 0 0	0 0 2 0	0 0 1 1
	JT/SW P-Value	0.341	0.500	0.068	0.276	0.331	0.357
	RTE P-Value	0.333	0.500	0.040 *	0.472N	0.317	0.283

**Table 8. Nonneoplasms by Body System for Terminal Sacrifice Males Bisphenol-A Stop Dose Arm**

<i>System and Nonneoplasm</i>	<i>Treatment (ug/kg)</i>						
<i>Lesion</i>	<i>Statistic</i>	<i>Control</i>	<i>2.5</i>	<i>25</i>	<i>250</i>	<i>2500</i>	<i>25000</i>
Epididymis * Exfoliated Germ Cell	Simple Incidence	12/49 (24.5%)	15/48 (31.3%)	11/48 (22.9%)	13/50 (26.0%)	17/50 (34.0%)	9/46 (19.6%)
	Poly-K Incidence	12/39.0 (30.8%)	15/38.3 (39.1%)	11/37.9 (29.1%)	13/36.1 (36.0%)	17/39.8 (42.7%)	9/29.5 (30.5%)
	Terminal Incidence	3/17 (17.6%)	3/16 (18.8%)	3/16 (18.8%)	3/13 (23.1%)	3/15 (20.0%)	2/9 (22.2%)
	Time-to-First	552	395	477	343	517	558
	Poly-K P-Value	0.341	0.293	0.535N	0.405	0.187	0.596N
	Severity Profile	3 6 3 0	5 7 3 0	3 7 1 0	3 9 1 0	5 5 6 1	4 4 1 0
	JT/SW P-Value	0.415N	0.741N	0.468N	0.579N	0.770N	0.334N
	RTE P-Value	0.391N	0.254	0.397N	0.464	0.127	0.247N
Epididymis * Hypospermia	Simple Incidence	14/49 (28.6%)	10/48 (20.8%)	15/48 (31.3%)	7/50 (14.0%)	16/50 (32.0%)	8/46 (17.4%)
	Poly-K Incidence	14/40.1 (34.9%)	10/35.6 (28.1%)	15/37.6 (39.9%)	7/33.6 (20.8%)	16/39.3 (40.7%)	8/30.0 (26.6%)
	Terminal Incidence	4/17 (23.5%)	4/16 (25.0%)	7/16 (43.8%)	2/13 (15.4%)	4/15 (26.7%)	3/9 (33.3%)
	Time-to-First	483	516	404	343	555	294
	Poly-K P-Value	0.444N	0.346N	0.413	0.136N	0.380	0.314N
	Severity Profile	0 0 0 14	0 0 2 8	0 0 2 13	0 0 0 7	0 1 4 11	0 0 0 8
	JT/SW P-Value	0.205N	0.156N	0.405N	0.051N	0.280N	0.127N
	RTE P-Value	0.196N	0.158N	0.419	0.043N*	0.449	0.097N
Epididymis * Infiltration Cellular,Lymphocyte	Simple Incidence	14/49 (28.6%)	16/48 (33.3%)	16/48 (33.3%)	14/50 (28.0%)	12/50 (24.0%)	13/46 (28.3%)
	Poly-K Incidence	14/40.2 (34.8%)	16/36.8 (43.5%)	16/38.3 (41.7%)	14/35.3 (39.6%)	12/39.9 (30.1%)	13/29.6 (44.0%)
	Terminal Incidence	6/17 (35.3%)	9/16 (56.3%)	7/16 (43.8%)	6/13 (46.2%)	2/15 (13.3%)	7/9 (77.8%)
	Time-to-First	448	395	512	403	482	474
	Poly-K P-Value	0.482N	0.286	0.341	0.420	0.415N	0.294
	Severity Profile	9 5 0 0	13 3 0 0	14 2 0 0	11 3 0 0	10 2 0 0	12 1 0 0
	JT/SW P-Value	0.199N	0.629N	0.691N	0.531N	0.337N	0.429N
	RTE P-Value	0.205N	0.361	0.386	0.425N	0.255N	0.391N
Epididymis * Polyarteritis	Simple Incidence	2/49 (4.1%)	1/48 (2.1%)	3/48 (6.3%)	4/50 (8.0%)	5/50 (10.0%)	2/46 (4.3%)
	Poly-K Incidence	2/36.9 (5.4%)	1/33.4 (3.0%)	3/35.5 (8.5%)	4/33.3 (12.0%)	5/37.7 (13.2%)	2/28.0 (7.2%)
	Terminal Incidence	1/17 (5.9%)	1/16 (6.3%)	0/16 (0.0%)	0/13 (0.0%)	2/15 (13.3%)	1/9 (11.1%)
	Time-to-First	552	727 (T)	638	403	482	558
	Poly-K P-Value	0.120	0.535N	0.482	0.288	0.222	0.591
	Severity Profile	2 0 0 0	1 0 0 0	1 2 0 0	2 1 1 0	4 1 0 0	2 0 0 0
	JT/SW P-Value	0.165	0.714	0.340	0.231	0.144	0.316
	RTE P-Value	0.173	0.341N	0.311	0.156	0.118	0.478
Prostate, Dorsal/Lateral Lobe * Cyst,Mucinous	Simple Incidence	6/46 (13.0%)	2/48 (4.2%)	6/48 (12.5%)	5/50 (10.0%)	7/49 (14.3%)	4/45 (8.9%)
	Poly-K Incidence	6/36.4 (16.5%)	2/33.4 (6.0%)	6/36.2 (16.6%)	5/32.0 (15.6%)	7/37.1 (18.9%)	4/28.9 (13.8%)
	Terminal Incidence	3/17 (17.6%)	2/16 (12.5%)	3/16 (18.8%)	2/13 (15.4%)	1/15 (6.7%)	1/9 (11.1%)
	Time-to-First	578	726 (T)	495	604	593	530
	Poly-K P-Value	0.339	0.157N	0.621	0.593N	0.514	0.520N

**Table 8. Nonneoplasms by Body System for Terminal Sacrifice Males Bisphenol-A Stop Dose Arm**

<i>System and Nonneoplasm</i>		<i>Treatment (ug/kg)</i>					
<i>Lesion</i>	<i>Statistic</i>	<i>Control</i>	<i>2.5</i>	<i>25</i>	<i>250</i>	<i>2500</i>	<i>25000</i>
Prostate, Dorsal/Lateral Lobe * Fibrosis	Simple Incidence	15/46 (32.6%)	8/48 (16.7%)	11/48 (22.9%)	8/50 (16.0%)	12/49 (24.5%)	6/45 (13.3%)
	Poly-K Incidence	15/38.1 (39.4%)	8/36.1 (22.2%)	11/36.7 (30.0%)	8/33.2 (24.1%)	12/38.9 (30.9%)	6/28.9 (20.8%)
	Terminal Incidence	5/17 (29.4%)	1/16 (6.3%)	5/16 (31.3%)	2/13 (15.4%)	2/15 (13.3%)	1/9 (11.1%)
	Time-to-First	578	516	552	506	551	507
	Poly-K P-Value	0.141N	0.082N	0.267N	0.124N	0.290N	0.083N
	Severity Profile	1 5 6 3	1 3 1 3	3 4 1 3	1 4 0 3	2 6 4 0	0 4 0 2
	JT/SW P-Value	0.049N*	0.039N* <sup>1</sup>	0.075N	0.027N* <sup>1</sup>	0.070N	0.012N*
	RTE P-Value	0.044N*	0.028N*	0.091N	0.018N*	0.113N	0.012N*
Prostate, Dorsal/Lateral Lobe * Infiltration Cellular,Lymphocyte	Simple Incidence	31/46 (67.4%)	30/48 (62.5%)	28/48 (58.3%)	27/50 (54.0%)	35/49 (71.4%)	22/45 (48.9%)
	Poly-K Incidence	31/41.6 (74.6%)	30/41.1 (72.9%)	28/40.0 (70.0%)	27/38.9 (69.3%)	35/42.4 (82.6%)	22/33.2 (66.3%)
	Terminal Incidence	13/17 (76.5%)	12/16 (75.0%)	12/16 (75.0%)	11/13 (84.6%)	13/15 (86.7%)	7/9 (77.8%)
	Time-to-First	552	435	477	343	432	445
	Poly-K P-Value	0.512N	0.535N	0.407N	0.382N	0.241	0.285N
	Severity Profile	17 11 1 2	20 6 1 3	15 9 2 2	16 8 1 2	20 14 1 0	14 7 0 1
	JT/SW P-Value	0.114N	0.222N	0.278N	0.119N	0.336N	0.034N*
	RTE P-Value	0.105N	0.226N	0.230N	0.096N	0.431	0.029N*
Prostate, Dorsal/Lateral Lobe * Inflammation,Suppurative	Simple Incidence	39/46 (84.8%)	46/48 (95.8%)	41/48 (85.4%)	42/50 (84.0%)	44/49 (89.8%)	38/45 (84.4%)
	Poly-K Incidence	39/43.3 (90.1%)	46/46.7 (98.4%)	41/45.4 (90.4%)	42/45.2 (93.0%)	44/46.3 (95.1%)	38/41.2 (92.3%)
	Terminal Incidence	17/17 (100.0%)	16/16 (100.0%)	14/16 (87.5%)	13/13 (100.0%)	14/15 (93.3%)	8/9 (88.9%)
	Time-to-First	392	349	393	343	432	294
	Poly-K P-Value	0.501	0.062	0.643	0.449	0.282	0.517
	Severity Profile	7 22 7 3	14 21 8 3	14 20 5 2	10 20 9 3	12 21 11 0	6 25 6 1
	JT/SW P-Value	0.371N	0.578N	0.136N	0.307N	0.393N	0.425N
	RTE P-Value	0.375N	0.411	0.118N	0.404N	0.429N	0.373N
Prostate, Ventral Lobe * Atrophy	Simple Incidence	2/48 (4.2%)	3/47 (6.4%)	4/47 (8.5%)	1/50 (2.0%)	4/49 (8.2%)	4/45 (8.9%)
	Poly-K Incidence	2/36.0 (5.6%)	3/34.0 (8.8%)	4/34.9 (11.5%)	1/31.4 (3.2%)	4/37.6 (10.6%)	4/29.0 (13.8%)
	Terminal Incidence	1/17 (5.9%)	1/16 (6.3%)	1/16 (6.3%)	0/13 (0.0%)	0/15 (0.0%)	0/9 (0.0%)
	Time-to-First	554	481	607	517	517	534
	Poly-K P-Value	0.205	0.473	0.320	0.548N	0.356	0.239
	Severity Profile	0 0 2 0	0 0 3 0	0 1 1 2	0 1 0 0	0 2 2 0	0 0 4 0
	JT/SW P-Value	0.233	0.315	0.225	0.479	0.279	0.234
	RTE P-Value	0.234	0.328	0.170	0.321N	0.222	0.167
Prostate, Ventral Lobe * Fibrosis	Simple Incidence	17/48 (35.4%)	10/47 (21.3%)	12/47 (25.5%)	10/50 (20.0%)	12/49 (24.5%)	8/45 (17.8%)
	Poly-K Incidence	17/39.3 (43.2%)	10/35.8 (28.0%)	12/36.3 (33.1%)	10/34.2 (29.2%)	12/38.3 (31.4%)	8/29.4 (27.2%)
	Terminal Incidence	6/17 (35.3%)	3/16 (18.8%)	3/16 (18.8%)	2/13 (15.4%)	5/15 (33.3%)	3/9 (33.3%)
	Time-to-First	483	395	582	498	432	480
	Poly-K P-Value	0.121N	0.120N	0.245N	0.151N	0.192N	0.126N
	Severity Profile	2 9 3 3	0 7 0 3	3 5 0 4	1 3 3 3	3 7 2 0	0 1 4 3
	JT/SW P-Value	0.069N	0.076N	0.120N	0.070N	0.084N	0.056N
	RTE P-Value	0.071N	0.067N	0.136N	0.056N	0.078N	0.044N*

**Table 8. Nonneoplasms by Body System for Terminal Sacrifice Males Bisphenol-A Stop Dose Arm**

<i>System and Nonneoplasm</i>	<i>Lesion</i>	<i>Statistic</i>	<i>Treatment (ug/kg)</i>				
			<i>Control</i>	<i>2.5</i>	<i>25</i>	<i>250</i>	<i>2500</i>
Prostate, Ventral Lobe * Hyperplasia,Epithelium	Simple Incidence	17/48 (35.4%)	7/47 (14.9%)	17/47 (36.2%)	16/50 (32.0%)	14/49 (28.6%)	13/45 (28.9%)
	Poly-K Incidence	17/38.9 (43.7%)	7/32.9 (21.3%)	17/36.0 (47.2%)	16/35.7 (44.9%)	14/37.4 (37.4%)	13/30.2 (43.0%)
	Terminal Incidence	9/17 (52.9%)	6/16 (37.5%)	10/16 (62.5%)	4/13 (30.8%)	7/15 (46.7%)	5/9 (55.6%)
	Time-to-First	518	665	512	474	558	530
	Poly-K P-Value	0.357	0.034N*	0.468	0.554	0.368N	0.578N
	Severity Profile	0 12 3 2	2 3 1 1	4 8 3 2	4 9 1 2	1 13 0 0	1 10 0 2
	JT/SW P-Value	0.447N	0.009N** <sup>1</sup>	0.134N	0.192N	0.193N	0.215N
	RTE P-Value	0.447N	0.009N**	0.450N	0.253N	0.145N	0.197N
Prostate, Ventral Lobe * Infiltration Cellular,Lymphocyte	Simple Incidence	19/48 (39.6%)	17/47 (36.2%)	15/47 (31.9%)	16/50 (32.0%)	20/49 (40.8%)	18/45 (40.0%)
	Poly-K Incidence	19/39.2 (48.4%)	17/37.7 (45.1%)	15/38.4 (39.1%)	16/34.5 (46.4%)	20/40.9 (48.9%)	18/33.2 (54.3%)
	Terminal Incidence	9/17 (52.9%)	6/16 (37.5%)	5/16 (31.3%)	8/13 (61.5%)	7/15 (46.7%)	8/9 (88.9%)
	Time-to-First	483	395	404	468	432	121
	Poly-K P-Value	0.271	0.476N	0.268N	0.524N	0.575	0.391
	Severity Profile	9 7 2 1	11 3 0 3	10 1 0 4	8 5 2 1	14 5 1 0	11 3 2 2
	JT/SW P-Value	0.465	0.689	0.832	0.872	0.725	0.683
	RTE P-Value	0.463	0.310N	0.189N	0.215N	0.416N	0.469N
Prostate, Ventral Lobe * Inflammation,Suppurative	Simple Incidence	10/48 (20.8%)	9/47 (19.1%)	9/47 (19.1%)	8/50 (16.0%)	10/49 (20.4%)	9/45 (20.0%)
	Poly-K Incidence	10/36.8 (27.2%)	9/35.2 (25.6%)	9/37.3 (24.1%)	8/33.7 (23.8%)	10/38.0 (26.3%)	9/30.1 (29.9%)
	Terminal Incidence	6/17 (35.3%)	3/16 (18.8%)	1/16 (6.3%)	2/13 (15.4%)	4/15 (26.7%)	4/9 (44.4%)
	Time-to-First	605	395	393	506	498	358
	Poly-K P-Value	0.448	0.544N	0.485N	0.477N	0.570N	0.513
	Severity Profile	5 2 1 2	5 1 1 2	3 2 0 4	4 1 1 2	5 4 0 1	4 2 2 1
	JT/SW P-Value	0.460N	0.416N	0.517N	0.356N	0.480N	0.529N
	RTE P-Value	0.462N	0.416N	0.461N	0.281N	0.462N	0.464N
Prostate, Ventral Lobe * Mineralization	Simple Incidence	3/48 (6.3%)	2/47 (4.3%)	0/47 (0.0%)	2/50 (4.0%)	3/49 (6.1%)	4/45 (8.9%)
	Poly-K Incidence	3/35.5 (8.5%)	2/32.6 (6.1%)	0/34.1 (0.0%)	2/30.8 (6.5%)	3/35.9 (8.4%)	4/28.4 (14.1%)
	Terminal Incidence	3/17 (17.6%)	2/16 (12.5%)	0/16 (0.0%)	2/13 (15.4%)	2/15 (13.3%)	2/9 (22.2%)
	Time-to-First	723 (T)	725 (T)	----	723 (T)	706	480
	Poly-K P-Value	0.206	0.538N	0.124N	0.565N	0.659N	0.378
	Severity Profile	1 2 0 0	0 2 0 0	---	0 2 0 0	0 2 1 0	0 3 1 0
	JT/SW P-Value	0.190	0.660	0.920	0.833	0.634	0.359
	RTE P-Value	0.182	0.335N	0.109N	0.311N	0.495	0.265

**Table 8. Nonneoplasms by Body System for Terminal Sacrifice Males Bisphenol-A Stop Dose Arm**

<i>System and Nonneoplasm</i>	<i>Treatment (ug/kg)</i>						
<i>Lesion</i>	<i>Statistic</i>	<i>Control</i>	<i>2.5</i>	<i>25</i>	<i>250</i>	<i>2500</i>	<i>25000</i>
Seminal Vesicle * Atrophy	Simple Incidence	5/39 ( 12.8%)	6/43 ( 14.0%)	4/41 ( 9.8%)	5/47 ( 10.6%)	5/48 ( 10.4%)	3/42 ( 7.1%)
	Poly-K Incidence	5/31.9 ( 15.7%)	6/32.7 ( 18.3%)	4/31.3 ( 12.8%)	5/30.9 ( 16.2%)	5/37.5 ( 13.3%)	3/26.8 ( 11.2%)
	Terminal Incidence	1/17 ( 5.9%)	1/16 ( 6.3%)	1/16 ( 6.3%)	1/13 ( 7.7%)	0/15 ( 0.0%)	0/9 ( 0.0%)
	Time-to-First	616	395	516	517	517	534
	Poly-K P-Value	0.294N	0.520	0.512N	0.615	0.525N	0.453N
	Severity Profile	0 2 2 1	0 0 5 1	0 0 1 3	0 1 3 1	0 0 5 0	0 1 1 1
	JT/SW P-Value	0.174N	0.587N	0.461N	0.488N	0.491N	0.294N
	RTE P-Value	0.175N	0.414	0.378N	0.387N	0.373N	0.219N
Seminal Vesicle * Dilatation,Lumen	Simple Incidence	6/39 ( 15.4%)	4/43 ( 9.3%)	2/41 ( 4.9%)	3/47 ( 6.4%)	1/48 ( 2.1%)	4/42 ( 9.5%)
	Poly-K Incidence	6/31.6 ( 19.0%)	4/30.6 ( 13.1%)	2/30.5 ( 6.5%)	3/30.1 ( 10.0%)	1/35.3 ( 2.8%)	4/27.0 ( 14.8%)
	Terminal Incidence	3/17 ( 17.6%)	3/16 ( 18.8%)	1/16 ( 6.3%)	1/13 ( 7.7%)	1/15 ( 6.7%)	0/9 ( 0.0%)
	Time-to-First	599	558	587	510	723 (T)	480
	Poly-K P-Value	0.102N	0.384N	0.136N	0.258N	0.035N*	0.468N
	Severity Profile	0 1 4 1	0 1 2 1	0 1 0 1	0 1 1 1	0 1 0 0	0 2 1 1
	JT/SW P-Value	0.076N	0.202N	0.068N	0.072N	0.010N** 1	0.058N
	RTE P-Value	0.074N	0.129N	0.034N*	0.056N	0.011N*	0.129N
Seminal Vesicle * Hyperplasia,Epithelium	Simple Incidence	5/39 ( 12.8%)	1/43 ( 2.3%)	4/41 ( 9.8%)	4/47 ( 8.5%)	4/48 ( 8.3%)	6/42 ( 14.3%)
	Poly-K Incidence	5/31.3 ( 16.0%)	1/30.3 ( 3.3%)	4/30.1 ( 13.3%)	4/29.8 ( 13.4%)	4/36.0 ( 11.1%)	6/26.7 ( 22.4%)
	Terminal Incidence	4/17 ( 23.5%)	0/16 ( 0.0%)	4/16 ( 25.0%)	3/13 ( 23.1%)	2/15 ( 13.3%)	3/9 ( 33.3%)
	Time-to-First	552	669	724 (T)	506	624	474
	Poly-K P-Value	0.232	0.103N	0.526N	0.532N	0.410N	0.386
	Severity Profile	0 1 4 0	0 0 0 1	0 2 2 0	0 1 3 0	0 2 2 0	0 1 4 1
	JT/SW P-Value	0.238	0.961	0.789	0.853	0.882	0.529
	RTE P-Value	0.261	0.060N	0.305N	0.245N	0.227N	0.399
Testes * Degeneration,Seminiferous Tubule	Simple Incidence	34/49 ( 69.4%)	33/48 ( 68.8%)	41/48 ( 85.4%)	36/50 ( 72.0%)	40/49 ( 81.6%)	27/45 ( 60.0%)
	Poly-K Incidence	34/43.7 ( 77.9%)	33/42.7 ( 77.3%)	41/45.2 ( 90.7%)	36/43.5 ( 82.8%)	40/45.8 ( 87.3%)	27/35.6 ( 75.8%)
	Terminal Incidence	14/17 ( 82.4%)	11/16 ( 68.8%)	15/16 ( 93.8%)	11/13 ( 84.6%)	13/15 ( 86.7%)	7/9 ( 77.8%)
	Time-to-First	448	395	393	399	426	294
	Poly-K P-Value	0.320	0.584N	0.062	0.363	0.160	0.524N
	Severity Profile	10 7 3 14	14 6 5 8	17 8 1 15	13 10 7 6	9 10 7 14	11 4 5 7
	JT/SW P-Value	0.395N	0.209N	0.582N	0.342N	0.688N	0.100N
	RTE P-Value	0.346N	0.199N	0.205	0.257N	0.098	0.076N
Testes * Polyarteritis	Simple Incidence	18/49 ( 36.7%)	11/48 ( 22.9%)	15/48 ( 31.3%)	14/50 ( 28.0%)	28/49 ( 57.1%)	16/45 ( 35.6%)
	Poly-K Incidence	18/38.8 ( 46.4%)	11/35.6 ( 30.9%)	15/38.0 ( 39.5%)	14/35.6 ( 39.3%)	28/41.8 ( 67.0%)	16/30.7 ( 52.2%)
	Terminal Incidence	9/17 ( 52.9%)	6/16 ( 37.5%)	6/16 ( 37.5%)	5/13 ( 38.5%)	9/15 ( 60.0%)	5/9 ( 55.6%)
	Time-to-First	552	395	512	403	432	474
	Poly-K P-Value	0.012 *	0.119N	0.347N	0.345N	0.038 *	0.400
	Severity Profile	7 5 5 1	1 7 3 0	6 4 1 4	6 4 3 1	4 9 6 9	4 7 3 2
	JT/SW P-Value	0.026 *	0.907	0.779	0.878	0.004 ** 1	0.110
	RTE P-Value	0.029 *	0.103N	0.325N	0.181N	0.002 **	0.494

**Table 8. Nonneoplasms by Body System for Terminal Sacrifice Males Bisphenol-A Stop Dose Arm**

System and Nonneoplasm	Lesion	Statistic	Treatment (ug/kg)				
			Control	2.5	25	250	2500
<b>Hematopoietic System</b>							
Bone Marrow * Hyperplasia, Myeloid Cell	Simple Incidence	4/47 ( 8.5%)	4/47 ( 8.5%)	3/46 ( 6.5%)	4/50 ( 8.0%)	5/49 ( 10.2%)	5/45 ( 11.1%)
	Poly-K Incidence	4/36.8 ( 10.9%)	4/33.1 ( 12.1%)	3/35.6 ( 8.4%)	4/32.5 ( 12.3%)	5/37.9 ( 13.2%)	5/29.9 ( 16.7%)
	Terminal Incidence	1/17 ( 5.9%)	2/16 ( 12.5%)	0/16 ( 0.0%)	0/13 ( 0.0%)	1/15 ( 6.7%)	0/9 ( 0.0%)
	Time-to-First	483	650	512	468	482	445
	Poly-K P-Value	0.259	0.585	0.519N	0.575	0.520	0.369
	Severity Profile	0 1 2 1	0 0 0 4	0 0 0 3	0 0 2 2	0 0 2 3	0 0 1 4
	JT/SW P-Value	0.276	0.463	0.622	0.641	0.475	0.407
	RTE P-Value	0.277	0.460	0.404N	0.482N	0.367	0.303
Bone Marrow * Hypocellularity	Simple Incidence	0/47 ( 0.0%)	3/47 ( 6.4%)	2/46 ( 4.3%)	4/50 ( 8.0%)	2/49 ( 4.1%)	4/45 ( 8.9%)
	Poly-K Incidence	0/35.5 ( 0.0%)	3/33.7 ( 8.9%)	2/34.8 ( 5.7%)	4/31.8 ( 12.6%)	2/36.1 ( 5.5%)	4/28.7 ( 14.0%)
	Terminal Incidence	0/17 ( 0.0%)	0/16 ( 0.0%)	1/16 ( 6.3%)	2/13 ( 15.4%)	1/15 ( 6.7%)	0/9 ( 0.0%)
	Time-to-First	----	555	567	558	652	507
	Poly-K P-Value	0.057	0.108	0.232	0.046 *	0.240	0.035 *
	Severity Profile	---	0 0 1 2	0 0 1 1	0 0 4 0	0 0 2 0	0 0 4 0
	JT/SW P-Value	0.077	0.040 * <sup>1</sup>	0.097	0.042 * <sup>1</sup>	0.105	0.037 *
	RTE P-Value	0.076	0.060	0.172	0.043 *	0.174	0.045 *
Spleen * Hematopoietic Cell Proliferation	Simple Incidence	16/47 ( 34.0%)	17/47 ( 36.2%)	9/47 ( 19.1%)	13/49 ( 26.5%)	24/49 ( 49.0%)	12/45 ( 26.7%)
	Poly-K Incidence	16/38.6 ( 41.5%)	17/38.3 ( 44.4%)	9/37.9 ( 23.8%)	13/35.4 ( 36.7%)	24/42.2 ( 56.9%)	12/32.9 ( 36.5%)
	Terminal Incidence	4/17 ( 23.5%)	3/16 ( 18.8%)	1/16 ( 6.3%)	2/13 ( 15.4%)	5/15 ( 33.3%)	2/9 ( 22.2%)
	Time-to-First	605	395	477	403	465	294
	Poly-K P-Value	0.278	0.487	0.073N	0.426N	0.113	0.424N
	Severity Profile	3 5 2 6	2 6 6 3	2 2 2 3	8 0 2 3	8 9 3 4	1 7 2 2
	JT/SW P-Value	0.476N	0.558N	0.070N	0.110N	0.404N	0.260N
	RTE P-Value	0.428N	0.423	0.058N	0.131N	0.119	0.194N
Spleen * Hyperplasia, Lymphoid	Simple Incidence	1/47 ( 2.1%)	2/47 ( 4.3%)	3/47 ( 6.4%)	6/49 ( 12.2%)	6/49 ( 12.2%)	3/45 ( 6.7%)
	Poly-K Incidence	1/35.7 ( 2.8%)	2/33.1 ( 6.0%)	3/36.3 ( 8.3%)	6/32.5 ( 18.5%)	6/37.5 ( 16.0%)	3/27.9 ( 10.8%)
	Terminal Incidence	0/17 ( 0.0%)	1/16 ( 6.3%)	0/16 ( 0.0%)	0/13 ( 0.0%)	0/15 ( 0.0%)	0/9 ( 0.0%)
	Time-to-First	667	589	512	566	551	600
	Poly-K P-Value	0.026 *	0.473	0.310	0.039 *	0.061	0.220
	Severity Profile	0 1 0 0	0 0 1 1	0 3 0 0	0 5 1 0	0 6 0 0	0 3 0 0
	JT/SW P-Value	0.052	0.271	0.188	0.026 * <sup>1</sup>	0.039 * <sup>1</sup>	0.083
	RTE P-Value	0.057	0.327	0.218	0.027 *	0.039 *	0.206

**Table 8. Nonneoplasms by Body System for Terminal Sacrifice Males Bisphenol-A Stop Dose Arm**

<b>System and Nonneoplasm</b>		<b>Treatment (ug/kg)</b>					
<b>Lesion</b>	<b>Statistic</b>	<b>Control</b>	<b>2.5</b>	<b>25</b>	<b>250</b>	<b>2500</b>	<b>25000</b>
Spleen * Pigmentation	Simple Incidence	26/47 (55.3%)	25/47 (53.2%)	27/47 (57.4%)	21/49 (42.9%)	24/49 (49.0%)	22/45 (48.9%)
	Poly-K Incidence	26/41.0 (63.4%)	25/39.4 (63.5%)	27/40.5 (66.7%)	21/37.5 (56.0%)	24/41.8 (57.4%)	22/34.9 (63.0%)
	Terminal Incidence	12/17 (70.6%)	11/16 (68.8%)	14/16 (87.5%)	7/13 (53.8%)	8/15 (53.3%)	6/9 (66.7%)
	Time-to-First	392	349	477	403	432	294
	Poly-K P-Value	0.303N	0.595	0.468	0.319N	0.363N	0.586N
	Severity Profile	7 12 5 2	7 12 4 2	9 11 5 2	10 5 3 3	7 14 1 2	3 14 1 4
	JT/SW P-Value	0.196N	0.398N	0.535N	0.099N	0.170N	0.262N
	RTE P-Value	0.205N	0.399N	0.481	0.075N	0.207N	0.361N
Thymus * Atrophy	Simple Incidence	47/48 (97.9%)	45/48 (93.8%)	44/46 (95.7%)	43/47 (91.5%)	46/48 (95.8%)	38/42 (90.5%)
	Poly-K Incidence	47/47.4 (99.2%)	45/45.7 (98.6%)	44/44.9 (98.1%)	43/44.2 (97.3%)	46/46.4 (99.1%)	38/38.9 (97.6%)
	Terminal Incidence	17/17 (100.0%)	16/16 (100.0%)	15/15 (100.0%)	13/13 (100.0%)	15/15 (100.0%)	9/9 (100.0%)
	Time-to-First	392	395	477	343	432	358
	Poly-K P-Value	0.315N	0.886N	0.719N	0.556N	0.971N	0.654N
	Severity Profile	0 0 1 46	0 0 1 44	0 0 0 44	0 1 1 41	0 0 1 45	0 0 5 33
	JT/SW P-Value	0.012N*	0.196N	0.375N	0.067N	0.205N	0.003N**
	RTE P-Value	0.010N**	0.232N	0.474N	0.060N	0.357N	0.004N**
<b>Integumentary System</b>							
Mammary Gland * Degeneration,Alveolus	Simple Incidence	28/49 (57.1%)	25/48 (52.1%)	22/47 (46.8%)	31/50 (62.0%)	33/49 (67.3%)	23/45 (51.1%)
	Poly-K Incidence	28/42.9 (65.3%)	25/39.5 (63.3%)	22/40.5 (54.3%)	31/41.2 (75.2%)	33/42.4 (77.9%)	23/34.1 (67.4%)
	Terminal Incidence	8/17 (47.1%)	10/16 (62.5%)	7/16 (43.8%)	10/13 (76.9%)	12/15 (80.0%)	7/9 (77.8%)
	Time-to-First	541	425	477	343	432	474
	Poly-K P-Value	0.085	0.516N	0.202N	0.208	0.130	0.521
	Severity Profile	0 1 1 16	0 4 8 13	0 2 8 12	0 3 11 17	0 3 9 21	1 4 6 12
	JT/SW P-Value	0.327	0.770	0.886	0.479	0.188	0.563
	RTE P-Value	0.350	0.231N	0.141N	0.379	0.139	0.189N
Mammary Gland * Dilatation,Alveolus	Simple Incidence	15/49 (30.6%)	7/48 (14.6%)	6/47 (12.8%)	7/50 (14.0%)	6/49 (12.2%)	7/45 (15.6%)
	Poly-K Incidence	15/38.9 (38.6%)	7/36.2 (19.4%)	6/35.0 (17.2%)	7/31.7 (22.1%)	6/37.2 (16.1%)	7/29.1 (24.1%)
	Terminal Incidence	8/17 (47.1%)	0/16 (0.0%)	3/16 (18.8%)	4/13 (30.8%)	2/15 (13.3%)	2/9 (22.2%)
	Time-to-First	552	529	567	590	555	465
	Poly-K P-Value	0.054N	0.052N	0.032N*	0.102N	0.022N*	0.154N
	Severity Profile	0 1 1 4 0	0 4 1 2	0 3 3 0	0 4 3 0	0 5 1 0	0 5 2 0
	JT/SW P-Value	0.032N*	0.041N*	0.021N*	0.021N*	0.009N**	0.019N*
	RTE P-Value	0.033N*	0.023N*	0.013N*	0.018N*	0.009N**	0.029N*

**Table 8. Nonneoplasms by Body System for Terminal Sacrifice Males Bisphenol-A Stop Dose Arm**

System and Nonneoplasm	Lesion	Statistic	Treatment (ug/kg)				
			Control	2.5	25	250	2500
Mammary Gland * Dilatation,Duct	Simple Incidence	15/49 ( 30.6%)	9/48 ( 18.8%)	10/47 ( 21.3%)	10/50 ( 20.0%)	11/49 ( 22.4%)	12/45 ( 26.7%)
	Poly-K Incidence	15/38.9 ( 38.6%)	9/36.4 ( 24.7%)	10/35.9 ( 27.9%)	10/32.3 ( 31.0%)	11/38.0 ( 28.9%)	12/29.6 ( 40.5%)
	Terminal Incidence	7/17 ( 41.2%)	1/16 ( 6.3%)	3/16 ( 18.8%)	6/13 ( 46.2%)	2/15 ( 13.3%)	4/9 ( 44.4%)
	Time-to-First	599	529	567	558	555	465
	Poly-K P-Value	0.469	0.142N	0.225N	0.332N	0.251N	0.536
	Severity Profile	0 9 4 2	1 3 3 2	1 3 5 1	0 6 2 2	1 5 5 0	0 5 6 1
	JT/SW P-Value	0.416N	0.103N	0.152N	0.142N	0.167N	0.229N
	RTE P-Value	0.434N	0.100N	0.155N	0.111N	0.164N	0.363N
Mammary Gland * Galactocele	Simple Incidence	3/49 ( 6.1%)	1/48 ( 2.1%)	5/47 ( 10.6%)	1/50 ( 2.0%)	1/49 ( 2.0%)	0/45 ( 0.0%)
	Poly-K Incidence	3/36.9 ( 8.1%)	1/33.7 ( 3.0%)	5/34.7 ( 14.4%)	1/31.0 ( 3.2%)	1/35.7 ( 2.8%)	0/27.0 ( 0.0%)
	Terminal Incidence	1/17 ( 5.9%)	0/16 ( 0.0%)	3/16 ( 18.8%)	0/13 ( 0.0%)	0/15 ( 0.0%)	0/9 ( 0.0%)
	Time-to-First	636	671	638	668	704	----
	Poly-K P-Value	0.086N	0.337N	0.320	0.369N	0.315N	0.182N
	<b>Musculoskeletal System</b>						
Bone, Femur * Fibrous Osteodystrophy	Simple Incidence	4/50 ( 8.0%)	1/48 ( 2.1%)	3/48 ( 6.3%)	1/50 ( 2.0%)	5/50 ( 10.0%)	2/46 ( 4.3%)
	Poly-K Incidence	4/37.9 ( 10.6%)	1/34.1 ( 2.9%)	3/36.2 ( 8.3%)	1/31.4 ( 3.2%)	5/37.8 ( 13.2%)	2/27.9 ( 7.2%)
	Terminal Incidence	0/17 ( 0.0%)	0/16 ( 0.0%)	0/16 ( 0.0%)	0/13 ( 0.0%)	0/15 ( 0.0%)	0/9 ( 0.0%)
	Time-to-First	605	481	516	517	517	593
	Poly-K P-Value	0.416	0.209N	0.525N	0.238N	0.498	0.485N
	Severity Profile	0 3 1 0	0 0 0 1	0 1 0 2	0 0 1 0	0 0 3 2	0 2 0 0
	JT/SW P-Value	0.474	0.901	0.717	0.909	0.402	0.694
	RTE P-Value	0.476	0.135N	0.375N	0.129N	0.302	0.220N
<b>Nervous System</b>							
Brain, Brain Stem * Compression	Simple Incidence	11/50 ( 22.0%)	10/48 ( 20.8%)	10/47 ( 21.3%)	10/50 ( 20.0%)	6/50 ( 12.0%)	8/46 ( 17.4%)
	Poly-K Incidence	11/39.5 ( 27.8%)	10/36.8 ( 27.2%)	10/36.7 ( 27.3%)	10/33.3 ( 30.1%)	6/37.3 ( 16.1%)	8/29.9 ( 26.8%)
	Terminal Incidence	4/17 ( 23.5%)	0/16 ( 0.0%)	3/16 ( 18.8%)	4/13 ( 30.8%)	1/15 ( 6.7%)	1/9 ( 11.1%)
	Time-to-First	552	529	477	558	555	465
	Poly-K P-Value	0.257N	0.577N	0.582N	0.520	0.164N	0.570N
	Severity Profile	1 5 3 2	0 5 3 2	2 2 2 4	0 8 1 1	1 1 1 3	3 1 2 2
	JT/SW P-Value	0.131N	0.464N	0.563N	0.471N	0.157N	0.250N
	RTE P-Value	0.139N	0.459N	0.491N	0.374N	0.119N	0.274N
Brain, Cerebrum * Dilatation,Ventricle	Simple Incidence	7/49 ( 14.3%)	7/48 ( 14.6%)	6/48 ( 12.5%)	4/50 ( 8.0%)	3/50 ( 6.0%)	2/46 ( 4.3%)
	Poly-K Incidence	7/38.9 ( 18.0%)	7/36.0 ( 19.5%)	6/36.7 ( 16.4%)	4/32.1 ( 12.4%)	3/37.0 ( 8.1%)	2/28.2 ( 7.1%)
	Terminal Incidence	1/17 ( 5.9%)	0/16 ( 0.0%)	0/16 ( 0.0%)	1/13 ( 7.7%)	0/15 ( 0.0%)	0/9 ( 0.0%)
	Time-to-First	483	529	477	588	555	617
	Poly-K P-Value	0.037N*	0.553	0.547N	0.378N	0.173N	0.179N
	Severity Profile	4 3 0 0	4 2 1 0	3 3 0 0	3 1 0 0	1 1 1 0	0 2 0 0
	JT/SW P-Value	0.016N*	0.524N	0.481N	0.211N	0.134N	0.077N
	RTE P-Value	0.018N*	0.474	0.391N	0.133N	0.101N	0.069N



**Table 8. Nonneoplasms by Body System for Terminal Sacrifice Males Bisphenol-A Stop Dose Arm**

<i>System and Nonneoplasm</i>		<i>Treatment (ug/kg)</i>					
<i>Lesion</i>	<i>Statistic</i>	<i>Control</i>	<i>2.5</i>	<i>25</i>	<i>250</i>	<i>2500</i>	<i>25000</i>
<b>Urinary System</b>							
Kidney * Cyst,Cortex	Simple Incidence	8/50 (16.0%)	14/48 (29.2%)	12/48 (25.0%)	12/50 (24.0%)	14/50 (28.0%)	10/45 (22.2%)
	Poly-K Incidence	8/39.5 (20.2%)	14/36.6 (38.2%)	12/39.0 (30.8%)	12/32.6 (36.8%)	14/39.9 (35.1%)	10/29.8 (33.6%)
	Terminal Incidence	1/17 (5.9%)	5/16 (31.3%)	1/16 (6.3%)	7/13 (53.8%)	5/15 (33.3%)	4/9 (44.4%)
	Time-to-First	392	449	495	566	432	480
	Poly-K P-Value	0.140	0.064	0.205	0.091	0.104	0.161
Kidney * Cyst,Renal Tubule	Simple Incidence	18/50 (36.0%)	12/48 (25.0%)	20/48 (41.7%)	21/50 (42.0%)	27/50 (54.0%)	18/45 (40.0%)
	Poly-K Incidence	18/40.7 (44.3%)	12/35.5 (33.8%)	20/41.5 (48.2%)	21/37.5 (56.0%)	27/43.0 (62.8%)	18/33.2 (54.3%)
	Terminal Incidence	8/17 (47.1%)	6/16 (37.5%)	5/16 (31.3%)	8/13 (61.5%)	8/15 (53.3%)	5/9 (55.6%)
	Time-to-First	392	574	404	403	432	121
	Poly-K P-Value	0.012 *	0.235N	0.443	0.195	0.059	0.257
Kidney * Hyperplasia,Transitional Epithelium	Simple Incidence	12/50 (24.0%)	9/48 (18.8%)	12/48 (25.0%)	12/50 (24.0%)	20/50 (40.0%)	10/45 (22.2%)
	Poly-K Incidence	12/40.0 (30.0%)	9/36.7 (24.5%)	12/37.2 (32.3%)	12/34.9 (34.4%)	20/40.6 (49.3%)	10/29.4 (34.0%)
	Terminal Incidence	4/17 (23.5%)	2/16 (12.5%)	4/16 (25.0%)	3/13 (23.1%)	7/15 (46.7%)	3/9 (33.3%)
	Time-to-First	541	395	516	490	432	539
	Poly-K P-Value	0.043 *	0.388N	0.511	0.435	0.054	0.462
	Severity Profile	3 8 0 1	4 2 3 0	5 5 1 1	4 7 0 1	8 1 1 1 0	3 5 2 0
	JT/SW P-Value	0.153	0.737	0.558	0.616	0.064	0.305
	RTE P-Value	0.174	0.270N	0.482	0.480N	0.051	0.425N
Kidney * Infiltration Cellular,Polymorphonuclear	Simple Incidence	8/50 (16.0%)	5/48 (10.4%)	9/48 (18.8%)	8/50 (16.0%)	8/50 (16.0%)	5/45 (11.1%)
	Poly-K Incidence	8/38.2 (20.9%)	5/34.3 (14.6%)	9/36.2 (24.8%)	8/32.9 (24.3%)	8/37.2 (21.5%)	5/28.9 (17.3%)
	Terminal Incidence	3/17 (17.6%)	2/16 (12.5%)	4/16 (25.0%)	4/13 (30.8%)	3/15 (20.0%)	0/9 (0.0%)
	Time-to-First	552	584	534	443	551	445
	Poly-K P-Value	0.485	0.346N	0.449	0.477	0.587	0.476N
	Severity Profile	4 4 0 0	4 1 0 0	7 0 0 2	5 2 1 0	2 4 2 0	1 4 0 0
	JT/SW P-Value	0.468N	0.189N	0.469N	0.536N	0.591N	0.369N
	RTE P-Value	0.459N	0.196N	0.371	0.492N	0.457	0.274N
Kidney * Mineralization	Simple Incidence	10/50 (20.0%)	2/48 (4.2%)	3/48 (6.3%)	2/50 (4.0%)	6/50 (12.0%)	3/45 (6.7%)
	Poly-K Incidence	10/39.4 (25.3%)	2/34.4 (5.8%)	3/35.7 (8.4%)	2/32.1 (6.2%)	6/38.2 (15.7%)	3/27.7 (10.8%)
	Terminal Incidence	2/17 (11.8%)	0/16 (0.0%)	0/16 (0.0%)	0/13 (0.0%)	0/15 (0.0%)	0/9 (0.0%)
	Time-to-First	552	481	587	498	517	593
	Poly-K P-Value	0.131N	0.022N*	0.047N*	0.031N*	0.219N	0.121N
	Severity Profile	2 1 2 5	0 1 1 0	0 1 0 2	0 0 2 0	0 0 1 5	0 1 0 2
	JT/SW P-Value	0.099N	0.008N**	0.009N**	0.002N**	0.014N*	0.015N*
	RTE P-Value	0.104N	0.004N**	0.011N*	0.003N**	0.106N	0.014N*

**Table 8. Nonneoplasms by Body System for Terminal Sacrifice Males Bisphenol-A Stop Dose Arm**

<i>System and Nonneoplasm</i>	<i>Lesion</i>	<i>Statistic</i>	<i>Treatment (ug/kg)</i>				
			<i>Control</i>	<i>2.5</i>	<i>25</i>	<i>250</i>	<i>2500</i>
Kidney * Nephropathy	Simple Incidence	48/50 (96.0%)	45/48 (93.8%)	45/48 (93.8%)	48/50 (96.0%)	46/50 (92.0%)	39/45 (86.7%)
	Poly-K Incidence	48/48.9 (98.1%)	45/46.3 (97.1%)	45/46.0 (97.8%)	48/48.6 (98.8%)	46/47.2 (97.6%)	39/40.8 (95.5%)
	Terminal Incidence	17/17 (100.0%)	16/16 (100.0%)	16/16 (100.0%)	13/13 (100.0%)	15/15 (100.0%)	9/9 (100.0%)
	Time-to-First	47	349	477	343	432	121
	Poly-K P-Value	0.306N	0.674N	0.796N	0.797	0.759N	0.444N
	Severity Profile	4 8 11 25	7 10 6 22	7 3 11 24	4 10 12 22	1 3 7 35	5 11 4 19
	JT/SW P-Value	0.475	0.832	0.676	0.766	0.057	0.600
	RTE P-Value	0.467N	0.172N	0.416N	0.306N	0.055	0.061N

P-values for dose trend are presented in the "Control" column.

N indicates a negative trend or negative treatment comparison to control with corresponding lower-tail p-values.

<sup>1</sup> Nonsignificant SW test due to the assumption of monotonicity.

**Table 9. Nonneoplasms by Body System for Terminal Sacrifice Females Bisphenol-A Continuous Dose Arm**

<b>System and Nonneoplasm</b>		<b>Treatment (ug/kg)</b>					
<b>Lesion</b>	<b>Statistic</b>	<b>Control</b>	<b>2.5</b>	<b>25</b>	<b>250</b>	<b>2500</b>	<b>25000</b>
<b>Alimentary System</b>							
Liver * Angiectasis	Simple Incidence	3/50 ( 6.0%)	4/48 ( 8.3%)	5/46 ( 10.9%)	5/49 ( 10.2%)	3/50 ( 6.0%)	8/46 ( 17.4%)
	Poly-K Incidence	3/34.6 ( 8.7%)	4/34.8 ( 11.5%)	5/29.5 ( 16.9%)	5/33.4 ( 15.0%)	3/29.0 ( 10.4%)	8/32.3 ( 24.8%)
	Terminal Incidence	2/16 ( 12.5%)	0/19 ( 0.0%)	2/14 ( 14.3%)	2/13 ( 15.4%)	2/10 ( 20.0%)	4/8 ( 50.0%)
	Time-to-First	594	548	524	556	719	523
	Poly-K P-Value	0.059	0.503	0.267	0.333	0.579	0.069
	Severity Profile	0 2 1 0	0 4 0 0	1 2 2 0	0 3 0 2	0 3 0 0	2 4 2 0
	JT/SW P-Value	0.095	0.339	0.235	0.271	0.391	0.042 *
	RTE P-Value	0.088	0.361	0.213	0.230	0.489N	0.040 *
<b>Liver * Basophilic Focus</b>							
Liver * Basophilic Focus	Simple Incidence	18/50 ( 36.0%)	23/48 ( 47.9%)	15/46 ( 32.6%)	18/49 ( 36.7%)	19/50 ( 38.0%)	18/46 ( 39.1%)
	Poly-K Incidence	18/40.1 ( 44.9%)	23/37.4 ( 61.6%)	15/32.8 ( 45.8%)	18/38.4 ( 46.9%)	19/35.8 ( 53.1%)	18/34.2 ( 52.6%)
	Terminal Incidence	5/16 ( 31.3%)	13/19 ( 68.4%)	4/14 ( 28.6%)	4/13 ( 30.8%)	3/10 ( 30.0%)	6/8 ( 75.0%)
	Time-to-First	488	505	514	261	448	532
	Poly-K P-Value	0.428	0.094	0.566	0.520	0.306	0.326
<b>Liver * Clear Cell Focus</b>							
Liver * Clear Cell Focus	Simple Incidence	9/50 ( 18.0%)	9/48 ( 18.8%)	12/46 ( 26.1%)	10/49 ( 20.4%)	6/50 ( 12.0%)	7/46 ( 15.2%)
	Poly-K Incidence	9/36.7 ( 24.5%)	9/33.6 ( 26.8%)	12/31.4 ( 38.2%)	10/35.6 ( 28.1%)	6/30.3 ( 19.8%)	7/33.8 ( 20.7%)
	Terminal Incidence	4/16 ( 25.0%)	6/19 ( 31.6%)	5/14 ( 35.7%)	2/13 ( 15.4%)	3/10 ( 30.0%)	1/8 ( 12.5%)
	Time-to-First	496	615	507	498	470	485
	Poly-K P-Value	0.257N	0.522	0.162	0.470	0.432N	0.461N
<b>Liver * Degeneration,Cystic</b>							
Liver * Degeneration,Cystic	Simple Incidence	4/50 ( 8.0%)	3/48 ( 6.3%)	6/46 ( 13.0%)	3/49 ( 6.1%)	5/50 ( 10.0%)	1/46 ( 2.2%)
	Poly-K Incidence	4/34.9 ( 11.5%)	3/33.3 ( 9.0%)	6/29.8 ( 20.2%)	3/33.2 ( 9.0%)	5/29.6 ( 16.9%)	1/31.2 ( 3.2%)
	Terminal Incidence	2/16 ( 12.5%)	2/19 ( 10.5%)	2/14 ( 14.3%)	0/13 ( 0.0%)	2/10 ( 20.0%)	0/8 ( 0.0%)
	Time-to-First	620	606	549	607	594	637
	Poly-K P-Value	0.288N	0.525N	0.266	0.527N	0.396	0.210N
	Severity Profile	4 0 0 0	3 0 0 0	6 0 0 0	3 0 0 0	4 1 0 0	1 0 0 0
	JT/SW P-Value	0.240N	0.369N	0.694N	0.465N	0.650N	0.191N
	RTE P-Value	0.225N	0.373N	0.154	0.363N	0.343	0.128N
<b>Liver * Fatty Change</b>							
Liver * Fatty Change	Simple Incidence	19/50 ( 38.0%)	9/48 ( 18.8%)	15/46 ( 32.6%)	15/49 ( 30.6%)	8/50 ( 16.0%)	12/46 ( 26.1%)
	Poly-K Incidence	19/40.4 ( 47.1%)	9/35.5 ( 25.3%)	15/32.2 ( 46.6%)	15/35.8 ( 41.9%)	8/31.6 ( 25.3%)	12/33.5 ( 35.8%)
	Terminal Incidence	5/16 ( 31.3%)	2/19 ( 10.5%)	5/14 ( 35.7%)	4/13 ( 30.8%)	2/10 ( 20.0%)	2/8 ( 25.0%)
	Time-to-First	488	507	489	556	419	523
	Poly-K P-Value	0.183N	0.037N*	0.581N	0.408N	0.043N*	0.221N
	Severity Profile	3 6 8 2	1 4 3 1	2 7 6 0	1 5 8 1	2 3 2 1	1 5 5 1
	JT/SW P-Value	0.089N	0.018N* <sup>1</sup>	0.094N	0.152N	0.006N**	0.035N*
	RTE P-Value	0.107N	0.015N*	0.234N	0.228N	0.007N**	0.098N

**Table 9. Nonneoplasms by Body System for Terminal Sacrifice Females Bisphenol-A Continuous Dose Arm**

<i>System and Nonneoplasm</i>	<i>Treatment (ug/kg)</i>						
<i>Lesion</i>	<i>Statistic</i>	<i>Control</i>	<i>2.5</i>	<i>25</i>	<i>250</i>	<i>2500</i>	<i>25000</i>
Liver * Fibrosis,Biliary Tract	Simple Incidence	6/50 ( 12.0%)	10/48 ( 20.8%)	4/46 ( 8.7%)	6/49 ( 12.2%)	5/50 ( 10.0%)	5/46 ( 10.9%)
	Poly-K Incidence	6/34.8 ( 17.3%)	10/34.9 ( 28.7%)	4/28.9 ( 13.8%)	6/34.4 ( 17.4%)	5/30.5 ( 16.4%)	5/32.3 ( 15.5%)
	Terminal Incidence	4/16 ( 25.0%)	5/19 ( 26.3%)	2/14 ( 14.3%)	2/13 ( 15.4%)	2/10 ( 20.0%)	0/8 ( 0.0%)
	Time-to-First	625	550	505	542	473	515
	Poly-K P-Value	0.228N	0.193	0.490N	0.619	0.596N	0.554N
	Severity Profile	3 3 0 0	6 4 0 0	3 1 0 0	5 1 0 0	3 2 0 0	4 1 0 0
	JT/SW P-Value	0.178N	0.873N	0.362N	0.492N	0.488N	0.520N
	RTE P-Value	0.177N	0.100	0.296N	0.485N	0.372N	0.409N
Liver * Hepatodiaphragmatic Nodule	Simple Incidence	6/50 ( 12.0%)	4/48 ( 8.3%)	6/46 ( 13.0%)	2/49 ( 4.1%)	5/50 ( 10.0%)	2/46 ( 4.3%)
	Poly-K Incidence	6/35.3 ( 17.0%)	4/34.7 ( 11.5%)	6/28.7 ( 20.9%)	2/33.8 ( 5.9%)	5/30.0 ( 16.7%)	2/31.2 ( 6.4%)
	Terminal Incidence	4/16 ( 25.0%)	0/19 ( 0.0%)	3/14 ( 21.4%)	0/13 ( 0.0%)	2/10 ( 20.0%)	1/8 ( 12.5%)
	Time-to-First	488	540	621	261	425	615
	Poly-K P-Value	0.148N	0.377N	0.467	0.141N	0.619N	0.169N
Liver * Hyperplasia,Bile Duct	Simple Incidence	16/50 ( 32.0%)	18/48 ( 37.5%)	16/46 ( 34.8%)	18/49 ( 36.7%)	11/50 ( 22.0%)	9/46 ( 19.6%)
	Poly-K Incidence	16/37.8 ( 42.3%)	18/35.6 ( 50.5%)	16/32.5 ( 49.3%)	18/38.0 ( 47.4%)	11/32.6 ( 33.8%)	9/32.0 ( 28.1%)
	Terminal Incidence	8/16 ( 50.0%)	10/19 ( 52.6%)	8/14 ( 57.1%)	5/13 ( 38.5%)	4/10 ( 40.0%)	3/8 ( 37.5%)
	Time-to-First	431	524	309	498	289	637
	Poly-K P-Value	0.050N	0.311	0.359	0.413	0.304N	0.152N
	Severity Profile	7 6 3 0	7 8 3 0	7 6 3 0	7 8 3 0	2 3 6 0	5 3 0 1
	JT/SW P-Value	0.043N*	0.722N	0.697N	0.777N	0.318N	0.118N
	RTE P-Value	0.039N*	0.274	0.388	0.300	0.225N	0.088N
Liver * Infiltration Cellular,Mononuclear Cell	Simple Incidence	37/50 ( 74.0%)	28/48 ( 58.3%)	35/46 ( 76.1%)	29/49 ( 59.2%)	26/50 ( 52.0%)	24/46 ( 52.2%)
	Poly-K Incidence	37/44.3 ( 83.4%)	28/38.1 ( 73.6%)	35/38.7 ( 90.4%)	29/41.9 ( 69.1%)	26/38.7 ( 67.2%)	24/37.9 ( 63.3%)
	Terminal Incidence	16/16 ( 100.0%)	15/19 ( 78.9%)	14/14 ( 100.0%)	7/13 ( 53.8%)	8/10 ( 80.0%)	5/8 ( 62.5%)
	Time-to-First	431	84	434	377	419	43
	Poly-K P-Value	0.003N**	0.172N	0.227	0.070N	0.045N*	0.018N*
	Severity Profile	27 9 1 0	20 8 0 0	29 6 0 0	24 5 0 0	21 5 0 0	19 4 1 0
	JT/SW P-Value	0.004N**	0.078N	0.220N	0.040N*	0.009N**	0.012N*
	RTE P-Value	0.004N**	0.065N	0.399N	0.035N*	0.008N**	0.011N*
Liver * Necrosis,Hepatocyte	Simple Incidence	1/50 ( 2.0%)	2/48 ( 4.2%)	3/46 ( 6.5%)	2/49 ( 4.1%)	4/50 ( 8.0%)	3/46 ( 6.5%)
	Poly-K Incidence	1/34.7 ( 2.9%)	2/33.5 ( 6.0%)	3/29.6 ( 10.1%)	2/33.3 ( 6.0%)	4/29.9 ( 13.4%)	3/31.0 ( 9.7%)
	Terminal Incidence	0/16 ( 0.0%)	0/19 ( 0.0%)	1/14 ( 7.1%)	0/13 ( 0.0%)	1/10 ( 10.0%)	1/8 ( 12.5%)
	Time-to-First	564	550	138	596	536	709
	Poly-K P-Value	0.109	0.488	0.248	0.485	0.133	0.263
	Severity Profile	1 0 0 0	1 1 0 0	2 0 1 0	1 0 0 1	2 0 1 1	0 1 0 2
	JT/SW P-Value	0.103	0.264	0.158	0.262	0.104	0.155
	RTE P-Value	0.110	0.315	0.196	0.316	0.088	0.135

**Table 9. Nonneoplasms by Body System for Terminal Sacrifice Females Bisphenol-A Continuous Dose Arm**

<b>System and Nonneoplasm</b>		<b>Treatment (ug/kg)</b>					
<b>Lesion</b>	<b>Statistic</b>	<b>Control</b>	<b>2.5</b>	<b>25</b>	<b>250</b>	<b>2500</b>	<b>25000</b>
Liver * Tension Lipidosis	Simple Incidence	5/50 (10.0%)	7/48 (14.6%)	8/46 (17.4%)	6/49 (12.2%)	4/50 (8.0%)	10/46 (21.7%)
	Poly-K Incidence	5/35.9 (13.9%)	7/33.6 (20.8%)	8/30.9 (25.9%)	6/33.4 (18.0%)	4/29.7 (13.5%)	10/33.6 (29.7%)
	Terminal Incidence	2/16 (12.5%)	5/19 (26.3%)	2/14 (14.3%)	3/13 (23.1%)	1/10 (10.0%)	2/8 (25.0%)
	Time-to-First	496	625	482	602	612	510
	Poly-K P-Value	0.160	0.326	0.174	0.447	0.621N	0.089
	Severity Profile	0 1 3	0 3 1 3	0 1 1 6	0 2 1 3	0 1 3 0	1 2 1 6
	JT/SW P-Value	0.229	0.262	0.164	0.310	0.443	0.064
	RTE P-Value	0.219	0.275	0.133	0.384	0.358N	0.052
Liver * Vacuolization Cytoplasmic	Simple Incidence	11/50 (22.0%)	16/48 (33.3%)	14/46 (30.4%)	13/49 (26.5%)	15/50 (30.0%)	15/46 (32.6%)
	Poly-K Incidence	11/37.0 (29.8%)	16/36.1 (44.4%)	14/32.5 (43.1%)	13/36.9 (35.2%)	15/34.6 (43.4%)	15/37.0 (40.6%)
	Terminal Incidence	4/16 (25.0%)	10/19 (52.6%)	6/14 (42.9%)	3/13 (23.1%)	3/10 (30.0%)	3/8 (37.5%)
	Time-to-First	450	471	387	445	456	467
	Poly-K P-Value	0.272	0.137	0.173	0.398	0.160	0.225
	Severity Profile	4 7 0 0	5 11 0 0	5 8 1 0	6 5 2 0	9 6 0 0	11 4 0 0
	JT/SW P-Value	0.381	0.101	0.163	0.233	0.261	0.274
	RTE P-Value	0.392	0.097	0.166	0.313	0.252	0.215
Pancreas * Basophilic Focus	Simple Incidence	3/50 (6.0%)	6/48 (12.5%)	0/46 (0.0%)	1/49 (2.0%)	1/49 (2.0%)	2/46 (4.3%)
	Poly-K Incidence	3/35.0 (8.6%)	6/34.7 (17.3%)	0/27.7 (0.0%)	1/33.0 (3.0%)	1/29.5 (3.4%)	2/32.2 (6.2%)
	Terminal Incidence	0/16 (0.0%)	2/19 (10.5%)	0/14 (0.0%)	0/13 (0.0%)	0/10 (0.0%)	0/8 (0.0%)
	Time-to-First	569	524	----	561	425	467
	Poly-K P-Value	0.080N	0.232	0.162N	0.324N	0.366N	0.538N
Pancreas * Degeneration,Acinus	Simple Incidence	34/50 (68.0%)	34/48 (70.8%)	35/46 (76.1%)	29/49 (59.2%)	31/49 (63.3%)	36/46 (78.3%)
	Poly-K Incidence	34/43.4 (78.3%)	34/41.5 (81.9%)	35/41.2 (85.0%)	29/41.1 (70.6%)	31/40.9 (75.7%)	36/43.3 (83.1%)
	Terminal Incidence	15/16 (93.8%)	16/19 (84.2%)	11/14 (78.6%)	10/13 (76.9%)	7/10 (70.0%)	6/8 (75.0%)
	Time-to-First	450	84	387	445	419	43
	Poly-K P-Value	0.480N	0.437	0.282	0.264N	0.488N	0.373
	Severity Profile	5 16 8 5	7 16 5 6	9 14 9 3	8 13 5 3	8 14 2 7	13 9 9 5
	JT/SW P-Value	0.310N	0.487N	0.611N	0.093N	0.167N	0.341N
	RTE P-Value	0.328N	0.495N	0.415	0.077N	0.204N	0.386
Pancreas * Infiltration Cellular,Lymphocyte	Simple Incidence	35/50 (70.0%)	33/48 (68.8%)	31/46 (67.4%)	28/49 (57.1%)	28/49 (57.1%)	29/46 (63.0%)
	Poly-K Incidence	35/43.1 (81.1%)	33/40.1 (82.2%)	31/38.7 (80.0%)	28/40.5 (69.1%)	28/39.1 (71.7%)	29/41.5 (69.9%)
	Terminal Incidence	15/16 (93.8%)	16/19 (84.2%)	11/14 (78.6%)	10/13 (76.9%)	7/10 (70.0%)	5/8 (62.5%)
	Time-to-First	477	471	434	445	419	467
	Poly-K P-Value	0.027N*	0.569	0.570N	0.123N	0.194N	0.147N
	Severity Profile	16 17 2 0	18 12 2 1	15 13 3 0	19 6 3 0	18 6 4 0	16 9 4 0
	JT/SW P-Value	0.051N	0.350N	0.446N	0.042N* <sup>1</sup>	0.052N	0.103N
	RTE P-Value	0.055N	0.359N	0.394N	0.037N*	0.047N*	0.205N

**Table 9. Nonneoplasms by Body System for Terminal Sacrifice Females Bisphenol-A Continuous Dose Arm**

<b>System and Nonneoplasm</b>		<b>Treatment (ug/kg)</b>					
<b>Lesion</b>	<b>Statistic</b>	<b>Control</b>	<b>2.5</b>	<b>25</b>	<b>250</b>	<b>2500</b>	<b>25000</b>
Pancreas * Inflammation,Chronic Active	Simple Incidence	2/50 ( 4.0%)	4/48 ( 8.3%)	4/46 ( 8.7%)	1/49 ( 2.0%)	1/49 ( 2.0%)	3/46 ( 6.5%)
	Poly-K Incidence	2/34.8 ( 5.7%)	4/35.4 ( 11.3%)	4/29.3 ( 13.7%)	1/32.4 ( 3.1%)	1/28.8 ( 3.5%)	3/32.2 ( 9.3%)
	Terminal Incidence	1/16 ( 6.3%)	0/19 ( 0.0%)	1/14 ( 7.1%)	1/13 ( 7.7%)	0/10 ( 0.0%)	0/8 ( 0.0%)
	Time-to-First	506	84	507	723 (T)	701	569
	Poly-K P-Value	0.412N	0.342	0.256	0.525N	0.566N	0.463
	Severity Profile	0 2 0 0	1 3 0 0	1 2 1 0	0 1 0 0	0 1 0 0	2 0 1 0
	JT/SW P-Value	0.312N	0.809N	0.877N	0.428N	0.430N	0.592N
	RTE P-Value	0.311N	0.179	0.141	0.330N	0.330N	0.297
Pancreas * Lipomatosis	Simple Incidence	6/50 ( 12.0%)	4/48 ( 8.3%)	8/46 ( 17.4%)	6/49 ( 12.2%)	3/49 ( 6.1%)	7/46 ( 15.2%)
	Poly-K Incidence	6/35.6 ( 16.8%)	4/33.9 ( 11.8%)	8/30.3 ( 26.4%)	6/33.2 ( 18.1%)	3/29.7 ( 10.1%)	7/33.1 ( 21.1%)
	Terminal Incidence	2/16 ( 12.5%)	2/19 ( 10.5%)	2/14 ( 14.3%)	3/13 ( 23.1%)	1/10 ( 10.0%)	1/8 ( 12.5%)
	Time-to-First	506	548	528	624	425	525
	Poly-K P-Value	0.415	0.398N	0.257	0.574	0.334N	0.442
	Severity Profile	0 1 3 2	0 3 1 0	0 5 3 0	0 2 2 2	0 0 2 1	0 1 6 0
	JT/SW P-Value	0.449	0.759	0.308	0.472	0.676	0.439
	RTE P-Value	0.438	0.247N	0.258	0.497	0.176N	0.327
Pancreas * Pigmentation	Simple Incidence	11/50 ( 22.0%)	11/48 ( 22.9%)	14/46 ( 30.4%)	8/49 ( 16.3%)	3/49 ( 6.1%)	8/46 ( 17.4%)
	Poly-K Incidence	11/38.6 ( 28.5%)	11/34.4 ( 32.0%)	14/34.2 ( 40.9%)	8/34.9 ( 22.9%)	3/30.5 ( 9.8%)	8/34.0 ( 23.5%)
	Terminal Incidence	3/16 ( 18.8%)	8/19 ( 42.1%)	2/14 ( 14.3%)	2/13 ( 15.4%)	0/10 ( 0.0%)	1/8 ( 12.5%)
	Time-to-First	450	524	468	478	505	467
	Poly-K P-Value	0.062N	0.471	0.185	0.390N	0.050N*	0.415N
	Severity Profile	10 1 0 0	10 1 0 0	12 2 0 0	7 1 0 0	2 1 0 0	6 2 0 0
	JT/SW P-Value	0.039N*	0.543N	0.789N	0.330N	0.032N* <sup>1</sup>	0.146N
	RTE P-Value	0.041N*	0.454	0.137	0.242N	0.025N*	0.307N
<b>Cardiovascular System</b>							
Heart * Cardiomyopathy	Simple Incidence	35/50 ( 70.0%)	30/48 ( 62.5%)	24/46 ( 52.2%)	35/49 ( 71.4%)	33/50 ( 66.0%)	33/46 ( 71.7%)
	Poly-K Incidence	35/43.5 ( 80.6%)	30/39.0 ( 77.0%)	24/34.6 ( 69.4%)	35/42.3 ( 82.7%)	33/38.4 ( 85.9%)	33/39.4 ( 83.7%)
	Terminal Incidence	15/16 ( 93.8%)	17/19 ( 89.5%)	10/14 ( 71.4%)	13/13 ( 100.0%)	10/10 ( 100.0%)	8/8 ( 100.0%)
	Time-to-First	446	84	505	377	456	493
	Poly-K P-Value	0.140	0.444N	0.157N	0.510	0.334	0.459
	Severity Profile	24 10 1 0	18 7 4 1	18 5 1 0	25 9 1 0	24 7 1 1	23 9 0 1
	JT/SW P-Value	0.395	0.569	0.902	0.610	0.734	0.593
	RTE P-Value	0.388	0.410N	0.038N*	0.494	0.314N	0.451

**Table 9. Nonneoplasms by Body System for Terminal Sacrifice Females Bisphenol-A Continuous Dose Arm**

<i>System and Nonneoplasm</i>		<i>Treatment (ug/kg)</i>					
<i>Lesion</i>	<i>Statistic</i>	<i>Control</i>	<i>2.5</i>	<i>25</i>	<i>250</i>	<i>2500</i>	<i>25000</i>
<b>Endocrine System</b>							
Adrenal Cortex * Angiectasis	Simple Incidence	9/50 (18.0%)	8/48 (16.7%)	6/45 (13.3%)	6/49 (12.2%)	6/49 (12.2%)	9/46 (19.6%)
	Poly-K Incidence	9/37.3 (24.1%)	8/35.6 (22.5%)	6/30.9 (19.4%)	6/34.1 (17.6%)	6/31.3 (19.2%)	9/32.9 (27.3%)
	Terminal Incidence	2/16 (12.5%)	3/19 (15.8%)	0/14 (0.0%)	1/13 (7.7%)	0/10 (0.0%)	2/8 (25.0%)
	Time-to-First	496	507	309	596	425	569
	Poly-K P-Value	0.503	0.546N	0.431N	0.349N	0.420N	0.486
	Severity Profile	0 4 3 2	0 4 3 1	0 5 1 0	0 5 1 0	0 3 0 3	1 6 2 0
	JT/SW P-Value	0.375N	0.417N	0.271N	0.225N	0.255N	0.366N
	RTE P-Value	0.391N	0.415N	0.226N	0.178N	0.213N	0.483
Adrenal Cortex * Degeneration,Cystic	Simple Incidence	31/50 (62.0%)	30/48 (62.5%)	27/45 (60.0%)	31/49 (63.3%)	29/49 (59.2%)	31/46 (67.4%)
	Poly-K Incidence	31/42.0 (73.8%)	30/40.2 (74.6%)	27/35.5 (76.1%)	31/40.1 (77.4%)	29/36.8 (78.9%)	31/38.9 (79.8%)
	Terminal Incidence	13/16 (81.3%)	13/19 (68.4%)	11/14 (78.6%)	13/13 (100.0%)	8/10 (80.0%)	7/8 (87.5%)
	Time-to-First	450	497	387	498	448	467
	Poly-K P-Value	0.200	0.573	0.514	0.445	0.378	0.336
	Severity Profile	3 10 8 10	3 9 6 12	6 5 4 12	5 7 5 14	8 5 4 12	4 13 6 8
	JT/SW P-Value	0.440N	0.592N	0.546N	0.677N	0.474N	0.575N
	RTE P-Value	0.433N	0.413	0.456N	0.374	0.352N	0.472
Adrenal Cortex * Hyperplasia	Simple Incidence	7/50 (14.0%)	7/48 (14.6%)	2/45 (4.4%)	3/49 (6.1%)	2/49 (4.1%)	5/46 (10.9%)
	Poly-K Incidence	7/36.7 (19.1%)	7/33.5 (20.9%)	2/28.3 (7.1%)	3/33.3 (9.0%)	2/28.8 (6.9%)	5/32.9 (15.2%)
	Terminal Incidence	2/16 (12.5%)	6/19 (31.6%)	1/14 (7.1%)	1/13 (7.7%)	1/10 (10.0%)	0/8 (0.0%)
	Time-to-First	450	548	541	582	701	523
	Poly-K P-Value	0.125N	0.543	0.150N	0.191N	0.145N	0.455N
	Severity Profile	3 3 1 0	6 1 0 0	1 1 0 0	1 2 0 0	1 1 0 0	2 3 0 0
	JT/SW P-Value	0.089N	0.481N	0.077N	0.088N	0.047N* <sup>1</sup>	0.122N
	RTE P-Value	0.105N	0.497N	0.047N*	0.086N	0.041N*	0.292N
Adrenal Cortex * Hypertrophy	Simple Incidence	5/50 (10.0%)	2/48 (4.2%)	2/45 (4.4%)	3/49 (6.1%)	4/49 (8.2%)	3/46 (6.5%)
	Poly-K Incidence	5/34.9 (14.3%)	2/33.6 (6.0%)	2/28.5 (7.0%)	3/33.5 (8.9%)	4/29.8 (13.4%)	3/32.1 (9.4%)
	Terminal Incidence	3/16 (18.8%)	0/19 (0.0%)	0/14 (0.0%)	0/13 (0.0%)	2/10 (20.0%)	0/8 (0.0%)
	Time-to-First	569	581	549	580	465	526
	Poly-K P-Value	0.493N	0.227N	0.301N	0.376N	0.602N	0.401N
	Severity Profile	1 3 1 0	1 0 1 0	1 0 1 0	1 1 1 0	1 2 1 0	2 0 1 0
	JT/SW P-Value	0.434N	0.133N	0.152N	0.190N	0.264N	0.283N
	RTE P-Value	0.444N	0.138N	0.157N	0.220N	0.357N	0.242N

**Table 9. Nonneoplasms by Body System for Terminal Sacrifice Females Bisphenol-A Continuous Dose Arm**

<b>System and Nonneoplasm</b>		<b>Treatment (ug/kg)</b>					
<b>Lesion</b>	<b>Statistic</b>	<b>Control</b>	<b>2.5</b>	<b>25</b>	<b>250</b>	<b>2500</b>	<b>25000</b>
Adrenal Cortex * Vacuolization Cytoplasmic	Simple Incidence	3/50 ( 6.0%)	6/48 ( 12.5%)	1/45 ( 2.2%)	5/49 ( 10.2%)	2/49 ( 4.1%)	4/46 ( 8.7%)
	Poly-K Incidence	3/34.2 ( 8.8%)	6/34.0 ( 17.7%)	1/28.1 ( 3.6%)	5/32.8 ( 15.2%)	2/29.2 ( 6.9%)	4/31.6 ( 12.7%)
	Terminal Incidence	3/16 ( 18.8%)	4/19 ( 21.1%)	0/14 ( 0.0%)	3/13 ( 23.1%)	1/10 ( 10.0%)	2/8 ( 25.0%)
	Time-to-First	725 (T)	550	615	669	594	542
	Poly-K P-Value	0.523N	0.232	0.376N	0.330	0.573N	0.456
	Severity Profile	1 2 0 0	2 4 0 0	1 0 0 0	1 3 1 0	2 0 0 0	0 3 0 1
	JT/SW P-Value	0.461N	0.866N	0.274N	0.653N	0.449N	0.679N
	RTE P-Value	0.468N	0.105	0.236N	0.175	0.345N	0.288
Adrenal Medulla * Hyperplasia	Simple Incidence	8/50 ( 16.0%)	7/48 ( 14.6%)	3/46 ( 6.5%)	4/49 ( 8.2%)	0/49 ( 0.0%)	4/46 ( 8.7%)
	Poly-K Incidence	8/35.8 ( 22.3%)	7/33.4 ( 20.9%)	3/28.9 ( 10.4%)	4/33.6 ( 11.9%)	0/28.7 ( 0.0%)	4/32.2 ( 12.4%)
	Terminal Incidence	4/16 ( 25.0%)	6/19 ( 31.6%)	0/14 ( 0.0%)	1/13 ( 7.7%)	0/10 ( 0.0%)	0/8 ( 0.0%)
	Time-to-First	569	570	581	561	---	526
	Poly-K P-Value	0.017N*	0.562N	0.171N	0.199N	0.008N**	0.223N
	Severity Profile	7 0 1 0	5 1 1 0	1 2 0 0	3 0 0 1	---	1 1 2 0
	JT/SW P-Value	0.013N*	0.441N	0.111N	0.125N	0.004N**	0.033N*
	RTE P-Value	0.014N*	0.417N	0.065N	0.104N	0.006N**	0.131N
Parathyroid Gland * Hyperplasia	Simple Incidence	4/50 ( 8.0%)	6/48 ( 12.5%)	3/45 ( 6.7%)	5/47 ( 10.6%)	3/50 ( 6.0%)	6/45 ( 13.3%)
	Poly-K Incidence	4/35.5 ( 11.3%)	6/34.6 ( 17.3%)	3/28.4 ( 10.5%)	5/33.3 ( 15.0%)	3/29.6 ( 10.1%)	6/31.5 ( 19.1%)
	Terminal Incidence	1/16 ( 6.3%)	2/19 ( 10.5%)	1/14 ( 7.1%)	0/13 ( 0.0%)	1/10 ( 10.0%)	1/8 ( 12.5%)
	Time-to-First	477	505	482	513	622	569
	Poly-K P-Value	0.345	0.349	0.622N	0.459	0.600N	0.290
	Severity Profile	2 2 0 0	2 3 1 0	1 2 0 0	2 2 0 1	2 1 0 0	2 2 1 1
	JT/SW P-Value	0.381	0.220	0.448	0.405	0.552	0.234
	RTE P-Value	0.367	0.195	0.420N	0.319	0.364N	0.162
Pituitary Gland * Angiectasis	Simple Incidence	10/50 ( 20.0%)	8/48 ( 16.7%)	4/46 ( 8.7%)	9/49 ( 18.4%)	9/49 ( 18.4%)	9/46 ( 19.6%)
	Poly-K Incidence	10/37.5 ( 26.7%)	8/35.4 ( 22.6%)	4/29.1 ( 13.7%)	9/34.8 ( 25.9%)	9/31.3 ( 28.8%)	9/32.2 ( 27.9%)
	Terminal Incidence	3/16 ( 18.8%)	2/19 ( 10.5%)	1/14 ( 7.1%)	2/13 ( 15.4%)	3/10 ( 30.0%)	3/8 ( 37.5%)
	Time-to-First	477	497	482	561	448	515
	Poly-K P-Value	0.330	0.446N	0.160N	0.577N	0.532	0.563
	Severity Profile	0 1 1 8	0 0 0 8	0 0 0 4	0 0 2 7	0 2 2 5	0 1 1 7
	JT/SW P-Value	0.441	0.632	0.889	0.710	0.747	0.677
	RTE P-Value	0.432	0.360N	0.083N	0.415N	0.376N	0.474N
Pituitary Gland * Cyst,Pars Distalis	Simple Incidence	9/50 ( 18.0%)	2/48 ( 4.2%)	7/46 ( 15.2%)	10/49 ( 20.4%)	3/49 ( 6.1%)	2/46 ( 4.3%)
	Poly-K Incidence	9/37.0 ( 24.3%)	2/33.2 ( 6.0%)	7/28.8 ( 24.3%)	10/35.2 ( 28.4%)	3/29.6 ( 10.1%)	2/31.7 ( 6.3%)
	Terminal Incidence	2/16 ( 12.5%)	1/19 ( 5.3%)	5/14 ( 35.7%)	3/13 ( 23.1%)	1/10 ( 10.0%)	0/8 ( 0.0%)
	Time-to-First	446	643	528	542	505	542
	Poly-K P-Value	0.102N	0.034N*	0.615	0.448	0.118N	0.041N*



**Table 9. Nonneoplasms by Body System for Terminal Sacrifice Females Bisphenol-A Continuous Dose Arm**

<b>System and Nonneoplasm</b>		<b>Treatment (ug/kg)</b>					
<b>Lesion</b>	<b>Statistic</b>	<b>Control</b>	<b>2.5</b>	<b>25</b>	<b>250</b>	<b>2500</b>	<b>25000</b>
Pituitary Gland * Hyperplasia,Pars Distalis	Simple Incidence	27/50 ( 54.0%)	22/48 ( 45.8%)	32/46 ( 69.6%)	26/49 ( 53.1%)	29/49 ( 59.2%)	23/46 ( 50.0%)
	Poly-K Incidence	27/43.6 ( 61.9%)	22/40.2 ( 54.7%)	32/40.6 ( 78.9%)	26/44.2 ( 58.8%)	29/42.7 ( 68.0%)	23/39.7 ( 57.9%)
	Terminal Incidence	9/16 ( 56.3%)	7/19 ( 36.8%)	10/14 ( 71.4%)	3/13 ( 23.1%)	5/10 ( 50.0%)	4/8 ( 50.0%)
	Time-to-First	431	321	309	261	289	467
	Poly-K P-Value	0.515N	0.320N	0.056	0.466N	0.350	0.437N
	Severity Profile	0 3 12 12	1 2 5 14	0 4 12 16	1 5 7 13	3 10 4 12	1 6 6 10
	JT/SW P-Value	0.257N	0.342N	0.794N	0.563N	0.571N	0.354N
	RTE P-Value	0.253N	0.321N	0.059	0.441N	0.444N	0.262N
Thyroid Gland * Hyperplasia,C-Cell	Simple Incidence	22/50 ( 44.0%)	17/48 ( 35.4%)	22/46 ( 47.8%)	18/49 ( 36.7%)	20/50 ( 40.0%)	17/46 ( 37.0%)
	Poly-K Incidence	22/40.7 ( 54.0%)	17/37.3 ( 45.5%)	22/36.0 ( 61.1%)	18/38.4 ( 46.9%)	20/35.9 ( 55.8%)	17/36.6 ( 46.4%)
	Terminal Incidence	8/16 ( 50.0%)	8/19 ( 42.1%)	7/14 ( 50.0%)	5/13 ( 38.5%)	4/10 ( 40.0%)	1/8 ( 12.5%)
	Time-to-First	450	505	387	445	419	493
	Poly-K P-Value	0.372N	0.293N	0.336	0.335N	0.531	0.322N
	Severity Profile	11 9 2 0	12 3 2 0	13 7 2 0	11 7 0 0	8 10 2 0	7 8 2 0
	JT/SW P-Value	0.406N	0.136N	0.388N	0.222N	0.368N	0.385N
	RTE P-Value	0.407N	0.135N	0.413	0.175N	0.403N	0.291N
Thyroid Gland * Hyperplasia,Follicular Cell	Simple Incidence	1/50 ( 2.0%)	6/48 ( 12.5%)	4/46 ( 8.7%)	3/49 ( 6.1%)	1/50 ( 2.0%)	4/46 ( 8.7%)
	Poly-K Incidence	1/34.2 ( 2.9%)	6/34.1 ( 17.6%)	4/30.1 ( 13.3%)	3/33.3 ( 9.0%)	1/29.1 ( 3.4%)	4/32.9 ( 12.2%)
	Terminal Incidence	1/16 ( 6.3%)	2/19 ( 10.5%)	0/14 ( 0.0%)	0/13 ( 0.0%)	0/10 ( 0.0%)	0/8 ( 0.0%)
	Time-to-First	726 (T)	540	505	582	679	526
	Poly-K P-Value	0.494	0.051	0.137	0.294	0.725	0.163
	Severity Profile	0 1 0 0	0 2 4 0	0 2 1 1	0 2 1 0	0 0 0 1	0 2 2 0
	JT/SW P-Value	0.497N	0.979N	0.945N	0.887N	0.652N	0.879N
	RTE P-Value	0.494N	0.015 *	0.095	0.205	0.485	0.102
Thyroid Gland * Ultimobranchial Cyst	Simple Incidence	8/50 ( 16.0%)	2/48 ( 4.2%)	6/46 ( 13.0%)	3/49 ( 6.1%)	4/50 ( 8.0%)	7/46 ( 15.2%)
	Poly-K Incidence	8/36.4 ( 22.0%)	2/33.5 ( 6.0%)	6/30.2 ( 19.9%)	3/33.3 ( 9.0%)	4/30.2 ( 13.3%)	7/32.8 ( 21.4%)
	Terminal Incidence	4/16 ( 25.0%)	1/19 ( 5.3%)	2/14 ( 14.3%)	1/13 ( 7.7%)	1/10 ( 10.0%)	2/8 ( 25.0%)
	Time-to-First	431	534	387	596	521	485
	Poly-K P-Value	0.484	0.055N	0.539N	0.120N	0.273N	0.594N
<b>Genital System</b>							
Ovary * Atrophy	Simple Incidence	47/50 ( 94.0%)	45/48 ( 93.8%)	44/46 ( 95.7%)	46/49 ( 93.9%)	45/50 ( 90.0%)	46/46 ( 100.0%)
	Poly-K Incidence	47/48.7 ( 96.5%)	45/45.1 ( 99.8%)	44/44.2 ( 99.5%)	46/47.0 ( 97.9%)	45/45.8 ( 98.3%)	46/46.0 ( 100.0%)
	Terminal Incidence	16/16 ( 100.0%)	19/19 ( 100.0%)	14/14 ( 100.0%)	13/13 ( 100.0%)	10/10 ( 100.0%)	8/8 ( 100.0%)
	Time-to-First	431	321	309	377	419	43
	Poly-K P-Value	0.168	0.300	0.366	0.611	0.563	0.271
	Severity Profile	0 24 15 8	1 27 9 8	1 25 8 10	0 27 11 8	0 26 7 12	0 23 12 11
	JT/SW P-Value	0.202	0.801	0.698	0.778	0.803	0.247
	RTE P-Value	0.189	0.206N	0.395N	0.310N	0.319N	0.188

**Table 9. Nonneoplasms by Body System for Terminal Sacrifice Females Bisphenol-A Continuous Dose Arm**

<i>System and Nonneoplasm</i>	<i>Treatment (ug/kg)</i>						
<i>Lesion</i>	<i>Statistic</i>	<i>Control</i>	<i>2.5</i>	<i>25</i>	<i>250</i>	<i>2500</i>	<i>25000</i>
Ovary * Cyst	Simple Incidence	4/50 ( 8.0%)	4/48 ( 8.3%)	4/46 ( 8.7%)	9/49 ( 18.4%)	2/50 ( 4.0%)	4/46 ( 8.7%)
	Poly-K Incidence	4/34.2 ( 11.7%)	4/33.8 ( 11.8%)	4/28.8 ( 13.9%)	9/34.3 ( 26.2%)	2/29.2 ( 6.8%)	4/31.1 ( 12.9%)
	Terminal Incidence	3/16 ( 18.8%)	2/19 ( 10.5%)	2/14 ( 14.3%)	3/13 ( 23.1%)	1/10 ( 10.0%)	1/8 ( 12.5%)
	Time-to-First	720	581	309	596	644	701
	Poly-K P-Value	0.442	0.640	0.548	0.104	0.410N	0.593
Ovary * Cyst,Follicle	Simple Incidence	3/50 ( 6.0%)	3/48 ( 6.3%)	2/46 ( 4.3%)	7/49 ( 14.3%)	6/50 ( 12.0%)	4/46 ( 8.7%)
	Poly-K Incidence	3/35.7 ( 8.4%)	3/33.4 ( 9.0%)	2/28.9 ( 6.9%)	7/34.5 ( 20.3%)	6/30.8 ( 19.5%)	4/32.3 ( 12.4%)
	Terminal Incidence	0/16 ( 0.0%)	2/19 ( 10.5%)	0/14 ( 0.0%)	2/13 ( 15.4%)	3/10 ( 30.0%)	1/8 ( 12.5%)
	Time-to-First	538	570	482	542	448	530
	Poly-K P-Value	0.106	0.634	0.597N	0.135	0.167	0.444
Ovary * Hyperplasia,Sertoliform	Simple Incidence	4/50 ( 8.0%)	5/48 ( 10.4%)	1/46 ( 2.2%)	5/49 ( 10.2%)	6/50 ( 12.0%)	4/46 ( 8.7%)
	Poly-K Incidence	4/34.6 ( 11.6%)	5/33.5 ( 14.9%)	1/28.3 ( 3.5%)	5/33.3 ( 15.0%)	6/30.0 ( 20.0%)	4/31.3 ( 12.8%)
	Terminal Incidence	2/16 ( 12.5%)	4/19 ( 21.1%)	0/14 ( 0.0%)	3/13 ( 23.1%)	2/10 ( 20.0%)	1/8 ( 12.5%)
	Time-to-First	667	550	549	602	561	665
	Poly-K P-Value	0.311	0.478	0.241N	0.475	0.275	0.589
	Severity Profile	4 0 0 0	3 1 1 0	1 0 0 0	3 2 0 0	3 1 2 0	3 0 1 0
	JT/SW P-Value	0.296	0.320	0.697	0.413	0.285	0.427
	RTE P-Value	0.301	0.318	0.161N	0.334	0.194	0.438
Uterus * Atrophy	Simple Incidence	7/50 ( 14.0%)	8/48 ( 16.7%)	4/45 ( 8.9%)	9/49 ( 18.4%)	4/48 ( 8.3%)	6/46 ( 13.0%)
	Poly-K Incidence	7/35.6 ( 19.7%)	8/34.4 ( 23.3%)	4/29.6 ( 13.5%)	9/34.8 ( 25.9%)	4/29.8 ( 13.4%)	6/31.5 ( 19.1%)
	Terminal Incidence	1/16 ( 6.3%)	4/19 ( 21.1%)	1/14 ( 7.1%)	4/13 ( 30.8%)	2/10 ( 20.0%)	3/8 ( 37.5%)
	Time-to-First	620	497	489	580	489	580
	Poly-K P-Value	0.401N	0.469	0.370N	0.366	0.366N	0.600N
	Severity Profile	0 0 7 0	0 0 5 3	0 1 3 0	0 2 5 2	0 0 3 1	0 0 6 0
	JT/SW P-Value	0.301N	0.686N	0.270N	0.601N	0.291N	0.435N
	RTE P-Value	0.303N	0.311	0.225N	0.263	0.219N	0.446N
Uterus * Dilatation,Lumen	Simple Incidence	2/50 ( 4.0%)	2/48 ( 4.2%)	3/45 ( 6.7%)	4/49 ( 8.2%)	5/48 ( 10.4%)	6/46 ( 13.0%)
	Poly-K Incidence	2/35.6 ( 5.6%)	2/33.5 ( 6.0%)	3/28.5 ( 10.5%)	4/34.5 ( 11.6%)	5/30.1 ( 16.6%)	6/33.0 ( 18.2%)
	Terminal Incidence	0/16 ( 0.0%)	1/19 ( 5.3%)	1/14 ( 7.1%)	0/13 ( 0.0%)	1/10 ( 10.0%)	0/8 ( 0.0%)
	Time-to-First	446	550	610	261	562	467
	Poly-K P-Value	0.020 *	0.673	0.398	0.319	0.147	0.103
	Severity Profile	0 0 0 2	0 0 0 2	0 0 0 3	0 0 1 3	0 0 0 5	0 0 1 5
	JT/SW P-Value	0.023 *	0.483	0.328	0.246	0.132	0.065
	RTE P-Value	0.023 *	0.488	0.313	0.227	0.112	0.059

**Table 9. Nonneoplasms by Body System for Terminal Sacrifice Females Bisphenol-A Continuous Dose Arm**

<i>System and Nonneoplasm</i>		<i>Treatment (ug/kg)</i>					
<i>Lesion</i>	<i>Statistic</i>	<i>Control</i>	<i>2.5</i>	<i>25</i>	<i>250</i>	<i>2500</i>	<i>25000</i>
Uterus * Hyperplasia,Cystic,Endometrium	Simple Incidence	30/50 ( 60.0%)	20/48 ( 41.7%)	26/45 ( 57.8%)	23/49 ( 46.9%)	22/48 ( 45.8%)	26/46 ( 56.5%)
	Poly-K Incidence	30/41.9 ( 71.6%)	20/40.1 ( 49.9%)	26/36.9 ( 70.4%)	23/40.6 ( 56.6%)	22/35.8 ( 61.4%)	26/39.2 ( 66.4%)
	Terminal Incidence	13/16 ( 81.3%)	6/19 ( 31.6%)	8/14 ( 57.1%)	4/13 ( 30.8%)	5/10 ( 50.0%)	4/8 ( 50.0%)
	Time-to-First	431	286	387	377	473	485
	Poly-K P-Value	0.478N	0.027N*	0.558N	0.097N	0.216N	0.385N
	Severity Profile	4 18 5 3	2 13 5 0	0 16 7 3	4 12 6 1	4 8 8 2	1 14 10 1
	JT/SW P-Value	0.441	0.958	0.430	0.801	0.873	0.581
	RTE P-Value	0.415	0.049N*	0.375	0.115N	0.162N	0.442
Uterus * Hyperplasia,Endometrium	Simple Incidence	10/50 ( 20.0%)	15/48 ( 31.3%)	12/45 ( 26.7%)	15/49 ( 30.6%)	15/48 ( 31.3%)	12/46 ( 26.1%)
	Poly-K Incidence	10/39.1 ( 25.6%)	15/36.4 ( 41.2%)	12/31.9 ( 37.6%)	15/37.1 ( 40.4%)	15/35.9 ( 41.8%)	12/36.2 ( 33.2%)
	Terminal Incidence	2/16 ( 12.5%)	8/19 ( 42.1%)	5/14 ( 35.7%)	5/13 ( 38.5%)	2/10 ( 20.0%)	1/8 ( 12.5%)
	Time-to-First	488	505	309	445	419	43
	Poly-K P-Value	0.248	0.108	0.196	0.120	0.099	0.315
	Severity Profile	2 8 0 0	5 8 2 0	2 8 2 0	6 7 0 2	10 5 0 0	2 7 1 2
	JT/SW P-Value	0.278	0.108	0.182	0.172	0.207	0.228
	RTE P-Value	0.289	0.116	0.206	0.140	0.196	0.208
Uterus * Metaplasia,Squamous	Simple Incidence	2/50 ( 4.0%)	4/48 ( 8.3%)	4/45 ( 8.9%)	1/49 ( 2.0%)	4/48 ( 8.3%)	6/46 ( 13.0%)
	Poly-K Incidence	2/35.7 ( 5.6%)	4/35.0 ( 11.4%)	4/29.5 ( 13.6%)	1/32.8 ( 3.0%)	4/31.1 ( 12.9%)	6/33.9 ( 17.7%)
	Terminal Incidence	0/16 ( 0.0%)	0/19 ( 0.0%)	1/14 ( 7.1%)	0/13 ( 0.0%)	0/10 ( 0.0%)	0/8 ( 0.0%)
	Time-to-First	431	471	539	624	470	485
	Poly-K P-Value	0.110	0.326	0.249	0.529N	0.272	0.110
	Severity Profile	1 1 0 0	2 2 0 0	1 2 0 1	1 0 0 0	1 3 0 0	4 1 1 0
	JT/SW P-Value	0.116	0.187	0.200	0.391	0.243	0.060
	RTE P-Value	0.119	0.208	0.162	0.351N	0.190	0.051
Vagina * Degeneration,Epithelium	Simple Incidence	1/49 ( 2.0%)	6/48 ( 12.5%)	3/45 ( 6.7%)	2/49 ( 4.1%)	6/50 ( 12.0%)	2/46 ( 4.3%)
	Poly-K Incidence	1/34.2 ( 2.9%)	6/35.0 ( 17.2%)	3/28.9 ( 10.4%)	2/33.0 ( 6.1%)	6/31.1 ( 19.3%)	2/32.1 ( 6.2%)
	Terminal Incidence	0/16 ( 0.0%)	1/19 ( 5.3%)	0/14 ( 0.0%)	1/13 ( 7.7%)	3/10 ( 30.0%)	0/8 ( 0.0%)
	Time-to-First	564	497	489	561	419	517
	Poly-K P-Value	0.401	0.055	0.244	0.487	0.038 *	0.477
	Severity Profile	0 0 1 0	0 2 3 1	0 1 2 0	0 1 1 0	0 3 2 1	0 2 0 0
	JT/SW P-Value	0.401	0.024 * <sup>1</sup>	0.090	0.158	0.039 * <sup>1</sup>	0.160
	RTE P-Value	0.424	0.022 *	0.221	0.351	0.032 *	0.345
Vagina * Hyperplasia,Epithelium	Simple Incidence	4/49 ( 8.2%)	5/48 ( 10.4%)	12/45 ( 26.7%)	10/49 ( 20.4%)	11/50 ( 22.0%)	12/46 ( 26.1%)
	Poly-K Incidence	4/35.2 ( 11.4%)	5/35.3 ( 14.2%)	12/33.7 ( 35.6%)	10/36.5 ( 27.4%)	11/33.4 ( 32.9%)	12/36.8 ( 32.6%)
	Terminal Incidence	2/16 ( 12.5%)	1/19 ( 5.3%)	2/14 ( 14.3%)	1/13 ( 7.7%)	2/10 ( 20.0%)	0/8 ( 0.0%)
	Time-to-First	431	471	434	478	470	43
	Poly-K P-Value	0.006 **	0.502	0.014 *	0.074	0.026 *	0.026 *
	Severity Profile	0 1 2 1	0 1 4 0	1 3 6 2	0 7 3 0	0 3 5 3	0 6 4 2
	JT/SW P-Value	0.007 **	0.360	0.007 **	0.031 *	0.038 *	0.019 *
	RTE P-Value	0.009 **	0.394	0.012 *	0.088	0.035 *	0.016 *

**Table 9. Nonneoplasms by Body System for Terminal Sacrifice Females Bisphenol-A Continuous Dose Arm**

<i>System and Nonneoplasm</i>		<i>Treatment (ug/kg)</i>					
<i>Lesion</i>	<i>Statistic</i>	<i>Control</i>	<i>2.5</i>	<i>25</i>	<i>250</i>	<i>2500</i>	<i>25000</i>
Vagina * Infiltration Cellular,Polymorphonuclear	Simple Incidence	7/49 ( 14.3%)	2/48 ( 4.2%)	9/45 ( 20.0%)	3/49 ( 6.1%)	6/50 ( 12.0%)	6/46 ( 13.0%)
	Poly-K Incidence	7/36.3 ( 19.3%)	2/33.0 ( 6.1%)	9/31.8 ( 28.3%)	3/32.4 ( 9.2%)	6/32.7 ( 18.3%)	6/31.9 ( 18.8%)
	Terminal Incidence	2/16 ( 12.5%)	1/19 ( 5.3%)	3/14 ( 21.4%)	3/13 ( 23.1%)	0/10 ( 0.0%)	2/8 ( 25.0%)
	Time-to-First	495	699	387	724 (T)	425	517
	Poly-K P-Value	0.432	0.097N	0.276	0.199N	0.582N	0.602N
	Severity Profile	0 2 2 3	0 1 1 0	0 5 2 2	0 2 1 0	0 1 2 3	0 3 1 2
	JT/SW P-Value	0.467	0.960	0.277	0.750	0.770	0.748
	RTE P-Value	0.465	0.049N*	0.219	0.087N	0.368N	0.405N
Vagina * Mucification,Epithelium	Simple Incidence	46/49 ( 93.9%)	37/48 ( 77.1%)	34/45 ( 75.6%)	39/49 ( 79.6%)	34/50 ( 68.0%)	40/46 ( 87.0%)
	Poly-K Incidence	46/47.2 ( 97.4%)	37/42.0 ( 88.1%)	34/39.3 ( 86.6%)	39/45.2 ( 86.4%)	34/42.8 ( 79.4%)	40/43.6 ( 91.8%)
	Terminal Incidence	16/16 (100.0%)	17/19 ( 89.5%)	13/14 ( 92.9%)	10/13 ( 76.9%)	6/10 ( 60.0%)	8/8 (100.0%)
	Time-to-First	450	497	309	377	419	43
	Poly-K P-Value	0.055N	0.064N	0.025N*	0.033N*	0.002N**	0.182N
	Severity Profile	0 13 12 21	0 7 8 22	0 7 11 16	0 4 14 21	0 8 9 17	1 10 8 21
	JT/SW P-Value	0.219N	0.296N	0.123N	0.286N	0.035N* <sup>1</sup>	0.182N
	RTE P-Value	0.233N	0.286N	0.103N	0.367N	0.029N*	0.399N
<b>Hematopoietic System</b>							
Bone Marrow * Hypocellularity	Simple Incidence	2/50 ( 4.0%)	3/48 ( 6.3%)	1/46 ( 2.2%)	2/49 ( 4.1%)	2/49 ( 4.1%)	6/46 ( 13.0%)
	Poly-K Incidence	2/35.3 ( 5.7%)	3/34.0 ( 8.8%)	1/28.4 ( 3.5%)	2/32.8 ( 6.1%)	2/29.5 ( 6.8%)	6/32.0 ( 18.8%)
	Terminal Incidence	0/16 ( 0.0%)	1/19 ( 5.3%)	0/14 ( 0.0%)	1/13 ( 7.7%)	1/10 ( 10.0%)	1/8 ( 12.5%)
	Time-to-First	450	497	482	634	456	515
	Poly-K P-Value	0.068	0.482	0.576N	0.669	0.628	0.096
	Severity Profile	0 0 1 1	0 0 1 2	0 0 0 1	0 0 2 0	0 0 1 1	0 0 5 1
	JT/SW P-Value	0.085	0.304	0.552	0.596	0.618	0.037 *
	RTE P-Value	0.076	0.308	0.352N	0.497N	0.493	0.035 *
Spleen * Hematopoietic Cell Proliferation	Simple Incidence	28/50 ( 56.0%)	27/48 ( 56.3%)	29/46 ( 63.0%)	30/49 ( 61.2%)	30/50 ( 60.0%)	23/46 ( 50.0%)
	Poly-K Incidence	28/44.0 ( 63.7%)	27/39.8 ( 67.9%)	29/39.4 ( 73.6%)	30/41.7 ( 72.0%)	30/41.9 ( 71.6%)	23/40.3 ( 57.1%)
	Terminal Incidence	8/16 ( 50.0%)	12/19 ( 63.2%)	7/14 ( 50.0%)	8/13 ( 61.5%)	5/10 ( 50.0%)	2/8 ( 25.0%)
	Time-to-First	431	84	309	478	419	43
	Poly-K P-Value	0.372N	0.427	0.217	0.265	0.279	0.339N
	Severity Profile	5 12 6 5	1 12 8 6	3 14 8 4	3 13 8 6	5 13 7 5	4 7 7 5
	JT/SW P-Value	0.397N	0.707N	0.823N	0.867N	0.784N	0.541N
	RTE P-Value	0.388N	0.289	0.237	0.218	0.357	0.409N

**Table 9. Nonneoplasms by Body System for Terminal Sacrifice Females Bisphenol-A Continuous Dose Arm**

<i>System and Nonneoplasm</i>	<i>Treatment (ug/kg)</i>						
<i>Lesion</i>	<i>Statistic</i>	<i>Control</i>	<i>2.5</i>	<i>25</i>	<i>250</i>	<i>2500</i>	<i>25000</i>
Spleen * Pigmentation	Simple Incidence	32/50 ( 64.0%)	27/48 ( 56.3%)	28/46 ( 60.9%)	34/49 ( 69.4%)	35/50 ( 70.0%)	30/46 ( 65.2%)
	Poly-K Incidence	32/44.2 ( 72.5%)	27/41.6 ( 64.9%)	28/37.0 ( 75.6%)	34/44.0 ( 77.3%)	35/42.6 ( 82.1%)	30/40.7 ( 73.7%)
	Terminal Incidence	11/16 ( 68.8%)	10/19 ( 52.6%)	12/14 ( 85.7%)	12/13 ( 92.3%)	9/10 ( 90.0%)	6/8 ( 75.0%)
	Time-to-First	431	147	309	261	256	485
	Poly-K P-Value	0.133	0.291N	0.470	0.379	0.182	0.551
	Severity Profile	7 13 6 6	6 11 7 3	5 10 7 6	9 16 5 4	4 10 13 8	6 13 4 7
	JT/SW P-Value	0.099	0.788	0.575	0.610	0.102	0.283
	RTE P-Value	0.112	0.215N	0.484	0.491N	0.077	0.423
Thymus * Atrophy	Simple Incidence	47/50 ( 94.0%)	47/48 ( 97.9%)	43/44 ( 97.7%)	47/49 ( 95.9%)	47/49 ( 95.9%)	44/45 ( 97.8%)
	Poly-K Incidence	47/49.3 ( 95.4%)	47/47.0 ( 100.0%)	43/43.2 ( 99.5%)	47/47.2 ( 99.6%)	47/47.1 ( 99.8%)	44/44.0 ( 100.0%)
	Terminal Incidence	16/16 ( 100.0%)	19/19 ( 100.0%)	14/14 ( 100.0%)	13/13 ( 100.0%)	10/10 ( 100.0%)	8/8 ( 100.0%)
	Time-to-First	431	84	309	445	419	467
	Poly-K P-Value	0.016 *	0.178	0.251	0.216	0.198	0.191
	Severity Profile	0 2 4 4 1	0 2 6 3 9	0 1 7 3 5	0 0 4 4 3	0 3 8 3 6	0 0 4 4 0
	JT/SW P-Value	0.334	0.492	0.608	0.262	0.669	0.219
	RTE P-Value	0.313	0.496	0.436N	0.206	0.156N	0.162
<b>Integumentary System</b>							
Mammary Gland * Atypical Focus	Simple Incidence	2/50 ( 4.0%)	7/48 ( 14.6%)	1/46 ( 2.2%)	5/49 ( 10.2%)	3/50 ( 6.0%)	3/46 ( 6.5%)
	Poly-K Incidence	2/34.4 ( 5.8%)	7/33.6 ( 20.9%)	1/28.2 ( 3.5%)	5/33.3 ( 15.0%)	3/29.7 ( 10.1%)	3/31.7 ( 9.5%)
	Terminal Incidence	1/16 ( 6.3%)	5/19 ( 26.3%)	0/14 ( 0.0%)	3/13 ( 23.1%)	2/10 ( 20.0%)	1/8 ( 12.5%)
	Time-to-First	672	621	581	561	456	517
	Poly-K P-Value	0.504N	0.067	0.569N	0.197	0.432	0.463
	Severity Profile	0 2 0 0	3 2 2 0	0 1 0 0	0 5 0 0	1 2 0 0	1 2 0 0
	JT/SW P-Value	0.436N	0.963N	0.430N	0.787N	0.780N	0.806N
	RTE P-Value	0.427N	0.024 *	0.364N	0.107	0.358	0.325
Mammary Gland * Dilatation,Alveolus	Simple Incidence	9/50 ( 18.0%)	14/48 ( 29.2%)	5/46 ( 10.9%)	7/49 ( 14.3%)	7/50 ( 14.0%)	11/46 ( 23.9%)
	Poly-K Incidence	9/36.0 ( 25.0%)	14/38.0 ( 36.8%)	5/30.9 ( 16.2%)	7/35.2 ( 19.9%)	7/32.3 ( 21.7%)	11/34.6 ( 31.8%)
	Terminal Incidence	5/16 ( 31.3%)	4/19 ( 21.1%)	0/14 ( 0.0%)	1/13 ( 7.7%)	0/10 ( 0.0%)	1/8 ( 12.5%)
	Time-to-First	477	497	468	478	470	485
	Poly-K P-Value	0.444N	0.192	0.277N	0.407N	0.486N	0.351
	Severity Profile	1 7 1 0	1 11 2 0	0 5 0 0	0 7 0 0	0 6 1 0	0 9 2 0
	JT/SW P-Value	0.412N	0.908N	0.229N	0.315N	0.351N	0.531N
	RTE P-Value	0.425N	0.068	0.192N	0.318N	0.320N	0.197

**Table 9. Nonneoplasms by Body System for Terminal Sacrifice Females Bisphenol-A Continuous Dose Arm**

<b>System and Nonneoplasm</b>		<b>Treatment (ug/kg)</b>					
<b>Lesion</b>	<b>Statistic</b>	<b>Control</b>	<b>2.5</b>	<b>25</b>	<b>250</b>	<b>2500</b>	<b>25000</b>
Mammary Gland * Dilatation,Duct	Simple Incidence	15/50 (30.0%)	16/48 (33.3%)	7/46 (15.2%)	9/49 (18.4%)	9/50 (18.0%)	14/46 (30.4%)
	Poly-K Incidence	15/38.1 (39.4%)	16/39.4 (40.6%)	7/31.9 (22.0%)	9/35.7 (25.2%)	9/33.1 (27.2%)	14/36.4 (38.5%)
	Terminal Incidence	7/16 (43.8%)	3/19 (15.8%)	0/14 (0.0%)	2/13 (15.4%)	0/10 (0.0%)	1/8 (12.5%)
	Time-to-First	477	471	468	478	470	485
	Poly-K P-Value	0.260N	0.551	0.089N	0.138N	0.193N	0.564N
	Severity Profile	0 10 5 0	0 12 2 2	0 6 1 0	0 6 3 0	0 4 5 0	2 9 3 0
	JT/SW P-Value	0.182N	0.619N	0.049N* <sup>1</sup>	0.073N	0.087N	0.174N
	RTE P-Value	0.198N	0.364	0.034N*	0.089N	0.098N	0.449N
Mammary Gland * Hyperplasia,Lobular	Simple Incidence	43/50 (86.0%)	41/48 (85.4%)	30/46 (65.2%)	38/49 (77.6%)	40/50 (80.0%)	37/46 (80.4%)
	Poly-K Incidence	43/45.4 (94.7%)	41/42.5 (96.4%)	30/36.7 (81.8%)	38/43.7 (86.9%)	40/43.2 (92.6%)	37/43.4 (85.2%)
	Terminal Incidence	16/16 (100.0%)	19/19 (100.0%)	12/14 (85.7%)	11/13 (84.6%)	10/10 (100.0%)	6/8 (75.0%)
	Time-to-First	477	471	482	445	419	467
	Poly-K P-Value	0.041N*	0.573	0.027N*	0.130N	0.521N	0.099N
	Severity Profile	1 8 13 21	1 7 11 22	1 7 10 12	0 7 17 14	1 14 11 14	4 9 5 19
	JT/SW P-Value	0.058N	0.596N	0.012N* <sup>1</sup>	0.048N* <sup>1</sup>	0.051N	0.085N
	RTE P-Value	0.059N	0.419	0.008N**	0.113N	0.047N*	0.170N
<b>Nervous System</b>							
Brain, Brain Stem * Compression	Simple Incidence	14/50 (28.0%)	13/48 (27.1%)	7/46 (15.2%)	14/49 (28.6%)	13/50 (26.0%)	17/46 (37.0%)
	Poly-K Incidence	14/38.6 (36.2%)	13/36.4 (35.7%)	7/29.5 (23.7%)	14/36.8 (38.0%)	13/32.8 (39.6%)	17/34.3 (49.6%)
	Terminal Incidence	3/16 (18.8%)	5/19 (26.3%)	3/14 (21.4%)	3/13 (23.1%)	3/10 (30.0%)	3/8 (37.5%)
	Time-to-First	477	497	482	513	456	510
	Poly-K P-Value	0.098	0.578N	0.195N	0.532	0.481	0.169
	Severity Profile	1 3 4 6	3 4 2 4	5 0 2 0	2 5 3 4	2 3 5 3	2 5 5 5
	JT/SW P-Value	0.176	0.622	0.915	0.661	0.740	0.266
	RTE P-Value	0.166	0.373N	0.038N*	0.451N	0.348N	0.196
Brain, Cerebrum * Dilatation,Ventricle	Simple Incidence	7/50 (14.0%)	4/48 (8.3%)	2/46 (4.3%)	4/49 (8.2%)	6/50 (12.0%)	6/46 (13.0%)
	Poly-K Incidence	7/36.0 (19.5%)	4/34.6 (11.6%)	2/28.8 (7.0%)	4/33.3 (12.0%)	6/30.8 (19.5%)	6/31.9 (18.8%)
	Terminal Incidence	1/16 (6.3%)	0/19 (0.0%)	0/14 (0.0%)	2/13 (15.4%)	1/10 (10.0%)	1/8 (12.5%)
	Time-to-First	495	497	482	604	521	515
	Poly-K P-Value	0.383	0.276N	0.137N	0.300N	0.622N	0.596N
	Severity Profile	4 3 0 0	1 3 0 0	1 1 0 0	0 4 0 0	1 5 0 0	4 2 0 0
	JT/SW P-Value	0.405	0.795	0.946	0.916	0.742	0.722
	RTE P-Value	0.389	0.210N	0.073N	0.215N	0.404N	0.432N

**Table 9. Nonneoplasms by Body System for Terminal Sacrifice Females Bisphenol-A Continuous Dose Arm**

<i>System and Nonneoplasm</i>		<i>Treatment (ug/kg)</i>					
<i>Lesion</i>	<i>Statistic</i>	<i>Control</i>	<i>2.5</i>	<i>25</i>	<i>250</i>	<i>2500</i>	<i>25000</i>
<b>Respiratory System</b>							
Lung * Hyperplasia,Alveolar Epithelium	Simple Incidence	4/38 ( 10.5%)	2/32 ( 6.3%)	1/34 ( 2.9%)	1/39 ( 2.6%)	3/44 ( 6.8%)	0/42 ( 0.0%)
	Poly-K Incidence	4/22.8 ( 17.5%)	2/17.0 ( 11.8%)	1/15.7 ( 6.4%)	1/22.5 ( 4.4%)	3/24.4 ( 12.3%)	0/26.8 ( 0.0%)
	Terminal Incidence	2/4 ( 50.0%)	1/3 ( 33.3%)	1/2 ( 50.0%)	0/3 ( 0.0%)	0/4 ( 0.0%)	0/4 ( 0.0%)
	Time-to-First	625	714	724 (T)	708	489	----
	Poly-K P-Value	0.027N*	0.480N	0.300N	0.171N	0.461N	0.037N*
	Severity Profile	2 2 0 0	1 1 0 0	0 1 0 0	0 1 0 0	1 2 0 0	---
	JT/SW P-Value	0.041N*	0.264N	0.125N	0.085N	0.158N	0.018N*
	RTE P-Value	0.042N*	0.204N	0.094N	0.074N	0.190N	0.026N*
Lung * Infiltration Cellular,Histiocyte	Simple Incidence	8/38 ( 21.1%)	3/32 ( 9.4%)	8/34 ( 23.5%)	12/39 ( 30.8%)	10/44 ( 22.7%)	13/42 ( 31.0%)
	Poly-K Incidence	8/24.4 ( 32.8%)	3/17.2 ( 17.4%)	8/19.0 ( 42.0%)	12/26.3 ( 45.6%)	10/27.3 ( 36.6%)	13/30.3 ( 42.9%)
	Terminal Incidence	3/4 ( 75.0%)	1/3 ( 33.3%)	2/2 ( 100.0%)	2/3 ( 66.7%)	0/4 ( 0.0%)	3/4 ( 75.0%)
	Time-to-First	488	651	468	556	434	525
	Poly-K P-Value	0.116	0.218N	0.371	0.245	0.503	0.305
	Severity Profile	1 5 2 0	2 0 0 1	2 3 2 1	6 5 1 0	5 2 3 0	3 3 6 1
	JT/SW P-Value	0.052	0.916	0.459	0.275	0.447	0.169
	RTE P-Value	0.042 *	0.112N	0.395	0.226	0.479	0.124
<b>Urinary System</b>							
Kidney * Casts Protein	Simple Incidence	8/50 ( 16.0%)	4/48 ( 8.3%)	3/46 ( 6.5%)	5/49 ( 10.2%)	6/50 ( 12.0%)	6/46 ( 13.0%)
	Poly-K Incidence	8/35.9 ( 22.3%)	4/34.0 ( 11.8%)	3/29.6 ( 10.1%)	5/34.2 ( 14.6%)	6/31.2 ( 19.2%)	6/33.4 ( 17.9%)
	Terminal Incidence	5/16 ( 31.3%)	2/19 ( 10.5%)	0/14 ( 0.0%)	2/13 ( 15.4%)	3/10 ( 30.0%)	2/8 ( 25.0%)
	Time-to-First	450	524	434	261	434	485
	Poly-K P-Value	0.528	0.194N	0.160N	0.299N	0.497N	0.439N
	Severity Profile	8 0 0 0	3 1 0 0	3 0 0 0	4 1 0 0	5 1 0 0	2 4 0 0
	JT/SW P-Value	0.467	0.864	0.955	0.910	0.856	0.770
	RTE P-Value	0.449	0.139N	0.083N	0.212N	0.280N	0.383N
Kidney * Cyst,Cortex	Simple Incidence	5/50 ( 10.0%)	8/48 ( 16.7%)	5/46 ( 10.9%)	7/49 ( 14.3%)	10/50 ( 20.0%)	9/46 ( 19.6%)
	Poly-K Incidence	5/36.2 ( 13.8%)	8/34.8 ( 23.0%)	5/30.2 ( 16.6%)	7/33.9 ( 20.7%)	10/33.7 ( 29.7%)	9/33.0 ( 27.3%)
	Terminal Incidence	1/16 ( 6.3%)	5/19 ( 26.3%)	1/14 ( 7.1%)	4/13 ( 30.8%)	2/10 ( 20.0%)	3/8 ( 37.5%)
	Time-to-First	488	497	505	513	289	493
	Poly-K P-Value	0.064	0.242	0.514	0.327	0.087	0.133
Kidney * Cyst,Renal Tubule	Simple Incidence	9/50 ( 18.0%)	8/48 ( 16.7%)	12/46 ( 26.1%)	15/49 ( 30.6%)	12/50 ( 24.0%)	6/46 ( 13.0%)
	Poly-K Incidence	9/36.2 ( 24.8%)	8/34.3 ( 23.3%)	12/32.1 ( 37.4%)	15/36.1 ( 41.6%)	12/33.9 ( 35.4%)	6/33.4 ( 18.0%)
	Terminal Incidence	5/16 ( 31.3%)	4/19 ( 21.1%)	5/14 ( 35.7%)	9/13 ( 69.2%)	1/10 ( 10.0%)	0/8 ( 0.0%)
	Time-to-First	446	534	138	261	434	485
	Poly-K P-Value	0.462	0.551N	0.187	0.093	0.235	0.340N

**Table 9. Nonneoplasms by Body System for Terminal Sacrifice Females Bisphenol-A Continuous Dose Arm**

<i>System and Nonneoplasm</i>		<i>Treatment (ug/kg)</i>					
<i>Lesion</i>	<i>Statistic</i>	<i>Control</i>	<i>2.5</i>	<i>25</i>	<i>250</i>	<i>2500</i>	<i>25000</i>
Kidney * Hyperplasia, Transitional Epithelium	Simple Incidence	12/50 (24.0%)	9/48 (18.8%)	7/46 (15.2%)	8/49 (16.3%)	9/50 (18.0%)	9/46 (19.6%)
	Poly-K Incidence	12/35.4 (33.9%)	9/33.8 (26.6%)	7/30.0 (23.3%)	8/34.2 (23.4%)	9/30.9 (29.1%)	9/32.7 (27.5%)
	Terminal Incidence	7/16 (43.8%)	7/19 (36.8%)	2/14 (14.3%)	4/13 (30.8%)	3/10 (30.0%)	2/8 (25.0%)
	Time-to-First	569	534	541	542	562	510
	Poly-K P-Value	0.345N	0.342N	0.246N	0.233N	0.438N	0.374N
	Severity Profile	8 4 0 0	8 1 0 0	5 2 0 0	6 1 1 0	8 1 0 0	6 2 0 1
	JT/SW P-Value	0.300N	0.228N	0.158N	0.180N	0.204N	0.256N
	RTE P-Value	0.314N	0.223N	0.132N	0.153N	0.192N	0.293N
Kidney * Mineralization	Simple Incidence	30/50 (60.0%)	23/48 (47.9%)	25/46 (54.3%)	25/49 (51.0%)	24/50 (48.0%)	26/46 (56.5%)
	Poly-K Incidence	30/42.9 (69.9%)	23/37.8 (60.9%)	25/40.3 (62.0%)	25/40.6 (61.6%)	24/39.3 (61.0%)	26/38.6 (67.4%)
	Terminal Incidence	10/16 (62.5%)	12/19 (63.2%)	4/14 (28.6%)	7/13 (53.8%)	3/10 (30.0%)	6/8 (75.0%)
	Time-to-First	446	505	138	377	289	493
	Poly-K P-Value	0.409N	0.256N	0.286N	0.270N	0.253N	0.497N
	Severity Profile	21 8 1 0	20 3 0 0	18 7 0 0	18 7 0 0	17 5 2 0	16 7 2 1
	JT/SW P-Value	0.475	0.945	0.814	0.888	0.925	0.663
	RTE P-Value	0.446	0.059N	0.274N	0.173N	0.135N	0.487N
Kidney * Nephropathy	Simple Incidence	19/50 (38.0%)	28/48 (58.3%)	21/46 (45.7%)	21/49 (42.9%)	21/50 (42.0%)	25/46 (54.3%)
	Poly-K Incidence	19/39.9 (47.6%)	28/40.6 (69.0%)	21/34.4 (61.0%)	21/38.5 (54.5%)	21/35.5 (59.2%)	25/38.2 (65.4%)
	Terminal Incidence	6/16 (37.5%)	12/19 (63.2%)	7/14 (50.0%)	7/13 (53.8%)	5/10 (50.0%)	4/8 (50.0%)
	Time-to-First	488	84	505	513	489	43
	Poly-K P-Value	0.207	0.033 *	0.164	0.344	0.206	0.073
	Severity Profile	18 0 1 0	16 9 0 3	17 2 1 1	12 5 2 2	12 4 3 2	18 3 1 3
	JT/SW P-Value	0.186	0.004 ** <sup>1</sup>	0.039 * <sup>1</sup>	0.071	0.100	0.034 *
	RTE P-Value	0.188	0.005 **	0.183	0.135	0.142	0.027 *

P-values for dose trend are presented in the "Control" column.

N indicates a negative trend or negative treatment comparison to control with corresponding lower-tail p-values.

<sup>1</sup> Nonsignificant SW test due to the assumption of monotonicity.



*Table 10. Nonneoplasms by Body System for Terminal Sacrifice Males Bisphenol-A Continuous Dose Arm*

<i>System and Nonneoplasm</i>		<i>Treatment (ug/kg)</i>					
<i>Lesion</i>	<i>Statistic</i>	<i>Control</i>	<i>2.5</i>	<i>25</i>	<i>250</i>	<i>2500</i>	<i>25000</i>
<b>Alimentary System</b>							
Liver * Angiectasis	Simple Incidence	1/50 ( 2.0%)	8/47 ( 17.0%)	4/48 ( 8.3%)	4/50 ( 8.0%)	3/50 ( 6.0%)	2/45 ( 4.4%)
	Poly-K Incidence	1/33.7 ( 3.0%)	8/35.1 ( 22.8%)	4/33.4 ( 12.0%)	4/34.0 ( 11.8%)	3/33.6 ( 8.9%)	2/28.5 ( 7.0%)
	Terminal Incidence	1/15 ( 6.7%)	4/16 ( 25.0%)	2/17 ( 11.8%)	3/14 ( 21.4%)	3/16 ( 18.8%)	1/11 ( 9.1%)
	Time-to-First	727 (T)	619	509	573	725 (T)	711
	Poly-K P-Value	0.332N	0.016 *	0.172	0.177	0.301	0.441
	Severity Profile	0 1 0 0	3 4 1 0	1 3 0 0	1 3 0 0	0 3 0 0	0 1 1 0
	JT/SW P-Value	0.295N	0.994N	0.922N	0.936N	0.891N	0.830N
RTE P-Value	0.268N	0.004 **	0.138	0.142	0.222	0.316	
Liver * Basophilic Focus	Simple Incidence	5/50 ( 10.0%)	5/47 ( 10.6%)	6/48 ( 12.5%)	8/50 ( 16.0%)	3/50 ( 6.0%)	4/45 ( 8.9%)
	Poly-K Incidence	5/34.3 ( 14.6%)	5/34.8 ( 14.4%)	6/34.4 ( 17.4%)	8/34.2 ( 23.4%)	3/33.6 ( 8.9%)	4/29.3 ( 13.6%)
	Terminal Incidence	3/15 ( 20.0%)	3/16 ( 18.8%)	1/17 ( 5.9%)	5/14 ( 35.7%)	3/16 ( 18.8%)	2/11 ( 18.2%)
	Time-to-First	622	553	476	600	725 (T)	509
	Poly-K P-Value	0.427N	0.624N	0.503	0.263	0.365N	0.600N
Liver * Clear Cell Focus	Simple Incidence	11/50 ( 22.0%)	7/47 ( 14.9%)	11/48 ( 22.9%)	14/50 ( 28.0%)	10/50 ( 20.0%)	8/45 ( 17.8%)
	Poly-K Incidence	11/35.7 ( 30.8%)	7/34.5 ( 20.3%)	11/34.4 ( 32.0%)	14/36.5 ( 38.4%)	10/34.9 ( 28.7%)	8/30.0 ( 26.7%)
	Terminal Incidence	6/15 ( 40.0%)	5/16 ( 31.3%)	7/17 ( 41.2%)	6/14 ( 42.9%)	7/16 ( 43.8%)	5/11 ( 45.5%)
	Time-to-First	566	615	532	485	540	501
	Poly-K P-Value	0.421	0.226N	0.561	0.329	0.526N	0.463N
Liver * Degeneration,Cystic	Simple Incidence	21/50 ( 42.0%)	19/47 ( 40.4%)	19/48 ( 39.6%)	22/50 ( 44.0%)	18/50 ( 36.0%)	18/45 ( 40.0%)
	Poly-K Incidence	21/38.2 ( 55.0%)	19/37.8 ( 50.3%)	19/35.9 ( 52.9%)	22/36.8 ( 59.7%)	18/37.6 ( 47.9%)	18/32.6 ( 55.2%)
	Terminal Incidence	9/15 ( 60.0%)	8/16 ( 50.0%)	9/17 ( 52.9%)	10/14 ( 71.4%)	7/16 ( 43.8%)	9/11 ( 81.8%)
	Time-to-First	425	516	532	574	411	386
	Poly-K P-Value	0.516N	0.426N	0.523N	0.421	0.342N	0.592
	Severity Profile	14 6 1 0	11 8 0 0	13 5 0 1	12 10 0 0	9 7 2 0	14 3 1 0
	JT/SW P-Value	0.377N	0.484N	0.472N	0.631N	0.494N	0.486N
RTE P-Value	0.372N	0.482N	0.401N	0.358	0.375N	0.365N	
Liver * Fatty Change	Simple Incidence	4/50 ( 8.0%)	8/47 ( 17.0%)	5/48 ( 10.4%)	5/50 ( 10.0%)	4/50 ( 8.0%)	2/45 ( 4.4%)
	Poly-K Incidence	4/35.1 ( 11.4%)	8/36.5 ( 21.9%)	5/33.2 ( 15.1%)	5/35.4 ( 14.1%)	4/34.4 ( 11.6%)	2/29.1 ( 6.9%)
	Terminal Incidence	2/15 ( 13.3%)	0/16 ( 0.0%)	1/17 ( 5.9%)	1/14 ( 7.1%)	1/16 ( 6.3%)	1/11 ( 9.1%)
	Time-to-First	225	595	588	342	631	509
	Poly-K P-Value	0.160N	0.188	0.465	0.506	0.636	0.425N
	Severity Profile	0 1 1 2	1 3 1 3	2 1 1 1	0 4 0 1	0 3 1 0	0 1 0 1
	JT/SW P-Value	0.104N	0.901N	0.700N	0.721N	0.605N	0.365N
RTE P-Value	0.095N	0.074	0.374	0.392	0.473N	0.270N	

**Table 10. Nonneoplasms by Body System for Terminal Sacrifice Males Bisphenol-A Continuous Dose Arm**

<i>System and Nonneoplasm</i>		<i>Treatment (ug/kg)</i>					
<i>Lesion</i>	<i>Statistic</i>	<i>Control</i>	<i>2.5</i>	<i>25</i>	<i>250</i>	<i>2500</i>	<i>25000</i>
Liver * Fibrosis,Biliary Tract	Simple Incidence	13/50 ( 26.0%)	19/47 ( 40.4%)	19/48 ( 39.6%)	15/50 ( 30.0%)	19/50 ( 38.0%)	10/45 ( 22.2%)
	Poly-K Incidence	13/35.9 ( 36.2%)	19/36.8 ( 51.6%)	19/36.8 ( 51.7%)	15/36.5 ( 41.1%)	19/37.5 ( 50.7%)	10/31.1 ( 32.1%)
	Terminal Incidence	7/15 ( 46.7%)	8/16 ( 50.0%)	10/17 ( 58.8%)	5/14 ( 35.7%)	6/16 ( 37.5%)	3/11 ( 27.3%)
	Time-to-First	566	613	476	573	526	463
	Poly-K P-Value	0.370N	0.127	0.125	0.422	0.143	0.462N
	Severity Profile	9 4 0 0	13 6 0 0	12 6 1 0	10 5 0 0	11 5 3 0	7 3 0 0
	JT/SW P-Value	0.342N	0.931N	0.967N	0.789N	0.927N	0.470N
	RTE P-Value	0.300N	0.068	0.069	0.331	0.075	0.351N
Liver * Hepatodiaphragmatic Nodule	Simple Incidence	6/50 ( 12.0%)	2/47 ( 4.3%)	4/48 ( 8.3%)	3/50 ( 6.0%)	7/50 ( 14.0%)	5/45 ( 11.1%)
	Poly-K Incidence	6/34.6 ( 17.3%)	2/34.2 ( 5.9%)	4/32.8 ( 12.2%)	3/34.6 ( 8.7%)	7/35.4 ( 19.7%)	5/30.9 ( 16.2%)
	Terminal Incidence	3/15 ( 20.0%)	1/16 ( 6.3%)	3/17 ( 17.6%)	1/14 ( 7.1%)	2/16 ( 12.5%)	1/11 ( 9.1%)
	Time-to-First	603	683	579	244	540	462
	Poly-K P-Value	0.267	0.131N	0.402N	0.236N	0.519	0.584N
	Liver * Hyperplasia,Bile Duct	Simple Incidence	16/50 ( 32.0%)	19/47 ( 40.4%)	17/48 ( 35.4%)	16/50 ( 32.0%)	16/50 ( 32.0%)
Poly-K Incidence		16/38.5 ( 41.5%)	19/38.3 ( 49.5%)	17/37.0 ( 45.9%)	16/37.3 ( 42.9%)	16/36.1 ( 44.3%)	12/31.6 ( 37.9%)
Terminal Incidence		6/15 ( 40.0%)	6/16 ( 37.5%)	7/17 ( 41.2%)	5/14 ( 35.7%)	7/16 ( 43.8%)	5/11 ( 45.5%)
Time-to-First		284	452	532	368	541	383
Poly-K P-Value		0.325N	0.310	0.437	0.546	0.497	0.475N
Severity Profile		7 8 1 0	6 9 2 2	9 3 4 1	8 5 3 0	6 5 3 2	6 4 2 0
JT/SW P-Value		0.185N	0.864N	0.744N	0.625N	0.689N	0.407N
RTE P-Value		0.174N	0.133	0.342	0.494	0.412	0.303N
Liver * Hyperplasia,Oval Cell	Simple Incidence	4/50 ( 8.0%)	1/47 ( 2.1%)	0/48 ( 0.0%)	1/50 ( 2.0%)	3/50 ( 6.0%)	2/45 ( 4.4%)
	Poly-K Incidence	4/34.0 ( 11.8%)	1/34.0 ( 2.9%)	0/32.3 ( 0.0%)	1/33.9 ( 3.0%)	3/33.8 ( 8.9%)	2/29.0 ( 6.9%)
	Terminal Incidence	2/15 ( 13.3%)	1/16 ( 6.3%)	0/17 ( 0.0%)	0/14 ( 0.0%)	2/16 ( 12.5%)	0/11 ( 0.0%)
	Time-to-First	647	723 (T)	----	617	668	637
	Poly-K P-Value	0.480N	0.175N	0.065N	0.176N	0.504N	0.412N
	Severity Profile	3 1 0 0	1 0 0 0	---	1 0 0 0	1 1 0 1	1 1 0 0
	JT/SW P-Value	0.424N	0.095N	0.017N* <sup>1</sup>	0.026N* <sup>1</sup>	0.098N	0.133N
	RTE P-Value	0.439N	0.080N	0.027N*	0.070N	0.312N	0.238N
Liver * Infiltration Cellular,Mononuclear Cell	Simple Incidence	35/50 ( 70.0%)	29/47 ( 61.7%)	37/48 ( 77.1%)	36/50 ( 72.0%)	34/50 ( 68.0%)	28/45 ( 62.2%)
	Poly-K Incidence	35/42.3 ( 82.6%)	29/40.1 ( 72.3%)	37/42.6 ( 86.9%)	36/42.3 ( 85.1%)	34/40.5 ( 84.0%)	28/35.4 ( 79.0%)
	Terminal Incidence	14/15 ( 93.3%)	13/16 ( 81.3%)	16/17 ( 94.1%)	13/14 ( 92.9%)	15/16 ( 93.8%)	11/11 ( 100.0%)
	Time-to-First	284	418	393	244	443	383
	Poly-K P-Value	0.366	0.169N	0.387	0.496	0.560	0.446N
	Severity Profile	21 14 0 0	16 13 0 0	22 15 0 0	26 10 0 0	21 13 0 0	19 9 0 0
	JT/SW P-Value	0.192N	0.288N	0.609N	0.444N	0.488N	0.208N
	RTE P-Value	0.192N	0.280N	0.247	0.356N	0.396N	0.158N

**Table 10. Nonneoplasms by Body System for Terminal Sacrifice Males Bisphenol-A Continuous Dose Arm**

<i>System and Nonneoplasm</i>		<i>Treatment (ug/kg)</i>					
<i>Lesion</i>	<i>Statistic</i>	<i>Control</i>	<i>2.5</i>	<i>25</i>	<i>250</i>	<i>2500</i>	<i>25000</i>
Liver * Necrosis,Hepatocyte	Simple Incidence	2/50 ( 4.0%)	3/47 ( 6.4%)	1/48 ( 2.1%)	1/50 ( 2.0%)	4/50 ( 8.0%)	1/45 ( 2.2%)
	Poly-K Incidence	2/34.5 ( 5.8%)	3/34.5 ( 8.7%)	1/32.5 ( 3.1%)	1/34.5 ( 2.9%)	4/35.6 ( 11.2%)	1/28.7 ( 3.5%)
	Terminal Incidence	0/15 ( 0.0%)	2/16 ( 12.5%)	0/17 ( 0.0%)	0/14 ( 0.0%)	0/16 ( 0.0%)	0/11 ( 0.0%)
	Time-to-First	543	585	678	244	381	656
	Poly-K P-Value	0.528N	0.500	0.521N	0.500N	0.350	0.564N
	Severity Profile	0 1 0 1	2 1 0 0	0 0 0 1	1 0 0 0	1 0 1 2	0 0 0 1
	JT/SW P-Value	0.464N	0.685N	0.379N	0.366N	0.640N	0.449N
	RTE P-Value	0.441N	0.293	0.319N	0.301N	0.161	0.334N
Liver * Tension Lipidosis	Simple Incidence	3/50 ( 6.0%)	2/47 ( 4.3%)	3/48 ( 6.3%)	1/50 ( 2.0%)	2/50 ( 4.0%)	7/45 ( 15.6%)
	Poly-K Incidence	3/33.8 ( 8.9%)	2/35.5 ( 5.6%)	3/33.7 ( 8.9%)	1/33.5 ( 3.0%)	2/33.9 ( 5.9%)	7/30.8 ( 22.7%)
	Terminal Incidence	1/15 ( 6.7%)	0/16 ( 0.0%)	0/17 ( 0.0%)	1/14 ( 7.1%)	1/16 ( 6.3%)	4/11 ( 36.4%)
	Time-to-First	709	452	547	727 (T)	637	330
	Poly-K P-Value	0.081	0.478N	0.664	0.307N	0.499N	0.111
	Severity Profile	0 0 1 2	0 2 0 0	0 2 0 1	0 1 0 0	0 1 0 1	0 4 1 2
	JT/SW P-Value	0.093	0.671	0.578	0.806	0.826	0.038 *
	RTE P-Value	0.076	0.337N	0.498	0.149N	0.326N	0.025 *
Liver * Vacuolization Cytoplasmic	Simple Incidence	12/50 ( 24.0%)	8/47 ( 17.0%)	11/48 ( 22.9%)	15/50 ( 30.0%)	14/50 ( 28.0%)	14/45 ( 31.1%)
	Poly-K Incidence	12/37.3 ( 32.2%)	8/35.7 ( 22.4%)	11/34.7 ( 31.7%)	15/38.9 ( 38.6%)	14/37.8 ( 37.1%)	14/32.2 ( 43.5%)
	Terminal Incidence	4/15 ( 26.7%)	4/16 ( 25.0%)	4/17 ( 23.5%)	5/14 ( 35.7%)	6/16 ( 37.5%)	7/11 ( 63.6%)
	Time-to-First	520	489	572	368	411	330
	Poly-K P-Value	0.057	0.245N	0.583N	0.364	0.418	0.227
	Severity Profile	6 3 3 0	2 3 3 0	3 4 4 0	6 7 2 0	4 6 2 2	2 8 2 2
	JT/SW P-Value	0.059	0.763	0.580	0.317	0.345	0.204
	RTE P-Value	0.062	0.269N	0.484	0.259	0.272	0.155
Pancreas * Basophilic Focus	Simple Incidence	2/50 ( 4.0%)	2/46 ( 4.3%)	2/48 ( 4.2%)	1/49 ( 2.0%)	4/48 ( 8.3%)	4/44 ( 9.1%)
	Poly-K Incidence	2/33.7 ( 5.9%)	2/33.4 ( 6.0%)	2/33.0 ( 6.1%)	1/33.3 ( 3.0%)	4/33.6 ( 11.9%)	4/30.2 ( 13.2%)
	Terminal Incidence	2/15 ( 13.3%)	1/16 ( 6.3%)	1/17 ( 5.9%)	0/14 ( 0.0%)	2/16 ( 12.5%)	1/11 ( 9.1%)
	Time-to-First	727 (T)	692	484	588	465	372
	Poly-K P-Value	0.113	0.692	0.688	0.504N	0.332	0.283
Pancreas * Degeneration,Acinus	Simple Incidence	42/50 ( 84.0%)	36/46 ( 78.3%)	43/48 ( 89.6%)	43/49 ( 87.8%)	44/48 ( 91.7%)	37/44 ( 84.1%)
	Poly-K Incidence	42/46.5 ( 90.2%)	36/41.2 ( 87.4%)	43/46.0 ( 93.5%)	43/46.0 ( 93.5%)	44/45.9 ( 95.8%)	37/42.0 ( 88.0%)
	Terminal Incidence	14/15 ( 93.3%)	16/16 ( 100.0%)	15/17 ( 88.2%)	13/14 ( 92.9%)	16/16 ( 100.0%)	10/11 ( 90.9%)
	Time-to-First	225	176	284	244	348	311
	Poly-K P-Value	0.349	0.460N	0.417	0.412	0.234	0.502N
	Severity Profile	7 9 13 13	6 10 13 7	9 18 12 4	6 24 6 7	3 13 16 12	7 12 8 10
	JT/SW P-Value	0.297	0.862	0.943	0.961	0.196	0.559
	RTE P-Value	0.312	0.128N	0.082N	0.084N	0.144	0.241N

**Table 10. Nonneoplasms by Body System for Terminal Sacrifice Males Bisphenol-A Continuous Dose Arm**

<i>System and Nonneoplasm</i>	<i>Lesion</i>	<i>Statistic</i>	<i>Treatment (ug/kg)</i>				
			<i>Control</i>	<i>2.5</i>	<i>25</i>	<i>250</i>	<i>2500</i>
Pancreas * Infiltration Cellular,Lymphocyte	Simple Incidence	36/50 ( 72.0%)	32/46 ( 69.6%)	43/48 ( 89.6%)	38/49 ( 77.6%)	38/48 ( 79.2%)	36/44 ( 81.8%)
	Poly-K Incidence	36/42.7 ( 84.4%)	32/39.7 ( 80.7%)	43/46.0 ( 93.5%)	38/43.8 ( 86.8%)	38/42.4 ( 89.6%)	36/41.3 ( 87.1%)
	Terminal Incidence	13/15 ( 86.7%)	15/16 ( 93.8%)	15/17 ( 88.2%)	12/14 ( 85.7%)	16/16 (100.0%)	9/11 ( 81.8%)
	Time-to-First	284	418	284	244	381	330
	Poly-K P-Value	0.233	0.430N	0.119	0.495	0.320	0.483
	Severity Profile	10 17 9 0	12 16 4 0	23 16 4 0	15 16 7 0	9 25 4 0	16 16 4 0
	JT/SW P-Value	0.320	0.825	0.645	0.688	0.452	0.621
	RTE P-Value	0.327	0.157N	0.411N	0.417N	0.339	0.376N
Pancreas * Lipomatosis	Simple Incidence	7/50 ( 14.0%)	7/46 ( 15.2%)	12/48 ( 25.0%)	11/49 ( 22.4%)	11/48 ( 22.9%)	9/44 ( 20.5%)
	Poly-K Incidence	7/34.4 ( 20.3%)	7/35.2 ( 19.9%)	12/34.3 ( 35.0%)	11/35.9 ( 30.6%)	11/35.0 ( 31.5%)	9/30.6 ( 29.4%)
	Terminal Incidence	5/15 ( 33.3%)	1/16 ( 6.3%)	6/17 ( 35.3%)	3/14 ( 21.4%)	6/16 ( 37.5%)	3/11 ( 27.3%)
	Time-to-First	526	489	576	490	513	501
	Poly-K P-Value	0.117	0.601N	0.130	0.232	0.211	0.283
	Severity Profile	0 1 3 3	0 3 3 1	0 0 5 7	0 4 5 2	0 5 2 4	0 3 3 3
	JT/SW P-Value	0.161	0.481	0.074	0.142	0.170	0.211
	RTE P-Value	0.166	0.497	0.071	0.186	0.160	0.242
Pancreas * Pigmentation	Simple Incidence	29/50 ( 58.0%)	19/46 ( 41.3%)	26/48 ( 54.2%)	26/49 ( 53.1%)	30/48 ( 62.5%)	26/44 ( 59.1%)
	Poly-K Incidence	29/45.0 ( 64.4%)	19/37.6 ( 50.5%)	26/42.0 ( 61.9%)	26/43.4 ( 59.9%)	30/42.4 ( 70.8%)	26/39.6 ( 65.6%)
	Terminal Incidence	8/15 ( 53.3%)	10/16 ( 62.5%)	7/17 ( 41.2%)	5/14 ( 35.7%)	11/16 ( 68.8%)	7/11 ( 63.6%)
	Time-to-First	72	418	393	244	348	311
	Poly-K P-Value	0.180	0.136N	0.490N	0.410N	0.336	0.548
	Severity Profile	16 13 0 0	11 7 1 0	22 4 0 0	17 9 0 0	20 9 1 0	15 11 0 0
	JT/SW P-Value	0.174	0.938	0.929	0.878	0.582	0.615
	RTE P-Value	0.170	0.051N	0.121N	0.226N	0.454	0.488
<b>Cardiovascular System</b>							
Heart * Cardiomyopathy	Simple Incidence	44/50 ( 88.0%)	44/48 ( 91.7%)	43/48 ( 89.6%)	45/50 ( 90.0%)	44/50 ( 88.0%)	41/46 ( 89.1%)
	Poly-K Incidence	44/46.0 ( 95.6%)	44/45.0 ( 97.7%)	43/45.6 ( 94.2%)	45/46.1 ( 97.6%)	44/45.8 ( 96.0%)	41/43.1 ( 95.2%)
	Terminal Incidence	15/15 (100.0%)	16/16 (100.0%)	16/17 ( 94.1%)	14/14 (100.0%)	16/16 (100.0%)	11/11 (100.0%)
	Time-to-First	225	292	284	342	411	304
	Poly-K P-Value	0.475N	0.506	0.581N	0.521	0.708	0.705N
	Severity Profile	12 21 10 1	11 22 10 1	13 17 10 3	12 21 8 4	14 22 6 2	14 16 6 5
	JT/SW P-Value	0.318N	0.675N	0.719N	0.769N	0.394N	0.526N
	RTE P-Value	0.320N	0.326	0.378	0.340	0.304N	0.499N

**Table 10. Nonneoplasms by Body System for Terminal Sacrifice Males Bisphenol-A Continuous Dose Arm**

System and Nonneoplasm	Lesion	Statistic	Treatment (ug/kg)				
			Control	2.5	25	250	2500
<b>Endocrine System</b>							
Adrenal Cortex * Angiectasis	Simple Incidence	2/50 ( 4.0%)	0/48 ( 0.0%)	4/48 ( 8.3%)	1/50 ( 2.0%)	1/48 ( 2.1%)	2/45 ( 4.4%)
	Poly-K Incidence	2/34.5 ( 5.8%)	0/34.0 ( 0.0%)	4/33.4 ( 12.0%)	1/33.5 ( 3.0%)	1/33.2 ( 3.0%)	2/28.4 ( 7.0%)
	Terminal Incidence	0/15 ( 0.0%)	0/16 ( 0.0%)	1/17 ( 5.9%)	1/14 ( 7.1%)	0/16 ( 0.0%)	1/11 ( 9.1%)
	Time-to-First	494	----	576	726 (T)	581	671
	Poly-K P-Value	0.480	0.239N	0.319	0.510N	0.514N	0.625
	Severity Profile	0 0 1	---	0 3 0 1	0 1 0 0	0 1 0 0	0 1 0 1
	JT/SW P-Value	0.480	0.918	0.178	0.497	0.635	0.600
	RTE P-Value	0.467	0.094N	0.124	0.283N	0.293N	0.458
Adrenal Cortex * Degeneration,Cystic	Simple Incidence	4/50 ( 8.0%)	6/48 ( 12.5%)	2/48 ( 4.2%)	2/50 ( 4.0%)	2/48 ( 4.2%)	3/45 ( 6.7%)
	Poly-K Incidence	4/33.8 ( 11.8%)	6/35.1 ( 17.1%)	2/32.7 ( 6.1%)	2/33.5 ( 6.0%)	2/33.2 ( 6.0%)	3/29.0 ( 10.4%)
	Terminal Incidence	2/15 ( 13.3%)	0/16 ( 0.0%)	1/17 ( 5.9%)	2/14 ( 14.3%)	0/16 ( 0.0%)	1/11 ( 9.1%)
	Time-to-First	709	619	617	727 (T)	630	501
	Poly-K P-Value	0.161N	0.390	0.350N	0.338N	0.343N	0.586N
	Severity Profile	0 3 0 1	3 3 0 0	0 0 1 1	2 0 0 0	0 2 0 0	1 0 0 2
	JT/SW P-Value	0.141N	0.735N	0.301N	0.255N	0.270N	0.344N
	RTE P-Value	0.152N	0.207	0.227N	0.160N	0.196N	0.398N
Adrenal Cortex * Hyperplasia	Simple Incidence	6/50 ( 12.0%)	9/48 ( 18.8%)	8/48 ( 16.7%)	7/50 ( 14.0%)	6/48 ( 12.5%)	7/45 ( 15.6%)
	Poly-K Incidence	6/35.3 ( 17.0%)	9/35.3 ( 25.5%)	8/32.7 ( 24.5%)	7/34.4 ( 20.4%)	6/33.6 ( 17.8%)	7/30.5 ( 23.0%)
	Terminal Incidence	1/15 ( 6.7%)	4/16 ( 25.0%)	6/17 ( 35.3%)	3/14 ( 21.4%)	4/16 ( 25.0%)	1/11 ( 9.1%)
	Time-to-First	559	539	666	608	479	534
	Poly-K P-Value	0.509	0.278	0.321	0.479	0.590	0.382
	Severity Profile	3 2 1 0	5 4 0 0	5 2 1 0	3 3 1 0	3 3 0 0	4 3 0 0
	JT/SW P-Value	0.464N	0.811N	0.807N	0.739N	0.658N	0.748N
	RTE P-Value	0.461N	0.189	0.274	0.383	0.480	0.330
Adrenal Cortex * Hypertrophy	Simple Incidence	2/50 ( 4.0%)	0/48 ( 0.0%)	1/48 ( 2.1%)	1/50 ( 2.0%)	2/48 ( 4.2%)	4/45 ( 8.9%)
	Poly-K Incidence	2/34.2 ( 5.8%)	0/34.0 ( 0.0%)	1/32.8 ( 3.1%)	1/33.6 ( 3.0%)	2/33.2 ( 6.0%)	4/29.0 ( 13.8%)
	Terminal Incidence	1/15 ( 6.7%)	0/16 ( 0.0%)	0/17 ( 0.0%)	0/14 ( 0.0%)	1/16 ( 6.3%)	2/11 ( 18.2%)
	Time-to-First	566	----	579	697	585	596
	Poly-K P-Value	0.062	0.237N	0.516N	0.506N	0.685	0.259
	Severity Profile	1 1 0 0	---	0 0 0 1	1 0 0 0	1 1 0 0	2 2 0 0
	JT/SW P-Value	0.058	0.918	0.823	0.863	0.613	0.129
	RTE P-Value	0.046 *	0.110N	0.309N	0.290N	0.482	0.071

**Table 10. Nonneoplasms by Body System for Terminal Sacrifice Males Bisphenol-A Continuous Dose Arm**

System and Nonneoplasm	Lesion	Statistic	Treatment (ug/kg)				
			Control	2.5	25	250	2500
Adrenal Cortex * Vacuolization Cytoplasmic	Simple Incidence	18/50 (36.0%)	12/48 (25.0%)	22/48 (45.8%)	14/50 (28.0%)	21/48 (43.8%)	15/45 (33.3%)
	Poly-K Incidence	18/39.6 (45.5%)	12/36.9 (32.5%)	22/37.2 (59.1%)	14/36.0 (38.9%)	21/38.3 (54.8%)	15/32.7 (45.9%)
	Terminal Incidence	5/15 (33.3%)	5/16 (31.3%)	11/17 (64.7%)	5/14 (35.7%)	9/16 (56.3%)	6/11 (54.5%)
	Time-to-First	486	418	476	485	411	330
	Poly-K P-Value	0.224	0.169N	0.154	0.361N	0.268	0.584
	Severity Profile	7 8 3 0	5 5 2 0	7 14 1 0	2 10 2 0	3 15 2 1	2 9 1 3
	JT/SW P-Value	0.171	0.880	0.199	0.547	0.184	0.372
	RTE P-Value	0.175	0.138N	0.171	0.277N	0.135	0.454
Adrenal Medulla * Hyperplasia	Simple Incidence	5/50 (10.0%)	3/48 (6.3%)	7/47 (14.9%)	6/50 (12.0%)	8/50 (16.0%)	5/45 (11.1%)
	Poly-K Incidence	5/35.1 (14.2%)	3/34.5 (8.7%)	7/33.5 (20.9%)	6/34.5 (17.4%)	8/34.4 (23.3%)	5/30.1 (16.6%)
	Terminal Incidence	1/15 (6.7%)	1/16 (6.3%)	3/17 (17.6%)	3/14 (21.4%)	5/16 (31.3%)	0/11 (0.0%)
	Time-to-First	578	650	568	574	581	534
	Poly-K P-Value	0.166	0.363N	0.341	0.487	0.253	0.533
	Severity Profile	3 2 0 0	1 0 2 0	4 1 1 1	4 1 0 1	3 5 0 0	2 3 0 0
	JT/SW P-Value	0.196	0.730	0.248	0.366	0.222	0.376
	RTE P-Value	0.207	0.308N	0.220	0.378	0.164	0.422
Parathyroid Gland * Hyperplasia	Simple Incidence	11/49 (22.4%)	11/46 (23.9%)	23/47 (48.9%)	18/50 (36.0%)	18/50 (36.0%)	12/46 (26.1%)
	Poly-K Incidence	11/36.7 (30.0%)	11/33.9 (32.4%)	23/37.5 (61.3%)	18/38.4 (46.9%)	18/39.0 (46.2%)	12/32.3 (37.2%)
	Terminal Incidence	3/15 (20.0%)	6/16 (37.5%)	10/17 (58.8%)	5/14 (35.7%)	5/16 (31.3%)	2/11 (18.2%)
	Time-to-First	543	650	476	485	443	534
	Poly-K P-Value	0.166	0.514	0.004 **	0.095	0.105	0.351
	Severity Profile	3 7 0 1	7 3 0 1	1 13 6 3	2 9 3 4	9 5 2 2	4 5 3 0
	JT/SW P-Value	0.230	0.514	<.001 *** <sup>1</sup>	0.008 ** <sup>1</sup>	0.025 * <sup>1</sup>	0.066
	RTE P-Value	0.227	0.474N	<.001 ***	0.039 *	0.101	0.349
Pituitary Gland * Angiectasis	Simple Incidence	6/48 (12.5%)	11/48 (22.9%)	10/48 (20.8%)	8/50 (16.0%)	9/50 (18.0%)	6/45 (13.3%)
	Poly-K Incidence	6/33.5 (17.9%)	11/36.8 (29.9%)	10/35.7 (28.0%)	8/34.8 (23.0%)	9/35.3 (25.5%)	6/29.1 (20.6%)
	Terminal Incidence	1/14 (7.1%)	3/16 (18.8%)	4/17 (23.5%)	5/14 (35.7%)	4/16 (25.0%)	4/11 (36.4%)
	Time-to-First	494	516	412	582	566	501
	Poly-K P-Value	0.491N	0.182	0.235	0.412	0.317	0.521
	Severity Profile	0 0 0 6	0 1 0 10	0 0 0 10	0 0 2 6	0 0 1 8	0 1 0 5
	JT/SW P-Value	0.352N	0.902N	0.915N	0.765N	0.833N	0.673N
	RTE P-Value	0.347N	0.104	0.147	0.354	0.247	0.478
Pituitary Gland * Cyst Multilocular, Pars Distalis	Simple Incidence	2/48 (4.2%)	0/48 (0.0%)	0/48 (0.0%)	3/50 (6.0%)	4/50 (8.0%)	5/45 (11.1%)
	Poly-K Incidence	2/32.3 (6.2%)	0/34.0 (0.0%)	0/32.3 (0.0%)	3/34.0 (8.8%)	4/34.7 (11.5%)	5/30.0 (16.7%)
	Terminal Incidence	2/14 (14.3%)	0/16 (0.0%)	0/17 (0.0%)	1/14 (7.1%)	2/16 (12.5%)	1/11 (9.1%)
	Time-to-First	726 (T)	----	----	609	526	464
	Poly-K P-Value	0.007 **	0.224N	0.236N	0.525	0.369	0.180

**Table 10. Nonneoplasms by Body System for Terminal Sacrifice Males Bisphenol-A Continuous Dose Arm**

<i>System and Nonneoplasm</i>		<i>Treatment (ug/kg)</i>					
<i>Lesion</i>	<i>Statistic</i>	<i>Control</i>	<i>2.5</i>	<i>25</i>	<i>250</i>	<i>2500</i>	<i>25000</i>
Pituitary Gland * Cyst,Pars Distalis	Simple Incidence	8/48 ( 16.7%)	4/48 ( 8.3%)	5/48 ( 10.4%)	6/50 ( 12.0%)	5/50 ( 10.0%)	2/45 ( 4.4%)
	Poly-K Incidence	8/34.9 ( 22.9%)	4/35.3 ( 11.3%)	5/34.0 ( 14.7%)	6/35.3 ( 17.0%)	5/34.6 ( 14.5%)	2/29.1 ( 6.9%)
	Terminal Incidence	1/14 ( 7.1%)	0/16 ( 0.0%)	2/17 ( 11.8%)	3/14 ( 21.4%)	3/16 ( 18.8%)	1/11 ( 9.1%)
	Time-to-First	284	595	509	244	581	330
	Poly-K P-Value	0.117N	0.162N	0.283N	0.372N	0.273N	0.074N
Pituitary Gland * Hyperplasia,Pars Distalis	Simple Incidence	11/48 ( 22.9%)	9/48 ( 18.8%)	19/48 ( 39.6%)	15/50 ( 30.0%)	17/50 ( 34.0%)	19/45 ( 42.2%)
	Poly-K Incidence	11/36.2 ( 30.4%)	9/36.3 ( 24.8%)	19/37.8 ( 50.3%)	15/37.8 ( 39.7%)	17/38.5 ( 44.1%)	19/34.2 ( 55.6%)
	Terminal Incidence	4/14 ( 28.6%)	4/16 ( 25.0%)	9/17 ( 52.9%)	4/14 ( 28.6%)	7/16 ( 43.8%)	6/11 ( 54.5%)
	Time-to-First	467	489	284	368	443	372
	Poly-K P-Value	0.005 **	0.393N	0.057	0.270	0.153	0.022 *
	Severity Profile	3 4 0	0 4 1	5 8 2 4	4 6 3 2	4 7 5 1	3 9 3 4
	JT/SW P-Value	0.011 *	0.624	0.040 * <sup>1</sup>	0.123	0.137	0.021 *
	RTE P-Value	0.010 *	0.415N	0.043 *	0.225	0.119	0.017 *
Pituitary Gland * Hypertrophy,Pars Distalis	Simple Incidence	4/48 ( 8.3%)	2/48 ( 4.2%)	3/48 ( 6.3%)	3/50 ( 6.0%)	3/50 ( 6.0%)	1/45 ( 2.2%)
	Poly-K Incidence	4/33.1 ( 12.1%)	2/34.6 ( 5.8%)	3/33.3 ( 9.0%)	3/34.4 ( 8.7%)	3/34.1 ( 8.8%)	1/28.6 ( 3.5%)
	Terminal Incidence	2/14 ( 14.3%)	1/16 ( 6.3%)	1/17 ( 5.9%)	0/14 ( 0.0%)	1/16 ( 6.3%)	0/11 ( 0.0%)
	Time-to-First	585	539	561	485	637	613
	Poly-K P-Value	0.252N	0.314N	0.497N	0.480N	0.484N	0.221N
	Severity Profile	1 3 0 0	1 0 1 0	2 1 0 0	0 3 0 0	0 3 0 0	0 1 0 0
	JT/SW P-Value	0.196N	0.203N	0.309N	0.356N	0.383N	0.134N
	RTE P-Value	0.196N	0.220N	0.319N	0.315N	0.315N	0.122N
Thyroid Gland * Hyperplasia,C-Cell	Simple Incidence	9/46 ( 19.6%)	13/40 ( 32.5%)	15/47 ( 31.9%)	15/44 ( 34.1%)	20/44 ( 45.5%)	11/44 ( 25.0%)
	Poly-K Incidence	9/34.9 ( 25.8%)	13/32.8 ( 39.7%)	15/35.5 ( 42.3%)	15/34.1 ( 44.0%)	20/33.8 ( 59.2%)	11/30.5 ( 36.0%)
	Terminal Incidence	5/15 ( 33.3%)	7/16 ( 43.8%)	7/17 ( 41.2%)	8/14 ( 57.1%)	12/16 ( 75.0%)	5/11 ( 45.5%)
	Time-to-First	225	585	488	485	513	541
	Poly-K P-Value	0.039 *	0.162	0.105	0.083	0.003 **	0.260
	Severity Profile	5 2 2 0	5 7 1 0	8 4 2 1	8 6 1 0	10 8 2 0	3 7 1 0
	JT/SW P-Value	0.106	0.082	0.102	0.097	0.006 ** <sup>1</sup>	0.068
	RTE P-Value	0.112	0.091	0.099	0.080	0.005 **	0.247
Thyroid Gland * Hyperplasia,Follicular Cell	Simple Incidence	3/46 ( 6.5%)	2/40 ( 5.0%)	9/47 ( 19.1%)	6/44 ( 13.6%)	3/44 ( 6.8%)	3/44 ( 6.8%)
	Poly-K Incidence	3/32.5 ( 9.2%)	2/31.2 ( 6.4%)	9/35.1 ( 25.6%)	6/32.0 ( 18.8%)	3/31.5 ( 9.5%)	3/28.6 ( 10.5%)
	Terminal Incidence	2/15 ( 13.3%)	0/16 ( 0.0%)	1/17 ( 5.9%)	2/14 ( 14.3%)	0/16 ( 0.0%)	0/11 ( 0.0%)
	Time-to-First	720	646	539	342	448	660
	Poly-K P-Value	0.434	0.519N	0.070	0.227	0.651	0.605
	Severity Profile	0 2 1 0	0 1 1 0	0 3 5 1	0 4 2 0	0 1 1 1	0 1 2 0
	JT/SW P-Value	0.493	0.613	0.024 * <sup>1</sup>	0.080	0.182	0.264
	RTE P-Value	0.474	0.413N	0.015 *	0.142	0.461	0.468

**Table 10. Nonneoplasms by Body System for Terminal Sacrifice Males Bisphenol-A Continuous Dose Arm**

<i>System and Nonneoplasm</i>		<i>Treatment (ug/kg)</i>					
<i>Lesion</i>	<i>Statistic</i>	<i>Control</i>	<i>2.5</i>	<i>25</i>	<i>250</i>	<i>2500</i>	<i>25000</i>
Thyroid Gland * Ultimobranchial Cyst	Simple Incidence	7/46 (15.2%)	4/40 (10.0%)	6/47 (12.8%)	5/44 (11.4%)	5/44 (11.4%)	3/44 (6.8%)
	Poly-K Incidence	7/34.4 (20.3%)	4/31.4 (12.7%)	6/32.1 (18.7%)	5/32.6 (15.3%)	5/31.7 (15.8%)	3/29.3 (10.2%)
	Terminal Incidence	2/15 (13.3%)	2/16 (12.5%)	4/17 (23.5%)	1/14 (7.1%)	3/16 (18.8%)	0/11 (0.0%)
	Time-to-First	225	619	678	368	513	559
	Poly-K P-Value	0.232N	0.309N	0.556N	0.413N	0.436N	0.221N
<b>Genital System</b>							
Epididymis * Exfoliated Germ Cell	Simple Incidence	10/49 (20.4%)	8/48 (16.7%)	10/48 (20.8%)	12/50 (24.0%)	13/50 (26.0%)	6/46 (13.0%)
	Poly-K Incidence	10/36.5 (27.4%)	8/35.5 (22.6%)	10/35.4 (28.3%)	12/37.4 (32.1%)	13/38.0 (34.2%)	6/30.1 (19.9%)
	Terminal Incidence	3/15 (20.0%)	2/16 (12.5%)	2/17 (11.8%)	3/14 (21.4%)	3/16 (18.8%)	2/11 (18.2%)
	Time-to-First	494	638	539	368	443	501
	Poly-K P-Value	0.429	0.419N	0.572	0.426	0.347	0.335N
	Severity Profile	5 3 1 1	5 1 2 0	1 9 0 0	4 5 2 1	4 7 2 0	4 0 2 0
	JT/SW P-Value	0.489N	0.305N	0.510N	0.649N	0.737N	0.250N
	RTE P-Value	0.468N	0.314N	0.441	0.299	0.228	0.187N
Epididymis * Hyospermia	Simple Incidence	11/49 (22.4%)	11/48 (22.9%)	9/48 (18.8%)	14/50 (28.0%)	11/50 (22.0%)	9/46 (19.6%)
	Poly-K Incidence	11/37.0 (29.7%)	11/36.2 (30.4%)	9/33.6 (26.8%)	14/38.1 (36.7%)	11/37.4 (29.4%)	9/31.4 (28.7%)
	Terminal Incidence	2/15 (13.3%)	5/16 (31.3%)	5/17 (29.4%)	5/14 (35.7%)	3/16 (18.8%)	1/11 (9.1%)
	Time-to-First	225	452	547	342	411	532
	Poly-K P-Value	0.494	0.576	0.497N	0.341	0.592N	0.571N
	Severity Profile	0 0 0 11	0 0 1 10	0 1 0 8	0 0 0 14	0 0 1 10	0 0 1 8
	JT/SW P-Value	0.428N	0.500N	0.367N	0.645N	0.588N	0.464N
	RTE P-Value	0.423N	0.499	0.310N	0.253	0.458N	0.347N
Epididymis * Infiltration Cellular,Lymphocyte	Simple Incidence	10/49 (20.4%)	12/48 (25.0%)	13/48 (27.1%)	15/50 (30.0%)	14/50 (28.0%)	15/46 (32.6%)
	Poly-K Incidence	10/35.5 (28.1%)	12/36.5 (32.9%)	13/34.4 (37.8%)	15/36.2 (41.4%)	14/36.0 (38.9%)	15/34.1 (44.0%)
	Terminal Incidence	4/15 (26.7%)	6/16 (37.5%)	6/17 (35.3%)	9/14 (64.3%)	8/16 (50.0%)	4/11 (36.4%)
	Time-to-First	225	489	576	311	443	386
	Poly-K P-Value	0.067	0.427	0.267	0.166	0.230	0.120
	Severity Profile	8 2 0 0	12 0 0 0	11 2 0 0	13 2 0 0	12 2 0 0	13 2 0 0
	JT/SW P-Value	0.086	0.338	0.273	0.187	0.232	0.131
	RTE P-Value	0.090	0.358	0.240	0.154	0.210	0.101
Epididymis * Polyarteritis	Simple Incidence	0/49 (0.0%)	1/48 (2.1%)	1/48 (2.1%)	1/50 (2.0%)	4/50 (8.0%)	1/46 (2.2%)
	Poly-K Incidence	0/33.7 (0.0%)	1/34.3 (2.9%)	1/32.8 (3.1%)	1/33.9 (3.0%)	4/35.2 (11.4%)	1/29.1 (3.4%)
	Terminal Incidence	0/15 (0.0%)	0/16 (0.0%)	0/17 (0.0%)	0/14 (0.0%)	0/16 (0.0%)	0/11 (0.0%)
	Time-to-First	----	652	576	626	443	534
	Poly-K P-Value	0.063	0.503	0.494	0.501	0.064	0.471
	Severity Profile	---	0 0 1 0	0 1 0 0	1 0 0 0	0 3 1 0	0 0 1 0
	JT/SW P-Value	0.065	0.156	0.228	0.261	0.010 ** 1	0.078
	RTE P-Value	0.083	0.262	0.267	0.276	0.013 *	0.255



**Table 10. Nonneoplasms by Body System for Terminal Sacrifice Males Bisphenol-A Continuous Dose Arm**

<i>System and Nonneoplasm</i>		<i>Treatment (ug/kg)</i>					
<i>Lesion</i>	<i>Statistic</i>	<i>Control</i>	<i>2.5</i>	<i>25</i>	<i>250</i>	<i>2500</i>	<i>25000</i>
Prostate, Dorsal/Lateral Lobe * Fibrosis	Simple Incidence	9/50 (18.0%)	5/48 (10.4%)	12/48 (25.0%)	9/50 (18.0%)	10/50 (20.0%)	6/46 (13.0%)
	Poly-K Incidence	9/36.6 (24.6%)	5/35.3 (14.2%)	12/35.3 (34.0%)	9/36.3 (24.8%)	10/35.7 (28.0%)	6/30.0 (20.0%)
	Terminal Incidence	3/15 (20.0%)	1/16 (6.3%)	4/17 (23.5%)	2/14 (14.3%)	4/16 (25.0%)	2/11 (18.2%)
	Time-to-First	526	539	284	490	479	509
	Poly-K P-Value	0.417	0.205N	0.263	0.599	0.475	0.440N
	Severity Profile	0 7 0 2	0 2 1 2	3 6 3 0	2 2 1 4	1 8 0 1	0 3 1 2
	JT/SW P-Value	0.485N	0.164N	0.557N	0.608N	0.648N	0.384N
	RTE P-Value	0.476N	0.185N	0.218	0.476	0.431	0.285N
Prostate, Dorsal/Lateral Lobe * Infiltration Cellular,Lymphocyte	Simple Incidence	33/50 (66.0%)	26/48 (54.2%)	27/48 (56.3%)	27/50 (54.0%)	27/50 (54.0%)	20/46 (43.5%)
	Poly-K Incidence	33/40.4 (81.7%)	26/38.2 (68.1%)	27/38.7 (69.7%)	27/39.6 (68.2%)	27/38.7 (69.8%)	20/33.0 (60.6%)
	Terminal Incidence	13/15 (86.7%)	13/16 (81.3%)	10/17 (58.8%)	9/14 (64.3%)	12/16 (75.0%)	8/11 (72.7%)
	Time-to-First	520	516	484	485	526	509
	Poly-K P-Value	0.041N*	0.099N	0.133N	0.099N	0.131N	0.022N*
	Severity Profile	19 11 2 1	18 7 1 0	21 5 1 0	16 6 3 2	18 8 0 1	10 7 1 2
	JT/SW P-Value	0.060N	0.067N	0.066N	0.104N	0.094N	0.035N*
	RTE P-Value	0.063N	0.074N	0.067N	0.136N	0.077N	0.027N*
Prostate, Dorsal/Lateral Lobe * Inflammation,Suppurative	Simple Incidence	41/50 (82.0%)	46/48 (95.8%)	47/48 (97.9%)	45/50 (90.0%)	43/50 (86.0%)	41/46 (89.1%)
	Poly-K Incidence	41/45.6 (89.9%)	46/46.2 (99.6%)	47/48.0 (98.0%)	45/47.7 (94.4%)	43/46.5 (92.4%)	41/43.3 (94.6%)
	Terminal Incidence	14/15 (93.3%)	16/16 (100.0%)	17/17 (100.0%)	14/14 (100.0%)	15/16 (93.8%)	11/11 (100.0%)
	Time-to-First	284	176	284	244	348	304
	Poly-K P-Value	0.482N	0.027 *	0.084	0.316	0.475	0.305
	Severity Profile	8 26 4 3	10 26 9 1	9 30 8 0	17 24 2 2	8 28 6 1	12 20 6 3
	JT/SW P-Value	0.255N	0.909N	0.961N	0.238N	0.513N	0.620N
	RTE P-Value	0.265N	0.085	0.072	0.195N	0.365	0.364
Prostate, Ventral Lobe * Atrophy	Simple Incidence	4/50 (8.0%)	2/48 (4.2%)	2/48 (4.2%)	0/49 (0.0%)	5/49 (10.2%)	5/46 (10.9%)
	Poly-K Incidence	4/34.9 (11.5%)	2/34.6 (5.8%)	2/32.7 (6.1%)	0/32.9 (0.0%)	5/34.7 (14.4%)	5/29.7 (16.9%)
	Terminal Incidence	2/15 (13.3%)	0/16 (0.0%)	1/17 (5.9%)	0/14 (0.0%)	1/16 (6.3%)	2/11 (18.2%)
	Time-to-First	526	638	588	----	526	532
	Poly-K P-Value	0.171	0.338N	0.364N	0.066N	0.496	0.396
	Severity Profile	0 0 3 1	0 0 1 1	0 2 0 0	---	0 1 4 0	0 0 4 1
	JT/SW P-Value	0.178	0.779	0.877	0.968	0.429	0.379
	RTE P-Value	0.169	0.216N	0.161N	0.036N*	0.340	0.279
Prostate, Ventral Lobe * Fibrosis	Simple Incidence	15/50 (30.0%)	4/48 (8.3%)	6/48 (12.5%)	8/49 (16.3%)	4/49 (8.2%)	11/46 (23.9%)
	Poly-K Incidence	15/36.0 (41.7%)	4/34.6 (11.6%)	6/34.2 (17.6%)	8/34.6 (23.1%)	4/33.7 (11.9%)	11/31.6 (34.8%)
	Terminal Incidence	7/15 (46.7%)	2/16 (12.5%)	1/17 (5.9%)	3/14 (21.4%)	2/16 (12.5%)	2/11 (18.2%)
	Time-to-First	549	638	572	490	570	532
	Poly-K P-Value	0.274N	0.003N**	0.021N*	0.070N	0.004N**	0.365N
	Severity Profile	0 7 3 5	2 1 0 1	3 2 1 0	2 3 0 3	1 1 0 2	1 5 2 3
	JT/SW P-Value	0.226N	0.002N**	0.003N**	0.007N**	<.001N***	0.014N*
	RTE P-Value	0.264N	0.001N**	0.005N**	0.024N*	0.001N**	0.183N

**Table 10. Nonneoplasms by Body System for Terminal Sacrifice Males Bisphenol-A Continuous Dose Arm**

System and Nonneoplasm	Statistic	Treatment (ug/kg)					
		Control	2.5	25	250	2500	25000
Prostate, Ventral Lobe * Hyperplasia,Epithelium	Simple Incidence	10/50 (20.0%)	12/48 (25.0%)	10/48 (20.8%)	18/49 (36.7%)	12/49 (24.5%)	8/46 (17.4%)
	Poly-K Incidence	10/34.0 (29.4%)	12/36.4 (33.0%)	10/35.0 (28.5%)	18/36.3 (49.5%)	12/34.7 (34.6%)	8/30.5 (26.3%)
	Terminal Incidence	6/15 (40.0%)	5/16 (31.3%)	3/17 (17.6%)	5/14 (35.7%)	7/16 (43.8%)	3/11 (27.3%)
	Time-to-First	674	489	495	573	565	509
	Poly-K P-Value	0.406	0.471	0.576N	0.059	0.416	0.500N
	Severity Profile	1 6 3 0	2 6 3 1	2 4 4 0	1 13 3 1	3 6 3 0	2 2 2 2
	JT/SW P-Value	0.475	0.278	0.430	0.038 * 1	0.165	0.325
	RTE P-Value	0.490	0.282	0.460	0.027 *	0.337	0.408N
Prostate, Ventral Lobe * Infiltration Cellular,Lymphocyte	Simple Incidence	25/50 (50.0%)	14/48 (29.2%)	15/48 (31.3%)	15/49 (30.6%)	20/49 (40.8%)	15/46 (32.6%)
	Poly-K Incidence	25/40.8 (61.2%)	14/38.2 (36.7%)	15/39.1 (38.3%)	15/39.4 (38.1%)	20/39.0 (51.3%)	15/33.3 (45.1%)
	Terminal Incidence	10/15 (66.7%)	7/16 (43.8%)	2/17 (11.8%)	2/14 (14.3%)	8/16 (50.0%)	5/11 (45.5%)
	Time-to-First	72	75	393	311	381	304
	Poly-K P-Value	0.255N	0.018N*	0.026N*	0.024N*	0.239N	0.109N
	Severity Profile	12 5 5 3	9 4 1 0	14 1 0 0	9 4 0 2	15 3 1 1	9 3 1 2
	JT/SW P-Value	0.121N	0.009N**	0.006N**	0.008N**	0.017N*	0.020N*
	RTE P-Value	0.136N	0.006N**	0.004N**	0.012N*	0.079N	0.023N*
Prostate, Ventral Lobe * Inflammation,Suppurative	Simple Incidence	16/50 (32.0%)	5/48 (10.4%)	5/48 (10.4%)	6/49 (12.2%)	5/49 (10.2%)	11/46 (23.9%)
	Poly-K Incidence	16/38.1 (42.0%)	5/34.6 (14.4%)	5/34.6 (14.4%)	6/35.3 (17.0%)	5/34.9 (14.3%)	11/31.9 (34.5%)
	Terminal Incidence	5/15 (33.3%)	3/16 (18.8%)	1/17 (5.9%)	2/14 (14.3%)	1/16 (6.3%)	4/11 (36.4%)
	Time-to-First	543	638	393	368	479	372
	Poly-K P-Value	0.176N	0.007N**	0.007N**	0.015N*	0.007N**	0.341N
	Severity Profile	7 2 2 5	3 2 0 0	3 2 0 0	3 1 0 2	1 2 1 1	5 2 1 3
	JT/SW P-Value	0.163N	0.003N**	0.002N**	0.002N**	0.001N**	0.007N**
	RTE P-Value	0.196N	0.002N**	0.002N**	0.003N**	0.002N**	0.126N
Prostate, Ventral Lobe * Mineralization	Simple Incidence	4/50 (8.0%)	1/48 (2.1%)	0/48 (0.0%)	1/49 (2.0%)	1/49 (2.0%)	0/46 (0.0%)
	Poly-K Incidence	4/34.0 (11.8%)	1/34.0 (2.9%)	0/32.3 (0.0%)	1/32.9 (3.0%)	1/33.1 (3.0%)	0/28.5 (0.0%)
	Terminal Incidence	2/15 (13.3%)	1/16 (6.3%)	0/17 (0.0%)	1/14 (7.1%)	1/16 (6.3%)	0/11 (0.0%)
	Time-to-First	671	724 (T)	----	726 (T)	727 (T)	----
	Poly-K P-Value	0.028N*	0.175N	0.065N	0.185N	0.183N	0.083N
	Severity Profile	0 0 3 1	1 0 0 0	---	1 0 0 0	0 1 0 0	---
	JT/SW P-Value	0.017N*	0.087N	0.016N*	0.025N*	0.027N*	0.006N**
	RTE P-Value	0.016N*	0.012N*	0.002N**	0.010N*	0.011N*	0.002N**

**Table 10. Nonneoplasms by Body System for Terminal Sacrifice Males Bisphenol-A Continuous Dose Arm**

<i>System and Nonneoplasm</i>	<i>Treatment (ug/kg)</i>						
<i>Lesion</i>	<i>Statistic</i>	<i>Control</i>	<i>2.5</i>	<i>25</i>	<i>250</i>	<i>2500</i>	<i>25000</i>
Seminal Vesicle * Dilatation,Lumen	Simple Incidence	2/44 ( 4.5%)	2/42 ( 4.8%)	4/45 ( 8.9%)	2/41 ( 4.9%)	0/44 ( 0.0%)	1/43 ( 2.3%)
	Poly-K Incidence	2/31.7 ( 6.3%)	2/31.3 ( 6.4%)	4/32.7 ( 12.2%)	2/29.1 ( 6.9%)	0/30.3 ( 0.0%)	1/26.8 ( 3.7%)
	Terminal Incidence	1/15 ( 6.7%)	1/16 ( 6.3%)	1/17 ( 5.9%)	2/14 ( 14.3%)	0/16 ( 0.0%)	0/11 ( 0.0%)
	Time-to-First	720	452	338	726 (T)	----	699
	Poly-K P-Value	0.184N	0.691	0.348	0.664	0.246N	0.559N
	Severity Profile	0 0 2	0 0 2	0 2 0 2	0 0 2 0	---	0 0 0 1
	JT/SW P-Value	0.120N	0.519N	0.757N	0.627N	0.199N	0.289N
	RTE P-Value	0.126N	0.480	0.221	0.485	0.118N	0.302N
Seminal Vesicle * Hyperplasia,Epithelium	Simple Incidence	7/44 ( 15.9%)	6/42 ( 14.3%)	5/45 ( 11.1%)	3/41 ( 7.3%)	4/44 ( 9.1%)	3/43 ( 7.0%)
	Poly-K Incidence	7/32.7 ( 21.4%)	6/30.7 ( 19.5%)	5/31.7 ( 15.8%)	3/29.6 ( 10.1%)	4/31.1 ( 12.9%)	3/27.3 ( 11.0%)
	Terminal Incidence	5/15 ( 33.3%)	5/16 ( 31.3%)	4/17 ( 23.5%)	1/14 ( 7.1%)	3/16 ( 18.8%)	1/11 ( 9.1%)
	Time-to-First	558	680	412	600	443	644
	Poly-K P-Value	0.082N	0.550N	0.397N	0.190N	0.282N	0.231N
	Severity Profile	0 5 1 1	0 3 3 0	0 4 0 1	0 1 1 1	0 1 3 0	0 1 2 0
	JT/SW P-Value	0.061N	0.434N	0.304N	0.161N	0.193N	0.132N
	RTE P-Value	0.062N	0.418N	0.236N	0.121N	0.184N	0.108N
Testes * Degeneration,Seminiferous Tubule	Simple Incidence	40/49 ( 81.6%)	30/48 ( 62.5%)	33/48 ( 68.8%)	35/50 ( 70.0%)	38/50 ( 76.0%)	33/46 ( 71.7%)
	Poly-K Incidence	40/44.6 ( 89.8%)	30/40.7 ( 73.8%)	33/41.3 ( 80.0%)	35/42.6 ( 82.1%)	38/45.5 ( 83.5%)	33/40.6 ( 81.3%)
	Terminal Incidence	14/15 ( 93.3%)	13/16 ( 81.3%)	13/17 ( 76.5%)	11/14 ( 78.6%)	12/16 ( 75.0%)	9/11 ( 81.8%)
	Time-to-First	225	452	284	342	348	304
	Poly-K P-Value	0.387N	0.030N*	0.127N	0.199N	0.260N	0.174N
	Severity Profile	20 5 5 10	15 5 0 10	11 11 2 9	9 8 4 14	17 10 1 10	20 3 2 8
	JT/SW P-Value	0.364N	0.055N	0.159N	0.323N	0.362N	0.144N
	RTE P-Value	0.365N	0.061N	0.260N	0.458	0.342N	0.108N
Testes * Polyarteritis	Simple Incidence	12/49 ( 24.5%)	11/48 ( 22.9%)	16/48 ( 33.3%)	20/50 ( 40.0%)	16/50 ( 32.0%)	10/46 ( 21.7%)
	Poly-K Incidence	12/35.2 ( 34.1%)	11/35.6 ( 30.9%)	16/34.8 ( 46.0%)	20/37.8 ( 53.0%)	16/37.0 ( 43.2%)	10/29.7 ( 33.7%)
	Terminal Incidence	6/15 ( 40.0%)	5/16 ( 31.3%)	8/17 ( 47.1%)	8/14 ( 57.1%)	7/16 ( 43.8%)	6/11 ( 54.5%)
	Time-to-First	494	553	572	490	443	534
	Poly-K P-Value	0.211	0.488N	0.208	0.070	0.282	0.595N
	Severity Profile	1 5 1 5	2 4 4 1	3 8 1 4	2 8 6 4	5 3 5 3	4 3 1 2
	JT/SW P-Value	0.425	0.629	0.264	0.070	0.182	0.365
	RTE P-Value	0.442	0.369N	0.229	0.054	0.267	0.286N

**Table 10. Nonneoplasms by Body System for Terminal Sacrifice Males Bisphenol-A Continuous Dose Arm**

<i>System and Nonneoplasm</i>	<i>Treatment (ug/kg)</i>						
<i>Lesion</i>	<i>Statistic</i>	<i>Control</i>	<i>2.5</i>	<i>25</i>	<i>250</i>	<i>2500</i>	<i>25000</i>
<b>Hematopoietic System</b>							
Bone Marrow * Hyperplasia, Myeloid Cell	Simple Incidence	6/48 ( 12.5%)	4/48 ( 8.3%)	2/48 ( 4.2%)	3/49 ( 6.1%)	7/50 ( 14.0%)	2/45 ( 4.4%)
	Poly-K Incidence	6/35.1 ( 17.1%)	4/35.4 ( 11.3%)	2/33.0 ( 6.1%)	3/34.2 ( 8.8%)	7/34.6 ( 20.2%)	2/29.6 ( 6.8%)
	Terminal Incidence	1/15 ( 6.7%)	1/16 ( 6.3%)	0/17 ( 0.0%)	0/14 ( 0.0%)	4/16 ( 25.0%)	0/11 ( 0.0%)
	Time-to-First	520	539	547	573	541	532
	Poly-K P-Value	0.360N	0.361N	0.148N	0.249N	0.488	0.188N
	Severity Profile	0 1 1 4	0 0 1 3	0 0 0 2	0 0 3 0	0 0 2 5	0 0 0 2
	JT/SW P-Value	0.289N	0.260N	0.089N	0.109N	0.302N	0.112N
	RTE P-Value	0.268N	0.237N	0.092N	0.103N	0.387	0.096N
Bone Marrow * Hypocellularity	Simple Incidence	5/48 ( 10.4%)	7/48 ( 14.6%)	5/48 ( 10.4%)	0/49 ( 0.0%)	0/50 ( 0.0%)	4/45 ( 8.9%)
	Poly-K Incidence	5/33.3 ( 15.0%)	7/35.1 ( 19.9%)	5/33.3 ( 15.0%)	0/32.9 ( 0.0%)	0/33.6 ( 0.0%)	4/29.0 ( 13.8%)
	Terminal Incidence	3/15 ( 20.0%)	3/16 ( 18.8%)	3/17 ( 17.6%)	0/14 ( 0.0%)	0/16 ( 0.0%)	2/11 ( 18.2%)
	Time-to-First	616	613	568	----	----	637
	Poly-K P-Value	0.025N*	0.413	0.634	0.029N*	0.028N*	0.591N
	Severity Profile	0 0 5 0	0 0 4 3	0 0 4 1	---	---	0 0 2 2
	JT/SW P-Value	0.023N*	0.761N	0.599N	0.047N* <sup>1</sup>	0.029N* <sup>1</sup>	0.114N
	RTE P-Value	0.026N*	0.160	0.488	0.032N*	0.031N*	0.413N
Spleen * Hematopoietic Cell Proliferation	Simple Incidence	13/49 ( 26.5%)	10/47 ( 21.3%)	13/48 ( 27.1%)	11/47 ( 23.4%)	10/49 ( 20.4%)	13/45 ( 28.9%)
	Poly-K Incidence	13/37.2 ( 35.0%)	10/35.2 ( 28.4%)	13/37.0 ( 35.2%)	11/36.6 ( 30.1%)	10/35.3 ( 28.3%)	13/33.5 ( 38.8%)
	Terminal Incidence	4/15 ( 26.7%)	5/16 ( 31.3%)	2/17 ( 11.8%)	1/14 ( 7.1%)	4/16 ( 25.0%)	2/11 ( 18.2%)
	Time-to-First	225	539	284	490	513	386
	Poly-K P-Value	0.450	0.363N	0.590	0.419N	0.358N	0.465
	Severity Profile	5 3 3 2	5 4 1 0	6 2 2 3	4 5 0 2	4 5 0 1	2 8 3 0
	JT/SW P-Value	0.447	0.776	0.566	0.693	0.793	0.504
	RTE P-Value	0.432	0.225N	0.487	0.342N	0.212N	0.378
Spleen * Pigmentation	Simple Incidence	28/49 ( 57.1%)	28/47 ( 59.6%)	28/48 ( 58.3%)	23/47 ( 48.9%)	22/49 ( 44.9%)	24/45 ( 53.3%)
	Poly-K Incidence	28/40.3 ( 69.4%)	28/41.0 ( 68.4%)	28/39.8 ( 70.4%)	23/38.0 ( 60.5%)	22/38.7 ( 56.9%)	24/36.5 ( 65.7%)
	Terminal Incidence	12/15 ( 80.0%)	10/16 ( 62.5%)	12/17 ( 70.6%)	11/14 ( 78.6%)	9/16 ( 56.3%)	9/11 ( 81.8%)
	Time-to-First	284	292	412	244	381	311
	Poly-K P-Value	0.151N	0.557N	0.565	0.259N	0.160N	0.454N
	Severity Profile	5 15 4 4	5 13 8 2	7 14 6 1	8 9 5 1	5 10 5 2	4 15 5 0
	JT/SW P-Value	0.074N	0.618N	0.488N	0.154N	0.149N	0.222N
	RTE P-Value	0.079N	0.377	0.424N	0.123N	0.116N	0.284N

**Table 10. Nonneoplasms by Body System for Terminal Sacrifice Males Bisphenol-A Continuous Dose Arm**

<i>System and Nonneoplasm</i>		<i>Treatment (ug/kg)</i>					
<i>Lesion</i>	<i>Statistic</i>	<i>Control</i>	<i>2.5</i>	<i>25</i>	<i>250</i>	<i>2500</i>	<i>25000</i>
Thymus * Atrophy	Simple Incidence	47/50 (94.0%)	43/46 (93.5%)	44/46 (95.7%)	47/49 (95.9%)	47/49 (95.9%)	42/43 (97.7%)
	Poly-K Incidence	47/48.2 (97.5%)	43/43.5 (98.9%)	44/44.7 (98.4%)	47/47.5 (98.9%)	47/47.2 (99.6%)	42/42.5 (98.9%)
	Terminal Incidence	15/15 (100.0%)	16/16 (100.0%)	17/17 (100.0%)	14/14 (100.0%)	16/16 (100.0%)	11/11 (100.0%)
	Time-to-First	225	418	284	244	381	311
	Poly-K P-Value	0.217	0.625	0.692	0.611	0.486	0.631
	Severity Profile	0 2 1 44	0 0 0 43	0 0 2 42	0 4 1 42	0 0 3 44	0 0 1 41
	JT/SW P-Value	0.277	0.198	0.281	0.464	0.478	0.148
	RTE P-Value	0.269	0.211	0.283	0.361N	0.362	0.113
<b>Integumentary System</b>							
Mammary Gland * Degeneration,Alveolus	Simple Incidence	28/50 (56.0%)	22/48 (45.8%)	25/48 (52.1%)	22/50 (44.0%)	25/50 (50.0%)	23/45 (51.1%)
	Poly-K Incidence	28/40.6 (69.0%)	22/40.4 (54.4%)	25/40.7 (61.5%)	22/40.0 (55.0%)	25/40.6 (61.5%)	23/34.5 (66.6%)
	Terminal Incidence	11/15 (73.3%)	11/16 (68.8%)	9/17 (52.9%)	7/14 (50.0%)	11/16 (68.8%)	7/10 (70.0%)
	Time-to-First	284	176	393	368	348	372
	Poly-K P-Value	0.508N	0.116N	0.306N	0.129N	0.307N	0.513N
	Severity Profile	0 1 10 17	0 3 4 15	0 9 5 11	0 2 6 14	0 2 9 14	0 3 7 13
	JT/SW P-Value	0.317N	0.193N	0.172N	0.156N	0.216N	0.253N
	RTE P-Value	0.327N	0.174N	0.146N	0.123N	0.237N	0.263N
Mammary Gland * Dilatation,Alveolus	Simple Incidence	8/50 (16.0%)	17/48 (35.4%)	11/48 (22.9%)	10/50 (20.0%)	11/50 (22.0%)	9/45 (20.0%)
	Poly-K Incidence	8/35.0 (22.9%)	17/36.8 (46.2%)	11/34.7 (31.7%)	10/34.6 (28.9%)	11/36.1 (30.5%)	9/29.5 (30.5%)
	Terminal Incidence	3/15 (20.0%)	5/16 (31.3%)	4/17 (23.5%)	6/14 (42.9%)	3/16 (18.8%)	3/10 (30.0%)
	Time-to-First	558	613	572	582	566	596
	Poly-K P-Value	0.413N	0.028 *	0.283	0.380	0.321	0.339
	Severity Profile	0 5 3 0	0 10 6 1	0 4 6 1	0 8 2 0	0 7 4 0	0 8 0 1
	JT/SW P-Value	0.285N	0.986N	0.896N	0.766N	0.836N	0.788N
	RTE P-Value	0.267N	0.011 *	0.166	0.351	0.241	0.363
Mammary Gland * Dilatation,Duct	Simple Incidence	14/50 (28.0%)	18/48 (37.5%)	15/48 (31.3%)	11/50 (22.0%)	15/50 (30.0%)	11/45 (24.4%)
	Poly-K Incidence	14/35.7 (39.2%)	18/36.8 (49.0%)	15/37.1 (40.4%)	11/35.2 (31.3%)	15/36.6 (41.0%)	11/30.4 (36.2%)
	Terminal Incidence	6/15 (40.0%)	6/16 (37.5%)	3/17 (17.6%)	6/14 (42.9%)	6/16 (37.5%)	3/10 (30.0%)
	Time-to-First	549	613	412	556	566	501
	Poly-K P-Value	0.247N	0.265	0.554	0.321N	0.536	0.500N
	Severity Profile	0 8 6 0	0 7 8 3	0 6 7 2	0 6 5 0	0 4 11 0	0 7 3 1
	JT/SW P-Value	0.194N	0.895N	0.795N	0.350N	0.610N	0.478N
	RTE P-Value	0.187N	0.100	0.289	0.273N	0.318	0.357N

**Table 10. Nonneoplasms by Body System for Terminal Sacrifice Males Bisphenol-A Continuous Dose Arm**

<i>System and Nonneoplasm</i>		<i>Treatment (ug/kg)</i>					
<i>Lesion</i>	<i>Statistic</i>	<i>Control</i>	<i>2.5</i>	<i>25</i>	<i>250</i>	<i>2500</i>	<i>25000</i>
<b>Nervous System</b>							
Brain, Brain Stem * Compression	Simple Incidence	12/49 (24.5%)	14/48 (29.2%)	12/48 (25.0%)	10/49 (20.4%)	9/49 (18.4%)	8/46 (17.4%)
	Poly-K Incidence	12/35.7 (33.6%)	14/36.8 (38.0%)	12/36.1 (33.3%)	10/35.6 (28.1%)	9/35.4 (25.4%)	8/30.3 (26.4%)
	Terminal Incidence	4/15 (26.7%)	3/16 (18.8%)	3/17 (17.6%)	4/14 (28.6%)	2/16 (12.5%)	3/11 (27.3%)
	Time-to-First	558	613	559	490	566	501
	Poly-K P-Value	0.117N	0.440	0.588N	0.399N	0.305N	0.355N
	Severity Profile	3 2 4 3	1 3 7 3	1 5 5 1	3 3 3 1	1 2 3 3	1 2 4 1
	JT/SW P-Value	0.073N	0.727N	0.579N	0.353N	0.352N	0.281N
	RTE P-Value	0.071N	0.258	0.498	0.275N	0.262N	0.209N
Brain, Cerebrum * Dilatation,Ventricle	Simple Incidence	6/50 (12.0%)	10/48 (20.8%)	8/48 (16.7%)	5/49 (10.2%)	6/49 (12.2%)	4/46 (8.7%)
	Poly-K Incidence	6/35.8 (16.7%)	10/36.2 (27.6%)	8/35.1 (22.8%)	5/34.6 (14.5%)	6/34.9 (17.2%)	4/29.8 (13.4%)
	Terminal Incidence	0/15 (0.0%)	1/16 (6.3%)	1/17 (5.9%)	1/14 (7.1%)	1/16 (6.3%)	1/11 (9.1%)
	Time-to-First	558	619	559	582	566	501
	Poly-K P-Value	0.177N	0.201	0.365	0.526N	0.606	0.489N
	Severity Profile	2 4 0 0	6 3 1 0	7 0 1 0	2 2 1 0	3 3 0 0	1 3 0 0
	JT/SW P-Value	0.130N	0.866N	0.770N	0.504N	0.578N	0.430N
	RTE P-Value	0.132N	0.113	0.294	0.398N	0.500N	0.320N
Brain, Cerebrum * Hemorrhage	Simple Incidence	2/50 (4.0%)	0/48 (0.0%)	0/48 (0.0%)	1/49 (2.0%)	1/49 (2.0%)	4/46 (8.7%)
	Poly-K Incidence	2/35.1 (5.7%)	0/34.0 (0.0%)	0/32.3 (0.0%)	1/33.7 (3.0%)	1/33.9 (3.0%)	4/30.6 (13.1%)
	Terminal Incidence	0/15 (0.0%)	0/16 (0.0%)	0/17 (0.0%)	0/14 (0.0%)	0/16 (0.0%)	0/11 (0.0%)
	Time-to-First	486	----	----	582	443	311
	Poly-K P-Value	0.077	0.243N	0.255N	0.514N	0.512N	0.272
	Severity Profile	1 1 0 0	---	---	0 1 0 0	0 0 0 1	1 2 1 0
	JT/SW P-Value	0.065	0.918	0.982	0.886	0.892	0.104
	RTE P-Value	0.051	0.108N	0.111N	0.279N	0.284N	0.051
<b>Urinary System</b>							
Kidney * Cyst,Cortex	Simple Incidence	20/50 (40.0%)	15/48 (31.3%)	13/48 (27.1%)	10/50 (20.0%)	15/50 (30.0%)	11/45 (24.4%)
	Poly-K Incidence	20/37.8 (53.0%)	15/35.5 (42.3%)	13/36.7 (35.4%)	10/35.2 (28.4%)	15/37.2 (40.3%)	11/32.6 (33.7%)
	Terminal Incidence	9/15 (60.0%)	9/16 (56.3%)	4/17 (23.5%)	4/14 (28.6%)	9/16 (56.3%)	2/11 (18.2%)
	Time-to-First	494	585	412	573	348	330
	Poly-K P-Value	0.049N*	0.237N	0.087N	0.022N*	0.180N	0.072N
	Kidney * Cyst,Renal Tubule	Simple Incidence	11/50 (22.0%)	13/48 (27.1%)	15/48 (31.3%)	21/50 (42.0%)	20/50 (40.0%)
Poly-K Incidence		11/37.4 (29.4%)	13/37.3 (34.8%)	15/38.0 (39.5%)	21/39.6 (53.1%)	20/38.7 (51.7%)	11/32.3 (34.0%)
Terminal Incidence		3/15 (20.0%)	5/16 (31.3%)	4/17 (23.5%)	9/14 (64.3%)	8/16 (50.0%)	4/11 (36.4%)
Time-to-First		284	75	412	368	411	372
Poly-K P-Value		0.068	0.400	0.244	0.024 *	0.033 *	0.438

**Table 10. Nonneoplasms by Body System for Terminal Sacrifice Males Bisphenol-A Continuous Dose Arm**

<i>System and Nonneoplasm</i>		<i>Treatment (ug/kg)</i>					
<i>Lesion</i>	<i>Statistic</i>	<i>Control</i>	<i>2.5</i>	<i>25</i>	<i>250</i>	<i>2500</i>	<i>25000</i>
Kidney * Hyperplasia, Transitional Epithelium	Simple Incidence	3/50 ( 6.0%)	4/48 ( 8.3%)	12/48 ( 25.0%)	7/50 ( 14.0%)	5/50 ( 10.0%)	4/45 ( 8.9%)
	Poly-K Incidence	3/34.6 ( 8.7%)	4/34.5 ( 11.6%)	12/34.1 ( 35.2%)	7/34.8 ( 20.1%)	5/34.1 ( 14.7%)	4/28.9 ( 13.8%)
	Terminal Incidence	1/15 ( 6.7%)	1/16 ( 6.3%)	7/17 ( 41.2%)	3/14 ( 21.4%)	2/16 ( 12.5%)	2/11 ( 18.2%)
	Time-to-First	543	650	576	490	645	650
	Poly-K P-Value	0.331	0.498	0.006 **	0.151	0.344	0.400
	Severity Profile	1 1 1 0	1 3 0 0	5 6 1 0	5 1 0 1	2 2 1 0	1 1 1 1
	JT/SW P-Value	0.394	0.334	0.003 ** <sup>1</sup>	0.033 * <sup>1</sup>	0.086	0.142
	RTE P-Value	0.405	0.364	0.002 **	0.130	0.272	0.318
Kidney * Infiltration Cellular, Polymorphonuclear	Simple Incidence	6/50 ( 12.0%)	6/48 ( 12.5%)	5/48 ( 10.4%)	8/50 ( 16.0%)	6/50 ( 12.0%)	3/45 ( 6.7%)
	Poly-K Incidence	6/35.3 ( 17.0%)	6/34.3 ( 17.5%)	5/32.7 ( 15.3%)	8/34.4 ( 23.3%)	6/34.0 ( 17.7%)	3/28.7 ( 10.5%)
	Terminal Incidence	3/15 ( 20.0%)	4/16 ( 25.0%)	3/17 ( 17.6%)	5/14 ( 35.7%)	3/16 ( 18.8%)	2/11 ( 18.2%)
	Time-to-First	543	678	618	622	677	650
	Poly-K P-Value	0.393N	0.604	0.555N	0.360	0.598	0.348N
	Severity Profile	4 1 1 0	2 4 0 0	1 4 0 0	4 4 0 0	2 4 0 0	3 0 0 0
	JT/SW P-Value	0.283N	0.550N	0.507N	0.700N	0.659N	0.270N
	RTE P-Value	0.269N	0.449	0.432N	0.265	0.480	0.195N
Kidney * Mineralization	Simple Incidence	1/50 ( 2.0%)	3/48 ( 6.3%)	3/48 ( 6.3%)	5/50 ( 10.0%)	1/50 ( 2.0%)	1/45 ( 2.2%)
	Poly-K Incidence	1/34.1 ( 2.9%)	3/35.0 ( 8.6%)	3/33.7 ( 8.9%)	5/35.3 ( 14.2%)	1/33.9 ( 2.9%)	1/28.6 ( 3.5%)
	Terminal Incidence	0/15 ( 0.0%)	0/16 ( 0.0%)	0/17 ( 0.0%)	0/14 ( 0.0%)	0/16 ( 0.0%)	0/11 ( 0.0%)
	Time-to-First	633	489	572	490	637	671
	Poly-K P-Value	0.482N	0.314	0.299	0.105	0.761	0.723
	Severity Profile	0 0 0 1	2 0 1 0	0 1 1 1	0 2 2 1	0 0 1 0	0 1 0 0
	JT/SW P-Value	0.397N	0.848N	0.898N	0.946N	0.630N	0.650N
	RTE P-Value	0.379N	0.220	0.177	0.035 *	0.495N	0.491
Kidney * Nephropathy	Simple Incidence	44/50 ( 88.0%)	44/48 ( 91.7%)	43/48 ( 89.6%)	45/50 ( 90.0%)	47/50 ( 94.0%)	39/45 ( 86.7%)
	Poly-K Incidence	44/46.4 ( 94.8%)	44/45.4 ( 97.0%)	43/44.2 ( 97.2%)	45/46.3 ( 97.1%)	47/47.5 ( 99.0%)	39/40.4 ( 96.5%)
	Terminal Incidence	15/15 ( 100.0%)	16/16 ( 100.0%)	17/17 ( 100.0%)	14/14 ( 100.0%)	16/16 ( 100.0%)	11/11 ( 100.0%)
	Time-to-First	225	292	393	244	381	383
	Poly-K P-Value	0.193	0.502	0.472	0.480	0.222	0.578
	Severity Profile	11 12 6 15	12 7 7 18	10 8 6 19	5 11 13 16	4 13 13 17	12 11 10 6
	JT/SW P-Value	0.320N	0.768N	0.860N	0.918N	0.957N	0.157N
	RTE P-Value	0.297N	0.209	0.178	0.109	0.045 *	0.107N

P-values for dose trend are presented in the “Control” column.

N indicates a negative trend or negative treatment comparison to control with corresponding lower-tail p-values.

<sup>1</sup> Nonsignificant SW test due to the assumption of monotonicity.

<b>Table 11. Nonneoplasms by Body System for Terminal Sacrifice Females EE2 Continuous Dose Arm</b>				
<b>System and Nonneoplasm</b>	<b>Treatment (ug/kg)</b>			
<b>Lesion</b>	<b>Statistic</b>	<b>Control</b>	<b>0.05</b>	<b>0.50</b>
<b>Alimentary System</b>				
Liver * Basophilic Focus	Simple Incidence	18/50 ( 36.0%)	12/26 ( 46.2%)	14/26 ( 53.8%)
	Poly-K Incidence	18/40.1 ( 44.9%)	12/18.9 ( 63.5%)	14/20.8 ( 67.4%)
	Terminal Incidence	5/16 ( 31.3%)	5/7 ( 71.4%)	2/4 ( 50.0%)
	Time-to-First	488	505	488
	Poly-K P-Value	0.036 *	0.134	0.068
Liver * Clear Cell Focus	Simple Incidence	9/50 ( 18.0%)	2/26 ( 7.7%)	1/26 ( 3.8%)
	Poly-K Incidence	9/36.7 ( 24.5%)	2/15.9 ( 12.6%)	1/15.7 ( 6.4%)
	Terminal Incidence	4/16 ( 25.0%)	2/7 ( 28.6%)	0/4 ( 0.0%)
	Time-to-First	496	724 (T)	525
	Poly-K P-Value	0.068N	0.274N	0.128N
Liver * Cyst,Biliary Tract	Simple Incidence	0/50 ( 0.0%)	2/26 ( 7.7%)	0/26 ( 0.0%)
	Poly-K Incidence	0/34.2 ( 0.0%)	2/15.9 ( 12.6%)	0/15.1 ( 0.0%)
	Terminal Incidence	0/16 ( 0.0%)	2/7 ( 28.6%)	0/4 ( 0.0%)
	Time-to-First	----	728 (T)	----
	Poly-K P-Value	0.444	0.090	-----
Liver * Degeneration,Cystic	Simple Incidence	4/50 ( 8.0%)	4/26 ( 15.4%)	2/26 ( 7.7%)
	Poly-K Incidence	4/34.9 ( 11.5%)	4/17.3 ( 23.1%)	2/15.2 ( 13.2%)
	Terminal Incidence	2/16 ( 12.5%)	0/7 ( 0.0%)	1/4 ( 25.0%)
	Time-to-First	620	511	711
	Poly-K P-Value	0.414	0.244	0.615
	Severity Profile	4 0 0 0	4 0 0 0	1 1 0 0
	JT/SW P-Value	0.385	0.161	0.363
RTE P-Value	0.496	0.161	0.496	
Liver * Fatty Change	Simple Incidence	19/50 ( 38.0%)	5/26 ( 19.2%)	3/26 ( 11.5%)
	Poly-K Incidence	19/40.4 ( 47.1%)	5/17.9 ( 28.0%)	3/15.7 ( 19.1%)
	Terminal Incidence	5/16 ( 31.3%)	1/7 ( 14.3%)	1/4 ( 25.0%)
	Time-to-First	488	490	571
	Poly-K P-Value	0.023N*	0.138N	0.053N
	Severity Profile	3 6 8 2	0 4 1 0	1 2 0 0
	JT/SW P-Value	0.002N**	0.039N*	0.004N**
RTE P-Value	0.002N**	0.026N*	0.002N**	



<b>Table 11. Nonneoplasms by Body System for Terminal Sacrifice Females EE2 Continuous Dose Arm</b>				
<b>System and Nonneoplasm</b>	<b>Treatment (ug/kg)</b>			
<b>Lesion</b>	<b>Statistic</b>	<b>Control</b>	<b>0.05</b>	<b>0.50</b>
Liver * Fibrosis,Biliary Tract	Simple Incidence	6/50 ( 12.0%)	3/26 ( 11.5%)	0/26 ( 0.0%)
	Poly-K Incidence	6/34.8 ( 17.3%)	3/16.9 ( 17.8%)	0/15.1 ( 0.0%)
	Terminal Incidence	4/16 ( 25.0%)	1/7 ( 14.3%)	0/4 ( 0.0%)
	Time-to-First	625	579	----
	Poly-K P-Value	0.119N	0.635	0.110N
	Severity Profile	3 3 0 0	3 0 0 0	---
	JT/SW P-Value	0.056N	0.442N	0.045N*
	RTE P-Value	0.029N*	0.443N	0.029N*
Liver * Hematopoietic Cell Proliferation	Simple Incidence	2/50 ( 4.0%)	2/26 ( 7.7%)	0/26 ( 0.0%)
	Poly-K Incidence	2/35.6 ( 5.6%)	2/16.6 ( 12.0%)	0/15.1 ( 0.0%)
	Terminal Incidence	0/16 ( 0.0%)	1/7 ( 14.3%)	0/4 ( 0.0%)
	Time-to-First	477	497	----
	Poly-K P-Value	0.469N	0.402	0.443N
	Severity Profile	2 0 0 0	2 0 0 0	---
	JT/SW P-Value	0.300N	0.752N	0.237N
	RTE P-Value	0.220N	0.218	0.220N
Liver * Hepatodiaphragmatic Nodule	Simple Incidence	6/50 ( 12.0%)	0/26 ( 0.0%)	0/26 ( 0.0%)
	Poly-K Incidence	6/35.3 ( 17.0%)	0/15.9 ( 0.0%)	0/15.1 ( 0.0%)
	Terminal Incidence	4/16 ( 25.0%)	0/7 ( 0.0%)	0/4 ( 0.0%)
	Time-to-First	488	----	----
	Poly-K P-Value	0.025N*	0.102N	0.114N
Liver * Hyperplasia,Bile Duct	Simple Incidence	16/50 ( 32.0%)	8/26 ( 30.8%)	1/26 ( 3.8%)
	Poly-K Incidence	16/37.8 ( 42.3%)	8/18.5 ( 43.2%)	1/15.4 ( 6.5%)
	Terminal Incidence	8/16 ( 50.0%)	2/7 ( 28.6%)	0/4 ( 0.0%)
	Time-to-First	431	460	631
	Poly-K P-Value	0.022N*	0.591	0.011N*
	Severity Profile	7 6 3 0	4 4 0 0	0 1 0 0
	JT/SW P-Value	0.008N**	0.405N	0.004N**
	RTE P-Value	0.002N**	0.406N	0.002N**
Liver * Infiltration Cellular,Mononuclear Cell	Simple Incidence	37/50 ( 74.0%)	17/26 ( 65.4%)	10/26 ( 38.5%)
	Poly-K Incidence	37/44.3 ( 83.4%)	17/21.6 ( 78.7%)	10/18.7 ( 53.5%)
	Terminal Incidence	16/16 (100.0%)	6/7 ( 85.7%)	2/4 ( 50.0%)
	Time-to-First	431	443	486
	Poly-K P-Value	0.006N**	0.441N	0.006N**
	Severity Profile	27 9 1 0	15 2 0 0	8 2 0 0
	JT/SW P-Value	0.001N**	0.100N	0.001N**
	RTE P-Value	<.001N***	0.108N	<.001N***

<b>Table 11. Nonneoplasms by Body System for Terminal Sacrifice Females EE2 Continuous Dose Arm</b>				
<b>System and Nonneoplasm</b>	<b>Treatment (ug/kg)</b>			
<b>Lesion</b>	<b>Statistic</b>	<b>Control</b>	<b>0.05</b>	<b>0.50</b>
Liver * Tension Lipidosis	Simple Incidence	5/50 ( 10.0%)	2/26 ( 7.7%)	7/26 ( 26.9%)
	Poly-K Incidence	5/35.9 ( 13.9%)	2/16.6 ( 12.1%)	7/16.9 ( 41.5%)
	Terminal Incidence	2/16 ( 12.5%)	0/7 ( 0.0%)	2/4 ( 50.0%)
	Time-to-First	496	614	525
	Poly-K P-Value	0.024 *	0.597N	0.026 *
	Severity Profile	0 1 1 3	0 0 1 1	0 1 4 2
	JT/SW P-Value	0.053	0.628	0.030 *
	RTE P-Value	0.026 *	0.390N	0.026 *
Liver * Vacuolization Cytoplasmic	Simple Incidence	11/50 ( 22.0%)	11/26 ( 42.3%)	7/26 ( 26.9%)
	Poly-K Incidence	11/37.0 ( 29.8%)	11/19.1 ( 57.7%)	7/17.5 ( 40.1%)
	Terminal Incidence	4/16 ( 25.0%)	5/7 ( 71.4%)	2/4 ( 50.0%)
	Time-to-First	450	497	360
	Poly-K P-Value	0.151	0.031 *	0.324
	Severity Profile	4 7 0 0	8 3 0 0	5 1 1 0
	JT/SW P-Value	0.258	0.065	0.216
	RTE P-Value	0.391	0.067	0.391
Pancreas * Basophilic Focus	Simple Incidence	3/50 ( 6.0%)	3/26 ( 11.5%)	0/26 ( 0.0%)
	Poly-K Incidence	3/35.0 ( 8.6%)	3/16.8 ( 17.8%)	0/15.1 ( 0.0%)
	Terminal Incidence	0/16 ( 0.0%)	1/7 ( 14.3%)	0/4 ( 0.0%)
	Time-to-First	569	490	----
	Poly-K P-Value	0.395N	0.307	0.306N
Pancreas * Degeneration,Acinus	Simple Incidence	34/50 ( 68.0%)	18/26 ( 69.2%)	16/26 ( 61.5%)
	Poly-K Incidence	34/43.4 ( 78.3%)	18/23.7 ( 76.1%)	16/22.4 ( 71.4%)
	Terminal Incidence	15/16 ( 93.8%)	4/7 ( 57.1%)	2/4 ( 50.0%)
	Time-to-First	450	443	462
	Poly-K P-Value	0.306N	0.541N	0.360N
	Severity Profile	5 16 8 5	4 10 2 2	7 6 1 2
	JT/SW P-Value	0.068N	0.304N	0.073N
	RTE P-Value	0.065N	0.321N	0.065N
Pancreas * Hyperplasia,Acinar Cell	Simple Incidence	0/50 ( 0.0%)	0/26 ( 0.0%)	2/26 ( 7.7%)
	Poly-K Incidence	0/34.2 ( 0.0%)	0/15.9 ( 0.0%)	2/16.1 ( 12.5%)
	Terminal Incidence	0/16 ( 0.0%)	0/7 ( 0.0%)	0/4 ( 0.0%)
	Time-to-First	----	----	527
	Poly-K P-Value	0.038 *	----	0.091
	Severity Profile	---	---	0 0 0 2
	JT/SW P-Value	0.023 *	0.500	0.013 *
	RTE P-Value	0.032 *	0.500	0.032 *

<b>Table 11. Nonneoplasms by Body System for Terminal Sacrifice Females EE2 Continuous Dose Arm</b>				
<b>System and Nonneoplasm</b>		<b>Treatment (ug/kg)</b>		
<b>Lesion</b>	<b>Statistic</b>	<b>Control</b>	<b>0.05</b>	<b>0.50</b>
Pancreas * Infiltration Cellular,Lymphocyte	Simple Incidence	35/50 (70.0%)	18/26 (69.2%)	13/26 (50.0%)
	Poly-K Incidence	35/43.1 (81.1%)	18/22.6 (79.5%)	13/20.7 (62.7%)
	Terminal Incidence	15/16 (93.8%)	5/7 (71.4%)	2/4 (50.0%)
	Time-to-First	477	443	462
	Poly-K P-Value	0.066N	0.579N	0.072N
	Severity Profile	16 17 2 0	13 4 1 0	8 3 2 0
	JT/SW P-Value	0.029N*	0.166N	0.037N*
	RTE P-Value	0.031N*	0.189N	0.031N*
Pancreas * Lipomatosis	Simple Incidence	6/50 (12.0%)	1/26 (3.8%)	0/26 (0.0%)
	Poly-K Incidence	6/35.6 (16.8%)	1/15.9 (6.3%)	0/15.1 (0.0%)
	Terminal Incidence	2/16 (12.5%)	1/7 (14.3%)	0/4 (0.0%)
	Time-to-First	506	728 (T)	----
	Poly-K P-Value	0.052N	0.284N	0.116N
	Severity Profile	0 1 3 2	0 0 1 0	---
	JT/SW P-Value	0.019N*	0.121N	0.029N*
	RTE P-Value	0.015N*	0.077N	0.015N*
Pancreas * Pigmentation	Simple Incidence	11/50 (22.0%)	4/26 (15.4%)	5/26 (19.2%)
	Poly-K Incidence	11/38.6 (28.5%)	4/18.0 (22.2%)	5/18.1 (27.7%)
	Terminal Incidence	3/16 (18.8%)	0/7 (0.0%)	0/4 (0.0%)
	Time-to-First	450	484	462
	Poly-K P-Value	0.499N	0.431N	0.600N
	Severity Profile	10 10 0	4 0 0 0	4 1 0 0
	JT/SW P-Value	0.341N	0.238N	0.377N
	RTE P-Value	0.405N	0.241N	0.405N
<b>Cardiovascular System</b>				
Heart * Cardiomyopathy	Simple Incidence	35/50 (70.0%)	19/26 (73.1%)	22/26 (84.6%)
	Poly-K Incidence	35/43.5 (80.6%)	19/22.6 (84.2%)	22/24.0 (91.7%)
	Terminal Incidence	15/16 (93.8%)	6/7 (85.7%)	4/4 (100.0%)
	Time-to-First	446	484	360
	Poly-K P-Value	0.112	0.488	0.149
	Severity Profile	24 10 1 0	14 5 0 0	12 9 1 0
	JT/SW P-Value	0.057	0.498	0.042 *
	RTE P-Value	0.035 *	0.493N	0.035 *

<b>Table 11. Nonneoplasms by Body System for Terminal Sacrifice Females EE2 Continuous Dose Arm</b>				
<b>System and Nonneoplasm</b>		<b>Treatment (ug/kg)</b>		
<b>Lesion</b>	<b>Statistic</b>	<b>Control</b>	<b>0.05</b>	<b>0.50</b>
<b>Endocrine System</b>				
Adrenal Cortex * Angiectasis	Simple Incidence	9/50 ( 18.0%)	3/26 ( 11.5%)	9/26 ( 34.6%)
	Poly-K Incidence	9/37.3 ( 24.1%)	3/17.2 ( 17.4%)	9/18.7 ( 48.1%)
	Terminal Incidence	2/16 ( 12.5%)	0/7 ( 0.0%)	1/4 ( 25.0%)
	Time-to-First	496	505	462
	Poly-K P-Value	0.057	0.420N	0.057
	Severity Profile	0 4 3 2	0 3 0 0	0 1 2 6
	JT/SW P-Value	0.066	0.804	0.027 *
	RTE P-Value	0.024 *	0.223N	0.024 *
Adrenal Cortex * Degeneration,Cystic	Simple Incidence	31/50 ( 62.0%)	13/26 ( 50.0%)	22/26 ( 84.6%)
	Poly-K Incidence	31/42.0 ( 73.8%)	13/19.9 ( 65.3%)	22/23.2 ( 94.6%)
	Terminal Incidence	13/16 ( 81.3%)	6/7 ( 85.7%)	4/4 (100.0%)
	Time-to-First	450	484	462
	Poly-K P-Value	0.026 *	0.331N	0.017 *
	Severity Profile	3 10 8 10	2 6 3 2	3 4 0 15
	JT/SW P-Value	0.032 *	0.925	0.005 **
	RTE P-Value	0.003 **	0.077N	0.003 **
Adrenal Cortex * Hyperplasia	Simple Incidence	7/50 ( 14.0%)	4/26 ( 15.4%)	1/26 ( 3.8%)
	Poly-K Incidence	7/36.7 ( 19.1%)	4/17.0 ( 23.5%)	1/15.1 ( 6.6%)
	Terminal Incidence	2/16 ( 12.5%)	2/7 ( 28.6%)	0/4 ( 0.0%)
	Time-to-First	450	511	716
	Poly-K P-Value	0.275N	0.497	0.247N
	Severity Profile	3 3 1 0	1 3 0 0	1 0 0 0
	JT/SW P-Value	0.134N	0.571N	0.108N
	RTE P-Value	0.091N	0.423	0.091N
Adrenal Cortex * Hypertrophy	Simple Incidence	5/50 ( 10.0%)	1/26 ( 3.8%)	2/26 ( 7.7%)
	Poly-K Incidence	5/34.9 ( 14.3%)	1/16.4 ( 6.1%)	2/15.3 ( 13.1%)
	Terminal Incidence	3/16 ( 18.8%)	0/7 ( 0.0%)	1/4 ( 25.0%)
	Time-to-First	569	592	677
	Poly-K P-Value	0.468N	0.351N	0.625N
	Severity Profile	1 3 1 0	0 0 0 1	0 1 0 1
	JT/SW P-Value	0.306N	0.190N	0.332N
	RTE P-Value	0.383N	0.232N	0.383N

<b>Table 11. Nonneoplasms by Body System for Terminal Sacrifice Females EE2 Continuous Dose Arm</b>				
<b>System and Nonneoplasm</b>	<b>Treatment (ug/kg)</b>			
<b>Lesion</b>	<b>Statistic</b>	<b>Control</b>	<b>0.05</b>	<b>0.50</b>
Adrenal Cortex * Pigmentation	Simple Incidence	0/50 ( 0.0%)	0/26 ( 0.0%)	2/26 ( 7.7%)
	Poly-K Incidence	0/34.2 ( 0.0%)	0/15.9 ( 0.0%)	2/16.1 ( 12.4%)
	Terminal Incidence	0/16 ( 0.0%)	0/7 ( 0.0%)	0/4 ( 0.0%)
	Time-to-First	----	----	540
	Poly-K P-Value	0.038 *	-----	0.091
	Severity Profile	---	---	0 1 1 0
	JT/SW P-Value	0.023 *	0.500	0.013 *
	RTE P-Value	0.032 *	0.500	0.032 *
Adrenal Cortex * Vacuolization Cytoplasmic	Simple Incidence	3/50 ( 6.0%)	3/26 ( 11.5%)	1/26 ( 3.8%)
	Poly-K Incidence	3/34.2 ( 8.8%)	3/17.3 ( 17.3%)	1/15.7 ( 6.4%)
	Terminal Incidence	3/16 ( 18.8%)	0/7 ( 0.0%)	0/4 ( 0.0%)
	Time-to-First	725 (T)	497	540
	Poly-K P-Value	0.598	0.329	0.604N
	Severity Profile	1 2 0 0	1 0 0 2	0 1 0 0
	JT/SW P-Value	0.489N	0.813N	0.438N
	RTE P-Value	0.370N	0.164	0.370N
Adrenal Medulla * Hyperplasia	Simple Incidence	8/50 ( 16.0%)	2/26 ( 7.7%)	8/26 ( 30.8%)
	Poly-K Incidence	8/35.8 ( 22.3%)	2/15.9 ( 12.6%)	8/17.6 ( 45.5%)
	Terminal Incidence	4/16 ( 25.0%)	2/7 ( 28.6%)	3/4 ( 75.0%)
	Time-to-First	569	724 (T)	486
	Poly-K P-Value	0.070	0.333N	0.070
	Severity Profile	7 0 1 0	2 0 0 0	4 4 0 0
	JT/SW P-Value	0.103	0.848	0.047 *
	RTE P-Value	0.044 *	0.188N	0.044 *
Parathyroid Gland * Hyperplasia	Simple Incidence	4/50 ( 8.0%)	3/26 ( 11.5%)	2/26 ( 7.7%)
	Poly-K Incidence	4/35.5 ( 11.3%)	3/16.5 ( 18.1%)	2/16.0 ( 12.5%)
	Terminal Incidence	1/16 ( 6.3%)	1/7 ( 14.3%)	0/4 ( 0.0%)
	Time-to-First	477	614	597
	Poly-K P-Value	0.483	0.406	0.630
	Severity Profile	2 2 0 0	1 2 0 0	1 1 0 0
	JT/SW P-Value	0.457	0.300	0.476
	RTE P-Value	0.482N	0.298	0.482N
Pituitary Gland * Angiectasis	Simple Incidence	10/50 ( 20.0%)	5/26 ( 19.2%)	17/26 ( 65.4%)
	Poly-K Incidence	10/37.5 ( 26.7%)	5/17.1 ( 29.2%)	17/22.0 ( 77.4%)
	Terminal Incidence	3/16 ( 18.8%)	1/7 ( 14.3%)	3/4 ( 75.0%)
	Time-to-First	477	614	360
	Poly-K P-Value	<.001 ***	0.552	<.001 ***
	Severity Profile	0 1 1 8	0 0 0 5	0 0 0 17
	JT/SW P-Value	<.001 ***	0.500	<.001 ***
	RTE P-Value	<.001 ***	0.482	<.001 ***

<b>Table 11. Nonneoplasms by Body System for Terminal Sacrifice Females EE2 Continuous Dose Arm</b>				
<b>System and Nonneoplasm</b>	<b>Treatment (ug/kg)</b>			
<b>Lesion</b>	<b>Statistic</b>	<b>Control</b>	<b>0.05</b>	<b>0.50</b>
Pituitary Gland * Cyst,Pars Distalis	Simple Incidence	9/50 ( 18.0%)	3/26 ( 11.5%)	2/26 ( 7.7%)
	Poly-K Incidence	9/37.0 ( 24.3%)	3/17.6 ( 17.1%)	2/15.6 ( 12.8%)
	Terminal Incidence	2/16 ( 12.5%)	0/7 ( 0.0%)	1/4 ( 25.0%)
	Time-to-First	446	484	552
	Poly-K P-Value	0.211N	0.401N	0.289N
Pituitary Gland * Hemorrhage	Simple Incidence	0/50 ( 0.0%)	0/26 ( 0.0%)	3/26 ( 11.5%)
	Poly-K Incidence	0/34.2 ( 0.0%)	0/15.9 ( 0.0%)	3/16.3 ( 18.4%)
	Terminal Incidence	0/16 ( 0.0%)	0/7 ( 0.0%)	1/4 ( 25.0%)
	Time-to-First	----	----	529
	Poly-K P-Value	0.008 **	-----	0.023 *
	Severity Profile	---	---	0 0 0 3
	JT/SW P-Value	0.007 **	0.500	0.003 **
RTE P-Value	0.007 **	0.500	0.007 **	
Pituitary Gland * Hyperplasia,Pars Distalis	Simple Incidence	27/50 ( 54.0%)	16/26 ( 61.5%)	6/26 ( 23.1%)
	Poly-K Incidence	27/43.6 ( 61.9%)	16/23.6 ( 67.8%)	6/16.9 ( 35.5%)
	Terminal Incidence	9/16 ( 56.3%)	3/7 ( 42.9%)	2/4 ( 50.0%)
	Time-to-First	431	443	552
	Poly-K P-Value	0.114N	0.411	0.055N
	Severity Profile	0 3 12 12	0 3 5 8	0 1 2 3
	JT/SW P-Value	0.028N*	0.721N	0.010N**
RTE P-Value	0.010N**	0.268	0.010N**	
Thyroid Gland * Hyperplasia,C-Cell	Simple Incidence	22/50 ( 44.0%)	7/26 ( 26.9%)	9/25 ( 36.0%)
	Poly-K Incidence	22/40.7 ( 54.0%)	7/18.7 ( 37.3%)	9/18.1 ( 49.6%)
	Terminal Incidence	8/16 ( 50.0%)	2/7 ( 28.6%)	2/4 ( 50.0%)
	Time-to-First	450	505	488
	Poly-K P-Value	0.331N	0.172N	0.487N
	Severity Profile	11 9 2 0	2 5 0 0	6 2 0 1
	JT/SW P-Value	0.146N	0.105N	0.179N
RTE P-Value	0.213N	0.094N	0.213N	
Thyroid Gland * Hyperplasia,Follicular Cell	Simple Incidence	1/50 ( 2.0%)	4/26 ( 15.4%)	0/25 ( 0.0%)
	Poly-K Incidence	1/34.2 ( 2.9%)	4/17.9 ( 22.3%)	0/14.7 ( 0.0%)
	Terminal Incidence	1/16 ( 6.3%)	0/7 ( 0.0%)	0/4 ( 0.0%)
	Time-to-First	726 (T)	443	----
	Poly-K P-Value	0.457	0.034 *	0.664N
	Severity Profile	0 1 0 0	0 1 3 0	---
	JT/SW P-Value	0.329	0.012 * <sup>1</sup>	0.158
RTE P-Value	0.354N	0.007 **	0.354N	

<b>Table 11. Nonneoplasms by Body System for Terminal Sacrifice Females EE2 Continuous Dose Arm</b>				
<b>System and Nonneoplasm</b>	<b>Treatment (ug/kg)</b>			
<b>Lesion</b>	<b>Statistic</b>	<b>Control</b>	<b>0.05</b>	<b>0.50</b>
Thyroid Gland * Ultimobranchial Cyst	Simple Incidence	8/50 ( 16.0%)	5/26 ( 19.2%)	8/25 ( 32.0%)
	Poly-K Incidence	8/36.4 ( 22.0%)	5/17.5 ( 28.6%)	8/17.4 ( 45.9%)
	Terminal Incidence	4/16 ( 25.0%)	2/7 ( 28.6%)	1/4 ( 25.0%)
	Time-to-First	431	485	360
	Poly-K P-Value	0.048 *	0.424	0.062
<b>Genital System</b>				
Ovary * Atrophy	Simple Incidence	47/50 ( 94.0%)	25/26 ( 96.2%)	26/26 ( 100.0%)
	Poly-K Incidence	47/48.7 ( 96.5%)	25/26.0 ( 96.2%)	26/26.0 ( 100.0%)
	Terminal Incidence	16/16 ( 100.0%)	6/7 ( 85.7%)	4/4 ( 100.0%)
	Time-to-First	431	443	360
	Poly-K P-Value	0.315	0.736N	0.430
	Severity Profile	0 24 15 8	0 12 7 6	0 11 1 24
	JT/SW P-Value	<.001 ***	0.282	<.001 ***
	RTE P-Value	<.001 ***	0.243	<.001 ***
Ovary * Cyst	Simple Incidence	4/50 ( 8.0%)	5/26 ( 19.2%)	5/26 ( 19.2%)
	Poly-K Incidence	4/34.2 ( 11.7%)	5/16.4 ( 30.4%)	5/15.8 ( 31.6%)
	Terminal Incidence	3/16 ( 18.8%)	4/7 ( 57.1%)	2/4 ( 50.0%)
	Time-to-First	720	579	597
	Poly-K P-Value	0.049 *	0.104	0.093
Ovary * Cyst,Bursa	Simple Incidence	0/50 ( 0.0%)	1/26 ( 3.8%)	2/26 ( 7.7%)
	Poly-K Incidence	0/34.2 ( 0.0%)	1/16.1 ( 6.2%)	2/15.9 ( 12.6%)
	Terminal Incidence	0/16 ( 0.0%)	0/7 ( 0.0%)	0/4 ( 0.0%)
	Time-to-First	----	672	582
	Poly-K P-Value	0.049 *	0.351	0.090
Ovary * Cyst,Follicle	Simple Incidence	3/50 ( 6.0%)	0/26 ( 0.0%)	3/26 ( 11.5%)
	Poly-K Incidence	3/35.7 ( 8.4%)	0/15.9 ( 0.0%)	3/16.1 ( 18.6%)
	Terminal Incidence	0/16 ( 0.0%)	0/7 ( 0.0%)	1/4 ( 25.0%)
	Time-to-First	538	----	540
	Poly-K P-Value	0.276	0.297N	0.281
Ovary * Hyperplasia,Sertoliform	Simple Incidence	4/50 ( 8.0%)	3/26 ( 11.5%)	3/26 ( 11.5%)
	Poly-K Incidence	4/34.6 ( 11.6%)	3/16.9 ( 17.8%)	3/15.7 ( 19.1%)
	Terminal Incidence	2/16 ( 12.5%)	1/7 ( 14.3%)	1/4 ( 25.0%)
	Time-to-First	667	497	610
	Poly-K P-Value	0.294	0.429	0.392
	Severity Profile	4 0 0 0	1 1 1 0	2 0 0 1
	JT/SW P-Value	0.265	0.278	0.346
	RTE P-Value	0.298	0.287	0.298

<b>Table 11. Nonneoplasms by Body System for Terminal Sacrifice Females EE2 Continuous Dose Arm</b>				
<b>System and Nonneoplasm</b>	<b>Treatment (ug/kg)</b>			
<b>Lesion</b>	<b>Statistic</b>	<b>Control</b>	<b>0.05</b>	<b>0.50</b>
Uterus * Atrophy	Simple Incidence	7/50 ( 14.0%)	1/26 ( 3.8%)	9/26 ( 34.6%)
	Poly-K Incidence	7/35.6 ( 19.7%)	1/15.9 ( 6.3%)	9/19.7 ( 45.6%)
	Terminal Incidence	1/16 ( 6.3%)	1/7 ( 14.3%)	1/4 ( 25.0%)
	Time-to-First	620	728 (T)	360
	Poly-K P-Value	0.026 *	0.213N	0.033 *
	Severity Profile	0 0 7 0	0 0 1 0	0 0 5 4
	JT/SW P-Value	0.034 *	0.913	0.008 **
	RTE P-Value	0.007 **	0.137N	0.007 **
Uterus * Cyst,Endometrium	Simple Incidence	0/50 ( 0.0%)	0/26 ( 0.0%)	2/26 ( 7.7%)
	Poly-K Incidence	0/34.2 ( 0.0%)	0/15.9 ( 0.0%)	2/15.8 ( 12.7%)
	Terminal Incidence	0/16 ( 0.0%)	0/7 ( 0.0%)	0/4 ( 0.0%)
	Time-to-First	----	----	529
	Poly-K P-Value	0.038 *	-----	0.089
Uterus * Dilatation,Lumen	Simple Incidence	2/50 ( 4.0%)	2/26 ( 7.7%)	3/26 ( 11.5%)
	Poly-K Incidence	2/35.6 ( 5.6%)	2/16.9 ( 11.8%)	3/16.0 ( 18.8%)
	Terminal Incidence	0/16 ( 0.0%)	0/7 ( 0.0%)	1/4 ( 25.0%)
	Time-to-First	446	485	552
	Poly-K P-Value	0.116	0.409	0.170
	Severity Profile	0 0 0 2	0 0 0 2	0 0 0 3
	JT/SW P-Value	0.108	0.248	0.130
	RTE P-Value	0.118	0.275	0.118
Uterus * Hyperplasia,Cystic,Endometrium	Simple Incidence	30/50 ( 60.0%)	14/26 ( 53.8%)	14/26 ( 53.8%)
	Poly-K Incidence	30/41.9 ( 71.6%)	14/21.8 ( 64.3%)	14/20.2 ( 69.2%)
	Terminal Incidence	13/16 ( 81.3%)	2/7 ( 28.6%)	2/4 ( 50.0%)
	Time-to-First	431	460	462
	Poly-K P-Value	0.434N	0.366N	0.547N
	Severity Profile	4 18 5 3	1 7 4 2	1 8 2 3
	JT/SW P-Value	0.463N	0.491N	0.539N
	RTE P-Value	0.460N	0.488N	0.460N
Uterus * Hyperplasia,Endometrial Glands	Simple Incidence	1/50 ( 2.0%)	2/26 ( 7.7%)	1/26 ( 3.8%)
	Poly-K Incidence	1/34.9 ( 2.9%)	2/16.3 ( 12.3%)	1/15.5 ( 6.5%)
	Terminal Incidence	0/16 ( 0.0%)	1/7 ( 14.3%)	0/4 ( 0.0%)
	Time-to-First	477	614	616
	Poly-K P-Value	0.333	0.247	0.569
	Severity Profile	0 1 0 0	0 2 0 0	0 1 0 0
	JT/SW P-Value	0.250	0.115	0.254
	RTE P-Value	0.349	0.124	0.349



<b>Table 11. Nonneoplasms by Body System for Terminal Sacrifice Females EE2 Continuous Dose Arm</b>				
<b>System and Nonneoplasm</b>	<b>Treatment (ug/kg)</b>			
<b>Lesion</b>	<b>Statistic</b>	<b>Control</b>	<b>0.05</b>	<b>0.50</b>
Uterus * Hyperplasia,Endometrium	Simple Incidence	10/50 ( 20.0%)	10/26 ( 38.5%)	2/26 ( 7.7%)
	Poly-K Incidence	10/39.1 ( 25.6%)	10/19.4 ( 51.5%)	2/16.2 ( 12.3%)
	Terminal Incidence	2/16 ( 12.5%)	4/7 ( 57.1%)	0/4 ( 0.0%)
	Time-to-First	488	443	488
	Poly-K P-Value	0.491N	0.040 *	0.240N
	Severity Profile	2 8 0 0	3 6 0 1	1 1 0 0
	JT/SW P-Value	0.268N	0.955N	0.119N
	RTE P-Value	0.094N	0.036 *	0.094N
Uterus * Metaplasia,Squamous	Simple Incidence	2/50 ( 4.0%)	2/26 ( 7.7%)	4/26 ( 15.4%)
	Poly-K Incidence	2/35.7 ( 5.6%)	2/16.1 ( 12.4%)	4/16.9 ( 23.6%)
	Terminal Incidence	0/16 ( 0.0%)	1/7 ( 14.3%)	1/4 ( 25.0%)
	Time-to-First	431	672	462
	Poly-K P-Value	0.046 *	0.390	0.071
	Severity Profile	1 1 0 0	0 2 0 0	3 0 1 0
	JT/SW P-Value	0.049 *	0.240	0.050
	RTE P-Value	0.055	0.273	0.055
Vagina * Atrophy	Simple Incidence	1/49 ( 2.0%)	0/26 ( 0.0%)	3/26 ( 11.5%)
	Poly-K Incidence	1/33.9 ( 2.9%)	0/15.9 ( 0.0%)	3/16.2 ( 18.6%)
	Terminal Incidence	0/16 ( 0.0%)	0/7 ( 0.0%)	1/4 ( 25.0%)
	Time-to-First	672	----	540
	Poly-K P-Value	0.055	0.648N	0.089
	Severity Profile	0 0 1 0	---	0 1 1 1
	JT/SW P-Value	0.051	0.767	0.026 *
	RTE P-Value	0.035 *	0.332N	0.035 *
Vagina * Degeneration,Epithelium	Simple Incidence	1/49 ( 2.0%)	1/26 ( 3.8%)	2/26 ( 7.7%)
	Poly-K Incidence	1/34.2 ( 2.9%)	1/15.9 ( 6.3%)	2/16.6 ( 12.1%)
	Terminal Incidence	0/16 ( 0.0%)	1/7 ( 14.3%)	0/4 ( 0.0%)
	Time-to-First	564	728 (T)	360
	Poly-K P-Value	0.169	0.580	0.257
	Severity Profile	0 0 1 0	0 0 0 1	0 1 1 0
	JT/SW P-Value	0.131	0.316	0.145
	RTE P-Value	0.146	0.344	0.146
Vagina * Hyperplasia,Epithelium	Simple Incidence	4/49 ( 8.2%)	5/26 ( 19.2%)	2/26 ( 7.7%)
	Poly-K Incidence	4/35.2 ( 11.4%)	5/18.6 ( 26.9%)	2/15.8 ( 12.6%)
	Terminal Incidence	2/16 ( 12.5%)	0/7 ( 0.0%)	1/4 ( 25.0%)
	Time-to-First	431	484	462
	Poly-K P-Value	0.386	0.139	0.629
	Severity Profile	0 1 2 1	0 1 2 2	0 1 1 0
	JT/SW P-Value	0.380	0.078	0.291
	RTE P-Value	0.459N	0.076	0.459N

<i>Table 11. Nonneoplasms by Body System for Terminal Sacrifice Females EE2 Continuous Dose Arm</i>				
<i>System and Nonneoplasm</i>		<i>Treatment (ug/kg)</i>		
<i>Lesion</i>	<i>Statistic</i>	<i>Control</i>	<i>0.05</i>	<i>0.50</i>
Vagina * Infiltration Cellular,Polymorphonuclear	Simple Incidence	7/49 ( 14.3%)	3/26 ( 11.5%)	2/26 ( 7.7%)
	Poly-K Incidence	7/36.3 ( 19.3%)	3/16.6 ( 18.1%)	2/16.3 ( 12.3%)
	Terminal Incidence	2/16 ( 12.5%)	1/7 ( 14.3%)	0/4 ( 0.0%)
	Time-to-First	495	614	486
	Poly-K P-Value	0.352N	0.606N	0.411N
	Severity Profile	0 2 2 3	0 2 1 0	0 1 0 1
	JT/SW P-Value	0.190N	0.332N	0.233N
	RTE P-Value	0.197N	0.331N	0.197N
Vagina * Mucification,Epithelium	Simple Incidence	46/49 ( 93.9%)	21/26 ( 80.8%)	23/26 ( 88.5%)
	Poly-K Incidence	46/47.2 ( 97.4%)	21/24.0 ( 87.4%)	23/24.8 ( 92.8%)
	Terminal Incidence	16/16 (100.0%)	6/7 ( 85.7%)	3/4 ( 75.0%)
	Time-to-First	450	443	360
	Poly-K P-Value	0.188N	0.080N	0.356N
	Severity Profile	0 13 12 21	0 4 5 12	0 6 8 9
	JT/SW P-Value	0.275N	0.409N	0.321N
	RTE P-Value	0.271N	0.408N	0.271N
<b>Hematopoietic System</b>				
Bone Marrow * Hyperplasia,Myeloid Cell	Simple Incidence	0/50 ( 0.0%)	0/26 ( 0.0%)	2/26 ( 7.7%)
	Poly-K Incidence	0/34.2 ( 0.0%)	0/15.9 ( 0.0%)	2/15.7 ( 12.8%)
	Terminal Incidence	0/16 ( 0.0%)	0/7 ( 0.0%)	1/4 ( 25.0%)
	Time-to-First	----	----	540
	Poly-K P-Value	0.038 *	-----	0.088
	Severity Profile	---	---	0 1 1 0
	JT/SW P-Value	0.023 *	0.500	0.013 *
	RTE P-Value	0.032 *	0.500	0.032 *
Spleen * Hematopoietic Cell Proliferation	Simple Incidence	28/50 ( 56.0%)	15/26 ( 57.7%)	10/26 ( 38.5%)
	Poly-K Incidence	28/44.0 ( 63.7%)	15/20.7 ( 72.4%)	10/19.1 ( 52.5%)
	Terminal Incidence	8/16 ( 50.0%)	5/7 ( 71.4%)	1/4 ( 25.0%)
	Time-to-First	431	485	488
	Poly-K P-Value	0.328N	0.333	0.283N
	Severity Profile	5 12 6 5	5 5 4 1	1 6 2 1
	JT/SW P-Value	0.089N	0.382N	0.089N
	RTE P-Value	0.077N	0.392N	0.077N

<b>Table 11. Nonneoplasms by Body System for Terminal Sacrifice Females EE2 Continuous Dose Arm</b>				
<b>System and Nonneoplasm</b>	<b>Treatment (ug/kg)</b>			
<b>Lesion</b>	<b>Statistic</b>	<b>Control</b>	<b>0.05</b>	<b>0.50</b>
Spleen * Pigmentation	Simple Incidence	32/50 ( 64.0%)	19/26 ( 73.1%)	26/26 (100.0%)
	Poly-K Incidence	32/44.2 ( 72.5%)	19/24.4 ( 77.9%)	26/26.0 (100.0%)
	Terminal Incidence	11/16 ( 68.8%)	4/7 ( 57.1%)	4/4 (100.0%)
	Time-to-First	431	443	360
	Poly-K P-Value	0.001 **	0.414	<.001 ***
	Severity Profile	7 13 6 6	4 3 7 5	1 4 8 13
	JT/SW P-Value	<.001 ***	0.097	<.001 ***
	RTE P-Value	<.001 ***	0.068	<.001 ***
Thymus * Atrophy	Simple Incidence	47/50 ( 94.0%)	26/26 (100.0%)	25/26 ( 96.2%)
	Poly-K Incidence	47/49.3 ( 95.4%)	26/26.0 (100.0%)	25/25.4 ( 98.4%)
	Terminal Incidence	16/16 (100.0%)	7/7 (100.0%)	4/4 (100.0%)
	Time-to-First	431	443	360
	Poly-K P-Value	0.260	0.323	0.493
	Severity Profile	0 2 4 41	0 0 5 21	0 1 7 17
	JT/SW P-Value	0.103N	0.529N	0.085N
	RTE P-Value	0.075N	0.456	0.075N
<b>Integumentary System</b>				
Mammary Gland * Atypical Focus	Simple Incidence	2/50 ( 4.0%)	2/26 ( 7.7%)	3/26 ( 11.5%)
	Poly-K Incidence	2/34.4 ( 5.8%)	2/16.1 ( 12.4%)	3/16.2 ( 18.6%)
	Terminal Incidence	1/16 ( 6.3%)	1/7 ( 14.3%)	0/4 ( 0.0%)
	Time-to-First	672	672	540
	Poly-K P-Value	0.123	0.404	0.183
	Severity Profile	0 2 0 0	1 1 0 0	2 1 0 0
	JT/SW P-Value	0.118	0.258	0.142
	RTE P-Value	0.139	0.284	0.139
Mammary Gland * Dilatation,Alveolus	Simple Incidence	9/50 ( 18.0%)	5/26 ( 19.2%)	22/26 ( 84.6%)
	Poly-K Incidence	9/36.0 ( 25.0%)	5/18.8 ( 26.6%)	22/24.1 ( 91.4%)
	Terminal Incidence	5/16 ( 31.3%)	0/7 ( 0.0%)	4/4 (100.0%)
	Time-to-First	477	484	360
	Poly-K P-Value	<.001 ***	0.579	<.001 ***
	Severity Profile	1 7 1 0	0 5 0 0	0 18 4 0
	JT/SW P-Value	<.001 ***	0.448	<.001 ***
	RTE P-Value	<.001 ***	0.453	<.001 ***

<b>Table 11. Nonneoplasms by Body System for Terminal Sacrifice Females EE2 Continuous Dose Arm</b>				
<b>System and Nonneoplasm</b>	<b>Treatment (ug/kg)</b>			
<b>Lesion</b>	<b>Statistic</b>	<b>Control</b>	<b>0.05</b>	<b>0.50</b>
Mammary Gland * Dilatation,Duct	Simple Incidence	15/50 (30.0%)	6/26 (23.1%)	21/26 (80.8%)
	Poly-K Incidence	15/38.1 (39.4%)	6/19.0 (31.6%)	21/24.2 (86.9%)
	Terminal Incidence	7/16 (43.8%)	0/7 (0.0%)	3/4 (75.0%)
	Time-to-First	477	484	360
	Poly-K P-Value	<.001 ***	0.387N	<.001 ***
	Severity Profile	0 10 5 0	0 3 3 0	0 10 7 4
	JT/SW P-Value	<.001 ***	0.700	<.001 ***
	RTE P-Value	<.001 ***	0.321N	<.001 ***
Mammary Gland * Galactocele	Simple Incidence	0/50 (0.0%)	0/26 (0.0%)	2/26 (7.7%)
	Poly-K Incidence	0/34.2 (0.0%)	0/15.9 (0.0%)	2/16.1 (12.4%)
	Terminal Incidence	0/16 (0.0%)	0/7 (0.0%)	0/4 (0.0%)
	Time-to-First	----	----	488
	Poly-K P-Value	0.038 *	-----	0.091
Mammary Gland * Hyperplasia,Lobular	Simple Incidence	43/50 (86.0%)	24/26 (92.3%)	23/26 (88.5%)
	Poly-K Incidence	43/45.4 (94.7%)	24/24.5 (98.1%)	23/25.1 (91.5%)
	Terminal Incidence	16/16 (100.0%)	7/7 (100.0%)	4/4 (100.0%)
	Time-to-First	477	484	360
	Poly-K P-Value	0.416N	0.468	0.495N
	Severity Profile	1 8 13 21	1 8 4 11	1 10 4 8
	JT/SW P-Value	0.135N	0.431N	0.134N
	RTE P-Value	0.118N	0.430N	0.118N
<b>Nervous System</b>				
Brain, Brain Stem * Compression	Simple Incidence	14/50 (28.0%)	6/26 (23.1%)	19/26 (73.1%)
	Poly-K Incidence	14/38.6 (36.2%)	6/17.9 (33.5%)	19/23.7 (80.3%)
	Terminal Incidence	3/16 (18.8%)	2/7 (28.6%)	2/4 (50.0%)
	Time-to-First	477	484	360
	Poly-K P-Value	<.001 ***	0.539N	<.001 ***
	Severity Profile	1 3 4 6	2 1 2 1	4 6 3 6
	JT/SW P-Value	0.002 **	0.749	<.001 ***
	RTE P-Value	<.001 ***	0.229N	<.001 ***
Brain, Brain Stem * Hemorrhage	Simple Incidence	1/50 (2.0%)	1/26 (3.8%)	5/26 (19.2%)
	Poly-K Incidence	1/34.6 (2.9%)	1/16.6 (6.0%)	5/18.0 (27.8%)
	Terminal Incidence	0/16 (0.0%)	0/7 (0.0%)	0/4 (0.0%)
	Time-to-First	615	484	360
	Poly-K P-Value	0.005 **	0.589	0.009 **
	Severity Profile	0 1 0 0	0 1 0 0	0 4 1 0
	JT/SW P-Value	0.006 **	0.318	0.003 **
	RTE P-Value	0.004 **	0.379	0.004 **

<b>Table 11. Nonneoplasms by Body System for Terminal Sacrifice Females EE2 Continuous Dose Arm</b>				
<b>System and Nonneoplasm</b>	<b>Treatment (ug/kg)</b>			
<b>Lesion</b>	<b>Statistic</b>	<b>Control</b>	<b>0.05</b>	<b>0.50</b>
Brain, Cerebrum * Dilatation, Ventricle	Simple Incidence	7/50 ( 14.0%)	2/26 ( 7.7%)	8/26 ( 30.8%)
	Poly-K Incidence	7/36.0 ( 19.5%)	2/17.0 ( 11.7%)	8/19.2 ( 41.7%)
	Terminal Incidence	1/16 ( 6.3%)	0/7 ( 0.0%)	0/4 ( 0.0%)
	Time-to-First	495	484	360
	Poly-K P-Value	0.058	0.380N	0.065
	Severity Profile	4 3 0 0	2 0 0 0	5 3 0 0
	JT/SW P-Value	0.080	0.805	0.038 *
	RTE P-Value	0.035 *	0.219N	0.035 *
<b>Respiratory System</b>				
Lung * Hyperplasia, Alveolar Epithelium	Simple Incidence	4/38 ( 10.5%)	1/21 ( 4.8%)	0/22 ( 0.0%)
	Poly-K Incidence	4/22.8 ( 17.5%)	1/10.9 ( 9.2%)	0/11.1 ( 0.0%)
	Terminal Incidence	2/4 ( 50.0%)	1/2 ( 50.0%)	
	Time-to-First	625	724 (T)	---
	Poly-K P-Value	0.108N	0.452N	0.182N
	Severity Profile	2 2 0 0	0 1 0 0	---
	JT/SW P-Value	0.052N	0.235N	0.062N
	RTE P-Value	0.064N	0.201N	0.064N
Lung * Infiltration Cellular, Histiocyte	Simple Incidence	8/38 ( 21.1%)	4/21 ( 19.0%)	4/22 ( 18.2%)
	Poly-K Incidence	8/24.4 ( 32.8%)	4/11.8 ( 33.8%)	4/13.0 ( 30.8%)
	Terminal Incidence	3/4 ( 75.0%)	2/2 ( 100.0%)	
	Time-to-First	488	517	540
	Poly-K P-Value	0.533N	0.628	0.599N
	Severity Profile	1 5 2 0	2 0 1 1	1 1 0 2
	JT/SW P-Value	0.419N	0.428N	0.504N
	RTE P-Value	0.430N	0.430N	0.430N
Nose * Accumulation, Hyaline Droplet, Olfactory Epithelium	Simple Incidence	8/34 ( 23.5%)	3/19 ( 15.8%)	7/22 ( 31.8%)
	Poly-K Incidence	8/20.5 ( 39.0%)	3/10.5 ( 28.5%)	7/14.0 ( 49.8%)
	Time-to-First	569	443	462
	Poly-K P-Value	0.331	0.422N	0.377
	Severity Profile	1 4 3 0	1 2 0 0	2 1 1 3
	JT/SW P-Value	0.277	0.788	0.248
	RTE P-Value	0.209	0.235N	0.209
	Nose * Accumulation, Hyaline Droplet, Respiratory Epithelium	Simple Incidence	2/34 ( 5.9%)	0/19 ( 0.0%)
Poly-K Incidence		2/18.6 ( 10.7%)	0/8.9 ( 0.0%)	3/12.3 ( 24.5%)
Time-to-First		667	---	527
Poly-K P-Value		0.222	0.410N	0.298
Severity Profile		0 2 0 0	---	1 2 0 0
JT/SW P-Value		0.196	0.857	0.162
RTE P-Value		0.151	0.203N	0.151

<b>Table 11. Nonneoplasms by Body System for Terminal Sacrifice Females EE2 Continuous Dose Arm</b>				
<b>System and Nonneoplasm</b>	<b>Treatment (ug/kg)</b>			
<b>Lesion</b>	<b>Statistic</b>	<b>Control</b>	<b>0.05</b>	<b>0.50</b>
Nose * Hyperplasia,Goblet Cell,Respiratory Epithelium	Simple Incidence	1/34 ( 2.9%)	0/19 ( 0.0%)	2/22 ( 9.1%)
	Poly-K Incidence	1/18.8 ( 5.3%)	0/8.9 ( 0.0%)	2/11.6 ( 17.3%)
	Time-to-First	538	----	597
	Poly-K P-Value	0.226	0.646N	0.327
	Severity Profile	0 1 0 0	---	0 2 0 0
	JT/SW P-Value	0.172	0.773	0.152
	RTE P-Value	0.144	0.302N	0.144
<b>Urinary System</b>				
Kidney * Casts Protein	Simple Incidence	8/50 ( 16.0%)	3/26 ( 11.5%)	2/26 ( 7.7%)
	Poly-K Incidence	8/35.9 ( 22.3%)	3/16.9 ( 17.7%)	2/15.6 ( 12.9%)
	Terminal Incidence	5/16 ( 31.3%)	1/7 ( 14.3%)	1/4 ( 25.0%)
	Time-to-First	450	460	589
	Poly-K P-Value	0.275N	0.493N	0.346N
	Severity Profile	8 0 0 0	3 0 0 0	2 0 0 0
	JT/SW P-Value	0.148N	0.301N	0.182N
RTE P-Value	0.157N	0.292N	0.157N	
Kidney * Cyst,Cortex	Simple Incidence	5/50 ( 10.0%)	7/26 ( 26.9%)	2/26 ( 7.7%)
	Poly-K Incidence	5/36.2 ( 13.8%)	7/18.9 ( 37.0%)	2/16.2 ( 12.4%)
	Terminal Incidence	1/16 ( 6.3%)	2/7 ( 28.6%)	0/4 ( 0.0%)
	Time-to-First	488	443	488
	Poly-K P-Value	0.397	0.045 *	0.613N
Kidney * Cyst,Renal Tubule	Simple Incidence	9/50 ( 18.0%)	5/26 ( 19.2%)	6/26 ( 23.1%)
	Poly-K Incidence	9/36.2 ( 24.8%)	5/18.3 ( 27.3%)	6/17.6 ( 34.1%)
	Terminal Incidence	5/16 ( 31.3%)	0/7 ( 0.0%)	1/4 ( 25.0%)
	Time-to-First	446	485	527
	Poly-K P-Value	0.299	0.554	0.349
Kidney * Hyperplasia,Transitional Epithelium	Simple Incidence	12/50 ( 24.0%)	5/26 ( 19.2%)	9/26 ( 34.6%)
	Poly-K Incidence	12/35.4 ( 33.9%)	5/17.3 ( 28.9%)	9/18.5 ( 48.7%)
	Terminal Incidence	7/16 ( 43.8%)	3/7 ( 42.9%)	3/4 ( 75.0%)
	Time-to-First	569	484	360
	Poly-K P-Value	0.200	0.481N	0.210
	Severity Profile	8 4 0 0	3 2 0 0	5 4 0 0
	JT/SW P-Value	0.207	0.669	0.169
	RTE P-Value	0.150	0.342N	0.150

<b>Table 11. Nonneoplasms by Body System for Terminal Sacrifice Females EE2 Continuous Dose Arm</b>				
<b>System and Nonneoplasm</b>	<b>Treatment (ug/kg)</b>			
<b>Lesion</b>	<b>Statistic</b>	<b>Control</b>	<b>0.05</b>	<b>0.50</b>
Kidney * Mineralization	Simple Incidence	30/50 ( 60.0%)	10/26 ( 38.5%)	17/26 ( 65.4%)
	Poly-K Incidence	30/42.9 ( 69.9%)	10/20.7 ( 48.4%)	17/22.0 ( 77.2%)
	Terminal Incidence	10/16 ( 62.5%)	2/7 ( 28.6%)	3/4 ( 75.0%)
	Time-to-First	446	443	360
	Poly-K P-Value	0.445	0.068N	0.359
	Severity Profile	21 8 1 0	4 5 1 0	10 7 0 0
	JT/SW P-Value	0.399	0.866	0.305
	RTE P-Value	0.255	0.144N	0.255
Kidney * Nephropathy	Simple Incidence	19/50 ( 38.0%)	14/26 ( 53.8%)	15/26 ( 57.7%)
	Poly-K Incidence	19/39.9 ( 47.6%)	14/21.0 ( 66.7%)	15/21.6 ( 69.6%)
	Terminal Incidence	6/16 ( 37.5%)	4/7 ( 57.1%)	2/4 ( 50.0%)
	Time-to-First	488	485	360
	Poly-K P-Value	0.037 *	0.109	0.067
	Severity Profile	18 0 1 0	10 3 1 0	6 5 3 1
	JT/SW P-Value	0.004 **	0.049 *	0.006 **
	RTE P-Value	0.006 **	0.062	0.006 **

P-values for dose trend are presented in the “Control” column.

N indicates a negative trend or negative treatment comparison to control with corresponding lower-tail p-values.

<sup>1</sup> Nonsignificant SW test due to the assumption of monotonicity.

<b>Table 12. Nonneoplasms by Body System for Terminal Sacrifice Males EE2 Continuous Dose Arm</b>				
<b>System and Nonneoplasm</b>		<b>Treatment (ug/kg)</b>		
<b>Lesion</b>	<b>Statistic</b>	<b>Control</b>	<b>0.05</b>	<b>0.50</b>
<b>Alimentary System</b>				
Liver * Angiectasis	Simple Incidence	1/50 ( 2.0%)	2/26 ( 7.7%)	2/25 ( 8.0%)
	Poly-K Incidence	1/33.7 ( 3.0%)	2/17.9 ( 11.1%)	2/19.9 ( 10.1%)
	Terminal Incidence	1/15 ( 6.7%)	1/9 ( 11.1%)	1/12 ( 8.3%)
	Time-to-First	727 (T)	638	559
	Poly-K P-Value	0.222	0.282	0.313
	Severity Profile	0 1 0 0	0 2 0 0	0 1 0 1
	JT/SW P-Value	0.095	0.115	0.149
	RTE P-Value	0.117	0.154	0.117
Liver * Basophilic Focus	Simple Incidence	5/50 ( 10.0%)	3/26 ( 11.5%)	0/25 ( 0.0%)
	Poly-K Incidence	5/34.3 ( 14.6%)	3/17.8 ( 16.9%)	0/19.3 ( 0.0%)
	Terminal Incidence	3/15 ( 20.0%)	2/9 ( 22.2%)	0/12 ( 0.0%)
	Time-to-First	622	679	----
	Poly-K P-Value	0.093N	0.575	0.094N
Liver * Clear Cell Focus	Simple Incidence	11/50 ( 22.0%)	7/26 ( 26.9%)	9/25 ( 36.0%)
	Poly-K Incidence	11/35.7 ( 30.8%)	7/19.2 ( 36.4%)	9/20.9 ( 43.1%)
	Terminal Incidence	6/15 ( 40.0%)	2/9 ( 22.2%)	5/12 ( 41.7%)
	Time-to-First	566	543	413
	Poly-K P-Value	0.208	0.450	0.250
Liver * Degeneration,Cystic	Simple Incidence	21/50 ( 42.0%)	10/26 ( 38.5%)	10/25 ( 40.0%)
	Poly-K Incidence	21/38.2 ( 55.0%)	10/19.6 ( 51.0%)	10/20.4 ( 49.0%)
	Terminal Incidence	9/15 ( 60.0%)	4/9 ( 44.4%)	5/12 ( 41.7%)
	Time-to-First	425	551	590
	Poly-K P-Value	0.371N	0.496N	0.431N
	Severity Profile	14 6 1 0	4 6 0 0	6 4 0 0
	JT/SW P-Value	0.470N	0.510N	0.541N
	RTE P-Value	0.462N	0.490	0.462N
Liver * Fatty Change	Simple Incidence	4/50 ( 8.0%)	0/26 ( 0.0%)	1/25 ( 4.0%)
	Poly-K Incidence	4/35.1 ( 11.4%)	0/17.6 ( 0.0%)	1/19.9 ( 5.0%)
	Terminal Incidence	2/15 ( 13.3%)	0/9 ( 0.0%)	0/12 ( 0.0%)
	Time-to-First	225	----	559
	Poly-K P-Value	0.228N	0.177N	0.380N
	Severity Profile	0 1 1 2	---	0 0 0 1
	JT/SW P-Value	0.142N	0.071N	0.158N
	RTE P-Value	0.234N	0.080N	0.234N



<b>Table 12. Nonneoplasms by Body System for Terminal Sacrifice Males EE2 Continuous Dose Arm</b>				
<b>System and Nonneoplasm</b>	<b>Treatment (ug/kg)</b>			
<b>Lesion</b>	<b>Statistic</b>	<b>Control</b>	<b>0.05</b>	<b>0.50</b>
Liver * Fibrosis,Biliary Tract	Simple Incidence	13/50 (26.0%)	7/26 (26.9%)	8/25 (32.0%)
	Poly-K Incidence	13/35.9 (36.2%)	7/18.8 (37.3%)	8/19.7 (40.6%)
	Terminal Incidence	7/15 (46.7%)	3/9 (33.3%)	6/12 (50.0%)
	Time-to-First	566	577	639
	Poly-K P-Value	0.433	0.589	0.487
	Severity Profile	9 4 0 0	6 1 0 0	7 1 0 0
	JT/SW P-Value	0.364	0.509	0.406
	RTE P-Value	0.343	0.490N	0.343
Liver * Hepatodiaphragmatic Nodule	Simple Incidence	6/50 (12.0%)	3/26 (11.5%)	1/25 (4.0%)
	Poly-K Incidence	6/34.6 (17.3%)	3/17.8 (16.9%)	1/19.5 (5.1%)
	Terminal Incidence	3/15 (20.0%)	2/9 (22.2%)	0/12 (0.0%)
	Time-to-First	603	679	673
	Poly-K P-Value	0.158N	0.635N	0.188N
Liver * Hyperplasia,Bile Duct	Simple Incidence	16/50 (32.0%)	10/26 (38.5%)	8/25 (32.0%)
	Poly-K Incidence	16/38.5 (41.5%)	10/20.8 (48.0%)	8/20.3 (39.4%)
	Terminal Incidence	6/15 (40.0%)	4/9 (44.4%)	4/12 (33.3%)
	Time-to-First	284	459	551
	Poly-K P-Value	0.530N	0.415	0.550N
	Severity Profile	7 8 1 0	5 3 2 0	5 1 2 0
	JT/SW P-Value	0.454	0.286	0.471
	RTE P-Value	0.476N	0.287	0.476N
Liver * Hyperplasia,Oval Cell	Simple Incidence	4/50 (8.0%)	1/26 (3.8%)	1/25 (4.0%)
	Poly-K Incidence	4/34.0 (11.8%)	1/17.6 (5.7%)	1/19.3 (5.2%)
	Terminal Incidence	2/15 (13.3%)	1/9 (11.1%)	1/12 (8.3%)
	Time-to-First	647	725 (T)	725 (T)
	Poly-K P-Value	0.270N	0.420N	0.379N
	Severity Profile	3 1 0 0	1 0 0 0	0 0 1 0
	JT/SW P-Value	0.220N	0.242N	0.297N
	RTE P-Value	0.262N	0.236N	0.262N
Liver * Infiltration Cellular,Mononuclear Cell	Simple Incidence	35/50 (70.0%)	22/26 (84.6%)	20/25 (80.0%)
	Poly-K Incidence	35/42.3 (82.6%)	22/23.5 (93.6%)	20/23.1 (86.8%)
	Terminal Incidence	14/15 (93.3%)	9/9 (100.0%)	10/12 (83.3%)
	Time-to-First	284	369	413
	Poly-K P-Value	0.311	0.150	0.464
	Severity Profile	21 14 0 0	16 6 0 0	12 8 0 0
	JT/SW P-Value	0.200	0.293	0.259
	RTE P-Value	0.219	0.301	0.219

<b>Table 12. Nonneoplasms by Body System for Terminal Sacrifice Males EE2 Continuous Dose Arm</b>				
<b>System and Nonneoplasm</b>	<b>Treatment (ug/kg)</b>			
<b>Lesion</b>	<b>Statistic</b>	<b>Control</b>	<b>0.05</b>	<b>0.50</b>
Liver * Tension Lipidosis	Simple Incidence	3/50 ( 6.0%)	1/26 ( 3.8%)	2/25 ( 8.0%)
	Poly-K Incidence	3/33.8 ( 8.9%)	1/17.6 ( 5.7%)	2/19.4 (10.3%)
	Terminal Incidence	1/15 ( 6.7%)	1/9 (11.1%)	1/12 ( 8.3%)
	Time-to-First	709	725 (T)	710
	Poly-K P-Value	0.557	0.557N	0.625
	Severity Profile	0 0 1 2	0 0 1 0	0 1 1 0
	JT/SW P-Value	0.450	0.664	0.462
	RTE P-Value	0.391	0.344N	0.391
Liver * Vacuolization Cytoplasmic	Simple Incidence	12/50 (24.0%)	11/26 (42.3%)	12/25 (48.0%)
	Poly-K Incidence	12/37.3 (32.2%)	11/19.3 (57.0%)	12/20.5 (58.5%)
	Terminal Incidence	4/15 (26.7%)	7/9 (77.8%)	8/12 (66.7%)
	Time-to-First	520	551	462
	Poly-K P-Value	0.020 *	0.055	0.037 *
	Severity Profile	6 3 3 0	3 8 0 0	4 7 1 0
	JT/SW P-Value	0.013 *	0.050 *	0.024 *
	RTE P-Value	0.025 *	0.055	0.025 *
Pancreas * Degeneration,Acinus	Simple Incidence	42/50 (84.0%)	20/26 (76.9%)	21/25 (84.0%)
	Poly-K Incidence	42/46.5 (90.2%)	20/22.4 (89.1%)	21/23.3 (90.2%)
	Terminal Incidence	14/15 (93.3%)	9/9 (100.0%)	11/12 (91.7%)
	Time-to-First	225	369	413
	Poly-K P-Value	0.586N	0.627N	0.685N
	Severity Profile	7 9 13 13	3 6 7 4	2 5 7 7
	JT/SW P-Value	0.495	0.835	0.434
	RTE P-Value	0.366	0.167N	0.366
Pancreas * Infiltration Cellular,Lymphocyte	Simple Incidence	36/50 (72.0%)	18/26 (69.2%)	16/25 (64.0%)
	Poly-K Incidence	36/42.7 (84.4%)	18/21.7 (82.8%)	16/22.3 (71.7%)
	Terminal Incidence	13/15 (86.7%)	9/9 (100.0%)	9/12 (75.0%)
	Time-to-First	284	369	413
	Poly-K P-Value	0.125N	0.588N	0.160N
	Severity Profile	10 17 9 0	4 13 1 0	6 8 2 0
	JT/SW P-Value	0.118N	0.283N	0.143N
	RTE P-Value	0.121N	0.293N	0.121N

<b>Table 12. Nonneoplasms by Body System for Terminal Sacrifice Males EE2 Continuous Dose Arm</b>				
<b>System and Nonneoplasm</b>	<b>Treatment (ug/kg)</b>			
<b>Lesion</b>	<b>Statistic</b>	<b>Control</b>	<b>0.05</b>	<b>0.50</b>
Pancreas * Inflammation,Chronic Active	Simple Incidence	1/50 ( 2.0%)	0/26 ( 0.0%)	2/25 ( 8.0%)
	Poly-K Incidence	1/33.7 ( 3.0%)	0/17.6 ( 0.0%)	2/19.5 (10.2%)
	Terminal Incidence	1/15 ( 6.7%)	0/9 ( 0.0%)	1/12 ( 8.3%)
	Time-to-First	727 (T)	----	673
	Poly-K P-Value	0.210	0.630N	0.308
	Severity Profile	0 1 0 0	---	0 2 0 0
	JT/SW P-Value	0.136	0.765	0.089
	RTE P-Value	0.105	0.313N	0.105
Pancreas * Lipomatosis	Simple Incidence	7/50 (14.0%)	7/26 (26.9%)	7/25 (28.0%)
	Poly-K Incidence	7/34.4 (20.3%)	7/18.3 (38.2%)	7/19.3 (36.2%)
	Terminal Incidence	5/15 (33.3%)	5/9 (55.6%)	6/12 (50.0%)
	Time-to-First	526	561	725 (T)
	Poly-K P-Value	0.110	0.134	0.161
	Severity Profile	0 1 3 3	0 0 4 3	0 1 5 1
	JT/SW P-Value	0.072	0.082	0.113
	RTE P-Value	0.108	0.085	0.108
Pancreas * Pigmentation	Simple Incidence	29/50 (58.0%)	8/26 (30.8%)	15/25 (60.0%)
	Poly-K Incidence	29/45.0 (64.4%)	8/20.4 (39.2%)	15/22.7 (66.0%)
	Terminal Incidence	8/15 (53.3%)	2/9 (22.2%)	7/12 (58.3%)
	Time-to-First	72	399	413
	Poly-K P-Value	0.480N	0.045N*	0.558
	Severity Profile	16 13 0 0	6 2 0 0	11 4 0 0
	JT/SW P-Value	0.181N	0.008N** <sup>1</sup>	0.102N
	RTE P-Value	0.392N	0.008N**	0.392N
<b>Cardiovascular System</b>				
Blood Vessel * Mineralization	Simple Incidence	1/50 ( 2.0%)	2/26 ( 7.7%)	0/26 ( 0.0%)
	Poly-K Incidence	1/34.1 ( 2.9%)	2/17.8 (11.2%)	0/19.6 ( 0.0%)
	Terminal Incidence	0/15 ( 0.0%)	1/9 (11.1%)	0/12 ( 0.0%)
	Time-to-First	633	671	----
	Poly-K P-Value	0.519N	0.278	0.612N
	Severity Profile	0 0 0 1	0 0 1 1	---
	JT/SW P-Value	0.479N	0.882N	0.371N
	RTE P-Value	0.311N	0.129	0.311N

<b>Table 12. Nonneoplasms by Body System for Terminal Sacrifice Males EE2 Continuous Dose Arm</b>				
<b>System and Nonneoplasm</b>	<b>Treatment (ug/kg)</b>			
<b>Lesion</b>	<b>Statistic</b>	<b>Control</b>	<b>0.05</b>	<b>0.50</b>
Heart * Cardiomyopathy	Simple Incidence	44/50 ( 88.0%)	24/26 ( 92.3%)	24/26 ( 92.3%)
	Poly-K Incidence	44/46.0 ( 95.6%)	24/24.3 ( 98.8%)	24/25.3 ( 95.0%)
	Terminal Incidence	15/15 (100.0%)	9/9 (100.0%)	11/12 ( 91.7%)
	Time-to-First	225	369	413
	Poly-K P-Value	0.644N	0.491	0.708N
	Severity Profile	12 21 10 1	11 8 3 2	5 10 4 5
	JT/SW P-Value	0.150	0.728	0.097
	RTE P-Value	0.079	0.282N	0.079
Heart * Metaplasia,Osseous	Simple Incidence	0/50 ( 0.0%)	0/26 ( 0.0%)	2/26 ( 7.7%)
	Poly-K Incidence	0/33.7 ( 0.0%)	0/17.6 ( 0.0%)	2/20.3 ( 9.8%)
	Terminal Incidence	0/15 ( 0.0%)	0/9 ( 0.0%)	1/12 ( 8.3%)
	Time-to-First	----	----	462
	Poly-K P-Value	0.049 *	----	0.125
	Severity Profile	---	---	0 0 2 0
	JT/SW P-Value	0.023 *	0.500	0.013 *
	RTE P-Value	0.030 *	0.500	0.030 *
Heart * Mineralization	Simple Incidence	1/50 ( 2.0%)	2/26 ( 7.7%)	0/26 ( 0.0%)
	Poly-K Incidence	1/34.1 ( 2.9%)	2/17.8 ( 11.2%)	0/19.6 ( 0.0%)
	Terminal Incidence	0/15 ( 0.0%)	1/9 ( 11.1%)	0/12 ( 0.0%)
	Time-to-First	633	671	----
	Poly-K P-Value	0.519N	0.278	0.612N
	Severity Profile	0 0 0 1	0 0 1 1	---
	JT/SW P-Value	0.479N	0.882N	0.371N
	RTE P-Value	0.311N	0.134	0.311N
<b>Endocrine System</b>				
Adrenal Cortex * Degeneration,Cystic	Simple Incidence	4/50 ( 8.0%)	0/26 ( 0.0%)	1/26 ( 3.8%)
	Poly-K Incidence	4/33.8 ( 11.8%)	0/17.6 ( 0.0%)	1/19.6 ( 5.1%)
	Terminal Incidence	2/15 ( 13.3%)	0/9 ( 0.0%)	1/12 ( 8.3%)
	Time-to-First	709	----	724 (T)
	Poly-K P-Value	0.217N	0.168N	0.371N
	Severity Profile	0 3 0 1	---	0 0 0 1
	JT/SW P-Value	0.139N	0.071N	0.152N
	RTE P-Value	0.224N	0.086N	0.224N

<b>Table 12. Nonneoplasms by Body System for Terminal Sacrifice Males EE2 Continuous Dose Arm</b>				
<b>System and Nonneoplasm</b>	<b>Treatment (ug/kg)</b>			
<b>Lesion</b>	<b>Statistic</b>	<b>Control</b>	<b>0.05</b>	<b>0.50</b>
Adrenal Cortex * Hyperplasia	Simple Incidence	6/50 ( 12.0%)	0/26 ( 0.0%)	5/26 ( 19.2%)
	Poly-K Incidence	6/35.3 ( 17.0%)	0/17.6 ( 0.0%)	5/20.2 ( 24.7%)
	Terminal Incidence	1/15 ( 6.7%)	0/9 ( 0.0%)	2/12 ( 16.7%)
	Time-to-First	559	---	608
	Poly-K P-Value	0.358	0.081N	0.363
	Severity Profile	3 2 1 0	---	3 1 1 0
	JT/SW P-Value	0.350	0.966	0.207
	RTE P-Value	0.171	0.050N*	0.171
Adrenal Cortex * Hypertrophy	Simple Incidence	2/50 ( 4.0%)	7/26 ( 26.9%)	2/26 ( 7.7%)
	Poly-K Incidence	2/34.2 ( 5.8%)	7/20.0 ( 35.0%)	2/19.7 ( 10.2%)
	Terminal Incidence	1/15 ( 6.7%)	1/9 ( 11.1%)	1/12 ( 8.3%)
	Time-to-First	566	369	706
	Poly-K P-Value	0.269	0.005 **	0.482
	Severity Profile	1 1 0 0	1 5 1 0	0 2 0 0
	JT/SW P-Value	0.095	0.001 **	0.041 *
	RTE P-Value	0.295	0.002 **	0.295
Adrenal Cortex * Vacuolization Cytoplasmic	Simple Incidence	18/50 ( 36.0%)	10/26 ( 38.5%)	11/26 ( 42.3%)
	Poly-K Incidence	18/39.6 ( 45.5%)	10/19.0 ( 52.6%)	11/21.3 ( 51.7%)
	Terminal Incidence	5/15 ( 33.3%)	5/9 ( 55.6%)	7/12 ( 58.3%)
	Time-to-First	486	585	462
	Poly-K P-Value	0.351	0.407	0.423
	Severity Profile	7 8 3 0	3 5 1 1	2 8 1 0
	JT/SW P-Value	0.250	0.370	0.300
	RTE P-Value	0.254	0.371	0.254
Adrenal Medulla * Hyperplasia	Simple Incidence	5/50 ( 10.0%)	5/26 ( 19.2%)	6/26 ( 23.1%)
	Poly-K Incidence	5/35.1 ( 14.2%)	5/17.9 ( 27.9%)	6/20.2 ( 29.7%)
	Terminal Incidence	1/15 ( 6.7%)	3/9 ( 33.3%)	4/12 ( 33.3%)
	Time-to-First	578	671	559
	Poly-K P-Value	0.102	0.200	0.143
	Severity Profile	3 2 0 0	2 0 3 0	4 2 0 0
	JT/SW P-Value	0.061	0.111	0.091
	RTE P-Value	0.081	0.124	0.081

<b>Table 12. Nonneoplasms by Body System for Terminal Sacrifice Males EE2 Continuous Dose Arm</b>				
<b>System and Nonneoplasm</b>	<b>Treatment (ug/kg)</b>			
<b>Lesion</b>	<b>Statistic</b>	<b>Control</b>	<b>0.05</b>	<b>0.50</b>
Parathyroid Gland * Hyperplasia	Simple Incidence	11/49 (22.4%)	7/25 (28.0%)	11/25 (44.0%)
	Poly-K Incidence	11/36.7 (30.0%)	7/18.2 (38.4%)	11/20.9 (52.7%)
	Terminal Incidence	3/15 (20.0%)	3/9 (33.3%)	5/12 (41.7%)
	Time-to-First	543	630	559
	Poly-K P-Value	0.051	0.372	0.066
	Severity Profile	3 7 0 1	2 3 1 1	3 5 1 2
	JT/SW P-Value	0.030 *	0.279	0.027 *
	RTE P-Value	0.029 *	0.287	0.029 *
Pituitary Gland * Angiectasis	Simple Incidence	6/48 (12.5%)	7/26 (26.9%)	3/26 (11.5%)
	Poly-K Incidence	6/33.5 (17.9%)	7/19.1 (36.6%)	3/20.1 (14.9%)
	Terminal Incidence	1/14 (7.1%)	3/9 (33.3%)	2/12 (16.7%)
	Time-to-First	494	543	559
	Poly-K P-Value	0.544N	0.111	0.537N
	Severity Profile	0 0 0 6	0 0 3 4	0 0 0 3
	JT/SW P-Value	0.390	0.083	0.301
	RTE P-Value	0.456N	0.080	0.456N
Pituitary Gland * Cyst,Pars Distalis	Simple Incidence	8/48 (16.7%)	2/26 (7.7%)	4/26 (15.4%)
	Poly-K Incidence	8/34.9 (22.9%)	2/18.8 (10.7%)	4/20.9 (19.2%)
	Terminal Incidence	1/14 (7.1%)	0/9 (0.0%)	2/12 (16.7%)
	Time-to-First	284	543	473
	Poly-K P-Value	0.393N	0.229N	0.502N
Pituitary Gland * Hyperplasia,Pars Distalis	Simple Incidence	11/48 (22.9%)	10/26 (38.5%)	13/26 (50.0%)
	Poly-K Incidence	11/36.2 (30.4%)	10/21.2 (47.1%)	13/22.6 (57.6%)
	Terminal Incidence	4/14 (28.6%)	3/9 (33.3%)	8/12 (66.7%)
	Time-to-First	467	399	413
	Poly-K P-Value	0.020 *	0.152	0.027 *
	Severity Profile	3 4 4 0	2 4 4 0	3 7 3 0
	JT/SW P-Value	0.012 *	0.075	0.017 *
	RTE P-Value	0.016 *	0.077	0.016 *
Pituitary Gland * Hypertrophy,Pars Distalis	Simple Incidence	4/48 (8.3%)	2/26 (7.7%)	2/26 (7.7%)
	Poly-K Incidence	4/33.1 (12.1%)	2/18.1 (11.0%)	2/20.3 (9.8%)
	Terminal Incidence	2/14 (14.3%)	1/9 (11.1%)	0/12 (0.0%)
	Time-to-First	585	581	608
	Poly-K P-Value	0.494N	0.635N	0.578N
	Severity Profile	1 3 0 0	1 1 0 0	0 2 0 0
	JT/SW P-Value	0.462N	0.452N	0.542N
	RTE P-Value	0.471N	0.453N	0.471N

<b>Table 12. Nonneoplasms by Body System for Terminal Sacrifice Males EE2 Continuous Dose Arm</b>				
<b>System and Nonneoplasm</b>	<b>Treatment (ug/kg)</b>			
<b>Lesion</b>	<b>Statistic</b>	<b>Control</b>	<b>0.05</b>	<b>0.50</b>
Thyroid Gland * Hyperplasia,C-Cell	Simple Incidence	9/46 ( 19.6%)	12/25 ( 48.0%)	7/25 ( 28.0%)
	Poly-K Incidence	9/34.9 ( 25.8%)	12/20.3 ( 59.1%)	7/20.2 ( 34.6%)
	Terminal Incidence	5/15 ( 33.3%)	4/9 ( 44.4%)	5/12 ( 41.7%)
	Time-to-First	225	459	590
	Poly-K P-Value	0.196	0.009 **	0.345
	Severity Profile	5 2 2 0	4 8 0 0	5 1 1 0
	JT/SW P-Value	0.121	0.006 ** 1	0.065
	RTE P-Value	0.268	0.007 **	0.268
Thyroid Gland * Hyperplasia,Follicular Cell	Simple Incidence	3/46 ( 6.5%)	2/25 ( 8.0%)	3/25 ( 12.0%)
	Poly-K Incidence	3/32.5 ( 9.2%)	2/17.7 ( 11.3%)	3/19.9 ( 15.1%)
	Terminal Incidence	2/15 ( 13.3%)	1/9 ( 11.1%)	1/12 ( 8.3%)
	Time-to-First	720	577	639
	Poly-K P-Value	0.341	0.601	0.420
	Severity Profile	0 2 1 0	0 1 0 1	0 1 2 0
	JT/SW P-Value	0.218	0.398	0.246
	RTE P-Value	0.208	0.403	0.208
Thyroid Gland * Ultimobranchial Cyst	Simple Incidence	7/46 ( 15.2%)	1/25 ( 4.0%)	3/25 ( 12.0%)
	Poly-K Incidence	7/34.4 ( 20.3%)	1/17.2 ( 5.8%)	3/19.7 ( 15.2%)
	Terminal Incidence	2/15 ( 13.3%)	1/9 ( 11.1%)	2/12 ( 16.7%)
	Time-to-First	225	725 (T)	608
	Poly-K P-Value	0.326N	0.172N	0.458N
<b>Genital System</b>				
Epididymis * Exfoliated Germ Cell	Simple Incidence	10/49 ( 20.4%)	6/26 ( 23.1%)	4/26 ( 15.4%)
	Poly-K Incidence	10/36.5 ( 27.4%)	6/18.3 ( 32.8%)	4/20.4 ( 19.7%)
	Terminal Incidence	3/15 ( 20.0%)	3/9 ( 33.3%)	1/12 ( 8.3%)
	Time-to-First	494	630	590
	Poly-K P-Value	0.347N	0.459	0.369N
	Severity Profile	5 3 1 1	4 1 1 0	3 1 0 0
	JT/SW P-Value	0.312N	0.574N	0.321N
	RTE P-Value	0.271N	0.421	0.271N
Epididymis * Hypospermia	Simple Incidence	11/49 ( 22.4%)	5/26 ( 19.2%)	10/26 ( 38.5%)
	Poly-K Incidence	11/37.0 ( 29.7%)	5/19.4 ( 25.8%)	10/20.6 ( 48.4%)
	Terminal Incidence	2/15 ( 13.3%)	2/9 ( 22.2%)	6/12 ( 50.0%)
	Time-to-First	225	369	559
	Poly-K P-Value	0.111	0.501N	0.119
	Severity Profile	0 0 0 11	0 0 1 4	0 0 0 10
	JT/SW P-Value	0.110	0.658	0.076
	RTE P-Value	0.072	0.345N	0.072

<b>Table 12. Nonneoplasms by Body System for Terminal Sacrifice Males EE2 Continuous Dose Arm</b>				
<b>System and Nonneoplasm</b>		<b>Treatment (ug/kg)</b>		
<b>Lesion</b>	<b>Statistic</b>	<b>Control</b>	<b>0.05</b>	<b>0.50</b>
Epididymis * Infiltration Cellular,Lymphocyte	Simple Incidence	10/49 ( 20.4%)	5/26 ( 19.2%)	10/26 ( 38.5%)
	Poly-K Incidence	10/35.5 ( 28.1%)	5/18.3 ( 27.3%)	10/20.4 ( 49.1%)
	Terminal Incidence	4/15 ( 26.7%)	2/9 ( 22.2%)	7/12 ( 58.3%)
	Time-to-First	225	607	590
	Poly-K P-Value	0.076	0.602N	0.087
	Severity Profile	8 2 0 0	4 1 0 0	8 2 0 0
	JT/SW P-Value	0.072	0.548	0.051
	RTE P-Value	0.045 *	0.456N	0.045 *
Prostate, Dorsal/Lateral Lobe * Fibrosis	Simple Incidence	9/50 ( 18.0%)	2/26 ( 7.7%)	2/25 ( 8.0%)
	Poly-K Incidence	9/36.6 ( 24.6%)	2/17.6 ( 11.4%)	2/19.4 ( 10.3%)
	Terminal Incidence	3/15 ( 20.0%)	2/9 ( 22.2%)	1/12 ( 8.3%)
	Time-to-First	526	725 (T)	710
	Poly-K P-Value	0.102N	0.220N	0.172N
	Severity Profile	0 7 0 2	0 1 0 1	0 0 1 1
	JT/SW P-Value	0.094N	0.124N	0.149N
	RTE P-Value	0.136N	0.117N	0.136N
Prostate, Dorsal/Lateral Lobe * Infiltration Cellular,Lymphocyte	Simple Incidence	33/50 ( 66.0%)	17/26 ( 65.4%)	13/25 ( 52.0%)
	Poly-K Incidence	33/40.4 ( 81.7%)	17/21.3 ( 79.7%)	13/20.1 ( 64.6%)
	Terminal Incidence	13/15 ( 86.7%)	9/9 (100.0%)	10/12 ( 83.3%)
	Time-to-First	520	369	518
	Poly-K P-Value	0.074N	0.568N	0.091N
	Severity Profile	19 11 2 1	10 6 1 0	6 6 0 1
	JT/SW P-Value	0.237N	0.447N	0.259N
	RTE P-Value	0.219N	0.449N	0.219N
Prostate, Dorsal/Lateral Lobe * Inflammation,Suppurative	Simple Incidence	41/50 ( 82.0%)	26/26 (100.0%)	22/25 ( 88.0%)
	Poly-K Incidence	41/45.6 ( 89.9%)	26/26.0 (100.0%)	22/23.1 ( 95.4%)
	Terminal Incidence	14/15 ( 93.3%)	9/9 (100.0%)	12/12 (100.0%)
	Time-to-First	284	369	413
	Poly-K P-Value	0.138	0.083	0.352
	Severity Profile	8 26 4 3	8 16 1 1	6 12 3 1
	JT/SW P-Value	0.424	0.370	0.485
	RTE P-Value	0.455	0.369	0.455



<b>Table 12. Nonneoplasms by Body System for Terminal Sacrifice Males EE2 Continuous Dose Arm</b>				
<b>System and Nonneoplasm</b>	<b>Treatment (ug/kg)</b>			
<b>Lesion</b>	<b>Statistic</b>	<b>Control</b>	<b>0.05</b>	<b>0.50</b>
Prostate, Ventral Lobe * Atrophy	Simple Incidence	4/50 ( 8.0%)	2/26 ( 7.7%)	0/26 ( 0.0%)
	Poly-K Incidence	4/34.9 ( 11.5%)	2/18.6 ( 10.7%)	0/19.6 ( 0.0%)
	Terminal Incidence	2/15 ( 13.3%)	0/9 ( 0.0%)	0/12 ( 0.0%)
	Time-to-First	526	561	----
	Poly-K P-Value	0.123N	0.646N	0.150N
	Severity Profile	0 0 3 1	0 2 0 0	---
	JT/SW P-Value	0.098N	0.444N	0.091N
	RTE P-Value	0.055N	0.447N	0.055N
Prostate, Ventral Lobe * Fibrosis	Simple Incidence	15/50 ( 30.0%)	2/26 ( 7.7%)	6/26 ( 23.1%)
	Poly-K Incidence	15/36.0 ( 41.7%)	2/18.1 ( 11.0%)	6/20.5 ( 29.3%)
	Terminal Incidence	7/15 ( 46.7%)	1/9 ( 11.1%)	3/12 ( 25.0%)
	Time-to-First	549	581	590
	Poly-K P-Value	0.135N	0.018N*	0.252N
	Severity Profile	0 7 3 5	0 1 0 1	0 5 0 1
	JT/SW P-Value	0.092N	0.015N* <sup>1</sup>	0.074N
	RTE P-Value	0.191N	0.011N*	0.191N
Prostate, Ventral Lobe * Hyperplasia,Epithelium	Simple Incidence	10/50 ( 20.0%)	4/26 ( 15.4%)	7/26 ( 26.9%)
	Poly-K Incidence	10/34.0 ( 29.4%)	4/17.6 ( 22.7%)	7/19.9 ( 35.2%)
	Terminal Incidence	6/15 ( 40.0%)	4/9 ( 44.4%)	6/12 ( 50.0%)
	Time-to-First	674	725 (T)	639
	Poly-K P-Value	0.412	0.427N	0.443
	Severity Profile	1 6 3 0	0 1 2 1	1 4 2 0
	JT/SW P-Value	0.310	0.621	0.303
	RTE P-Value	0.255	0.389N	0.255
Prostate, Ventral Lobe * Infiltration Cellular,Lymphocyte	Simple Incidence	25/50 ( 50.0%)	6/26 ( 23.1%)	14/26 ( 53.8%)
	Poly-K Incidence	25/40.8 ( 61.2%)	6/19.2 ( 31.3%)	14/22.3 ( 62.9%)
	Terminal Incidence	10/15 ( 66.7%)	2/9 ( 22.2%)	8/12 ( 66.7%)
	Time-to-First	72	543	462
	Poly-K P-Value	0.488N	0.022N*	0.561
	Severity Profile	12 5 5 3	5 0 1 0	6 7 0 1
	JT/SW P-Value	0.309N	0.006N** <sup>1</sup>	0.148N
	RTE P-Value	0.426	0.005N**	0.426

<b>Table 12. Nonneoplasms by Body System for Terminal Sacrifice Males EE2 Continuous Dose Arm</b>				
<b>System and Nonneoplasm</b>	<b>Treatment (ug/kg)</b>			
<b>Lesion</b>	<b>Statistic</b>	<b>Control</b>	<b>0.05</b>	<b>0.50</b>
Prostate, Ventral Lobe * Inflammation,Suppurative	Simple Incidence	16/50 ( 32.0%)	4/26 ( 15.4%)	8/26 ( 30.8%)
	Poly-K Incidence	16/38.1 ( 42.0%)	4/18.7 ( 21.4%)	8/22.2 ( 36.0%)
	Terminal Incidence	5/15 ( 33.3%)	2/9 ( 22.2%)	2/12 ( 16.7%)
	Time-to-First	543	369	413
	Poly-K P-Value	0.316N	0.103N	0.424N
	Severity Profile	7 2 2 5	3 0 0 1	5 2 0 1
	JT/SW P-Value	0.240N	0.050N	0.194N
	RTE P-Value	0.378N	0.045N*	0.378N
Prostate, Ventral Lobe * Mineralization	Simple Incidence	4/50 ( 8.0%)	1/26 ( 3.8%)	3/26 ( 11.5%)
	Poly-K Incidence	4/34.0 ( 11.8%)	1/17.9 ( 5.6%)	3/20.3 ( 14.8%)
	Terminal Incidence	2/15 ( 13.3%)	0/9 ( 0.0%)	1/12 ( 8.3%)
	Time-to-First	671	638	590
	Poly-K P-Value	0.489	0.411N	0.538
	Severity Profile	0 0 3 1	0 0 1 0	0 1 1 1
	JT/SW P-Value	0.391	0.758	0.359
	RTE P-Value	0.303	0.260N	0.303
Seminal Vesicle * Dilatation,Lumen	Simple Incidence	2/44 ( 4.5%)	2/25 ( 8.0%)	1/23 ( 4.3%)
	Poly-K Incidence	2/31.7 ( 6.3%)	2/17.4 ( 11.5%)	1/17.9 ( 5.6%)
	Terminal Incidence	1/15 ( 6.7%)	1/9 ( 11.1%)	1/12 ( 8.3%)
	Time-to-First	720	665	727 (T)
	Poly-K P-Value	0.616N	0.464	0.698N
	Severity Profile	0 0 0 2	0 1 1 0	0 0 0 1
	JT/SW P-Value	0.452	0.300	0.471
	RTE P-Value	0.486N	0.296	0.486N
Seminal Vesicle * Hyperplasia,Epithelium	Simple Incidence	7/44 ( 15.9%)	0/25 ( 0.0%)	2/23 ( 8.7%)
	Poly-K Incidence	7/32.7 ( 21.4%)	0/17.2 ( 0.0%)	2/18.4 ( 10.8%)
	Terminal Incidence	5/15 ( 33.3%)	0/9 ( 0.0%)	1/12 ( 8.3%)
	Time-to-First	558	---	559
	Poly-K P-Value	0.136N	0.048N*	0.280N
	Severity Profile	0 5 1 1	---	0 1 1 0
	JT/SW P-Value	0.082N	0.018N* <sup>1</sup>	0.076N
	RTE P-Value	0.177N	0.012N*	0.177N

<b>Table 12. Nonneoplasms by Body System for Terminal Sacrifice Males EE2 Continuous Dose Arm</b>				
<b>System and Nonneoplasm</b>	<b>Treatment (ug/kg)</b>			
<b>Lesion</b>	<b>Statistic</b>	<b>Control</b>	<b>0.05</b>	<b>0.50</b>
Testes * Degeneration,Seminiferous Tubule	Simple Incidence	40/49 ( 81.6%)	17/26 ( 65.4%)	21/26 ( 80.8%)
	Poly-K Incidence	40/44.6 ( 89.8%)	17/21.5 ( 79.1%)	21/22.9 ( 91.8%)
	Terminal Incidence	14/15 ( 93.3%)	8/9 ( 88.9%)	12/12 (100.0%)
	Time-to-First	225	369	518
	Poly-K P-Value	0.592	0.166N	0.584
	Severity Profile	20 5 5 10	8 4 1 4	8 2 1 10
	JT/SW P-Value	0.348	0.890	0.240
	RTE P-Value	0.192	0.126N	0.192
Testes * Polyarteritis	Simple Incidence	12/49 ( 24.5%)	6/26 ( 23.1%)	5/26 ( 19.2%)
	Poly-K Incidence	12/35.2 ( 34.1%)	6/18.7 ( 32.1%)	5/20.1 ( 24.9%)
	Terminal Incidence	6/15 ( 40.0%)	2/9 ( 22.2%)	4/12 ( 33.3%)
	Time-to-First	494	607	590
	Poly-K P-Value	0.292N	0.564N	0.338N
	Severity Profile	1 5 1 5	1 3 1 1	2 1 1 1
	JT/SW P-Value	0.256N	0.394N	0.303N
	RTE P-Value	0.256N	0.397N	0.256N
<b>Hematopoietic System</b>				
Bone Marrow * Hyperplasia,Myeloid Cell	Simple Incidence	6/48 ( 12.5%)	3/26 ( 11.5%)	2/25 ( 8.0%)
	Poly-K Incidence	6/35.1 ( 17.1%)	3/19.2 ( 15.6%)	2/20.4 ( 9.8%)
	Terminal Incidence	1/15 ( 6.7%)	1/9 ( 11.1%)	0/12 ( 0.0%)
	Time-to-First	520	369	413
	Poly-K P-Value	0.303N	0.596N	0.363N
	Severity Profile	0 1 1 4	0 0 1 2	0 0 1 1
	JT/SW P-Value	0.294N	0.456N	0.333N
	RTE P-Value	0.281N	0.455N	0.281N
Bone Marrow * Hypocellularity	Simple Incidence	5/48 ( 10.4%)	0/26 ( 0.0%)	1/25 ( 4.0%)
	Poly-K Incidence	5/33.3 ( 15.0%)	0/17.6 ( 0.0%)	1/19.3 ( 5.2%)
	Terminal Incidence	3/15 ( 20.0%)	0/9 ( 0.0%)	1/12 ( 8.3%)
	Time-to-First	616	----	727 (T)
	Poly-K P-Value	0.127N	0.109N	0.260N
	Severity Profile	0 0 5 0	---	0 0 1 0
	JT/SW P-Value	0.075N	0.045N* <sup>1</sup>	0.090N
	RTE P-Value	0.125N	0.032N*	0.125N

## Statistical Analysis of Neoplastic and Non-neoplastic Lesions (Terminal Sacrifice)

<b>Table 12. Nonneoplasms by Body System for Terminal Sacrifice Males EE2 Continuous Dose Arm</b>				
<b>System and Nonneoplasm</b>	<b>Treatment (ug/kg)</b>			
<b>Lesion</b>	<b>Statistic</b>	<b>Control</b>	<b>0.05</b>	<b>0.50</b>
Spleen * Hematopoietic Cell Proliferation	Simple Incidence	13/49 (26.5%)	6/26 (23.1%)	7/25 (28.0%)
	Poly-K Incidence	13/37.2 (35.0%)	6/18.9 (31.8%)	7/20.7 (33.8%)
	Terminal Incidence	4/15 (26.7%)	2/9 (22.2%)	4/12 (33.3%)
	Time-to-First	225	551	462
	Poly-K P-Value	0.516N	0.524N	0.582N
	Severity Profile	5 3 3 2	2 2 2 0	3 3 1 0
	JT/SW P-Value	0.460N	0.363N	0.507N
	RTE P-Value	0.499N	0.366N	0.499N
Spleen * Pigmentation	Simple Incidence	28/49 (57.1%)	16/26 (61.5%)	16/25 (64.0%)
	Poly-K Incidence	28/40.3 (69.4%)	16/20.8 (76.9%)	16/22.5 (71.2%)
	Terminal Incidence	12/15 (80.0%)	8/9 (88.9%)	9/12 (75.0%)
	Time-to-First	284	369	462
	Poly-K P-Value	0.472	0.363	0.562
	Severity Profile	5 15 4 4	8 6 1 1	5 10 0 1
	JT/SW P-Value	0.377N	0.267N	0.400N
	RTE P-Value	0.432N	0.254N	0.432N
Thymus * Atrophy	Simple Incidence	47/50 (94.0%)	22/24 (91.7%)	24/25 (96.0%)
	Poly-K Incidence	47/48.2 (97.5%)	22/22.3 (98.7%)	24/24.3 (98.9%)
	Terminal Incidence	15/15 (100.0%)	9/9 (100.0%)	11/11 (100.0%)
	Time-to-First	225	369	413
	Poly-K P-Value	0.503	0.748	0.715
	Severity Profile	0 2 1 44	0 0 2 20	0 1 1 22
	JT/SW P-Value	0.455N	0.307N	0.481N
	RTE P-Value	0.485	0.306N	0.485
<b>Integumentary System</b>				
Mammary Gland * Degeneration, Alveolus	Simple Incidence	28/50 (56.0%)	14/25 (56.0%)	17/25 (68.0%)
	Poly-K Incidence	28/40.6 (69.0%)	14/19.0 (73.6%)	17/22.2 (76.4%)
	Terminal Incidence	11/15 (73.3%)	8/8 (100.0%)	8/12 (66.7%)
	Time-to-First	284	543	462
	Poly-K P-Value	0.291	0.474	0.357
	Severity Profile	0 1 10 17	0 2 3 9	0 2 4 11
	JT/SW P-Value	0.214	0.507	0.214
	RTE P-Value	0.183	0.493N	0.183

<b>Table 12. Nonneoplasms by Body System for Terminal Sacrifice Males EE2 Continuous Dose Arm</b>				
<b>System and Nonneoplasm</b>	<b>Treatment (ug/kg)</b>			
<b>Lesion</b>	<b>Statistic</b>	<b>Control</b>	<b>0.05</b>	<b>0.50</b>
Mammary Gland * Dilatation,Alveolus	Simple Incidence	8/50 ( 16.0%)	4/25 ( 16.0%)	1/25 ( 4.0%)
	Poly-K Incidence	8/35.0 ( 22.9%)	4/17.6 ( 22.7%)	1/19.3 ( 5.2%)
	Terminal Incidence	3/15 ( 20.0%)	1/8 ( 12.5%)	1/12 ( 8.3%)
	Time-to-First	558	607	727 (T)
	Poly-K P-Value	0.082N	0.632N	0.089N
	Severity Profile	0 5 3 0	1 1 2 0	0 1 0 0
	JT/SW P-Value	0.100N	0.496N	0.082N
	RTE P-Value	0.063N	0.496N	0.063N
Mammary Gland * Dilatation,Duct	Simple Incidence	14/50 ( 28.0%)	6/25 ( 24.0%)	2/25 ( 8.0%)
	Poly-K Incidence	14/35.7 ( 39.2%)	6/17.9 ( 33.6%)	2/20.0 ( 10.0%)
	Terminal Incidence	6/15 ( 40.0%)	2/8 ( 25.0%)	1/12 ( 8.3%)
	Time-to-First	549	607	518
	Poly-K P-Value	0.014N*	0.459N	0.016N*
	Severity Profile	0 8 6 0	0 4 2 0	0 2 0 0
	JT/SW P-Value	0.028N*	0.337N	0.023N*
	RTE P-Value	0.018N*	0.327N	0.018N*
Mammary Gland * Hyperplasia,Lobular	Simple Incidence	1/50 ( 2.0%)	2/25 ( 8.0%)	0/25 ( 0.0%)
	Poly-K Incidence	1/34.4 ( 2.9%)	2/18.3 ( 10.9%)	0/19.3 ( 0.0%)
	Terminal Incidence	0/15 ( 0.0%)	0/8 ( 0.0%)	0/12 ( 0.0%)
	Time-to-First	486	369	----
	Poly-K P-Value	0.525N	0.281	0.617N
	Severity Profile	0 1 0 0	0 2 0 0	---
	JT/SW P-Value	0.500	0.107	0.378
	RTE P-Value	0.317N	0.108	0.317N
<b>Nervous System</b>				
Brain, Brain Stem * Compression	Simple Incidence	12/49 ( 24.5%)	6/26 ( 23.1%)	4/26 ( 15.4%)
	Poly-K Incidence	12/35.7 ( 33.6%)	6/19.0 ( 31.5%)	4/20.8 ( 19.3%)
	Terminal Incidence	4/15 ( 26.7%)	2/9 ( 22.2%)	2/12 ( 16.7%)
	Time-to-First	558	543	518
	Poly-K P-Value	0.163N	0.560N	0.190N
	Severity Profile	3 2 4 3	0 2 4 0	0 1 2 1
	JT/SW P-Value	0.225N	0.447N	0.246N
	RTE P-Value	0.208N	0.443N	0.208N

<b>Table 12. Nonneoplasms by Body System for Terminal Sacrifice Males EE2 Continuous Dose Arm</b>				
<b>System and Nonneoplasm</b>	<b>Treatment (ug/kg)</b>			
<b>Lesion</b>	<b>Statistic</b>	<b>Control</b>	<b>0.05</b>	<b>0.50</b>
Brain, Cerebrum * Dilatation, Ventricle	Simple Incidence	6/50 ( 12.0%)	2/26 ( 7.7%)	4/26 ( 15.4%)
	Poly-K Incidence	6/35.8 ( 16.7%)	2/18.2 ( 11.0%)	4/20.2 ( 19.8%)
	Terminal Incidence	0/15 ( 0.0%)	0/9 ( 0.0%)	3/12 ( 25.0%)
	Time-to-First	558	630	518
	Poly-K P-Value	0.493	0.437N	0.532
	Severity Profile	2 4 0 0	0 2 0 0	1 3 0 0
	JT/SW P-Value	0.402	0.704	0.390
	RTE P-Value	0.329	0.308N	0.329
<b>Urinary System</b>				
Kidney * Cyst, Cortex	Simple Incidence	20/50 ( 40.0%)	11/26 ( 42.3%)	8/26 ( 30.8%)
	Poly-K Incidence	20/37.8 ( 53.0%)	11/20.4 ( 53.9%)	8/20.7 ( 38.7%)
	Terminal Incidence	9/15 ( 60.0%)	5/9 ( 55.6%)	5/12 ( 41.7%)
	Time-to-First	494	369	559
	Poly-K P-Value	0.192N	0.588	0.208N
Kidney * Cyst, Renal Tubule	Simple Incidence	11/50 ( 22.0%)	14/26 ( 53.8%)	10/26 ( 38.5%)
	Poly-K Incidence	11/37.4 ( 29.4%)	14/20.6 ( 67.9%)	10/21.1 ( 47.3%)
	Terminal Incidence	3/15 ( 20.0%)	7/9 ( 77.8%)	6/12 ( 50.0%)
	Time-to-First	284	369	462
	Poly-K P-Value	0.054	0.002 **	0.128
Kidney * Hyperplasia, Transitional Epithelium	Simple Incidence	3/50 ( 6.0%)	2/26 ( 7.7%)	1/26 ( 3.8%)
	Poly-K Incidence	3/34.6 ( 8.7%)	2/17.8 ( 11.2%)	1/19.7 ( 5.1%)
	Terminal Incidence	1/15 ( 6.7%)	1/9 ( 11.1%)	0/12 ( 0.0%)
	Time-to-First	543	671	710
	Poly-K P-Value	0.448N	0.578	0.523N
	Severity Profile	1 1 1 0	1 1 0 0	0 0 1 0
	JT/SW P-Value	0.409N	0.601N	0.431N
	RTE P-Value	0.365N	0.395	0.365N
Kidney * Infiltration Cellular, Polymorphonuclear	Simple Incidence	6/50 ( 12.0%)	2/26 ( 7.7%)	5/26 ( 19.2%)
	Poly-K Incidence	6/35.3 ( 17.0%)	2/17.8 ( 11.2%)	5/19.6 ( 25.5%)
	Terminal Incidence	3/15 ( 20.0%)	1/9 ( 11.1%)	5/12 ( 41.7%)
	Time-to-First	543	679	724 (T)
	Poly-K P-Value	0.309	0.441N	0.341
	Severity Profile	4 1 1 0	2 0 0 0	3 2 0 0
	JT/SW P-Value	0.264	0.731	0.220
	RTE P-Value	0.191	0.283N	0.191

## Statistical Analysis of Neoplastic and Non-neoplastic Lesions (Terminal Sacrifice)

<i>Table 12. Nonneoplasms by Body System for Terminal Sacrifice Males EE2 Continuous Dose Arm</i>				
<i>System and Nonneoplasm</i>	<i>Treatment (ug/kg)</i>			
<i>Lesion</i>	<i>Statistic</i>	<i>Control</i>	<i>0.05</i>	<i>0.50</i>
Kidney * Nephropathy	Simple Incidence	44/50 (88.0%)	21/26 (80.8%)	23/26 (88.5%)
	Poly-K Incidence	44/46.4 (94.8%)	21/22.5 (93.2%)	23/24.5 (93.7%)
	Terminal Incidence	15/15 (100.0%)	9/9 (100.0%)	11/12 (91.7%)
	Time-to-First	225	459	413
	Poly-K P-Value	0.527N	0.635N	0.662N
	Severity Profile	11 12 6 15	1 6 9 5	3 8 7 5
	JT/SW P-Value	0.449	0.433	0.512
	RTE P-Value	0.457	0.416	0.457

P-values for dose trend are presented in the "Control" column.

N indicates a negative trend or negative treatment comparison to control with corresponding lower-tail p-values.

<sup>1</sup> Nonsignificant SW test due to the assumption of monotonicity.