

Table 1. Female organ weights PND 4^a

| Negative controls and reference estrogen | | | | | | | | | |
|--|---------------------|----------------|--|--|--|----|--|--|--|
| | 0.3 % CMC (Vehicle) | Naïve control | | 0.5 EE ₂ (μ g/kg bw/day) | 5.0 EE ₂ (μ g/kg bw/day) | | | | |
| Mammary Gland | 16 | 19 | | | 13 | 13 | | | |
| Absolute (g) | 0.115 ± 0.012 | 0.096 ± 0.007 | | 0.078 ± 0.008 | 0.080 ± 0.009 | | | | |
| Rel. to Body (mg/g) | 10.890 ± 1.099 | 8.958 ± 0.622 | | 7.738 ± 0.547 | 8.303 ± 0.869 | | | | |
| Body Weight | 16 | 19 | | 13 | 13 | | | | |
| g | 10.506 ± 0.281 | 10.621 ± 0.254 | | 9.862 ± 0.423 | 9.638 ± 0.356 | | | | |

| Low dose BPA | | | | | | | | |
|----------------------|-------------------------------|----------------|----------------|---------------|----------------|----------------|----------------|----------------|
| | BPA Dose (μ g/kg bw/day) | | | | | | | |
| | Vehicle | 2.5 | 8 | 25 | 80 | 260 | 840 | 2,700 |
| Mammary Gland | 16 | 15 | 15 | 19 | 17 | 17 | 19 | 21 |
| Absolute | 0.115 ± 0.012 | 0.115 ± 0.016 | 0.124 ± 0.014 | 0.092 ± 0.008 | 0.083 ± 0.006 | 0.100 ± 0.014 | 0.115 ± 0.011 | 0.101 ± 0.007 |
| Rel. to Body | 10.890 ± 1.099 | 10.399 ± 1.266 | 11.650 ± 1.229 | 9.295 ± 0.768 | 7.997 ± 0.436 | 8.902 ± 0.890 | 10.679 ± 0.804 | 9.447 ± 0.533 |
| Body Weight | 16 | 15 | 15 | 19 | 17 | 17 | 19 | 21 |
| g | 10.506 ± 0.281 | 10.767 ± 0.479 | 10.567 ± 0.342 | 9.853 ± 0.222 | 10.312 ± 0.399 | 10.741 ± 0.499 | 10.647 ± 0.257 | 10.571 ± 0.329 |

| High dose BPA | | | |
|----------------------|-------------------------------|----------------|---------------|
| | BPA Dose (μ g/kg bw/day) | | |
| | Vehicle | 100,000 | 300,000 |
| Mammary Gland | 16 | 18 | 20 |
| Absolute | 0.115 ± 0.012 | 0.109 ± 0.015 | 0.089 ± 0.014 |
| Rel. to Body | 10.890 ± 1.099 | 9.724 ± 1.112 | 8.705 ± 1.153 |
| Body Weight | 16 | 18 | 20 |
| g | 10.506 ± 0.281 | 10.900 ± 0.287 | 9.885 ± 0.253 |

^a Results [absolute weight (g), weight relative to brain weight (g/g), and weight relative to body weight (mg/g)] are presented as means ± S.E.M. Statistical analyses were conducted by ANOVA for absolute weights and by ANOCOVA with brain and body weights as covariates. Detailed statistical results, including the adjusted (least squares) means generated by those models, are presented in tables in Appendix XLI. Statistical comparisons to the vehicle control were conducted in the subgroups described in Materials and Methods. There were no significant differences from vehicle control in the organs weighed from PND 4 females.

^b The body weight reported is the weight recorded at receiving for termination and necropsy in pathology. The weight is shown in these tables for reference, but was not analyzed separately as part of the organ weight analyses.

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Appendix XLI, Table 2. Male organ weights, PND 4^a

| Negative controls and reference estrogen | | | | |
|--|---------------------|----------------|--|--|
| | 0.3 % CMC (Vehicle) | Naïve control | 0.5 EE ₂ (μ g/kg bw/day) | 5.0 EE ₂ (μ g/kg bw/day) |
| Mammary Gland | 19 | 21 | 14 | 14 |
| Absolute (g) | 0.097 ± 0.008 | 0.114 ± 0.010 | 0.090 ± 0.009 | 0.085 ± 0.009 |
| Rel. to Body (mg/g) | 8.662 ± 0.622 | 9.960 ± 0.842 | 8.362 ± 0.868 | 7.952 ± 0.712 |
| Prostate | 19 | 21 | 14 | 14 |
| Absolute | 0.007 ± 0.000 | 0.008 ± 0.001 | 0.006 ± 0.000 | 0.008 ± 0.000 |
| Rel. to Body | 0.644 ± 0.038 | 0.716 ± 0.079 | 0.577 ± 0.054 | 0.740 ± 0.046 |
| Body Weight | 19 | 21 | 14 | 14 |
| g | 11.005 ± 0.361 | 11.319 ± 0.225 | 10.729 ± 0.336 | 10.500 ± 0.332 |

| Low dose BPA | | | | | | | | |
|----------------------|-------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| | BPA Dose (μ g/kg bw/day) | | | | | | | |
| | Vehicle | 2.5 | 8 | 25 | 80 | 260 | 840 | 2,700 |
| Mammary Gland | 19 | 21 | 17 | 18 | 21 | 19 | 18 | 20 |
| Absolute | 0.097 ± 0.008 | 0.095 ± 0.006 | 0.101 ± 0.008 | 0.105 ± 0.013 | 0.095 ± 0.008 | 0.105 ± 0.012 | 0.107 ± 0.008 | 0.092 ± 0.005 |
| Rel. to Body | 8.662 ± 0.622 | 8.629 ± 0.470 | 8.690 ± 0.512 | 9.306 ± 1.086 | 8.533 ± 0.564 | 9.309 ± 0.831 | 9.149 ± 0.495 | 8.397 ± 0.371 |
| Prostate | 19 | 21 | 17 | 18 | 21 | 19 | 17 | 20 |
| Absolute | 0.007 ± 0.000 | 0.007 ± 0.000 | 0.007 ± 0.001 | 0.008 ± 0.001 | 0.007 ± 0.001 | 0.007 ± 0.001 | 0.007 ± 0.000 | 0.008 ± 0.000 |
| Rel. to Body | 0.644 ± 0.038 | 0.633 ± 0.047 | 0.617 ± 0.070 | 0.723 ± 0.104 | 0.636 ± 0.049 | 0.646 ± 0.047 | 0.586 ± 0.031 | 0.704 ± 0.053 |
| Body Weight | 19 | 21 | 17 | 18 | 21 | 19 | 18 | 20 |
| g | 11.005 ± 0.361 | 10.957 ± 0.384 | 11.535 ± 0.332 | 11.122 ± 0.299 | 10.981 ± 0.298 | 11.068 ± 0.421 | 11.433 ± 0.362 | 10.945 ± 0.343 |

| High dose BPA | | | |
|----------------------|-------------------------------|----------------|-----------------|
| | BPA Dose (μ g/kg bw/day) | | |
| | Vehicle | 100,000 | 300,000 |
| Mammary Gland | 19 | 20 | 18 |
| Absolute | 0.097 ± 0.008 | 0.081 ± 0.006 | 0.062 ± 0.006** |
| Rel. to Body | 8.662 ± 0.622 | 7.583 ± 0.351 | 6.322 ± 0.509 |
| Prostate | 19 | 20 | 18 |
| Absolute | 0.007 ± 0.000 | 0.007 ± 0.001 | 0.007 ± 0.001 |
| Rel. to Body | 0.644 ± 0.038 | 0.708 ± 0.053 | 0.762 ± 0.117 |
| Body Weight | 19 | 20 | 18 |
| g | 11.005 ± 0.361 | 10.530 ± 0.394 | 9.744 ± 0.303 |

^a Results [absolute weight (g), weight relative to brain weight (g/g), and weight relative to body weight (mg/g)] are presented as means ± S.E.M. Statistical analyses were conducted by ANOVA for absolute weights and by ANOCOVA with brain and body weights as covariates. Detailed statistical results, including the adjusted (least squares)

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means generated by those models and reasons for any excluded organ weights, are presented in tables in Appendix XLI. Statistical comparisons to the vehicle control were conducted in the subgroups described in Materials and Methods. Significant differences from vehicle controls are indicated in shaded cells, **, p < 0.01.

^bThe body weight reported is the weight recorded at receiving for termination and necropsy in pathology. The weight is shown in these tables for reference, but was not analyzed separately as part of the organ weight analyses.

Table 1. Summary Statistics for Female Organ and Receiving Weights (g)

| Organ | Vehicle | | | BPA 2.5 ($\mu\text{g/kg}$) | | | BPA 8 ($\mu\text{g/kg}$) | | | BPA 25 ($\mu\text{g/kg}$) | | | BPA 80 ($\mu\text{g/kg}$) | | | BPA 260 ($\mu\text{g/kg}$) | | | BPA 840 ($\mu\text{g/kg}$) | | | BPA 2700 ($\mu\text{g/kg}$) | | |
|------------------|---------|--------|-------|------------------------------|--------|-------|----------------------------|--------|-------|-----------------------------|-------|-------|-----------------------------|--------|-------|------------------------------|--------|-------|------------------------------|--------|-------|-------------------------------|--------|-------|
| | N | Mean | S.E. | N | Mean | S.E. | N | Mean | S.E. | N | Mean | S.E. | N | Mean | S.E. | N | Mean | S.E. | N | Mean | S.E. | N | Mean | S.E. |
| Mammary Gl | 16 | 0.115 | 0.012 | 15 | 0.115 | 0.016 | 15 | 0.124 | 0.014 | 19 | 0.092 | 0.008 | 17 | 0.083 | 0.006 | 17 | 0.100 | 0.014 | 19 | 0.115 | 0.011 | 21 | 0.101 | 0.007 |
| Receiving Weight | 16 | 10.506 | 0.281 | 15 | 10.767 | 0.479 | 15 | 10.567 | 0.342 | 19 | 9.853 | 0.222 | 17 | 10.312 | 0.399 | 17 | 10.741 | 0.499 | 19 | 10.647 | 0.257 | 21 | 10.571 | 0.329 |

Table 1. Summary Statistics for Female Organ and Receiving Weights (g)

| Organ | BPA 100,000 ($\mu\text{g/kg}$) | | | BPA 300,000 ($\mu\text{g/kg}$) | | | EE ₂ 0.5 ($\mu\text{g/kg}$) | | | EE ₂ 5.0 ($\mu\text{g/kg}$) | | | Naïve Control | | |
|------------------|----------------------------------|--------|-------|----------------------------------|-------|-------|--|-------|-------|--|-------|-------|---------------|--------|-------|
| | N | Mean | S.E. | N | Mean | S.E. | N | Mean | S.E. | N | Mean | S.E. | N | Mean | S.E. |
| Mammary Gl | 18 | 0.109 | 0.015 | 20 | 0.089 | 0.014 | 13 | 0.078 | 0.008 | 13 | 0.080 | 0.009 | 19 | 0.096 | 0.007 |
| Receiving Weight | 18 | 10.900 | 0.287 | 20 | 9.885 | 0.253 | 13 | 9.862 | 0.423 | 13 | 9.638 | 0.356 | 19 | 10.621 | 0.254 |

Table 2. Summary Statistics for Female Relative Organ Weight to Receiving Weight (mg/g)

| Organ | Vehicle | | | BPA 2.5 ($\mu\text{g/kg}$) | | | BPA 8 ($\mu\text{g/kg}$) | | | BPA 25 ($\mu\text{g/kg}$) | | | BPA 80 ($\mu\text{g/kg}$) | | | BPA 260 ($\mu\text{g/kg}$) | | | BPA 840 ($\mu\text{g/kg}$) | | | BPA 2700 ($\mu\text{g/kg}$) | | |
|------------|---------|--------|-------|------------------------------|--------|-------|----------------------------|--------|-------|-----------------------------|-------|-------|-----------------------------|-------|-------|------------------------------|-------|-------|------------------------------|--------|-------|-------------------------------|-------|-------|
| | N | Mean | S.E. | N | Mean | S.E. | N | Mean | S.E. | N | Mean | S.E. | N | Mean | S.E. | N | Mean | S.E. | N | Mean | S.E. | N | Mean | S.E. |
| Mammary Gl | 16 | 10.890 | 1.099 | 15 | 10.399 | 1.266 | 15 | 11.650 | 1.229 | 19 | 9.295 | 0.768 | 17 | 7.997 | 0.436 | 17 | 8.902 | 0.890 | 19 | 10.679 | 0.804 | 21 | 9.447 | 0.533 |

Table 2. Summary Statistics for Female Relative Organ Weight to Receiving Weight (mg/g)

| Organ | BPA 100,000 ($\mu\text{g/kg}$) | | | BPA 300,000 ($\mu\text{g/kg}$) | | | EE ₂ 0.5 ($\mu\text{g/kg}$) | | | EE ₂ 5.0 ($\mu\text{g/kg}$) | | | Naïve Control | | |
|------------|----------------------------------|-------|-------|----------------------------------|-------|-------|--|-------|-------|--|-------|-------|---------------|-------|-------|
| | N | Mean | S.E. | N | Mean | S.E. | N | Mean | S.E. | N | Mean | S.E. | | | |
| Mammary Gl | 18 | 9.724 | 1.112 | 20 | 8.705 | 1.153 | 13 | 7.738 | 0.547 | 13 | 8.303 | 0.869 | 19 | 8.958 | 0.622 |

Table 3. Summary Statistics for Male Organ and Receiving Weights (g)

| Organ | Vehicle | | | BPA 2.5 ($\mu\text{g}/\text{kg}$) | | | BPA 8 ($\mu\text{g}/\text{kg}$) | | | BPA 25 ($\mu\text{g}/\text{kg}$) | | | BPA 80 ($\mu\text{g}/\text{kg}$) | | | BPA 260 ($\mu\text{g}/\text{kg}$) | | | BPA 840 ($\mu\text{g}/\text{kg}$) | | | | | |
|------------------|---------|--------|-------|-------------------------------------|--------|-------|-----------------------------------|--------|-------|------------------------------------|--------|-------|------------------------------------|--------|-------|-------------------------------------|--------|-------|-------------------------------------|--------|-------|----|--------|-------|
| | N | Mean | S.E. | N | Mean | S.E. | N | Mean | S.E. | N | Mean | S.E. | N | Mean | S.E. | N | Mean | S.E. | N | Mean | S.E. | N | Mean | S.E. |
| Mammary Gl | 19 | 0.097 | 0.008 | 21 | 0.095 | 0.006 | 17 | 0.101 | 0.008 | 18 | 0.105 | 0.013 | 21 | 0.095 | 0.008 | 19 | 0.105 | 0.012 | 18 | 0.107 | 0.008 | 20 | 0.092 | 0.005 |
| Prostate | 19 | 0.007 | 0.000 | 21 | 0.007 | 0.000 | 17 | 0.007 | 0.001 | 18 | 0.008 | 0.001 | 21 | 0.007 | 0.001 | 19 | 0.007 | 0.001 | 17 | 0.007 | 0.000 | 20 | 0.008 | 0.000 |
| Receiving Weight | 19 | 11.005 | 0.361 | 21 | 10.957 | 0.384 | 17 | 11.535 | 0.332 | 18 | 11.122 | 0.299 | 21 | 10.981 | 0.298 | 19 | 11.068 | 0.421 | 18 | 11.433 | 0.362 | 20 | 10.945 | 0.343 |

Table 3. Summary Statistics for Male Organ and Receiving Weights (g)

| Organ | BPA 100,000 ($\mu\text{g}/\text{kg}$) | | | BPA 300,000 ($\mu\text{g}/\text{kg}$) | | | EE ₂ 0.5 ($\mu\text{g}/\text{kg}$) | | | EE ₂ 5.0 ($\mu\text{g}/\text{kg}$) | | | Naïve Control | | |
|------------------|---|--------|-------|---|-------|-------|---|--------|-------|---|--------|-------|---------------|--------|-------|
| | N | Mean | S.E. | N | Mean | S.E. | N | Mean | S.E. | N | Mean | S.E. | N | Mean | S.E. |
| Mammary Gl | 20 | 0.081 | 0.006 | 18 | 0.062 | 0.006 | 14 | 0.090 | 0.009 | 14 | 0.085 | 0.009 | 21 | 0.114 | 0.010 |
| Prostate | 20 | 0.007 | 0.001 | 18 | 0.007 | 0.001 | 14 | 0.006 | 0.000 | 14 | 0.008 | 0.000 | 21 | 0.008 | 0.001 |
| Receiving Weight | 20 | 10.530 | 0.394 | 18 | 9.744 | 0.303 | 14 | 10.729 | 0.336 | 14 | 10.500 | 0.332 | 21 | 11.319 | 0.225 |

Table 4. Summary Statistics for Male Relative Organ Weight to Receiving Weight (mg/g)

| Organ | Vehicle | | | BPA 2.5 ($\mu\text{g}/\text{kg}$) | | | BPA 8 ($\mu\text{g}/\text{kg}$) | | | BPA 25 ($\mu\text{g}/\text{kg}$) | | | BPA 80 ($\mu\text{g}/\text{kg}$) | | | BPA 260 ($\mu\text{g}/\text{kg}$) | | | BPA 840 ($\mu\text{g}/\text{kg}$) | | | | | |
|------------|---------|-------|-------|-------------------------------------|-------|-------|-----------------------------------|-------|-------|------------------------------------|-------|-------|------------------------------------|-------|-------|-------------------------------------|-------|-------|-------------------------------------|-------|-------|----|-------|-------|
| | N | Mean | S.E. | N | Mean | S.E. | N | Mean | S.E. | N | Mean | S.E. | N | Mean | S.E. | N | Mean | S.E. | N | Mean | S.E. | N | Mean | S.E. |
| Mammary Gl | 19 | 8.662 | 0.622 | 21 | 8.629 | 0.470 | 17 | 8.690 | 0.512 | 18 | 9.306 | 1.086 | 21 | 8.533 | 0.564 | 19 | 9.309 | 0.831 | 18 | 9.149 | 0.495 | 20 | 8.397 | 0.371 |
| Prostate | 19 | 0.644 | 0.038 | 21 | 0.633 | 0.047 | 17 | 0.617 | 0.070 | 18 | 0.723 | 0.104 | 21 | 0.636 | 0.049 | 19 | 0.646 | 0.047 | 17 | 0.586 | 0.031 | 20 | 0.704 | 0.053 |

Table 4. Summary Statistics for Male Relative Organ Weight to Receiving Weight (mg/g)

| Organ | BPA 100,000 ($\mu\text{g}/\text{kg}$) | | | BPA 300,000 ($\mu\text{g}/\text{kg}$) | | | EE ₂ 0.5 ($\mu\text{g}/\text{kg}$) | | | EE ₂ 5.0 ($\mu\text{g}/\text{kg}$) | | | Naïve Control | | |
|------------|---|-------|-------|---|-------|-------|---|-------|-------|---|-------|-------|---------------|-------|-------|
| | N | Mean | S.E. | N | Mean | S.E. | N | Mean | S.E. | N | Mean | S.E. | | | |
| Mammary Gl | 20 | 7.583 | 0.351 | 18 | 6.322 | 0.509 | 14 | 8.362 | 0.868 | 14 | 7.952 | 0.712 | 21 | 9.960 | 0.842 |
| Prostate | 20 | 0.708 | 0.053 | 18 | 0.762 | 0.117 | 14 | 0.577 | 0.054 | 14 | 0.740 | 0.046 | 21 | 0.716 | 0.079 |

| Table 5. ANOVA for Females | | | | | |
|----------------------------|--------|-----------|------------|--------------|--------------|
| Organ | Effect | NumDF | DenDF | FValue | ProbF |
| Mammary Gl | Group | <u>12</u> | <u>209</u> | <u>1.564</u> | <u>0.104</u> |

| Table 6. ANOCOVA for Females (Receiving Weight Covariate) | | | | | |
|---|------------------|----------|------------|---------------|--------------|
| Organ | Effect | NumDF | DenDF | FValue | ProbF |
| Mammary Gl | Group | 12 | 208 | 1.125 | 0.341 |
| Mammary Gl | Receiving Weight | <u>1</u> | <u>208</u> | <u>98.419</u> | <u>0.000</u> |

Table 7. ANOVA Comparison of Least Square Mean Organ Weights Across Dose Groups for Females

| Organ | Vehicle | | | BPA 2.5 ($\mu\text{g/kg}$) | | | BPA 8 ($\mu\text{g/kg}$) | | | BPA 25 ($\mu\text{g/kg}$) | | | BPA 80 ($\mu\text{g/kg}$) | | | BPA 260 ($\mu\text{g/kg}$) | | | BPA 840 ($\mu\text{g/kg}$) | | | BPA 2700 ($\mu\text{g/kg}$) | | |
|------------|---------|-------|-------|------------------------------|-------|-------|----------------------------|-------|-------|-----------------------------|-------|-------|-----------------------------|-------|-------|------------------------------|-------|-------|------------------------------|-------|-------|-------------------------------|-------|-------|
| | Mean | S.E. | P-val | Mean | S.E. | P-val | Mean | S.E. | P-val | Mean | S.E. | P-val | Mean | S.E. | P-val | Mean | S.E. | P-val | Mean | S.E. | P-val | Mean | S.E. | P-val |
| Mammary Gl | 0.115 | 0.012 | 0.754 | 0.115 | 0.012 | 1.000 | 0.124 | 0.012 | 0.996 | 0.092 | 0.011 | 0.530 | 0.083 | 0.011 | 0.240 | 0.100 | 0.011 | 0.897 | 0.115 | 0.011 | 1.000 | 0.101 | 0.010 | 0.901 |

Table 7. ANOVA Comparison of Least Square Mean Organ Weights Across Dose Groups for Females

| Organ | BPA 100,000 ($\mu\text{g/kg}$) | | | BPA 300,000 ($\mu\text{g/kg}$) | | | EE ₂ 0.5 ($\mu\text{g/kg}$) | | | EE ₂ 5.0 ($\mu\text{g/kg}$) | | | Naive Control | | |
|------------|----------------------------------|-------|-------|----------------------------------|-------|-------|--|-------|-------|--|-------|-------|---------------|-------|-------|
| | Mean | S.E. | P-val | Mean | S.E. | P-val | Mean | S.E. | P-val | Mean | S.E. | P-val | Mean | S.E. | P-val |
| Mammary Gl | 0.109 | 0.011 | 0.889 | 0.089 | 0.011 | 0.176 | 0.078 | 0.013 | 0.066 | 0.080 | 0.013 | 0.084 | 0.096 | 0.011 | 0.222 |

All p-values and % are relative to the control group, except p-values for the linear trend presented under the control group.

Table 8. ANOCOVA Comparison of Least Square Mean Organ Weights Across Dose Groups for Females (Receiving Wt Covariate)

| Organ | Vehicle | | | BPA 2.5 ($\mu\text{g/kg}$) | | | BPA 8 ($\mu\text{g/kg}$) | | | BPA 25 ($\mu\text{g/kg}$) | | | BPA 80 ($\mu\text{g/kg}$) | | | BPA 260 ($\mu\text{g/kg}$) | | | BPA 840 ($\mu\text{g/kg}$) | | | BPA 2700 ($\mu\text{g/kg}$) | | |
|------------|---------|-------|-------|------------------------------|-------|-------|----------------------------|-------|-------|-----------------------------|-------|-------|-----------------------------|-------|-------|------------------------------|-------|-------|------------------------------|-------|-------|-------------------------------|-------|-------|
| | Mean | S.E. | P-val | Mean | S.E. | P-val | Mean | S.E. | P-val | Mean | S.E. | P-val | Mean | S.E. | P-val | Mean | S.E. | P-val | Mean | S.E. | P-val | Mean | S.E. | P-val |
| Mammary GI | 0.113 | 0.010 | 0.483 | 0.108 | 0.010 | 0.999 | 0.120 | 0.010 | 0.995 | 0.102 | 0.009 | 0.938 | 0.085 | 0.009 | 0.184 | 0.093 | 0.009 | 0.543 | 0.111 | 0.009 | 1.000 | 0.097 | 0.008 | 0.723 |

Table 8. ANOCOVA Comparison of Least Square Mean Organ Weights Across Dose Groups for Females (Receiving Wt Covariate)

| Organ | BPA 100,000 ($\mu\text{g/kg}$) | | | BPA 300,000 ($\mu\text{g/kg}$) | | | EE ₂ 0.5 ($\mu\text{g/kg}$) | | | EE ₂ 5.0 ($\mu\text{g/kg}$) | | | Naive Control | | |
|------------|----------------------------------|-------|-------|----------------------------------|-------|-------|--|-------|-------|--|-------|-------|---------------|-------|-------|
| | Mean | S.E. | P-val | Mean | S.E. | P-val | Mean | S.E. | P-val | Mean | S.E. | P-val | Mean | S.E. | P-val |
| Mammary GI | 0.099 | 0.009 | 0.471 | 0.099 | 0.009 | 0.451 | 0.088 | 0.011 | 0.161 | 0.094 | 0.011 | 0.340 | 0.091 | 0.009 | 0.101 |

All p-values and % are relative to the control group, except p-values for the linear trend presented under the control group.

Table 9. Least Square Means Treatment Percent of Vehicle for Female Organ Weight

| Analysis | Organ | Treatment | | | | | | | | | | Naïve Control |
|----------|------------|-----------------|---------------|----------------|----------------|-----------------|-----------------|------------------|---------------------|---------------------|-----------------------------|---------------|
| | | BPA 2.5 (µg/kg) | BPA 8 (µg/kg) | BPA 25 (µg/kg) | BPA 80 (µg/kg) | BPA 260 (µg/kg) | BPA 840 (µg/kg) | BPA 2700 (µg/kg) | BPA 100,000 (µg/kg) | BPA 300,000 (µg/kg) | EE ₂ 0.5 (µg/kg) | |
| ANOVA | Mammary GI | 100.0 | 107.3 | 79.7 | 72.4 | 86.9 | 100.2 | 87.6 | 94.4 | 77.4 | 67.9 | 69.5 |
| ANOCOVA | Mammary GI | 95.6 | 106.4 | 90.3 | 75.1 | 82.7 | 97.8 | 86.3 | 87.6 | 87.5 | 78.2 | 83.6 |

Table 10. Unadjusted P-values for Female Organ Weight

| Analysis | Organ | Treatment | | | | | | | | | | Naïve Control |
|----------|------------|-----------------|---------------|----------------|----------------|-----------------|-----------------|------------------|---------------------|---------------------|-----------------------------|---------------|
| | | BPA 2.5 (µg/kg) | BPA 8 (µg/kg) | BPA 25 (µg/kg) | BPA 80 (µg/kg) | BPA 260 (µg/kg) | BPA 840 (µg/kg) | BPA 2700 (µg/kg) | BPA 100,000 (µg/kg) | BPA 300,000 (µg/kg) | EE ₂ 0.5 (µg/kg) | |
| ANOVA | Mammary GI | 0.998 | 0.618 | 0.144 | 0.053 | 0.357 | 0.990 | 0.361 | 0.687 | 0.100 | 0.036 | 0.046 |
| ANOCOVA | Mammary GI | 0.720 | 0.602 | 0.410 | 0.039 | 0.149 | 0.850 | 0.229 | 0.295 | 0.280 | 0.091 | 0.204 |

Statistical Analysis of Organ Weights on PND 4

Table 11. ANOVA for Males

| Organ | Effect | NumDF | DenDF | FValue | ProbF |
|------------|--------|-------|-------|--------|--------------|
| Mammary Gl | Group | 12 | 227 | 2.355 | 0.007 |
| Prostate | Group | 12 | 226 | 0.573 | 0.863 |

Table 12. ANOCOVA for Males (Receiving Weight Covariate)

| Organ | Effect | NumDF | DenDF | FValue | ProbF |
|------------|------------------|-------|-------|---------|--------------|
| Mammary Gl | Group | 12 | 226 | 1.031 | 0.421 |
| Mammary Gl | Receiving Weight | 1 | 226 | 118.956 | 0.000 |
| Prostate | Group | 12 | 225 | 0.664 | 0.785 |
| Prostate | Receiving Weight | 1 | 225 | 7.904 | 0.005 |

Table 13. ANOVA Comparison of Least Square Mean Organ Weights Across Dose Groups for Males

| Organ | Vehicle | | | BPA 2.5 ($\mu\text{g/kg}$) | | | BPA 8 ($\mu\text{g/kg}$) | | | BPA 25 ($\mu\text{g/kg}$) | | | BPA 80 ($\mu\text{g/kg}$) | | | BPA 260 ($\mu\text{g/kg}$) | | | BPA 840 ($\mu\text{g/kg}$) | | | BPA 2700 ($\mu\text{g/kg}$) | | |
|------------|---------|-------|-------|------------------------------|-------|-------|----------------------------|-------|-------|-----------------------------|-------|-------|-----------------------------|-------|-------|------------------------------|-------|-------|------------------------------|-------|-------|-------------------------------|-------|-------|
| | Mean | S.E. | P-val | Mean | S.E. | P-val | Mean | S.E. | P-val | Mean | S.E. | P-val | Mean | S.E. | P-val | Mean | S.E. | P-val | Mean | S.E. | P-val | Mean | S.E. | P-val |
| Mammary GI | 0.097 | 0.009 | 0.537 | 0.095 | 0.008 | 1.000 | 0.101 | 0.009 | 1.000 | 0.105 | 0.009 | 0.982 | 0.095 | 0.008 | 1.000 | 0.105 | 0.009 | 0.985 | 0.107 | 0.009 | 0.959 | 0.092 | 0.008 | 0.999 |
| Prostate | 0.007 | 0.001 | 0.685 | 0.007 | 0.001 | 1.000 | 0.007 | 0.001 | 1.000 | 0.008 | 0.001 | 0.897 | 0.007 | 0.001 | 1.000 | 0.007 | 0.001 | 1.000 | 0.007 | 0.001 | 0.999 | 0.008 | 0.001 | 0.993 |

Table 13. ANOVA Comparison of Least Square Mean Organ Weights Across Dose Groups for Male S

| Organ | BPA 100,000 ($\mu\text{g/kg}$) | | | BPA 300,000 ($\mu\text{g/kg}$) | | | EE ₂ 0.5 ($\mu\text{g/kg}$) | | | EE ₂ 5.0 ($\mu\text{g/kg}$) | | | Naïve Control | | |
|------------|----------------------------------|-------|-------|----------------------------------|-------|-------|--|-------|-------|--|-------|-------|---------------|-------|-------|
| | Mean | S.E. | P-val | Mean | S.E. | P-val | Mean | S.E. | P-val | Mean | S.E. | P-val | Mean | S.E. | P-val |
| Mammary GI | 0.081 | 0.008 | 0.295 | 0.062 | 0.009 | 0.009 | 0.090 | 0.010 | 0.795 | 0.085 | 0.010 | 0.550 | 0.114 | 0.008 | 0.168 |
| Prostate | 0.007 | 0.001 | 0.908 | 0.007 | 0.001 | 0.887 | 0.006 | 0.001 | 0.541 | 0.008 | 0.001 | 0.773 | 0.008 | 0.001 | 0.299 |

All p-values and % are relative to the control group, except p-values for the linear trend presented under the control group.

| Table 14. ANOCOVA Comparison of Least Square Mean Organ Weights Across Dose Groups for Males (Receiving Wt Covariate) | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---------|-------|-------|-------------------------------------|-------|-------|-----------------------------------|-------|-------|------------------------------------|-------|-------|------------------------------------|-------|-------|-------------------------------------|-------|-------|-------------------------------------|-------|-------|--------------------------------------|-------|-------|
| Organ | Vehicle | | | BPA 2.5 ($\mu\text{g}/\text{kg}$) | | | BPA 8 ($\mu\text{g}/\text{kg}$) | | | BPA 25 ($\mu\text{g}/\text{kg}$) | | | BPA 80 ($\mu\text{g}/\text{kg}$) | | | BPA 260 ($\mu\text{g}/\text{kg}$) | | | BPA 840 ($\mu\text{g}/\text{kg}$) | | | BPA 2700 ($\mu\text{g}/\text{kg}$) | | |
| | Mean | S.E. | P-val | Mean | S.E. | P-val | Mean | S.E. | P-val | Mean | S.E. | P-val | Mean | S.E. | P-val | Mean | S.E. | P-val | Mean | S.E. | P-val | | | |
| Mammary GI | 0.096 | 0.007 | 0.603 | 0.095 | 0.007 | 1.000 | 0.092 | 0.007 | 0.999 | 0.102 | 0.007 | 0.985 | 0.094 | 0.007 | 1.000 | 0.103 | 0.007 | 0.977 | 0.099 | 0.007 | 1.000 | 0.092 | 0.007 | 0.999 |
| Prostate | 0.007 | 0.001 | 0.635 | 0.007 | 0.001 | 1.000 | 0.007 | 0.001 | 1.000 | 0.008 | 0.001 | 0.911 | 0.007 | 0.001 | 1.000 | 0.007 | 0.001 | 1.000 | 0.006 | 0.001 | 0.992 | 0.008 | 0.001 | 0.991 |

| Table 14. ANOCOVA Comparison of Least Square Mean Organ Weights Across Dose Groups for Males (Receiving Wt Covariate) | | | | | | | | | | | | | | | |
|---|---|-------|-------|---|-------|-------|---|-------|-------|---|-------|-------|---------------|-------|-------|
| Organ | BPA 100,000 ($\mu\text{g}/\text{kg}$) | | | BPA 300,000 ($\mu\text{g}/\text{kg}$) | | | EE ₂ 0.5 ($\mu\text{g}/\text{kg}$) | | | EE ₂ 5.0 ($\mu\text{g}/\text{kg}$) | | | Naïve Control | | |
| | Mean | S.E. | P-val | Mean | S.E. | P-val | Mean | S.E. | P-val | Mean | S.E. | P-val | Mean | S.E. | P-val |
| Mammary GI | 0.087 | 0.007 | 0.537 | 0.080 | 0.007 | 0.186 | 0.093 | 0.008 | 0.932 | 0.091 | 0.008 | 0.869 | 0.108 | 0.007 | 0.224 |
| Prostate | 0.008 | 0.001 | 0.801 | 0.008 | 0.001 | 0.580 | 0.006 | 0.001 | 0.599 | 0.008 | 0.001 | 0.646 | 0.008 | 0.001 | 0.353 |

All p-values and % are relative to the control group, except p-values for the linear trend presented under the control group.

Table 15. Least Square Means Treatment Percent of Vehicle for Male Organ Weight

| Analysis | Organ | BPA 2.5 (µg/kg) | BPA 8 (µg/kg) | BPA 25 (µg/kg) | BPA 80 (µg/kg) | BPA 260 (µg/kg) | BPA 840 (µg/kg) | BPA 2700 (µg/kg) | BPA 100,000 (µg/kg) | BPA 300,000 (µg/kg) | EE ₂ 0.5 (µg/kg) | EE ₂ 5.0 (µg/kg) | Naïve Control |
|----------|------------|--------------------|------------------|-------------------|-------------------|--------------------|--------------------|---------------------|---------------------------|---------------------------|--------------------------------|--------------------------------|------------------|
| ANOVA | Mammary GI | 97.6 | 104.0 | 108.1 | 97.8 | 107.8 | 109.5 | 95.0 | 83.4 | 64.1 | 92.4 | 87.5 | 116.7 |
| | Prostate | 96.7 | 102.2 | 112.8 | 98.5 | 99.7 | 94.4 | 107.3 | 104.9 | 105.6 | 86.0 | 108.9 | 113.9 |
| ANOCOVA | Mammary GI | 98.3 | 95.9 | 106.4 | 98.1 | 106.9 | 103.0 | 95.9 | 90.5 | 83.1 | 96.6 | 95.1 | 112.1 |
| | Prostate | 96.9 | 99.4 | 112.2 | 98.6 | 99.4 | 92.2 | 107.7 | 107.4 | 112.3 | 87.4 | 111.6 | 112.3 |

Table 16. Unadjusted P-values for Male Organ Weight

| Analysis | Organ | BPA 2.5 (µg/kg) | BPA 8 (µg/kg) | BPA 25 (µg/kg) | BPA 80 (µg/kg) | BPA 260 (µg/kg) | BPA 840 (µg/kg) | BPA 2700 (µg/kg) | BPA 100,000 (µg/kg) | BPA 300,000 (µg/kg) | EE ₂ 0.5 (µg/kg) | EE ₂ 5.0 (µg/kg) | Naïve Control |
|----------|------------|--------------------|------------------|-------------------|-------------------|--------------------|--------------------|---------------------|---------------------------|---------------------------|--------------------------------|--------------------------------|------------------|
| ANOVA | Mammary GI | 0.843 | 0.754 | 0.517 | 0.854 | 0.531 | 0.450 | 0.682 | 0.175 | 0.005 | 0.573 | 0.354 | 0.168 |
| | Prostate | 0.804 | 0.877 | 0.356 | 0.911 | 0.983 | 0.692 | 0.588 | 0.716 | 0.685 | 0.347 | 0.549 | 0.299 |
| ANOCOVA | Mammary GI | 0.865 | 0.697 | 0.532 | 0.850 | 0.499 | 0.769 | 0.680 | 0.344 | 0.107 | 0.756 | 0.660 | 0.224 |
| | Prostate | 0.816 | 0.966 | 0.373 | 0.917 | 0.963 | 0.576 | 0.566 | 0.579 | 0.377 | 0.392 | 0.431 | 0.353 |