NTP Historical Controls Report

By Route and Vehicle

Wistar Han RATS

November 2014
This report shows the tumor rates of control group animals from selected studies. The studies used are shown on the Study Summary page.

This report is broken up into sections based on the route and vehicle used to deliver the chemical. The Table of Contents on Page 3 shows the different Route/Vehicle combinations. To see the data from all routes and vehicles combined into one set, you must run the "All Routes" report.

The individual tumor rates shown on the data pages of the report relate to the Study Summary page as follows: the tumor rates are shown in the same order as the Study Summary page, except that they are grouped horizontally in sets of three, with the males in the first set of three and the females in the second set. For example if the study summary showed the studies like this:

<table>
<thead>
<tr>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>M1</td>
<td>F1</td>
</tr>
<tr>
<td>M2</td>
<td>F2</td>
</tr>
<tr>
<td>M3</td>
<td>F3</td>
</tr>
<tr>
<td>M4</td>
<td>F4</td>
</tr>
<tr>
<td>M5</td>
<td>F5</td>
</tr>
</tbody>
</table>

the data would be shown as:

<table>
<thead>
<tr>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>M1</td>
<td>F1</td>
</tr>
<tr>
<td>M2</td>
<td>F2</td>
</tr>
<tr>
<td>M3</td>
<td>F3</td>
</tr>
<tr>
<td>M4</td>
<td>F4</td>
</tr>
<tr>
<td>M5</td>
<td>F5</td>
</tr>
</tbody>
</table>

Directly beneath the individual tumor rates on the data pages are the overall totals for that tumor/site combination. This includes the total tumors/animals, the overall mean (in parentheses), the mean of the study means, and the standard deviation of the study means.

Studies with no control animals of a particular gender are listed on the summary page with the Number of Animals shown as zero and the Start Date and Length of Study shown as “N/A”. On the data pages there are blank spaces where tumor rates for these studies would normally be found, so that the male and female rates for the remaining studies can be easily compared.
# Table of Contents

<table>
<thead>
<tr>
<th>Route</th>
<th>Vehicle</th>
<th>Page Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>GAVAGE</td>
<td>CORN OIL</td>
<td>4</td>
</tr>
<tr>
<td>GAVAGE</td>
<td>WATER</td>
<td>33</td>
</tr>
<tr>
<td>INHALATION</td>
<td>AIR</td>
<td>62</td>
</tr>
</tbody>
</table>
### Study Summary

<table>
<thead>
<tr>
<th>Laboratory Name</th>
<th>Study Number</th>
<th>Study Start Date</th>
<th>Length of Study in Days</th>
<th>Number of Animals Total and (#/Cage)</th>
<th>Number Surviving and (Mean Life Span)</th>
<th>Maximum Mean Weekly Body Weight</th>
<th>Chemical</th>
</tr>
</thead>
<tbody>
<tr>
<td>Southern Research Institute</td>
<td>052020903</td>
<td>08/26/08</td>
<td>729</td>
<td>49(3)</td>
<td>36(671)</td>
<td>673.4</td>
<td>Pentabromodiphenyl oxide (technical) (DE 71)</td>
</tr>
<tr>
<td>Battelle Columbus Laboratory</td>
<td>052032003</td>
<td>07/25/07</td>
<td>727</td>
<td>50(3)</td>
<td>33(642)</td>
<td>662.9</td>
<td>Tetrabromobisphenol A</td>
</tr>
<tr>
<td>Southern Research Institute</td>
<td>052020903</td>
<td>08/26/08</td>
<td>728</td>
<td>50(5)</td>
<td>37(678)</td>
<td>389.6</td>
<td>Pentabromodiphenyl oxide (technical) (DE 71)</td>
</tr>
<tr>
<td>Battelle Columbus Laboratory</td>
<td>052032003</td>
<td>07/26/07</td>
<td>728</td>
<td>50(5)</td>
<td>34(678)</td>
<td>375.2</td>
<td>Tetrabromobisphenol A</td>
</tr>
</tbody>
</table>

NOTE: The text on page 2 ("Report Description") describes how the studies listed here are displayed on the data pages that follow.
### Tumor Incidence for Selected Control Animal Groups

**Species:** RATS  
**Strain:** Wistar Han  
**Route:** GAVAGE  
**Vehicle:** CORN OIL

**Length of Study:** CHRONIC  
**Report Date:** 11/11/2014

#### Male

<table>
<thead>
<tr>
<th>#All Organs:</th>
<th>Total</th>
<th>Mean</th>
<th>SD</th>
<th>Overall Incidence</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benign Tumors</td>
<td>33/49 (67%)</td>
<td>30/50 (60%)</td>
<td>37/50 (74%)</td>
<td>38/50 (76%)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Overall Incidence</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean 63.67%</td>
<td>SD 5.2%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Overall Incidence</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean 75%</td>
<td>SD 1.41%</td>
</tr>
</tbody>
</table>

#### Female

<table>
<thead>
<tr>
<th>#All Organs:</th>
<th>Total</th>
<th>Mean</th>
<th>SD</th>
<th>Overall Incidence</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benign Tumors</td>
<td>13/49 (27%)</td>
<td>8/50 (16%)</td>
<td>10/50 (20%)</td>
<td>10/50 (20%)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Overall Incidence</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean 21.27%</td>
<td>SD 7.45%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Overall Incidence</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean 20%</td>
<td>SD 0%</td>
</tr>
</tbody>
</table>

#### Male

<table>
<thead>
<tr>
<th>#All Organs:</th>
<th>Total</th>
<th>Mean</th>
<th>SD</th>
<th>Overall Incidence</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Malignant Tumors</td>
<td>36/49 (73%)</td>
<td>34/50 (68%)</td>
<td>40/50 (80%)</td>
<td>40/50 (80%)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Overall Incidence</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean 70.73%</td>
<td>SD 3.87%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Overall Incidence</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean 80%</td>
<td>SD 0%</td>
</tr>
</tbody>
</table>

#### Female

<table>
<thead>
<tr>
<th>#All Organs:</th>
<th>Total</th>
<th>Mean</th>
<th>SD</th>
<th>Overall Incidence</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hemangioma</td>
<td>1/49 (2%)</td>
<td>1/50 (2%)</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Overall Incidence</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean 2.02%</td>
<td>SD 0.03%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Overall Incidence</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean 0%</td>
<td>SD 0%</td>
</tr>
</tbody>
</table>

#### Male

<table>
<thead>
<tr>
<th>#All Organs:</th>
<th>Total</th>
<th>Mean</th>
<th>SD</th>
<th>Overall Incidence</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hemangiosarcoma</td>
<td>8/49 (16%)</td>
<td>3/50 (6%)</td>
<td>2/50 (4%)</td>
<td>2/50 (4%)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Overall Incidence</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean 11.16%</td>
<td>SD 7.3%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Overall Incidence</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean 4%</td>
<td>SD 0%</td>
</tr>
</tbody>
</table>

#### Female

<table>
<thead>
<tr>
<th>#All Organs:</th>
<th>Total</th>
<th>Mean</th>
<th>SD</th>
<th>Overall Incidence</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hemangiosarcoma or Hemangioma</td>
<td>9/49 (18%)</td>
<td>4/50 (8%)</td>
<td>2/50 (4%)</td>
<td>2/50 (4%)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Overall Incidence</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean 13.18%</td>
<td>SD 7.33%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Overall Incidence</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean 4%</td>
<td>SD 0%</td>
</tr>
</tbody>
</table>

### Notes:
- #: Denominator is number of animals necropsied
- *: Denominator is number of animals with tissues examined microscopically
## Tumor Incidence for Selected Control Animal Groups

**Species:** RATS  
**Route:** GAVAGE  
**Vehicle:** CORN OIL  
**Strain:** Wistar Han  
**Length of Study:** CHRONIC

<table>
<thead>
<tr>
<th>All Organs</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Histiocytic Sarcoma</td>
<td>0/49 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total: 0/99 (0%)</td>
<td>Mean: 0%</td>
</tr>
<tr>
<td>Leukemia: Lymphocytic, Monocytic, Mononuclear, or Undifferentiated</td>
<td>1/49 (2%)</td>
<td>1/50 (2%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total: 2/99 (2.02%)</td>
<td>Mean: 2.02%</td>
</tr>
<tr>
<td>Malignant Lymphoma: Histiocytic, Lymphocytic, Mixed, NOS, or Undifferentiated Cell Type</td>
<td>0/49 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total: 0/99 (0%)</td>
<td>Mean: 0%</td>
</tr>
<tr>
<td>Mesothelioma: Benign, Malignant, NOS</td>
<td>0/49 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total: 0/99 (0%)</td>
<td>Mean: 0%</td>
</tr>
<tr>
<td>Mesothelioma: Malignant</td>
<td>0/49 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total: 0/99 (0%)</td>
<td>Mean: 0%</td>
</tr>
<tr>
<td>Osteoma</td>
<td>0/49 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total: 0/99 (0%)</td>
<td>Mean: 0%</td>
</tr>
</tbody>
</table>

*: Denominator is number of animals with tissues examined microscopically  
#: Denominator is number of animals necropsied
**Toxicology Data Management System**

**Contract/Lab:** All Laboratories  
**Species:** RATS  
**Strain:** Wistar Han  
**Length of Study:** CHRONIC  
**Route:** GAVAGE  
**Vehicle:** CORN OIL  

**Report Date:** 11/11/2014

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### Tumor Incidence for Selected Control Animal Groups

<table>
<thead>
<tr>
<th>Organ Type</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Overall Incidence</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>0/99 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Mean</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>SD</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Total</td>
<td>1/100 (1%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Mean</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>SD</td>
<td>1.41%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>All Organs:</strong> Osteosarcoma</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>0/49 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Mean</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>SD</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>1/50 (2%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Mean</td>
<td>2%</td>
<td>1%</td>
</tr>
<tr>
<td>SD</td>
<td>1.41%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>All Organs:</strong> Osteosarcoma or Osteoma</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>0/49 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Mean</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>SD</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>1/50 (2%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Mean</td>
<td>2%</td>
<td>1%</td>
</tr>
<tr>
<td>SD</td>
<td>1.41%</td>
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</tbody>
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<table>
<thead>
<tr>
<th><strong>Adrenal Cortex:</strong> Adenoma</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>0/49 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Mean</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>SD</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>1/50 (2%)</td>
<td>1/50 (2%)</td>
</tr>
<tr>
<td>Mean</td>
<td>2%</td>
<td>2%</td>
</tr>
<tr>
<td>SD</td>
<td>0%</td>
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</table>

<table>
<thead>
<tr>
<th><strong>Adrenal Cortex:</strong> Carcinoma</th>
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<tbody>
<tr>
<td>Total</td>
<td>1/49 (2%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Mean</td>
<td>1.02%</td>
<td>0%</td>
</tr>
<tr>
<td>SD</td>
<td>1.44%</td>
<td>0%</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>1/100 (1%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Mean</td>
<td>1%</td>
<td>0%</td>
</tr>
<tr>
<td>SD</td>
<td>1.41%</td>
<td>0%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Adrenal Medulla:</strong> Pheochromocytoma Benign</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>0/49 (0%)</td>
<td>0/49 (0%)</td>
</tr>
<tr>
<td>Mean</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>SD</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>3/99 (3.03%)</td>
<td>2/49 (4%)</td>
</tr>
<tr>
<td>Mean</td>
<td>3.04%</td>
<td>3.04%</td>
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<td>SD</td>
<td>1.47%</td>
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</table>

<table>
<thead>
<tr>
<th><strong>Adrenal Medulla:</strong> Pheochromocytoma Complex</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>0/49 (0%)</td>
<td>0/49 (0%)</td>
</tr>
<tr>
<td>Mean</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>SD</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>1/99 (1.01%)</td>
<td>0/49 (0%)</td>
</tr>
<tr>
<td>Mean</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>SD</td>
<td>1.41%</td>
<td></td>
</tr>
</tbody>
</table>

*: Denominator is number of animals with tissues examined microscopically
#: Denominator is number of animals necropsied
### Tumor Incidence for Selected Control Animal Groups

**Species:** RATS  
**Route:** GAVAGE  
**Vehicle:** CORN OIL  
**Length of Study:** CHRONIC  
**Report Date:** 11/11/2014

<table>
<thead>
<tr>
<th>Tissue Type</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Adrenal Medulla:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pheochromocytoma: Malignant</td>
<td>1/49 (2%)</td>
<td>0/49 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 1/98 (1.02%)</td>
<td>Mean 1.02%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pheochromocytoma: Benign, Complex, Malignant, NOS</td>
<td>1/49 (2%)</td>
<td>0/49 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 1/98 (1.02%)</td>
<td>Mean 1.02%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Blood Vessel:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hemangiosarcoma</td>
<td>0/49 (0%)</td>
<td>1/50 (2%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 0/99 (0%)</td>
<td>Mean 0%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Bone Marrow:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hemangiosarcoma</td>
<td>0/49 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 0/99 (0%)</td>
<td>Mean 0%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Bone:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Osteoma</td>
<td>0/49 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 0/99 (0%)</td>
<td>Mean 0%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Osteosarcoma</td>
<td>0/49 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 1/99 (1%)</td>
<td>Mean 1%</td>
</tr>
</tbody>
</table>

*: Denominator is number of animals with tissues examined microscopically  
#: Denominator is number of animals necropsied
<table>
<thead>
<tr>
<th>#Bone:</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>#Bone:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Osteosarcoma or Osteoma</td>
<td>0/49 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 0/99 (0%)</td>
<td>Mean 0% SD 0%</td>
</tr>
<tr>
<td></td>
<td>Total 1/100 (1%)</td>
<td>Mean 1% SD 1.41%</td>
</tr>
<tr>
<td>Route: GAVAGE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>#Bone:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sarcoma</td>
<td>0/49 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 0/99 (0%)</td>
<td>Mean 0% SD 0%</td>
</tr>
<tr>
<td></td>
<td>Total 0/100 (0%)</td>
<td>Mean 0% SD 0%</td>
</tr>
<tr>
<td>Vehicle: CORN OIL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>*Brain:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Glioma</td>
<td>0/49 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 0/99 (0%)</td>
<td>Mean 0% SD 0%</td>
</tr>
<tr>
<td></td>
<td>Total 0/100 (0%)</td>
<td>Mean 0% SD 0%</td>
</tr>
<tr>
<td>Strain: Wistar Han</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 1/99 (1.01%)</td>
<td>Mean 1.02% SD 1.44%</td>
</tr>
<tr>
<td></td>
<td>Total 0/100 (0%)</td>
<td>Mean 0% SD 0%</td>
</tr>
<tr>
<td>*: Denominator is number of animals with tissues examined microscopically</td>
<td></td>
<td></td>
</tr>
<tr>
<td>#: Denominator is number of animals necropsied</td>
<td></td>
<td></td>
</tr>
<tr>
<td>*Brain:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Granular Cell Tumor Benign</td>
<td>1/49 (2%)</td>
<td>1/50 (2%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 2/99 (2.02%)</td>
<td>Mean 2.02% SD 0.03%</td>
</tr>
<tr>
<td></td>
<td>Total 0/100 (0%)</td>
<td>Mean 0% SD 0%</td>
</tr>
<tr>
<td>*Brain:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Granular Cell Tumor Malignant</td>
<td>0/49 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 0/99 (0%)</td>
<td>Mean 0% SD 0%</td>
</tr>
<tr>
<td></td>
<td>Total 0/100 (0%)</td>
<td>Mean 0% SD 0%</td>
</tr>
</tbody>
</table>
### Tumor Incidence for Selected Control Animal Groups

**Species:** RATS  
**Strain:** Wistar Han  
**Vehicle:** CORN OIL  
**Length of Study:** CHRONIC

**Report Date:** 11/11/2014

#### Route: GAVAGE

<table>
<thead>
<tr>
<th><strong>Tissue</strong></th>
<th><strong>Male</strong></th>
<th><strong>Female</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>*Brain: Meningioma Malignant</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0/49 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 0/99 (0%)</td>
<td>Mean 0% SD 0%</td>
</tr>
<tr>
<td></td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
</tr>
</tbody>
</table>

#### *Brain: Meningioma: Benign, Malignant, NOS*

<table>
<thead>
<tr>
<th><strong>Tissue</strong></th>
<th><strong>Male</strong></th>
<th><strong>Female</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0/49 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 0/99 (0%)</td>
<td>Mean 0% SD 0%</td>
</tr>
<tr>
<td></td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
</tr>
</tbody>
</table>

#### *Brain: Oligodendroglioma, Glioma, or Astrocytoma*

<table>
<thead>
<tr>
<th><strong>Tissue</strong></th>
<th><strong>Male</strong></th>
<th><strong>Female</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1/49 (2%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 1/99 (1.01%)</td>
<td>Mean 1.02% SD 1.44%</td>
</tr>
<tr>
<td></td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
</tr>
</tbody>
</table>

#### *Clitoral/Preputial Gland: Carcinoma*

<table>
<thead>
<tr>
<th><strong>Tissue</strong></th>
<th><strong>Male</strong></th>
<th><strong>Female</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1/49 (2%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 1/99 (1.01%)</td>
<td>Mean 1.02% SD 1.44%</td>
</tr>
<tr>
<td></td>
<td>0/49 (0%)</td>
<td>0/50 (0%)</td>
</tr>
</tbody>
</table>

#### *Clitoral/Preputial Gland: Carcinoma or Adenoma*

<table>
<thead>
<tr>
<th><strong>Tissue</strong></th>
<th><strong>Male</strong></th>
<th><strong>Female</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1/49 (2%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 1/99 (1.01%)</td>
<td>Mean 1.02% SD 1.44%</td>
</tr>
<tr>
<td></td>
<td>0/49 (0%)</td>
<td>1/50 (2%)</td>
</tr>
</tbody>
</table>

#### *Heart: Schwannoma Benign*

<table>
<thead>
<tr>
<th><strong>Tissue</strong></th>
<th><strong>Male</strong></th>
<th><strong>Female</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0/49 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 0/99 (0%)</td>
<td>Mean 0% SD 0%</td>
</tr>
<tr>
<td></td>
<td>0/50 (0%)</td>
<td>1/50 (2%)</td>
</tr>
</tbody>
</table>

*: Denominator is number of animals with tissues examined microscopically  
#: Denominator is number of animals necropsied
<table>
<thead>
<tr>
<th>Tumor Type</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Heart:</em> Schwannoma NOS</td>
<td>0/49 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 0/99 (0%)</td>
<td>Mean 0%  SD 0%</td>
</tr>
<tr>
<td>#Intestine Small: Duodenum: Fibroma</td>
<td>1/49 (2%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 1/99 (1.01%)</td>
<td>Mean 1.02% SD 1.44%</td>
</tr>
<tr>
<td>#Intestine Small: Duodenum: Leiomyosarcoma</td>
<td>0/49 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 0/99 (0%)</td>
<td>Mean 0%  SD 0%</td>
</tr>
<tr>
<td>#Intestine Small: Jejunum: Leiomyoma</td>
<td>0/49 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 0/99 (0%)</td>
<td>Mean 0%  SD 0%</td>
</tr>
<tr>
<td>#Intestine Small: Jejunum: Leiomyosarcoma</td>
<td>0/49 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 0/99 (0%)</td>
<td>Mean 0%  SD 0%</td>
</tr>
<tr>
<td>#Intestine Small: Site Unspecified: Fibroma</td>
<td>1/49 (2%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 1/99 (1.01%)</td>
<td>Mean 1.02% SD 1.44%</td>
</tr>
</tbody>
</table>

*: Denominator is number of animals with tissues examined microscopically
#: Denominator is number of animals necropsied
<table>
<thead>
<tr>
<th>Tumor Incidence for Selected Control Animal Groups</th>
</tr>
</thead>
<tbody>
<tr>
<td>Species: RATS</td>
</tr>
<tr>
<td>Strain: Wistar Han</td>
</tr>
<tr>
<td>Route: GAVAGE</td>
</tr>
<tr>
<td>Vehicle: CORN OIL</td>
</tr>
<tr>
<td>Length of Study: CHRONIC</td>
</tr>
<tr>
<td><strong>Overall Incidence</strong></td>
</tr>
<tr>
<td><strong>Male</strong></td>
</tr>
<tr>
<td>Total: 0/99 (0%)</td>
</tr>
<tr>
<td>Mean: 0%</td>
</tr>
<tr>
<td>SD: 0%</td>
</tr>
<tr>
<td><strong>Female</strong></td>
</tr>
<tr>
<td>Total: 0/100 (0%)</td>
</tr>
<tr>
<td>Mean: 0%</td>
</tr>
<tr>
<td>SD: 0%</td>
</tr>
</tbody>
</table>

| **#Intestine Small: Site Unspecified:**           |
| **Leiomyoma**                                    |
| Male: 0/49 (0%)                                  |
| Female: 0/50 (0%)                                |
| **Overall Incidence**                            |
| Male: 0/99 (0%)                                  |
| Female: 0/100 (0%)                               |
| **#Intestine Small: Site Unspecified:**          |
| **Leiomyosarcoma**                               |
| Male: 0/49 (0%)                                  |
| Female: 0/50 (0%)                                |
| **Overall Incidence**                            |
| Male: 0/99 (0%)                                  |
| Female: 1/100 (1%)                               |
| **Overall Incidence**                            |
| Male: 0/99 (0%)                                  |
| Female: 1/100 (1%)                               |

| **#Islets, Pancreatic:**                         |
| **Adenoma**                                      |
| Male: 4/49 (8%)                                  |
| Female: 1/50 (2%)                                |
| **Overall Incidence**                            |
| Male: 5/99 (5.05%)                               |
| Female: 0/100 (0%)                               |

| **#Islets, Pancreatic:**                         |
| **Carcinoma**                                    |
| Male: 2/49 (4%)                                  |
| Female: 0/50 (0%)                                |
| **Overall Incidence**                            |
| Male: 2/99 (2.02%)                               |
| Female: 0/100 (0%)                               |

| **#Islets, Pancreatic:**                         |
| **Carcinoma or Adenoma**                         |
| Male: 6/49 (12%)                                 |
| Female: 1/50 (2%)                                |
| **Overall Incidence**                            |
| Male: 7/99 (7.07%)                               |
| Female: 0/100 (0%)                               |

| **#Kidney: Pelvis and Transitional Epithelium:**|
| **Papilloma**                                    |
| Male: 0/49 (0%)                                  |
| Female: 0/50 (0%)                                |
| **Overall Incidence**                            |
| Male: 0/99 (0%)                                  |
| Female: 0/100 (0%)                               |

*: Denominator is number of animals with tissues examined microscopically
#: Denominator is number of animals necropsied
<table>
<thead>
<tr>
<th>Tumor Incidence for Selected Control Animal Groups</th>
<th>Male</th>
<th>Female</th>
<th>Overall Incidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>*Kidney: Renal Tubule: Adenoma</td>
<td>0/49 (0%)</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 0/99 (0%)</td>
<td>Mean 0%</td>
<td>SD 0%</td>
</tr>
<tr>
<td>*Kidney: Renal Tubule: Carcinoma</td>
<td>0/49 (0%)</td>
<td>0/50 (0%)</td>
<td></td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 0/99 (0%)</td>
<td>Mean 0%</td>
<td>SD 0%</td>
</tr>
<tr>
<td>*Kidney: Renal Tubule: Carcinoma or Adenoma</td>
<td>0/49 (0%)</td>
<td>0/50 (0%)</td>
<td></td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 0/99 (0%)</td>
<td>Mean 0%</td>
<td>SD 0%</td>
</tr>
<tr>
<td>*Kidney: Renal Tubule: Lipoma</td>
<td>0/49 (0%)</td>
<td>0/50 (0%)</td>
<td></td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 0/99 (0%)</td>
<td>Mean 0%</td>
<td>SD 0%</td>
</tr>
<tr>
<td>*Kidney: Renal Tubule: Liposarcoma</td>
<td>3/49 (6%)</td>
<td>0/50 (0%)</td>
<td></td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 3/99 (3.03%)</td>
<td>Mean 3.06%</td>
<td>SD 4.33%</td>
</tr>
</tbody>
</table>

*: Denominator is number of animals with tissues examined microscopically  
#: Denominator is number of animals necropsied
### Tumor Incidence for Selected Control Animal Groups

**Species:** RATS  
**Strain:** Wistar Han  
**Route:** GAVAGE  
**Vehicle:** CORN OIL  
**Length of Study:** CHRONIC  
**Report Date:** 11/11/2014

<table>
<thead>
<tr>
<th><strong>Species</strong></th>
<th><strong>Strain</strong></th>
<th><strong>Route</strong></th>
<th><strong>Vehicle</strong></th>
<th><strong>Length of Study</strong></th>
<th><strong>Report Date</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>RATS</td>
<td>Wistar Han</td>
<td>GAVAGE</td>
<td>CORN OIL</td>
<td>CHRONIC</td>
<td>11/11/2014</td>
</tr>
</tbody>
</table>

#### Male  

<table>
<thead>
<tr>
<th><strong>Tissue</strong></th>
<th><strong>Incidence</strong></th>
<th><strong>Overall Incidence</strong></th>
<th><strong>Overall Incidence</strong></th>
<th><strong>Overall Incidence</strong></th>
<th><strong>Overall Incidence</strong></th>
<th><strong>Overall Incidence</strong></th>
<th><strong>Overall Incidence</strong></th>
<th><strong>Overall Incidence</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Liver:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hepatocellular Carcinoma or Hepatocellular Adenoma</td>
<td>3/49 (6%)</td>
<td>Mean 3.06%</td>
<td>SD 4.33%</td>
<td>Total</td>
<td>3/50 (6%)</td>
<td>Mean 4%</td>
<td>SD 2.83%</td>
<td>1/50 (2%)</td>
</tr>
</tbody>
</table>

#### Female  

<table>
<thead>
<tr>
<th><strong>Tissue</strong></th>
<th><strong>Incidence</strong></th>
<th><strong>Overall Incidence</strong></th>
<th><strong>Overall Incidence</strong></th>
<th><strong>Overall Incidence</strong></th>
<th><strong>Overall Incidence</strong></th>
<th><strong>Overall Incidence</strong></th>
<th><strong>Overall Incidence</strong></th>
<th><strong>Overall Incidence</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Liver:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hepatocellular Carcinoma, Hepatocellular Adenoma, or Hepatoblastoma</td>
<td>3/49 (6%)</td>
<td>Mean 3.06%</td>
<td>SD 4.33%</td>
<td>Total</td>
<td>3/50 (6%)</td>
<td>Mean 4%</td>
<td>SD 2.83%</td>
<td>1/50 (2%)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Lung:</strong></th>
<th><strong>Incidence</strong></th>
<th><strong>Overall Incidence</strong></th>
<th><strong>Overall Incidence</strong></th>
<th><strong>Overall Incidence</strong></th>
<th><strong>Overall Incidence</strong></th>
<th><strong>Overall Incidence</strong></th>
<th><strong>Overall Incidence</strong></th>
<th><strong>Overall Incidence</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Alveolar/Bronchiolar Adenoma</td>
<td>0/49 (0%)</td>
<td>Mean 0%</td>
<td>SD 0%</td>
<td>Total</td>
<td>0/50 (0%)</td>
<td>Mean 0%</td>
<td>SD 0%</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Alveolar/Bronchiolar Carcinoma or Alveolar/Bronchiolar Adenoma</td>
<td>0/49 (0%)</td>
<td>Mean 0%</td>
<td>SD 0%</td>
<td>Total</td>
<td>0/50 (0%)</td>
<td>Mean 0%</td>
<td>SD 0%</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Lymph Node:</td>
<td>Hemangioma</td>
<td>1/49 (2%)</td>
<td>Mean 2.02%</td>
<td>SD 0.03%</td>
<td>Total</td>
<td>1/50 (2%)</td>
<td>Mean 0%</td>
<td>SD 0%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Lymph Node, Mesenteric:</strong></th>
<th><strong>Incidence</strong></th>
<th><strong>Overall Incidence</strong></th>
<th><strong>Overall Incidence</strong></th>
<th><strong>Overall Incidence</strong></th>
<th><strong>Overall Incidence</strong></th>
<th><strong>Overall Incidence</strong></th>
<th><strong>Overall Incidence</strong></th>
<th><strong>Overall Incidence</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Hemangioma</td>
<td>1/49 (2%)</td>
<td>Mean 2.02%</td>
<td>SD 0.03%</td>
<td>Total</td>
<td>1/50 (2%)</td>
<td>Mean 0%</td>
<td>SD 0%</td>
<td>0/50 (0%)</td>
</tr>
</tbody>
</table>

*: Denominator is number of animals with tissues examined microscopically  
#: Denominator is number of animals necropsied
<table>
<thead>
<tr>
<th>Tumor Incidence for Selected Control Animal Groups</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Species:</strong> RATS</td>
</tr>
<tr>
<td><strong>Strain:</strong> Wistar Han</td>
</tr>
<tr>
<td><strong>Vehicle:</strong> CORN OIL</td>
</tr>
<tr>
<td><strong>Route:</strong> GAVAGE</td>
</tr>
<tr>
<td><strong>Length of Study:</strong> CHRONIC</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>#Lymph Node, Mesenteric:</strong></td>
<td></td>
</tr>
<tr>
<td>Hemangiosarcoma</td>
<td></td>
</tr>
<tr>
<td>7/49 (14%)</td>
<td>1/50 (2%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 8/99 (8.08%)</td>
</tr>
<tr>
<td>Mean 8.14%</td>
<td>SD 8.69%</td>
</tr>
<tr>
<td>2/50 (4%)</td>
<td>1/50 (2%)</td>
</tr>
<tr>
<td><strong>#Mammary Gland:</strong></td>
<td></td>
</tr>
<tr>
<td>Adenoma</td>
<td></td>
</tr>
<tr>
<td>0/49 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 0/99 (0%)</td>
</tr>
<tr>
<td>Mean 0%</td>
<td>SD 0%</td>
</tr>
<tr>
<td>0/50 (0%)</td>
<td>4/50 (8%)</td>
</tr>
<tr>
<td><strong>#Mammary Gland:</strong></td>
<td></td>
</tr>
<tr>
<td>Carcinoma</td>
<td></td>
</tr>
<tr>
<td>0/49 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 0/99 (0%)</td>
</tr>
<tr>
<td>Mean 0%</td>
<td>SD 0%</td>
</tr>
<tr>
<td>1/50 (2%)</td>
<td>1/50 (2%)</td>
</tr>
<tr>
<td><strong>#Mammary Gland:</strong></td>
<td></td>
</tr>
<tr>
<td>Carcinoma or Adenoma</td>
<td></td>
</tr>
<tr>
<td>0/49 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 0/99 (0%)</td>
</tr>
<tr>
<td>Mean 0%</td>
<td>SD 0%</td>
</tr>
<tr>
<td>1/50 (2%)</td>
<td>4/50 (8%)</td>
</tr>
<tr>
<td><strong>#Mammary Gland:</strong></td>
<td></td>
</tr>
<tr>
<td>Fibroadenoma</td>
<td></td>
</tr>
<tr>
<td>0/49 (0%)</td>
<td>1/50 (2%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 1/99 (1.01%)</td>
</tr>
<tr>
<td>Mean 1%</td>
<td>SD 1.41%</td>
</tr>
<tr>
<td>9/50 (18%)</td>
<td>8/50 (16%)</td>
</tr>
<tr>
<td><strong>#Mammary Gland:</strong></td>
<td></td>
</tr>
<tr>
<td>Fibroma, Fibroadenoma or Adenoma</td>
<td></td>
</tr>
<tr>
<td>0/49 (0%)</td>
<td>1/50 (2%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 9/50 (18%)</td>
</tr>
<tr>
<td>Mean 18%</td>
<td>SD 1.41%</td>
</tr>
<tr>
<td>9/50 (18%)</td>
<td>12/50 (24%)</td>
</tr>
</tbody>
</table>

*: Denominator is number of animals with tissues examined microscopically
#: Denominator is number of animals necropsied
### Tumor Incidence for Selected Control Animal Groups

**Species:** RATS  
**Route:** GAVAGE  
**Vehicle:** CORN OIL  
**Strain:** Wistar Han  
**Length of Study:** CHRONIC  

<table>
<thead>
<tr>
<th>Tissue Type</th>
<th>Male</th>
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<th></th>
<th></th>
<th>Female</th>
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<tbody>
<tr>
<td><strong>#Mammary Gland:</strong></td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>Fibroma, Fibroadenoma, Carcinoma, or Adenoma</td>
<td>0/49 (0%)</td>
<td>1/50 (2%)</td>
<td>10/50 (20%)</td>
<td>12/50 (24%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total</td>
<td>1/99 (1.01%)</td>
<td>Mean 1%</td>
<td>SD 1.41%</td>
<td>Total</td>
<td>22/100 (22%)</td>
<td>Mean 22%</td>
<td>SD 2.83%</td>
</tr>
<tr>
<td><strong>#Mesentery:</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Hemangiosarcoma</td>
<td>0/49 (0%)</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Overall Incidence</td>
<td>Total</td>
<td>0/99 (0%)</td>
<td>Mean 0%</td>
<td>SD 0%</td>
<td>Total</td>
<td>0/100 (0%)</td>
<td>Mean 0%</td>
<td>SD 0%</td>
</tr>
<tr>
<td><strong>#Mesentery:</strong></td>
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<td></td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>Lipoma</td>
<td>1/49 (2%)</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Overall Incidence</td>
<td>Total</td>
<td>1/99 (1.01%)</td>
<td>Mean 1.02%</td>
<td>SD 1.44%</td>
<td>Total</td>
<td>0/100 (0%)</td>
<td>Mean 0%</td>
<td>SD 0%</td>
</tr>
<tr>
<td><strong>#Mesentery:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Schwannoma Malignant</td>
<td>0/49 (0%)</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Overall Incidence</td>
<td>Total</td>
<td>0/99 (0%)</td>
<td>Mean 0%</td>
<td>SD 0%</td>
<td>Total</td>
<td>1/100 (1%)</td>
<td>Mean 1%</td>
<td>SD 1.41%</td>
</tr>
<tr>
<td><strong>#Nose:</strong></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chondroma</td>
<td>0/49 (0%)</td>
<td>0/50 (0%)</td>
<td>1/50 (2%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Overall Incidence</td>
<td>Total</td>
<td>0/99 (0%)</td>
<td>Mean 0%</td>
<td>SD 0%</td>
<td>Total</td>
<td>1/100 (1%)</td>
<td>Mean 1%</td>
<td>SD 1.41%</td>
</tr>
<tr>
<td><strong>#Nose:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>Olfactory Neuroblastoma</td>
<td>0/49 (0%)</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
<td>1/50 (2%)</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total</td>
<td>0/99 (0%)</td>
<td>Mean 0%</td>
<td>SD 0%</td>
<td>Total</td>
<td>1/100 (1%)</td>
<td>Mean 1%</td>
<td>SD 1.41%</td>
</tr>
</tbody>
</table>

* Denominator is number of animals with tissues examined microscopically  
#: Denominator is number of animals necropsied
<table>
<thead>
<tr>
<th>Tumor Incidence for Selected Control Animal Groups</th>
</tr>
</thead>
</table>
| **Species:** Rats  
**Route:** Gavage  
**Vehicle:** Corn Oil |

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Oral Cavity (Oral Mucosa, Tongue, Pharynx, Tooth, Gingiva):</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| Squamous Cell Carcinoma | 0/49 (0%)  
0/50 (0%)  
0/50 (0%) | 0/50 (0%)  
0/50 (0%)  
0/50 (0%) | 0/99 (0%)  
Total Mean 0% SD 0% | 0/100 (0%)  
Total Mean 0% SD 0% |
| Overall Incidence |                            |                             |

| **Oral Cavity (Oral Mucosa, Tongue, Pharynx, Tooth, Gingiva):** |                            |
| Squamous Cell Carcinoma, Papilloma Squamous, or Papilloma | 0/49 (0%)  
0/50 (0%)  
0/50 (0%)  
0/50 (0%) | 0/50 (0%)  
0/50 (0%)  
0/50 (0%) | 0/99 (0%)  
Total Mean 0% SD 0% | 0/100 (0%)  
Total Mean 0% SD 0% |
| Overall Incidence |                            |                             |

| **Oral Mucosa:** |                            |
| Squamous Cell Carcinoma | 0/49 (0%)  
0/50 (0%)  
0/50 (0%)  
0/50 (0%) | 0/50 (0%)  
0/50 (0%)  
0/50 (0%)  
0/50 (0%) | 0/99 (0%)  
Total Mean 0% SD 0% | 0/100 (0%)  
Total Mean 0% SD 0% |
| Overall Incidence |                            |

| **Ovary:** |                            |
| Adenoma | 0/50 (0%)  
0/50 (0%) | 0/50 (0%)  
0/50 (0%) | 0/100 (0%)  
Total Mean 0% SD 0% |
| Overall Incidence |                            |

| **Ovary:** |                            |
| Cystadenoma | 0/50 (0%)  
0/50 (0%) | 0/50 (0%)  
0/50 (0%) | 0/100 (0%)  
Total Mean 0% SD 0% |
| Overall Incidence |                            |

| **Ovary:** |                            |
| Granulosa Cell Tumor Benign | 1/50 (2%)  
0/50 (0%) | 0/50 (0%) | 1/100 (1%)  
Total Mean 1% SD 1.41% |
| Overall Incidence |                            |

*: Denominator is number of animals with tissues examined microscopically  
#: Denominator is number of animals necropsied
<table>
<thead>
<tr>
<th>Species</th>
<th>Route</th>
<th>Vehicle</th>
</tr>
</thead>
<tbody>
<tr>
<td>RATS</td>
<td>GAVAGE</td>
<td>CORN OIL</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Strain:</th>
<th>CHRONIC</th>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Length of Study:</th>
<th>CHRONIC</th>
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</thead>
</table>

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Male</th>
<th>Female</th>
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</thead>
<tbody>
<tr>
<td>*Ovary:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Granulosa Cell Tumor Malignant</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall Incidence</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>2/100 (2%)</td>
<td>1/50 (2%)</td>
</tr>
<tr>
<td>Mean</td>
<td>2%</td>
<td></td>
</tr>
<tr>
<td>SD</td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>*Ovary:</td>
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</tr>
<tr>
<td>Granulosa Cell Tumor: Benign, Malignant, NOS</td>
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<tr>
<td>Overall Incidence</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>3/100 (3%)</td>
<td>1/50 (2%)</td>
</tr>
<tr>
<td>Mean</td>
<td>3%</td>
<td></td>
</tr>
<tr>
<td>SD</td>
<td>1.41%</td>
<td></td>
</tr>
<tr>
<td>*Ovary:</td>
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<td></td>
</tr>
<tr>
<td>Sex Cord Stromal Tumor, Benign</td>
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</tr>
<tr>
<td>Overall Incidence</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>2/100 (2%)</td>
<td>1/50 (2%)</td>
</tr>
<tr>
<td>Mean</td>
<td>2%</td>
<td></td>
</tr>
<tr>
<td>SD</td>
<td>2.83%</td>
<td></td>
</tr>
<tr>
<td>*Ovary:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tubulostromal Adenoma</td>
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</tr>
<tr>
<td>Overall Incidence</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>0/100 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Mean</td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>SD</td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>*Pancreas:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adenoma</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall Incidence</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>2/96 (2.08%)</td>
<td>1/50 (2%)</td>
</tr>
<tr>
<td>Mean</td>
<td>2.09%</td>
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</tr>
<tr>
<td>SD</td>
<td>0.12%</td>
<td></td>
</tr>
<tr>
<td>*Pancreas:</td>
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<td></td>
</tr>
<tr>
<td>Carcinoma or Adenoma</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall Incidence</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>2/96 (2.08%)</td>
<td>1/50 (2%)</td>
</tr>
<tr>
<td>Mean</td>
<td>2.09%</td>
<td></td>
</tr>
<tr>
<td>SD</td>
<td>0.12%</td>
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</tr>
</tbody>
</table>

*: Denominator is number of animals with tissues examined microscopically
#: Denominator is number of animals necropsied
<table>
<thead>
<tr>
<th>Species: RATS</th>
<th>Route: GAVAGE</th>
<th>Vehicle: CORN OIL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strain: Wistar Han</td>
<td>Length of Study: CHRONIC</td>
<td></td>
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</table>

**Tumor Incidence for Selected Control Animal Groups**

<table>
<thead>
<tr>
<th>Study Period</th>
<th>Male</th>
<th></th>
<th>Female</th>
<th></th>
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</thead>
<tbody>
<tr>
<td></td>
<td>1/97 (1.03%)</td>
<td>Mean 1.02%</td>
<td>0/48 (0%)</td>
<td>SD 1.44%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Parathyroid Gland: Adenoma</th>
<th>Male</th>
<th></th>
<th>Female</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Incidence</td>
<td>2/92 (2.17%)</td>
<td>Mean 2.13%</td>
<td>SD 3.01%</td>
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</tr>
<tr>
<td></td>
<td>1/97 (1.03%)</td>
<td>Mean 1.02%</td>
<td>SD 1.44%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Pituitary Gland: Pars Distalis or Unspecified Site: Adenoma</th>
<th>Male</th>
<th></th>
<th>Female</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Incidence</td>
<td>19/49 (39%)</td>
<td>Mean 40.39%</td>
<td>SD 2.28%</td>
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</tr>
<tr>
<td></td>
<td>23/50 (46%)</td>
<td>Mean 44%</td>
<td>SD 2.83%</td>
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</table>

<table>
<thead>
<tr>
<th>Pituitary Gland: Pars Distalis or Unspecified Site: Carcinoma or Adenoma</th>
<th>Male</th>
<th></th>
<th>Female</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Incidence</td>
<td>0/99 (0%)</td>
<td>Mean 0%</td>
<td>SD 0%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0/100 (0%)</td>
<td>Mean 0%</td>
<td>SD 0%</td>
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</table>

<table>
<thead>
<tr>
<th>Pituitary Gland: Pars Intermedia: Adenoma</th>
<th>Male</th>
<th></th>
<th>Female</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Incidence</td>
<td>0/49 (0%)</td>
<td>Mean 0%</td>
<td>SD 0%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1/50 (2%)</td>
<td>Mean 2%</td>
<td>SD 2.83%</td>
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</table>

<table>
<thead>
<tr>
<th>Pituitary Gland: Pars Intermedia: Carcinoma or Adenoma</th>
<th>Male</th>
<th></th>
<th>Female</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Overall Incidence</td>
<td>0/49 (0%)</td>
<td>Mean 0%</td>
<td>SD 0%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4/50 (8%)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*: Denominator is number of animals with tissues examined microscopically
#: Denominator is number of animals necropsied
<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>*Prostate:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adenoma</td>
<td>0/49 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 0/99 (0%)</td>
<td>Mean 0%</td>
</tr>
<tr>
<td>*Prostate:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carcinoma or Adenoma</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 0/99 (0%)</td>
<td>Mean 0%</td>
</tr>
</tbody>
</table>

| *Salivary Glands:    |                       |                       |
| Adenoma              | 1/46 (2%)             | 0/50 (0%)             |
| Overall Incidence    | Total 1/96 (1.04%)    | Mean 1.09%            | SD 1.54% |

| *Salivary Glands:    |                       |                       |
| Carcinoma            | 0/46 (0%)             | 0/50 (0%)             |
| Overall Incidence    | Total 1/96 (1.04%)    | Mean 1.09%            | SD 1.54% |

| *Salivary Glands:    |                       |                       |
| Myoepithelioma       | 0/46 (0%)             | 1/50 (2%)             |
| Overall Incidence    | Total 1/96 (1.04%)    | Mean 1%               | SD 1.41% |

*: Denominator is number of animals with tissues examined microscopically
#: Denominator is number of animals necropsied
<table>
<thead>
<tr>
<th>Tumor Type</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>*Salivary Glands:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Schwanoma Malignant</td>
<td>0/46 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>0/96 (0%)</td>
<td></td>
</tr>
<tr>
<td>Mean 0% SD 0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0/100 (0%)</td>
<td>Mean 0% SD 0%</td>
</tr>
<tr>
<td>#Seminal Vesicle:</td>
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</tr>
<tr>
<td>Adenoma</td>
<td>0/49 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>0/99 (0%)</td>
<td></td>
</tr>
<tr>
<td>Mean 0% SD 0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>#Skeletal Muscle:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hemangiosarcoma</td>
<td>1/49 (2%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>1/99 (1.01%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Mean 1.02% SD 1.44%</td>
<td>0/100 (0%)</td>
<td>Mean 0% SD 0%</td>
</tr>
<tr>
<td>#Skeletal Muscle:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sarcoma</td>
<td>0/49 (0%)</td>
<td>1/50 (2%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>1/99 (1.01%)</td>
<td>1/50 (2%)</td>
</tr>
<tr>
<td>Mean 1% SD 1.41%</td>
<td>0/100 (0%)</td>
<td>Mean 0% SD 0%</td>
</tr>
<tr>
<td>#Skin:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basal Cell Adenoma</td>
<td>1/49 (2%)</td>
<td>2/50 (4%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>3/99 (3.03%)</td>
<td>1/50 (2%)</td>
</tr>
<tr>
<td>Mean 3.02% SD 1.39%</td>
<td>1/100 (1%)</td>
<td>Mean 1% SD 1.41%</td>
</tr>
<tr>
<td>#Skin:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basal Cell Adenoma or Basosquamous Tumor Benign</td>
<td>1/49 (2%)</td>
<td>2/50 (4%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>3/99 (3.03%)</td>
<td>1/50 (2%)</td>
</tr>
<tr>
<td>Mean 3.02% SD 1.39%</td>
<td>1/100 (1%)</td>
<td>Mean 1% SD 1.41%</td>
</tr>
</tbody>
</table>

*: Denominator is number of animals with tissues examined microscopically
#: Denominator is number of animals necropsied
<table>
<thead>
<tr>
<th>Species: RATS</th>
<th>Route: GAVAGE</th>
<th>Vehicle: CORN OIL</th>
</tr>
</thead>
</table>

**Strain:** Wistar Han  
**Length of Study:** CHRONIC  
**Contract/Lab:** All Laboratories  
**Report Date:** 11/11/2014  
**Version:** Nov2014

### Tumor Incidence for Selected Control Animal Groups

<table>
<thead>
<tr>
<th>#Skin:</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>#</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Skin:</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Basal Cell Adenoma, Basosquamous Tumor Benign, or Trichoepithelioma</td>
<td>1/49 (2%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total</td>
<td>3/99 (3.03%)</td>
</tr>
<tr>
<td></td>
<td>Basal Cell Carcinoma</td>
<td>0/49 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total</td>
<td>1/99 (1.01%)</td>
</tr>
<tr>
<td></td>
<td>Basal Cell Carcinoma or Basosquamous Tumor (malignant or NOS)</td>
<td>0/49 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total</td>
<td>1/99 (1.01%)</td>
</tr>
<tr>
<td></td>
<td>Basal or Sq. Cell Carcinoma, Carcinoma, Basosq. Tumor (M or B), Basal Cell Adenoma, Adenoma, Papilloma, Sq Papilloma, Keratoacanthoma, Trichoepithelioma</td>
<td>3/49 (6%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total</td>
<td>10/99 (10.1%)</td>
</tr>
<tr>
<td></td>
<td>Fibroma</td>
<td>1/49 (2%)</td>
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<tr>
<td>Overall Incidence</td>
<td>Total</td>
<td>1/99 (1.01%)</td>
</tr>
</tbody>
</table>

*: Denominator is number of animals with tissues examined microscopically  
#: Denominator is number of animals necropsied
### Tumor Incidence for Selected Control Animal Groups

**Species:** RATS  
**Strain:** Wistar Han  
**Length of Study:** CHRONIC  
**Route:** GAVAGE  
**Vehicle:** CORN OIL

<table>
<thead>
<tr>
<th>#Skin:</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fibroma, Fibrosarcoma, Sarcoma, Myxoma, Myxosarcoma, or Fibrous Histiocytoma</td>
<td><strong>Overall Incidence</strong> Total 1/99 (1.01%) Mean 1.02% SD 1.44% Total 0/100 (0%) Mean 0% SD 0%</td>
<td><strong>Overall Incidence</strong> Total 0/50 (0%) Mean 0% SD 0% Total 0/50 (0%) Mean 0% SD 0%</td>
</tr>
<tr>
<td>#Skin: Fibrosarcoma</td>
<td><strong>Overall Incidence</strong> Total 0/99 (0%) Mean 0% SD 0% Total 0/100 (0%) Mean 0% SD 0%</td>
<td><strong>Overall Incidence</strong> Total 0/50 (0%) Mean 0% SD 0% Total 0/50 (0%) Mean 0% SD 0%</td>
</tr>
<tr>
<td>#Skin: Hamartoma</td>
<td><strong>Overall Incidence</strong> Total 0/99 (0%) Mean 0% SD 0% Total 1/100 (1%) Mean 1% SD 1.41%</td>
<td><strong>Overall Incidence</strong> Total 0/50 (0%) Mean 0% SD 0% Total 1/100 (1%) Mean 1% SD 1.41%</td>
</tr>
<tr>
<td>#Skin: Keratoacanthoma</td>
<td><strong>Overall Incidence</strong> Total 6/99 (6.06%) Mean 6.04% SD 2.77% Total 0/100 (0%) Mean 0% SD 0%</td>
<td><strong>Overall Incidence</strong> Total 0/50 (0%) Mean 0% SD 0% Total 0/50 (0%) Mean 0% SD 0%</td>
</tr>
</tbody>
</table>

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#: Denominator is number of animals necropsied
<table>
<thead>
<tr>
<th>Skin Type / Diagnoses</th>
<th>Male</th>
<th>Female</th>
<th>Overall Incidence</th>
<th>Total</th>
<th>Mean ± SD</th>
<th>Total</th>
<th>Mean ± SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lipoma</td>
<td>0/49 (0%)</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
<td>0/100 (0%)</td>
<td>Mean 0% SD 0%</td>
<td>0/50 (0%)</td>
<td>Mean 0% SD 0%</td>
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<tr>
<td>Liposarcoma</td>
<td>0/49 (0%)</td>
<td>0/50 (0%)</td>
<td>0/100 (0%)</td>
<td>0/50 (0%)</td>
<td>Mean 0% SD 0%</td>
<td>0/50 (0%)</td>
<td>Mean 0% SD 0%</td>
</tr>
<tr>
<td>Neurofibrosarcoma or Schwannoma (malignant or NOS)</td>
<td>0/49 (0%)</td>
<td>2/50 (4%)</td>
<td>2/99 (2.02%)</td>
<td>0/100 (0%)</td>
<td>Mean 2% SD 2.83%</td>
<td>0/50 (0%)</td>
<td>Mean 0% SD 0%</td>
</tr>
<tr>
<td>Neurofibrosarcoma, Neurofibroma, or Schwannoma (benign, malignant or NOS)</td>
<td>0/49 (0%)</td>
<td>2/50 (4%)</td>
<td>2/99 (2.02%)</td>
<td>0/100 (0%)</td>
<td>Mean 2% SD 2.83%</td>
<td>0/50 (0%)</td>
<td>Mean 0% SD 0%</td>
</tr>
<tr>
<td>Schwannoma Malignant</td>
<td>0/49 (0%)</td>
<td>2/50 (4%)</td>
<td>2/99 (2.02%)</td>
<td>0/100 (0%)</td>
<td>Mean 2% SD 2.83%</td>
<td>0/50 (0%)</td>
<td>Mean 0% SD 0%</td>
</tr>
<tr>
<td>Squamous Cell Carcinoma</td>
<td>0/49 (0%)</td>
<td>0/50 (0%)</td>
<td>0/99 (0%)</td>
<td>0/100 (0%)</td>
<td>Mean 0% SD 0%</td>
<td>0/50 (0%)</td>
<td>Mean 0% SD 0%</td>
</tr>
</tbody>
</table>

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Species: RATS  
Strain: Wistar Han  
Length of Study: CHRONIC  
Route: GAVAGE  
Vehicle: CORN OIL

<table>
<thead>
<tr>
<th>Tumor Incidence for Selected Control Animal Groups</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
</tr>
<tr>
<td>#Skin: Squamous Cell Carcinoma, Basal Cell Carcinoma, Basosquamous Tumor (malignant or NOS), or Carcinoma</td>
</tr>
<tr>
<td>0/49 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
</tr>
<tr>
<td>#Skin: Squamous Cell Papilloma</td>
</tr>
<tr>
<td>0/49 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
</tr>
<tr>
<td>#Skin: Squamous Cell Papilloma or Papilloma</td>
</tr>
<tr>
<td>0/49 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
</tr>
<tr>
<td>#Skin: Squamous Cell Papilloma, Papilloma, Squamous Cell Carcinoma or Keratoacanthoma</td>
</tr>
<tr>
<td>2/49 (4%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
</tr>
<tr>
<td>#Skin: Squamous Cell Papilloma, Papilloma, or Keratoacanthoma</td>
</tr>
<tr>
<td>2/49 (4%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
</tr>
<tr>
<td>#Skin: Sebaceous Gland: Adenoma</td>
</tr>
<tr>
<td>0/49 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>Tumor Incidence for Selected Control Animal Groups</th>
</tr>
</thead>
</table>

**Species:** RATS  
**Strain:** Wistar Han  
**Length of Study:** CHRONIC  
**Route:** GAVAGE  
**Vehicle:** CORN OIL

### Male

<table>
<thead>
<tr>
<th>Tissue Type</th>
<th>Tumor Incidence</th>
<th>Mean</th>
<th>SD</th>
<th>Overall Incidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin: Sebaceous Gland: Carcinoma or Adenoma</td>
<td>0/49 (0%)</td>
<td>0/50 (0%)</td>
<td>Total 0/100 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 0/99 (0%)</td>
<td>Mean 0%</td>
<td>SD 0%</td>
<td>Total 0/100 (0%)</td>
</tr>
<tr>
<td>Spleen: Hemangiosarcoma</td>
<td>1/47 (2%)</td>
<td>1/50 (2%)</td>
<td>Total 0/50 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 2/97 (2.06%)</td>
<td>Mean 2.06%</td>
<td>SD 0.09%</td>
<td>Total 0/100 (0%)</td>
</tr>
<tr>
<td>Stomach, Forestomach: Fibrosarcoma</td>
<td>0/49 (0%)</td>
<td>0/50 (0%)</td>
<td>Total 0/50 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 1/99 (1.01%)</td>
<td>Mean 1.02%</td>
<td>SD 1.44%</td>
<td>Total 0/100 (0%)</td>
</tr>
<tr>
<td>Stomach, Forestomach: Leiomyoma</td>
<td>0/49 (0%)</td>
<td>0/50 (0%)</td>
<td>Total 0/50 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 0/99 (0%)</td>
<td>Mean 0%</td>
<td>SD 0%</td>
<td>Total 0/100 (0%)</td>
</tr>
<tr>
<td>Stomach, Forestomach: Leiomyosarcoma</td>
<td>0/49 (0%)</td>
<td>0/50 (0%)</td>
<td>Total 0/50 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 0/99 (0%)</td>
<td>Mean 0%</td>
<td>SD 0%</td>
<td>Total 0/100 (0%)</td>
</tr>
<tr>
<td>Stomach, Forestomach: Sarcoma</td>
<td>0/49 (0%)</td>
<td>0/50 (0%)</td>
<td>Total 0/50 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 0/99 (0%)</td>
<td>Mean 0%</td>
<td>SD 0%</td>
<td>Total 0/100 (0%)</td>
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### Female

<table>
<thead>
<tr>
<th>Tissue Type</th>
<th>Tumor Incidence</th>
<th>Mean</th>
<th>SD</th>
<th>Overall Incidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin: Sebaceous Gland: Carcinoma or Adenoma</td>
<td>0/49 (0%)</td>
<td>0/50 (0%)</td>
<td>Total 0/50 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 0/99 (0%)</td>
<td>Mean 0%</td>
<td>SD 0%</td>
<td>Total 0/100 (0%)</td>
</tr>
<tr>
<td>Spleen: Hemangiosarcoma</td>
<td>1/47 (2%)</td>
<td>1/50 (2%)</td>
<td>Total 0/50 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 2/97 (2.06%)</td>
<td>Mean 2.06%</td>
<td>SD 0.09%</td>
<td>Total 0/100 (0%)</td>
</tr>
<tr>
<td>Stomach, Forestomach: Fibrosarcoma</td>
<td>0/49 (0%)</td>
<td>0/50 (0%)</td>
<td>Total 0/50 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 1/99 (1.01%)</td>
<td>Mean 1.02%</td>
<td>SD 1.44%</td>
<td>Total 0/100 (0%)</td>
</tr>
<tr>
<td>Stomach, Forestomach: Leiomyoma</td>
<td>0/49 (0%)</td>
<td>0/50 (0%)</td>
<td>Total 0/50 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 0/99 (0%)</td>
<td>Mean 0%</td>
<td>SD 0%</td>
<td>Total 0/100 (0%)</td>
</tr>
<tr>
<td>Stomach, Forestomach: Leiomyosarcoma</td>
<td>0/49 (0%)</td>
<td>0/50 (0%)</td>
<td>Total 0/50 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 0/99 (0%)</td>
<td>Mean 0%</td>
<td>SD 0%</td>
<td>Total 0/100 (0%)</td>
</tr>
<tr>
<td>Stomach, Forestomach: Sarcoma</td>
<td>0/49 (0%)</td>
<td>0/50 (0%)</td>
<td>Total 0/50 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 0/99 (0%)</td>
<td>Mean 0%</td>
<td>SD 0%</td>
<td>Total 0/100 (0%)</td>
</tr>
</tbody>
</table>

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#: Denominator is number of animals necropsied
<table>
<thead>
<tr>
<th>Species: RATS</th>
<th>Route: GAVAGE</th>
<th>Vehicle: CORN OIL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strain: Wistar Han</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Length of Study: CHRONIC</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Tumor Incidence for Selected Control Animal Groups</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Report Date:</strong> 11/11/2014</td>
<td></td>
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<tr>
<td><strong>Version:</strong> Nov2014</td>
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<td><strong>Contract/Lab:</strong> All Laboratories</td>
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</tbody>
</table>

### Male

<table>
<thead>
<tr>
<th>#Tumor, Forestomach: Squamous Cell Carcinoma</th>
<th>0/49 (0%)</th>
<th>0/50 (0%)</th>
<th>0/50 (0%)</th>
<th>Overall Incidence Total 0/99 (0%)</th>
<th>Mean 0%</th>
<th>SD 0%</th>
</tr>
</thead>
<tbody>
<tr>
<td>#Tumor, Forestomach: Squamous Cell Carcinoma or Papilloma Squamous</td>
<td>1/49 (2%)</td>
<td>0/50 (0%)</td>
<td></td>
<td>0/50 (0%)</td>
<td>Mean 0%</td>
<td>SD 0%</td>
</tr>
<tr>
<td>#Tumor, Glandular: Fibrosarcoma</td>
<td>1/49 (2%)</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
<td>Overall Incidence Total 1/99 (1.01%)</td>
<td>Mean 1.02%</td>
<td>SD 1.44%</td>
</tr>
<tr>
<td>#Tumor, Glandular: Leiomyosarcoma</td>
<td>0/49 (0%)</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
<td>1/50 (2%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>#Tumor, Glandular: Sarcoma</td>
<td>0/49 (0%)</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
<td>Overall Incidence Total 0/99 (0%)</td>
<td>Mean 0%</td>
<td>SD 0%</td>
</tr>
</tbody>
</table>

### Female

<table>
<thead>
<tr>
<th>#Tumor, Forestomach: Squamous Cell Carcinoma</th>
<th>0/50 (0%)</th>
<th>0/50 (0%)</th>
<th>0/50 (0%)</th>
<th>Overall Incidence Total 0/100 (0%)</th>
<th>Mean 0%</th>
<th>SD 0%</th>
</tr>
</thead>
<tbody>
<tr>
<td>#Tumor, Forestomach: Squamous Cell Carcinoma or Papilloma Squamous</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
<td></td>
<td>0/50 (0%)</td>
<td>Mean 0%</td>
<td>SD 0%</td>
</tr>
<tr>
<td>#Tumor, Glandular: Fibrosarcoma</td>
<td>1/50 (0%)</td>
<td>1/50 (0%)</td>
<td>1/50 (0%)</td>
<td>Overall Incidence Total 1/100 (1%)</td>
<td>Mean 1%</td>
<td>SD 1.41%</td>
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</tbody>
</table>

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<table>
<thead>
<tr>
<th>Tissue</th>
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<tr>
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</tr>
<tr>
<td>Adenoma</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>2/49 (4%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>Mean 2.04%</td>
</tr>
<tr>
<td><strong>Hemangiosarcoma</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>0/49 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>Mean 0%</td>
</tr>
<tr>
<td><strong>Thymus:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sarcoma</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>0/45 (0%)</td>
<td>0/49 (0%)</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>Mean 0%</td>
</tr>
<tr>
<td><strong>Thymoma Benign</strong></td>
<td></td>
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</tr>
<tr>
<td>Overall Incidence</td>
<td>0/45 (0%)</td>
<td>1/49 (2%)</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>Mean 1.02%</td>
</tr>
<tr>
<td><strong>Thymoma: Benign, Malignant, NOS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>0/45 (0%)</td>
<td>1/49 (2%)</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>Mean 1.02%</td>
</tr>
<tr>
<td><strong>Thyroid Gland:</strong></td>
<td></td>
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</tr>
<tr>
<td>Carcinoma</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>0/45 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>Mean 0%</td>
</tr>
</tbody>
</table>

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#: Denominator is number of animals necropsied
<table>
<thead>
<tr>
<th>Species: RATS</th>
<th>Route: GAVAGE</th>
<th>Vehicle: CORN OIL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length of Study: CHRONIC</td>
<td><strong>Tumor Incidence for Selected Control Animal Groups</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th></th>
<th></th>
<th>Female</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Overall Incidence</td>
<td></td>
<td></td>
<td>Overall Incidence</td>
<td></td>
</tr>
<tr>
<td>Thyroid Gland: C-Cell: Adenoma</td>
<td>11/45 (24%)</td>
<td>5/50 (10%)</td>
<td>7/45 (16%)</td>
<td>7/50 (14%)</td>
<td>16/95 (16.84%)</td>
<td>Mean 17.22%</td>
</tr>
<tr>
<td>Thyroid Gland: C-Cell: Carcinoma</td>
<td>0/45 (0%)</td>
<td>0/50 (0%)</td>
<td>0/45 (0%)</td>
<td>0/50 (0%)</td>
<td>0/95 (0%)</td>
<td>Mean 0%</td>
</tr>
<tr>
<td>Thyroid Gland: C-Cell: Carcinoma or Adenoma</td>
<td>11/45 (24%)</td>
<td>5/50 (10%)</td>
<td>7/45 (16%)</td>
<td>7/50 (14%)</td>
<td>16/95 (16.84%)</td>
<td>Mean 17.22%</td>
</tr>
<tr>
<td>Thyroid Gland: Follicular Cell: Adenoma</td>
<td>1/45 (2%)</td>
<td>3/50 (6%)</td>
<td>1/45 (2%)</td>
<td>3/50 (6%)</td>
<td>4/95 (4.21%)</td>
<td>Mean 4.11%</td>
</tr>
<tr>
<td>Thyroid Gland: Follicular Cell: Carcinoma</td>
<td>0/45 (0%)</td>
<td>0/50 (0%)</td>
<td>0/45 (0%)</td>
<td>0/50 (0%)</td>
<td>0/95 (0%)</td>
<td>Mean 0%</td>
</tr>
<tr>
<td>Thyroid Gland: Follicular Cell: Carcinoma or Adenoma</td>
<td>1/45 (2%)</td>
<td>3/50 (6%)</td>
<td>1/45 (2%)</td>
<td>3/50 (6%)</td>
<td>4/95 (4.21%)</td>
<td>Mean 4.11%</td>
</tr>
</tbody>
</table>

*: Denominator is number of animals with tissues examined microscopically
#: Denominator is number of animals necropsied
### Tumor Incidence for Selected Control Animal Groups

**Species:** RATS  
**Strain:** Wistar Han  
**Route:** GAVAGE  
**Vehicle:** CORN OIL  
**Length of Study:** CHRONIC  
**Report Date:** 11/11/2014

#### *Urinary Bladder: Carcinoma or Papilloma*

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Mean 1%</td>
</tr>
<tr>
<td>0/49 (0%)</td>
<td>1/50 (2%)</td>
<td>0/50 (0%)</td>
</tr>
</tbody>
</table>

**Overall Incidence**  
Total: 1/99 (1.01%)  
Mean: 1%  
SD: 1.41%

#### *Urinary Bladder: Papilloma*

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Mean 1%</td>
</tr>
<tr>
<td>0/49 (0%)</td>
<td>1/50 (2%)</td>
<td>0/50 (0%)</td>
</tr>
</tbody>
</table>

**Overall Incidence**  
Total: 1/99 (1.01%)  
Mean: 1%  
SD: 1.41%

#### Uterus: Adenoma

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Mean 1%</td>
</tr>
<tr>
<td>1/50 (2%)</td>
<td>0/50 (0%)</td>
<td></td>
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</tbody>
</table>

**Overall Incidence**  
Total: 1/100 (1%)  
Mean: 1%  
SD: 1.41%

#### Uterus: Carcinoma

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Mean 1%</td>
</tr>
<tr>
<td>1/50 (2%)</td>
<td>3/50 (6%)</td>
<td></td>
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</tbody>
</table>

**Overall Incidence**  
Total: 4/100 (4%)  
Mean: 4%  
SD: 2.83%

#### Uterus: Granular Cell Tumor Benign

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<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Mean 1%</td>
</tr>
<tr>
<td>1/50 (2%)</td>
<td>0/50 (0%)</td>
<td></td>
</tr>
</tbody>
</table>

**Overall Incidence**  
Total: 0/100 (0%)  
Mean: 0%  
SD: 0%

#### Uterus: Hemangiosarcoma

<table>
<thead>
<tr>
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<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Mean 1%</td>
</tr>
<tr>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
<td></td>
</tr>
</tbody>
</table>

**Overall Incidence**  
Total: 0/100 (0%)  
Mean: 0%  
SD: 0%

---

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### Tumor Incidence for Selected Control Animal Groups

**Species:** RATS  
**Strain:** Wistar Han  
**Route:** GAVAGE  
**Vehicle:** CORN OIL  
**Length of Study:** CHRONIC  

**Report Date:** 11/11/2014

#### Male

<table>
<thead>
<tr>
<th>Tumor Type</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>#Uterus:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leiomyosarcoma</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td><strong>Overall Incidence</strong></td>
<td>Total</td>
<td>Mean 0%</td>
</tr>
<tr>
<td>Malignant Mixed Mullerian Tumor</td>
<td>1/50 (2%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td><strong>Overall Incidence</strong></td>
<td>Total</td>
<td>Mean 1%</td>
</tr>
<tr>
<td>Polyp Stromal</td>
<td>3/50 (6%)</td>
<td>2/50 (4%)</td>
</tr>
<tr>
<td><strong>Overall Incidence</strong></td>
<td>Total</td>
<td>Mean 5%</td>
</tr>
<tr>
<td>Sarcoma Stromal or Polyp Stromal</td>
<td>3/50 (6%)</td>
<td>2/50 (4%)</td>
</tr>
<tr>
<td><strong>Overall Incidence</strong></td>
<td>Total</td>
<td>Mean 5%</td>
</tr>
<tr>
<td>Schwannoma Malignant</td>
<td>1/50 (2%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td><strong>Overall Incidence</strong></td>
<td>Total</td>
<td>Mean 1%</td>
</tr>
</tbody>
</table>

*: Denominator is number of animals with tissues examined microscopically  
#: Denominator is number of animals necropsied
### Species: RATS  
### Strain: Wistar Han  
### Route: GAVAGE  
### Vehicle: CORN OIL  
### Length of Study: CHRONIC

## Tumor Incidence for Selected Control Animal Groups

### Male

<table>
<thead>
<tr>
<th>Tumor Type</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Squamous Cell Papilloma</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 0/100 (0%)</td>
<td>Mean 0%</td>
</tr>
<tr>
<td>Fibrosarcoma</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 0/100 (0%)</td>
<td>Mean 0%</td>
</tr>
<tr>
<td>Leiomyoma</td>
<td>0/50 (0%)</td>
<td>1/50 (2%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 1/100 (1%)</td>
<td>Mean 1% SD 1.41%</td>
</tr>
<tr>
<td>Polyp</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 0/100 (0%)</td>
<td>Mean 0%</td>
</tr>
</tbody>
</table>

### Female

<table>
<thead>
<tr>
<th>Tumor Type</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Squamous Cell Papilloma</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 0/100 (0%)</td>
<td>Mean 0%</td>
</tr>
<tr>
<td>Fibrosarcoma</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 0/100 (0%)</td>
<td>Mean 0%</td>
</tr>
<tr>
<td>Leiomyoma</td>
<td>0/50 (0%)</td>
<td>1/50 (2%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 1/100 (1%)</td>
<td>Mean 1% SD 1.41%</td>
</tr>
<tr>
<td>Polyp</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 0/100 (0%)</td>
<td>Mean 0%</td>
</tr>
</tbody>
</table>

### Notes
- *: Denominator is number of animals with tissues examined microscopically
- #: Denominator is number of animals necropsied
### Study Summary

<table>
<thead>
<tr>
<th>Laboratory Name</th>
<th>Study Number</th>
<th>Study Start Date</th>
<th>Length of Study in Days</th>
<th>Number of Animals Total and (#/Cage)</th>
<th>Number Surviving and (Mean Life Span)</th>
<th>Maximum Mean Weekly Body Weight</th>
<th>Chemical</th>
</tr>
</thead>
<tbody>
<tr>
<td>Battelle Columbus Laboratory</td>
<td>052020303</td>
<td>07/18/07</td>
<td>727</td>
<td>50(3)</td>
<td>35(687)</td>
<td>632.7</td>
<td>Green tea extract</td>
</tr>
<tr>
<td>Battelle Columbus Laboratory</td>
<td>052020303</td>
<td>07/19/07</td>
<td>729</td>
<td>50(5)</td>
<td>26(671)</td>
<td>369.7</td>
<td>Green tea extract</td>
</tr>
</tbody>
</table>
**Toxicology Data Management System**  
Tumor Incidence for Selected Control Animal Groups

**Species:** RATS  
**Strain:** Wistar Han  
**Length of Study:** CHRONIC  
**Route:** GAVAGE  
**Vehicle:** WATER  
**Report Date:** 11/11/2014

<table>
<thead>
<tr>
<th>#All Organs:</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Benign Tumors</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 26/50 (52%) Mean 52% SD 0%</td>
<td>Total 38/50 (76%) Mean 76% SD 0%</td>
</tr>
<tr>
<td><strong>Malignant Tumors</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 12/50 (24%) Mean 24% SD 0%</td>
<td>Total 16/50 (32%) Mean 32% SD 0%</td>
</tr>
<tr>
<td><strong>All Organs:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Malignant and Benign Tumors</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 36/50 (72%) Mean 72% SD 0%</td>
<td>Total 43/50 (86%) Mean 86% SD 0%</td>
</tr>
<tr>
<td><strong>Hemangioma</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 0/50 (0%) Mean 0% SD 0%</td>
<td>Total 0/50 (0%) Mean 0% SD 0%</td>
</tr>
<tr>
<td><strong>Hemangiosarcoma</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 0/50 (0%) Mean 0% SD 0%</td>
<td>Total 2/50 (4%) Mean 4% SD 0%</td>
</tr>
<tr>
<td><strong>Hemangiosarcoma or Hemangioma</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 0/50 (0%) Mean 0% SD 0%</td>
<td>Total 2/50 (4%) Mean 4% SD 0%</td>
</tr>
</tbody>
</table>

*: Denominator is number of animals with tissues examined microscopically  
#: Denominator is number of animals necropsied
<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>#All Organs:</strong></td>
<td><strong>Histiocytic Sarcoma</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total</td>
<td>Mean 0%</td>
</tr>
<tr>
<td></td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td><strong>#All Organs:</strong></td>
<td><strong>Leukemia: Lymphocytic, Monocytic, Mononuclear, or Undifferentiated</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total</td>
<td>Mean 0%</td>
</tr>
<tr>
<td></td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td><strong>#All Organs:</strong></td>
<td><strong>Malignant Lymphoma: Histiocytic, Lymphocytic, Mixed, NOS, or Undifferentiated Cell Type</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0/50 (0%)</td>
<td>1/50 (2%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total</td>
<td>Mean 0%</td>
</tr>
<tr>
<td></td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td><strong>#All Organs:</strong></td>
<td><strong>Mesothelioma: Benign, Malignant, NOS</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2/50 (4%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total</td>
<td>Mean 4%</td>
</tr>
<tr>
<td></td>
<td>2/50 (4%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td><strong>#All Organs:</strong></td>
<td><strong>Mesothelioma: Malignant</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2/50 (4%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total</td>
<td>Mean 4%</td>
</tr>
<tr>
<td></td>
<td>2/50 (4%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td><strong>#All Organs:</strong></td>
<td><strong>Osteoma</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1/50 (2%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total</td>
<td>Mean 2%</td>
</tr>
<tr>
<td></td>
<td>1/50 (2%)</td>
<td>0/50 (0%)</td>
</tr>
</tbody>
</table>

*: Denominator is number of animals with tissues examined microscopically  
#: Denominator is number of animals necropsied
<table>
<thead>
<tr>
<th>#All Organs:</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Osteosarcoma</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>1/50 (2%)</td>
<td>Mean 2% SD 0%</td>
</tr>
<tr>
<td>#All Organs:</td>
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<td></td>
</tr>
<tr>
<td><strong>Osteosarcoma or Osteoma</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>2/50 (4%)</td>
<td>Mean 4% SD 0%</td>
</tr>
<tr>
<td>*Adrenal Cortex:</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Adenoma</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>1/50 (2%)</td>
<td>Mean 2% SD 0%</td>
</tr>
<tr>
<td>*Adrenal Cortex:</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Carcinoma</strong></td>
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</tr>
<tr>
<td>Overall Incidence</td>
<td>0/50 (0%)</td>
<td>Mean 0% SD 0%</td>
</tr>
<tr>
<td>*Adrenal Medulla:</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Pheochromocytoma Benign</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>1/50 (2%)</td>
<td>Mean 2% SD 0%</td>
</tr>
<tr>
<td>*Adrenal Medulla:</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Pheochromocytoma Complex</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>0/50 (0%)</td>
<td>Mean 0% SD 0%</td>
</tr>
</tbody>
</table>

*: Denominator is number of animals with tissues examined microscopically
#: Denominator is number of animals necropsied
**Species:** RATS  
**Strain:** Wistar Han  
**Route:** Gavage  
**Vehicle:** WATER  
**Length of Study:** CHRONIC  

<table>
<thead>
<tr>
<th>Tumor Incidence for Selected Control Animal Groups</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Overall Incidence</strong></td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td><strong>Adrenal Medulla:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pheochromocytoma Malignant</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td><strong>Overall Incidence</strong></td>
<td>1/50 (2%)</td>
<td>1/50 (2%)</td>
</tr>
<tr>
<td><strong>Adrenal Medulla:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pheochromocytoma: Benign, Complex, Malignant, NOS</td>
<td>1/50 (2%)</td>
<td>1/50 (2%)</td>
</tr>
<tr>
<td><strong>Overall Incidence</strong></td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td><strong>Bone Marrow:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hemangiosarcoma</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td><strong>Overall Incidence</strong></td>
<td>1/50 (2%)</td>
<td>1/50 (2%)</td>
</tr>
<tr>
<td><strong>Bone:</strong></td>
<td></td>
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</tr>
<tr>
<td>Osteoma</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td><strong>Overall Incidence</strong></td>
<td>1/50 (2%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td><strong>Bone:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Osteosarcoma</td>
<td>1/50 (2%)</td>
<td>0/50 (0%)</td>
</tr>
</tbody>
</table>

*: Denominator is number of animals with tissues examined microscopically  
#: Denominator is number of animals necropsied
<table>
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<tbody>
<tr>
<td></td>
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<td>Overall Incidence</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total</td>
<td></td>
<td>Total</td>
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<tr>
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<tr>
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<td>Osteosarcoma or Osteoma</td>
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<td>2/50 (4%)</td>
<td>Mean 4%</td>
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</tr>
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<td></td>
<td>Glioma</td>
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<td></td>
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<td>Mean 0%</td>
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</tr>
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<td>Mean 2%</td>
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</tr>
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<td>Mean 4%</td>
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<td>0/50 (0%)</td>
<td>Mean 0%</td>
<td>0/50 (0%)</td>
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*: Denominator is number of animals with tissues examined microscopically
#: Denominator is number of animals necropsied
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<thead>
<tr>
<th>Tumor Type</th>
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<th>Female</th>
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<tbody>
<tr>
<td>*Brain:</td>
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</tr>
<tr>
<td>Meningioma Malignant</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
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<td>Total 0/50 (0%)</td>
<td>Mean 0% SD 0%</td>
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<td>Total 0/50 (0%)</td>
<td>Mean 0% SD 0%</td>
</tr>
<tr>
<td>*Brain:</td>
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</tr>
<tr>
<td>Meningioma: Benign, Malignant, NOS</td>
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<td>0/50 (0%)</td>
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<td>Mean 0% SD 0%</td>
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<td></td>
<td>Total 0/50 (0%)</td>
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<tr>
<td>*Brain:</td>
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<td>0/50 (0%)</td>
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</tr>
<tr>
<td></td>
<td>Total 0/49 (0%)</td>
<td>Mean 0% SD 0%</td>
</tr>
<tr>
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<td></td>
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</tr>
<tr>
<td>Carcinoma</td>
<td>1/50 (2%)</td>
<td>0/49 (0%)</td>
</tr>
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<td>Total 1/50 (2%)</td>
<td>Mean 2% SD 0%</td>
</tr>
<tr>
<td></td>
<td>Total 0/49 (0%)</td>
<td>Mean 0% SD 0%</td>
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<tr>
<td>*Clitoral/Preputial Gland:</td>
<td></td>
<td></td>
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<tr>
<td>Carcinoma or Adenoma</td>
<td>1/50 (2%)</td>
<td>0/49 (0%)</td>
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<tr>
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<td>Mean 2% SD 0%</td>
</tr>
<tr>
<td></td>
<td>Total 0/49 (0%)</td>
<td>Mean 0% SD 0%</td>
</tr>
<tr>
<td>*Heart:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Schwannoma Benign</td>
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<td>0/50 (0%)</td>
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<td>Mean 0% SD 0%</td>
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<td>Mean 0% SD 0%</td>
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<tbody>
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<td>Mean 0% SD 0%</td>
</tr>
<tr>
<td><strong>Intestine Small: Duodenum:</strong></td>
<td></td>
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<tr>
<td>Fibroma</td>
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</tr>
<tr>
<td>Overall Incidence</td>
<td>0/50 (0%)</td>
<td>Mean 0% SD 0%</td>
</tr>
<tr>
<td><strong>Intestine Small: Jejunum:</strong></td>
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<tr>
<td>Leiomyosarcoma</td>
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<tr>
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<td>Mean 0% SD 0%</td>
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<tr>
<td><strong>Intestine Small: Jejunum:</strong></td>
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<tr>
<td>Leiomyoma</td>
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<tr>
<td>Overall Incidence</td>
<td>0/50 (0%)</td>
<td>Mean 0% SD 0%</td>
</tr>
<tr>
<td><strong>Intestine Small: Site Unspecified:</strong></td>
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<tr>
<td>Overall Incidence</td>
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<td>Mean 0% SD 0%</td>
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*: Denominator is number of animals with tissues examined microscopically
#: Denominator is number of animals necropsied
**Species:** RATS  
**Route:** GAVAGE  
**Vehicle:** WATER  

**Length of Study:** CHRONIC  

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<tr>
<th>Tumor Type</th>
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<tbody>
<tr>
<td><strong>Intestine Small: Site Unspecified:</strong></td>
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<td>Leiomyoma</td>
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<td>0/50 (0%)</td>
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<tr>
<td>Overall Incidence</td>
<td>Total 0/50 (0%)</td>
<td>Mean 0% SD 0%</td>
</tr>
<tr>
<td></td>
<td>Total 0/50 (0%)</td>
<td>Mean 0% SD 0%</td>
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<td><strong>Intestine Small: Site Unspecified:</strong></td>
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</tr>
<tr>
<td>Leiomyosarcoma</td>
<td>0/50 (0%)</td>
<td>1/50 (2%)</td>
</tr>
<tr>
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<td>Mean 2% SD 0%</td>
</tr>
<tr>
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<td>Total 0/50 (0%)</td>
<td>Mean 2% SD 0%</td>
</tr>
<tr>
<td>*Islets, Pancreatic: Adenoma</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
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<td>Mean 0% SD 0%</td>
</tr>
<tr>
<td></td>
<td>Total 0/50 (0%)</td>
<td>Mean 0% SD 0%</td>
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<td>*Islets, Pancreatic: Carcinoma</td>
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<td>0/50 (0%)</td>
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<td>Mean 0% SD 0%</td>
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<td>Total 0/50 (0%)</td>
<td>Mean 0% SD 0%</td>
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<tr>
<td>*Islets, Pancreatic: Carcinoma or Adenoma</td>
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<td>0/50 (0%)</td>
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<td>Mean 0% SD 0%</td>
</tr>
<tr>
<td></td>
<td>Total 0/50 (0%)</td>
<td>Mean 0% SD 0%</td>
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<td>*Kidney: Pelvis and Transitional Epithelium: Papilloma</td>
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<td>0/50 (0%)</td>
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<td>Mean 0% SD 0%</td>
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<td>Total 0/50 (0%)</td>
<td>Mean 0% SD 0%</td>
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*: Denominator is number of animals with tissues examined microscopically  
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<table>
<thead>
<tr>
<th>Tumor Incidence for Selected Control Animal Groups</th>
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<tbody>
<tr>
<td><strong>Species:</strong> RATS</td>
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<table>
<thead>
<tr>
<th>Length of Study: CHRONIC</th>
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</table>

<table>
<thead>
<tr>
<th>*Kidney: Renal Tubule: Adenoma</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Incidence</td>
</tr>
<tr>
<td>-------------------</td>
</tr>
<tr>
<td>Total</td>
</tr>
<tr>
<td>Mean</td>
</tr>
<tr>
<td>SD</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>*Kidney: Renal Tubule: Carcinoma</th>
</tr>
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<tbody>
<tr>
<td>Overall Incidence</td>
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<tr>
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<tr>
<td>Total</td>
</tr>
<tr>
<td>Mean</td>
</tr>
<tr>
<td>SD</td>
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<table>
<thead>
<tr>
<th>*Kidney: Renal Tubule: Carcinoma or Adenoma</th>
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<td>Overall Incidence</td>
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<tr>
<td>-------------------</td>
</tr>
<tr>
<td>Total</td>
</tr>
<tr>
<td>Mean</td>
</tr>
<tr>
<td>SD</td>
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<table>
<thead>
<tr>
<th>*Kidney: Renal Tubule: Lipoma</th>
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<td>-------------------</td>
</tr>
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<td>Total</td>
</tr>
<tr>
<td>Mean</td>
</tr>
<tr>
<td>SD</td>
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<table>
<thead>
<tr>
<th>*Liver: Hepatocellular Adenoma</th>
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<tr>
<td>-------------------</td>
</tr>
<tr>
<td>Total</td>
</tr>
<tr>
<td>Mean</td>
</tr>
<tr>
<td>SD</td>
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<thead>
<tr>
<th>Tumor Incidence for Selected Control Animal Groups</th>
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<tbody>
<tr>
<td><strong>Species:</strong> RATS</td>
</tr>
<tr>
<td><strong>Strain:</strong> Wistar Han</td>
</tr>
<tr>
<td><strong>Route:</strong> GAVAGE</td>
</tr>
<tr>
<td><strong>Vehicle:</strong> WATER</td>
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<tr>
<td><strong>Length of Study:</strong> CHRONIC</td>
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<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
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<tbody>
<tr>
<td><strong>Liver:</strong></td>
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<tr>
<td>Hepatocellular Carcinoma or Hepatocellular Adenoma</td>
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<td>1/50 (2%)</td>
</tr>
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<td>Overall Incidence</td>
<td>Total: 0/50 (0%) Mean 0% SD 0%</td>
<td>Total: 1/50 (2%) Mean 2% SD 0%</td>
</tr>
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<tr>
<td><strong>Liver:</strong></td>
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<tr>
<td>Hepatocellular Carcinoma, Hepatocellular Adenoma, or Hepatoblastoma</td>
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<td>1/50 (2%)</td>
</tr>
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<td>Total: 1/50 (2%) Mean 2% SD 0%</td>
</tr>
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<tr>
<td><strong>Lung:</strong></td>
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<tr>
<td>Alveolar/Bronchiolar Adenoma</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total: 0/50 (0%) Mean 0% SD 0%</td>
<td>Total: 0/50 (0%) Mean 0% SD 0%</td>
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<tr>
<td><strong>Lung:</strong></td>
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<td></td>
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<tr>
<td>Alveolar/Bronchiolar Carcinoma or Alveolar/Bronchiolar Adenoma</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
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<tr>
<td>Overall Incidence</td>
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<td>Total: 0/50 (0%) Mean 0% SD 0%</td>
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<tr>
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<td></td>
</tr>
<tr>
<td><strong>Lymph Node:</strong></td>
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</tr>
<tr>
<td>Hemangioma</td>
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<td>0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total: 0/50 (0%) Mean 0% SD 0%</td>
<td>Total: 0/50 (0%) Mean 0% SD 0%</td>
</tr>
<tr>
<td></td>
<td></td>
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<tr>
<td><strong>Lymph Node, Mesenteric:</strong></td>
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<td>0/50 (0%)</td>
</tr>
<tr>
<td>Hemangioma</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total: 0/50 (0%) Mean 0% SD 0%</td>
<td>Total: 0/50 (0%) Mean 0% SD 0%</td>
</tr>
</tbody>
</table>

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#: Denominator is number of animals necropsied
**Species:** RATS  
**Strain:** Wistar Han  
**Route:** GAVAGE  
**Vehicle:** WATER  
**Length of Study:** CHRONIC  

**Report Date:** 11/11/2014

### Tumor Incidence for Selected Control Animal Groups

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<th>Species</th>
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<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>#Lymph Node, Mesenteric: Hemangiosarcoma</td>
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<td>1/50 (2%)</td>
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<td>Overall Incidence</td>
<td>Total</td>
<td>Mean 0%</td>
<td>SD 0%</td>
</tr>
<tr>
<td>#Mammary Gland: Adenoma</td>
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<td>2/50 (4%)</td>
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</tr>
<tr>
<td>Overall Incidence</td>
<td>Total</td>
<td>Mean 0%</td>
<td>SD 0%</td>
</tr>
<tr>
<td>#Mammary Gland: Carcinoma</td>
<td>0/50 (0%)</td>
<td>6/50 (12%)</td>
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<tr>
<td>Overall Incidence</td>
<td>Total</td>
<td>Mean 0%</td>
<td>SD 0%</td>
</tr>
<tr>
<td>#Mammary Gland: Carcinoma or Adenoma</td>
<td>0/50 (0%)</td>
<td>8/50 (16%)</td>
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<td>Overall Incidence</td>
<td>Total</td>
<td>Mean 0%</td>
<td>SD 0%</td>
</tr>
<tr>
<td>#Mammary Gland: Fibroadenoma</td>
<td>0/50 (0%)</td>
<td>11/50 (22%)</td>
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<tr>
<td>Overall Incidence</td>
<td>Total</td>
<td>Mean 0%</td>
<td>SD 0%</td>
</tr>
<tr>
<td>#Mammary Gland: Fibroma, Fibroadenoma or Adenoma</td>
<td>0/50 (0%)</td>
<td>11/50 (22%)</td>
<td></td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total</td>
<td>Mean 0%</td>
<td>SD 0%</td>
</tr>
</tbody>
</table>

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#: Denominator is number of animals necropsied
<table>
<thead>
<tr>
<th>Tumor Incidence for Selected Control Animal Groups</th>
</tr>
</thead>
</table>
| **Species:** RATS  
| **Strain:** Wistar Han  
| **Route:** GAVAGE  
| **Vehicle:** WATER  
| **Length of Study:** CHRONIC |
| **Report Date:** 11/11/2014 |

<table>
<thead>
<tr>
<th>Tissue Type</th>
<th>Direction</th>
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<th>Female</th>
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</thead>
<tbody>
<tr>
<td><strong>#Mammary Gland:</strong></td>
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</tr>
<tr>
<td>Fibroma, Fibroadenoma, Carcinoma, or Adenoma</td>
<td>Total</td>
<td>0/50 (0%)</td>
<td>Mean 0%</td>
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<td></td>
<td>SD 0%</td>
<td>Total 15/50 (30%)</td>
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<td>Hemangiosarcoma</td>
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<td>Mean 0%</td>
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<td></td>
<td>SD 0%</td>
<td>Total 1/50 (2%)</td>
<td></td>
</tr>
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<td><strong>#Mesentery:</strong></td>
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</tr>
<tr>
<td>Lipoma</td>
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<td>Mean 0%</td>
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<td></td>
<td>SD 0%</td>
<td>Total 0/50 (0%)</td>
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<tr>
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</tr>
<tr>
<td>Schwannoma Malignant</td>
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<td>1/50 (2%)</td>
<td>Mean 2%</td>
</tr>
<tr>
<td></td>
<td>SD 0%</td>
<td>Total 0/50 (0%)</td>
<td></td>
</tr>
<tr>
<td><strong>#Nose:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chondroma</td>
<td>Total</td>
<td>0/50 (0%)</td>
<td>Mean 0%</td>
</tr>
<tr>
<td></td>
<td>SD 0%</td>
<td>Total 0/49 (0%)</td>
<td></td>
</tr>
<tr>
<td><strong>#Nose:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Olfactory Neuroblastoma</td>
<td>Total</td>
<td>0/49 (0%)</td>
<td>Mean 0%</td>
</tr>
<tr>
<td></td>
<td>SD 0%</td>
<td>Total 0/49 (0%)</td>
<td></td>
</tr>
</tbody>
</table>

*Denominator is number of animals with tissues examined microscopically
#: Denominator is number of animals necropsied
<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>#Oral Cavity (Oral Mucosa, Tongue, Pharynx, Tooth, Gingiva):</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Squamous Cell Carcinoma</td>
<td>1/50 (2%)</td>
<td>1/50 (2%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 1/50 (2%)</td>
<td>Mean 2%</td>
</tr>
<tr>
<td><strong>#Oral Cavity (Oral Mucosa, Tongue, Pharynx, Tooth, Gingiva):</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Squamous Cell Carcinoma, Papilloma Squamous, or Papilloma</td>
<td>1/50 (2%)</td>
<td>1/50 (2%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 1/50 (2%)</td>
<td>Mean 2%</td>
</tr>
<tr>
<td><strong>#Oral Mucosa:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Squamous Cell Carcinoma</td>
<td>1/50 (2%)</td>
<td>1/50 (2%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 1/50 (2%)</td>
<td>Mean 2%</td>
</tr>
<tr>
<td><strong>Ovary:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adenoma</td>
<td>0/50 (0%)</td>
<td></td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 0/50 (0%)</td>
<td>Mean 0%</td>
</tr>
<tr>
<td>Cystadenoma</td>
<td>0/50 (0%)</td>
<td></td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 0/50 (0%)</td>
<td>Mean 0%</td>
</tr>
<tr>
<td>Granulosa Cell Tumor Benign</td>
<td>0/50 (0%)</td>
<td></td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 0/50 (0%)</td>
<td>Mean 0%</td>
</tr>
</tbody>
</table>

*: Denominator is number of animals with tissues examined microscopically
#: Denominator is number of animals necropsied
**Tumor Incidence for Selected Control Animal Groups**

**Species:** RATS  
**Strain:** Wistar Han  
**Length of Study:** CHRONIC  
**Route:** GAVAGE  
**Vehicle:** WATER  
**Report Date:** 11/11/2014

<table>
<thead>
<tr>
<th>Tissue Type</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Ovary:</em></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| Granulosa Cell Tumor Malignant | 0/50 (0%) | Mean 0%  
| Overall Incidence | Total | SD 0%  |
| Granulosa Cell Tumor: Benign, Malignant, NOS | 0/50 (0%) | 0/50 (0%)  
| Overall Incidence | Total | Mean 0%  
| Sex Cord Stromal Tumor, Benign | 0/50 (0%) | Mean 0%  
| Overall Incidence | Total | SD 0%  |
| *Ovary:*    |      |        |
| Tubulostromal Adenoma | 0/50 (0%) | 0/50 (0%)  
| Overall Incidence | Total | Mean 0%  
| *Pancreas:* |      |        |
| Adenoma | 0/50 (0%) | 0/50 (0%)  
| Overall Incidence | Total | Mean 0%  
| Carcinoma or Adenoma | 0/50 (0%) | 0/50 (0%)  
| Overall Incidence | Total | Mean 0%  

*: Denominator is number of animals with tissues examined microscopically  
#: Denominator is number of animals necropsied
### Tumor Incidence for Selected Control Animal Groups

**Version:** Nov2014  
**Contract/Lab:** All Laboratories  
**Species:** RATS  
**Strain:** Wistar Han  
**Length of Study:** CHRONIC  
**Route:** GAVAGE  
**Vehicle:** WATER  
**Report Date:** 11/11/2014

<table>
<thead>
<tr>
<th>Tissue</th>
<th>Male</th>
<th></th>
<th>Female</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Overall Incidence</td>
<td></td>
<td>Overall Incidence</td>
<td></td>
</tr>
<tr>
<td><strong>Parathyroid Gland:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adenoma</td>
<td>0/47 (0%)</td>
<td>Mean 0%</td>
<td>SD 0%</td>
<td>0/47 (0%)</td>
</tr>
<tr>
<td><em>Parathyroid Gland: Pars Distalis or Unspecified Site:</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adenoma</td>
<td>17/50 (34%)</td>
<td>Mean 34%</td>
<td>SD 0%</td>
<td>32/50 (64%)</td>
</tr>
<tr>
<td>Pituitary Gland: Pars Distalis or Unspecified Site: Carcinoma</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carcinoma</td>
<td>0/50 (0%)</td>
<td>Mean 0%</td>
<td>SD 0%</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td><em>Pituitary Gland: Pars Distalis or Unspecified Site:</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carcinoma or Adenoma</td>
<td>17/50 (34%)</td>
<td>Mean 34%</td>
<td>SD 0%</td>
<td>32/50 (64%)</td>
</tr>
<tr>
<td>Pituitary Gland: Pars Intermedia:</td>
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</tr>
<tr>
<td>Adenoma</td>
<td>1/50 (2%)</td>
<td>Mean 2%</td>
<td>SD 0%</td>
<td>2/50 (4%)</td>
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<td>Pituitary Gland: Pars Intermedia: Carcinoma or Adenoma</td>
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<td></td>
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<tr>
<td>Carcinoma or Adenoma</td>
<td>1/50 (2%)</td>
<td>Mean 2%</td>
<td>SD 0%</td>
<td>2/50 (4%)</td>
</tr>
</tbody>
</table>

* Denominator is number of animals with tissues examined microscopically  
# Denominator is number of animals necropsied
<table>
<thead>
<tr>
<th>Tumor Incidence for Selected Control Animal Groups</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Species:</strong></td>
</tr>
<tr>
<td><strong>Strain:</strong></td>
</tr>
<tr>
<td><strong>Route:</strong></td>
</tr>
<tr>
<td><strong>Vehicle:</strong></td>
</tr>
<tr>
<td><strong>Length of Study:</strong></td>
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### Male

<table>
<thead>
<tr>
<th>Tumor Type</th>
<th>Incidence</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>*Prostate: Adenoma</td>
<td>0/50 (0%)</td>
<td>Mean 0%</td>
<td>SD 0%</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 0/50 (0%)</td>
<td>Mean 0%</td>
<td>SD 0%</td>
</tr>
<tr>
<td>*Prostate: Carcinoma or Adenoma</td>
<td>0/50 (0%)</td>
<td>Mean 0%</td>
<td>SD 0%</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 0/50 (0%)</td>
<td>Mean 0%</td>
<td>SD 0%</td>
</tr>
<tr>
<td>*Salivary Glands: Adenoma</td>
<td>0/50 (0%)</td>
<td>Mean 0%</td>
<td>SD 0%</td>
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<tr>
<td>Overall Incidence</td>
<td>Total 0/50 (0%)</td>
<td>Mean 0%</td>
<td>SD 0%</td>
</tr>
<tr>
<td>*Salivary Glands: Carcinoma</td>
<td>0/49 (0%)</td>
<td>Mean 0%</td>
<td>SD 0%</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 0/49 (0%)</td>
<td>Mean 0%</td>
<td>SD 0%</td>
</tr>
<tr>
<td>*Salivary Glands: Carcinoma or Adenoma</td>
<td>0/49 (0%)</td>
<td>Mean 0%</td>
<td>SD 0%</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 0/49 (0%)</td>
<td>Mean 0%</td>
<td>SD 0%</td>
</tr>
<tr>
<td>*Salivary Glands: Myoepithelioma</td>
<td>0/50 (0%)</td>
<td>Mean 0%</td>
<td>SD 0%</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 0/50 (0%)</td>
<td>Mean 0%</td>
<td>SD 0%</td>
</tr>
</tbody>
</table>

### Female

<table>
<thead>
<tr>
<th>Tumor Type</th>
<th>Incidence</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>*Prostate: Adenoma</td>
<td>0/50 (0%)</td>
<td>Mean 0%</td>
<td>SD 0%</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 0/50 (0%)</td>
<td>Mean 0%</td>
<td>SD 0%</td>
</tr>
<tr>
<td>*Prostate: Carcinoma or Adenoma</td>
<td>0/50 (0%)</td>
<td>Mean 0%</td>
<td>SD 0%</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 0/50 (0%)</td>
<td>Mean 0%</td>
<td>SD 0%</td>
</tr>
<tr>
<td>*Salivary Glands: Adenoma</td>
<td>0/50 (0%)</td>
<td>Mean 0%</td>
<td>SD 0%</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 0/50 (0%)</td>
<td>Mean 0%</td>
<td>SD 0%</td>
</tr>
<tr>
<td>*Salivary Glands: Carcinoma</td>
<td>0/49 (0%)</td>
<td>Mean 0%</td>
<td>SD 0%</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 0/49 (0%)</td>
<td>Mean 0%</td>
<td>SD 0%</td>
</tr>
<tr>
<td>*Salivary Glands: Carcinoma or Adenoma</td>
<td>0/49 (0%)</td>
<td>Mean 0%</td>
<td>SD 0%</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 0/49 (0%)</td>
<td>Mean 0%</td>
<td>SD 0%</td>
</tr>
<tr>
<td>*Salivary Glands: Myoepithelioma</td>
<td>0/50 (0%)</td>
<td>Mean 0%</td>
<td>SD 0%</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 0/50 (0%)</td>
<td>Mean 0%</td>
<td>SD 0%</td>
</tr>
</tbody>
</table>

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#: Denominator is number of animals necropsied
<table>
<thead>
<tr>
<th>Tumor Type</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Salivary Glands:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Schwannoma Malignant</td>
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<td>0/49 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 0/50 (0%) Mean 0% SD 0%</td>
<td>Total 0/49 (0%) Mean 0% SD 0%</td>
</tr>
<tr>
<td><strong>Seminal Vesicle:</strong></td>
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<tr>
<td>Adenoma</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 0/50 (0%) Mean 0% SD 0%</td>
<td></td>
</tr>
<tr>
<td><strong>Skeletal Muscle:</strong></td>
<td></td>
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</tr>
<tr>
<td>Hemangiosarcoma</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 0/50 (0%) Mean 0% SD 0%</td>
<td>Total 0/50 (0%) Mean 0% SD 0%</td>
</tr>
<tr>
<td>Sarcoma</td>
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</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 0/50 (0%) Mean 0% SD 0%</td>
<td></td>
</tr>
<tr>
<td><strong>Skin:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basal Cell Adenoma</td>
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<td></td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 2/50 (4%) Mean 4% SD 0%</td>
<td>Total 0/50 (0%) Mean 0% SD 0%</td>
</tr>
<tr>
<td>Basal Cell Adenoma or Basosquamous Tumor Benign</td>
<td>2/50 (4%)</td>
<td></td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 2/50 (4%) Mean 4% SD 0%</td>
<td></td>
</tr>
</tbody>
</table>

*: Denominator is number of animals with tissues examined microscopically
#: Denominator is number of animals necropsied
### Tumor Incidence for Selected Control Animal Groups

**Species:** RATS  
**Strain:** Wistar Han  
**Route:** GAVAGE  
**Vehicle:** WATER  
**Length of Study:** CHRONIC  
**Report Date:** 11/11/2014

<table>
<thead>
<tr>
<th>#Skin:</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Basal Cell Adenoma, Basosquamous Tumor Benign, or Trichoepithelioma</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2/50 (4%)</td>
<td>0/50 (0%)</td>
<td></td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td></td>
<td>Mean 4%</td>
<td>Mean 0%</td>
</tr>
<tr>
<td></td>
<td>SD 0%</td>
<td>SD 0%</td>
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<table>
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<tr>
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<tbody>
<tr>
<td><strong>Basal Cell Carcinoma</strong></td>
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</tr>
<tr>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
<td></td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td></td>
<td>Mean 0%</td>
<td>Mean 0%</td>
</tr>
<tr>
<td></td>
<td>SD 0%</td>
<td>SD 0%</td>
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<table>
<thead>
<tr>
<th>#Skin:</th>
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<tbody>
<tr>
<td><strong>Basal Cell Carcinoma or Basosquamous Tumor (malignant or NOS)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
<td></td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td></td>
<td>Mean 0%</td>
<td>Mean 0%</td>
</tr>
<tr>
<td></td>
<td>SD 0%</td>
<td>SD 0%</td>
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</table>

<table>
<thead>
<tr>
<th>#Skin:</th>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>Basal or Sq. Cell Carcinoma, Carcinoma, Basosq. Tumor (M or B), Basal Cell Adenoma, Adenoma, Papilloma, Sq Papilloma, Keratoacanthoma, Trichoepithelioma</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6/50 (12%)</td>
<td>0/50 (0%)</td>
<td></td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total</td>
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<td></td>
<td>Mean 0%</td>
<td>Mean 0%</td>
</tr>
<tr>
<td></td>
<td>SD 0%</td>
<td>SD 0%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>#Skin:</th>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>Fibroma</strong></td>
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</tr>
<tr>
<td>1/50 (2%)</td>
<td>0/50 (0%)</td>
<td></td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total</td>
<td>0/50 (0%)</td>
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<tr>
<td></td>
<td>Mean 0%</td>
<td>Mean 0%</td>
</tr>
<tr>
<td></td>
<td>SD 0%</td>
<td>SD 0%</td>
</tr>
</tbody>
</table>

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#: Denominator is number of animals necropsied
### Tumor Incidence for Selected Control Animal Groups

**Species:** RATS  
**Strain:** Wistar Han  
**Route:** GAVAGE  
**Vehicle:** WATER  
**Length of Study:** CHRONIC

<table>
<thead>
<tr>
<th>Skin Type</th>
<th>Male</th>
<th>Female</th>
<th>Overall Incidence</th>
<th>SD</th>
<th>Mean</th>
<th>SD</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fibroma, Fibrosarcoma, Sarcoma, Myxoma, Myxosarcoma, or Fibrous Histiocytoma</strong></td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>1/50 (2%)</td>
<td>0/50 (0%)</td>
<td>Total 1/50 (2%)</td>
<td>Mean 2%</td>
<td>SD 0%</td>
<td>Total 0/50 (0%)</td>
<td>Mean 0%</td>
<td>SD 0%</td>
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</tr>
<tr>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
<td>Total 0/50 (0%)</td>
<td>Mean 0%</td>
<td>SD 0%</td>
<td>Total 0/50 (0%)</td>
<td>Mean 0%</td>
<td>SD 0%</td>
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<td></td>
</tr>
<tr>
<td>1/50 (2%)</td>
<td>0/50 (0%)</td>
<td>Total 1/50 (2%)</td>
<td>Mean 2%</td>
<td>SD 0%</td>
<td>Total 0/50 (0%)</td>
<td>Mean 0%</td>
<td>SD 0%</td>
<td></td>
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<tr>
<td><strong>Hemangiosarcoma</strong></td>
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<td>0/50 (0%)</td>
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<td>SD 0%</td>
<td>Total 0/50 (0%)</td>
<td>Mean 0%</td>
<td>SD 0%</td>
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<td><strong>Keratoacanthoma</strong></td>
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</tr>
<tr>
<td>2/50 (4%)</td>
<td>0/50 (0%)</td>
<td>Total 2/50 (4%)</td>
<td>Mean 4%</td>
<td>SD 0%</td>
<td>Total 0/50 (0%)</td>
<td>Mean 0%</td>
<td>SD 0%</td>
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</table>

*: Denominator is number of animals with tissues examined microscopically
#: Denominator is number of animals necropsied
<table>
<thead>
<tr>
<th>Skin Type</th>
<th>Male</th>
<th>Female</th>
<th>Overall Incidence</th>
<th>Total Mean</th>
<th>SD</th>
<th>Overall Incidence</th>
<th>Total Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lipoma</td>
<td>1/50 (2%)</td>
<td>0/50 (0%)</td>
<td>Total</td>
<td>1/50</td>
<td>2%</td>
<td>Mean 2%</td>
<td>0/50</td>
<td>0%</td>
</tr>
<tr>
<td>Liposarcoma</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
<td>Total</td>
<td>0/50</td>
<td>0%</td>
<td>Mean 0%</td>
<td>0/50</td>
<td>0%</td>
</tr>
<tr>
<td>Neurofibrosarcoma, Neurofibroma, or Schwannoma (malignant or NOS)</td>
<td>2/50 (4%)</td>
<td>2/50 (4%)</td>
<td>Total</td>
<td>2/50</td>
<td>4%</td>
<td>Mean 4%</td>
<td>2/50</td>
<td>4%</td>
</tr>
<tr>
<td>Schwannoma Malignant</td>
<td>2/50 (4%)</td>
<td>2/50 (4%)</td>
<td>Total</td>
<td>2/50</td>
<td>4%</td>
<td>Mean 4%</td>
<td>2/50</td>
<td>4%</td>
</tr>
<tr>
<td>Squamous Cell Carcinoma</td>
<td>1/50 (2%)</td>
<td>0/50 (0%)</td>
<td>Total</td>
<td>1/50</td>
<td>2%</td>
<td>Mean 2%</td>
<td>0/50</td>
<td>0%</td>
</tr>
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</table>

*: Denominator is number of animals with tissues examined microscopically
#: Denominator is number of animals necropsied
<table>
<thead>
<tr>
<th>#Skin:</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Squamous Cell Carcinoma, Basal Cell Carcinoma, Basosquamous Tumor (malignant or NOS), or Carcinoma</td>
<td>Total 1/50 (2%) Mean 2% SD 0% Total 0/50 (0%)</td>
<td>Mean 0% SD 0%</td>
</tr>
<tr>
<td>Squamous Cell Papilloma</td>
<td>Overall Incidence Total 1/50 (2%) Mean 2% SD 0%</td>
<td>Total 0/50 (0%) Mean 0% SD 0%</td>
</tr>
<tr>
<td>Squamous Cell Papilloma or Papilloma</td>
<td>Overall Incidence Total 1/50 (2%) Mean 2% SD 0%</td>
<td>Total 0/50 (0%) Mean 0% SD 0%</td>
</tr>
<tr>
<td>Squamous Cell Papilloma, Papilloma, Squamous Cell Carcinoma or Keratoacanthoma</td>
<td>Overall Incidence Total 4/50 (8%) Mean 8% SD 0%</td>
<td>Total 0/50 (0%) Mean 0% SD 0%</td>
</tr>
<tr>
<td>Squamous Cell Papilloma, Papilloma, or Keratoacanthoma</td>
<td>Overall Incidence Total 3/50 (6%) Mean 6% SD 0%</td>
<td>Total 0/50 (0%) Mean 0% SD 0%</td>
</tr>
<tr>
<td>Sebaceous Gland: Adenoma</td>
<td>Overall Incidence Total 1/50 (2%) Mean 2% SD 0%</td>
<td>Total 0/50 (0%) Mean 0% SD 0%</td>
</tr>
</tbody>
</table>

*: Denominator is number of animals examined microscopically
#: Denominator is number of animals necropsied
<table>
<thead>
<tr>
<th>Tumor Incidence for Selected Control Animal Groups</th>
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</table>

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th></th>
<th>Female</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>#Skin: Sebaceous Gland: Carcinoma or Adenoma</td>
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<tr>
<td>Overall Incidence</td>
<td>Total 1/50 (2%)</td>
<td>Mean 2%</td>
<td>SD 0%</td>
<td>Total 0/50 (0%)</td>
</tr>
<tr>
<td></td>
<td></td>
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<td>Spleen: Hemangiosarcoma</td>
<td>0/50 (0%)</td>
<td>Mean 0%</td>
<td>SD 0%</td>
<td>Total 0/50 (0%)</td>
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<tr>
<td>Overall Incidence</td>
<td>Total 0/50 (0%)</td>
<td>Mean 0%</td>
<td>SD 0%</td>
<td>Total 0/50 (0%)</td>
</tr>
<tr>
<td></td>
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<td></td>
</tr>
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<td>SD 0%</td>
<td>Total 0/50 (0%)</td>
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<tr>
<td>Overall Incidence</td>
<td>Total 0/50 (0%)</td>
<td>Mean 0%</td>
<td>SD 0%</td>
<td>Total 0/50 (0%)</td>
</tr>
<tr>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>#Stomach, Forestomach: Leiomyoma</td>
<td>0/50 (0%)</td>
<td>Mean 0%</td>
<td>SD 0%</td>
<td>Total 0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 1/50 (2%)</td>
<td>Mean 2%</td>
<td>SD 0%</td>
<td>Total 0/50 (0%)</td>
</tr>
<tr>
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<td></td>
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<tr>
<td>#Stomach, Forestomach: Leiomyosarcoma</td>
<td>0/50 (0%)</td>
<td>Mean 0%</td>
<td>SD 0%</td>
<td>Total 0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 0/50 (0%)</td>
<td>Mean 0%</td>
<td>SD 0%</td>
<td>Total 0/50 (0%)</td>
</tr>
<tr>
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<tr>
<td>#Stomach, Forestomach: Sarcoma</td>
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<td>Mean 0%</td>
<td>SD 0%</td>
<td>Total 0/50 (0%)</td>
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<td>Overall Incidence</td>
<td>Total 1/50 (2%)</td>
<td>Mean 2%</td>
<td>SD 0%</td>
<td>Total 0/50 (0%)</td>
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*: Denominator is number of animals with tissues examined microscopically
#: Denominator is number of animals necropsied
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<thead>
<tr>
<th>Tumor Type</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>#Stomach, Forestomach:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Squamous Cell Carcinoma</td>
<td>0/50 (0%)</td>
<td>1/50 (2%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>#Stomach, Forestomach:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Squamous Cell Carcinoma or Papilloma Squamous</td>
<td>0/50 (0%)</td>
<td>1/50 (2%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>#Stomach, Glandular:</td>
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<td></td>
</tr>
<tr>
<td>Squamous Cell Papilloma</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>#Stomach, Glandular:</td>
<td></td>
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<tr>
<td>Fibrosarcoma</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
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<td>0/50 (0%)</td>
</tr>
<tr>
<td>#Stomach, Glandular:</td>
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<tr>
<td>Leiomyosarcoma</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>#Stomach, Glandular:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sarcoma</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
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</tbody>
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*: Denominator is number of animals with tissues examined microscopically
#: Denominator is number of animals necropsied
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<tr>
<th>Tissue</th>
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<td><strong>Testes:</strong></td>
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<td>Adenoma</td>
<td>2/50 (4%)</td>
<td>Total 0/50 (0%)</td>
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<td>Overall Incidence</td>
<td>2/50 (4%)</td>
<td>Mean 4%</td>
</tr>
<tr>
<td></td>
<td>SD 0%</td>
<td>Total 0/50 (0%)</td>
</tr>
<tr>
<td>Hemangiosarcoma</td>
<td>0/50 (0%)</td>
<td></td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>0/50 (0%)</td>
<td>Mean 0%</td>
</tr>
<tr>
<td><strong>Thymus:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sarcoma</td>
<td>0/49 (0%)</td>
<td>Total 3/49 (6.12%)</td>
</tr>
<tr>
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<td>2/49 (4.08%)</td>
<td>Mean 4.08%</td>
</tr>
<tr>
<td></td>
<td>SD 0%</td>
<td>Total 3/49 (6.12%)</td>
</tr>
<tr>
<td>Thymoma Benign</td>
<td>2/49 (4%)</td>
<td></td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>2/49 (4.08%)</td>
<td>Mean 4.08%</td>
</tr>
<tr>
<td></td>
<td>SD 0%</td>
<td>Total 3/49 (6.12%)</td>
</tr>
<tr>
<td>Thymoma: Benign, Malignant, NOS</td>
<td>2/49 (4%)</td>
<td>3/49 (6%)</td>
</tr>
<tr>
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<td>3/49 (6.12%)</td>
<td>Mean 6.12%</td>
</tr>
<tr>
<td>Thyroid Gland:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carcinoma</td>
<td>0/50 (0%)</td>
<td>Total 0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>0/50 (0%)</td>
<td>Mean 0%</td>
</tr>
</tbody>
</table>

*: Denominator is number of animals with tissues examined microscopically
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**Tumor Incidence for Selected Control Animal Groups**

**Species:** RATS  
**Route:** Gavage  
**Vehicle:** Water

**Length of Study:** CHRONIC  
**Strain:** Wistar Han  
**Contract/Lab:** All Laboratories  
**Report Date:** 11/11/2014

<table>
<thead>
<tr>
<th>Species</th>
<th>Route</th>
<th>Vehicle</th>
<th>Length of Study</th>
<th>Strain</th>
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<tbody>
<tr>
<td>RATS</td>
<td>Gavage</td>
<td>WATER</td>
<td>CHRONIC</td>
<td>Wistar Han</td>
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### Thyroid Gland: C-Cell

#### Adenoma

<table>
<thead>
<tr>
<th>Male</th>
<th>Female</th>
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</thead>
<tbody>
<tr>
<td>4/50 (8%)</td>
<td>3/50 (6%)</td>
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<table>
<thead>
<tr>
<th>Overall Incidence</th>
<th>Mean</th>
<th>SD</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>8%</td>
<td>0%</td>
<td>6%</td>
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#### Carcinoma

<table>
<thead>
<tr>
<th>Male</th>
<th>Female</th>
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</thead>
<tbody>
<tr>
<td>0/50 (0%)</td>
<td>1/50 (2%)</td>
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<table>
<thead>
<tr>
<th>Overall Incidence</th>
<th>Mean</th>
<th>SD</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>2%</td>
<td>0%</td>
<td>2%</td>
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#### Carcinoma or Adenoma

<table>
<thead>
<tr>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>4/50 (8%)</td>
<td>4/50 (8%)</td>
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</tbody>
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<table>
<thead>
<tr>
<th>Overall Incidence</th>
<th>Mean</th>
<th>SD</th>
<th>Total</th>
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<tbody>
<tr>
<td>Total</td>
<td>8%</td>
<td>0%</td>
<td>8%</td>
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### Thyroid Gland: Follicular Cell

#### Adenoma

<table>
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</thead>
<tbody>
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<td>1/50 (2%)</td>
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<table>
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<th>Overall Incidence</th>
<th>Mean</th>
<th>SD</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>2%</td>
<td>0%</td>
<td>2%</td>
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#### Carcinoma

<table>
<thead>
<tr>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
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<table>
<thead>
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<th>Overall Incidence</th>
<th>Mean</th>
<th>SD</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
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</tbody>
</table>

#### Carcinoma or Adenoma

<table>
<thead>
<tr>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>0/50 (0%)</td>
<td>1/50 (2%)</td>
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<table>
<thead>
<tr>
<th>Overall Incidence</th>
<th>Mean</th>
<th>SD</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>2%</td>
<td>0%</td>
<td>2%</td>
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*: Denominator is number of animals with tissues examined microscopically  
#: Denominator is number of animals necropsied
<table>
<thead>
<tr>
<th>Tumor Incidence for Selected Control Animal Groups</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Species: RATS</td>
<td>0/50 (0%)</td>
<td>0/49 (0%)</td>
</tr>
<tr>
<td>Strain: Wistar Han</td>
<td>Mean 0%</td>
<td>Mean 0%</td>
</tr>
<tr>
<td>Route: GAVAGE</td>
<td>SD 0%</td>
<td>SD 0%</td>
</tr>
<tr>
<td>Vehicle: WATER</td>
<td>Total</td>
<td>Overall Incidence</td>
</tr>
<tr>
<td>Length of Study: CHRONIC</td>
<td>Total</td>
<td>Overall Incidence</td>
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<td>0/50 (0%)</td>
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<tr>
<td></td>
<td></td>
<td>Mean 0%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SD 0%</td>
</tr>
<tr>
<td>*Urinary Bladder: Papilloma</td>
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<td></td>
<td></td>
<td>Mean 0%</td>
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<td></td>
<td></td>
<td>SD 0%</td>
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<td>Overall Incidence</td>
<td>Total</td>
<td>Overall Incidence</td>
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<tr>
<td></td>
<td>Total</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mean 0%</td>
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<td></td>
<td></td>
<td>SD 0%</td>
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<td>#Uterus: Adenoma</td>
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<td></td>
<td></td>
<td>Mean 0%</td>
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<td></td>
<td></td>
<td>SD 0%</td>
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<tr>
<td>#Uterus: Carcinoma</td>
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<td>3/50 (6%)</td>
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<td></td>
<td></td>
<td>Mean 6%</td>
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<td></td>
<td></td>
<td>SD 0%</td>
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<td>#Uterus: Granular Cell Tumor Benign</td>
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<td></td>
<td>Mean 0%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SD 0%</td>
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<tr>
<td>#Uterus: Hemangiosarcoma</td>
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<td>0/50 (0%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mean 0%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SD 0%</td>
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#: Denominator is number of animals necropsied
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<thead>
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<th>Tumor Type</th>
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<th>Female</th>
<th>Overall Incidence</th>
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<tr>
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<td>SD 0%</td>
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<tr>
<td>Overall Incidence</td>
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</tr>
<tr>
<td>#Uterus: Malignant Mixed Mullerian Tumor</td>
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<td>SD 0%</td>
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<td>Overall Incidence</td>
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</tr>
<tr>
<td>#Uterus: Polyp Stromal</td>
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<td>Mean 6%</td>
<td>SD 0%</td>
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<td>Overall Incidence</td>
<td>3/50 (6%)</td>
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</tr>
<tr>
<td>#Uterus: Sarcoma Stromal</td>
<td>1/50 (2%)</td>
<td>Mean 2%</td>
<td>SD 0%</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>1/50 (2%)</td>
<td></td>
<td></td>
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<tr>
<td>#Uterus: Sarcoma Stromal or Polyp Stromal</td>
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<td>SD 0%</td>
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<tr>
<td>Overall Incidence</td>
<td>4/50 (8%)</td>
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<td></td>
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<tr>
<td>#Uterus: Schwannoma Malignant</td>
<td>1/50 (2%)</td>
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<td>SD 0%</td>
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<tr>
<td>Overall Incidence</td>
<td>1/50 (2%)</td>
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*: Denominator is number of animals with tissues examined microscopically
#: Denominator is number of animals necropsied
<table>
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<th>Tissue Type</th>
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<th>Female</th>
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</thead>
<tbody>
<tr>
<td><strong>Uterus:</strong></td>
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</tr>
<tr>
<td>Squamous Cell Papilloma</td>
<td>0/50 (0%)</td>
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</tr>
<tr>
<td>Overall Incidence</td>
<td>Total</td>
<td>Mean 0%</td>
</tr>
<tr>
<td><strong>Vagina:</strong></td>
<td></td>
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</tr>
<tr>
<td>Fibrosarcoma</td>
<td>0/50 (0%)</td>
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<tr>
<td>Overall Incidence</td>
<td>Total</td>
<td>Mean 0%</td>
</tr>
<tr>
<td><strong>Vagina:</strong></td>
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<tr>
<td>Leiomyoma</td>
<td>0/50 (0%)</td>
<td>Mean 0%</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total</td>
<td>Mean 0%</td>
</tr>
<tr>
<td><strong>Vagina:</strong></td>
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<tr>
<td>Polyp</td>
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</tr>
<tr>
<td>Overall Incidence</td>
<td>Total</td>
<td>Mean 2%</td>
</tr>
<tr>
<td><strong>Zymbal’s Gland:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carcinoma</td>
<td>1/50 (2%)</td>
<td>Mean 2%</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total</td>
<td>Mean 2%</td>
</tr>
<tr>
<td><strong>Zymbal’s Gland:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carcinoma or Adenoma</td>
<td>0/50 (0%)</td>
<td>Mean 0%</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total</td>
<td>Mean 0%</td>
</tr>
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*: Denominator is number of animals with tissues examined microscopically
#: Denominator is number of animals necropsied
Tumor Incidence for Selected Control Animal Groups

Vehicle: AIR

<table>
<thead>
<tr>
<th>Study Summary</th>
<th>Study Number</th>
<th>Study Start Date</th>
<th>Length of Study in Days</th>
<th>Number of Animals Total and (#/Cage)</th>
<th>Number Surviving and (Mean Life Span)</th>
<th>Maximum Mean Weekly Body Weight</th>
<th>Chemical</th>
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<tr>
<td>Male</td>
<td>Battelle Northwest 052060103</td>
<td>09/22/08</td>
<td>729</td>
<td>50(5)</td>
<td>30(672)</td>
<td>606.7</td>
<td>Antimony trioxide</td>
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<td></td>
<td>Battelle Northwest 052051503</td>
<td>04/14/08</td>
<td>729</td>
<td>50(5)</td>
<td>33(688)</td>
<td>602.8</td>
<td>Metal working fluids (CIMSTAR 3800)</td>
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<td>Battelle Northwest 052052303</td>
<td>07/20/09</td>
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<td>50(5)</td>
<td>36(696)</td>
<td>622.2</td>
<td>Metal working fluids (Trim VX)</td>
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<td>39(704)</td>
<td>395.6</td>
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<tr>
<td></td>
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<td>04/14/08</td>
<td>731</td>
<td>50(5)</td>
<td>35(700)</td>
<td>384.9</td>
<td>Metal working fluids (CIMSTAR 3800)</td>
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<td>Battelle Northwest 052052303</td>
<td>07/20/09</td>
<td>731</td>
<td>50(5)</td>
<td>30(681)</td>
<td>391.1</td>
<td>Metal working fluids (Trim VX)</td>
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### Tumor Incidence for Selected Control Animal Groups

**Species:** RATS  
**Route:** INHALATION  
**Vehicle:** AIR  
**Length of Study:** CHRONIC

<table>
<thead>
<tr>
<th>Organ Type</th>
<th>Male</th>
<th>Female</th>
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<tr>
<td><strong>#All Organs:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Benign Tumors</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total: 90/150 (60%)</td>
<td>Mean: 60%</td>
</tr>
<tr>
<td></td>
<td>SD: 10.58%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total: 117/150 (78%)</td>
<td>Mean: 78%</td>
</tr>
<tr>
<td></td>
<td>SD: 10.39%</td>
<td></td>
</tr>
<tr>
<td>Malignant Tumors</td>
<td>6/50 (12%)</td>
<td>13/50 (26%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total: 23/150 (15.33%)</td>
<td>Mean: 15.33%</td>
</tr>
<tr>
<td></td>
<td>SD: 9.45%</td>
<td></td>
</tr>
<tr>
<td>Malignant and Benign Tumors</td>
<td>36/50 (72%)</td>
<td>37/50 (74%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total: 99/150 (66%)</td>
<td>Mean: 66%</td>
</tr>
<tr>
<td></td>
<td>SD: 12.17%</td>
<td></td>
</tr>
<tr>
<td>Hemangioma</td>
<td>1/50 (2%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total: 2/150 (1.33%)</td>
<td>Mean: 1.33%</td>
</tr>
<tr>
<td></td>
<td>SD: 1.15%</td>
<td></td>
</tr>
<tr>
<td>Hemangiosarcoma or Hemangioma</td>
<td>3/50 (6%)</td>
<td>3/50 (6%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total: 8/150 (5.33%)</td>
<td>Mean: 5.33%</td>
</tr>
<tr>
<td></td>
<td>SD: 3.06%</td>
<td></td>
</tr>
</tbody>
</table>

* Denominator is number of animals with tissues examined microscopically  
# Denominator is number of animals necropsied
### Tumor Incidence for Selected Control Animal Groups

**Species:** RATS  
**Strain:** Wistar Han  
**Route:** INHALATION  
**Vehicle:** AIR  
**Length of Study:** CHRONIC  
**Report Date:** 11/11/2014  

<table>
<thead>
<tr>
<th>#All Organs:</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Histiocytic Sarcoma</strong></td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total</td>
<td>Mean 0%</td>
</tr>
<tr>
<td><strong>Leukemia: Lymphocytic, Monocytic, Mononuclear, or Undifferentiated</strong></td>
<td>1/50 (2%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total</td>
<td>Mean 0.67%</td>
</tr>
<tr>
<td><strong>Malignant Lymphoma: Histiocytic, Lymphocytic, Mixed, NOS, or Undifferentiated Cell Type</strong></td>
<td>0/50 (0%)</td>
<td>1/50 (2%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total</td>
<td>Mean 0%</td>
</tr>
<tr>
<td><strong>Mesothelioma: Benign, Malignant, NOS</strong></td>
<td>0/50 (0%)</td>
<td>1/50 (2%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total</td>
<td>Mean 2%</td>
</tr>
<tr>
<td><strong>Mesothelioma: Malignant</strong></td>
<td>0/50 (0%)</td>
<td>1/50 (2%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total</td>
<td>Mean 0%</td>
</tr>
<tr>
<td><strong>Osteoma</strong></td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total</td>
<td>Mean 0%</td>
</tr>
</tbody>
</table>

*: Denominator is number of animals with tissues examined microscopically  
#: Denominator is number of animals necropsied
### Tumor Incidence for Selected Control Animal Groups

**Species:** RATS  
**Route:** INHALATION  
**Vehicle:** AIR  
**Length of Study:** CHRONIC

#### #All Organs: Osteosarcoma

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Incidence</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>#All Organs: Osteosarcoma or Osteoma</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>*Adrenal Cortex: Adenoma</td>
<td>3/50 (6%)</td>
<td>2/50 (4%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>3/150 (2%)</td>
<td>2/150 (2%)</td>
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<tr>
<td>*Adrenal Cortex: Carcinoma</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
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<tr>
<td>Overall Incidence</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>*Adrenal Medulla: Pheochromocytoma Benign</td>
<td>1/49 (2%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>5/149 (3.36%)</td>
<td>1/49 (2%)</td>
</tr>
<tr>
<td>*Adrenal Medulla: Pheochromocytoma Complex</td>
<td>1/49 (2%)</td>
<td>0/50 (0%)</td>
</tr>
</tbody>
</table>

*: Denominator is number of animals with tissues examined microscopically  
#: Denominator is number of animals necropsied
<table>
<thead>
<tr>
<th>Tissue</th>
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<th>Female</th>
<th>Overall Incidence</th>
<th>Male</th>
<th>Female</th>
<th>Overall</th>
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<tbody>
<tr>
<td></td>
<td></td>
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</tr>
<tr>
<td><strong>Adrenal Medulla:</strong></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pheochromocytoma Malignant</td>
<td>0/49 (0%)</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
<td>0/49 (0%)</td>
<td>1/49 (2%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 0/149 (0%)</td>
<td>Mean 0%</td>
<td>SD 0%</td>
<td>Total 1/148 (0.68%)</td>
<td>Mean 0.68%</td>
<td>SD 1.18%</td>
</tr>
<tr>
<td><em>Adrenal Medulla:</em></td>
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<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pheochromocytoma: Benign, Complex, Malignant, NOS</td>
<td>2/49 (4%)</td>
<td>4/50 (8%)</td>
<td>0/50 (0%)</td>
<td>0/49 (0%)</td>
<td>2/49 (4%)</td>
<td>0/50 (0%)</td>
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<tr>
<td>Overall Incidence</td>
<td>Total 6/149 (4.03%)</td>
<td>Mean 4.03%</td>
<td>SD 4%</td>
<td>Total 2/148 (1.35%)</td>
<td>Mean 1.36%</td>
<td>SD 2.36%</td>
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<td><strong>Blood Vessel:</strong></td>
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<td>Hemangiosarcoma</td>
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<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 0/150 (0%)</td>
<td>Mean 0%</td>
<td>SD 0%</td>
<td>Total 0/150 (0%)</td>
<td>Mean 0%</td>
<td>SD 0%</td>
</tr>
<tr>
<td><em>Bone Marrow:</em></td>
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<td>1/50 (2%)</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 1/150 (0.67%)</td>
<td>Mean 0.67%</td>
<td>SD 1.15%</td>
<td>Total 0/150 (0%)</td>
<td>Mean 0%</td>
<td>SD 0%</td>
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<tr>
<td><strong>Bone:</strong></td>
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<tr>
<td>Osteoma</td>
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<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
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<td>Mean 0%</td>
<td>SD 0%</td>
<td>Total 0/150 (0%)</td>
<td>Mean 0%</td>
<td>SD 0%</td>
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<tr>
<td>Osteosarcoma</td>
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<td>1/50 (2%)</td>
<td>0/50 (0%)</td>
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<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 1/150 (0.67%)</td>
<td>Mean 0.67%</td>
<td>SD 1.15%</td>
<td>Total 0/150 (0%)</td>
<td>Mean 0%</td>
<td>SD 0%</td>
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</tbody>
</table>

*: Denominator is number of animals with tissues examined microscopically
#: Denominator is number of animals necropsied
# Bone:

### Osteosarcoma or Osteoma

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<td>Mean 0.67%</td>
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### Sarcoma

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<td>0/50 (0%)</td>
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<tr>
<td>Overall Incidence</td>
<td>0/150 (0%)</td>
<td>0/150 (0%)</td>
</tr>
<tr>
<td></td>
<td>Mean 0%</td>
<td>Mean 0%</td>
</tr>
<tr>
<td></td>
<td>SD 0%</td>
<td>SD 0%</td>
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* Brain:

### Glioma

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<tbody>
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<td>0/50 (0%)</td>
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<tr>
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<td>2/150 (1.33%)</td>
<td>0/150 (0%)</td>
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<td></td>
<td>Mean 1.33%</td>
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</tr>
<tr>
<td></td>
<td>SD 2.31%</td>
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### Glioma Malignant

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<td>0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>0/150 (0%)</td>
<td>0/150 (0%)</td>
</tr>
<tr>
<td></td>
<td>Mean 0%</td>
<td>Mean 0%</td>
</tr>
<tr>
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### Granular Cell Tumor Benign

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</tr>
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<tbody>
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<tr>
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<td>0/150 (0%)</td>
</tr>
<tr>
<td></td>
<td>Mean 0.67%</td>
<td>Mean 0%</td>
</tr>
<tr>
<td></td>
<td>SD 1.15%</td>
<td>SD 0%</td>
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### Granular Cell Tumor Malignant

<table>
<thead>
<tr>
<th></th>
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<th>Female</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>1/150 (0.67%)</td>
<td>0/150 (0%)</td>
</tr>
<tr>
<td></td>
<td>Mean 0.67%</td>
<td>Mean 0%</td>
</tr>
<tr>
<td></td>
<td>SD 1.15%</td>
<td>SD 0%</td>
</tr>
</tbody>
</table>

*: Denominator is number of animals with tissues examined microscopically
#: Denominator is number of animals necropsied
<table>
<thead>
<tr>
<th>Species: RATS</th>
<th>Route: INHALATION</th>
<th>Vehicle: AIR</th>
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<tbody>
<tr>
<td>Strain: Wistar Han</td>
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<tr>
<td>Length of Study: CHRONIC</td>
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**Tumor Incidence for Selected Control Animal Groups**

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<th>Male</th>
<th></th>
<th>Female</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Brain:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meningioma Malignant</td>
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</tr>
<tr>
<td>Overall Incidence</td>
<td>Total</td>
<td>1/150 (0.67%)</td>
<td>Mean 0.67%</td>
<td>SD 1.15%</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>0/50 (0%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1/50 (2%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>0/50 (0%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>0/150 (0%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mean 0%</td>
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<td></td>
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<tr>
<td></td>
<td>SD 1.15%</td>
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<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th></th>
<th>Female</th>
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<tbody>
<tr>
<td><strong>Brain:</strong></td>
<td></td>
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</tr>
<tr>
<td>Meningioma: Benign, Malignant, NOS</td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>Overall Incidence</td>
<td>Total</td>
<td>0/50 (0%)</td>
<td>Mean 0%</td>
<td>SD 0%</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>1/50 (2%)</td>
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<td>0/50 (0%)</td>
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<td>0/50 (0%)</td>
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<tr>
<td></td>
<td>Total</td>
<td>1/150 (0.67%)</td>
<td>Mean 0.67%</td>
<td>SD 1.15%</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>0/150 (0%)</td>
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<table>
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<tr>
<td><strong>Brain:</strong></td>
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<tr>
<td>Oligodendroglioma, Glioma, or Astrocytoma</td>
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<td>SD 0%</td>
</tr>
<tr>
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<td></td>
<td>1/50 (2%)</td>
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<td>0/50 (0%)</td>
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<tr>
<td></td>
<td>Total</td>
<td>0/149 (0%)</td>
<td>Mean 0%</td>
<td>SD 0%</td>
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<td></td>
<td>Female</td>
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<table>
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<td><strong>Brain:</strong></td>
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<tr>
<td>Clitoral/Preputial Gland: Carcinoma</td>
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<tr>
<td>Overall Incidence</td>
<td>Total</td>
<td>0/149 (0%)</td>
<td>Mean 0%</td>
<td>SD 0%</td>
</tr>
<tr>
<td></td>
<td>Female</td>
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<td>1/50 (2%)</td>
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<tr>
<td></td>
<td>Total</td>
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<td>SD 1.15%</td>
</tr>
<tr>
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<td>Female</td>
<td>0/150 (0%)</td>
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<table>
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<th></th>
<th>Female</th>
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<tbody>
<tr>
<td><strong>Brain:</strong></td>
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<tr>
<td>Schwannoma Benign</td>
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<td>Mean 0%</td>
<td>SD 0%</td>
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<tr>
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<td>Female</td>
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<td>1/150 (0.67%)</td>
<td>Mean 0.67%</td>
<td>SD 1.15%</td>
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<tr>
<td></td>
<td>Female</td>
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*: Denominator is number of animals with tissues examined microscopically
#: Denominator is number of animals necropsied
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<th></th>
<th></th>
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<tbody>
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<tr>
<td>Heart</td>
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<td>SD 1.15%</td>
<td>0/150 (0%)</td>
<td>Mean 0%</td>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>#Intestine Small: Duodenum:</td>
<td></td>
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</tr>
<tr>
<td>Fibroma</td>
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<td>Mean 0%</td>
<td>SD 0%</td>
<td>0/150 (0%)</td>
<td>Mean 0%</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total</td>
<td>0/150 (0%)</td>
<td></td>
<td></td>
<td>0/150 (0%)</td>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>#Intestine Small: Jejunum:</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Leiomyoma</td>
<td></td>
<td>0/150 (0%)</td>
<td>Mean 0%</td>
<td>SD 0%</td>
<td>0/150 (0%)</td>
<td>Mean 0%</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total</td>
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<td>0/150 (0%)</td>
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<td></td>
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<tr>
<td>#Intestine Small: Jejunum:</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Leiomyosarcoma</td>
<td></td>
<td>0/150 (0%)</td>
<td>Mean 0%</td>
<td>SD 0%</td>
<td>0/150 (0%)</td>
<td>Mean 0%</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>#Intestine Small: Site Unspecified:</td>
<td></td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>Fibroma</td>
<td></td>
<td>0/150 (0%)</td>
<td>Mean 0%</td>
<td>SD 0%</td>
<td>0/150 (0%)</td>
<td>Mean 0%</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total</td>
<td>0/150 (0%)</td>
<td></td>
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<td>0/150 (0%)</td>
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</tr>
</tbody>
</table>

*: Denominator is number of animals with tissues examined microscopically
#: Denominator is number of animals necropsied
**Species:** RATS  
**Strain:** Wistar Han  
**Length of Study:** CHRONIC

**Route:** INHALATION  
**Vehicle:** AIR

### Tumor Incidence for Selected Control Animal Groups

<table>
<thead>
<tr>
<th>Tumor Site</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Intestine Small: Site Unspecified:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leiomyoma</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>0/150 (0%)</td>
<td>Mean 0% SD 0%</td>
</tr>
<tr>
<td><strong>Intestine Small: Site Unspecified:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leiomyosarcoma</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>0/150 (0%)</td>
<td>Mean 0% SD 0%</td>
</tr>
<tr>
<td><strong>Islets, Pancreatic:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adenoma</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>0/150 (0%)</td>
<td>Mean 0% SD 0%</td>
</tr>
<tr>
<td><strong>Islets, Pancreatic:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carcinoma</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>0/150 (0%)</td>
<td>Mean 0% SD 0%</td>
</tr>
<tr>
<td><strong>Islets, Pancreatic:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carcinoma or Adenoma</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>0/150 (0%)</td>
<td>Mean 0% SD 0%</td>
</tr>
<tr>
<td><strong>Kidney: Pelvis and Transitional Epithelium:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Papilloma</td>
<td>0/50 (0%)</td>
<td>1/50 (2%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>1/150 (0.67%)</td>
<td>Mean 0.67% SD 1.15%</td>
</tr>
</tbody>
</table>

*: Denominator is number of animals with tissues examined microscopically  
#: Denominator is number of animals necropsied
### Tumor Incidence for Selected Control Animal Groups

**Species:** RATS  
**Strain:** Wistar Han  
**Length of Study:** CHRONIC  
**Route:** INHALATION  
**Vehicle:** AIR

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Overall Incidence</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>0/150 (0%)</td>
<td>0/150 (0%)</td>
</tr>
<tr>
<td>Mean</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>SD</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td><strong>Overall Incidence</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1/150 (0.67%)</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Mean 0.67%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>SD 1.15%</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>

- **Kidney: Renal Tubule: Adenoma**
  - Male: 0/50 (0%)
  - Female: 0/50 (0%)
  - Overall: 1/150 (0.67%)

- **Kidney: Renal Tubule: Carcinoma**
  - Male: 0/50 (0%)
  - Female: 0/50 (0%)
  - Overall: 1/150 (0.67%)

- **Kidney: Renal Tubule: Carcinoma or Adenoma**
  - Male: 0/50 (0%)
  - Female: 0/50 (0%)
  - Overall: 1/150 (0.67%)

- **Kidney: Renal Tubule: Lipoma**
  - Male: 0/50 (0%)
  - Female: 0/50 (0%)
  - Overall: 0/150 (0%)

- **Kidney: Renal Tubule: Liposarcoma**
  - Male: 0/50 (0%)
  - Female: 0/50 (0%)
  - Overall: 0/150 (0%)

- **Liver: Hepatocellular Adenoma**
  - Male: 0/50 (0%)
  - Female: 0/50 (0%)
  - Overall: 1/150 (0.67%)

---

*: Denominator is number of animals with tissues examined microscopically  
#: Denominator is number of animals necropsied
**Male** | **Female**
--- | ---

**Liver:**

- Hepatocellular Carcinoma or Hepatocellular Adenoma
  - 0/50 (0%) 0/50 (0%) 1/50 (2%)
  - 1/150 (0.67%) Mean 0.67% SD 1.15%
  - Total 1/150 (0.67%) Mean 0.67% SD 1.15%

- Hepatocellular Carcinoma, Hepatocellular Adenoma, or Hepatoblastoma
  - 0/50 (0%) 0/50 (0%) 1/50 (2%)
  - 1/150 (0.67%) Mean 0.67% SD 1.15%
  - Total 1/150 (0.67%) Mean 0.67% SD 1.15%

**Lung:**

- Alveolar/Bronchiolar Adenoma
  - 3/50 (6%) 1/50 (2%) 0/50 (0%)
  - 3/150 (2%) Mean 2.67% SD 3.06%
  - Total 4/150 (2.67%) Mean 2.67% SD 3.06%

- Alveolar/Bronchiolar Carcinoma or Alveolar/Bronchiolar Adenoma
  - 0/50 (0%) 1/50 (2%)
  - 4/150 (2.67%) Mean 2.67% SD 3.06%
  - Total 0/150 (0%) Mean 0% SD 0%

**Lymph Node:**

- Hemangioma
  - 0/50 (0%)
  - 1/150 (0.67%) Mean 0.67% SD 1.15%
  - Total 0/150 (0%) Mean 0% SD 0%

- Hemangioma
  - 1/50 (2%)
  - 1/150 (0.67%) Mean 0.67% SD 1.15%
  - Total 0/150 (0%) Mean 0% SD 0%

*: Denominator is number of animals with tissues examined microscopically
#: Denominator is number of animals necropsied
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<tr>
<th>Tissue Type</th>
<th>Species</th>
<th>Route</th>
<th>Vehicle</th>
<th>Strain</th>
<th>Length of Study</th>
<th>#Male</th>
<th>#Female</th>
<th>Overall Incidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lymph Node, Mesenteric: Hemangiosarcoma</td>
<td>RATS</td>
<td>INHALATION</td>
<td>AIR</td>
<td>Wistar Han</td>
<td>CHRONIC</td>
<td>2/50 (4%)</td>
<td>3/50 (6%)</td>
<td>0/50 (0%)</td>
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<tr>
<td>Overall Incidence</td>
<td>Total</td>
<td>5/150 (3.33%)</td>
<td>Mean 3.33%</td>
<td>SD 3.06%</td>
<td>Total 1/150 (0.67%)</td>
<td>Mean 0.67%</td>
<td>SD 1.15%</td>
<td></td>
</tr>
<tr>
<td>Mammary Gland: Adenoma</td>
<td>RATS</td>
<td>INHALATION</td>
<td>AIR</td>
<td>Wistar Han</td>
<td>CHRONIC</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total</td>
<td>0/150 (0%)</td>
<td>Mean 0%</td>
<td>SD 0%</td>
<td>Total 5/150 (3.33%)</td>
<td>Mean 3.33%</td>
<td>SD 3.06%</td>
<td></td>
</tr>
<tr>
<td>Mammary Gland: Carcinoma</td>
<td>RATS</td>
<td>INHALATION</td>
<td>AIR</td>
<td>Wistar Han</td>
<td>CHRONIC</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total</td>
<td>0/150 (0%)</td>
<td>Mean 0%</td>
<td>SD 0%</td>
<td>Total 19/150 (12.67%)</td>
<td>Mean 12.67%</td>
<td>SD 3.06%</td>
<td></td>
</tr>
<tr>
<td>Mammary Gland: Carcinoma or Adenoma</td>
<td>RATS</td>
<td>INHALATION</td>
<td>AIR</td>
<td>Wistar Han</td>
<td>CHRONIC</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total</td>
<td>0/150 (0%)</td>
<td>Mean 0%</td>
<td>SD 0%</td>
<td>Total 18/150 (12%)</td>
<td>Mean 12%</td>
<td>SD 3.06%</td>
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</tr>
</tbody>
</table>

*: Denominator is number of animals examined microscopically
#: Denominator is number of animals necropsied
### Toxicology Data Management System

**Tumor Incidence for Selected Control Animal Groups**

**Route:** INHALATION  
**Vehicle:** AIR

---

**Species:** RATS  
**Strain:** Wistar Han  
**Length of Study:** CHRONIC  
**Contract/Lab:** All Laboratories  
**Version:** Nov2014  
**Report Date:** 11/11/2014

---

#### #Mammary Gland:

- Fibroma, Fibroadenoma, Carcinoma, or Adenoma

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
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</thead>
<tbody>
<tr>
<td>Overall Incidence</td>
<td>0/150 (0%)</td>
<td>9/50 (18%)</td>
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<tr>
<td>Total</td>
<td>0/150 (0%)</td>
<td>0/150 (0%)</td>
</tr>
<tr>
<td>Mean</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>SD</td>
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<td>0%</td>
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</tbody>
</table>

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#### #Mesentery:

- Hemangiosarcoma

<table>
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<th>Female</th>
</tr>
</thead>
<tbody>
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<td>Overall Incidence</td>
<td>0/150 (0%)</td>
<td>0/150 (0%)</td>
</tr>
<tr>
<td>Total</td>
<td>0/150 (0%)</td>
<td>0/150 (0%)</td>
</tr>
<tr>
<td>Mean</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>SD</td>
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#### #Mesenter:

- Lipoma

<table>
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<th>Female</th>
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<tbody>
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<td>0/150 (0%)</td>
<td>0/150 (0%)</td>
</tr>
<tr>
<td>Total</td>
<td>0/150 (0%)</td>
<td>0/150 (0%)</td>
</tr>
<tr>
<td>Mean</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>SD</td>
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</tbody>
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#### #Mesentery:

- Schwannoma Malignant

<table>
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<th></th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Incidence</td>
<td>0/150 (0%)</td>
<td>0/150 (0%)</td>
</tr>
<tr>
<td>Total</td>
<td>0/150 (0%)</td>
<td>0/150 (0%)</td>
</tr>
<tr>
<td>Mean</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>SD</td>
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<td>0%</td>
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#### *Nose:

- Chondroma

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Incidence</td>
<td>1/150 (0.67%)</td>
<td>0/150 (0%)</td>
</tr>
<tr>
<td>Total</td>
<td>0/150 (0%)</td>
<td>0/150 (0%)</td>
</tr>
<tr>
<td>Mean</td>
<td>0.67%</td>
<td>0%</td>
</tr>
<tr>
<td>SD</td>
<td>1.15%</td>
<td>0%</td>
</tr>
</tbody>
</table>

---

#### *Nose:

- Olfactory Neuroblastoma

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Incidence</td>
<td>0/150 (0%)</td>
<td>0/150 (0%)</td>
</tr>
<tr>
<td>Total</td>
<td>0/150 (0%)</td>
<td>0/150 (0%)</td>
</tr>
<tr>
<td>Mean</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>SD</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>

---

*Denominator is number of animals with tissues examined microscopically  
#: Denominator is number of animals necropsied
### Tumor Incidence for Selected Control Animal Groups

**Species:** RATS  
**Strain:** Wistar Han  
**Route:** INHALATION  
**Vehicle:** AIR  
**Length of Study:** CHRONIC

#### Male

<table>
<thead>
<tr>
<th>Tumor Location</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>#Oral Cavity (Oral Mucosa, Tongue, Pharynx, Tooth, Gingiva):</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Squamous Cell Carcinoma</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>0/150 (0%)</td>
<td>Mean 0% SD 0%</td>
</tr>
<tr>
<td><strong>#Oral Cavity (Oral Mucosa, Tongue, Pharynx, Tooth, Gingiva):</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Squamous Cell Carcinoma, Papilloma Squamous, or Papilloma</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>0/150 (0%)</td>
<td>Mean 0% SD 0%</td>
</tr>
<tr>
<td><strong>#Oral Mucosa:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Squamous Cell Carcinoma</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>0/150 (0%)</td>
<td>Mean 0% SD 0%</td>
</tr>
</tbody>
</table>

#### Female

<table>
<thead>
<tr>
<th>Tumor Location</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>*<strong>Ovary:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adenoma</td>
<td>2/50 (4%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>2/150 (1.33%)</td>
<td>Mean 1.33% SD 2.31%</td>
</tr>
<tr>
<td>*<strong>Ovary:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cystadenoma</td>
<td>1/50 (2%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>1/150 (0.67%)</td>
<td>Mean 0.67% SD 1.15%</td>
</tr>
<tr>
<td>*<strong>Ovary:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Granulosa Cell Tumor Benign</td>
<td>0/50 (0%)</td>
<td>1/50 (2%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>1/150 (0.67%)</td>
<td>Mean 0.67% SD 1.15%</td>
</tr>
</tbody>
</table>

*: Denominator is number of animals with tissues examined microscopically  
#: Denominator is number of animals necropsied
<table>
<thead>
<tr>
<th>Tissue</th>
<th>Male</th>
<th>Female</th>
<th>Overall Incidence</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ovary:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Granulosa Cell Tumor Malignant</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
<td>1/50 (2%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total: 1/150 (0.67%)</td>
<td>Mean: 0.67%</td>
<td>SD: 1.15%</td>
</tr>
<tr>
<td>Granulosa Cell Tumor: Benign, Malignant, NOS</td>
<td>0/50 (0%)</td>
<td>1/50 (2%)</td>
<td>1/50 (2%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total: 2/150 (1.33%)</td>
<td>Mean: 1.33%</td>
<td>SD: 1.15%</td>
</tr>
<tr>
<td>Sex Cord Stromal Tumor, Benign</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total: 0/150 (0%)</td>
<td>Mean: 0%</td>
<td>SD: 0%</td>
</tr>
<tr>
<td>Tubulostromal Adenoma</td>
<td>2/50 (4%)</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total: 2/150 (1.33%)</td>
<td>Mean: 1.33%</td>
<td>SD: 2.31%</td>
</tr>
<tr>
<td>Pancreas:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adenoma</td>
<td>0/50 (0%)</td>
<td>1/50 (2%)</td>
<td>1/50 (2%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total: 2/150 (1.33%)</td>
<td>Mean: 1.33%</td>
<td>SD: 1.15%</td>
</tr>
<tr>
<td>Carcinoma or Adenoma</td>
<td>0/50 (0%)</td>
<td>1/50 (2%)</td>
<td>1/50 (2%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total: 0/149 (0%)</td>
<td>Mean: 0%</td>
<td>SD: 0%</td>
</tr>
</tbody>
</table>

*: Denominator is number of animals with tissues examined microscopically
#: Denominator is number of animals necropsied
### Toxicology Data Management System

**Tumor Incidence for Selected Control Animal Groups**

**Route:** INHALATION  
**Vehicle:** AIR

<table>
<thead>
<tr>
<th>Species</th>
<th>RATS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strain</td>
<td>Wistar Han</td>
</tr>
<tr>
<td>Length of Study</td>
<td>CHRONIC</td>
</tr>
</tbody>
</table>

#### Male vs. Female

<table>
<thead>
<tr>
<th>Tumor Location</th>
<th>Male</th>
<th>Female</th>
<th>Overall Incidence</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Total</td>
</tr>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>SD</td>
<td>SD</td>
</tr>
</tbody>
</table>

* Parathyroid Gland: Adenoma

<table>
<thead>
<tr>
<th></th>
<th>0/44 (0%)</th>
<th>0/43 (0%)</th>
<th>0/39 (0%)</th>
<th>0/39 (0%)</th>
<th>0/47 (0%)</th>
<th>1/42 (2%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>Total</td>
<td>Mean 0%</td>
<td>SD 0%</td>
<td>Total</td>
<td>Mean 0.79%</td>
<td>SD 1.37%</td>
</tr>
</tbody>
</table>

* Pituitary Gland: Pars Distalis or Unspecified Site: Adenoma

<table>
<thead>
<tr>
<th></th>
<th>14/50 (28%)</th>
<th>16/49 (33%)</th>
<th>14/50 (28%)</th>
<th>19/50 (38%)</th>
<th>35/50 (70%)</th>
<th>34/50 (68%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>Total 44/149 (29.53%)</td>
<td>Mean 29.55%</td>
<td>SD 2.69%</td>
<td>Total 88/150 (58.67%)</td>
<td>Mean 58.67%</td>
<td>SD 17.93%</td>
</tr>
</tbody>
</table>

* Pituitary Gland: Pars Distalis or Unspecified Site: Carcinoma or Adenoma

<table>
<thead>
<tr>
<th></th>
<th>0/50 (0%)</th>
<th>0/49 (0%)</th>
<th>0/50 (0%)</th>
<th>1/50 (2%)</th>
<th>0/50 (0%)</th>
<th>0/50 (0%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>Total 0/149 (0%)</td>
<td>Mean 0%</td>
<td>SD 0%</td>
<td>Total 1/150 (0.67%)</td>
<td>Mean 0.67%</td>
<td>SD 1.15%</td>
</tr>
</tbody>
</table>

* Pituitary Gland: Pars Intermedia: Adenoma

<table>
<thead>
<tr>
<th></th>
<th>1/50 (2%)</th>
<th>2/49 (4%)</th>
<th>1/50 (2%)</th>
<th>0/50 (0%)</th>
<th>1/50 (2%)</th>
<th>1/50 (2%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>Total 4/149 (2.68%)</td>
<td>Mean 2.69%</td>
<td>SD 1.2%</td>
<td>Total 2/150 (1.33%)</td>
<td>Mean 1.33%</td>
<td>SD 1.15%</td>
</tr>
</tbody>
</table>

* Pituitary Gland: Pars Intermedia: Carcinoma or Adenoma

<table>
<thead>
<tr>
<th></th>
<th>1/50 (2%)</th>
<th>2/49 (4%)</th>
<th>1/50 (2%)</th>
<th>0/50 (0%)</th>
<th>1/50 (2%)</th>
<th>1/50 (2%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>Total 4/149 (2.68%)</td>
<td>Mean 2.69%</td>
<td>SD 1.2%</td>
<td>Total 2/150 (1.33%)</td>
<td>Mean 1.33%</td>
<td>SD 1.15%</td>
</tr>
</tbody>
</table>

*: Denominator is number of animals with tissues examined microscopically  
#: Denominator is number of animals necropsied
**Species:** RATS  
**Strain:** Wistar Han  
**Length of Study:** CHRONIC  
**Route:** INHALATION  
**Vehicle:** AIR

### Tumor Incidence for Selected Control Animal Groups

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Prostate:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Adenoma</em></td>
<td>1/50 (2%)</td>
<td>1/50 (2%)</td>
<td>0/50 (0%)</td>
<td></td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 2/150 (1.33%)</td>
<td>Mean 1.33%</td>
<td>SD 1.15%</td>
<td></td>
</tr>
<tr>
<td><em>Carcinoma or Adenoma</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 1/50 (2%)</td>
<td>Mean 1.33%</td>
<td>SD 1.15%</td>
<td></td>
</tr>
<tr>
<td><strong>Salivary Glands:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Adenoma</em></td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
<td></td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 0/150 (0%)</td>
<td>Mean 0%</td>
<td>SD 0%</td>
<td></td>
</tr>
<tr>
<td><em>Carcinoma</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 0/150 (0%)</td>
<td>Mean 0%</td>
<td>SD 0%</td>
<td></td>
</tr>
<tr>
<td><strong>Salivary Glands:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Carcinoma or Adenoma</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 0/150 (0%)</td>
<td>Mean 0%</td>
<td>SD 0%</td>
<td></td>
</tr>
<tr>
<td><em>Myoepithelioma</em></td>
<td>1/50 (2%)</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
<td></td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 1/150 (0.67%)</td>
<td>Mean 0.67%</td>
<td>SD 1.15%</td>
<td></td>
</tr>
</tbody>
</table>

*: Denominator is number of animals with tissues examined microscopically  
#: Denominator is number of animals necropsied
### Toxicology Data Management System

**Tumor Incidence for Selected Control Animal Groups**

**Route:** INHALATION  
**Vehicle:** AIR

**Species:** RATS  
**Strain:** Wistar Han  
**Length of Study:** CHRONIC  
**Report Date:** 11/11/2014

<table>
<thead>
<tr>
<th>Tissue</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Salivary Glands:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Schwannoma Malignant</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0/50 (0%)</td>
<td>1/50 (2%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 1/150 (0.67%)</td>
<td>Mean 0.67%</td>
</tr>
<tr>
<td></td>
<td>0/50 (0%)</td>
<td>1/50 (2%)</td>
</tr>
<tr>
<td><strong>#Seminal Vesicle:</strong></td>
<td>0/50 (0%)</td>
<td>1/50 (2%)</td>
</tr>
<tr>
<td>Adenoma</td>
<td>Overall Incidence Total 1/150 (0.67%)</td>
<td>Mean 0.67%</td>
</tr>
<tr>
<td><strong>#Skeletal Muscle:</strong></td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Hemangiosarcoma</td>
<td>Overall Incidence Total 0/150 (0%)</td>
<td>Mean 0%</td>
</tr>
<tr>
<td><strong>#Skeletal Muscle:</strong></td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Sarcoma</td>
<td>Overall Incidence Total 0/150 (0%)</td>
<td>Mean 0%</td>
</tr>
<tr>
<td><strong>#Skin:</strong></td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Basal Cell Adenoma</td>
<td>Overall Incidence Total 0/150 (0%)</td>
<td>Mean 0%</td>
</tr>
<tr>
<td><strong>#Skin:</strong></td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Basal Cell Adenoma or</td>
<td>Overall Incidence Total 0/150 (0%)</td>
<td>Mean 0%</td>
</tr>
<tr>
<td>Basosquamous Tumor</td>
<td>Benign</td>
<td></td>
</tr>
</tbody>
</table>

*: Denominator is number of animals with tissues examined microscopically
#: Denominator is number of animals necropsied
<table>
<thead>
<tr>
<th>Species: RATS</th>
<th>Route: INHALATION</th>
<th>Vehicle: AIR</th>
</tr>
</thead>
</table>

| Strain: Wistar Han | Length of Study: CHRONIC | |

**Report Date:** 11/11/2014

## Tumor Incidence for Selected Control Animal Groups

<table>
<thead>
<tr>
<th>#Skin:</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basal Cell Adenoma, Basosquamous Tumor Benign, or Trichoepithelioma</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 0/150 (0%)</td>
<td>Mean 0%</td>
</tr>
</tbody>
</table>

### Basal Cell Carcinoma

<table>
<thead>
<tr>
<th>#Skin:</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basal Cell Carcinoma</td>
<td>0/50 (0%)</td>
<td>1/50 (2%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 1/150 (0.67%)</td>
<td>Mean 0.67%</td>
</tr>
</tbody>
</table>

### Basal Cell Carcinoma or Basosquamous Tumor (malignant or NOS)

<table>
<thead>
<tr>
<th>#Skin:</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basal Cell Carcinoma, Basal Cell Adenoma, Basosquamous Tumor (benign, malignant or NOS), or Trichoepithelioma</td>
<td>1/50 (2%)</td>
<td>2/50 (4%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 4/150 (2.67%)</td>
<td>Mean 2.67%</td>
</tr>
</tbody>
</table>

### Basal or Sq. Cell Carcinoma, Carcinoma, Basosq. Tumor (M or B), Basal Cell Adenoma, Adenoma, Papilloma, Sq Papilloma, Keratoacanthoma, Trichoepithelioma

<table>
<thead>
<tr>
<th>#Skin:</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fibroma</td>
<td>2/50 (4%)</td>
<td>1/50 (2%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 2/150 (1.33%)</td>
<td>Mean 1.33%</td>
</tr>
</tbody>
</table>

*: Denominator is number of animals with tissues examined microscopically
#: Denominator is number of animals necropsied
#Species: RATS

#Strain: Wistar Han

#Length of Study: CHRONIC

## Route: INHALATION

### Vehicle: AIR

### Tumor Incidence for Selected Control Animal Groups

#### Male

<table>
<thead>
<tr>
<th>Skin Type</th>
<th>Male</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>#Skin: Fibroma, Fibrosarcoma, Sarcoma, Myxoma, Myxosarcoma, or Fibrous Histiocytoma</td>
<td>2/50  (4%)</td>
<td>2/50 (4%)</td>
<td>1/50  (2%)</td>
<td>Total</td>
<td>2/50 (4%)</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
<td>Overall Incidence</td>
<td>Total</td>
</tr>
<tr>
<td></td>
<td>Mean 3.33%</td>
<td>Mean 3.33%</td>
<td>Mean 1.15%</td>
<td></td>
<td>Mean 1.33%</td>
<td>Mean 0%</td>
<td>Mean 0%</td>
<td>SD 1.15%</td>
<td>5/150 (3.33%)</td>
</tr>
</tbody>
</table>

#### Female

<table>
<thead>
<tr>
<th>Skin Type</th>
<th>Female</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>#Skin: Fibrosarcoma</td>
<td>0/50   (0%)</td>
<td>1/50 (2%)</td>
<td>0/50 (0%)</td>
<td>Total</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
<td>Overall Incidence</td>
<td>Total</td>
</tr>
<tr>
<td></td>
<td>Mean 0.67%</td>
<td>Mean 0.67%</td>
<td>Mean 1.15%</td>
<td></td>
<td>Mean 0%</td>
<td>Mean 0%</td>
<td>Mean 0%</td>
<td>SD 0%</td>
<td>1/150 (0.67%)</td>
</tr>
</tbody>
</table>

#### Male

<table>
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<tr>
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<th>Male</th>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>#Skin: Hamartoma</td>
<td>0/50  (0%)</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
<td>Total</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
<td>Overall Incidence</td>
<td>Total</td>
</tr>
<tr>
<td></td>
<td>Mean 0%</td>
<td>Mean 0%</td>
<td>Mean 0%</td>
<td></td>
<td>Mean 0%</td>
<td>Mean 0%</td>
<td>Mean 0%</td>
<td>SD 0%</td>
<td>0/150 (0%)</td>
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</tbody>
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#### Female

<table>
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</thead>
<tbody>
<tr>
<td>#Skin: Hemangiosarcoma</td>
<td>0/50   (0%)</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
<td>Total</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
<td>Overall Incidence</td>
<td>Total</td>
</tr>
<tr>
<td></td>
<td>Mean 0%</td>
<td>Mean 0%</td>
<td>Mean 0%</td>
<td></td>
<td>Mean 0%</td>
<td>Mean 0%</td>
<td>Mean 0%</td>
<td>SD 0%</td>
<td>0/150 (0%)</td>
</tr>
</tbody>
</table>

#### Male

<table>
<thead>
<tr>
<th>Skin Type</th>
<th>Male</th>
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</tr>
</thead>
<tbody>
<tr>
<td>#Skin: Keratoacanthoma</td>
<td>1/50  (2%)</td>
<td>1/50 (2%)</td>
<td>1/50 (2%)</td>
<td>Total</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
<td>Overall Incidence</td>
<td>Total</td>
</tr>
<tr>
<td></td>
<td>Mean 2%</td>
<td>Mean 2%</td>
<td>Mean 0%</td>
<td></td>
<td>Mean 0%</td>
<td>Mean 0%</td>
<td>Mean 0%</td>
<td>SD 0%</td>
<td>3/150 (2%)</td>
</tr>
</tbody>
</table>

### Notes:

- #: Denominator is number of animals necropsied
- *: Denominator is number of animals with tissues examined microscopically
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<th>Male</th>
<th>Female</th>
</tr>
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<tbody>
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</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 1/150 (0.67%)</td>
<td>Mean 0.67%</td>
</tr>
<tr>
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<td>SD 1.15%</td>
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<td>Total 0/150 (0%)</td>
<td>Mean 0%</td>
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<tr>
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<td>Mean 0%</td>
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<td>SD 0%</td>
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<td>1/50 (2%)</td>
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<td>0/50 (0%)</td>
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<tr>
<td></td>
<td>Total 1/150 (0.67%)</td>
<td>Mean 0.67%</td>
</tr>
<tr>
<td></td>
<td>SD 1.15%</td>
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<tr>
<td>Neurofibrosarcoma or Schwannoma (malignant or NOS)</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
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<tr>
<td></td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 0/150 (0%)</td>
<td>Mean 0%</td>
</tr>
<tr>
<td></td>
<td>SD 0%</td>
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<tr>
<td></td>
<td>0/50 (0%)</td>
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</tr>
<tr>
<td></td>
<td>SD 0%</td>
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</tr>
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<td>Neurofibrosarcoma, Neurofibroma, or Schwannoma (benign, malignant or NOS)</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
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<tr>
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<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 0/150 (0%)</td>
<td>Mean 0%</td>
</tr>
<tr>
<td></td>
<td>SD 0%</td>
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<td>0/50 (0%)</td>
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<tr>
<td></td>
<td>Total 0/150 (0%)</td>
<td>Mean 0%</td>
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<tr>
<td></td>
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<td>Schwannoma Malignant</td>
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<td>Overall Incidence</td>
<td>Total 0/150 (0%)</td>
<td>Mean 0%</td>
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<tr>
<td></td>
<td>SD 0%</td>
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<td>0/50 (0%)</td>
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<tr>
<td></td>
<td>Total 0/150 (0%)</td>
<td>Mean 0%</td>
</tr>
<tr>
<td></td>
<td>SD 0%</td>
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<tr>
<td>Squamous Cell Carcinoma</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
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<td>0/50 (0%)</td>
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<tr>
<td>Overall Incidence</td>
<td>Total 0/150 (0%)</td>
<td>Mean 0%</td>
</tr>
<tr>
<td></td>
<td>SD 0%</td>
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<tr>
<td></td>
<td>Total 0/150 (0%)</td>
<td>Mean 0%</td>
</tr>
<tr>
<td></td>
<td>SD 0%</td>
<td></td>
</tr>
</tbody>
</table>

*: Denominator is number of animals with tissues examined microscopically
#: Denominator is number of animals necropsied
<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Incidence</td>
<td>Total: 1/150 (0.67%)</td>
<td>Total: 0/150 (0%)</td>
</tr>
<tr>
<td></td>
<td>Mean: 0.67%</td>
<td>Mean: 0%</td>
</tr>
<tr>
<td></td>
<td>SD: 1.15%</td>
<td>SD: 0%</td>
</tr>
</tbody>
</table>

**#Skin: Squamous Cell Carcinoma, Basal Cell Carcinoma, Basosquamous Tumor (malignant or NOS), or Carcinoma**

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td></td>
<td>1/50 (2%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td></td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
</tr>
</tbody>
</table>

**Overall Incidence**

|                    | Total: 1/150 (0.67%)  | Total: 0/150 (0%)     |
|--------------------| Mean: 0.67%           | Mean: 0%              |
|--------------------| SD: 1.15%             | SD: 0%                |

**#Skin: Squamous Cell Papilloma**

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td></td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td></td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
</tr>
</tbody>
</table>

**Overall Incidence**

|                    | Total: 0/150 (0%)     | Total: 0/150 (0%)     |
|--------------------| Mean: 0%              | Mean: 0%              |
|--------------------| SD: 0%                | SD: 0%                |

**#Skin: Squamous Cell Papilloma or Papilloma**

<table>
<thead>
<tr>
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<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td></td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td></td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
</tr>
</tbody>
</table>

**Overall Incidence**

|                    | Total: 0/150 (0%)     | Total: 0/150 (0%)     |
|--------------------| Mean: 0%              | Mean: 0%              |
|--------------------| SD: 0%                | SD: 0%                |

**#Skin: Squamous Cell Papilloma, Papilloma, Squamous Cell Carcinoma or Keratoacanthoma**

<table>
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<th></th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1/50 (2%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
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<td>1/50 (2%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td></td>
<td>1/50 (2%)</td>
<td>0/50 (0%)</td>
</tr>
</tbody>
</table>

**Overall Incidence**

|                    | Total: 3/150 (2%)     | Total: 0/150 (0%)     |
|--------------------| Mean: 2%              | Mean: 0%              |
|--------------------| SD: 0%                | SD: 0%                |

**#Skin: Squamous Cell Papilloma, Papilloma, or Keratoacanthoma**

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1/50 (2%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td></td>
<td>1/50 (2%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td></td>
<td>1/50 (2%)</td>
<td>0/50 (0%)</td>
</tr>
</tbody>
</table>

**Overall Incidence**

|                    | Total: 3/150 (2%)     | Total: 0/150 (0%)     |
|--------------------| Mean: 2%              | Mean: 0%              |
|--------------------| SD: 0%                | SD: 0%                |

**#Skin: Sebaceous Gland:**

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<tr>
<th></th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td></td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td></td>
<td>1/50 (2%)</td>
<td>0/50 (0%)</td>
</tr>
</tbody>
</table>

**Overall Incidence**

|                    | Total: 1/150 (0.67%)  | Total: 0/150 (0%)     |
|--------------------| Mean: 0.67%           | Mean: 0%              |
|--------------------| SD: 1.15%             | SD: 0%                |

*: Denominator is number of animals with tissues examined microscopically
#: Denominator is number of animals necropsied
### Tumor Incidence for Selected Control Animal Groups

**Species:** RATS  
**Strain:** Wistar Han  
**Route:** INHALATION  
**Vehicle:** AIR  
**Length of Study:** CHRONIC

#### #Skin: Sebaceous Gland: Carcinoma or Adenoma

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>#Skin: Sebaceous Gland:</td>
<td>Carcinoma or Adenoma</td>
</tr>
<tr>
<td>Overall</td>
<td>Total</td>
<td>Mean 0.67%</td>
</tr>
<tr>
<td>*Spleen:</td>
<td>Hemangiosarcoma</td>
<td></td>
</tr>
<tr>
<td>Overall</td>
<td>Total</td>
<td>0/150 (0%)</td>
</tr>
<tr>
<td>#Stomach, Forestomach: Fibrosarcoma</td>
<td>Total</td>
<td>0/150 (0%)</td>
</tr>
<tr>
<td>#Stomach, Forestomach: Leiomyoma</td>
<td>Total</td>
<td>0/150 (0%)</td>
</tr>
<tr>
<td>#Stomach, Forestomach: Sarcoma</td>
<td>Total</td>
<td>0/150 (0%)</td>
</tr>
</tbody>
</table>

**Overall Incidence**

- **Total:** Denominator is number of animals with tissues examined microscopically
- **#:** Denominator is number of animals necropsied

---

* Version: Nov2014  
* Contract/Lab: All Laboratories  
* Species: RATS  
* Strain: Wistar Han  
* Length of Study: CHRONIC  
* Toxicology Data Management System  
* Tumor Incidence for Selected Control Animal Groups  
* Report Date: 11/11/2014
### Tumor Incidence for Selected Control Animal Groups

**Species:** RATS  
**Route:** INHALATION  
**Vehicle:** AIR  
**Length of Study:** CHRONIC  

<table>
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<tr>
<th>Tumor Type</th>
<th>Male</th>
<th>Female</th>
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</thead>
<tbody>
<tr>
<td><strong>#Stomach, Forestomach:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Squamous Cell Carcinoma</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 0/150 (0%)</td>
<td>Mean 0%</td>
</tr>
<tr>
<td></td>
<td>SD 0%</td>
<td></td>
</tr>
<tr>
<td>#Stomach, Forestomach:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Squamous Cell Carcinoma or Papilloma Squamous</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 0/150 (0%)</td>
<td>Mean 0%</td>
</tr>
<tr>
<td></td>
<td>SD 0%</td>
<td></td>
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<tr>
<td>#Stomach, Glandular:</td>
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<tr>
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<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 0/150 (0%)</td>
<td>Mean 0%</td>
</tr>
<tr>
<td></td>
<td>SD 0%</td>
<td></td>
</tr>
<tr>
<td>#Stomach, Glandular:</td>
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<tr>
<td>Leiomyosarcoma</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
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<td>Overall Incidence</td>
<td>Total 0/150 (0%)</td>
<td>Mean 0%</td>
</tr>
<tr>
<td></td>
<td>SD 0%</td>
<td></td>
</tr>
<tr>
<td>#Stomach, Glandular:</td>
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<td>1/50 (2%)</td>
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<tr>
<td>Overall Incidence</td>
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<td>Mean 0.67%</td>
</tr>
<tr>
<td></td>
<td>SD 1.15%</td>
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*: Denominator is number of animals with tissues examined microscopically  
#: Denominator is number of animals necropsied
<table>
<thead>
<tr>
<th>Species: RATS</th>
<th>Route: INHALATION</th>
<th>Contract/Lab: All Laboratories</th>
<th>Length of Study: CHRONIC</th>
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<td>2/50 (4%)</td>
<td>0/50 (0%)</td>
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<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 8/150 (5.33%)</td>
<td>Mean 5.33%</td>
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<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Female</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 1/150 (0.67%)</td>
<td>Mean 0.67%</td>
<td>SD 1.15%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>*Thymus:</th>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Sarcoma</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>0/41 (0%)</td>
<td>0/40 (0%)</td>
<td>0/48 (0%)</td>
</tr>
<tr>
<td>Female</td>
<td>0/48 (0%)</td>
<td>0/48 (0%)</td>
<td>0/48 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 0/129 (0%)</td>
<td>Mean 0%</td>
<td>SD 0%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>*Thymus:</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Thymoma Benign</td>
<td>3/41 (7%)</td>
<td>1/40 (3%)</td>
<td>3/48 (6%)</td>
</tr>
<tr>
<td>Male</td>
<td>6/46 (13%)</td>
<td>5/48 (10%)</td>
<td>0/48 (0%)</td>
</tr>
<tr>
<td>Female</td>
<td>8/48 (17%)</td>
<td>0/48 (0%)</td>
<td>0/48 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 7/129 (5.43%)</td>
<td>Mean 5.36%</td>
<td>SD 2.53%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>*Thymus:</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Thymoma: Benign, Malignant, NOS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Female</td>
<td>1/50 (2%)</td>
<td>0/50 (0%)</td>
<td>0/49 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 1/149 (0.67%)</td>
<td>Mean 0.67%</td>
<td>SD 1.15%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>*Thyroid Gland:</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Carcinoma</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Male</td>
<td>1/50 (2%)</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
</tr>
<tr>
<td>Female</td>
<td>0/49 (0%)</td>
<td>0/49 (0%)</td>
<td>0/49 (0%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total 1/149 (0.67%)</td>
<td>Mean 0.67%</td>
<td>SD 1.15%</td>
</tr>
</tbody>
</table>

*: Denominator is number of animals with tissues examined microscopically
#: Denominator is number of animals necropsied
### Toxicology Data Management System

**Tumor Incidence for Selected Control Animal Groups**

**Species:** RATS  
**Route:** INHALATION  
**Vehicle:** AIR

**Contract/Lab:** All Laboratories  
**Strain:** Wistar Han  
**Length of Study:** CHRONIC  
**Report Date:** 11/11/2014

<table>
<thead>
<tr>
<th>Tissue Type</th>
<th>Male</th>
<th></th>
<th></th>
<th>Female</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>*Thyroid Gland: C-Cell:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adenoma</td>
<td>5/50 (10%)</td>
<td>7/50 (14%)</td>
<td>3/50 (6%)</td>
<td>4/50 (8%)</td>
<td>3/50 (6%)</td>
<td>7/49 (14%)</td>
</tr>
<tr>
<td>Overall Incidence Total</td>
<td>15/150 (10%)</td>
<td>Mean 10%</td>
<td>SD 4%</td>
<td>14/149 (9.4%)</td>
<td>Mean 9.43%</td>
<td>SD 4.32%</td>
</tr>
<tr>
<td>*Thyroid Gland: C-Cell:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carcinoma</td>
<td>1/50 (2%)</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
<td>1/50 (2%)</td>
<td>0/50 (0%)</td>
<td>0/49 (0%)</td>
</tr>
<tr>
<td>Overall Incidence Total</td>
<td>1/150 (0.67%)</td>
<td>Mean 0.67%</td>
<td>SD 1.15%</td>
<td>1/149 (0.67%)</td>
<td>Mean 0.67%</td>
<td>SD 1.15%</td>
</tr>
<tr>
<td>*Thyroid Gland: C-Cell:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carcinoma or Adenoma</td>
<td>6/50 (12%)</td>
<td>7/50 (14%)</td>
<td>3/50 (6%)</td>
<td>5/50 (10%)</td>
<td>3/50 (6%)</td>
<td>7/49 (14%)</td>
</tr>
<tr>
<td>Overall Incidence Total</td>
<td>16/150 (10.67%)</td>
<td>Mean 10.67%</td>
<td>SD 4.16%</td>
<td>15/149 (10.07%)</td>
<td>Mean 10.1%</td>
<td>SD 4.14%</td>
</tr>
<tr>
<td>*Thyroid Gland: Follicular Cell:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adenoma</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
<td>1/50 (2%)</td>
<td>1/50 (2%)</td>
<td>1/49 (2%)</td>
</tr>
<tr>
<td>Overall Incidence Total</td>
<td>0/150 (0%)</td>
<td>Mean 0%</td>
<td>SD 0%</td>
<td>3/149 (2.01%)</td>
<td>Mean 2.01%</td>
<td>SD 0.02%</td>
</tr>
<tr>
<td>*Thyroid Gland: Follicular Cell:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carcinoma</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
<td>1/50 (2%)</td>
<td>1/50 (2%)</td>
<td>1/49 (2%)</td>
</tr>
<tr>
<td>Overall Incidence Total</td>
<td>0/150 (0%)</td>
<td>Mean 0%</td>
<td>SD 0%</td>
<td>3/149 (2.01%)</td>
<td>Mean 2.01%</td>
<td>SD 0.02%</td>
</tr>
<tr>
<td>*Thyroid Gland: Follicular Cell:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carcinoma or Adenoma</td>
<td>0/50 (0%)</td>
<td>1/50 (2%)</td>
<td>0/50 (0%)</td>
<td>2/50 (4%)</td>
<td>2/50 (4%)</td>
<td>1/49 (2%)</td>
</tr>
<tr>
<td>Overall Incidence Total</td>
<td>1/150 (0.67%)</td>
<td>Mean 0.67%</td>
<td>SD 1.15%</td>
<td>5/149 (3.36%)</td>
<td>Mean 3.35%</td>
<td>SD 1.13%</td>
</tr>
</tbody>
</table>

*: Denominator is number of animals with tissues examined microscopically  
#: Denominator is number of animals necropsied
**Species:** RATS  
**Route:** INHALATION  
**Vehicle:** AIR  
**Length of Study:** CHRONIC

### Tumor Incidence for Selected Control Animal Groups

<table>
<thead>
<tr>
<th>Tumor Type</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
</table>
| **Urinary Bladder:**  
  Carcinoma or Papilloma | 0/50 (0%) | 0/50 (0%) |
  Overall Incidence | Total: 0/150 (0%) | Mean: 0% SD: 0% |
| **Urinary Bladder:**  
  Papilloma | 0/50 (0%) | 0/50 (0%) |
  Overall Incidence | Total: 0/150 (0%) | Mean: 0% SD: 0% |
| **Uterus:**  
  Adenoma | 1/50 (2%) | 0/50 (0%) |
  Overall Incidence | Total: 1/150 (0.67%) | Mean: 0.67% SD: 1.15% |
| **Uterus:**  
  Carcinoma | 3/50 (6%) | 1/50 (2%) |
  Overall Incidence | Total: 5/150 (3.33%) | Mean: 3.33% SD: 2.31% |
| **Uterus:**  
  Granular Cell Tumor Benign | 1/50 (2%) | 0/50 (0%) |
  Overall Incidence | Total: 1/150 (0.67%) | Mean: 0.67% SD: 1.15% |
| **Uterus:**  
  Hemangiosarcoma | 0/50 (0%) | 0/50 (0%) |
  Overall Incidence | Total: 0/150 (0%) | Mean: 0% SD: 0% |

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<table>
<thead>
<tr>
<th>Uterus:</th>
<th>Male</th>
<th></th>
<th>Female</th>
<th></th>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>#Leiomyosarcoma</td>
<td>1/50 (2%)</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total</td>
<td>1/150  0.67%</td>
<td>Mean 0.67%</td>
<td>SD 1.15%</td>
<td></td>
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</tr>
<tr>
<td>#Malignant Mixed Mullerian Tumor</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total</td>
<td>0/150  0%</td>
<td>Mean 0%</td>
<td>SD 0%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>#Polyp Stromal</td>
<td>2/50 (4%)</td>
<td>5/50 (10%)</td>
<td>6/50 (12%)</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total</td>
<td>13/150 8.67%</td>
<td>Mean 8.67%</td>
<td>SD 4.16%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>#Sarcoma Stromal</td>
<td>1/50 (2%)</td>
<td>2/50 (4%)</td>
<td>1/50 (2%)</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total</td>
<td>4/150 2.67%</td>
<td>Mean 2.67%</td>
<td>SD 1.15%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>#Sarcoma Stromal or Polyp Stromal</td>
<td>3/50 (6%)</td>
<td>6/50 (12%)</td>
<td>7/50 (14%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total</td>
<td>16/150 10.67%</td>
<td>Mean 10.67%</td>
<td>SD 4.16%</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>#Schwannoma Malignant</td>
<td>0/50 (0%)</td>
<td>0/50 (0%)</td>
<td>2/50 (4%)</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total</td>
<td>2/150 1.33%</td>
<td>Mean 1.33%</td>
<td>SD 2.31%</td>
<td></td>
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</tr>
</tbody>
</table>

*: Denominator is number of animals with tissues examined microscopically
#: Denominator is number of animals necropsied
<table>
<thead>
<tr>
<th>Species:</th>
<th>RATS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strain:</td>
<td>Wistar Han</td>
</tr>
<tr>
<td>Route:</td>
<td>INHALATION</td>
</tr>
<tr>
<td>Vehicle:</td>
<td>AIR</td>
</tr>
<tr>
<td>Length of Study:</td>
<td>CHRONIC</td>
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<table>
<thead>
<tr>
<th>Organ</th>
<th>Type</th>
<th>Male</th>
<th>Female</th>
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</thead>
<tbody>
<tr>
<td>Uterus:</td>
<td>Squamous Cell Papilloma</td>
<td>0/50 (0%)</td>
<td>1/50 (2%)</td>
</tr>
<tr>
<td>Overall Incidence</td>
<td>Total</td>
<td>1/150 (0.67%)</td>
<td>Mean 0.67%</td>
</tr>
</tbody>
</table>

| Vagina: | Fibrosarcoma | 0/50 (0%) | 0/50 (0%) | 1/50 (2%) |
| Overall Incidence | Total | 1/150 (0.67%) | Mean 0.67% | SD 1.15% |

| Vagina: | Leiomyoma | 0/50 (0%) | 0/50 (0%) | 0/50 (0%) |
| Overall Incidence | Total | 0/150 (0%) | Mean 0% | SD 0% |

| Vagina: | Polyp | 0/50 (0%) | 0/50 (0%) | 0/50 (0%) |
| Overall Incidence | Total | 0/150 (0%) | Mean 0% | SD 0% |

| Zymbal's Gland: | Carcinoma | 0/50 (0%) | 2/50 (4%) | 1/50 (2%) |
| Overall Incidence | Total | 3/150 (2%) | Mean 2% | SD 2% |

| Zymbal's Gland: | Carcinoma or Adenoma | 0/50 (0%) | 2/50 (4%) | 1/50 (2%) |
| Overall Incidence | Total | 3/150 (2%) | Mean 2% | SD 2% |

*: Denominator is number of animals with tissues examined microscopically
#: Denominator is number of animals necropsied