

## Historical control rates for NTP Tg.AC and p53 mice

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1/31/08

## Tg.AC Females, 6 months

|   | Trimetholpropane triacrylate | Pentaerythritol triacrylate | Bromodichloromethane |        |        | Sodium bromate |       | Dichloroacetic acid |       | Dicyclohexyl-carbodiimide | Diisopropyl-carbodiimide | Total             |
|---|------------------------------|-----------------------------|----------------------|--------|--------|----------------|-------|---------------------|-------|---------------------------|--------------------------|-------------------|
|   | dermal                       | dermal                      | water                | gavage | dermal | dermal         | water | dermal              | water | dermal                    | dermal                   |                   |
| Length of study (weeks)                                 | 28                           | 27                          | 26                   | 26     | 26     | 26             | 27    | 26                  | 26    | 20                        | 20                       |                   |
| Stomach, Forestomach – squamous cell papilloma          | 4/15                         | 5/15                        | 4/15                 | 6/15   | 2/15   | 6/15           | 6/15  | 7/15                | 5/15  | 0/10                      | 0/10                     | 45/155<br>(29.0%) |
| Tooth – odontogenic tumor                               | 1/15                         | 4/15                        | 3/15                 | 4/15   | 2/15   | 3/15           | 1/15  | 5/15                | 2/15  | 3/10                      | 3/10                     | 31/155<br>(20.0%) |
| Skin – vulva, squamous cell papilloma                   | 0/15                         | 0/15                        | 0/15                 | 0/15   | 0/15   | 0/15           | 0/15  | 0/15                | 0/15  | 0/10                      | 0/10                     | 0/155<br>(0.0%)   |
| Skin – squamous cell papilloma                          | 0/15                         | 0/15                        | 0/15                 | 1/15   | 1/15   | 5/15           | 6/15  | 6/15                | 4/15  | 0/10                      | 1/10                     | 24/155<br>(15.5%) |
| Skin – SOA, squamous cell papilloma                     | 0/15                         | 0/15                        |                      |        | 0/15   | 0/15           |       | 0/15                |       | 0/10                      | 1/10                     | 1/95<br>(1.1%)    |
| Lung – alveolar/bronchiolar adenoma                     | 1/15                         | 0/15                        | 0/15                 | 0/15   | 0/15   | 0/15           | 0/15  | 0/15                | 0/15  | 0/10                      | 0/10                     | 1/155<br>(0.6%)   |
| Nose – respiratory epithelium, adenoma                  |                              |                             |                      |        |        |                |       |                     |       | 0/10                      | 1/10                     | 1/20<br>(5.0%)    |
| Vagina – squamous cell papilloma                        |                              |                             | 2/2                  |        |        |                |       |                     |       |                           |                          | 2/2<br>(100%)     |
| Salivary glands - carcinoma                             | 1/1                          |                             | 1/1                  | 1/1    | 1/1    |                | 1/1   | 1/1                 | 1/1   |                           | 0/10                     | 7/17<br>(41.2%)   |
| Intestine, small – jejunum, carcinoma                   |                              |                             |                      |        |        |                |       |                     |       |                           | 1/9                      | 1/9<br>(11.1%)    |
| Intestine large, rectum – anus, squamous cell papilloma |                              |                             |                      |        |        | 0/1            | 1/1   |                     | 2/2   |                           |                          | 3/4<br>(75.0%)    |
| Multiple organs – leukemia erythrocytic                 | 0/15                         | 1/15                        | 2/15                 | 2/15   | 0/15   | 0/15           | 1/15  | 1/15                | 1/15  | 1/10                      | 1/10                     | 10/155<br>(6.5%)  |
| Multiple organs – lymphoma malignant                    | 0/15                         | 0/15                        | 0/15                 | 0/15   | 0/15   | 0/15           | 1/15  | 0/15                | 0/15  | 1/10                      | 0/10                     | 2/155<br>(1.3%)   |

## Tg.AC Males, 6 months

|  | Trimethylolpropane triacrylate | Pentaerythritol triacrylate | Bromodichloromethane |        |        | Sodium bromate |       | Dichloroacetic acid |       | Overall           |
|--|--------------------------------|-----------------------------|----------------------|--------|--------|----------------|-------|---------------------|-------|-------------------|
|  | dermal                         | dermal                      | water                | gavage | dermal | dermal         | water | dermal              | water |                   |
| Length of study (weeks)                        | 28                             | 27                          | 26                   | 26     | 26     | 26             | 27    | 26                  | 26    |                   |
| Stomach, Forestomach – squamous cell papilloma | 5/15                           | 6/15                        | 5/15                 | 9/15   | 4/15   | 3/15           | 7/15  | 1/15                | 4/15  | 44/135<br>(32.6%) |
| Tooth – odontoma                               | 1/15                           | 2/15                        | 4/15                 | 3/15   | 3/15   | 3/15           | 3/15  | 2/15                | 1/15  | 22/135<br>(16.3%) |
| Skin – squamous cell papilloma                 | 0/15                           | 0/15                        | 6/15                 | 1/15   | 1/15   | 2/15           | 0/15  | 5/15                | 2/15  | 17/135<br>(12.6%) |
| Skin – SOA, squamous cell papilloma            | 0/15                           | 1/15                        | 0/15                 | 0/15   | 0/15   | 0/15           | 0/15  | 0/15                | 0/15  | 1/135<br>(0.7%)   |
| Lung – alveolar/bronchiolar adenoma            | 0/15                           | 2/15                        | 0/15                 | 0/15   | 1/15   | 0/15           | 0/15  | 1/15                | 0/15  | 4/135<br>(3.0%)   |
| Salivary glands - carcinoma                    |                                | 1/1                         | 0/1                  |        |        |                |       | 1/1                 |       | 2/3<br>(66.7%)    |
| Multiple organs – leukemia erythrocytic        | 0/15                           | 0/15                        | 0/15                 | 1/15   | 1/15   | 0/15           | 0/15  | 0/15                | 0/15  | 2/135<br>(1.5%)   |

## Tg.AC Females, 9 months

|   | Aspartame | Acesulfame potassium | Bromodichloromethane |        |        | Sodium bromate |       | Dichloroacetic acid |       | Allyl bromide | Total             |
|---|-----------|----------------------|----------------------|--------|--------|----------------|-------|---------------------|-------|---------------|-------------------|
|   | feed      | feed                 | water                | gavage | dermal | dermal         | water | dermal              | water | gavage        |                   |
| Length of study (weeks)                                 | 40        | 40                   | 42                   | 41     | 39     | 39             | 43    | 39                  | 41    | 40            |                   |
| Stomach, Forestomach – squamous cell papilloma          | 4/15      | 9/14                 | 5/10                 | 4/10   | 1/10   | 2/9            | 1/10  | 6/10                | 6/10  | 8/14          | 46/112<br>(41.1%) |
| Tooth – odontogenic tumor                               | 4/15      | 2/15                 | 3/10                 | 4/10   | 4/10   | 2/9            | 3/10  | 4/10                | 1/10  | 2/15          | 29/114<br>(25.4%) |
| Skin – squamous cell carcinoma                          | 0/15      | 0/15                 | 0/10                 | 0/10   | 1/10   | 0/9            | 0/10  | 1/10                | 0/10  | 0/15          | 2/114<br>(1.8%)   |
| Skin – vulva, squamous cell papilloma                   | 1/15      | 2/15                 | 0/10                 | 0/10   | 0/10   | 0/9            | 0/10  | 0/10                | 0/10  | 2/15          | 5/114<br>(4.4%)   |
| Skin – squamous cell papilloma                          | 0/15      | 1/15                 | 6/10                 | 6/10   | 6/10   | 6/9            | 5/10  | 7/10                | 6/10  | 1/15          | 44/114<br>(38.6%) |
| Skin – lip, squamous cell papilloma                     |           |                      |                      |        |        |                |       |                     |       | 1/15          | 1/15<br>(6.7%)    |
| Skin – SOA, squamous cell papilloma                     |           |                      |                      |        | 0/10   | 1/9            |       | 0/10                |       |               | 1/29<br>(3.4%)    |
| Lung – alveolar/bronchiolar adenoma                     | 1/15      | 1/15                 | 0/10                 | 0/10   | 0/10   | 0/9            | 1/10  | 0/10                | 0/10  | 0/14          | 2/113<br>(1.8%)   |
| Ovary – teratoma, benign                                | 0/15      | 0/13                 | 0/10                 | 0/10   | 0/10   | 1/9            | 0/10  | 0/10                | 0/10  | 0/13          | 1/112<br>(0.9%)   |
| Ovary - luteoma   | 0/15      | 0/13                 | 0/10                 | 0/10   | 0/10   | 0/9            | 1/10  | 0/10                | 0/10  | 0/13          | 1/112<br>(0.9%)   |
| Vagina - leiomyosarcoma                                 | 0/15      | 0/13                 |                      |        | 1/2    |                |       |                     |       |               | 1/30<br>(3.3%)    |
| Vagina – squamous cell papilloma                        | 0/15      | 0/13                 |                      |        | 1/2    |                |       |                     |       |               | 1/30<br>(3.3%)    |
| Salivary glands - carcinoma                             | 0/15      | 0/14                 | 1/1                  |        |        | 0/1            | 1/1   |                     |       |               | 2/32<br>(6.3%)    |
| Intestine large, rectum – anus, squamous cell papilloma | 0/15      | 0/13                 |                      |        |        |                |       |                     | 1/1   |               | 1/29<br>(3.4%)    |
| Multiple organs – leukemia erythrocytic                 | 1/15      | 2/15                 | 1/10                 | 0/10   | 2/10   | 1/9            | 0/10  | 0/10                | 3/10  | 0/15          | 10/114<br>(8.8%)  |
| Multiple organs – lymphoma malignant                    | 0/15      | 0/15                 | 0/10                 | 0/10   | 0/10   | 0/9            | 0/10  | 1/10                | 0/10  | 2/15          | 3/114<br>(2.6%)   |
| Zymbal’s gland - carcinoma                              | 0/15      | 0/11                 |                      |        |        | 1/2            |       |                     |       |               | 1/28<br>(3.6%)    |

## Tg.AC Males, 9 months

|  | Aspartame | Acesulfame potassium | Bromodichloromethane |        |        | Sodium bromate |       | Dichloroacetic acid |       | Allyl bromide | Total             |
|--|-----------|----------------------|----------------------|--------|--------|----------------|-------|---------------------|-------|---------------|-------------------|
|  | feed      | feed                 | water                | gavage | dermal | dermal         | water | dermal              | water | gavage        |                   |
| Length of study (weeks)                        | 40        | 40                   | 42                   | 41     | 39     | 39             | 43    | 39                  | 41    | 40            |                   |
| Stomach, Forestomach – squamous cell papilloma | 8/12      | 5/15                 | 7/10                 | 8/10   | 3/10   | 3/10           | 4/10  | 7/10                | 5/10  | 6/15          | 56/112<br>(50.0%) |
| Tooth – odontoma                               | 3/15      | 4/15                 | 3/10                 | 4/10   | 3/10   | 2/10           | 3/10  | 1/10                | 2/10  | 5/15          | 30/115<br>(26.1%) |
| Skin – squamous cell carcinoma                 | 0/15      | 0/15                 | 0/10                 | 0/10   | 0/10   | 1/10           | 0/10  | 0/10                | 0/10  | 0/15          | 1/115<br>(0.9%)   |
| Skin – prepuce, squamous cell papilloma        | 0/15      | 1/15                 | 0/10                 | 0/10   | 0/10   | 0/10           | 0/10  | 0/10                | 0/10  | 0/15          | 1/115<br>(0.9%)   |
| Skin – lip, squamous cell papilloma            | 0/15      | 2/15                 | 0/10                 | 0/10   | 0/10   | 0/10           | 0/10  | 0/10                | 0/10  | 1/15          | 3/115<br>(2.6%)   |
| Skin – squamous cell papilloma                 | 0/15      | 1/15                 | 8/10                 | 5/10   | 6/10   | 7/10           | 5/10  | 8/10                | 9/10  | 5/15          | 54/115<br>(50.0%) |
| Skin – dermis, mast cell tumor, benign         | 0/15      | 1/15                 | 0/10                 | 0/10   | 0/10   | 0/10           | 0/10  | 0/10                | 0/10  | 0/15          | 1/115<br>(0.9%)   |
| Lung – alveolar/bronchiolar adenoma            | 0/14      | 1/15                 | 0/10                 | 0/10   | 0/10   | 1/10           | 1/10  | 0/10                | 1/10  | 1/15          | 5/115<br>(4.3%)   |
| Thyroid gland - adenoma                        | 0/13      | 1/15                 | 0/10                 | 0/10   | 0/10   | 0/10           | 0/10  | 0/10                | 0/10  | 0/15          | 1/113<br>(0.9%)   |
| Salivary glands - carcinoma                    | 0/13      | 0/14                 |                      | 2/2    | 1/1    | 1/2            |       |                     |       |               | 4/32<br>(12.5%)   |
| Salivary glands - carcinosarcoma               | 0/13      | 0/14                 |                      | 0/2    |        | 1/2            |       |                     |       |               | 1/31<br>(3.2%)    |
| Multiple organs – leukemia erythrocytic        | 1/15      | 0/15                 | 1/10                 | 0/10   | 0/10   | 0/10           | 2/10  | 1/10                | 0/10  | 0/15          | 5/115<br>(4.3%)   |

**p53 Females, 6 months**

|                                      | Bromodichloro-<br>methane |        | Sodium<br>bromate | Diisopropyl-<br>carbodiimide | Dichloroacetic<br>acid | Dicyclohexyl-<br>carbodiimide | Diisopropyl-<br>carbodiimide | Overall         |
|--------------------------------------|---------------------------|--------|-------------------|------------------------------|------------------------|-------------------------------|------------------------------|-----------------|
|                                      | water                     | gavage | water             | dermal                       | water                  | dermal                        | dermal                       |                 |
| Length of study (weeks)              | 26                        | 26     | 27                | 27                           | 26                     | 27                            | 26                           |                 |
| Uterus – stromal polyp               | 1/15                      | 0/15   | 1/15              | 0/15                         | 1/15                   | 0/15                          | 0/15                         | 3/105<br>(2.9%) |
| Multiple organs – lymphoma malignant | 0/15                      | 0/15   | 1/15              | 0/15                         | 0/15                   | 0/15                          | 0/15                         | 1/105<br>(1.0%) |

**p53 Males, 6 months**

|   | Bromodichloro-<br>methane |        | Sodium<br>bromate | Dichloroacetic<br>acid | Overall        |
|---|---------------------------|--------|-------------------|------------------------|----------------|
|   | water                     | gavage | water             | water                  |                |
| Length of study (weeks)                   | 26                        | 26     | 27                | 26                     |                |
| Liver – hepatocellular adenoma            | 1/15                      | 0/15   | 0/15              | 0/15                   | 1/60<br>(1.7%) |
| Thyroid gland – follicular cell carcinoma | 1/15                      | 0/15   | 0/15              | 0/15                   | 1/60<br>(1.7%) |
| Multiple organs – lymphoma malignant      | 0/15                      | 0/15   | 1/15              | 0/15                   | 1/60<br>(1.7%) |

**p53 Females, 9 months**

|   | Aspartame | Acesulfame potassium | Bromodichloro-methane |        | Sodium bromate | Dichloroacetic acid | Overall        |
|---|-----------|----------------------|-----------------------|--------|----------------|---------------------|----------------|
|   | feed      | feed                 | water                 | gavage | water          | water               |                |
| Length of study (weeks)                 | 40        | 40                   | 42                    | 41     | 43             | 41                  |                |
| Bone – osteosarcoma                     | 1/15      | 1/15                 |                       | 1/1    |                | 0/10                | 3/41<br>(7.3%) |
| Uterus – stromal polyp                  | 0/15      | 0/15                 | 2/10                  | 0/10   | 0/10           | 0/10                | 2/70<br>(2.9%) |
| Pituitary gland – pars distalis adenoma | 1/9       | 0/13                 | 0/10                  | 0/10   | 0/10           | 0/10                | 1/62<br>(1.6%) |
| Mammary gland – carcinoma               | 1/13      | 0/15                 | 0/10                  | 0/10   | 0/10           | 0/10                | 1/68<br>(1.5%) |
| Skin – carcinoma                        | 0/15      | 0/15                 | 1/10                  | 0/10   | 0/10           | 0/10                | 1/70<br>(1.4%) |
| Ovary - cystadenoma                     | 0/15      | 0/15                 | 0/10                  | 0/10   | 1/10           | 0/10                | 1/70<br>(1.4%) |
| Multiple organs – lymphoma malignant    | 1/15      | 0/15                 | 0/10                  | 0/10   | 2/10           | 0/10                | 3/70<br>(4.3%) |

**p53 Males, 9 months**

|                                      | Aspartame | Acesulfame potassium | Bromodichloro-methane |        | Sodium bromate | Dichloroacetic acid | Overall        |
|--------------------------------------|-----------|----------------------|-----------------------|--------|----------------|---------------------|----------------|
|                                      | feed      | feed                 | water                 | gavage | water          | water               |                |
| Length of study (weeks)              | 40        | 40                   | 42                    | 41     | 43             | 41                  |                |
| Bone – osteosarcoma                  | 0/15      | 0/15                 |                       |        | 1/10           | 0/10                | 1/50<br>(2.0%) |
| Liver – hepatocellular adenoma       | 0/15      | 0/15                 | 0/10                  | 2/10   | 0/10           | 0/10                | 2/70<br>(2.9%) |
| Multiple organs – lymphoma malignant | 0/15      | 0/15                 | 1/10                  | 1/10   | 0/10           | 0/10                | 2/70<br>(2.9%) |