

Experiment Number: 61427-04

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Mouse/B6C3F1

**P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH
AVERAGE SEVERITY GRADES[b]**

Test Compound: Vanadium pentoxide

CAS Number: 1314-62-1

Date Report Requested: 10/15/2014

Time Report Requested: 13:11:08

First Dose M/F: NA / NA

Lab: IIT

| | |
|-----------------------------|------------|
| C Number: | C61427 |
| Lock Date: | 05/20/1992 |
| Cage Range: | All |
| Date Range: | All |
| Reasons For Removal: | All |
| Removal Date Range: | All |
| Treatment Groups: | All |
| Study Gender: | Both |
| PWG Approval Date | NONE |

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First Dose M/F: NA / NA

Lab: IIT

| B6C3F1 Mouse MALE | CONTROL | 1.00 MG/M3 | 2.00 MG/M3 | 4.00 MG/M3 | 8.00 MG/M3 | 16.00 MG/M3 |
|----------------------------------|---------|------------|------------|------------|------------|-------------|
| Disposition Summary | | | | | | |
| Animals Initially In Study | 10 | 10 | 10 | 10 | 10 | 10 |
| Early Deaths | | | | | | |
| Natural Death | | | | | | 1 |
| Survivors | | | | | | |
| Terminal Sacrifice | 10 | 10 | 10 | 10 | 10 | 9 |
| Animals Examined Microscopically | 10 | 10 | 10 | 10 | 10 | 10 |
| ALIMENTARY SYSTEM | | | | | | |
| Esophagus | (10) | (0) | (0) | (0) | (0) | (10) |
| Gallbladder | (9) | (0) | (0) | (0) | (0) | (8) |
| Intestine Large, Cecum | (10) | (0) | (0) | (0) | (0) | (10) |
| Intestine Large, Colon | (10) | (0) | (0) | (0) | (0) | (10) |
| Intestine Large, Rectum | (10) | (0) | (0) | (0) | (0) | (10) |
| Intestine Small, Duodenum | (10) | (0) | (0) | (0) | (0) | (10) |
| Intestine Small, Ileum | (10) | (0) | (0) | (0) | (0) | (10) |
| Intestine Small, Jejunum | (10) | (0) | (0) | (0) | (0) | (10) |
| Liver | (10) | (0) | (0) | (0) | (0) | (10) |
| Mineralization | 1 [1.0] | | | | | |
| Pancreas | (10) | (0) | (0) | (0) | (0) | (9) |
| Salivary Glands | (10) | (0) | (0) | (0) | (0) | (10) |
| CARDIOVASCULAR SYSTEM | | | | | | |
| Heart | (10) | (0) | (0) | (0) | (0) | (10) |
| ENDOCRINE SYSTEM | | | | | | |
| Adrenal Cortex | (10) | (0) | (0) | (0) | (0) | (10) |
| Adrenal Medulla | (10) | (0) | (0) | (0) | (0) | (10) |
| Parathyroid Gland | (2) | (0) | (0) | (0) | (0) | (7) |
| Pituitary Gland | (10) | (0) | (0) | (0) | (0) | (10) |

a - Number of animals examined microscopically at site and number of animals with lesion

b - Average severity grade (1-minimal; 2-mild; 3-moderate; 4-marked)

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Test Compound: Vanadium pentoxide

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Date Report Requested: 10/15/2014

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First Dose M/F: NA / NA

Lab: IIT

| B6C3F1 Mouse MALE | CONTROL | 1.00 MG/M3 | 2.00 MG/M3 | 4.00 MG/M3 | 8.00 MG/M3 | 16.00 MG/M3 |
|-------------------------|---------|------------|------------|------------|------------|-------------|
| Thyroid Gland | (10) | (0) | (0) | (0) | (0) | (10) |
| GENERAL BODY SYSTEM | | | | | | |
| None | | | | | | |
| GENITAL SYSTEM | | | | | | |
| Epididymis | (9) | (0) | (0) | (0) | (0) | (10) |
| Preputial Gland | (10) | (1) | (0) | (0) | (0) | (10) |
| Cyst | | | | | | 1 [1.0] |
| Hyperplasia | | 1 [2.0] | | | | |
| Prostate | (10) | (0) | (0) | (0) | (0) | (10) |
| Seminal Vesicle | (10) | (0) | (0) | (0) | (0) | (10) |
| Testes | (10) | (0) | (0) | (0) | (0) | (10) |
| HEMATOPOIETIC SYSTEM | | | | | | |
| Bone Marrow | (10) | (0) | (0) | (0) | (0) | (10) |
| Lymph Node, Bronchial | (7) | (0) | (0) | (0) | (0) | (3) |
| Lymph Node, Mandibular | (10) | (0) | (0) | (0) | (0) | (9) |
| Lymph Node, Mediastinal | (6) | (0) | (0) | (0) | (0) | (2) |
| Lymph Node, Mesenteric | (8) | (0) | (0) | (0) | (0) | (10) |
| Spleen | (10) | (0) | (1) | (0) | (0) | (10) |
| Thymus | (9) | (0) | (0) | (0) | (8) | (7) |
| Depletion Lymphoid | | | | | | 2 [3.0] |
| INTEGUMENTARY SYSTEM | | | | | | |
| Mammary Gland | (1) | (0) | (0) | (0) | (0) | (0) |
| Skin | (10) | (0) | (0) | (0) | (0) | (10) |
| MUSCULOSKELETAL SYSTEM | | | | | | |
| Bone | (10) | (0) | (0) | (0) | (0) | (10) |
| NERVOUS SYSTEM | | | | | | |
| Brain | (10) | (0) | (0) | (0) | (0) | (10) |

a - Number of animals examined microscopically at site and number of animals with lesion

b - Average severity grade (1-minimal; 2-mild; 3-moderate; 4-marked)

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Species/Strain: Mouse/B6C3F1

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Test Compound: Vanadium pentoxide

CAS Number: 1314-62-1

Date Report Requested: 10/15/2014

Time Report Requested: 13:11:08

First Dose M/F: NA / NA

Lab: IIT

| B6C3F1 Mouse MALE | CONTROL | 1.00 MG/M3 | 2.00 MG/M3 | 4.00 MG/M3 | 8.00 MG/M3 | 16.00 MG/M3 |
|-------------------------|---------|------------|------------|------------|------------|-------------|
| Brain | (10) | (0) | (0) | (0) | (0) | (10) |
| RESPIRATORY SYSTEM | | | | | | |
| Larynx | (10) | (0) | (0) | (0) | (0) | (10) |
| Lung | (10) | (10) | (10) | (10) | (10) | (10) |
| Epithelium, Hyperplasia | | 1 [1.0] | 4 [1.0] | 5 [1.0] | 10 [1.3] | 10 [3.0] |
| Inflammation | | 1 [1.0] | 3 [1.0] | 4 [1.0] | 10 [2.0] | 10 [2.0] |
| Nose | (10) | (0) | (0) | (0) | (0) | (10) |
| Trachea | (10) | (0) | (0) | (0) | (0) | (10) |
| SPECIAL SENSES SYSTEM | | | | | | |
| None | | | | | | |
| URINARY SYSTEM | | | | | | |
| Kidney | (10) | (0) | (0) | (0) | (0) | (10) |
| Pelvis, Inflammation | | | | | | 1 [2.0] |
| Urinary Bladder | (10) | (0) | (0) | (0) | (0) | (10) |

END OF MALE DATA

a - Number of animals examined microscopically at site and number of animals with lesion

b - Average severity grade (1-minimal; 2-mild; 3-moderate; 4-marked)

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First Dose M/F: NA / NA

Lab: IIT

| B6C3F1 Mouse FEMALE | CONTROL | 1.00 MG/M3 | 2.00 MG/M3 | 4.00 MG/M3 | 8.00 MG/M3 | 16.00 MG/M3 |
|----------------------------------|---------|------------|------------|------------|------------|-------------|
| Disposition Summary | | | | | | |
| Animals Initially In Study | 10 | 10 | 10 | 10 | 10 | 10 |
| Early Deaths | | | | | | |
| Survivors | | | | | | |
| Terminal Sacrifice | 10 | 10 | 10 | 10 | 10 | 10 |
| Animals Examined Microscopically | 10 | 10 | 10 | 10 | 10 | 10 |
| ALIMENTARY SYSTEM | | | | | | |
| Esophagus | (10) | (0) | (0) | (0) | (0) | (10) |
| Gallbladder | (7) | (0) | (0) | (0) | (0) | (8) |
| Intestine Large, Cecum | (10) | (0) | (0) | (0) | (0) | (10) |
| Intestine Large, Colon | (10) | (0) | (0) | (0) | (0) | (10) |
| Intestine Large, Rectum | (10) | (0) | (0) | (0) | (0) | (10) |
| Intestine Small, Duodenum | (10) | (0) | (0) | (0) | (0) | (10) |
| Intestine Small, Ileum | (10) | (0) | (0) | (0) | (0) | (10) |
| Intestine Small, Jejunum | (10) | (0) | (0) | (0) | (0) | (10) |
| Liver | (10) | (0) | (0) | (0) | (0) | (10) |
| Pancreas | (10) | (0) | (0) | (0) | (0) | (10) |
| Salivary Glands | (9) | (0) | (0) | (0) | (0) | (10) |
| CARDIOVASCULAR SYSTEM | | | | | | |
| Heart | (10) | (0) | (1) | (0) | (0) | (10) |
| ENDOCRINE SYSTEM | | | | | | |
| Adrenal Cortex | (10) | (0) | (0) | (0) | (0) | (10) |
| Adrenal Medulla | (10) | (0) | (0) | (0) | (0) | (10) |
| Parathyroid Gland | (7) | (0) | (0) | (0) | (0) | (10) |
| Pituitary Gland | (10) | (0) | (0) | (0) | (0) | (10) |
| Thyroid Gland | (10) | (0) | (0) | (0) | (0) | (10) |
| GENERAL BODY SYSTEM | | | | | | |

a - Number of animals examined microscopically at site and number of animals with lesion

b - Average severity grade (1-minimal; 2-mild; 3-moderate; 4-marked)

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| B6C3F1 Mouse FEMALE | CONTROL | 1.00 MG/M3 | 2.00 MG/M3 | 4.00 MG/M3 | 8.00 MG/M3 | 16.00 MG/M3 |
|-------------------------------|---------|------------|------------|------------|------------|-------------|
| None | | | | | | |
| GENITAL SYSTEM | | | | | | |
| Clitoral Gland | (8) | (0) | (0) | (0) | (0) | (10) |
| Ovary | (10) | (0) | (0) | (0) | (0) | (10) |
| Uterus | (10) | (0) | (0) | (0) | (0) | (10) |
| HEMATOPOIETIC SYSTEM | | | | | | |
| Bone Marrow | (10) | (0) | (0) | (0) | (0) | (10) |
| Lymph Node, Bronchial | (5) | (0) | (0) | (0) | (0) | (8) |
| Lymph Node, Mandibular | (8) | (0) | (0) | (0) | (0) | (10) |
| Lymph Node, Mediastinal | (7) | (0) | (0) | (0) | (0) | (3) |
| Lymph Node, Mesenteric | (10) | (0) | (0) | (0) | (0) | (10) |
| Spleen | (10) | (0) | (0) | (0) | (0) | (10) |
| Thymus | (9) | (0) | (0) | (0) | (9) | (10) |
| Depletion Lymphoid | | | | | | 1 [1.0] |
| INTEGUMENTARY SYSTEM | | | | | | |
| Mammary Gland | (10) | (0) | (0) | (0) | (0) | (10) |
| Skin | (10) | (0) | (0) | (0) | (0) | (10) |
| MUSCULOSKELETAL SYSTEM | | | | | | |
| Bone | (10) | (0) | (0) | (0) | (0) | (10) |
| NERVOUS SYSTEM | | | | | | |
| Brain | (10) | (0) | (0) | (0) | (0) | (10) |
| RESPIRATORY SYSTEM | | | | | | |
| Larynx | (10) | (0) | (0) | (0) | (0) | (10) |
| Lung | (10) | (9) | (10) | (9) | (10) | (10) |
| Epithelium, Hyperplasia | | | 6 [1.0] | 7 [1.0] | 10 [1.5] | 10 [2.5] |
| Inflammation | | 1 [1.0] | 7 [1.0] | 9 [1.1] | 10 [1.9] | 10 [2.5] |
| Nose | (10) | (0) | (0) | (0) | (0) | (10) |

a - Number of animals examined microscopically at site and number of animals with lesion

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Lab: IIT

| B6C3F1 Mouse FEMALE | CONTROL | 1.00 MG/M3 | 2.00 MG/M3 | 4.00 MG/M3 | 8.00 MG/M3 | 16.00 MG/M3 |
|------------------------------|----------------|-------------------|-------------------|-------------------|-------------------|--------------------|
| Nose | (10) | (0) | (0) | (0) | (0) | (10) |
| Trachea | (10) | (0) | (0) | (0) | (0) | (10) |
| SPECIAL SENSES SYSTEM | | | | | | |
| Eye | (0) | (0) | (0) | (1) | (0) | (0) |
| URINARY SYSTEM | | | | | | |
| Kidney | (10) | (0) | (0) | (0) | (0) | (10) |
| Urinary Bladder | (8) | (0) | (0) | (0) | (0) | (10) |

**** END OF REPORT ****

a - Number of animals examined microscopically at site and number of animals with lesion

b - Average severity grade (1-minimal; 2-mild; 3-moderate; 4-marked)