

**Experiment Number:** 61427-03  
**Test Type:** 90-DAY  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P11: STATISTICAL ANALYSIS OF SURVIVAL DATA**  
**Test Compound:** Vanadium pentoxide  
**CAS Number:** 1314-62-1

**Date Report Requested:** 10/23/2014  
**Time Report Requested:** 02:29:06  
**First Dose M/F:** NA / NA  
**Lab:** IIT

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

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First Dose M/F: NA / NA

Lab: IIT

Male RAT  
FIRST TERMINAL SACRIFICE AT 92 DAYS  
INDIVIDUAL SURVIVAL TIMES (DAYS)

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<b>DOSE = CONTROL</b>			
TOTAL 10	UNCENSORED DEATHS 0	CENSORED DEATHS 0	TERMINAL 10
<b>UNCENSORED DEATH DAYS</b>			
none			
<b>CENSORED DEATH DAYS</b>			
none			
<hr/>			
<b>DOSE = 1.00 MG/M3</b>			
TOTAL 10	UNCENSORED DEATHS 0	CENSORED DEATHS 0	TERMINAL 10
<b>UNCENSORED DEATH DAYS</b>			
none			
<b>CENSORED DEATH DAYS</b>			
none			
<hr/>			
<b>DOSE = 2.00 MG/M3</b>			
TOTAL 10	UNCENSORED DEATHS 0	CENSORED DEATHS 0	TERMINAL 10
<b>UNCENSORED DEATH DAYS</b>			
none			
<b>CENSORED DEATH DAYS</b>			
none			
<hr/>			
<b>DOSE = 4.00 MG/M3</b>			
TOTAL 10	UNCENSORED DEATHS 0	CENSORED DEATHS 0	TERMINAL 10
<b>UNCENSORED DEATH DAYS</b>			
none			
<b>CENSORED DEATH DAYS</b>			
none			

(A) FIRST TERMINAL SACRIFICE

(B) THE FIRST ENTRY IS THE TREND TEST (TARONE, 1975) RESULT. SUBSEQUENT ENTRIES ARE THE RESULTS OF PAIRWISE TESTS (COX, 1972). NEGATIVE TRENDS ARE INDICATED BY "N".

(C) MEAN OF ALL UNCENSORED DEATHS PRIOR TO TERMINAL SACRIFICE

(D) MEAN OF ALL DEATHS (UNCENSORED, CENSORED, TERMINAL SACRIFICE)

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First Dose M/F: NA / NA

Lab: IIT

Male RAT  
FIRST TERMINAL SACRIFICE AT 92 DAYS  
INDIVIDUAL SURVIVAL TIMES (DAYS)

---

DOSE = 8.00 MG/M3

TOTAL 10                      UNCENSORED DEATHS 0                      CENSORED DEATHS 0                      TERMINAL 10

UNCENSORED DEATH DAYS

none

CENSORED DEATH DAYS

none

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DOSE = 16.00 MG/M3

TOTAL 10                      UNCENSORED DEATHS 7                      CENSORED DEATHS 0                      TERMINAL 3

UNCENSORED DEATH DAYS

53            54            55            59            74            74            75

CENSORED DEATH DAYS

none

(A) FIRST TERMINAL SACRIFICE

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(C) MEAN OF ALL UNCENSORED DEATHS PRIOR TO TERMINAL SACRIFICE

(D) MEAN OF ALL DEATHS (UNCENSORED, CENSORED, TERMINAL SACRIFICE)

Experiment Number: 61427-03

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P11: STATISTICAL ANALYSIS OF SURVIVAL DATA

Test Compound: Vanadium pentoxide

CAS Number: 1314-62-1

Date Report Requested: 10/23/2014

Time Report Requested: 02:29:06

First Dose M/F: NA / NA

Lab: IIT

Male RAT  
FIRST TERMINAL SACRIFICE AT 92 DAYS

KAPLAN-MEIER SURVIVAL PROBABILITY ESTIMATES (%)

DOSE	TIME (DAYS)									
	10	20	30	40	50	60	70	80	90	92(A)
CONTROL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1.00 MG/M3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2.00 MG/M3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
4.00 MG/M3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
8.00 MG/M3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
16.00 MG/M3	100.0	100.0	100.0	100.0	100.0	60.0	60.0	30.0	30.0	30.0

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(C) MEAN OF ALL UNCENSORED DEATHS PRIOR TO TERMINAL SACRIFICE

(D) MEAN OF ALL DEATHS (UNCENSORED, CENSORED, TERMINAL SACRIFICE)

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**P11: STATISTICAL ANALYSIS OF SURVIVAL DATA**

Test Compound: Vanadium pentoxide

CAS Number: 1314-62-1

Date Report Requested: 10/23/2014

Time Report Requested: 02:29:06

First Dose M/F: NA / NA

Lab: IIT

Male RAT  
FIRST TERMINAL SACRIFICE AT 92 DAYS

SURVIVAL SUMMARY STATISTICS

DOSE	CONTROL	1.00 MG/M3	2.00 MG/M3	4.00 MG/M3
<b>SURVIVAL AT END OF STUDY</b> (KAPLAN-MEIER)	100.0%	100.0%	100.0%	100.0%
<b>SIGNIFICANCE (B)</b> (LIFE TABLE)	P=0.000	-----	-----	-----
<b>MEAN DAY OF NATURAL DEATHS (C)</b> (STANDARD ERROR)	.	.	.	.
	(.)	(.)	(.)	(.)
<b>MEAN LIFE SPAN (D)</b> (STANDARD ERROR)	92.0	92.0	92.0	92.0
	(0.0)	(0.0)	(0.0)	(0.0)

(A) FIRST TERMINAL SACRIFICE

(B) THE FIRST ENTRY IS THE TREND TEST (TARONE, 1975) RESULT. SUBSEQUENT ENTRIES ARE THE RESULTS OF PAIRWISE TESTS (COX, 1972). NEGATIVE TRENDS ARE INDICATED BY "N".

(C) MEAN OF ALL UNCENSORED DEATHS PRIOR TO TERMINAL SACRIFICE

(D) MEAN OF ALL DEATHS (UNCENSORED, CENSORED, TERMINAL SACRIFICE)

**Experiment Number:** 61427-03

**Test Type:** 90-DAY

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**Species/Strain:** Rat/F 344/N

**P11: STATISTICAL ANALYSIS OF SURVIVAL DATA**

**Test Compound:** Vanadium pentoxide

**CAS Number:** 1314-62-1

**Date Report Requested:** 10/23/2014

**Time Report Requested:** 02:29:06

**First Dose M/F:** NA / NA

**Lab:** IIT

**Male RAT  
FIRST TERMINAL SACRIFICE AT 92 DAYS**

**SURVIVAL SUMMARY STATISTICS**

<b>DOSE</b>	<b>8.00 MG/M3</b>	<b>16.00 MG/M3</b>
<b>SURVIVAL AT END OF STUDY</b> (KAPLAN-MEIER)	100.0%	30.0%
<b>SIGNIFICANCE (B)</b> (LIFE TABLE)	-----	P=0.004
<b>MEAN DAY OF NATURAL DEATHS (C)</b> (STANDARD ERROR)	. (.)	63.4 (3.9)
<b>MEAN LIFE SPAN (D)</b> (STANDARD ERROR)	92.0 (0.0)	72.0 (5.1)

(A) FIRST TERMINAL SACRIFICE

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(C) MEAN OF ALL UNCENSORED DEATHS PRIOR TO TERMINAL SACRIFICE

(D) MEAN OF ALL DEATHS (UNCENSORED, CENSORED, TERMINAL SACRIFICE)

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Test Type: 90-DAY

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Species/Strain: Rat/F 344/N

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Test Compound: Vanadium pentoxide

CAS Number: 1314-62-1

Date Report Requested: 10/23/2014

Time Report Requested: 02:29:06

First Dose M/F: NA / NA

Lab: IIT

Female RAT  
FIRST TERMINAL SACRIFICE AT 92 DAYS  
INDIVIDUAL SURVIVAL TIMES (DAYS)

---

**DOSE = CONTROL**

TOTAL 10                      UNCENSORED DEATHS 0                      CENSORED DEATHS 0                      TERMINAL 10

**UNCENSORED DEATH DAYS**

none

**CENSORED DEATH DAYS**

none

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**DOSE = 1.00 MG/M3**

TOTAL 10                      UNCENSORED DEATHS 0                      CENSORED DEATHS 0                      TERMINAL 10

**UNCENSORED DEATH DAYS**

none

**CENSORED DEATH DAYS**

none

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**DOSE = 2.00 MG/M3**

TOTAL 10                      UNCENSORED DEATHS 0                      CENSORED DEATHS 0                      TERMINAL 10

**UNCENSORED DEATH DAYS**

none

**CENSORED DEATH DAYS**

none

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**DOSE = 4.00 MG/M3**

TOTAL 10                      UNCENSORED DEATHS 0                      CENSORED DEATHS 0                      TERMINAL 10

**UNCENSORED DEATH DAYS**

none

**CENSORED DEATH DAYS**

none

(A) FIRST TERMINAL SACRIFICE

(B) THE FIRST ENTRY IS THE TREND TEST (TARONE, 1975) RESULT. SUBSEQUENT ENTRIES ARE THE RESULTS OF PAIRWISE TESTS (COX, 1972). NEGATIVE TRENDS ARE INDICATED BY "N".

(C) MEAN OF ALL UNCENSORED DEATHS PRIOR TO TERMINAL SACRIFICE

(D) MEAN OF ALL DEATHS (UNCENSORED, CENSORED, TERMINAL SACRIFICE)

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Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P11: STATISTICAL ANALYSIS OF SURVIVAL DATA

Test Compound: Vanadium pentoxide

CAS Number: 1314-62-1

Date Report Requested: 10/23/2014

Time Report Requested: 02:29:06

First Dose M/F: NA / NA

Lab: IIT

Female RAT  
FIRST TERMINAL SACRIFICE AT 92 DAYS  
INDIVIDUAL SURVIVAL TIMES (DAYS)

---

DOSE = 8.00 MG/M3

TOTAL 10

UNCENSORED DEATHS 0

CENSORED DEATHS 0

TERMINAL 10

UNCENSORED DEATH DAYS

none

CENSORED DEATH DAYS

none

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DOSE = 16.00 MG/M3

TOTAL 10

UNCENSORED DEATHS 3

CENSORED DEATHS 0

TERMINAL 7

UNCENSORED DEATH DAYS

62      80      91

CENSORED DEATH DAYS

none

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(C) MEAN OF ALL UNCENSORED DEATHS PRIOR TO TERMINAL SACRIFICE

(D) MEAN OF ALL DEATHS (UNCENSORED, CENSORED, TERMINAL SACRIFICE)



Experiment Number: 61427-03

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Species/Strain: Rat/F 344/N

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Test Compound: Vanadium pentoxide

CAS Number: 1314-62-1

Date Report Requested: 10/23/2014

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First Dose M/F: NA / NA

Lab: IIT

Female RAT  
FIRST TERMINAL SACRIFICE AT 92 DAYS

KAPLAN-MEIER SURVIVAL PROBABILITY ESTIMATES (%)

DOSE	TIME (DAYS)									
	10	20	30	40	50	60	70	80	90	92(A)
CONTROL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1.00 MG/M3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2.00 MG/M3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
4.00 MG/M3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
8.00 MG/M3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
16.00 MG/M3	100.0	100.0	100.0	100.0	100.0	100.0	90.0	80.0	80.0	70.0

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(C) MEAN OF ALL UNCENSORED DEATHS PRIOR TO TERMINAL SACRIFICE

(D) MEAN OF ALL DEATHS (UNCENSORED, CENSORED, TERMINAL SACRIFICE)

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Species/Strain: Rat/F 344/N

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Test Compound: Vanadium pentoxide

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First Dose M/F: NA / NA

Lab: IIT

Female RAT  
FIRST TERMINAL SACRIFICE AT 92 DAYS

SURVIVAL SUMMARY STATISTICS

DOSE	CONTROL	1.00 MG/M3	2.00 MG/M3	4.00 MG/M3
<b>SURVIVAL AT END OF STUDY</b> (KAPLAN-MEIER)	100.0%	100.0%	100.0%	100.0%
<b>SIGNIFICANCE (B)</b> (LIFE TABLE)	P=0.002	-----	-----	-----
<b>MEAN DAY OF NATURAL DEATHS (C)</b> (STANDARD ERROR)	.	.	.	.
	(.)	(.)	(.)	(.)
<b>MEAN LIFE SPAN (D)</b> (STANDARD ERROR)	92.0	92.0	92.0	92.0
	(0.0)	(0.0)	(0.0)	(0.0)

(A) FIRST TERMINAL SACRIFICE

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(C) MEAN OF ALL UNCENSORED DEATHS PRIOR TO TERMINAL SACRIFICE

(D) MEAN OF ALL DEATHS (UNCENSORED, CENSORED, TERMINAL SACRIFICE)

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Species/Strain: Rat/F 344/N

**P11: STATISTICAL ANALYSIS OF SURVIVAL DATA**

Test Compound: Vanadium pentoxide

CAS Number: 1314-62-1

Date Report Requested: 10/23/2014

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First Dose M/F: NA / NA

Lab: IIT

Female RAT  
FIRST TERMINAL SACRIFICE AT 92 DAYS

SURVIVAL SUMMARY STATISTICS

DOSE	8.00 MG/M3	16.00 MG/M3
SURVIVAL AT END OF STUDY (KAPLAN-MEIER)	100.0%	70.0%
SIGNIFICANCE (B) (LIFE TABLE)	-----	P=0.210
MEAN DAY OF NATURAL DEATHS (C) (STANDARD ERROR)	. (.)	77.7 (8.5)
MEAN LIFE SPAN (D) (STANDARD ERROR)	92.0 (0.0)	87.7 (3.1)

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(C) MEAN OF ALL UNCENSORED DEATHS PRIOR TO TERMINAL SACRIFICE

(D) MEAN OF ALL DEATHS (UNCENSORED, CENSORED, TERMINAL SACRIFICE)

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**Test Compound:** Vanadium pentoxide

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**First Dose M/F:** NA / NA

**Lab:** IIT

**\*\* END OF REPORT \*\***

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(C) MEAN OF ALL UNCENSORED DEATHS PRIOR TO TERMINAL SACRIFICE

(D) MEAN OF ALL DEATHS (UNCENSORED, CENSORED, TERMINAL SACRIFICE)