Test Type: 14-DAY

C Number:

Species/Strain: Rat/F 344/N

Route: GAVAGE

P11: STATISTICAL ANALYSIS OF SURVIVAL DATA

Test Compound: Elmiron (sodium pentosanpolysulfate)

CAS Number: 37319-17-8

Date Report Requested: 10/18/2014 Time Report Requested: 14:05:00

First Dose M/F: NA / NA

Lab: MBA

C88122B

Lock Date: 08/21/1995

Cage Range: All

Date Range: All

Reasons For Removal:

Removal Date Range: All

Treatment Groups: All

Study Gender: Both

PWG Approval Date NONE

Species/Strain: Rat/F 344/N

Test Type: 14-DAY

Route: GAVAGE

P11: STATISTICAL ANALYSIS OF SURVIVAL DATA

Test Compound: Elmiron (sodium pentosanpolysulfate)

CAS Number: 37319-17-8

Date Report Requested: 10/18/2014 Time Report Requested: 14:05:00

First Dose M/F: NA / NA

Lab: MBA

Male RAT
FIRST TERMINAL SACRIFICE AT 17 DAYS
INDIVIDUAL SURVIVAL TIMES (DAYS)

| | IND | IVIDUAL SURVIVAL TIMES (DATS | <u> </u> | |
|-----------------------|---------------------|------------------------------|------------|--|
| DOSE = 0 MG/KG | | | _ | |
| TOTAL 5 | UNCENSORED DEATHS 0 | CENSORED DEATHS 0 | TERMINAL 5 | |
| UNCENSORED DEATH DAYS | | | | |
| none | | | | |
| CENSORED DEATH DAYS | | | | |
| none | | | | |
| DOSE = 33 MG/KG | | | | |
| TOTAL 5 | UNCENSORED DEATHS 0 | CENSORED DEATHS 0 | TERMINAL 5 | |
| UNCENSORED DEATH DAYS | | | | |
| none | | | | |
| CENSORED DEATH DAYS | | | | |
| none | | | | |
| DOSE = 111 MG/KG | | | | |
| TOTAL 5 | UNCENSORED DEATHS 0 | CENSORED DEATHS 0 | TERMINAL 5 | |
| UNCENSORED DEATH DAYS | | | | |
| none | | | | |
| CENSORED DEATH DAYS | | | | |
| none | | | | |
| DOSE = 333 MG/KG | | | | |
| TOTAL 5 | UNCENSORED DEATHS 0 | CENSORED DEATHS 0 | TERMINAL 5 | |
| 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)

Species/Strain: Rat/F 344/N

Test Type: 14-DAY

Route: GAVAGE

P11: STATISTICAL ANALYSIS OF SURVIVAL DATA

Test Compound: Elmiron (sodium pentosanpolysulfate)

CAS Number: 37319-17-8

Date Report Requested: 10/18/2014
Time Report Requested: 14:05:00

First Dose M/F: NA / NA

Lab: MBA

Male RAT FIRST TERMINAL SACRIFICE AT 17 DAYS INDIVIDUAL SURVIVAL TIMES (DAYS)

DOSE = 1000 MG/KG

TOTAL 5

UNCENSORED DEATHS 0

CENSORED DEATHS 0

TERMINAL 5

UNCENSORED DEATH DAYS

none

CENSORED DEATH DAYS

none

DOSE = 3000 MG/KG

TOTAL 5

UNCENSORED DEATHS 0

CENSORED DEATHS 0

TERMINAL 5

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)

Species/Strain: Rat/F 344/N

Test Type: 14-DAY

Route: GAVAGE

P11: STATISTICAL ANALYSIS OF SURVIVAL DATA

Test Compound: Elmiron (sodium pentosanpolysulfate)

CAS Number: 37319-17-8

Date Report Requested: 10/18/2014 Time Report Requested: 14:05:00

First Dose M/F: NA / NA

Lab: MBA

Male RAT FIRST TERMINAL SACRIFICE AT 17 DAYS

KAPLAN-MEIER SURVIVAL PROBABILITY ESTIMATES (%)

| DOSE | | TIME (DAYS) | | | | | | | | |
|------------|-------|-------------|-------|-------|-------|-------|-------|-------|-------|-------|
| | 2 | 4 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 17(A) |
| 0 MG/KG | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| 33 MG/KG | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| 111 MG/KG | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| 333 MG/KG | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| 1000 MG/KG | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| 3000 MG/KG | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

⁽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)

Species/Strain: Rat/F 344/N

Test Type: 14-DAY

Route: GAVAGE

P11: STATISTICAL ANALYSIS OF SURVIVAL DATA

Test Compound: Elmiron (sodium pentosanpolysulfate)

CAS Number: 37319-17-8

Date Report Requested: 10/18/2014 Time Report Requested: 14:05:00

First Dose M/F: NA / NA

Lab: MBA

Male RAT FIRST TERMINAL SACRIFICE AT 17 DAYS

| DOSE | 0 MG/KG | 33 MG/KG | 111 MG/KG | 333 MG/KG | |
|--------------------------------|---------|----------|-----------|-----------|--|
| SURVIVAL AT END OF STUDY | 100.0% | 100.0% | 100.0% | 100.0% | |
| (KAPLAN-MEIER) | | | | | |
| SIGNIFICANCE (B) | | | | | |
| (LIFE TABLE) | | | | | |
| MEAN DAY OF NATURAL DEATHS (C) | | | | | |
| (STANDARD ERROR) | (.) | (.) | (.) | (.) | |
| MEAN LIFE SPAN (D) | 17.0 | 17.0 | 17.0 | 17.0 | |
| (STANDARD ERROR) | (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)

Test Type: 14-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P11: STATISTICAL ANALYSIS OF SURVIVAL DATA

Test Compound: Elmiron (sodium pentosanpolysulfate)

CAS Number: 37319-17-8

Date Report Requested: 10/18/2014 Time Report Requested: 14:05:00

First Dose M/F: NA / NA

Lab: MBA

Male RAT FIRST TERMINAL SACRIFICE AT 17 DAYS

| DOSE 1000 MG/KG 3000 MG/KG SURVIVAL AT END OF STUDY 100.0% 100.0% (KAPLAN-MEIER) | | | |
|--|------------------------------|------------|------------|
| (KAPLAN-MEIER) SIGNIFICANCE (B) (LIFE TABLE) MEAN DAY OF NATURAL DEATHS (C) . (STANDARD ERROR) (.) (.) | SE | 1000 MG/KG | 3000 MG/KG |
| SIGNIFICANCE (B) (LIFE TABLE) MEAN DAY OF NATURAL DEATHS (C) | RVIVAL AT END OF STUDY | 100.0% | 100.0% |
| (LIFE TABLE) MEAN DAY OF NATURAL DEATHS (C) (STANDARD ERROR) (.) (.) (.) | PLAN-MEIER) | | |
| MEAN DAY OF NATURAL DEATHS (C) (STANDARD ERROR) (.) (.) | NIFICANCE (B) | | |
| (STANDARD ERROR) (.) (.) | E TABLE) | | |
| | AN DAY OF NATURAL DEATHS (C) | • | |
| MEAN LIFE SDAN (D) 17.0 17.0 | ANDARD ERROR) | (.) | (.) |
| MEAN LIFE STAN (U) 17.0 17.0 | AN LIFE SPAN (D) | 17.0 | 17.0 |
| (STANDARD ERROR) (0.0) (0.0) | ANDARD ERROR) | (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)

Species/Strain: Rat/F 344/N

Test Type: 14-DAY

Route: GAVAGE

P11: STATISTICAL ANALYSIS OF SURVIVAL DATA

Test Compound: Elmiron (sodium pentosanpolysulfate)

CAS Number: 37319-17-8

Date Report Requested: 10/18/2014
Time Report Requested: 14:05:00

First Dose M/F: NA / NA

Lab: MBA

Female RAT
FIRST TERMINAL SACRIFICE AT 17 DAYS
INDIVIDUAL SURVIVAL TIMES (DAYS)

| | INL | DIVIDUAL SURVIVAL TIMES (DAY | 5) | |
|-----------------------|---------------------|------------------------------|------------|--|
| DOSE = 0 MG/KG | | | | |
| TOTAL 5 | UNCENSORED DEATHS 0 | CENSORED DEATHS 0 | TERMINAL 5 | |
| UNCENSORED DEATH DAYS | | | | |
| none | | | | |
| CENSORED DEATH DAYS | | | | |
| none | | | | |
| DOSE = 33 MG/KG | | | | |
| TOTAL 5 | UNCENSORED DEATHS 0 | CENSORED DEATHS 0 | TERMINAL 5 | |
| UNCENSORED DEATH DAYS | | | | |
| none | | | | |
| CENSORED DEATH DAYS | | | | |
| none | | | | |
| DOSE = 111 MG/KG | | | | |
| TOTAL 5 | UNCENSORED DEATHS 0 | CENSORED DEATHS 0 | TERMINAL 5 | |
| UNCENSORED DEATH DAYS | | | - | |
| none | | | | |
| CENSORED DEATH DAYS | | | | |
| none | | | | |
| DOSE = 333 MG/KG | | | | |
| TOTAL 5 | UNCENSORED DEATHS 0 | CENSORED DEATHS 0 | TERMINAL 5 | |
| 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)

P11: STATISTICAL ANALYSIS OF SURVIVAL DATA

Date Report Requested: 10/18/2014

Time Report Requested: 14:05:00

First Dose M/F: NA / NA

Lab: MBA

Test Type: 14-DAY **Route:** GAVAGE

Species/Strain: Rat/F 344/N

Female RAT
FIRST TERMINAL SACRIFICE AT 17 DAYS
INDIVIDUAL SURVIVAL TIMES (DAYS)

Test Compound: Elmiron (sodium pentosanpolysulfate)

CAS Number: 37319-17-8

DOSE = 1000 MG/KG

TOTAL 5

UNCENSORED DEATHS 0

CENSORED DEATHS 0

TERMINAL 5

UNCENSORED DEATH DAYS

none

CENSORED DEATH DAYS

none

DOSE = 3000 MG/KG

TOTAL 5

UNCENSORED DEATHS 0

CENSORED DEATHS 0

TERMINAL 5

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)

Species/Strain: Rat/F 344/N

Test Type: 14-DAY

Route: GAVAGE

P11: STATISTICAL ANALYSIS OF SURVIVAL DATA

Test Compound: Elmiron (sodium pentosanpolysulfate)

CAS Number: 37319-17-8

Date Report Requested: 10/18/2014 Time Report Requested: 14:05:00

First Dose M/F: NA / NA

Lab: MBA

Female RAT FIRST TERMINAL SACRIFICE AT 17 DAYS

KAPLAN-MEIER SURVIVAL PROBABILITY ESTIMATES (%)

| DOSE | | TIME (DAYS) | | | | | | | | |
|------------|-------|-------------|-------|-------|-------|-------|-------|-------|-------|-------|
| | 2 | 4 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 17(A) |
| 0 MG/KG | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| 33 MG/KG | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| 111 MG/KG | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| 333 MG/KG | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| 1000 MG/KG | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| 3000 MG/KG | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

⁽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)

Species/Strain: Rat/F 344/N

Test Type: 14-DAY

Route: GAVAGE

P11: STATISTICAL ANALYSIS OF SURVIVAL DATA

Test Compound: Elmiron (sodium pentosanpolysulfate)

CAS Number: 37319-17-8

Date Report Requested: 10/18/2014
Time Report Requested: 14:05:00

First Dose M/F: NA / NA

Lab: MBA

Female RAT FIRST TERMINAL SACRIFICE AT 17 DAYS

| DOSE | 0 MG/KG | 33 MG/KG | 111 MG/KG | 333 MG/KG | |
|--------------------------------|---------|----------|-----------|-----------|--|
| SURVIVAL AT END OF STUDY | 100.0% | 100.0% | 100.0% | 100.0% | |
| (KAPLAN-MEIER) | | | | | |
| SIGNIFICANCE (B) | | | | | |
| (LIFE TABLE) | | | | | |
| MEAN DAY OF NATURAL DEATHS (C) | | | | | |
| (STANDARD ERROR) | (.) | (.) | (.) | (.) | |
| MEAN LIFE SPAN (D) | 17.0 | 17.0 | 17.0 | 17.0 | |
| (STANDARD ERROR) | (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)

Test Type: 14-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P11: STATISTICAL ANALYSIS OF SURVIVAL DATA

Test Compound: Elmiron (sodium pentosanpolysulfate)

CAS Number: 37319-17-8

Date Report Requested: 10/18/2014 Time Report Requested: 14:05:00

First Dose M/F: NA / NA

Lab: MBA

Female RAT FIRST TERMINAL SACRIFICE AT 17 DAYS

| DOSE | 1000 MG/KG | 3000 MG/KG | |
|--------------------------------|------------|------------|--|
| SURVIVAL AT END OF STUDY | 100.0% | 100.0% | |
| (KAPLAN-MEIER) | | | |
| SIGNIFICANCE (B) | | | |
| (LIFE TABLE) | | | |
| MEAN DAY OF NATURAL DEATHS (C) | | | |
| (STANDARD ERROR) | (.) | (.) | |
| MEAN LIFE SPAN (D) | 17.0 | 17.0 | |
| (STANDARD ERROR) | (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)

Test Type: 14-DAY **Route:** GAVAGE

Species/Strain: Rat/F 344/N

P11: STATISTICAL ANALYSIS OF SURVIVAL DATA

Test Compound: Elmiron (sodium pentosanpolysulfate)

CAS Number: 37319-17-8

Date Report Requested: 10/18/2014 Time Report Requested: 14:05:00

First Dose M/F: NA / NA

Lab: MBA

** END OF REPORT **

⁽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)