Test Type: 14-DAY Route: GAVAGE

Species/Strain: Rat/F 344/N

#### P11: STATISTICAL ANALYSIS OF SURVIVAL DATA

Test Compound: Kava kava extract **CAS Number:** 9000-38-8

Date Report Requested: 10/23/2014 Time Report Requested: 01:26:16

First Dose M/F: NA / NA

Lab: BAT

C Number: C20007

Lock Date: 04/22/2003

**Cage Range:** ΑII

**Date Range:** ΑII

**Reasons For Removal:** ΑII

**Removal Date Range:** ΑII

**Treatment Groups:** ΑII

**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: Kava kava extract

**CAS Number:** 9000-38-8

Date Report Requested: 10/23/2014 Time Report Requested: 01:26:16

First Dose M/F: NA / NA

Lab: BAT

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

	INDI	VIDUAL SURVIVAL TIMES (DAYS	5)	
DOSE = 0 G/KG				
TOTAL 5	UNCENSORED DEATHS 0	CENSORED DEATHS 0	TERMINAL 5	
UNCENSORED DEATH DAYS				
none				
CENSORED DEATH DAYS				
none				
DOSE = 0.125 G/KG				
TOTAL 5	UNCENSORED DEATHS 0	CENSORED DEATHS 0	TERMINAL 5	
UNCENSORED DEATH DAYS				
none				
CENSORED DEATH DAYS				
none				
DOSE = 0.25 G/KG				
TOTAL 5	UNCENSORED DEATHS 0	CENSORED DEATHS 0	TERMINAL 5	
UNCENSORED DEATH DAYS				
none				
CENSORED DEATH DAYS				
none				
DOSE = 0.5 G/KG				
TOTAL 5	UNCENSORED DEATHS 0	CENSORED DEATHS 0	TERMINAL 5	
UNCENSORED DEATH DAYS				
none				
CENSORED DEATH DAYS				
none				

<sup>(</sup>A) FIRST TERMINAL SACRIFICE

<sup>(</sup>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".

<sup>(</sup>C) MEAN OF ALL UNCENSORED DEATHS PRIOR TO TERMINAL SACRIFICE

<sup>(</sup>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: Kava kava extract

**CAS Number:** 9000-38-8

Date Report Requested: 10/23/2014
Time Report Requested: 01:26:16

First Dose M/F: NA / NA

Lab: BAT

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

DOSE = 1.0 G/KG

TOTAL 5

**UNCENSORED DEATHS 0** 

CENSORED DEATHS 0

**TERMINAL 5** 

UNCENSORED DEATH DAYS

none

**CENSORED DEATH DAYS** 

none

DOSE = 2.0 G/KG

TOTAL 5

**UNCENSORED DEATHS 0** 

**CENSORED DEATHS 0** 

**TERMINAL 5** 

**UNCENSORED DEATH DAYS** 

none

**CENSORED DEATH DAYS** 

none

<sup>(</sup>A) FIRST TERMINAL SACRIFICE

<sup>(</sup>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".

<sup>(</sup>C) MEAN OF ALL UNCENSORED DEATHS PRIOR TO TERMINAL SACRIFICE

<sup>(</sup>D) MEAN OF ALL DEATHS (UNCENSORED, CENSORED, TERMINAL SACRIFICE)

P11: STATISTICAL ANALYSIS OF SURVIVAL DATA

Test Compound: Kava kava extract CAS Number: 9000-38-8

Date Report Requested: 10/23/2014 Time Report Requested: 01:26:16

First Dose M/F: NA / NA

Lab: BAT

Species/Strain: Rat/F 344/N

Test Type: 14-DAY

Route: GAVAGE

#### Male RAT FIRST TERMINAL SACRIFICE AT 17 DAYS

#### KAPLAN-MEIER SURVIVAL PROBABILITY ESTIMATES (%)

DOSE					TIME	(DAYS)				
	2	4	6	88	10	12	14	16	18	17(A)
0 G/KG	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
0.125 G/KG	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
0.25 G/KG	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
0.5 G/KG	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1.0 G/KG	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2.0 G/KG	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

<sup>(</sup>A) FIRST TERMINAL SACRIFICE

<sup>(</sup>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".

<sup>(</sup>C) MEAN OF ALL UNCENSORED DEATHS PRIOR TO TERMINAL SACRIFICE

<sup>(</sup>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: Kava kava extract **CAS Number:** 9000-38-8

Date Report Requested: 10/23/2014 Time Report Requested: 01:26:16

First Dose M/F: NA / NA

Lab: BAT

#### Male RAT FIRST TERMINAL SACRIFICE AT 17 DAYS

DOSE	0 G/KG	0.125 G/KG	0.25 G/KG	0.5 G/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)	

<sup>(</sup>A) FIRST TERMINAL SACRIFICE

<sup>(</sup>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".

<sup>(</sup>C) MEAN OF ALL UNCENSORED DEATHS PRIOR TO TERMINAL SACRIFICE

<sup>(</sup>D) MEAN OF ALL DEATHS (UNCENSORED, CENSORED, TERMINAL SACRIFICE)

Test Type: 14-DAY

Species/Strain: Rat/F 344/N

Route: GAVAGE

#### P11: STATISTICAL ANALYSIS OF SURVIVAL DATA

Test Compound: Kava kava extract **CAS Number:** 9000-38-8

Date Report Requested: 10/23/2014 Time Report Requested: 01:26:16

First Dose M/F: NA / NA

Lab: BAT

#### Male RAT FIRST TERMINAL SACRIFICE AT 17 DAYS

DOSE	1.0 G/KG	2.0 G/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)

<sup>(</sup>A) FIRST TERMINAL SACRIFICE

<sup>(</sup>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".

<sup>(</sup>C) MEAN OF ALL UNCENSORED DEATHS PRIOR TO TERMINAL SACRIFICE

<sup>(</sup>D) MEAN OF ALL DEATHS (UNCENSORED, CENSORED, TERMINAL SACRIFICE)

P11: STATISTICAL ANALYSIS OF SURVIVAL DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Species/Strain: Rat/F 344/N

Test Type: 14-DAY

Route: GAVAGE

Time Report Requested: 01:26:16

Date Report Requested: 10/23/2014

First Dose M/F: NA / NA

Lab: BAT

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

	IND	IVIDUAL SURVIVAL TIMES (DATS	<u> </u>	
DOSE = 0 G/KG				
TOTAL 5	UNCENSORED DEATHS 0	CENSORED DEATHS 0	TERMINAL 5	
UNCENSORED DEATH DAYS				
none				
CENSORED DEATH DAYS				
none				
DOSE = 0.125 G/KG				
TOTAL 5	UNCENSORED DEATHS 0	CENSORED DEATHS 0	TERMINAL 5	
UNCENSORED DEATH DAYS				
none				
CENSORED DEATH DAYS				
none				
DOSE = 0.25 G/KG				
TOTAL 5	UNCENSORED DEATHS 0	CENSORED DEATHS 0	TERMINAL 5	
UNCENSORED DEATH DAYS				
none				
CENSORED DEATH DAYS				
none				
DOSE = 0.5 G/KG				
TOTAL 5	UNCENSORED DEATHS 0	CENSORED DEATHS 0	TERMINAL 5	
UNCENSORED DEATH DAYS				
none				
CENSORED DEATH DAYS				
none				

<sup>(</sup>A) FIRST TERMINAL SACRIFICE

<sup>(</sup>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".

<sup>(</sup>C) MEAN OF ALL UNCENSORED DEATHS PRIOR TO TERMINAL SACRIFICE

<sup>(</sup>D) MEAN OF ALL DEATHS (UNCENSORED, CENSORED, TERMINAL SACRIFICE)

P11: STATISTICAL ANALYSIS OF SURVIVAL DATA

Test Compound: Kava kava extract

**CAS Number:** 9000-38-8

Ti

Date Report Requested: 10/23/2014

Time Report Requested: 01:26:16

First Dose M/F: NA / NA

Lab: BAT

Route: GAVAGE
Species/Strain: Rat/F 344/N

Test Type: 14-DAY

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

DOSE = 1.0 G/KG

TOTAL 5

**UNCENSORED DEATHS 0** 

CENSORED DEATHS 0

**TERMINAL 5** 

UNCENSORED DEATH DAYS

none

**CENSORED DEATH DAYS** 

none

DOSE = 2.0 G/KG

TOTAL 5

**UNCENSORED DEATHS 1** 

**CENSORED DEATHS 0** 

**TERMINAL 4** 

**UNCENSORED DEATH DAYS** 

3

**CENSORED DEATH DAYS** 

none

<sup>(</sup>A) FIRST TERMINAL SACRIFICE

<sup>(</sup>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".

<sup>(</sup>C) MEAN OF ALL UNCENSORED DEATHS PRIOR TO TERMINAL SACRIFICE

<sup>(</sup>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: Kava kava extract CAS Number: 9000-38-8

Date Report Requested: 10/23/2014 Time Report Requested: 01:26:16

First Dose M/F: NA / NA

Lab: BAT

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 G/	'KG	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
0.125	G/KG	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
0.25 G	S/KG	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
0.5 G	/KG	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1.0 G	/KG	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2.0 G	/KG	100.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0

<sup>(</sup>A) FIRST TERMINAL SACRIFICE

<sup>(</sup>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".

<sup>(</sup>C) MEAN OF ALL UNCENSORED DEATHS PRIOR TO TERMINAL SACRIFICE

<sup>(</sup>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: Kava kava extract **CAS Number:** 9000-38-8

Date Report Requested: 10/23/2014 Time Report Requested: 01:26:16

First Dose M/F: NA / NA

Lab: BAT

## Female RAT FIRST TERMINAL SACRIFICE AT 17 DAYS

DOSE	0 G/KG	0.125 G/KG	0.25 G/KG	0.5 G/KG	
SURVIVAL AT END OF STUDY	100.0%	100.0%	100.0%	100.0%	
(KAPLAN-MEIER)					
SIGNIFICANCE (B)	P=0.213				
(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)	

<sup>(</sup>A) FIRST TERMINAL SACRIFICE

<sup>(</sup>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".

<sup>(</sup>C) MEAN OF ALL UNCENSORED DEATHS PRIOR TO TERMINAL SACRIFICE

<sup>(</sup>D) MEAN OF ALL DEATHS (UNCENSORED, CENSORED, TERMINAL SACRIFICE)

P11: STATISTICAL ANALYSIS OF SURVIVAL DATA

Test Compound: Kava kava extract

**CAS Number:** 9000-38-8

Date Report Requested: 10/23/2014

Time Report Requested: 01:26:16

Lab: BAT

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Test Type: 14-DAY

Route: GAVAGE

#### Female RAT FIRST TERMINAL SACRIFICE AT 17 DAYS

DOSE	1.0 G/KG	2.0 G/KG
SURVIVAL AT END OF STUDY	100.0%	80.0%
(KAPLAN-MEIER)		
SIGNIFICANCE (B)		P=1.000
(LIFE TABLE)		
MEAN DAY OF NATURAL DEATHS (C)		3.0
(STANDARD ERROR)	(.)	(.)
MEAN LIFE SPAN (D)	17.0	14.2
(STANDARD ERROR)	(0.0)	(2.8)

<sup>(</sup>A) FIRST TERMINAL SACRIFICE

<sup>(</sup>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".

<sup>(</sup>C) MEAN OF ALL UNCENSORED DEATHS PRIOR TO TERMINAL SACRIFICE

<sup>(</sup>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: Kava kava extract CAS Number: 9000-38-8

Date Report Requested: 10/23/2014 Time Report Requested: 01:26:16

First Dose M/F: NA / NA

Lab: BAT

\*\* END OF REPORT \*\*

<sup>(</sup>A) FIRST TERMINAL SACRIFICE

<sup>(</sup>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".

<sup>(</sup>C) MEAN OF ALL UNCENSORED DEATHS PRIOR TO TERMINAL SACRIFICE

<sup>(</sup>D) MEAN OF ALL DEATHS (UNCENSORED, CENSORED, TERMINAL SACRIFICE)