

Experiment Number: 56111-01
Test Type: 90-DAY
Route: DOSED FEED
Species/Strain: Rat/F 344/N

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Test Compound: trans-Cinnamaldehyde

CAS Number: 14371-10-9

Date Report Requested: 10/19/2014

Time Report Requested: 07:16:46

First Dose M/F: NA / NA

Lab: BAT

C Number:	C56111B
Lock Date:	01/02/1996
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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SUMMARY OF STATISTICALLY SIGNIFICANT ($P \leq .05$) RESULTS IN THE ANALYSIS OF TRANS-CINNAMALDEHYDE

MALE RAT

Organ

Heart

Kidney: Renal Tubule

Liver

Stomach, Forestomach

Stomach, Forestomach: Epithelium

FEMALE RAT

Organ

Liver

Lung

Ovary

Stomach, Forestomach

Stomach, Forestomach: Epithelium

Morphology

Cardiomyopathy Chronic

Regeneration

Inflammation Chronic

Inflammation Chronic

Hyperplasia

Morphology

Inflammation Chronic

Inflammation Chronic

Cyst

Inflammation Chronic

Hyperplasia

Ulcer

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STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RAT(F 344/N)
LAST REMOVAL AT 14286 WEEKS

DOSE	MALE				
	UNTREATDCONTROL	1.25	2.5	5.0	10.0
Epididymis					
Atypia Cellular					
LESION RATES					
OVERALL(a)	0/20 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	1/10 (10%)
POLY-3 RATE (b)	0/20.00	0/0.00	0/0.00	0/0.00	1/10.00
POLY-3 PERCENT (g)	0%	0%	0%	0%	10%
TERMINAL (d)	0/20 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	1/10 (10%)
FIRST INCIDENCE	---	---	---	---	92(T)
STATISTICAL TESTS					
POLY 3	(e)	(e)	(e)	(e)	P=0.359
POLY 1.5	(e)	(e)	(e)	(e)	P=0.359
POLY 6	(e)	(e)	(e)	(e)	P=0.359
COCH-ARM / FISHERS	P=0.184	(e)	(e)	(e)	P=0.333
MAX-ISO-POLY-3	(e)	(e)	(e)	(e)	P=0.107
HISTCONT SAME RTE					
HISTCONT ALL RTES					
CURR VS HC SAME RTE					
CURR VS HC ALL RTES					

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STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RAT(F 344/N)
LAST REMOVAL AT 14286 WEEKS

DOSE	MALE				
	UNTREATDCONTROL	1.25	2.5	5.0	10.0
Heart					
Cardiomyopathy Chronic					
LESION RATES					
OVERALL(a)	17/20 (85%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	3/10 (30%)
POLY-3 RATE (b)	17/20.00	0/0.00	0/0.00	0/0.00	3/10.00
POLY-3 PERCENT (g)	85%	0%	0%	0%	30%
TERMINAL (d)	17/20 (85%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	3/10 (30%)
FIRST INCIDENCE	92(T)	---	---	---	92(T)
STATISTICAL TESTS					
POLY 3	(e)	(e)	(e)	(e)	P=0.001N**
POLY 1.5	(e)	(e)	(e)	(e)	P=0.001N**
POLY 6	(e)	(e)	(e)	(e)	P=0.001N**
COCH-ARM / FISHERS	P=0.002N**	(e)	(e)	(e)	P=0.005N**
MAX-ISO-POLY-3	(e)	(e)	(e)	(e)	P=0.001N**
HISTCONT SAME RTE					
HISTCONT ALL RTES					
CURR VS HC SAME RTE					
CURR VS HC ALL RTES					

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First Dose M/F: NA / NA

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RAT(F 344/N)
 LAST REMOVAL AT 14286 WEEKS**

DOSE	MALE				
	UNTREATDCONTROL	1.25	2.5	5.0	10.0
Intestine Large, Colon					
Parasite Metazoan					
LESION RATES					
OVERALL(a)	1/20 (5%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/10 (0%)
POLY-3 RATE (b)	1/20.00	0/0.00	0/0.00	0/0.00	0/10.00
POLY-3 PERCENT (g)	5%	0%	0%	0%	0%
TERMINAL (d)	1/20 (5%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/10 (0%)
FIRST INCIDENCE	92(T)	---	---	---	---
STATISTICAL TESTS					
POLY 3	(e)	(e)	(e)	(e)	P=0.637N
POLY 1.5	(e)	(e)	(e)	(e)	P=0.637N
POLY 6	(e)	(e)	(e)	(e)	P=0.637N
COCH-ARM / FISHERS	P=0.429N	(e)	(e)	(e)	P=0.667N
MAX-ISO-POLY-3	(e)	(e)	(e)	(e)	P=0.272N
HISTCONT SAME RTE					
HISTCONT ALL RTES					
CURR VS HC SAME RTE					
CURR VS HC ALL RTES					

Experiment Number: 56111-01
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 Species/Strain: Rat/F 344/N

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS
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First Dose M/F: NA / NA
Lab: BAT

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RAT(F 344/N)
LAST REMOVAL AT 14286 WEEKS

DOSE	MALE				
	UNTREATDCONTROL	1.25	2.5	5.0	10.0
Intestine Large, Rectum					
Parasite Metazoan					
LESION RATES					
OVERALL(a)	1/20 (5%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	1/10 (10%)
POLY-3 RATE (b)	1/20.00	0/0.00	0/0.00	0/0.00	1/10.00
POLY-3 PERCENT (g)	5%	0%	0%	0%	10%
TERMINAL (d)	1/20 (5%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	1/10 (10%)
FIRST INCIDENCE	92(T)	---	---	---	92(T)
STATISTICAL TESTS					
POLY 3	(e)	(e)	(e)	(e)	P=0.599
POLY 1.5	(e)	(e)	(e)	(e)	P=0.599
POLY 6	(e)	(e)	(e)	(e)	P=0.599
COCH-ARM / FISHERS	P=0.449	(e)	(e)	(e)	P=0.563
MAX-ISO-POLY-3	(e)	(e)	(e)	(e)	P=0.332
HISTCONT SAME RTE					
HISTCONT ALL RTES					
CURR VS HC SAME RTE					
CURR VS HC ALL RTES					

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 Species/Strain: Rat/F 344/N

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Lab: BAT

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RAT(F 344/N)
LAST REMOVAL AT 14286 WEEKS

DOSE	MALE				
	UNTREATD	CONTROL	1.25	2.5	5.0
Kidney: Renal Tubule					
Regeneration					
LESION RATES					
OVERALL(a)	19/20 (95%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/10 (0%)
POLY-3 RATE (b)	19/20.00	0/0.00	0/0.00	0/0.00	0/10.00
POLY-3 PERCENT (g)	95%	0%	0%	0%	0%
TERMINAL (d)	19/20 (95%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/10 (0%)
FIRST INCIDENCE	92(T)	---	---	---	---
STATISTICAL TESTS					
POLY 3	(e)	(e)	(e)	(e)	P=0.000N**
POLY 1.5	(e)	(e)	(e)	(e)	P=0.000N**
POLY 6	(e)	(e)	(e)	(e)	P=0.000N**
COCH-ARM / FISHERS	P=0.000N**	(e)	(e)	(e)	P=0.000N**
MAX-ISO-POLY-3	(e)	(e)	(e)	(e)	P=0.000N**
HISTCONT SAME RTE					
HISTCONT ALL RTES					
CURR VS HC SAME RTE					
CURR VS HC ALL RTES					

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 Species/Strain: Rat/F 344/N

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 First Dose M/F: NA / NA
 Lab: BAT

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RAT(F 344/N)
 LAST REMOVAL AT 14286 WEEKS

DOSE	MALE				
	UNTREATDCONTROL	1.25	2.5	5.0	10.0
Liver					
Hepatodiaphragmatic Nodule					
LESION RATES					
OVERALL(a)	1/20 (5%)	0/6 (0%)	0/7 (0%)	0/6 (0%)	0/10 (0%)
POLY-3 RATE (b)	1/20.00	0/6.00	0/7.00	0/6.00	0/10.00
POLY-3 PERCENT (g)	5%	0%	0%	0%	0%
TERMINAL (d)	1/20 (5%)	0/6 (0%)	0/7 (0%)	0/6 (0%)	0/10 (0%)
FIRST INCIDENCE	92(T)	---	---	---	---
STATISTICAL TESTS					
POLY 3	P=0.433N	P=0.736N	P=0.706N	P=0.736N	P=0.637N
POLY 1.5	P=0.433N	P=0.736N	P=0.706N	P=0.736N	P=0.637N
POLY 6	P=0.433N	P=0.736N	P=0.706N	P=0.736N	P=0.637N
COCH-ARM / FISHERS	P=0.430N	P=0.769N	P=0.741N	P=0.769N	P=0.667N
MAX-ISO-POLY-3	P=0.390N	P=0.332N	P=0.315N	P=0.332N	P=0.272N
HISTCONT SAME RTE					
HISTCONT ALL RTES					
CURR VS HC SAME RTE					
CURR VS HC ALL RTES					

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 First Dose M/F: NA / NA
 Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RAT(F 344/N)
 LAST REMOVAL AT 14286 WEEKS**

DOSE	MALE				
	UNTREATDCONTROL	1.25	2.5	5.0	10.0
Liver					
Inflammation Chronic					
LESION RATES					
OVERALL(a)	14/20 (70%)	6/6 (100%)	7/7 (100%)	6/6 (100%)	2/10 (20%)
POLY-3 RATE (b)	14/20.00	6/6.00	7/7.00	6/6.00	2/10.00
POLY-3 PERCENT (g)	70%	100%	100%	100%	20%
TERMINAL (d)	14/20 (70%)	6/6 (100%)	7/7 (100%)	6/6 (100%)	2/10 (20%)
FIRST INCIDENCE	92(T)	92(T)	92(T)	92(T)	92(T)
STATISTICAL TESTS					
POLY 3	P=0.000N**	P=0.162	P=0.129	P=0.162	P=0.008N**
POLY 1.5	P=0.000N**	P=0.162	P=0.129	P=0.162	P=0.008N**
POLY 6	P=0.000N**	P=0.162	P=0.129	P=0.162	P=0.008N**
COCH-ARM / FISHERS	P=0.003N**	P=0.168	P=0.131	P=0.168	P=0.013N*
MAX-ISO-POLY-3	P=0.000N**	P=0.108	P=0.086	P=0.108	P=0.007N**
HISTCONT SAME RTE					
HISTCONT ALL RTES					
CURR VS HC SAME RTE					
CURR VS HC ALL RTES					

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Lab: BAT

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RAT(F 344/N)
LAST REMOVAL AT 14286 WEEKS

DOSE	MALE				
	UNTREATDCONTROL	1.25	2.5	5.0	10.0
Lung					
Inflammation Chronic					
LESION RATES					
OVERALL(a)	1/20 (5%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/10 (0%)
POLY-3 RATE (b)	1/20.00	0/0.00	0/0.00	0/0.00	0/10.00
POLY-3 PERCENT (g)	5%	0%	0%	0%	0%
TERMINAL (d)	1/20 (5%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/10 (0%)
FIRST INCIDENCE	92(T)	---	---	---	---
STATISTICAL TESTS					
POLY 3	(e)	(e)	(e)	(e)	P=0.637N
POLY 1.5	(e)	(e)	(e)	(e)	P=0.637N
POLY 6	(e)	(e)	(e)	(e)	P=0.637N
COCH-ARM / FISHERS	P=0.429N	(e)	(e)	(e)	P=0.667N
MAX-ISO-POLY-3	(e)	(e)	(e)	(e)	P=0.272N
HISTCONT SAME RTE					
HISTCONT ALL RTES					
CURR VS HC SAME RTE					
CURR VS HC ALL RTES					

Experiment Number: 56111-01
 Test Type: 90-DAY
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 Species/Strain: Rat/F 344/N

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STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RAT(F 344/N)
LAST REMOVAL AT 14286 WEEKS

DOSE	MALE				
	UNTREATDCONTROL	1.25	2.5	5.0	10.0
Lung: Alveolus					
Infiltration Cellular Histiocyte					
LESION RATES					
OVERALL(a)	2/20 (10%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	1/10 (10%)
POLY-3 RATE (b)	2/20.00	0/0.00	0/0.00	0/0.00	1/10.00
POLY-3 PERCENT (g)	10%	0%	0%	0%	10%
TERMINAL (d)	2/20 (10%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	1/10 (10%)
FIRST INCIDENCE	92(T)	---	---	---	92(T)
STATISTICAL TESTS					
POLY 3	(e)	(e)	(e)	(e)	P=0.734
POLY 1.5	(e)	(e)	(e)	(e)	P=0.734
POLY 6	(e)	(e)	(e)	(e)	P=0.734
COCH-ARM / FISHERS	P=0.627	(e)	(e)	(e)	P=0.719
MAX-ISO-POLY-3	(e)	(e)	(e)	(e)	P=1.000
HISTCONT SAME RTE					
HISTCONT ALL RTES					
CURR VS HC SAME RTE					
CURR VS HC ALL RTES					

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STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RAT(F 344/N)
LAST REMOVAL AT 14286 WEEKS

DOSE	MALE				
	UNTREATDCONTROL	1.25	2.5	5.0	10.0
Nose					
Foreign Body					
LESION RATES					
OVERALL(a)	1/20 (5%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/10 (0%)
POLY-3 RATE (b)	1/20.00	0/0.00	0/0.00	0/0.00	0/10.00
POLY-3 PERCENT (g)	5%	0%	0%	0%	0%
TERMINAL (d)	1/20 (5%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/10 (0%)
FIRST INCIDENCE	92(T)	---	---	---	---
STATISTICAL TESTS					
POLY 3	(e)	(e)	(e)	(e)	P=0.637N
POLY 1.5	(e)	(e)	(e)	(e)	P=0.637N
POLY 6	(e)	(e)	(e)	(e)	P=0.637N
COCH-ARM / FISHERS	P=0.429N	(e)	(e)	(e)	P=0.667N
MAX-ISO-POLY-3	(e)	(e)	(e)	(e)	P=0.272N
HISTCONT SAME RTE					
HISTCONT ALL RTES					
CURR VS HC SAME RTE					
CURR VS HC ALL RTES					

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First Dose M/F: NA / NA

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**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RAT(F 344/N)
 LAST REMOVAL AT 14286 WEEKS**

DOSE	MALE				
	UNTREATDCONTROL	1.25	2.5	5.0	10.0
Pituitary Gland: Pars Distalis					
Cyst					
LESION RATES					
OVERALL(a)	2/20 (10%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/10 (0%)
POLY-3 RATE (b)	2/20.00	0/0.00	0/0.00	0/0.00	0/10.00
POLY-3 PERCENT (g)	10%	0%	0%	0%	0%
TERMINAL (d)	2/20 (10%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/10 (0%)
FIRST INCIDENCE	92(T)	---	---	---	---
STATISTICAL TESTS					
POLY 3	(e)	(e)	(e)	(e)	P=0.400N
POLY 1.5	(e)	(e)	(e)	(e)	P=0.400N
POLY 6	(e)	(e)	(e)	(e)	P=0.400N
COCH-ARM / FISHERS	P=0.259N	(e)	(e)	(e)	P=0.437N
MAX-ISO-POLY-3	(e)	(e)	(e)	(e)	P=0.189N
HISTCONT SAME RTE					
HISTCONT ALL RTES					
CURR VS HC SAME RTE					
CURR VS HC ALL RTES					

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STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RAT(F 344/N)
LAST REMOVAL AT 14286 WEEKS

DOSE	MALE				
	UNTREATDCONTROL	1.25	2.5	5.0	10.0
Prostate Atrophy					
LESION RATES					
OVERALL(a)	0/20 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	1/10 (10%)
POLY-3 RATE (b)	0/20.00	0/0.00	0/0.00	0/0.00	1/10.00
POLY-3 PERCENT (g)	0%	0%	0%	0%	10%
TERMINAL (d)	0/20 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	1/10 (10%)
FIRST INCIDENCE	---	---	---	---	92(T)
STATISTICAL TESTS					
POLY 3	(e)	(e)	(e)	(e)	P=0.359
POLY 1.5	(e)	(e)	(e)	(e)	P=0.359
POLY 6	(e)	(e)	(e)	(e)	P=0.359
COCH-ARM / FISHERS	P=0.184	(e)	(e)	(e)	P=0.333
MAX-ISO-POLY-3	(e)	(e)	(e)	(e)	P=0.107
HISTCONT SAME RTE					
HISTCONT ALL RTES					
CURR VS HC SAME RTE					
CURR VS HC ALL RTES					

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LAST REMOVAL AT 14286 WEEKS

DOSE	MALE				
	UNTREATDCONTROL	1.25	2.5	5.0	10.0
Prostate					
Inflammation Chronic					
LESION RATES					
OVERALL(a)	2/20 (10%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	1/10 (10%)
POLY-3 RATE (b)	2/20.00	0/0.00	0/0.00	0/0.00	1/10.00
POLY-3 PERCENT (g)	10%	0%	0%	0%	10%
TERMINAL (d)	2/20 (10%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	1/10 (10%)
FIRST INCIDENCE	92(T)	---	---	---	92(T)
STATISTICAL TESTS					
POLY 3	(e)	(e)	(e)	(e)	P=0.734
POLY 1.5	(e)	(e)	(e)	(e)	P=0.734
POLY 6	(e)	(e)	(e)	(e)	P=0.734
COCH-ARM / FISHERS	P=0.627	(e)	(e)	(e)	P=0.719
MAX-ISO-POLY-3	(e)	(e)	(e)	(e)	P=1.000
HISTCONT SAME RTE					
HISTCONT ALL RTES					
CURR VS HC SAME RTE					
CURR VS HC ALL RTES					

Experiment Number: 56111-01
 Test Type: 90-DAY
 Route: DOSED FEED
 Species/Strain: Rat/F 344/N

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS
Test Compound: trans-Cinnamaldehyde
CAS Number: 14371-10-9

Date Report Requested: 10/19/2014
Time Report Requested: 07:16:46
First Dose M/F: NA / NA
Lab: BAT

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RAT(F 344/N)
LAST REMOVAL AT 14286 WEEKS

DOSE	MALE				
	UNTREATDCONTROL	1.25	2.5	5.0	10.0
Seminal Vesicle					
Atrophy					
LESION RATES					
OVERALL(a)	0/20 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	1/10 (10%)
POLY-3 RATE (b)	0/20.00	0/0.00	0/0.00	0/0.00	1/10.00
POLY-3 PERCENT (g)	0%	0%	0%	0%	10%
TERMINAL (d)	0/20 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	1/10 (10%)
FIRST INCIDENCE	---	---	---	---	92(T)
STATISTICAL TESTS					
POLY 3	(e)	(e)	(e)	(e)	P=0.359
POLY 1.5	(e)	(e)	(e)	(e)	P=0.359
POLY 6	(e)	(e)	(e)	(e)	P=0.359
COCH-ARM / FISHERS	P=0.184	(e)	(e)	(e)	P=0.333
MAX-ISO-POLY-3	(e)	(e)	(e)	(e)	P=0.107
HISTCONT SAME RTE					
HISTCONT ALL RTES					
CURR VS HC SAME RTE					
CURR VS HC ALL RTES					

Experiment Number: 56111-01
 Test Type: 90-DAY
 Route: DOSED FEED
 Species/Strain: Rat/F 344/N

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS
 Test Compound: trans-Cinnamaldehyde
 CAS Number: 14371-10-9

Date Report Requested: 10/19/2014
 Time Report Requested: 07:16:46
 First Dose M/F: NA / NA
 Lab: BAT

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RAT(F 344/N)
 LAST REMOVAL AT 14286 WEEKS

DOSE	MALE				
	UNTREATDCONTROL	1.25	2.5	5.0	10.0
Stomach, Forestomach					
Inflammation Chronic					
LESION RATES					
OVERALL(a)	0/20 (0%)	0/10 (0%)	0/10 (0%)	3/10 (30%)	7/10 (70%)
POLY-3 RATE (b)	0/20.00	0/10.00	0/10.00	3/10.00	7/10.00
POLY-3 PERCENT (g)	0%	0%	0%	30%	70%
TERMINAL (d)	0/20 (0%)	0/10 (0%)	0/10 (0%)	3/10 (30%)	7/10 (70%)
FIRST INCIDENCE	---	---	---	92(T)	92(T)
STATISTICAL TESTS					
POLY 3	P=0.000**	(e)	(e)	P=0.017*	P=0.000**
POLY 1.5	P=0.000**	(e)	(e)	P=0.017*	P=0.000**
POLY 6	P=0.000**	(e)	(e)	P=0.017*	P=0.000**
COCH-ARM / FISHERS	P=0.000**	(e)	(e)	P=0.030*	P=0.000**
MAX-ISO-POLY-3	P=0.000**	(e)	(e)	P=0.007**	P=0.000**
HISTCONT SAME RTE					
HISTCONT ALL RTES					
CURR VS HC SAME RTE					
CURR VS HC ALL RTES					

Experiment Number: 56111-01
 Test Type: 90-DAY
 Route: DOSED FEED
 Species/Strain: Rat/F 344/N

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS
Test Compound: trans-Cinnamaldehyde
CAS Number: 14371-10-9

Date Report Requested: 10/19/2014
 Time Report Requested: 07:16:46
 First Dose M/F: NA / NA
 Lab: BAT

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RAT(F 344/N)
LAST REMOVAL AT 14286 WEEKS

DOSE	MALE				
	UNTREATDCONTROL	1.25	2.5	5.0	10.0
Stomach, Forestomach: Epithelium					
Hyperplasia					
LESION RATES					
OVERALL(a)	0/20 (0%)	0/10 (0%)	7/10 (70%)	10/10 (100%)	10/10 (100%)
POLY-3 RATE (b)	0/20.00	0/10.00	7/10.00	10/10.00	10/10.00
POLY-3 PERCENT (g)	0%	0%	70%	100%	100%
TERMINAL (d)	0/20 (0%)	0/10 (0%)	7/10 (70%)	10/10 (100%)	10/10 (100%)
FIRST INCIDENCE	---	---	92(T)	92(T)	92(T)
STATISTICAL TESTS					
POLY 3	P=0.000**	(e)	P=0.000**	P=NA	P=NA
POLY 1.5	P=0.000**	(e)	P=0.000**	P=NA	P=NA
POLY 6	P=0.000**	(e)	P=0.000**	P=NA	P=NA
COCH-ARM / FISHERS	P=0.000**	(e)	P=0.000**	P=0.000**	P=0.000**
MAX-ISO-POLY-3	P=0.000**	(e)	P=0.000**	P=0.000**	P=0.000**
HISTCONT SAME RTE					
HISTCONT ALL RTES					
CURR VS HC SAME RTE					
CURR VS HC ALL RTES					

Experiment Number: 56111-01
 Test Type: 90-DAY
 Route: DOSED FEED
 Species/Strain: Rat/F 344/N

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS
Test Compound: trans-Cinnamaldehyde
CAS Number: 14371-10-9

Date Report Requested: 10/19/2014
Time Report Requested: 07:16:46
First Dose M/F: NA / NA
Lab: BAT

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RAT(F 344/N)
LAST REMOVAL AT 14286 WEEKS

DOSE	MALE				
	UNTREATDCONTROL	1.25	2.5	5.0	10.0
Stomach, Forestomach: Epithelium					
Ulcer					
LESION RATES					
OVERALL(a)	0/20 (0%)	0/10 (0%)	0/10 (0%)	1/10 (10%)	1/10 (10%)
POLY-3 RATE (b)	0/20.00	0/10.00	0/10.00	1/10.00	1/10.00
POLY-3 PERCENT (g)	0%	0%	0%	10%	10%
TERMINAL (d)	0/20 (0%)	0/10 (0%)	0/10 (0%)	1/10 (10%)	1/10 (10%)
FIRST INCIDENCE	---	---	---	92(T)	92(T)
STATISTICAL TESTS					
POLY 3	P=0.102	(e)	(e)	P=0.359	P=0.359
POLY 1.5	P=0.102	(e)	(e)	P=0.359	P=0.359
POLY 6	P=0.102	(e)	(e)	P=0.359	P=0.359
COCH-ARM / FISHERS	P=0.101	(e)	(e)	P=0.333	P=0.333
MAX-ISO-POLY-3	P=0.177	(e)	(e)	P=0.107	P=0.107
HISTCONT SAME RTE					
HISTCONT ALL RTES					
CURR VS HC SAME RTE					
CURR VS HC ALL RTES					

Experiment Number: 56111-01
 Test Type: 90-DAY
 Route: DOSED FEED
 Species/Strain: Rat/F 344/N

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS
Test Compound: trans-Cinnamaldehyde
CAS Number: 14371-10-9

Date Report Requested: 10/19/2014
Time Report Requested: 07:16:46
First Dose M/F: NA / NA
Lab: BAT

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RAT(F 344/N)
LAST REMOVAL AT 14286 WEEKS

DOSE	MALE				
	UNTREATDCONTROL	1.25	2.5	5.0	10.0
Stomach, Glandular Mineralization					
LESION RATES					
OVERALL(a)	0/20 (0%)	0/0 (0%)	0/0 (0%)	0/1 (0%)	1/10 (10%)
POLY-3 RATE (b)	0/20.00	0/0.00	0/0.00	0/1.00	1/10.00
POLY-3 PERCENT (g)	0%	0%	0%	0%	10%
TERMINAL (d)	0/20 (0%)	0/0 (0%)	0/0 (0%)	0/1 (0%)	1/10 (10%)
FIRST INCIDENCE	---	---	---	---	92(T)
STATISTICAL TESTS					
POLY 3	(e)	(e)	(e)	(e)	P=0.359
POLY 1.5	(e)	(e)	(e)	(e)	P=0.359
POLY 6	(e)	(e)	(e)	(e)	P=0.359
COCH-ARM / FISHERS	P=0.184	(e)	(e)	(e)	P=0.333
MAX-ISO-POLY-3	(e)	(e)	(e)	(e)	P=0.107
HISTCONT SAME RTE					
HISTCONT ALL RTES					
CURR VS HC SAME RTE					
CURR VS HC ALL RTES					

Experiment Number: 56111-01
 Test Type: 90-DAY
 Route: DOSED FEED
 Species/Strain: Rat/F 344/N

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS
Test Compound: trans-Cinnamaldehyde
CAS Number: 14371-10-9

Date Report Requested: 10/19/2014
Time Report Requested: 07:16:46
First Dose M/F: NA / NA
Lab: BAT

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RAT(F 344/N)
LAST REMOVAL AT 14286 WEEKS

DOSE	MALE				
	UNTREATDCONTROL	1.25	2.5	5.0	10.0
Testes: Germinal Epith Degeneration					
LESION RATES					
OVERALL(a)	0/20 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	1/10 (10%)
POLY-3 RATE (b)	0/20.00	0/0.00	0/0.00	0/0.00	1/10.00
POLY-3 PERCENT (g)	0%	0%	0%	0%	10%
TERMINAL (d)	0/20 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	1/10 (10%)
FIRST INCIDENCE	---	---	---	---	92(T)
STATISTICAL TESTS					
POLY 3	(e)	(e)	(e)	(e)	P=0.359
POLY 1.5	(e)	(e)	(e)	(e)	P=0.359
POLY 6	(e)	(e)	(e)	(e)	P=0.359
COCH-ARM / FISHERS	P=0.184	(e)	(e)	(e)	P=0.333
MAX-ISO-POLY-3	(e)	(e)	(e)	(e)	P=0.107
HISTCONT SAME RTE					
HISTCONT ALL RTES					
CURR VS HC SAME RTE					
CURR VS HC ALL RTES					

Experiment Number: 56111-01
 Test Type: 90-DAY
 Route: DOSED FEED
 Species/Strain: Rat/F 344/N

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS
Test Compound: trans-Cinnamaldehyde
CAS Number: 14371-10-9

Date Report Requested: 10/19/2014
Time Report Requested: 07:16:46
First Dose M/F: NA / NA
Lab: BAT

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RAT(F 344/N)
LAST REMOVAL AT 14286 WEEKS

DOSE	FEMALE				
	VEHICLE CONTROL	1.25	2.5	5.0	10.0
Clitoral Gland					
Inflammation Chronic					
LESION RATES					
OVERALL(a)	2/20 (10%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/10 (0%)
POLY-3 RATE (b)	2/20.00	0/0.00	0/0.00	0/0.00	0/10.00
POLY-3 PERCENT (g)	10%	0%	0%	0%	0%
TERMINAL (d)	2/20 (10%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/10 (0%)
FIRST INCIDENCE	92(T)	---	---	---	---
STATISTICAL TESTS					
POLY 3	(e)	(e)	(e)	(e)	P=0.400N
POLY 1.5	(e)	(e)	(e)	(e)	P=0.400N
POLY 6	(e)	(e)	(e)	(e)	P=0.400N
COCH-ARM / FISHERS	P=0.259N	(e)	(e)	(e)	P=0.437N
MAX-ISO-POLY-3	(e)	(e)	(e)	(e)	P=0.189N
HISTCONT SAME RTE					
HISTCONT ALL RTES					
CURR VS HC SAME RTE					
CURR VS HC ALL RTES					

Experiment Number: 56111-01
 Test Type: 90-DAY
 Route: DOSED FEED
 Species/Strain: Rat/F 344/N

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS
Test Compound: trans-Cinnamaldehyde
CAS Number: 14371-10-9

Date Report Requested: 10/19/2014
Time Report Requested: 07:16:46
First Dose M/F: NA / NA
Lab: BAT

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RAT(F 344/N)
LAST REMOVAL AT 14286 WEEKS

DOSE	FEMALE				
	VEHICLE CONTROL	1.25	2.5	5.0	10.0
Heart					
Cardiomyopathy Chronic					
LESION RATES					
OVERALL(a)	1/20 (5%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/10 (0%)
POLY-3 RATE (b)	1/20.00	0/0.00	0/0.00	0/0.00	0/10.00
POLY-3 PERCENT (g)	5%	0%	0%	0%	0%
TERMINAL (d)	1/20 (5%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/10 (0%)
FIRST INCIDENCE	92(T)	---	---	---	---
STATISTICAL TESTS					
POLY 3	(e)	(e)	(e)	(e)	P=0.637N
POLY 1.5	(e)	(e)	(e)	(e)	P=0.637N
POLY 6	(e)	(e)	(e)	(e)	P=0.637N
COCH-ARM / FISHERS	P=0.429N	(e)	(e)	(e)	P=0.667N
MAX-ISO-POLY-3	(e)	(e)	(e)	(e)	P=0.272N
HISTCONT SAME RTE					
HISTCONT ALL RTES					
CURR VS HC SAME RTE					
CURR VS HC ALL RTES					

Experiment Number: 56111-01
 Test Type: 90-DAY
 Route: DOSED FEED
 Species/Strain: Rat/F 344/N

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS
Test Compound: trans-Cinnamaldehyde
CAS Number: 14371-10-9

Date Report Requested: 10/19/2014
Time Report Requested: 07:16:46
First Dose M/F: NA / NA
Lab: BAT

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RAT(F 344/N)
LAST REMOVAL AT 14286 WEEKS

DOSE	FEMALE				
	VEHICLE CONTROL	1.25	2.5	5.0	10.0
Intestine Large, Colon					
Parasite Metazoan					
LESION RATES					
OVERALL(a)	0/20 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	1/10 (10%)
POLY-3 RATE (b)	0/20.00	0/0.00	0/0.00	0/0.00	1/10.00
POLY-3 PERCENT (g)	0%	0%	0%	0%	10%
TERMINAL (d)	0/20 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	1/10 (10%)
FIRST INCIDENCE	---	---	---	---	92(T)
STATISTICAL TESTS					
POLY 3	(e)	(e)	(e)	(e)	P=0.359
POLY 1.5	(e)	(e)	(e)	(e)	P=0.359
POLY 6	(e)	(e)	(e)	(e)	P=0.359
COCH-ARM / FISHERS	P=0.184	(e)	(e)	(e)	P=0.333
MAX-ISO-POLY-3	(e)	(e)	(e)	(e)	P=0.107
HISTCONT SAME RTE					
HISTCONT ALL RTES					
CURR VS HC SAME RTE					
CURR VS HC ALL RTES					

Experiment Number: 56111-01
 Test Type: 90-DAY
 Route: DOSED FEED
 Species/Strain: Rat/F 344/N

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Test Compound: trans-Cinnamaldehyde

CAS Number: 14371-10-9

Date Report Requested: 10/19/2014

Time Report Requested: 07:16:46

First Dose M/F: NA / NA

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RAT(F 344/N)
 LAST REMOVAL AT 14286 WEEKS**

DOSE	FEMALE				
	VEHICLE CONTROL	1.25	2.5	5.0	10.0
Intestine Large, Rectum					
Parasite Metazoan					
LESION RATES					
OVERALL(a)	1/20 (5%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	1/10 (10%)
POLY-3 RATE (b)	1/20.00	0/0.00	0/0.00	0/0.00	1/10.00
POLY-3 PERCENT (g)	5%	0%	0%	0%	10%
TERMINAL (d)	1/20 (5%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	1/10 (10%)
FIRST INCIDENCE	92(T)	---	---	---	92(T)
STATISTICAL TESTS					
POLY 3	(e)	(e)	(e)	(e)	P=0.599
POLY 1.5	(e)	(e)	(e)	(e)	P=0.599
POLY 6	(e)	(e)	(e)	(e)	P=0.599
COCH-ARM / FISHERS	P=0.449	(e)	(e)	(e)	P=0.563
MAX-ISO-POLY-3	(e)	(e)	(e)	(e)	P=0.332
HISTCONT SAME RTE					
HISTCONT ALL RTES					
CURR VS HC SAME RTE					
CURR VS HC ALL RTES					

Experiment Number: 56111-01
 Test Type: 90-DAY
 Route: DOSED FEED
 Species/Strain: Rat/F 344/N

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS
Test Compound: trans-Cinnamaldehyde
CAS Number: 14371-10-9

Date Report Requested: 10/19/2014
Time Report Requested: 07:16:46
First Dose M/F: NA / NA
Lab: BAT

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RAT(F 344/N)
LAST REMOVAL AT 14286 WEEKS

DOSE	FEMALE				
	VEHICLE CONTROL	1.25	2.5	5.0	10.0
Kidney: Renal Tubule					
Regeneration					
LESION RATES					
OVERALL(a)	0/20 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	1/10 (10%)
POLY-3 RATE (b)	0/20.00	0/0.00	0/0.00	0/0.00	1/10.00
POLY-3 PERCENT (g)	0%	0%	0%	0%	10%
TERMINAL (d)	0/20 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	1/10 (10%)
FIRST INCIDENCE	---	---	---	---	92(T)
STATISTICAL TESTS					
POLY 3	(e)	(e)	(e)	(e)	P=0.359
POLY 1.5	(e)	(e)	(e)	(e)	P=0.359
POLY 6	(e)	(e)	(e)	(e)	P=0.359
COCH-ARM / FISHERS	P=0.184	(e)	(e)	(e)	P=0.333
MAX-ISO-POLY-3	(e)	(e)	(e)	(e)	P=0.107
HISTCONT SAME RTE					
HISTCONT ALL RTES					
CURR VS HC SAME RTE					
CURR VS HC ALL RTES					

Experiment Number: 56111-01
 Test Type: 90-DAY
 Route: DOSED FEED
 Species/Strain: Rat/F 344/N

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Test Compound: trans-Cinnamaldehyde

CAS Number: 14371-10-9

Date Report Requested: 10/19/2014

Time Report Requested: 07:16:46

First Dose M/F: NA / NA

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RAT(F 344/N)
 LAST REMOVAL AT 14286 WEEKS**

DOSE	FEMALE				
	VEHICLE CONTROL	1.25	2.5	5.0	10.0
Liver					
Hepatodiaphragmatic Nodule					
LESION RATES					
OVERALL(a)	3/20 (15%)	1/8 (12%)	0/8 (0%)	0/4 (0%)	1/10 (10%)
POLY-3 RATE (b)	3/20.00	1/8.00	0/8.00	0/4.00	1/10.00
POLY-3 PERCENT (g)	15%	12.5%	0%	0%	10%
TERMINAL (d)	3/20 (15%)	1/8 (12%)	0/8 (0%)	0/4 (0%)	1/10 (10%)
FIRST INCIDENCE	92(T)	92(T)	---	---	92(T)
STATISTICAL TESTS					
POLY 3	P=0.440N	P=0.660N	P=0.317N	P=0.500N	P=0.573N
POLY 1.5	P=0.440N	P=0.660N	P=0.317N	P=0.500N	P=0.573N
POLY 6	P=0.440N	P=0.660N	P=0.317N	P=0.500N	P=0.573N
COCH-ARM / FISHERS	P=0.438N	P=0.763	P=0.348N	P=0.563N	P=0.593N
MAX-ISO-POLY-3	P=0.393N	P=0.445N	P=0.170N	P=0.267N	P=0.375N
HISTCONT SAME RTE					
HISTCONT ALL RTES					
CURR VS HC SAME RTE					
CURR VS HC ALL RTES					

Experiment Number: 56111-01
 Test Type: 90-DAY
 Route: DOSED FEED
 Species/Strain: Rat/F 344/N

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS
Test Compound: trans-Cinnamaldehyde
CAS Number: 14371-10-9

Date Report Requested: 10/19/2014
Time Report Requested: 07:16:46
First Dose M/F: NA / NA
Lab: BAT

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RAT(F 344/N)
LAST REMOVAL AT 14286 WEEKS

DOSE	FEMALE				
	VEHICLE CONTROL	1.25	2.5	5.0	10.0
Liver					
Inflammation Chronic					
LESION RATES					
OVERALL(a)	17/20 (85%)	7/8 (88%)	8/8 (100%)	4/4 (100%)	4/10 (40%)
POLY-3 RATE (b)	17/20.00	7/8.00	8/8.00	4/4.00	4/10.00
POLY-3 PERCENT (g)	85%	87.5%	100%	100%	40%
TERMINAL (d)	17/20 (85%)	7/8 (88%)	8/8 (100%)	4/4 (100%)	4/10 (40%)
FIRST INCIDENCE	92(T)	92(T)	92(T)	92(T)	92(T)
STATISTICAL TESTS					
POLY 3	P=0.001N**	P=0.660	P=0.317	P=0.500	P=0.011N*
POLY 1.5	P=0.001N**	P=0.660	P=0.317	P=0.500	P=0.011N*
POLY 6	P=0.001N**	P=0.660	P=0.317	P=0.500	P=0.011N*
COCH-ARM / FISHERS	P=0.004N**	P=0.763N	P=0.348	P=0.563	P=0.018N*
MAX-ISO-POLY-3	P=0.002N**	P=0.445	P=0.170	P=0.267	P=0.009N**
HISTCONT SAME RTE					
HISTCONT ALL RTES					
CURR VS HC SAME RTE					
CURR VS HC ALL RTES					

Experiment Number: 56111-01
 Test Type: 90-DAY
 Route: DOSED FEED
 Species/Strain: Rat/F 344/N

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS
Test Compound: trans-Cinnamaldehyde
CAS Number: 14371-10-9

Date Report Requested: 10/19/2014
Time Report Requested: 07:16:46
First Dose M/F: NA / NA
Lab: BAT

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RAT(F 344/N)
LAST REMOVAL AT 14286 WEEKS

DOSE	FEMALE				
	VEHICLE CONTROL	1.25	2.5	5.0	10.0
Lung					
Inflammation Chronic					
LESION RATES					
OVERALL(a)	0/20 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	2/10 (20%)
POLY-3 RATE (b)	0/20.00	0/0.00	0/0.00	0/0.00	2/10.00
POLY-3 PERCENT (g)	0%	0%	0%	0%	20%
TERMINAL (d)	0/20 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	2/10 (20%)
FIRST INCIDENCE	---	---	---	---	92(T)
STATISTICAL TESTS					
POLY 3	(e)	(e)	(e)	(e)	P=0.088
POLY 1.5	(e)	(e)	(e)	(e)	P=0.088
POLY 6	(e)	(e)	(e)	(e)	P=0.088
COCH-ARM / FISHERS	P=0.046*	(e)	(e)	(e)	P=0.103
MAX-ISO-POLY-3	(e)	(e)	(e)	(e)	P=0.031*
HISTCONT SAME RTE					
HISTCONT ALL RTES					
CURR VS HC SAME RTE					
CURR VS HC ALL RTES					

Experiment Number: 56111-01
 Test Type: 90-DAY
 Route: DOSED FEED
 Species/Strain: Rat/F 344/N

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Test Compound: trans-Cinnamaldehyde

CAS Number: 14371-10-9

Date Report Requested: 10/19/2014

Time Report Requested: 07:16:46

First Dose M/F: NA / NA

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RAT(F 344/N)
 LAST REMOVAL AT 14286 WEEKS**

DOSE	FEMALE				
	VEHICLE CONTROL	1.25	2.5	5.0	10.0
Lung: Alveolus					
Infiltration Cellular Histiocyte					
LESION RATES					
OVERALL(a)	2/20 (10%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	1/10 (10%)
POLY-3 RATE (b)	2/20.00	0/0.00	0/0.00	0/0.00	1/10.00
POLY-3 PERCENT (g)	10%	0%	0%	0%	10%
TERMINAL (d)	2/20 (10%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	1/10 (10%)
FIRST INCIDENCE	92(T)	---	---	---	92(T)
STATISTICAL TESTS					
POLY 3	(e)	(e)	(e)	(e)	P=0.734
POLY 1.5	(e)	(e)	(e)	(e)	P=0.734
POLY 6	(e)	(e)	(e)	(e)	P=0.734
COCH-ARM / FISHERS	P=0.627	(e)	(e)	(e)	P=0.719
MAX-ISO-POLY-3	(e)	(e)	(e)	(e)	P=1.000
HISTCONT SAME RTE					
HISTCONT ALL RTES					
CURR VS HC SAME RTE					
CURR VS HC ALL RTES					

Experiment Number: 56111-01
 Test Type: 90-DAY
 Route: DOSED FEED
 Species/Strain: Rat/F 344/N

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Test Compound: trans-Cinnamaldehyde

CAS Number: 14371-10-9

Date Report Requested: 10/19/2014

Time Report Requested: 07:16:46

First Dose M/F: NA / NA

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RAT(F 344/N)
 LAST REMOVAL AT 14286 WEEKS**

DOSE	FEMALE				
	VEHICLE CONTROL	1.25	2.5	5.0	10.0
Nose					
Foreign Body					
LESION RATES					
OVERALL(a)	0/20 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/10 (0%)
POLY-3 RATE (b)	0/20.00	0/0.00	0/0.00	0/0.00	0/10.00
POLY-3 PERCENT (g)	0%	0%	0%	0%	0%
TERMINAL (d)	0/20 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/10 (0%)
FIRST INCIDENCE	---	---	---	---	---
STATISTICAL TESTS					
POLY 3	(n)	(n)	(n)	(n)	(n)
POLY 1.5	(n)	(n)	(n)	(n)	(n)
POLY 6	(n)	(n)	(n)	(n)	(n)
COCH-ARM / FISHERS	(n)	(n)	(n)	(n)	(n)
MAX-ISO-POLY-3	(n)	(n)	(n)	(n)	(n)
HISTCONT SAME RTE					
HISTCONT ALL RTES					
CURR VS HC SAME RTE					
CURR VS HC ALL RTES					

Experiment Number: 56111-01
 Test Type: 90-DAY
 Route: DOSED FEED
 Species/Strain: Rat/F 344/N

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS
Test Compound: trans-Cinnamaldehyde
CAS Number: 14371-10-9

Date Report Requested: 10/19/2014
 Time Report Requested: 07:16:46
 First Dose M/F: NA / NA
 Lab: BAT

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RAT(F 344/N)
LAST REMOVAL AT 14286 WEEKS

DOSE	FEMALE				
	VEHICLE CONTROL	1.25	2.5	5.0	10.0
Ovary Cyst					
LESION RATES					
OVERALL(a)	5/20 (25%)	3/3 (100%)	1/1 (100%)	0/0 (0%)	0/10 (0%)
POLY-3 RATE (b)	5/20.00	3/3.00	1/1.00	0/0.00	0/10.00
POLY-3 PERCENT (g)	25%	100%	100%	0%	0%
TERMINAL (d)	5/20 (25%)	3/3 (100%)	1/1 (100%)	0/0 (0%)	0/10 (0%)
FIRST INCIDENCE	92(T)	92(T)	92(T)	---	---
STATISTICAL TESTS					
POLY 3	(e)	P=0.016*	P=0.311	(e)	P=0.108N
POLY 1.5	(e)	P=0.016*	P=0.311	(e)	P=0.108N
POLY 6	(e)	P=0.016*	P=0.311	(e)	P=0.108N
COCH-ARM / FISHERS	P=0.046N*	P=0.032*	P=0.286	(e)	P=0.109N
MAX-ISO-POLY-3	(e)	P=0.015*	P=0.117	(e)	P=0.063N
HISTCONT SAME RTE					
HISTCONT ALL RTES					
CURR VS HC SAME RTE					
CURR VS HC ALL RTES					

Experiment Number: 56111-01
 Test Type: 90-DAY
 Route: DOSED FEED
 Species/Strain: Rat/F 344/N

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Test Compound: trans-Cinnamaldehyde

CAS Number: 14371-10-9

Date Report Requested: 10/19/2014

Time Report Requested: 07:16:46

First Dose M/F: NA / NA

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RAT(F 344/N)
 LAST REMOVAL AT 14286 WEEKS**

DOSE	FEMALE				
	VEHICLE CONTROL	1.25	2.5	5.0	10.0
Pituitary Gland: Pars Distalis					
Cyst					
LESION RATES					
OVERALL(a)	0/20 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/10 (0%)
POLY-3 RATE (b)	0/20.00	0/0.00	0/0.00	0/0.00	0/10.00
POLY-3 PERCENT (g)	0%	0%	0%	0%	0%
TERMINAL (d)	0/20 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/10 (0%)
FIRST INCIDENCE	---	---	---	---	---
STATISTICAL TESTS					
POLY 3	(n)	(n)	(n)	(n)	(n)
POLY 1.5	(n)	(n)	(n)	(n)	(n)
POLY 6	(n)	(n)	(n)	(n)	(n)
COCH-ARM / FISHERS	(n)	(n)	(n)	(n)	(n)
MAX-ISO-POLY-3	(n)	(n)	(n)	(n)	(n)
HISTCONT SAME RTE					
HISTCONT ALL RTES					
CURR VS HC SAME RTE					
CURR VS HC ALL RTES					

Experiment Number: 56111-01
 Test Type: 90-DAY
 Route: DOSED FEED
 Species/Strain: Rat/F 344/N

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS
 Test Compound: trans-Cinnamaldehyde
 CAS Number: 14371-10-9

Date Report Requested: 10/19/2014
 Time Report Requested: 07:16:46
 First Dose M/F: NA / NA
 Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RAT(F 344/N)
 LAST REMOVAL AT 14286 WEEKS**

DOSE	FEMALE				
	VEHICLE CONTROL	1.25	2.5	5.0	10.0
Stomach, Forestomach					
Inflammation Chronic					
LESION RATES					
OVERALL(a)	0/20 (0%)	0/10 (0%)	0/10 (0%)	8/10 (80%)	8/10 (80%)
POLY-3 RATE (b)	0/20.00	0/10.00	0/10.00	8/10.00	8/10.00
POLY-3 PERCENT (g)	0%	0%	0%	80%	80%
TERMINAL (d)	0/20 (0%)	0/10 (0%)	0/10 (0%)	8/10 (80%)	8/10 (80%)
FIRST INCIDENCE	---	---	---	92(T)	92(T)
STATISTICAL TESTS					
POLY 3	P=0.000**	(e)	(e)	P=0.000**	P=0.000**
POLY 1.5	P=0.000**	(e)	(e)	P=0.000**	P=0.000**
POLY 6	P=0.000**	(e)	(e)	P=0.000**	P=0.000**
COCH-ARM / FISHERS	P=0.000**	(e)	(e)	P=0.000**	P=0.000**
MAX-ISO-POLY-3	P=0.000**	(e)	(e)	P=0.000**	P=0.000**
HISTCONT SAME RTE					
HISTCONT ALL RTES					
CURR VS HC SAME RTE					
CURR VS HC ALL RTES					

Experiment Number: 56111-01
 Test Type: 90-DAY
 Route: DOSED FEED
 Species/Strain: Rat/F 344/N

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS
 Test Compound: trans-Cinnamaldehyde
 CAS Number: 14371-10-9

Date Report Requested: 10/19/2014
 Time Report Requested: 07:16:46
 First Dose M/F: NA / NA
 Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RAT(F 344/N)
 LAST REMOVAL AT 14286 WEEKS**

DOSE	FEMALE				
	VEHICLE CONTROL	1.25	2.5	5.0	10.0
Stomach, Forestomach: Epithelium					
Hyperplasia					
LESION RATES					
OVERALL(a)	0/20 (0%)	0/10 (0%)	10/10 (100%)	10/10 (100%)	10/10 (100%)
POLY-3 RATE (b)	0/20.00	0/10.00	10/10.00	10/10.00	10/10.00
POLY-3 PERCENT (g)	0%	0%	100%	100%	100%
TERMINAL (d)	0/20 (0%)	0/10 (0%)	10/10 (100%)	10/10 (100%)	10/10 (100%)
FIRST INCIDENCE	---	---	92(T)	92(T)	92(T)
STATISTICAL TESTS					
POLY 3	P=0.000**	(e)	P=NA	P=NA	P=NA
POLY 1.5	P=0.000**	(e)	P=NA	P=NA	P=NA
POLY 6	P=0.000**	(e)	P=NA	P=NA	P=NA
COCH-ARM / FISHERS	P=0.000**	(e)	P=0.000**	P=0.000**	P=0.000**
MAX-ISO-POLY-3	(e)	(e)	P=0.000**	P=0.000**	P=0.000**
HISTCONT SAME RTE					
HISTCONT ALL RTES					
CURR VS HC SAME RTE					
CURR VS HC ALL RTES					

Experiment Number: 56111-01

Test Type: 90-DAY

Route: DOSED FEED

Species/Strain: Rat/F 344/N

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Test Compound: trans-Cinnamaldehyde

CAS Number: 14371-10-9

Date Report Requested: 10/19/2014

Time Report Requested: 07:16:46

First Dose M/F: NA / NA

Lab: BAT

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RAT(F 344/N)
LAST REMOVAL AT 14286 WEEKS

DOSE	FEMALE				
	VEHICLE CONTROL	1.25	2.5	5.0	10.0
Stomach, Forestomach: Epithelium					
Ulcer					
LESION RATES					
OVERALL(a)	0/20 (0%)	0/10 (0%)	0/10 (0%)	0/10 (0%)	3/10 (30%)
POLY-3 RATE (b)	0/20.00	0/10.00	0/10.00	0/10.00	3/10.00
POLY-3 PERCENT (g)	0%	0%	0%	0%	30%
TERMINAL (d)	0/20 (0%)	0/10 (0%)	0/10 (0%)	0/10 (0%)	3/10 (30%)
FIRST INCIDENCE	---	---	---	---	92(T)
STATISTICAL TESTS					
POLY 3	P=0.000**	(e)	(e)	(e)	P=0.017*
POLY 1.5	P=0.000**	(e)	(e)	(e)	P=0.017*
POLY 6	P=0.000**	(e)	(e)	(e)	P=0.017*
COCH-ARM / FISHERS	P<0.001**	(e)	(e)	(e)	P=0.030*
MAX-ISO-POLY-3	P<0.001**	(e)	(e)	(e)	P=0.007**
HISTCONT SAME RTE					
HISTCONT ALL RTEs					
CURR VS HC SAME RTE					
CURR VS HC ALL RTEs					

Experiment Number: 56111-01

Test Type: 90-DAY

Route: DOSED FEED

Species/Strain: Rat/F 344/N

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Test Compound: trans-Cinnamaldehyde

CAS Number: 14371-10-9

Date Report Requested: 10/19/2014

Time Report Requested: 07:16:46

First Dose M/F: NA / NA

Lab: BAT

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RAT(F 344/N)
LAST REMOVAL AT 14286 WEEKS

DOSE	FEMALE				
	VEHICLE CONTROL	1.25	2.5	5.0	10.0
Stomach, Glandular Mineralization					
LESION RATES					
OVERALL(a)	0/20 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/10 (0%)
POLY-3 RATE (b)	0/20.00	0/0.00	0/0.00	0/0.00	0/10.00
POLY-3 PERCENT (g)	0%	0%	0%	0%	0%
TERMINAL (d)	0/20 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/10 (0%)
FIRST INCIDENCE	---	---	---	---	---
STATISTICAL TESTS					
POLY 3	(n)	(n)	(n)	(n)	(n)
POLY 1.5	(n)	(n)	(n)	(n)	(n)
POLY 6	(n)	(n)	(n)	(n)	(n)
COCH-ARM / FISHERS	(n)	(n)	(n)	(n)	(n)
MAX-ISO-POLY-3	(n)	(n)	(n)	(n)	(n)
HISTCONT SAME RTE					
HISTCONT ALL RTES					
CURR VS HC SAME RTE					
CURR VS HC ALL RTES					

Experiment Number: 56111-01
Test Type: 90-DAY
Route: DOSED FEED
Species/Strain: Rat/F 344/N

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Test Compound: trans-Cinnamaldehyde
CAS Number: 14371-10-9

Date Report Requested: 10/19/2014
Time Report Requested: 07:16:46
First Dose M/F: NA / NA
Lab: BAT

LEGEND

- (a) Number of tumor-bearing animals/number of animals examined at site.
 - (b) Number of tumor-bearing animals/Poly-3 number
 - (d) Observed incidence at terminal kill.
 - (e) Value of statistic cannot be computed.
 - (f) Beneath the control incidence are the P-values associated with the trend test. Beneath the dosed group incidence are the P-values corresponding to pairwise comparisons between the controls and that dosed group.
 - (g) Poly-3 adjusted lifetime tumor incidence.
 - (n) No statistics are calculated if all dose groups have fewer than two tumors.
 - (I) Interim sacrifice
 - (T) Terminal sacrifice
 - # Tumor rates based on numbers of animals necropsied.
 - * To the right of any statistical result, indicates significance at ($P \leq 0.05$).
 - ** To the right of any statistical result, indicates significance at ($P \leq 0.01$).
 - N Indicates a negative trend for all tests
- The Cochran-Armitage and Fishers exact tests compare directly the overall incidence rates.

**** END OF REPORT ****