

Experiment Number: 20108-06
Test Type: 90-DAY
Route: GAVAGE
Species/Strain: Mouse/TRAMP

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Test Compound: Antioxidant model (TRAMP) - N-acetylcysteine

CAS Number: 616-91-1

Date Report Requested: 10/23/2014

Time Report Requested: 14:19:40

First Dose M/F: NA / NA

Lab: ILS

C Number:	C20108C
Lock Date:	Not Entered.
Cage Range:	All
Date Range:	All
Reasons For Removal:	All
Removal Date Range:	All
Treatment Groups:	All
Study Gender:	Male
PWG Approval Date	NONE

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SUMMARY OF STATISTICALLY SIGNIFICANT ($P \leq .05$) RESULTS IN THE ANALYSIS OF ANTIOXIDANT MODEL (TRAMP) - N-

MALE MOUSE

Organ

Prostate, Dorsal Lobe

Morphology

Hyperplasia Grade 3 Diffuse

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STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN MOUSE(TRAMP)
LAST REMOVAL AT 13 WEEKS

MALE		
DOSE	VEHICLE CONTROL	NAC 125MG/KG
Epididymis		
Atypia Cellular		
LESION RATES		
OVERALL(a)	1/12 (8%)	0/32 (0%)
POLY-3 RATE (b)	1/7.01	0/19.68
POLY-3 PERCENT (g)	14.3%	0%
INT SACRIFICE 1	0/2 (0%)	0/6 (0%)
INT SACRIFICE 2	0/4 (0%)	0/6 (0%)
TERMINAL (d)	0/0 (0%)	0/0 (0%)
FIRST INCIDENCE	85(l)	---
STATISTICAL TESTS		
POLY 3	P=0.291N	P=0.291N
POLY 1.5	P=0.296N	P=0.296N
POLY 6	P=0.288N	P=0.288N
COCH-ARM / FISHERS	P=0.303N	P=0.273N
MAX-ISO-POLY-3	P=0.081N	P=0.081N
HISTCONT SAME RTE		
HISTCONT ALL RTES		
CURR VS HC SAME RTE		
CURR VS HC ALL RTES		

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LAST REMOVAL AT 13 WEEKS

DOSE	VEHICLE CONTROL	NAC 125MG/KG	MALE
<hr/>			
Epididymis			
Granuloma Sperm			
<hr/>			
LESION RATES			
OVERALL(a)	0/12 (0%)	1/32 (3%)	
POLY-3 RATE (b)	0/6.88	1/19.71	
POLY-3 PERCENT (g)	0%	5.1%	
INT SACRIFICE 1	0/2 (0%)	0/6 (0%)	
INT SACRIFICE 2	0/4 (0%)	0/6 (0%)	
TERMINAL (d)	0/0 (0%)	0/0 (0%)	
FIRST INCIDENCE	---	88(l)	
<hr/>			
STATISTICAL TESTS			
POLY 3	P=0.706	P=0.706	
POLY 1.5	P=0.700	P=0.700	
POLY 6	P=0.713	P=0.713	
COCH-ARM / FISHERS	P=0.697	P=0.727	
MAX-ISO-POLY-3	P=0.318	P=0.318	
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 MOUSE(TRAMP)
LAST REMOVAL AT 13 WEEKS

			MALE
DOSE	VEHICLE CONTROL	NAC	125MG/KG
Epididymis			
Inflammation			
LESION RATES			
OVERALL(a)	0/12 (0%)	1/32 (3%)	
POLY-3 RATE (b)	0/6.88	1/19.71	
POLY-3 PERCENT (g)	0%	5.1%	
INT SACRIFICE 1	0/2 (0%)	0/6 (0%)	
INT SACRIFICE 2	0/4 (0%)	0/6 (0%)	
TERMINAL (d)	0/0 (0%)	0/0 (0%)	
FIRST INCIDENCE	---	88(l)	
STATISTICAL TESTS			
POLY 3	P=0.706	P=0.706	
POLY 1.5	P=0.700	P=0.700	
POLY 6	P=0.713	P=0.713	
COCH-ARM / FISHERS	P=0.697	P=0.727	
MAX-ISO-POLY-3	P=0.318	P=0.318	
HISTCONT SAME RTE			
HISTCONT ALL RTES			
CURR VS HC SAME RTE			
CURR VS HC ALL RTES			

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LAST REMOVAL AT 13 WEEKS

DOSE	VEHICLE CONTROL	NAC 125MG/KG	MALE
Kidney: Cortex, Renal Tubule			
Regeneration Focal			
LESION RATES			
OVERALL(a)	1/12 (8%)	5/32 (16%)	
POLY-3 RATE (b)	1/6.98	5/21.58	
POLY-3 PERCENT (g)	14.3%	23.2%	
INT SACRIFICE 1	0/2 (0%)	1/6 (17%)	
INT SACRIFICE 2	0/4 (0%)	1/6 (17%)	
TERMINAL (d)	0/0 (0%)	0/0 (0%)	
FIRST INCIDENCE	86(l)	33(l)	
STATISTICAL TESTS			
POLY 3	P=0.514	P=0.514	
POLY 1.5	P=0.483	P=0.483	
POLY 6	P=0.540	P=0.540	
COCH-ARM / FISHERS	P=0.447	P=0.471	
MAX-ISO-POLY-3	P=0.351	P=0.351	
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 MOUSE(TRAMP)
LAST REMOVAL AT 13 WEEKS

DOSE	MALE	
	VEHICLE CONTROL	NAC 125MG/KG
Liver		
Inflammation Focal		
LESION RATES		
OVERALL(a)	6/12 (50%)	8/32 (25%)
POLY-3 RATE (b)	6/8.83	8/22.51
POLY-3 PERCENT (g)	68%	35.5%
INT SACRIFICE 1	1/2 (50%)	1/6 (17%)
INT SACRIFICE 2	1/4 (25%)	2/6 (33%)
TERMINAL (d)	0/0 (0%)	0/0 (0%)
FIRST INCIDENCE	32(l)	33(l)
STATISTICAL TESTS		
POLY 3	P=0.095N	P=0.095N
POLY 1.5	P=0.103N	P=0.103N
POLY 6	P=0.089N	P=0.089N
COCH-ARM / FISHERS	P=0.111N	P=0.112N
MAX-ISO-POLY-3	P=0.073N	P=0.073N
HISTCONT SAME RTE		
HISTCONT ALL RTES		
CURR VS HC SAME RTE		
CURR VS HC ALL RTES		

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LAST REMOVAL AT 13 WEEKS

DOSE	VEHICLE CONTROL	NAC	125MG/KG
MALE			
Liver			
Tension Lipidosis			
LESION RATES			
OVERALL(a)	0/12 (0%)	1/32 (3%)	
POLY-3 RATE (b)	0/6.88	1/19.78	
POLY-3 PERCENT (g)	0%	5.1%	
INT SACRIFICE 1	0/2 (0%)	0/6 (0%)	
INT SACRIFICE 2	0/4 (0%)	0/6 (0%)	
TERMINAL (d)	0/0 (0%)	0/0 (0%)	
FIRST INCIDENCE	---	86(l)	
STATISTICAL TESTS			
POLY 3	P=0.707	P=0.707	
POLY 1.5	P=0.700	P=0.700	
POLY 6	P=0.714	P=0.714	
COCH-ARM / FISHERS	P=0.697	P=0.727	
MAX-ISO-POLY-3	P=0.318	P=0.318	
HISTCONT SAME RTE			
HISTCONT ALL RTES			
CURR VS HC SAME RTE			
CURR VS HC ALL RTES			

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LAST REMOVAL AT 13 WEEKS

			MALE
DOSE	VEHICLE CONTROL	NAC	125MG/KG
Prostate, Anterior Lobe			
Hyperplasia Grade 2 Focal			
LESION RATES			
OVERALL(a)	0/12 (0%)	1/32 (3%)	
POLY-3 RATE (b)	0/6.88	1/20.64	
POLY-3 PERCENT (g)	0%	4.8%	
INT SACRIFICE 1	0/2 (0%)	0/6 (0%)	
INT SACRIFICE 2	0/4 (0%)	0/6 (0%)	
TERMINAL (d)	0/0 (0%)	0/0 (0%)	
FIRST INCIDENCE	---	30	
STATISTICAL TESTS			
POLY 3	P=0.713	P=0.713	
POLY 1.5	P=0.705	P=0.705	
POLY 6	P=0.720	P=0.720	
COCH-ARM / FISHERS	P=0.697	P=0.727	
MAX-ISO-POLY-3	P=0.325	P=0.325	
HISTCONT SAME RTE			
HISTCONT ALL RTES			
CURR VS HC SAME RTE			
CURR VS HC ALL RTES			

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LAST REMOVAL AT 13 WEEKS

DOSE	VEHICLE CONTROL	NAC 125MG/KG	MALE
Prostate, Anterior Lobe			
Hyperplasia Grade 3 Diffuse			
LESION RATES			
OVERALL(a)	0/12 (0%)	1/32 (3%)	
POLY-3 RATE (b)	0/6.88	1/20.42	
POLY-3 PERCENT (g)	0%	4.9%	
INT SACRIFICE 1	0/2 (0%)	0/6 (0%)	
INT SACRIFICE 2	0/4 (0%)	1/6 (17%)	
TERMINAL (d)	0/0 (0%)	0/0 (0%)	
FIRST INCIDENCE	---	57(l)	
STATISTICAL TESTS			
POLY 3	P=0.711	P=0.711	
POLY 1.5	P=0.703	P=0.703	
POLY 6	P=0.719	P=0.719	
COCH-ARM / FISHERS	P=0.697	P=0.727	
MAX-ISO-POLY-3	P=0.324	P=0.324	
HISTCONT SAME RTE			
HISTCONT ALL RTES			
CURR VS HC SAME RTE			
CURR VS HC ALL RTES			

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LAST REMOVAL AT 13 WEEKS

			MALE
DOSE	VEHICLE CONTROL	NAC	125MG/KG
Prostate, Anterior Lobe			
Hyperplasia Grade 3 Focal			
LESION RATES			
OVERALL(a)	9/12 (75%)	28/32 (88%)	
POLY-3 RATE (b)	9/11.21	28/30.14	
POLY-3 PERCENT (g)	80.3%	92.9%	
INT SACRIFICE 1	2/2 (100%)	6/6 (100%)	
INT SACRIFICE 2	3/4 (75%)	5/6 (83%)	
TERMINAL (d)	0/0 (0%)	0/0 (0%)	
FIRST INCIDENCE	32(l)	32(l)	
STATISTICAL TESTS			
POLY 3	P=0.259	P=0.259	
POLY 1.5	P=0.250	P=0.250	
POLY 6	P=0.279	P=0.279	
COCH-ARM / FISHERS	P=0.292	P=0.282	
MAX-ISO-POLY-3	P=0.150	P=0.150	
HISTCONT SAME RTE			
HISTCONT ALL RTES			
CURR VS HC SAME RTE			
CURR VS HC ALL RTES			

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LAST REMOVAL AT 13 WEEKS

			MALE
DOSE	VEHICLE CONTROL	NAC 125MG/KG	
Prostate, Anterior Lobe			
Hyperplasia Grade 4 Focal			
LESION RATES			
OVERALL(a)	3/12 (25%)	2/32 (6%)	
POLY-3 RATE (b)	3/7.67	2/19.84	
POLY-3 PERCENT (g)	39.1%	10.1%	
INT SACRIFICE 1	0/2 (0%)	0/6 (0%)	
INT SACRIFICE 2	1/4 (25%)	0/6 (0%)	
TERMINAL (d)	0/0 (0%)	0/0 (0%)	
FIRST INCIDENCE	58(l)	86(l)	
STATISTICAL TESTS			
POLY 3	P=0.103N	P=0.103N	
POLY 1.5	P=0.106N	P=0.106N	
POLY 6	P=0.102N	P=0.102N	
COCH-ARM / FISHERS	P=0.113N	P=0.116N	
MAX-ISO-POLY-3	P=0.063N	P=0.063N	
HISTCONT SAME RTE			
HISTCONT ALL RTES			
CURR VS HC SAME RTE			
CURR VS HC ALL RTES			

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LAST REMOVAL AT 13 WEEKS

DOSE	MALE	
	VEHICLE CONTROL	NAC 125MG/KG
Prostate, Dorsal Lobe		
Hyperplasia Grade 3 Diffuse		
LESION RATES		
OVERALL(a)	5/12 (42%)	2/29 (7%)
POLY-3 RATE (b)	5/9.93	2/18.72
POLY-3 PERCENT (g)	50.4%	10.7%
INT SACRIFICE 1	0/2 (0%)	0/6 (0%)
INT SACRIFICE 2	4/4 (100%)	1/6 (17%)
TERMINAL (d)	0/0 (0%)	0/0 (0%)
FIRST INCIDENCE	57(l)	58(l)
STATISTICAL TESTS		
POLY 3	P=0.017N*	P=0.017N*
POLY 1.5	P=0.012N*	P=0.012N*
POLY 6	P=0.025N*	P=0.025N*
COCH-ARM / FISHERS	P=0.013N*	P=0.016N*
MAX-ISO-POLY-3	P=0.008N**	P=0.008N**
HISTCONT SAME RTE		
HISTCONT ALL RTES		
CURR VS HC SAME RTE		
CURR VS HC ALL RTES		

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 LAST REMOVAL AT 13 WEEKS**

DOSE	MALE	
	VEHICLE CONTROL	NAC 125MG/KG
Prostate, Dorsal Lobe		
Hyperplasia Grade 3 Focal		
LESION RATES		
OVERALL(a)	2/12 (17%)	13/29 (45%)
POLY-3 RATE (b)	2/8.79	13/26.85
POLY-3 PERCENT (g)	22.8%	48.4%
INT SACRIFICE 1	2/2 (100%)	6/6 (100%)
INT SACRIFICE 2	0/4 (0%)	4/6 (67%)
TERMINAL (d)	0/0 (0%)	0/0 (0%)
FIRST INCIDENCE	32(l)	32(l)
STATISTICAL TESTS		
POLY 3	P=0.183	P=0.183
POLY 1.5	P=0.139	P=0.139
POLY 6	P=0.231	P=0.231
COCH-ARM / FISHERS	P=0.089	P=0.087
MAX-ISO-POLY-3	P=0.155	P=0.155
HISTCONT SAME RTE		
HISTCONT ALL RTES		
CURR VS HC SAME RTE		
CURR VS HC ALL RTES		

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LAST REMOVAL AT 13 WEEKS

DOSE	VEHICLE CONTROL	NAC	125MG/KG
MALE			
Prostate, Dorsal Lobe			
Hyperplasia Grade 4 Diffuse			
LESION RATES			
OVERALL(a)	0/12 (0%)	1/29 (3%)	
POLY-3 RATE (b)	0/6.88	1/18.64	
POLY-3 PERCENT (g)	0%	5.4%	
INT SACRIFICE 1	0/2 (0%)	0/6 (0%)	
INT SACRIFICE 2	0/4 (0%)	1/6 (17%)	
TERMINAL (d)	0/0 (0%)	0/0 (0%)	
FIRST INCIDENCE	---	57(l)	
STATISTICAL TESTS			
POLY 3	P=0.694	P=0.694	
POLY 1.5	P=0.685	P=0.685	
POLY 6	P=0.703	P=0.703	
COCH-ARM / FISHERS	P=0.678	P=0.707	
MAX-ISO-POLY-3	P=0.314	P=0.314	
HISTCONT SAME RTE			
HISTCONT ALL RTES			
CURR VS HC SAME RTE			
CURR VS HC ALL RTES			

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 LAST REMOVAL AT 13 WEEKS**

DOSE	MALE	
	VEHICLE CONTROL	NAC 125MG/KG
Prostate, Dorsal Lobe		
Hyperplasia Grade 4 Focal		
LESION RATES		
OVERALL(a)	5/12 (42%)	11/29 (38%)
POLY-3 RATE (b)	5/7.05	11/18.49
POLY-3 PERCENT (g)	70.9%	59.5%
INT SACRIFICE 1	0/2 (0%)	0/6 (0%)
INT SACRIFICE 2	0/4 (0%)	0/6 (0%)
TERMINAL (d)	0/0 (0%)	0/0 (0%)
FIRST INCIDENCE	86(l)	85(l)
STATISTICAL TESTS		
POLY 3	P=0.467N	P=0.467N
POLY 1.5	P=0.520N	P=0.520N
POLY 6	P=0.400N	P=0.400N
COCH-ARM / FISHERS	P=0.551N	P=0.547N
MAX-ISO-POLY-3	P=0.320N	P=0.320N
HISTCONT SAME RTE		
HISTCONT ALL RTES		
CURR VS HC SAME RTE		
CURR VS HC ALL RTES		

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LAST REMOVAL AT 13 WEEKS

DOSE	VEHICLE CONTROL	NAC 125MG/KG	MALE
Prostate, Dorsal Lobe			
Hyperplasia Grade 5 Focal			
LESION RATES			
OVERALL(a)	0/12 (0%)	2/29 (7%)	
POLY-3 RATE (b)	0/6.88	2/17.90	
POLY-3 PERCENT (g)	0%	11.2%	
INT SACRIFICE 1	0/2 (0%)	0/6 (0%)	
INT SACRIFICE 2	0/4 (0%)	0/6 (0%)	
TERMINAL (d)	0/0 (0%)	0/0 (0%)	
FIRST INCIDENCE	---	89(T)(I)	
STATISTICAL TESTS			
POLY 3	P=0.464	P=0.464	
POLY 1.5	P=0.455	P=0.455	
POLY 6	P=0.474	P=0.474	
COCH-ARM / FISHERS	P=0.446	P=0.495	
MAX-ISO-POLY-3	P=0.231	P=0.231	
HISTCONT SAME RTE			
HISTCONT ALL RTES			
CURR VS HC SAME RTE			
CURR VS HC ALL RTES			

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Test Type: 90-DAY
Route: GAVAGE
Species/Strain: Mouse/TRAMP

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS
Test Compound: Antioxidant model (TRAMP) - N-acetylcysteine
CAS Number: 616-91-1

Date Report Requested: 10/23/2014
Time Report Requested: 14:19:40
First Dose M/F: NA / NA
Lab: ILS

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN MOUSE(TRAMP)
LAST REMOVAL AT 13 WEEKS

DOSE	MALE	
	VEHICLE CONTROL	NAC 125MG/KG
Prostate, Lateral Lobe		
Hyperplasia Grade 3 Diffuse		
LESION RATES		
OVERALL(a)	7/10 (70%)	11/28 (39%)
POLY-3 RATE (b)	7/8.00	11/18.21
POLY-3 PERCENT (g)	87.5%	60.4%
INT SACRIFICE 1	0/2 (0%)	0/6 (0%)
INT SACRIFICE 2	3/3 (100%)	1/6 (17%)
TERMINAL (d)	0/0 (0%)	0/0 (0%)
FIRST INCIDENCE	57(l)	58(l)
STATISTICAL TESTS		
POLY 3	P=0.148N	P=0.148N
POLY 1.5	P=0.105N	P=0.105N
POLY 6	P=0.208N	P=0.208N
COCH-ARM / FISHERS	P=0.097N	P=0.096N
MAX-ISO-POLY-3	P=0.085N	P=0.085N
HISTCONT SAME RTE		
HISTCONT ALL RTES		
CURR VS HC SAME RTE		
CURR VS HC ALL RTES		

Experiment Number: 20108-06
Test Type: 90-DAY
Route: GAVAGE
Species/Strain: Mouse/TRAMP

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS
Test Compound: Antioxidant model (TRAMP) - N-acetylcysteine
CAS Number: 616-91-1

Date Report Requested: 10/23/2014
Time Report Requested: 14:19:40
First Dose M/F: NA / NA
Lab: ILS

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN MOUSE(TRAMP)
LAST REMOVAL AT 13 WEEKS

DOSE	VEHICLE CONTROL	NAC 125MG/KG	MALE
Prostate, Lateral Lobe			
Hyperplasia Grade 3 Focal			
LESION RATES			
OVERALL(a)	3/10 (30%)	17/28 (61%)	
POLY-3 RATE (b)	3/7.64	17/26.69	
POLY-3 PERCENT (g)	39.3%	63.7%	
INT SACRIFICE 1	2/2 (100%)	6/6 (100%)	
INT SACRIFICE 2	0/3 (0%)	5/6 (83%)	
TERMINAL (d)	0/0 (0%)	0/0 (0%)	
FIRST INCIDENCE	32(l)	32(l)	
STATISTICAL TESTS			
POLY 3	P=0.223	P=0.223	
POLY 1.5	P=0.165	P=0.165	
POLY 6	P=0.281	P=0.281	
COCH-ARM / FISHERS	P=0.097	P=0.096	
MAX-ISO-POLY-3	P=0.182	P=0.182	
HISTCONT SAME RTE			
HISTCONT ALL RTES			
CURR VS HC SAME RTE			
CURR VS HC ALL RTES			

Experiment Number: 20108-06
Test Type: 90-DAY
Route: GAVAGE
Species/Strain: Mouse/TRAMP

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS
Test Compound: Antioxidant model (TRAMP) - N-acetylcysteine
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Date Report Requested: 10/23/2014
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First Dose M/F: NA / NA
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STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN MOUSE(TRAMP)
LAST REMOVAL AT 13 WEEKS

MALE		
DOSE	VEHICLE CONTROL	NAC 125MG/KG
Prostate, Ventral Lobe		
Hyperplasia Grade 2 Focal		
LESION RATES		
OVERALL(a)	1/7 (14%)	6/25 (24%)
POLY-3 RATE (b)	1/3.82	6/19.06
POLY-3 PERCENT (g)	26.2%	31.5%
INT SACRIFICE 1	1/2 (50%)	2/6 (33%)
INT SACRIFICE 2	0/3 (0%)	2/4 (50%)
TERMINAL (d)	0/0 (0%)	0/0 (0%)
FIRST INCIDENCE	33(l)	32(l)
STATISTICAL TESTS		
POLY 3	P=0.640	P=0.640
POLY 1.5	P=0.579	P=0.579
POLY 6	P=0.688	P=0.688
COCH-ARM / FISHERS	P=0.487	P=0.511
MAX-ISO-POLY-3	P=0.446	P=0.446
HISTCONT SAME RTE		
HISTCONT ALL RTES		
CURR VS HC SAME RTE		
CURR VS HC ALL RTES		

Experiment Number: 20108-06
Test Type: 90-DAY
Route: GAVAGE
Species/Strain: Mouse/TRAMP

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS
Test Compound: Antioxidant model (TRAMP) - N-acetylcysteine
CAS Number: 616-91-1

Date Report Requested: 10/23/2014
Time Report Requested: 14:19:40
First Dose M/F: NA / NA
Lab: ILS

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN MOUSE(TRAMP)
LAST REMOVAL AT 13 WEEKS

DOSE	MALE	
	VEHICLE CONTROL	NAC 125MG/KG
Prostate, Ventral Lobe		
Hyperplasia Grade 3 Diffuse		
LESION RATES		
OVERALL(a)	1/7 (14%)	1/25 (4%)
POLY-3 RATE (b)	1/3.60	1/15.46
POLY-3 PERCENT (g)	27.8%	6.5%
INT SACRIFICE 1	0/2 (0%)	0/6 (0%)
INT SACRIFICE 2	1/3 (33%)	0/4 (0%)
TERMINAL (d)	0/0 (0%)	0/0 (0%)
FIRST INCIDENCE	57(l)	88(l)
STATISTICAL TESTS		
POLY 3	P=0.413N	P=0.413N
POLY 1.5	P=0.428N	P=0.428N
POLY 6	P=0.407N	P=0.407N
COCH-ARM / FISHERS	P=0.456N	P=0.395N
MAX-ISO-POLY-3	P=0.194N	P=0.194N
HISTCONT SAME RTE		
HISTCONT ALL RTES		
CURR VS HC SAME RTE		
CURR VS HC ALL RTES		

Experiment Number: 20108-06
Test Type: 90-DAY
Route: GAVAGE
Species/Strain: Mouse/TRAMP

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS
Test Compound: Antioxidant model (TRAMP) - N-acetylcysteine
CAS Number: 616-91-1

Date Report Requested: 10/23/2014
Time Report Requested: 14:19:40
First Dose M/F: NA / NA
Lab: ILS

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN MOUSE(TRAMP)
LAST REMOVAL AT 13 WEEKS

			MALE
DOSE	VEHICLE CONTROL	NAC	125MG/KG
Prostate, Ventral Lobe			
Hyperplasia Grade 3 Focal			
LESION RATES			
OVERALL(a)	5/7 (71%)	17/25 (68%)	
POLY-3 RATE (b)	5/5.31	17/20.61	
POLY-3 PERCENT (g)	94.2%	82.5%	
INT SACRIFICE 1	1/2 (50%)	4/6 (67%)	
INT SACRIFICE 2	2/3 (67%)	1/4 (25%)	
TERMINAL (d)	0/0 (0%)	0/0 (0%)	
FIRST INCIDENCE	32(l)	32(l)	
STATISTICAL TESTS			
POLY 3	P=0.506N	P=0.506N	
POLY 1.5	P=0.539N	P=0.539N	
POLY 6	P=0.506N	P=0.506N	
COCH-ARM / FISHERS	P=0.613N	P=0.624N	
MAX-ISO-POLY-3	P=0.281N	P=0.281N	
HISTCONT SAME RTE			
HISTCONT ALL RTES			
CURR VS HC SAME RTE			
CURR VS HC ALL RTES			

Experiment Number: 20108-06
Test Type: 90-DAY
Route: GAVAGE
Species/Strain: Mouse/TRAMP

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS
Test Compound: Antioxidant model (TRAMP) - N-acetylcysteine
CAS Number: 616-91-1

Date Report Requested: 10/23/2014
Time Report Requested: 14:19:40
First Dose M/F: NA / NA
Lab: ILS

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN MOUSE(TRAMP)
LAST REMOVAL AT 13 WEEKS

DOSE	MALE	
	VEHICLE CONTROL	NAC 125MG/KG
Prostate, Ventral Lobe		
Hyperplasia Grade 4 Focal		
LESION RATES		
OVERALL(a)	0/7 (0%)	1/25 (4%)
POLY-3 RATE (b)	0/2.87	1/16.15
POLY-3 PERCENT (g)	0%	6.2%
INT SACRIFICE 1	0/2 (0%)	0/6 (0%)
INT SACRIFICE 2	0/3 (0%)	1/4 (25%)
TERMINAL (d)	0/0 (0%)	0/0 (0%)
FIRST INCIDENCE	---	58(l)
STATISTICAL TESTS		
POLY 3	P=0.798	P=0.798
POLY 1.5	P=0.780	P=0.780
POLY 6	P=0.810	P=0.810
COCH-ARM / FISHERS	P=0.755	P=0.781
MAX-ISO-POLY-3	P=0.394	P=0.394
HISTCONT SAME RTE		
HISTCONT ALL RTES		
CURR VS HC SAME RTE		
CURR VS HC ALL RTES		

Experiment Number: 20108-06
Test Type: 90-DAY
Route: GAVAGE
Species/Strain: Mouse/TRAMP

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS
Test Compound: Antioxidant model (TRAMP) - N-acetylcysteine
CAS Number: 616-91-1

Date Report Requested: 10/23/2014
Time Report Requested: 14:19:40
First Dose M/F: NA / NA
Lab: ILS

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN MOUSE(TRAMP)
LAST REMOVAL AT 13 WEEKS

MALE		
DOSE	VEHICLE CONTROL	NAC 125MG/KG
Seminal Vesicle		
Hyperplasia		
LESION RATES		
OVERALL(a)	3/12 (25%)	7/32 (22%)
POLY-3 RATE (b)	3/7.01	7/20.01
POLY-3 PERCENT (g)	42.8%	35%
INT SACRIFICE 1	0/2 (0%)	0/6 (0%)
INT SACRIFICE 2	0/4 (0%)	0/6 (0%)
TERMINAL (d)	0/0 (0%)	0/0 (0%)
FIRST INCIDENCE	86(l)	86(l)
STATISTICAL TESTS		
POLY 3	P=0.535N	P=0.535N
POLY 1.5	P=0.559N	P=0.559N
POLY 6	P=0.512N	P=0.512N
COCH-ARM / FISHERS	P=0.573N	P=0.559N
MAX-ISO-POLY-3	P=0.382N	P=0.382N
HISTCONT SAME RTE		
HISTCONT ALL RTES		
CURR VS HC SAME RTE		
CURR VS HC ALL RTES		

Experiment Number: 20108-06
Test Type: 90-DAY
Route: GAVAGE
Species/Strain: Mouse/TRAMP

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS
Test Compound: Antioxidant model (TRAMP) - N-acetylcysteine
CAS Number: 616-91-1

Date Report Requested: 10/23/2014
Time Report Requested: 14:19:40
First Dose M/F: NA / NA
Lab: ILS

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN MOUSE(TRAMP)
LAST REMOVAL AT 13 WEEKS

DOSE	MALE	
	VEHICLE CONTROL	NAC 125MG/KG
Seminal Vesicle		
Hyperplasia Grade 2 Focal		
LESION RATES		
OVERALL(a)	2/12 (17%)	5/32 (16%)
POLY-3 RATE (b)	2/8.34	5/20.86
POLY-3 PERCENT (g)	24%	24%
INT SACRIFICE 1	0/2 (0%)	0/6 (0%)
INT SACRIFICE 2	2/4 (50%)	1/6 (17%)
TERMINAL (d)	0/0 (0%)	0/0 (0%)
FIRST INCIDENCE	57(l)	58(l)
STATISTICAL TESTS		
POLY 3	P=0.685	P=0.685
POLY 1.5	P=0.675N	P=0.675N
POLY 6	P=0.684	P=0.684
COCH-ARM / FISHERS	P=0.648N	P=0.628N
MAX-ISO-POLY-3	P=0.500	P=0.500
HISTCONT SAME RTE		
HISTCONT ALL RTES		
CURR VS HC SAME RTE		
CURR VS HC ALL RTES		

Experiment Number: 20108-06
Test Type: 90-DAY
Route: GAVAGE
Species/Strain: Mouse/TRAMP

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS
Test Compound: Antioxidant model (TRAMP) - N-acetylcysteine
CAS Number: 616-91-1

Date Report Requested: 10/23/2014
Time Report Requested: 14:19:40
First Dose M/F: NA / NA
Lab: ILS

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN MOUSE(TRAMP)
LAST REMOVAL AT 13 WEEKS

DOSE	VEHICLE CONTROL	NAC	125MG/KG
MALE			
Seminal Vesicle			
Hyperplasia Grade 3 Focal			
LESION RATES			
OVERALL(a)	0/12 (0%)	1/32 (3%)	
POLY-3 RATE (b)	0/6.88	1/19.68	
POLY-3 PERCENT (g)	0%	5.1%	
INT SACRIFICE 1	0/2 (0%)	0/6 (0%)	
INT SACRIFICE 2	0/4 (0%)	0/6 (0%)	
TERMINAL (d)	0/0 (0%)	0/0 (0%)	
FIRST INCIDENCE	---	89(T)(I)	
STATISTICAL TESTS			
POLY 3	P=0.706	P=0.706	
POLY 1.5	P=0.700	P=0.700	
POLY 6	P=0.712	P=0.712	
COCH-ARM / FISHERS	P=0.697	P=0.727	
MAX-ISO-POLY-3	P=0.317	P=0.317	
HISTCONT SAME RTE			
HISTCONT ALL RTES			
CURR VS HC SAME RTE			
CURR VS HC ALL RTES			

Experiment Number: 20108-06
 Test Type: 90-DAY
 Route: GAVAGE
 Species/Strain: Mouse/TRAMP

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS
 Test Compound: Antioxidant model (TRAMP) - N-acetylcysteine
 CAS Number: 616-91-1

Date Report Requested: 10/23/2014
 Time Report Requested: 14:19:40
 First Dose M/F: NA / NA
 Lab: ILS

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN MOUSE(TRAMP)
 LAST REMOVAL AT 13 WEEKS**

DOSE	MALE	
	VEHICLE CONTROL	NAC 125MG/KG
Spleen		
Hematopoietic Cell Proliferation		
LESION RATES		
OVERALL(a)	0/12 (0%)	2/31 (6%)
POLY-3 RATE (b)	0/6.88	2/18.71
POLY-3 PERCENT (g)	0%	10.7%
INT SACRIFICE 1	0/2 (0%)	0/6 (0%)
INT SACRIFICE 2	0/4 (0%)	0/6 (0%)
TERMINAL (d)	0/0 (0%)	0/0 (0%)
FIRST INCIDENCE	---	89(T)(I)
STATISTICAL TESTS		
POLY 3	P=0.475	P=0.475
POLY 1.5	P=0.467	P=0.467
POLY 6	P=0.483	P=0.483
COCH-ARM / FISHERS	P=0.463	P=0.515
MAX-ISO-POLY-3	P=0.236	P=0.236
HISTCONT SAME RTE		
HISTCONT ALL RTES		
CURR VS HC SAME RTE		
CURR VS HC ALL RTES		

Experiment Number: 20108-06
Test Type: 90-DAY
Route: GAVAGE
Species/Strain: Mouse/TRAMP

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS
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CAS Number: 616-91-1

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

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN MOUSE(TRAMP)
LAST REMOVAL AT 13 WEEKS

MALE		
DOSE	VEHICLE CONTROL	NAC 125MG/KG
Testes: Germinal Epith		
Syncytial Alteration		
LESION RATES		
OVERALL(a)	2/12 (17%)	2/32 (6%)
POLY-3 RATE (b)	2/7.05	2/20.47
POLY-3 PERCENT (g)	28.4%	9.8%
INT SACRIFICE 1	0/2 (0%)	0/6 (0%)
INT SACRIFICE 2	0/4 (0%)	1/6 (17%)
TERMINAL (d)	0/0 (0%)	0/0 (0%)
FIRST INCIDENCE	85(l)	58(l)
STATISTICAL TESTS		
POLY 3	P=0.281N	P=0.281N
POLY 1.5	P=0.298N	P=0.298N
POLY 6	P=0.269N	P=0.269N
COCH-ARM / FISHERS	P=0.315N	P=0.297N
MAX-ISO-POLY-3	P=0.168N	P=0.168N
HISTCONT SAME RTE		
HISTCONT ALL RTES		
CURR VS HC SAME RTE		
CURR VS HC ALL RTES		

Experiment Number: 20108-06
Test Type: 90-DAY
Route: GAVAGE
Species/Strain: Mouse/TRAMP

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS
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CAS Number: 616-91-1

Date Report Requested: 10/23/2014
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First Dose M/F: NA / NA
Lab: ILS

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN MOUSE(TRAMP)
LAST REMOVAL AT 13 WEEKS

			MALE
DOSE	VEHICLE CONTROL	NAC	125MG/KG
Testes: Seminif Tub			
Atrophy			
LESION RATES			
OVERALL(a)	0/12 (0%)	1/32 (3%)	
POLY-3 RATE (b)	0/6.88	1/20.63	
POLY-3 PERCENT (g)	0%	4.8%	
INT SACRIFICE 1	0/2 (0%)	1/6 (17%)	
INT SACRIFICE 2	0/4 (0%)	0/6 (0%)	
TERMINAL (d)	0/0 (0%)	0/0 (0%)	
FIRST INCIDENCE	---	32(l)	
STATISTICAL TESTS			
POLY 3	P=0.713	P=0.713	
POLY 1.5	P=0.704	P=0.704	
POLY 6	P=0.720	P=0.720	
COCH-ARM / FISHERS	P=0.697	P=0.727	
MAX-ISO-POLY-3	P=0.325	P=0.325	
HISTCONT SAME RTE			
HISTCONT ALL RTES			
CURR VS HC SAME RTE			
CURR VS HC ALL RTES			

Experiment Number: 20108-06
Test Type: 90-DAY
Route: GAVAGE
Species/Strain: Mouse/TRAMP

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS
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Lab: ILS

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 ****