

**Experiment Number:** 20008-01

**Test Type:** 90-DAY

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

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

**Test Compound:** Milk thistle extract

**CAS Number:** 84604-20-6

**Date Report Requested:** 10/21/2014

**Time Report Requested:** 09:11:12

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

**Lab:** SRI

**C Number:** C20008

**Lock Date:** 11/08/2002

**Cage Range:** All

**Date Range:** All

**Reasons For Removal:** All

**Removal Date Range:** All

**Treatment Groups:** All

**Study Gender:** Both

**PWG Approval Date:** NONE

Experiment Number: 20008-01

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Species/Strain: Rat/F 344/N

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Date Report Requested: 10/21/2014

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First Dose M/F: NA / NA

Lab: SRI

F 344/N Rat Male  
0 PPM

DAY ON TEST	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	9	9	9	9	9	9	9	9	9	9
	3	3	3	3	3	3	3	3	3	3
ANIMAL ID	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	1
	1	2	3	4	5	6	7	8	9	0
	*TOTALS									

Alimentary System

Esophagus	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	10
Liver	+	+	+	+	+	+	+	+	+	+	10
Inflammation, Chronic, Focal			1		1	1	1	1	1		6 1.0
Vacuolization Cytoplasmic, Focal						1				1	2 1.0
Pancreas	+	+	+	+	+	+	+	+	+	+	10
Acinus, Basophilic Focus			1								1 1.0
Fibrosis			1								1 1.0
Interstitial, Fibrosis, Focal							1				1 1.0
Salivary Glands	+	+	+	+	+	+	+	+	+	+	10
Parotid Gl, Basophilic Focus					1	1		1			3 1.0
Parotid Gl, Basophilic Focus, Multiple		2	1	1			1		1		5 1.2
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	10
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	10

Cardiovascular System

Heart	+	+	+	+	+	+	+	+	+	+	10
-------	---	---	---	---	---	---	---	---	---	---	----

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

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Species/Strain: Rat/F 344/N

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Lab: SRI

F 344/N Rat Male  
0 PPM

DAY ON TEST	0	0	0	0	0	0	0	0	0	0		
ANIMAL ID	0	0	0	0	0	0	0	0	0	0		
	0	0	0	0	0	0	0	0	0	0		
	9	9	9	9	9	9	9	9	9	9		
	3	3	3	3	3	3	3	3	3	3		
	0	0	0	0	0	0	0	0	0	0		
	0	0	0	0	0	0	0	0	0	0		
	0	0	0	0	0	0	0	0	0	0		
	0	0	0	0	0	0	0	0	0	1		
	1	2	3	4	5	6	7	8	9	0	*TOTALS	

Cardiomyopathy, Focal 1 1 1 1 1 1 1 1 1 2 10 1.1

Endocrine System

Adrenal Cortex + + + + + + + + + + 10

Accessory Adrenal Cortical Nodule X X 2

Adrenal Medulla + + + + + + + + + + 10

Parathyroid Gland + + + + + + + + + + 10

Pituitary Gland + + + + + + + + + + 10

Pars Distalis, Cyst 1 1 1.0

Thyroid Gland + + + + + + + + + + 10

General Body System

NONE

Genital System

Epididymis + + + + + + + + + + 10

Preputial Gland + + + + + + + + + + 10

Prostate + + + + + + + + + + 10

Seminal Vesicle + + + + + + + + + + 10

Testes + + + + + + + + + + 10

Hematopoietic System

Bone Marrow + + + + + + + + + + 10

Lymph Node + 1

Pancreatic, Hemorrhage 2 1 2.0

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First Dose M/F: NA / NA

Lab: SRI

**F 344/N Rat Male**  
**0 PPM**

DAY ON TEST	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	9	9	9	9	9	9	9	9	9	9
	3	3	3	3	3	3	3	3	3	3
ANIMAL ID	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	1
	1	2	3	4	5	6	7	8	9	0

**\*TOTALS**

Pancreatic, Hemorrhage											2		
Lymph Node, Mandibular	M	M	M	M	M	M	M	M	+	M		1	
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+		10	
Inflammation, Histiocytic, Focal										1		1	1.0
Spleen	+	+	+	+	+	+	+	+	+	+		10	
Thymus	+	+	+	+	+	+	+	+	+	+		10	
<b>Integumentary System</b>													
Mammary Gland	+	+	+	+	+	+	+	+	+	+		10	
Skin	+	+	+	+	+	+	+	+	+	+		10	
<b>Musculoskeletal System</b>													
Bone	+	+	+	+	+	+	+	+	+	+		10	
<b>Nervous System</b>													
Brain	+	+	+	+	+	+	+	+	+	+		10	
<b>Respiratory System</b>													
Lung	+	+	+	+	+	+	+	+	+	+		10	
Inflammation, Chronic, Focal									1	1		2	1.0
Nose	+	+	+	+	+	+	+	+	+	+		10	
Trachea	+	+	+	+	+	+	+	+	+	+		10	
<b>Special Senses System</b>													
Eye	+	+	+	+	+	+	+	+	+	+		10	

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Species/Strain: Rat/F 344/N

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First Dose M/F: NA / NA

Lab: SRI

F 344/N Rat Male  
0 PPM

	DAY ON TEST										
	0	0	0	0	0	0	0	0	0	0	
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	
	3	3	3	3	3	3	3	3	3	3	
	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	1	
	1	2	3	4	5	6	7	8	9	0	
	<b>*TOTALS</b>										
Harderian Gland	+	+	+	+	+	+	+	+	+	+	10
Lacrimal Gland	+										1
<b>Urinary System</b>											
Kidney	+	+	+	+	+	+	+	+	+	+	10
Nephropathy			1		1			1	1		4 1.0
Urinary Bladder	+	+	+	+	+	+	+	+	+	+	10

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Date Report Requested: 10/21/2014

Time Report Requested: 09:11:12

First Dose M/F: NA / NA

Lab: SRI

F 344/N Rat Male  
3125 PPM

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	
	9	9	9	9	9	9	9	9	9	9	
	3	3	3	3	3	3	3	3	3	3	
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	
	1	1	1	1	1	1	1	1	1	2	
	1	2	3	4	5	6	7	8	9	0	*TOTALS

Alimentary System

Liver											+	1	
Hepatodiaphragmatic Nodule											2		1 2.0

Cardiovascular System

Heart											+	+	+	+	+	+	+	+	+	+	10	
Cardiomyopathy, Focal											2	1	1	2	1	1	1	1	2	1	10	1.3

Endocrine System

NONE

General Body System

NONE

Genital System

NONE

Hematopoietic System

NONE

Integumentary System

NONE

Musculoskeletal System

NONE

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+ ..Tissue examined microscopically

X ..Lesion present

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Lab: SRI

F 344/N Rat Male  
3125 PPM

DAY ON TEST	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	9	9	9	9	9	9	9	9	9	9
	3	3	3	3	3	3	3	3	3	3
ANIMAL ID	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	1	1	1	1	1	1	1	1	1	2
	1	2	3	4	5	6	7	8	9	0
	*TOTALS									

**Nervous System**

NONE

**Respiratory System**

NONE

**Special Senses System**

NONE

**Urinary System**

NONE

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Date Report Requested: 10/21/2014

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First Dose M/F: NA / NA

Lab: SRI

F 344/N Rat Male  
6250 PPM

DAY ON TEST	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	9	9	9	9	9	9	9	9	9	9
	3	3	3	3	3	3	3	3	3	3
ANIMAL ID	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	2	2	2	2	2	2	2	2	2	3
	1	2	3	4	5	6	7	8	9	0
	*TOTALS									

Alimentary System

Liver	+	+	+	+	+	+	+	+	+	+	10	
Hepatodiaphragmatic Nodule							2				1	2.0
Inflammation, Chronic, Focal	1	1	1		1	1	1	1	1	1	9	1.0

Cardiovascular System

Heart	+	+	+	+	+	+	+	+	+	+	10	
Cardiomyopathy, Focal	1	2	2	2	2	1	1	1	1	1	10	1.4

Endocrine System

NONE

General Body System

NONE

Genital System

NONE

Hematopoietic System

NONE

Integumentary System

Skin	+										1	
Lip, Hemorrhage, Focal	2										1	2.0

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Lab: SRI

F 344/N Rat Male  
6250 PPM

DAY ON TEST	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	9	9	9	9	9	9	9	9	9	9
	3	3	3	3	3	3	3	3	3	3
ANIMAL ID	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	2	2	2	2	2	2	2	2	2	3
	1	2	3	4	5	6	7	8	9	0
	*TOTALS									

Musculoskeletal System

NONE

Nervous System

NONE

Respiratory System

NONE

Special Senses System

NONE

Urinary System

Kidney

+ + + + + + + + + + 10

Nephropathy

1 1 1 3 1.0

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Species/Strain: Rat/F 344/N

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Date Report Requested: 10/21/2014

Time Report Requested: 09:11:12

First Dose M/F: NA / NA

Lab: SRI

F 344/N Rat Male  
12500 PPM

| DAY ON TEST | 0       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|-------------|---------|---|---|---|---|---|---|---|---|---|
|             | 0       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 9       | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
|             | 3       | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| ANIMAL ID   | 0       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 3       | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 |
|             | 1       | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |
|             | *TOTALS |   |   |   |   |   |   |   |   |   |

**Alimentary System**

|                              |   |   |   |   |   |   |   |   |   |   |    |       |
|------------------------------|---|---|---|---|---|---|---|---|---|---|----|-------|
| Liver                        | + | + | + | + | + | + | + | + | + | + | 10 |       |
| Hepatodiaphragmatic Nodule   |   |   |   |   |   |   |   |   |   |   | 2  | 1 2.0 |
| Inflammation, Chronic, Focal | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 10 | 1.0   |

**Cardiovascular System**

|                       |   |   |   |   |   |   |   |   |   |   |    |     |
|-----------------------|---|---|---|---|---|---|---|---|---|---|----|-----|
| Heart                 | + | + | + | + | + | + | + | + | + | + | 10 |     |
| Cardiomyopathy, Focal | 1 | 1 | 1 | 1 | 2 | 1 | 2 | 2 | 1 | 1 | 10 | 1.3 |

**Endocrine System**

NONE

**General Body System**

NONE

**Genital System**

NONE

**Hematopoietic System**

NONE

**Integumentary System**

NONE

**Musculoskeletal System**

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Time Report Requested: 09:11:12

First Dose M/F: NA / NA

Lab: SRI

F 344/N Rat Male  
12500 PPM

|             |   |   |   |   |   |   |   |   |   |   |         |
|-------------|---|---|---|---|---|---|---|---|---|---|---------|
| DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |         |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |         |
|             | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |         |
|             | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |         |
| ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |         |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |         |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |         |
|             | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 |         |
|             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | *TOTALS |

NONE  
Nervous System

NONE  
Respiratory System

NONE  
Special Senses System

NONE  
Urinary System

|             |   |   |   |   |   |   |   |   |   |   |       |
|-------------|---|---|---|---|---|---|---|---|---|---|-------|
| Kidney      | + | + | + | + | + | + | + | + | + | + | 10    |
| Nephropathy | 1 |   |   | 1 | 1 |   |   |   |   |   | 3 1.0 |

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X ..Lesion present

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Date Report Requested: 10/21/2014

Time Report Requested: 09:11:12

First Dose M/F: NA / NA

Lab: SRI

F 344/N Rat Male  
25000 PPM

|             |   |   |   |   |   |   |   |   |   |   |         |
|-------------|---|---|---|---|---|---|---|---|---|---|---------|
| DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |         |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |         |
|             | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |         |
|             | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |         |
| ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |         |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |         |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |         |
|             | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |         |
|             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | *TOTALS |

Alimentary System

|                              |   |   |   |   |   |   |   |   |   |   |       |
|------------------------------|---|---|---|---|---|---|---|---|---|---|-------|
| Liver                        | + | + | + | + | + | + | + | + | + | + | 10    |
| Inflammation, Chronic, Focal |   |   |   |   |   | 1 |   |   | 1 |   | 2 1.0 |

Cardiovascular System

|                       |   |   |   |   |   |   |   |   |   |   |       |
|-----------------------|---|---|---|---|---|---|---|---|---|---|-------|
| Heart                 | + | + | + | + | + | + | + | + | + | + | 10    |
| Cardiomyopathy, Focal | 1 |   | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 9 1.1 |

Endocrine System

NONE

General Body System

NONE

Genital System

NONE

Hematopoietic System

NONE

Integumentary System

NONE

Musculoskeletal System

NONE

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

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Time Report Requested: 09:11:13

First Dose M/F: NA / NA

Lab: SRI

F 344/N Rat Male  
25000 PPM

|             |   |   |   |   |   |   |   |   |   |   |         |
|-------------|---|---|---|---|---|---|---|---|---|---|---------|
| DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |         |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |         |
|             | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |         |
|             | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |         |
| ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |         |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |         |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |         |
|             | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |         |
|             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | *TOTALS |

Nervous System

NONE

Respiratory System

NONE

Special Senses System

NONE

Urinary System

Kidney + + + + + + + + + 10

Nephropathy 1 1 1 1 1 5 1.0

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20008-01

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Milk thistle extract

CAS Number: 84604-20-6

Date Report Requested: 10/21/2014

Time Report Requested: 09:11:13

First Dose M/F: NA / NA

Lab: SRI

F 344/N Rat Male  
50000 PPM

| DAY ON TEST | 0       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|-------------|---------|---|---|---|---|---|---|---|---|---|
|             | 0       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 9       | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
|             | 3       | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| ANIMAL ID   | 0       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 5       | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 |
|             | 1       | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |
|             | *TOTALS |   |   |   |   |   |   |   |   |   |

Alimentary System

|  |   |   |   |   |   |   |   |   |   |   |       |
|--|---|---|---|---|---|---|---|---|---|---|-------|
| Esophagus                              | + | + | + | + | + | + | + | + | + | + | 10    |
| Intestine Large, Cecum                 | + | + | + | + | + | + | + | + | + | + | 10    |
| Intestine Large, Colon                 | + | + | + | + | + | + | + | + | + | + | 10    |
| Intussusception                        |   |   |   |   |   |   | 3 |   |   |   | 1 3.0 |
| Intestine Large, Rectum                | + | + | + | + | + | + | + | + | + | + | 10    |
| Intussusception                        |   |   |   |   |   |   | 3 |   |   |   | 1 3.0 |
| Intestine Small, Duodenum              | + | + | + | + | + | + | + | + | + | + | 10    |
| Intestine Small, Ileum                 | + | + | + | + | + | + | + | + | + | + | 10    |
| Intestine Small, Jejunum               | + | + | + | + | + | + | + | + | + | + | 10    |
| Liver                                  | + | + | + | + | + | + | + | + | + | + | 10    |
| Hepatodiaphragmatic Nodule             |   |   |   | 2 |   |   |   |   |   |   | 1 2.0 |
| Inflammation, Chronic, Focal           |   |   | 1 |   |   |   | 1 | 1 |   |   | 3 1.0 |
| Vacuolization Cytoplasmic, Focal       |   |   |   |   |   |   | 1 |   |   |   | 1 1.0 |
| Pancreas                               | + | + | + | + | + | + | + | + | + | + | 10    |
| Basophilic Focus                       |   |   |   | 1 |   |   |   |   |   |   | 1 1.0 |
| Salivary Glands                        | + | + | + | + | + | + | + | + | + | + | 10    |
| Parotid Gl, Basophilic Focus, Multiple | 1 |   | 1 | 1 | 1 | 1 | 1 |   | 1 | 2 | 8 1.1 |
| Stomach, Forestomach                   | + | + | + | + | + | + | + | + | + | + | 10    |
| Stomach, Glandular                     | + | + | + | + | + | + | + | + | + | + | 10    |

Cardiovascular System

|       |   |   |   |   |   |   |   |   |   |   |    |
|-------|---|---|---|---|---|---|---|---|---|---|----|
| Heart | + | + | + | + | + | + | + | + | + | + | 10 |
|-------|---|---|---|---|---|---|---|---|---|---|----|

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20008-01

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Milk thistle extract

CAS Number: 84604-20-6

Date Report Requested: 10/21/2014

Time Report Requested: 09:11:13

First Dose M/F: NA / NA

Lab: SRI

F 344/N Rat Male  
50000 PPM

| DAY ON TEST | 0              | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |  |
|-------------|----------------|---|---|---|---|---|---|---|---|---|--|--|
|             | 0              | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |  |
|             | 9              | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |  |  |
|             | 3              | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |  |  |
| ANIMAL ID   | 0              | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |  |
|             | 0              | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |  |
|             | 0              | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |  |
|             | 5              | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 |  |  |
|             | 1              | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |  |  |
|             | <b>*TOTALS</b> |   |   |   |   |   |   |   |   |   |  |  |

|                                   |   |   |   |   |   |   |   |   |   |   |    |     |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|----|-----|
| Cardiomyopathy, Focal             | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 1 | 10 | 1.2 |
| <b>Endocrine System</b>           |   |   |   |   |   |   |   |   |   |   |    |     |
| Adrenal Cortex                    | + | + | + | + | + | + | + | + | + | + | 10 |     |
| Accessory Adrenal Cortical Nodule |   |   |   |   |   | X |   |   |   | 1 | 2  | 1.0 |
| Adrenal Medulla                   | + | + | + | + | + | + | + | + | + | + | 10 |     |
| Parathyroid Gland                 | + | + | + | + | + | + | + | + | + | + | 10 |     |
| Pituitary Gland                   | + | + | + | + | + | + | + | + | + | + | 10 |     |
| Pars Nervosa, Cyst                |   |   |   | 1 |   |   |   |   |   |   | 1  | 1.0 |
| Thyroid Gland                     | + | + | + | + | + | + | + | + | + | + | 10 |     |
| Ultimobranchial Cyst              |   |   |   |   |   |   |   |   | 1 |   | 1  | 1.0 |
| <b>General Body System</b>        |   |   |   |   |   |   |   |   |   |   |    |     |
| NONE                              |   |   |   |   |   |   |   |   |   |   |    |     |
| <b>Genital System</b>             |   |   |   |   |   |   |   |   |   |   |    |     |
| Epididymis                        | + | + | + | + | + | + | + | + | + | + | 10 |     |
| Preputial Gland                   | + | + | + | + | + | + | + | + | + | + | 10 |     |
| Prostate                          | + | + | + | + | + | + | + | + | + | + | 10 |     |
| Seminal Vesicle                   | + | + | + | + | + | + | + | + | + | + | 10 |     |
| Testes                            | + | + | + | + | + | + | + | + | + | + | 10 |     |
| <b>Hematopoietic System</b>       |   |   |   |   |   |   |   |   |   |   |    |     |
| Bone Marrow                       | + | + | + | + | + | + | + | + | + | + | 10 |     |
| Myeloid Cell, Hyperplasia, Focal  |   |   |   |   |   |   |   |   | 1 |   | 1  | 1.0 |

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

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2) Mild 4) Marked

Experiment Number: 20008-01

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Milk thistle extract

CAS Number: 84604-20-6

Date Report Requested: 10/21/2014

Time Report Requested: 09:11:13

First Dose M/F: NA / NA

Lab: SRI

F 344/N Rat Male  
50000 PPM

| DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|-------------|---|---|---|---|---|---|---|---|---|---|
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
|             | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 |
|             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

\*TOTALS

|                                  |   |   |   |   |   |   |   |   |   |   |   |    |     |
|----------------------------------|---|---|---|---|---|---|---|---|---|---|---|----|-----|
| Myeloid Cell, Hyperplasia, Focal |   |   |   |   |   |   |   |   |   |   | 1 | 1  | 1.0 |
| Lymph Node                       |   |   |   |   |   |   |   |   |   |   | + | 1  |     |
| Pancreatic, Hemorrhage           |   |   |   |   |   |   |   |   |   |   | 2 | 1  | 2.0 |
| Lymph Node, Mandibular           | M | M | M | M | M | M | M | M | M | M |   | 0  |     |
| Lymph Node, Mesenteric           | + | + | + | + | + | + | + | + | + | + |   | 10 |     |
| Inflammation, Histiocytic, Focal |   |   |   |   |   |   |   |   |   |   | 1 | 1  | 1.0 |
| Spleen                           | + | + | + | + | + | + | + | + | + | + |   | 10 |     |
| Thymus                           | + | + | + | + | + | + | + | + | + | + |   | 10 |     |
| Hemorrhage                       |   |   |   |   |   |   |   |   |   |   | 1 | 1  | 1.0 |
| <b>Integumentary System</b>      |   |   |   |   |   |   |   |   |   |   |   |    |     |
| Mammary Gland                    | + | + | + | + | + | + | + | + | + | + |   | 10 |     |
| Skin                             | + | + | + | + | + | + | + | + | + | + |   | 10 |     |
| <b>Musculoskeletal System</b>    |   |   |   |   |   |   |   |   |   |   |   |    |     |
| Bone                             | + | + | + | + | + | + | + | + | + | + |   | 10 |     |
| <b>Nervous System</b>            |   |   |   |   |   |   |   |   |   |   |   |    |     |
| Brain                            | + | + | + | + | + | + | + | + | + | + |   | 10 |     |
| <b>Respiratory System</b>        |   |   |   |   |   |   |   |   |   |   |   |    |     |
| Lung                             | + | + | + | + | + | + | + | + | + | + |   | 10 |     |
| Inflammation, Chronic, Focal     |   |   |   |   |   |   |   |   |   |   | 1 | 2  | 1.0 |
| Nose                             | + | + | + | + | + | + | + | + | + | + |   | 10 |     |
| Trachea                          | + | + | + | + | + | + | + | + | + | + |   | 10 |     |

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

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Experiment Number: 20008-01

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Milk thistle extract

CAS Number: 84604-20-6

Date Report Requested: 10/21/2014

Time Report Requested: 09:11:13

First Dose M/F: NA / NA

Lab: SRI

F 344/N Rat Male  
50000 PPM

|             |   |   |   |   |   |   |   |   |   |   |         |
|-------------|---|---|---|---|---|---|---|---|---|---|---------|
| DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |         |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |         |
|             | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |         |
|             | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |         |
| ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |         |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |         |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |         |
|             | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 |         |
|             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | *TOTALS |

Special Senses System

|                 |   |   |   |   |   |   |   |   |   |   |    |
|-----------------|---|---|---|---|---|---|---|---|---|---|----|
| Eye             | + | + | + | + | + | + | + | + | + | + | 10 |
| Harderian Gland | + | + | + | + | + | + | + | + | + | + | 10 |
| Lacrimal Gland  |   |   |   |   |   |   |   |   | + |   | 1  |

Urinary System

|                    |   |   |   |   |   |   |   |   |   |   |       |
|--------------------|---|---|---|---|---|---|---|---|---|---|-------|
| Kidney             | + | + | + | + | + | + | + | + | + | + | 10    |
| Nephropathy        | 1 |   | 1 |   |   | 1 | 1 |   | 1 |   | 5 1.0 |
| Nephropathy, Focal |   |   |   |   |   |   |   | 1 |   |   | 1 1.0 |
| Urinary Bladder    | + | + | + | + | + | + | + | + | + | + | 10    |

\*\*\*END OF MALE DATA\*\*\*

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

X ..Lesion present

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Date Report Requested: 10/21/2014

Time Report Requested: 09:11:13

First Dose M/F: NA / NA

Lab: SRI

|                             |             |   |   |   |   |   |   |   |   |   |   |         |
|-----------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---------|
| F 344/N Rat Female<br>0 PPM | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |         |
|                             |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |         |
|                             |             | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |         |
|                             |             | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |         |
|                             | ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | *TOTALS |
|                             | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   |         |
|                             | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   |         |
|                             | 6           | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 |   |         |
|                             | 1           | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |   |         |

Alimentary System

|  |   |   |   |   |   |   |   |   |   |   |       |
|--|---|---|---|---|---|---|---|---|---|---|-------|
| Esophagus                              | + | + | + | + | + | + | + | + | + | + | 10    |
| Intestine Large, Cecum                 | + | + | + | + | + | + | + | + | + | + | 10    |
| Intestine Large, Colon                 | + | + | + | + | + | + | + | + | + | + | 10    |
| Intestine Large, Rectum                | + | + | + | + | + | + | + | + | + | + | 10    |
| Intestine Small, Duodenum              | + | + | + | + | + | + | + | + | + | + | 10    |
| Intestine Small, Ileum                 | + | + | + | + | + | + | + | + | + | + | 10    |
| Intestine Small, Jejunum               | + | + | + | + | + | + | + | + | + | + | 10    |
| Liver                                  | + | + | + | + | + | + | + | + | + | + | 10    |
| Hepatodiaphragmatic Nodule             |   |   |   |   | 2 |   |   |   |   |   | 1 2.0 |
| Inflammation, Chronic, Focal           | 1 | 1 | 1 |   | 1 |   | 1 | 1 | 1 |   | 7 1.0 |
| Pancreas                               | + | + | + | + | + | + | + | + | + | + | 10    |
| Acinus, Atrophy, Focal                 |   |   |   |   |   | 1 |   |   |   |   | 1 1.0 |
| Salivary Glands                        | + | + | + | + | + | + | + | + | + | + | 10    |
| Parotid Gl, Basophilic Focus           |   |   |   |   |   |   |   | 1 |   |   | 1 1.0 |
| Parotid Gl, Basophilic Focus, Multiple |   |   |   |   |   |   |   |   |   | 1 | 1 1.0 |
| Stomach, Forestomach                   | + | + | + | + | + | + | + | + | + | + | 10    |
| Stomach, Glandular                     | + | + | + | + | + | + | + | + | + | + | 10    |
| Tooth                                  |   |   |   | + |   |   |   |   |   |   | 1     |
| Pulp, Dysplasia                        |   |   |   | 2 |   |   |   |   |   |   | 1 2.0 |

Cardiovascular System

|       |   |   |   |   |   |   |   |   |   |   |    |
|-------|---|---|---|---|---|---|---|---|---|---|----|
| Heart | + | + | + | + | + | + | + | + | + | + | 10 |
|-------|---|---|---|---|---|---|---|---|---|---|----|

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

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2) Mild 4) Marked

Experiment Number: 20008-01

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Milk thistle extract

CAS Number: 84604-20-6

Date Report Requested: 10/21/2014

Time Report Requested: 09:11:13

First Dose M/F: NA / NA

Lab: SRI

F 344/N Rat Female  
0 PPM

| DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|-------------|---|---|---|---|---|---|---|---|---|---|
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
|             | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 |
|             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

\*TOTALS

|                       |  |  |  |  |  |  |  |  |  |  |   |     |
|-----------------------|--|--|--|--|--|--|--|--|--|--|---|-----|
| Cardiomyopathy, Focal |  |  |  |  |  |  |  |  |  |  | 2 | 1.0 |
|-----------------------|--|--|--|--|--|--|--|--|--|--|---|-----|

Endocrine System

|                                   |   |   |   |   |   |   |   |   |   |   |    |     |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|----|-----|
| Adrenal Cortex                    | + | + | + | + | + | + | + | + | + | + | 10 |     |
| Accessory Adrenal Cortical Nodule |   |   | 1 |   |   |   |   |   |   |   | 1  | 1.0 |
| Adrenal Medulla                   | + | + | + | + | + | + | + | + | + | + | 10 |     |
| Parathyroid Gland                 | + | + | + | + | + | + | + | + | + | + | 10 |     |
| Pituitary Gland                   | + | + | + | + | + | + | + | + | + | + | 10 |     |
| Thyroid Gland                     | + | + | + | + | + | + | + | + | + | + | 10 |     |
| Ultimobranchial Cyst              |   |   |   | 1 |   |   |   |   |   |   | 1  | 1.0 |

General Body System

NONE

Genital System

|                |   |   |   |   |   |   |   |   |   |   |    |     |
|----------------|---|---|---|---|---|---|---|---|---|---|----|-----|
| Clitoral Gland | + | + | + | + | + | + | + | + | + | + | 10 |     |
| Ovary          | + | + | + | + | + | + | + | + | + | + | 10 |     |
| Uterus         | + | + | + | + | + | + | + | + | + | + | 10 |     |
| Hydrometra     |   |   |   | 2 |   |   |   |   |   |   | 1  | 2.0 |

Hematopoietic System

|                         |   |   |   |   |   |   |   |   |   |   |    |     |
|-------------------------|---|---|---|---|---|---|---|---|---|---|----|-----|
| Bone Marrow             | + | + | + | + | + | + | + | + | + | + | 10 |     |
| Lymph Node              |   |   |   | + |   |   |   |   |   |   | 1  |     |
| Mediastinal, Hemorrhage |   |   |   | 2 |   |   |   |   |   |   | 1  | 2.0 |
| Lymph Node, Mandibular  | M | M | M | M | M | M | + | M | + | M | 2  |     |

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

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Species/Strain: Rat/F 344/N

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Test Compound: Milk thistle extract

CAS Number: 84604-20-6

Date Report Requested: 10/21/2014

Time Report Requested: 09:11:13

First Dose M/F: NA / NA

Lab: SRI

F 344/N Rat Female  
0 PPM

|                               | DAY ON TEST |   |   |   |   |   |   |   |   |   |                |    |   |     |
|-------------------------------|-------------|---|---|---|---|---|---|---|---|---|----------------|----|---|-----|
|                               | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |                |    |   |     |
| ANIMAL ID                     | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |                |    |   |     |
|                               | 3           | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |                |    |   |     |
|                               | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |                |    |   |     |
|                               | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |                |    |   |     |
|                               | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |                |    |   |     |
|                               | 6           | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |                |    |   |     |
|                               | 1           | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |                |    |   |     |
|                               |             |   |   |   |   |   |   |   |   |   | <b>*TOTALS</b> |    |   |     |
| Lymph Node, Mandibular        | M           | M | M | M | M | M | + | M | + | M |                | 2  |   |     |
| Lymph Node, Mesenteric        | +           | + | + | + | + | + | + | + | + | + |                | 10 |   |     |
| Hyperplasia, Histiocytic      |             |   | 2 |   |   |   |   |   |   |   |                |    | 2 | 1.5 |
| Spleen                        | +           | + | + | + | + | + | + | + | + | + |                | 10 |   |     |
| Thymus                        | +           | + | + | + | + | + | + | + | + | + |                | 10 |   |     |
| <b>Integumentary System</b>   |             |   |   |   |   |   |   |   |   |   |                |    |   |     |
| Mammary Gland                 | +           | + | + | + | + | + | + | + | + | + |                | 10 |   |     |
| Skin                          | +           | + | + | + | + | + | + | + | + | + |                | 10 |   |     |
| <b>Musculoskeletal System</b> |             |   |   |   |   |   |   |   |   |   |                |    |   |     |
| Bone                          | +           | + | + | + | + | + | + | + | + | + |                | 10 |   |     |
| <b>Nervous System</b>         |             |   |   |   |   |   |   |   |   |   |                |    |   |     |
| Brain                         | +           | + | + | + | + | + | + | + | + | + |                | 10 |   |     |
| <b>Respiratory System</b>     |             |   |   |   |   |   |   |   |   |   |                |    |   |     |
| Lung                          | +           | + | + | + | + | + | + | + | + | + |                | 10 |   |     |
| Inflammation, Chronic, Focal  |             |   | 1 |   |   |   |   |   |   |   |                |    | 1 | 1.0 |
| Nose                          | +           | + | + | + | + | + | + | + | + | + |                | 10 |   |     |
| Trachea                       | +           | + | + | + | + | + | + | + | + | + |                | 10 |   |     |
| <b>Special Senses System</b>  |             |   |   |   |   |   |   |   |   |   |                |    |   |     |
| Eye                           | +           | + | + | + | + | + | + | + | + | + |                | 10 |   |     |
| Harderian Gland               | +           | + | + | + | + | + | + | + | + | + |                | 10 |   |     |

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20008-01  
 Test Type: 90-DAY  
 Species/Strain: Rat/F 344/N

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**  
 Test Compound: Milk thistle extract  
 CAS Number: 84604-20-6

Date Report Requested: 10/21/2014  
 Time Report Requested: 09:11:13  
 First Dose M/F: NA / NA  
 Lab: SRI

**F 344/N Rat Female**  
**0 PPM**

| DAY ON TEST | 0              | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|-------------|----------------|---|---|---|---|---|---|---|---|---|
|             | 0              | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 9              | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
|             | 3              | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| ANIMAL ID   | 0              | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0              | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0              | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 6              | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 |
|             | 1              | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |
|             | <b>*TOTALS</b> |   |   |   |   |   |   |   |   |   |

**Urinary System**

|                 |   |   |   |   |   |   |   |   |   |   |       |
|-----------------|---|---|---|---|---|---|---|---|---|---|-------|
| Kidney          | + | + | + | + | + | + | + | + | + | + | 10    |
| Nephropathy     | 1 |   | 1 |   |   |   |   |   |   |   | 2 1.0 |
| Urinary Bladder | + | + | + | + | + | + | + | + | + | + | 10    |

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20008-01

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Milk thistle extract

CAS Number: 84604-20-6

Date Report Requested: 10/21/2014

Time Report Requested: 09:11:13

First Dose M/F: NA / NA

Lab: SRI

F 344/N Rat Female  
3125 PPM

| DAY ON TEST | 0       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|-------------|---------|---|---|---|---|---|---|---|---|---|
|             | 0       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 9       | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
|             | 3       | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| ANIMAL ID   | 0       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 7       | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 |
|             | 1       | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |
|             | *TOTALS |   |   |   |   |   |   |   |   |   |

Alimentary System

|  |   |   |   |   |   |   |   |   |   |   |        |
|--|---|---|---|---|---|---|---|---|---|---|--------|
| Liver                                  | + | + | + | + | + | + | + | + | + | + | 10     |
| Hepatodiaphragmatic Nodule             |   |   | 2 |   |   |   | 2 |   |   |   | 2 2.0  |
| Inflammation, Chronic, Focal           | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 10 1.0 |
| Salivary Glands                        | + | + | + | + | + | + | + | + | + | + | 10     |
| Parotid Gl, Basophilic Focus           | 1 |   |   | 1 |   |   |   | 1 |   |   | 3 1.0  |
| Parotid Gl, Basophilic Focus, Multiple |   | 1 | 1 |   |   | 1 | 1 |   |   |   | 4 1.0  |

Cardiovascular System

NONE

Endocrine System

NONE

General Body System

NONE

Genital System

|                |  |  |  |   |  |   |  |  |  |   |       |
|----------------|--|--|--|---|--|---|--|--|--|---|-------|
| Clitoral Gland |  |  |  |   |  |   |  |  |  | + | 1     |
| Uterus         |  |  |  |   |  | + |  |  |  |   | 1     |
| Hydrometra     |  |  |  | 1 |  |   |  |  |  |   | 1 1.0 |

Hematopoietic System

NONE

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20008-01

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Test Compound: Milk thistle extract

CAS Number: 84604-20-6

Date Report Requested: 10/21/2014

Time Report Requested: 09:11:13

First Dose M/F: NA / NA

Lab: SRI

**F 344/N Rat Female  
3125 PPM**

|             |   |   |   |   |   |   |   |   |   |   |                |
|-------------|---|---|---|---|---|---|---|---|---|---|----------------|
| DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |                |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |                |
|             | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |                |
|             | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |                |
| ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |                |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |                |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |                |
|             | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 |                |
|             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | <b>*TOTALS</b> |

**Integumentary System**

NONE

**Musculoskeletal System**

NONE

**Nervous System**

NONE

**Respiratory System**

NONE

**Special Senses System**

NONE

**Urinary System**

NONE

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20008-01

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Milk thistle extract

CAS Number: 84604-20-6

Date Report Requested: 10/21/2014

Time Report Requested: 09:11:13

First Dose M/F: NA / NA

Lab: SRI

F 344/N Rat Female  
6250 PPM

| DAY ON TEST | 0       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|-------------|---------|---|---|---|---|---|---|---|---|---|
|             | 0       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 9       | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
|             | 3       | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| ANIMAL ID   | 0       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 8       | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 |
|             | 1       | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |
|             | *TOTALS |   |   |   |   |   |   |   |   |   |

**Alimentary System**

|                              |   |   |   |   |   |   |   |   |   |   |       |
|------------------------------|---|---|---|---|---|---|---|---|---|---|-------|
| Liver                        | + | + | + | + | + | + | + | + | + | + | 10    |
| Hepatodiaphragmatic Nodule   |   |   |   |   |   |   | 2 | 2 |   |   | 2 2.0 |
| Inflammation, Chronic, Focal | 1 | 1 | 1 | 1 | 2 |   |   | 1 | 1 | 1 | 8 1.1 |
| Salivary Glands              | + | + | + | + | + | + | + | + | + | + | 10    |
| Parotid Gl, Basophilic Focus |   |   |   | 1 |   |   | 1 |   | 1 | 1 | 4 1.0 |

**Cardiovascular System**

NONE

**Endocrine System**

NONE

**General Body System**

NONE

**Genital System**

|                |  |  |  |  |  |  |  |  |   |  |   |
|----------------|--|--|--|--|--|--|--|--|---|--|---|
| Clitoral Gland |  |  |  |  |  |  |  |  | + |  | 1 |
|----------------|--|--|--|--|--|--|--|--|---|--|---|

**Hematopoietic System**

|                                   |  |  |  |   |   |  |  |  |  |  |       |
|-----------------------------------|--|--|--|---|---|--|--|--|--|--|-------|
| Lymph Node                        |  |  |  | + | + |  |  |  |  |  | 2     |
| Pancreatic, Hyperplasia, Lymphoid |  |  |  | 3 | 2 |  |  |  |  |  | 2 2.5 |

**Integumentary System**

NONE

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked



Experiment Number: 20008-01

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Milk thistle extract

CAS Number: 84604-20-6

Date Report Requested: 10/21/2014

Time Report Requested: 09:11:13

First Dose M/F: NA / NA

Lab: SRI

F 344/N Rat Female  
6250 PPM

|             |   |   |   |   |   |   |   |   |   |   |
|-------------|---|---|---|---|---|---|---|---|---|---|
| DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
|             | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 |
|             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

\*TOTALS

Musculoskeletal System

NONE

Nervous System

NONE

Respiratory System

NONE

Special Senses System

NONE

Urinary System

NONE

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20008-01

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Milk thistle extract

CAS Number: 84604-20-6

Date Report Requested: 10/21/2014

Time Report Requested: 09:11:13

First Dose M/F: NA / NA

Lab: SRI

F 344/N Rat Female  
12500 PPM

| DAY ON TEST | 0       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|-------------|---------|---|---|---|---|---|---|---|---|---|
|             | 0       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 9       | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
|             | 3       | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| ANIMAL ID   | 0       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
|             | 9       | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 |
|             | 1       | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |
|             | *TOTALS |   |   |   |   |   |   |   |   |   |

Alimentary System

|  |   |   |   |   |   |   |   |   |   |   |       |
|--|---|---|---|---|---|---|---|---|---|---|-------|
| Liver  | + | + | + | + | + | + | + | + | + | + | 10    |
| Hepatodiaphragmatic Nodule                     |   |   |   |   | 2 |   |   |   |   |   | 1 2.0 |
| Inflammation, Chronic, Focal                   | 1 | 1 | 1 |   | 1 | 2 | 1 | 1 | 2 | 1 | 9 1.2 |
| Salivary Glands                                | + | + | + | + | + | + | + | + | + | + | 10    |
| Duct, Parotid Gl, Inflammation, Chronic, Focal |   |   |   |   |   |   |   | 1 |   |   | 1 1.0 |
| Parotid Gl, Basophilic Focus                   | 1 | 1 |   |   | 1 |   |   |   |   |   | 3 1.0 |
| Parotid Gl, Basophilic Focus, Multiple         |   |   |   |   |   |   |   |   | 1 |   | 1 1.0 |

Cardiovascular System

NONE

Endocrine System

NONE

General Body System

NONE

Genital System

|                |  |  |  |  |   |   |  |   |  |  |       |
|----------------|--|--|--|--|---|---|--|---|--|--|-------|
| Clitoral Gland |  |  |  |  | + |   |  |   |  |  | 1     |
| Cyst           |  |  |  |  | 2 |   |  |   |  |  | 1 2.0 |
| Uterus         |  |  |  |  |   | + |  | + |  |  | 2     |
| Hydrometra     |  |  |  |  |   | 2 |  | 2 |  |  | 2 2.0 |

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20008-01

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Milk thistle extract

CAS Number: 84604-20-6

Date Report Requested: 10/21/2014

Time Report Requested: 09:11:14

First Dose M/F: NA / NA

Lab: SRI

F 344/N Rat Female  
12500 PPM

|             |   |   |   |   |   |   |   |   |   |   |         |
|-------------|---|---|---|---|---|---|---|---|---|---|---------|
| DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |         |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |         |
|             | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |         |
|             | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |         |
| ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |         |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |         |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |         |
|             | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 |         |
|             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | *TOTALS |

Hematopoietic System

Lymph Node + 1

Pancreatic, Hyperplasia, Lymphoid 2 1 2.0

Integumentary System

NONE

Musculoskeletal System

NONE

Nervous System

NONE

Respiratory System

NONE

Special Senses System

NONE

Urinary System

NONE

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20008-01

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Milk thistle extract

CAS Number: 84604-20-6

Date Report Requested: 10/21/2014

Time Report Requested: 09:11:14

First Dose M/F: NA / NA

Lab: SRI

F 344/N Rat Female  
25000 PPM

|             |   |   |   |   |   |   |   |   |   |   |         |
|-------------|---|---|---|---|---|---|---|---|---|---|---------|
| DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |         |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |         |
|             | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |         |
|             | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |         |
| ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |         |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |         |
|             | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |         |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |         |
|             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | *TOTALS |

Alimentary System

|  |   |   |   |   |   |   |   |   |   |   |    |     |
|--|---|---|---|---|---|---|---|---|---|---|----|-----|
| Liver                                  | + | + | + | + | + | + | + | + | + | + | 10 |     |
| Hepatodiaphragmatic Nodule             |   |   | 2 |   |   |   |   |   |   |   | 1  | 2.0 |
| Inflammation, Chronic, Focal           | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 10 | 1.0 |
| Salivary Glands                        |   | + |   | + |   | + | + | + | + | + | 7  |     |
| Parotid Gl, Basophilic Focus           |   | 1 |   | 1 |   | 1 |   | 1 | 1 |   | 5  | 1.0 |
| Parotid Gl, Basophilic Focus, Multiple |   |   |   |   |   |   |   |   | 1 |   | 1  | 1.0 |

Cardiovascular System

NONE

Endocrine System

NONE

General Body System

NONE

Genital System

NONE

Hematopoietic System

NONE

Integumentary System

NONE

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20008-01

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Milk thistle extract

CAS Number: 84604-20-6

Date Report Requested: 10/21/2014

Time Report Requested: 09:11:14

First Dose M/F: NA / NA

Lab: SRI

F 344/N Rat Female  
25000 PPM

|             |   |   |   |   |   |   |   |   |   |   |
|-------------|---|---|---|---|---|---|---|---|---|---|
| DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
|             | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
|             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

\*TOTALS

Musculoskeletal System

NONE

Nervous System

NONE

Respiratory System

NONE

Special Senses System

NONE

Urinary System

NONE

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

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2) Mild 4) Marked

Experiment Number: 20008-01

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Milk thistle extract

CAS Number: 84604-20-6

Date Report Requested: 10/21/2014

Time Report Requested: 09:11:14

First Dose M/F: NA / NA

Lab: SRI

F 344/N Rat Female  
50000 PPM

| DAY ON TEST | 0       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|-------------|---------|---|---|---|---|---|---|---|---|---|
|             | 0       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 9       | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
|             | 3       | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| ANIMAL ID   | 0       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 1       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|             | 1       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 |
|             | 1       | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |
|             | *TOTALS |   |   |   |   |   |   |   |   |   |

Alimentary System

|  |   |   |   |   |   |   |   |   |   |   |       |
|--|---|---|---|---|---|---|---|---|---|---|-------|
| Esophagus                              | + | + | + | M | + | + | + | + | + | + | 9     |
| Intestine Large, Cecum                 | + | + | + | + | + | + | + | + | + | + | 10    |
| Intestine Large, Colon                 | + | + | + | + | + | + | + | + | + | + | 10    |
| Intussusception                        |   |   |   |   |   |   |   | 3 |   |   | 1 3.0 |
| Intestine Large, Rectum                | + | + | + | + | + | + | + | + | + | + | 10    |
| Intussusception                        |   |   |   |   |   |   |   | 3 |   |   | 1 3.0 |
| Intestine Small, Duodenum              | + | + | + | + | + | + | + | + | + | + | 10    |
| Intestine Small, Ileum                 | + | + | + | + | + | + | + | + | + | + | 10    |
| Intestine Small, Jejunum               | + | + | + | + | + | + | + | + | + | + | 10    |
| Liver                                  | + | + | + | + | + | + | + | + | + | + | 10    |
| Hepatodiaphragmatic Nodule             |   |   |   |   | 2 |   |   |   |   |   | 1 2.0 |
| Inflammation, Chronic, Focal           | 2 | 1 | 1 |   | 1 | 1 | 1 | 1 | 1 | 1 | 9 1.1 |
| Pancreas                               | + | + | + | + | + | + | + | + | + | + | 10    |
| Interstitial, Fibrosis, Focal          |   |   | 1 |   |   |   |   |   |   |   | 1 1.0 |
| Salivary Glands                        | + | + | + | + | + | + | + | + | + | + | 10    |
| Duct, Parotid Gl, Proliferation, Focal |   |   |   |   |   |   |   | 1 |   |   | 1 1.0 |
| Interstitial, Fibrosis, Focal          |   |   |   |   | 1 |   |   |   |   |   | 1 1.0 |
| Parotid Gl, Basophilic Focus           |   |   |   |   |   |   |   |   | 1 |   | 1 1.0 |
| Parotid Gl, Basophilic Focus, Multiple |   | 1 |   | 1 |   | 1 | 1 | 1 | 1 |   | 6 1.0 |
| Stomach, Forestomach                   | + | + | + | + | + | + | + | + | + | + | 10    |
| Stomach, Glandular                     | + | + | + | + | + | + | + | + | + | + | 10    |

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+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20008-01

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Milk thistle extract

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|-------------|---------|---|---|---|---|---|---|---|---|---|
|             | 0       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 9       | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
|             | 3       | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| ANIMAL ID   | 0       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 1       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|             | 1       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 |
|             | 1       | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |
|             | *TOTALS |   |   |   |   |   |   |   |   |   |

Cardiovascular System

|                       |   |   |   |   |   |   |   |   |   |   |       |
|-----------------------|---|---|---|---|---|---|---|---|---|---|-------|
| Heart                 | + | + | + | + | + | + | + | + | + | + | 10    |
| Cardiomyopathy, Focal |   |   | 1 |   |   |   | 1 |   |   |   | 2 1.0 |

Endocrine System

|                      |   |   |   |   |   |   |   |   |   |   |       |
|----------------------|---|---|---|---|---|---|---|---|---|---|-------|
| Adrenal Cortex       | + | + | + | + | + | + | + | + | + | + | 10    |
| Adrenal Medulla      | + | + | + | + | + | + | + | + | + | + | 10    |
| Parathyroid Gland    | + | + | + | + | + | + | + | + | + | + | 10    |
| Pituitary Gland      | I | + | + | + | + | + | + | + | + | + | 9     |
| Pars Distalis, Cyst  |   | 1 |   |   | 1 |   |   |   |   |   | 2 1.0 |
| Thyroid Gland        | + | + | + | + | + | + | + | + | + | + | 10    |
| Ultimobranchial Cyst |   |   |   |   |   |   |   | 1 |   |   | 1 1.0 |

General Body System

NONE

Genital System

|                |   |   |   |   |   |   |   |   |   |   |       |
|----------------|---|---|---|---|---|---|---|---|---|---|-------|
| Clitoral Gland | + | + | + | + | + | + | + | + | + | + | 10    |
| Ovary          | + | + | + | + | + | + | + | + | + | + | 10    |
| Uterus         | + | + | + | + | + | + | + | + | + | + | 10    |
| Hydrometra     |   |   |   |   |   | 2 |   |   |   |   | 1 2.0 |

Hematopoietic System

|             |   |   |   |   |   |   |   |   |   |   |    |
|-------------|---|---|---|---|---|---|---|---|---|---|----|
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | 10 |
|-------------|---|---|---|---|---|---|---|---|---|---|----|

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|                               | DAY ON TEST |   |   |   |   |   |   |   |   |   |       |
|-------------------------------|-------------|---|---|---|---|---|---|---|---|---|-------|
|                               | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |       |
| ANIMAL ID                     | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |       |
|                               | 1           | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |       |
|                               | 1           | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 |       |
|                               | 1           | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |       |
|                               | *TOTALS     |   |   |   |   |   |   |   |   |   |       |
| Lymph Node, Mandibular        | M           | M | M | M | + | M | M | M | M | M | 1     |
| Lymph Node, Mesenteric        | +           | + | + | + | + | + | + | + | + | + | 10    |
| Hyperplasia, Histiocytic      | 1           | 1 |   |   | 1 |   | 1 | 1 |   |   | 5 1.0 |
| Spleen                        | +           | + | + | + | + | + | + | + | + | + | 10    |
| Thymus                        | +           | + | + | + | + | + | + | + | + | + | 10    |
| <b>Integumentary System</b>   |             |   |   |   |   |   |   |   |   |   |       |
| Mammary Gland                 | +           | + | + | + | + | + | + | + | + | + | 10    |
| Skin                          | +           | + | + | + | + | + | + | + | + | + | 10    |
| <b>Musculoskeletal System</b> |             |   |   |   |   |   |   |   |   |   |       |
| Bone                          | +           | + | + | + | + | + | + | + | + | + | 10    |
| <b>Nervous System</b>         |             |   |   |   |   |   |   |   |   |   |       |
| Brain                         | +           | + | + | + | + | + | + | + | + | + | 10    |
| <b>Respiratory System</b>     |             |   |   |   |   |   |   |   |   |   |       |
| Lung                          | +           | + | + | + | + | + | + | + | + | + | 10    |
| Nose                          | +           | + | + | + | + | + | + | + | + | + | 10    |
| Trachea                       | +           | + | + | + | + | + | + | + | + | + | 10    |
| <b>Special Senses System</b>  |             |   |   |   |   |   |   |   |   |   |       |
| Eye                           | +           | + | + | + | + | + | + | + | + | + | 10    |
| Harderian Gland               | +           | + | + | + | + | + | + | + | + | + | 10    |

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|             |   |   |   |   |   |   |   |   |   |   |         |
|-------------|---|---|---|---|---|---|---|---|---|---|---------|
| DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |         |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |         |
|             | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |         |
|             | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |         |
| ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |         |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |         |
|             | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |         |
|             | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 |         |
|             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | *TOTALS |

Urinary System

|                      |   |   |   |   |   |   |   |   |   |   |       |
|----------------------|---|---|---|---|---|---|---|---|---|---|-------|
| Kidney               | + | + | + | + | + | + | + | + | + | + | 10    |
| Nephropathy          |   |   | 1 |   |   |   |   |   |   | 1 | 2 1.0 |
| Pelvis, Inflammation |   |   |   | 2 |   |   |   |   |   |   | 1 2.0 |
| Urinary Bladder      | + | + | + | + | + | + | + | + | + | + | 10    |

\*\* END OF REPORT \*\*

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