

**Experiment Number:** 56348-02  
**Test Type:** 90-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Mouse/B6C3F1

**P04: NEOPLASMS BY INDIVIDUAL ANIMAL**  
**Test Compound:** Citral  
**CAS Number:** 5392-40-5

**Date Report Requested:** 10/22/2014  
**Time Report Requested:** 05:30:52  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**C Number:** C56348A  
**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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**First Dose M/F:** NA / NA

**Lab:** BAT

**B6C3F1 Mouse Male  
UNTREAT CONTROL**

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
Gallbladder	M	+	+	+	+	+	+	+	+	+	9
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
Pancreas	+	+	+	+	+	+	+	+	+	+	10
Salivary Glands	+	+	+	+	+	+	+	+	+	+	10
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	10
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	10

**Cardiovascular System**

Blood Vessel	+	+	+	+	+	+	+	+	+	+	10
Heart	+	+	+	+	+	+	+	+	+	+	10

**Endocrine System**

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	10
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	10
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	10

\* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

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**Lab:** BAT

**B6C3F1 Mouse Male  
UNTREAT CONTROL**

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
	9	9	9	9	9	9	9	9	9	9
	3	3	3	3	3	3	3	3	3	3
	1	2	3	4	5	6	7	8	9	0

\*TOTALS

Parathyroid Gland	+	+	+	M	+	M	+	M	+	+	7
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	10
Thyroid Gland	+	+	+	+	0	0	0	0	0	0	0

**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, Mandibular	+	+	+	+	+	+	+	+	+	+	10
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	10
Spleen	+	+	+	+	+	+	+	+	+	+	10
Thymus	+	+	+	+	+	+	+	+	+	+	10

**Integumentary System**

Mammary Gland	M	M	M	M	M	M	M	M	M	M	0
Skin	+	+	+	+	+	+	+	+	+	+	10

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M ..Missing tissue

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**Lab:** BAT

<b>B6C3F1 Mouse Male</b> <b>UNTREAT CONTROL</b>	DAY ON TEST	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	
		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	1	
		1	2	3	4	5	6	7	8	9	
		<b>*TOTALS</b>									

**Musculoskeletal System**

Bone + + + + + + + + + + 10

**Nervous System**

Brain + + + + + + + + + + 10

**Respiratory System**

Lung + + + + + + + + + + 10

Nose + + + + + + + + + + 10

Trachea + + + + + + + + + + 10

**Special Senses System**

NONE

**Urinary System**

Kidney + + + + + + + + + + 10

Urinary Bladder + + + + + + + + + + 10

**SYSTEMIC LESIONS**

Multiple Organ + + + + + + + + + + 10

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

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**Lab:** BAT

**B6C3F1 Mouse Male**  
**VEHICLE CONTROL**

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
	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**

Esophagus	+	+	+	+	+	+	+	+	+	+	10
Gallbladder	+	+	+	+	+	+	M	M	+	+	8
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
Pancreas	+	+	+	+	+	+	+	+	+	+	10
Salivary Glands	+	+	+	+	+	+	+	+	+	+	10
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	10
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	10

**Cardiovascular System**

Blood Vessel	+	+	+	+	+	+	+	+	+	+	10
Heart	+	+	+	+	+	+	+	+	+	+	10

**Endocrine System**

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	10
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	10
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	10

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

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First Dose M/F: NA / NA

Lab: BAT

**B6C3F1 Mouse Male  
VEHICLE CONTROL**

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
	9	9	9	9	9	9	9	9	9	9
	3	3	3	3	3	3	3	3	3	3

\*TOTALS

Parathyroid Gland	+	+	+	+	+	+	+	M	+	M	8
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	10
Thyroid Gland	+	+	+	0	0	0	0	0	0	0	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, Mandibular	+	+	+	+	+	+	+	+	+	+	10
Lymph Node, Mesenteric	+	+	+	+	+	M	+	+	+	+	9
Spleen	+	+	+	+	+	+	+	+	+	+	10
Thymus	+	+	+	+	+	+	+	+	+	+	10

**Integumentary System**

Mammary Gland	M	M	M	M	M	M	M	M	M	M	0
Skin	+	+	+	+	+	+	+	+	+	+	10

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

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

**Lab:** BAT

**B6C3F1 Mouse Male  
VEHICLE CONTROL**

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
	9	9	9	9	9	9	9	9	9	9
	3	3	3	3	3	3	3	3	3	3
	1	1	1	1	1	1	1	1	1	2
	1	2	3	4	5	6	7	8	9	0

\*TOTALS

**Musculoskeletal System**

Bone + + + + + + + + + + 10

**Nervous System**

Brain + + + + + + + + + + 10

**Respiratory System**

Lung + + + + + + + + + + 10

Nose + + + + + + + + + + 10

Trachea + + + + + + + + + + 10

**Special Senses System**

NONE

**Urinary System**

Kidney + + + + + + + + + + 10

Urinary Bladder + + + + + + + + + + 10

**SYSTEMIC LESIONS**

Multiple Organ + + + + + + + + + + 10

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

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X ..Lesion present

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I ..Insufficient tissue

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**Route:** DOSED FEED  
**Species/Strain:** Mouse/B6C3F1

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**Test Compound:** Citral  
**CAS Number:** 5392-40-5

**Date Report Requested:** 10/22/2014  
**Time Report Requested:** 05:30:52  
**First Dose M/F:** NA / NA  
**Lab:** BAT

DAY ON TEST

**B6C3F1 Mouse Male**  
**3900 PPM**

ANIMAL ID

**\*TOTALS**

**Alimentary System**

NONE

**Cardiovascular System**

NONE

**Endocrine System**

NONE

**General Body System**

NONE

**Genital System**

NONE

**Hematopoietic System**

NONE

**Integumentary System**

NONE

**Musculoskeletal System**

NONE

**Nervous System**

NONE

\* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

**Experiment Number:** 56348-02

**Test Type:** 90-DAY

**Route:** DOSED FEED

**Species/Strain:** Mouse/B6C3F1

**P04: NEOPLASMS BY INDIVIDUAL ANIMAL**

**Test Compound:** Citral

**CAS Number:** 5392-40-5

**Date Report Requested:** 10/22/2014

**Time Report Requested:** 05:30:52

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

**Lab:** BAT

DAY ON TEST

**B6C3F1 Mouse Male**

**3900 PPM**

ANIMAL ID

**\*TOTALS**

**Respiratory System**

NONE

**Special Senses System**

NONE

**Urinary System**

NONE

**SYSTEMIC LESIONS**

Multiple Organ

0

\* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

**Experiment Number:** 56348-02  
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**Route:** DOSED FEED  
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**P04: NEOPLASMS BY INDIVIDUAL ANIMAL**  
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**First Dose M/F:** NA / NA  
**Lab:** BAT

DAY ON TEST

**B6C3F1 Mouse Male**  
**7800 PPM**

ANIMAL ID

**\*TOTALS**

**Alimentary System**

NONE

**Cardiovascular System**

NONE

**Endocrine System**

NONE

**General Body System**

NONE

**Genital System**

NONE

**Hematopoietic System**

NONE

**Integumentary System**

NONE

**Musculoskeletal System**

NONE

**Nervous System**

NONE

\* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

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**Test Compound:** Citral

**CAS Number:** 5392-40-5

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

**Lab:** BAT

DAY ON TEST

**B6C3F1 Mouse Male**

**7800 PPM**

ANIMAL ID

**\*TOTALS**

**Respiratory System**

NONE

**Special Senses System**

NONE

**Urinary System**

NONE

**SYSTEMIC LESIONS**

Multiple Organ

0

\* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

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**Lab:** BAT

**B6C3F1 Mouse Male  
15600 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
	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
	4	4	4	4	4	4	4	4	4	5
	1	2	3	4	5	6	7	8	9	0

\*TOTALS

**Alimentary System**

Stomach, Forestomach

+ + + + + + + + + + 10

**Cardiovascular System**

NONE

**Endocrine System**

NONE

**General Body System**

NONE

**Genital System**

NONE

**Hematopoietic System**

NONE

**Integumentary System**

NONE

**Musculoskeletal System**

NONE

**Nervous System**

NONE

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

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A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

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

**Lab:** BAT

**B6C3F1 Mouse Male  
15600 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 |
|             | 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 |
|             | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
|             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

\*TOTALS

**Respiratory System**

NONE

**Special Senses System**

NONE

**Urinary System**

NONE

**SYSTEMIC LESIONS**

Multiple Organ

+ + + + + + + + + + +

10

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

**Lab:** BAT

**B6C3F1 Mouse Male  
31300 PPM**

| DAY ON TEST |   |   |   |   |   |   |   |   |   |   |
|-------------|---|---|---|---|---|---|---|---|---|---|
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1           | 1 | 1 | 9 | 1 | 9 | 9 | 9 | 9 | 9 | 1 |
| 4           | 0 | 3 | 0 | 3 | 3 | 3 | 3 | 3 | 3 | 0 |
| 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 |
| Gallbladder               | + | + | + | + | + | + | + | + | + | + | 10 |
| Intestine Large, Cecum    | + | + | + | + | + | + | + | + | + | + | 10 |
| Intestine Large, Colon    | + | + | + | + | + | + | + | + | + | + | 10 |
| Intestine Large, Rectum   | + | + | + | + | + | + | + | + | + | + | 10 |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | 10 |
| Intestine Small, Ileum    | + | + | + | + | + | + | + | M | + | + | 9  |
| Intestine Small, Jejunum  | + | + | + | + | + | + | + | + | + | + | 10 |
| Liver                     | + | + | + | + | + | + | + | + | + | + | 10 |
| Pancreas                  | + | + | + | + | + | + | + | + | + | + | 10 |
| Salivary Glands           | + | + | + | + | + | + | + | + | + | + | 10 |
| Stomach, Forestomach      | + | + | + | + | + | + | + | + | + | + | 10 |
| Stomach, Glandular        | + | + | + | + | + | + | + | + | + | + | 10 |

**Cardiovascular System**

|              |   |   |   |   |   |   |   |   |   |   |    |
|--------------|---|---|---|---|---|---|---|---|---|---|----|
| Blood Vessel | + | + | + | + | + | + | + | + | + | + | 10 |
| Heart        | + | + | + | + | + | + | + | + | + | + | 10 |

**Endocrine System**

|                    |   |   |   |   |   |   |   |   |   |   |    |
|--------------------|---|---|---|---|---|---|---|---|---|---|----|
| Adrenal Cortex     | + | + | + | + | + | + | + | + | + | + | 10 |
| Adrenal Medulla    | + | + | + | + | + | + | + | + | + | + | 10 |
| Islets, Pancreatic | + | + | + | + | + | + | + | + | + | + | 10 |

\* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 56348-02

Test Type: 90-DAY

Route: DOSED FEED

Species/Strain: Mouse/B6C3F1

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Test Compound: Citral

CAS Number: 5392-40-5

Date Report Requested: 10/22/2014

Time Report Requested: 05:30:53

First Dose M/F: NA / NA

Lab: BAT

B6C3F1 Mouse Male  
31300 PPM

| DAY ON TEST |   |   |   |   |   |   |   |   |   |   |
|-------------|---|---|---|---|---|---|---|---|---|---|
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1           | 1 | 1 | 9 | 1 | 9 | 9 | 9 | 9 | 9 | 1 |
| 4           | 0 | 3 | 0 | 3 | 3 | 3 | 3 | 3 | 3 | 0 |

| 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 |
| 5         | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 |

\*TOTALS

|                   |   |   |   |   |   |   |   |   |   |   |    |
|-------------------|---|---|---|---|---|---|---|---|---|---|----|
| Parathyroid Gland | + | + | M | + | M | M | + | + | + | M | 6  |
| Pituitary Gland   | + | + | + | + | + | M | + | + | + | + | 9  |
| 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, Mandibular | + | + | + | + | + | + | + | + | + | + | 10 |
| Lymph Node, Mesenteric | + | + | + | + | + | + | + | + | + | + | 10 |
| Spleen                 | + | + | + | + | + | + | + | + | + | + | 10 |
| Thymus                 | + | M | + | + | + | + | + | + | + | M | 8  |

**Integumentary System**

|               |   |   |   |   |   |   |   |   |   |   |    |
|---------------|---|---|---|---|---|---|---|---|---|---|----|
| Mammary Gland | M | + | M | + | M | M | M | M | M | M | 2  |
| Skin          | + | + | + | + | + | + | + | + | + | + | 10 |

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

**Experiment Number:** 56348-02  
**Test Type:** 90-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Mouse/B6C3F1

**P04: NEOPLASMS BY INDIVIDUAL ANIMAL**  
**Test Compound:** Citral  
**CAS Number:** 5392-40-5

**Date Report Requested:** 10/22/2014  
**Time Report Requested:** 05:30:53  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**B6C3F1 Mouse Male**  
**31300 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 |
|             | 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

**Musculoskeletal System**

Bone + + + + + + + + + + 10

**Nervous System**

Brain + + + + + + + + + + 10

**Respiratory System**

Lung + + + + + + + + + + 10

Nose + + + + + + + + + + 10

Trachea + + + + + + + + + + 10

**Special Senses System**

NONE

**Urinary System**

Kidney + + + + + + + + + + 10

Urinary Bladder + + + + + + + + M + 9

**SYSTEMIC LESIONS**

Multiple Organ + + + + + + + + + + 10

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

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

**Experiment Number:** 56348-02

**Test Type:** 90-DAY

**Route:** DOSED FEED

**Species/Strain:** Mouse/B6C3F1

**P04: NEOPLASMS BY INDIVIDUAL ANIMAL**

**Test Compound:** Citral

**CAS Number:** 5392-40-5

**Date Report Requested:** 10/22/2014

**Time Report Requested:** 05:30:53

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

**Lab:** BAT

| <b>B6C3F1 Mouse Female</b><br><b>UNTREAT CONTROL</b> | <b>DAY ON TEST</b> | 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 |
|  |                    | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 |

\*TOTALS

**Alimentary System**

|                           |   |   |   |   |   |   |   |   |   |   |    |
|---------------------------|---|---|---|---|---|---|---|---|---|---|----|
| Esophagus                 | + | + | + | + | + | + | + | + | + | + | 10 |
| Gallbladder               | + | + | + | + | M | + | + | + | + | + | 9  |
| 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 |
| Pancreas                  | + | + | + | + | + | + | + | + | + | + | 10 |
| Salivary Glands           | + | + | + | + | + | + | + | + | + | + | 10 |
| Stomach, Forestomach      | + | + | + | + | + | + | + | + | + | + | 10 |
| Stomach, Glandular        | + | + | + | + | + | + | + | + | + | + | 10 |

**Cardiovascular System**

|              |   |   |   |   |   |   |   |   |   |   |    |
|--------------|---|---|---|---|---|---|---|---|---|---|----|
| Blood Vessel | + | + | + | + | + | + | + | + | + | + | 10 |
| Heart        | + | + | + | + | + | + | + | + | + | + | 10 |

**Endocrine System**

|                    |   |   |   |   |   |   |   |   |   |   |    |
|--------------------|---|---|---|---|---|---|---|---|---|---|----|
| Adrenal Cortex     | + | + | + | + | + | + | + | + | + | + | 10 |
| Adrenal Medulla    | + | + | + | + | + | + | + | + | + | + | 10 |
| Islets, Pancreatic | + | + | + | + | + | + | + | + | + | + | 10 |

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

**Experiment Number:** 56348-02

**Test Type:** 90-DAY

**Route:** DOSED FEED

**Species/Strain:** Mouse/B6C3F1

**P04: NEOPLASMS BY INDIVIDUAL ANIMAL**

**Test Compound:** Citral

**CAS Number:** 5392-40-5

**Date Report Requested:** 10/22/2014

**Time Report Requested:** 05:30:53

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

**Lab:** BAT

| <b>B6C3F1 Mouse Female<br/>UNTREAT CONTROL</b> | 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>                                 |             |   |   |   |   |   |   |   |   |   |   |
| Parathyroid Gland                              |             | + | + | + | + | + | + | + | + | + | M |
| Pituitary Gland                                |             | + | + | + | + | + | + | + | + | + | + |
| Thyroid Gland                                  |             | + | + | + | + | + | + | + | + | + | + |
| <b>General Body System</b>                     |             |   |   |   |   |   |   |   |   |   |   |
| NONE   |             |   |   |   |   |   |   |   |   |   |   |
| <b>Genital System</b>                          |             |   |   |   |   |   |   |   |   |   |   |
| Clitoral Gland                                 |             | + | + | + | + | + | + | + | + | + | + |
| Ovary  |             | + | + | + | + | + | + | + | + | + | + |
| Uterus   |             | + | + | + | + | + | + | + | + | + | + |
| <b>Hematopoietic System</b>                    |             |   |   |   |   |   |   |   |   |   |   |
| Bone Marrow                                    |             | + | + | + | + | + | + | + | + | + | + |
| Lymph Node, Mandibular                         |             | + | + | + | + | + | + | + | + | + | + |
| Lymph Node, Mesenteric                         |             | + | + | + | + | + | + | + | + | + | + |
| Spleen   |             | + | + | + | + | + | + | + | + | + | + |
| Thymus   |             | + | + | + | + | + | + | + | + | + | + |
| <b>Integumentary System</b>                    |             |   |   |   |   |   |   |   |   |   |   |
| Mammary Gland                                  |             | + | + | + | + | + | + | + | + | + | + |
| Skin   |             | + | + | + | + | + | + | + | + | + | + |
| <b>Musculoskeletal System</b>                  |             |   |   |   |   |   |   |   |   |   |   |
| Bone   |             | + | + | + | + | + | + | + | + | + | + |

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

**Experiment Number:** 56348-02

**Test Type:** 90-DAY

**Route:** DOSED FEED

**Species/Strain:** Mouse/B6C3F1

**P04: NEOPLASMS BY INDIVIDUAL ANIMAL**

**Test Compound:** Citral

**CAS Number:** 5392-40-5

**Date Report Requested:** 10/22/2014

**Time Report Requested:** 05:30:53

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

**Lab:** BAT

| B6C3F1 Mouse Female<br>UNTREAT CONTROL | DAY ON TEST         | 0 0 0 0 0 0 0 0 0 0 |  |  |  |  |  |  |  |  |  |
|--|---------------------|---------------------|--|--|--|--|--|--|--|--|--|
|  |                     | 0 0 0 0 0 0 0 0 0 0 |  |  |  |  |  |  |  |  |  |
| ANIMAL ID                              | 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 0 |  |  |  |  |  |  |  |  |  |
|  | 6 6 6 6 6 6 6 6 6 7 | 6 6 6 6 6 6 6 6 6 7 |  |  |  |  |  |  |  |  |  |
|  | 1 2 3 4 5 6 7 8 9 0 | 1 2 3 4 5 6 7 8 9 0 |  |  |  |  |  |  |  |  |  |

\*TOTALS

**Nervous System**

Brain + + + + + + + + + + 10

**Respiratory System**

Lung + + + + + + + + + + 10

Nose + + + + + + + + + + 10

Trachea + + + + + + + + + + 10

**Special Senses System**

NONE

**Urinary System**

Kidney + + + + + + + + + + 10

Urinary Bladder + + + + + + + + + + 10

**SYSTEMIC LESIONS**

Multiple Organ + + + + + + + + + + 10

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

**Experiment Number:** 56348-02

**Test Type:** 90-DAY

**Route:** DOSED FEED

**Species/Strain:** Mouse/B6C3F1

**P04: NEOPLASMS BY INDIVIDUAL ANIMAL**

**Test Compound:** Citral

**CAS Number:** 5392-40-5

**Date Report Requested:** 10/22/2014

**Time Report Requested:** 05:30:53

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

**Lab:** BAT

| <b>B6C3F1 Mouse Female</b><br><b>VEHICLE CONTROL</b> | 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**

|                           |   |   |   |   |   |   |   |   |   |   |   |    |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|----|
| Esophagus                 | + | + | + | + | + | + | + | + | + | + | + | 10 |
| Gallbladder               | + | + | + | M | + | + | + | M | + | + | + | 8  |
| 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 |
| Pancreas                  | + | + | + | + | + | + | + | + | + | + | + | 10 |
| Salivary Glands           | + | + | + | + | + | + | + | + | + | + | + | 10 |
| Stomach, Forestomach      | + | + | + | + | + | + | + | + | + | + | + | 10 |
| Stomach, Glandular        | + | + | + | + | + | + | + | + | + | + | + | 10 |

**Cardiovascular System**

|              |   |   |   |   |   |   |   |   |   |   |   |    |
|--------------|---|---|---|---|---|---|---|---|---|---|---|----|
| Blood Vessel | + | + | + | + | + | + | + | + | + | + | + | 10 |
| Heart        | + | + | + | + | + | + | + | + | + | + | + | 10 |

**Endocrine System**

|                    |   |   |   |   |   |   |   |   |   |   |   |    |
|--------------------|---|---|---|---|---|---|---|---|---|---|---|----|
| Adrenal Cortex     | + | + | + | + | + | + | + | + | + | + | + | 10 |
| Adrenal Medulla    | + | + | + | + | + | + | + | + | + | + | + | 10 |
| Islets, Pancreatic | + | + | + | + | + | + | + | + | + | + | + | 10 |

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

**Experiment Number:** 56348-02  
**Test Type:** 90-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Mouse/B6C3F1

**P04: NEOPLASMS BY INDIVIDUAL ANIMAL**  
**Test Compound:** Citral  
**CAS Number:** 5392-40-5

**Date Report Requested:** 10/22/2014  
**Time Report Requested:** 05:30:53  
**First Dose M/F:** NA / NA  
**Lab:** BAT

| <b>B6C3F1 Mouse Female</b><br><b>VEHICLE CONTROL</b> | DAY ON TEST | 0              | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   |    |
|--|-------------|----------------|---|---|---|---|---|---|---|---|---|----|
|  | ANIMAL ID   | 0              | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   |    |
|  |             | 9              | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |   |    |
|  |             | 3              | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |   |    |
|  |             | 0              | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   |    |
|  |             | 7              | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 |   |    |
|  |             | 1              | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |   |    |
|  |             | <b>*TOTALS</b> |   |   |   |   |   |   |   |   |   |    |
| Parathyroid Gland                                    |             | +              | + | M | + | + | + | M | M | + | M | 6  |
| Pituitary Gland                                      |             | +              | + | + | + | + | + | + | + | + | + | 10 |
| Thyroid Gland  |             | +              | + | + | + | + | + | + | + | + | + | 10 |
| <b>General Body System</b>                           |             |                |   |   |   |   |   |   |   |   |   |    |
| NONE   |             |                |   |   |   |   |   |   |   |   |   |    |
| <b>Genital System</b>                                |             |                |   |   |   |   |   |   |   |   |   |    |
| Clitoral Gland                                       |             | +              | + | + | + | + | + | + | + | + | + | 10 |
| Ovary  |             | +              | + | + | + | + | + | + | + | + | + | 10 |
| Uterus   |             | +              | + | + | + | + | + | + | + | + | + | 10 |
| <b>Hematopoietic System</b>                          |             |                |   |   |   |   |   |   |   |   |   |    |
| Bone Marrow  |             | +              | + | + | + | + | + | + | + | + | + | 10 |
| Lymph Node, Mandibular                               |             | +              | + | + | + | + | + | + | + | + | + | 10 |
| Lymph Node, Mesenteric                               |             | +              | + | + | + | + | + | + | + | + | + | 10 |
| Spleen   |             | +              | + | + | + | + | + | + | + | + | + | 10 |
| Thymus   |             | +              | + | + | + | + | + | + | + | + | + | 10 |
| <b>Integumentary System</b>                          |             |                |   |   |   |   |   |   |   |   |   |    |
| Mammary Gland  |             | +              | + | + | + | + | + | + | + | + | + | 10 |
| Skin   |             | +              | + | + | + | + | + | + | + | + | + | 10 |
| <b>Musculoskeletal System</b>                        |             |                |   |   |   |   |   |   |   |   |   |    |
| Bone   |             | +              | + | + | + | + | + | + | + | + | + | 10 |

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

**Experiment Number:** 56348-02

**Test Type:** 90-DAY

**Route:** DOSED FEED

**Species/Strain:** Mouse/B6C3F1

**P04: NEOPLASMS BY INDIVIDUAL ANIMAL**

**Test Compound:** Citral

**CAS Number:** 5392-40-5

**Date Report Requested:** 10/22/2014

**Time Report Requested:** 05:30:53

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

**Lab:** BAT

| <b>B6C3F1 Mouse Female</b><br><b>VEHICLE CONTROL</b> | DAY ON TEST | 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 |
|  |             | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
|  |             | 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 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |             | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 |
|  |             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |

\*TOTALS

**Nervous System**

Brain + + + + + + + + + + 10

**Respiratory System**

Lung + + + + + + + + + + 10

Nose + + + + + + + + + + 10

Trachea + + + + + + + + + + 10

**Special Senses System**

NONE

**Urinary System**

Kidney + + + + + + + + + + 10

Urinary Bladder + + + + + + + + + + 10

**SYSTEMIC LESIONS**

Multiple Organ + + + + + + + + + + 10

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

**Experiment Number:** 56348-02  
**Test Type:** 90-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Mouse/B6C3F1

**P04: NEOPLASMS BY INDIVIDUAL ANIMAL**  
**Test Compound:** Citral  
**CAS Number:** 5392-40-5

**Date Report Requested:** 10/22/2014  
**Time Report Requested:** 05:30:53  
**First Dose M/F:** NA / NA  
**Lab:** BAT

DAY ON TEST

**B6C3F1 Mouse Female**  
**3900 PPM**

ANIMAL ID

**\*TOTALS**

**Alimentary System**

NONE

**Cardiovascular System**

NONE

**Endocrine System**

NONE

**General Body System**

NONE

**Genital System**

NONE

**Hematopoietic System**

NONE

**Integumentary System**

NONE

**Musculoskeletal System**

NONE

**Nervous System**

NONE

\* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

**Experiment Number:** 56348-02

**Test Type:** 90-DAY

**Route:** DOSED FEED

**Species/Strain:** Mouse/B6C3F1

**P04: NEOPLASMS BY INDIVIDUAL ANIMAL**

**Test Compound:** Citral

**CAS Number:** 5392-40-5

**Date Report Requested:** 10/22/2014

**Time Report Requested:** 05:30:53

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

**Lab:** BAT

DAY ON TEST

**B6C3F1 Mouse Female**

**3900 PPM**

ANIMAL ID

**\*TOTALS**

**Respiratory System**

NONE

**Special Senses System**

NONE

**Urinary System**

NONE

**SYSTEMIC LESIONS**

|                |   |
|----------------|---|
| Multiple Organ | 0 |
|----------------|---|

\* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

**Experiment Number:** 56348-02

**Test Type:** 90-DAY

**Route:** DOSED FEED

**Species/Strain:** Mouse/B6C3F1

**P04: NEOPLASMS BY INDIVIDUAL ANIMAL**

**Test Compound:** Citral

**CAS Number:** 5392-40-5

**Date Report Requested:** 10/22/2014

**Time Report Requested:** 05:30:53

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

**Lab:** BAT

| <b>B6C3F1 Mouse Female</b><br><b>7800 PPM</b> | DAY ON TEST | 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           | 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**

Stomach, Forestomach

+ + + + + + + + + +

10

**Cardiovascular System**

NONE

**Endocrine System**

NONE

**General Body System**

NONE

**Genital System**

Ovary

+ + + + + + + + + +

10

**Hematopoietic System**

NONE

**Integumentary System**

NONE

**Musculoskeletal System**

NONE

**Nervous System**

NONE

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

**Experiment Number:** 56348-02

**Test Type:** 90-DAY

**Route:** DOSED FEED

**Species/Strain:** Mouse/B6C3F1

**P04: NEOPLASMS BY INDIVIDUAL ANIMAL**

**Test Compound:** Citral

**CAS Number:** 5392-40-5

**Date Report Requested:** 10/22/2014

**Time Report Requested:** 05:30:53

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

**Lab:** BAT

| <b>B6C3F1 Mouse Female<br/>7800 PPM</b> | <b>DAY ON TEST</b> | 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 |
|   |                    | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
|   | <b>ANIMAL ID</b>   | 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 | 0 |
|   |                    | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |

\*TOTALS

**Respiratory System**

NONE

**Special Senses System**

NONE

**Urinary System**

NONE

**SYSTEMIC LESIONS**

Multiple Organ

+ + + + + + + + + + +

10

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

**Experiment Number:** 56348-02

**Test Type:** 90-DAY

**Route:** DOSED FEED

**Species/Strain:** Mouse/B6C3F1

**P04: NEOPLASMS BY INDIVIDUAL ANIMAL**

**Test Compound:** Citral

**CAS Number:** 5392-40-5

**Date Report Requested:** 10/22/2014

**Time Report Requested:** 05:30:53

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

**Lab:** BAT

| <b>B6C3F1 Mouse Female</b><br><b>15600 PPM</b> | <b>DAY ON TEST</b> | 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 |
|  |                    | 3              | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
|  | <b>ANIMAL ID</b>   | 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 |
|  |                    | 0              | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
|  |                    | 1              | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|  |                    | <b>*TOTALS</b> |   |   |   |   |   |   |   |   |

**Alimentary System**

Stomach, Forestomach

+ + + + + + + + + +

10

**Cardiovascular System**

NONE

**Endocrine System**

NONE

**General Body System**

NONE

**Genital System**

Ovary

+ + + + + + + + + +

10

**Hematopoietic System**

NONE

**Integumentary System**

NONE

**Musculoskeletal System**

NONE

**Nervous System**

NONE

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

**Experiment Number:** 56348-02

**Test Type:** 90-DAY

**Route:** DOSED FEED

**Species/Strain:** Mouse/B6C3F1

**P04: NEOPLASMS BY INDIVIDUAL ANIMAL**

**Test Compound:** Citral

**CAS Number:** 5392-40-5

**Date Report Requested:** 10/22/2014

**Time Report Requested:** 05:30:53

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

**Lab:** BAT

| B6C3F1 Mouse Female<br>15600 PPM | DAY ON TEST | 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           | 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

**Respiratory System**

NONE

**Special Senses System**

NONE

**Urinary System**

NONE

**SYSTEMIC LESIONS**

Multiple Organ

+ + + + + + + + + + +

10

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

**Experiment Number:** 56348-02

**Test Type:** 90-DAY

**Route:** DOSED FEED

**Species/Strain:** Mouse/B6C3F1

**P04: NEOPLASMS BY INDIVIDUAL ANIMAL**

**Test Compound:** Citral

**CAS Number:** 5392-40-5

**Date Report Requested:** 10/22/2014

**Time Report Requested:** 05:30:53

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

**Lab:** BAT

| <b>B6C3F1 Mouse Female</b><br><b>31300 PPM</b> | DAY ON TEST | 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       |
|  |             | 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       |
|  |             | 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       |
|  |             |   |   |   |   |   |   |   |   | *TOTALS |

**Alimentary System**

|                           |   |   |   |   |   |   |   |   |   |   |    |
|---------------------------|---|---|---|---|---|---|---|---|---|---|----|
| Esophagus                 | + | + | M | + | + | + | + | + | + | + | 9  |
| Gallbladder               | + | + | + | + | + | + | + | + | + | + | 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 |
| Pancreas                  | + | + | + | + | + | + | + | + | + | + | 10 |
| Salivary Glands           | + | + | + | + | + | + | + | + | + | + | 10 |
| Stomach, Forestomach      | + | + | + | + | + | + | + | + | + | + | 10 |
| Stomach, Glandular        | + | + | + | + | + | + | + | + | + | + | 10 |

**Cardiovascular System**

|              |   |   |   |   |   |   |   |   |   |   |    |
|--------------|---|---|---|---|---|---|---|---|---|---|----|
| Blood Vessel | + | + | + | + | + | + | + | + | + | + | 10 |
| Heart        | + | + | + | + | + | + | + | + | + | + | 10 |

**Endocrine System**

|                    |   |   |   |   |   |   |   |   |   |   |    |
|--------------------|---|---|---|---|---|---|---|---|---|---|----|
| Adrenal Cortex     | + | + | + | + | + | + | + | + | + | + | 10 |
| Adrenal Medulla    | + | + | + | + | + | + | + | + | + | + | 10 |
| Islets, Pancreatic | + | + | + | + | + | + | + | + | + | + | 10 |

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

**Experiment Number:** 56348-02  
**Test Type:** 90-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Mouse/B6C3F1

**P04: NEOPLASMS BY INDIVIDUAL ANIMAL**  
**Test Compound:** Citral  
**CAS Number:** 5392-40-5

**Date Report Requested:** 10/22/2014  
**Time Report Requested:** 05:30:53  
**First Dose M/F:** NA / NA  
**Lab:** BAT

| <b>B6C3F1 Mouse Female</b><br><b>31300 PPM</b> | DAY ON TEST         | 0 0 0 0 0 0 0 0 0 0 |  |  |  |  |  |  |  |  |  |
|--|---------------------|---------------------|--|--|--|--|--|--|--|--|--|
|  |                     | 0 0 0 0 0 0 0 0 0 0 |  |  |  |  |  |  |  |  |  |
| ANIMAL ID                                      | 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 |  |  |  |  |  |  |  |  |  |
|  | 1 1 1 1 1 1 1 1 1 1 | 1 1 1 1 1 1 1 1 1 1 |  |  |  |  |  |  |  |  |  |
|  | 1 1 1 1 1 1 1 1 1 2 | 1 1 1 1 1 1 1 1 1 2 |  |  |  |  |  |  |  |  |  |
|  | 1 2 3 4 5 6 7 8 9 0 | *TOTALS             |  |  |  |  |  |  |  |  |  |
| Parathyroid Gland                              | + + M + + + + + M + | 8                   |  |  |  |  |  |  |  |  |  |
| Pituitary Gland                                | + + + + + + + + + + | 10                  |  |  |  |  |  |  |  |  |  |
| Thyroid Gland                                  | + + M + + + + + + + | 9                   |  |  |  |  |  |  |  |  |  |
| <b>General Body System</b>                     |                     |                     |  |  |  |  |  |  |  |  |  |
| NONE   |                     |                     |  |  |  |  |  |  |  |  |  |
| <b>Genital System</b>                          |                     |                     |  |  |  |  |  |  |  |  |  |
| Clitoral Gland                                 | + + + + + + + + + + | 10                  |  |  |  |  |  |  |  |  |  |
| Ovary  | + + + + + + + + + + | 10                  |  |  |  |  |  |  |  |  |  |
| Uterus   | + + + + + + + + + + | 10                  |  |  |  |  |  |  |  |  |  |
| <b>Hematopoietic System</b>                    |                     |                     |  |  |  |  |  |  |  |  |  |
| Bone Marrow                                    | + + + + + + + + + + | 10                  |  |  |  |  |  |  |  |  |  |
| Lymph Node, Mandibular                         | + + M + + + + + + + | 9                   |  |  |  |  |  |  |  |  |  |
| Lymph Node, Mesenteric                         | + + + + + + + + + + | 10                  |  |  |  |  |  |  |  |  |  |
| Spleen   | + + + + + + + + + + | 10                  |  |  |  |  |  |  |  |  |  |
| Thymus   | + + + + + + + + + + | 10                  |  |  |  |  |  |  |  |  |  |
| <b>Integumentary System</b>                    |                     |                     |  |  |  |  |  |  |  |  |  |
| Mammary Gland                                  | + + + + + + + + + + | 10                  |  |  |  |  |  |  |  |  |  |
| Skin   | + + + + + + + + + + | 10                  |  |  |  |  |  |  |  |  |  |
| <b>Musculoskeletal System</b>                  |                     |                     |  |  |  |  |  |  |  |  |  |
| Bone   | + + + + + + + + + + | 10                  |  |  |  |  |  |  |  |  |  |

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

**Experiment Number:** 56348-02

**Test Type:** 90-DAY

**Route:** DOSED FEED

**Species/Strain:** Mouse/B6C3F1

**P04: NEOPLASMS BY INDIVIDUAL ANIMAL**

**Test Compound:** Citral

**CAS Number:** 5392-40-5

**Date Report Requested:** 10/22/2014

**Time Report Requested:** 05:30:53

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

**Lab:** BAT

| <b>B6C3F1 Mouse Female</b><br><b>31300 PPM</b> | DAY ON TEST | 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 |  |
|  |             | 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 |  |
|  |             | 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 |  |
|  |             | *TOTALS |   |   |   |   |   |   |   |   |  |

**Nervous System**

Brain + + + + + + + + + + 10

**Respiratory System**

Lung + M + + + + + + + + 9

Nose + + + + + + + + + + 10

Trachea + + M + + + + + + + 9

**Special Senses System**

NONE

**Urinary System**

Kidney + + + + + + + + + + 10

Urinary Bladder + + + + + + + + + + 10

**SYSTEMIC LESIONS**

Multiple Organ + + + + + + + + + + 10

\*\* END OF REPORT \*\*

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue