

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:20  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

<b>C Number:</b>	C92002B
<b>Lock Date:</b>	Not Entered.
<b>Cage Range:</b>	All
<b>Date Range:</b>	All
<b>Reasons For Removal:</b>	All
<b>Removal Date Range:</b>	All
<b>Treatment Groups:</b>	All
<b>Study Gender:</b>	Both
<b>PWG Approval Date</b>	NONE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:20  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 1	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 61
	<b>DOSE:</b> 0PPM/M FUMON-01	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100001

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

* Adrenal Gland	* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum
* Bone Marrow	* Brain - Cerebellum	* Brain - Cerebrum	* Coagulating Gland
* Epididymis	* Esophagus	* Eye	* Harderian Gland
* Heart	* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum
* Intestine Small - Duodenum	* Intestine Small - Ileum	* Intestine Small - Jejunum	* Kidney
* Lacrimal Gland	* Larynx	* Liver	* Lung - Bronchus
* Lymph Node - Mandibular	* Lymph Node - Mesenteric	* Pancreas	* Parathyroid Gland
* Peripheral Nerve - Sciatic	* Pituitary Gland	* Preputial Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	* Skeletal Muscle - Thigh	* Skin
* Spinal Cord - Thoracic	* Spleen	* Stomach - Forestomach	* Stomach - Glandular
* Testes	* Thymus	* Thyroid Gland	* Tongue
* Trachea	* Urinary Bladder	* Zymbal's Gland	

---

**MISSING**

\* Mammary Gland

---

**OBSERVATIONS**

* Bone	Scapula	Osteoma	
Note: BONE OVER DECALCIFIED [ Osteoma TGLS = 1-14 ]			
* Nose	Nasolacrim Dct	Inflammation	Chronic, Mild
* Preputial GI			
Note: ONLY ONE			

---

**PRIMARY CAUSE OF DEATH** - UNCERTAIN

---

Animal Note: COD...UNKNOWN

---

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92002-03  
Test Type: CHRONIC  
Species/Strain: Rat/F 344/NCTR

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
Test Compound: Fumonisin B1  
CAS Number: 116355-83-0

Date Report Requested: 10/15/2014  
Time Report Requested: 18:08:20  
First Dose M/F: NA / NA  
Lab: NCTR

---

<b>ANIMAL ID:</b> 6	<b>TRT#:</b> 4	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 238
	<b>DOSE:</b> 50PPM/M FUMON-04	<b>DISP:</b> Natural Death	<b>HISTO:</b> 21080100006

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

* Adrenal Gland	* Blood Vessel - Aorta	* Bone - Sternum	* Brain - Cerebellum
* Brain - Cerebrum	* Coagulating Gland	* Epididymis	* Esophagus
* Eye	* Harderian Gland	* Heart	* Intestine Large - Rectum
* Intestine Small - Duodenum	* Lacrimal Gland	* Larynx	* Liver
* Lung - Bronchus	* Lymph Node - Mandibular	* Lymph Node - Mesenteric	* Mammary Gland
* Nose	* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Pituitary Gland
* Preputial Gland	* Prostate	* Salivary Glands	* Seminal Vesicle
* Skeletal Muscle - Thigh	* Skin	* Spinal Cord - Thoracic	* Stomach - Forestomach
* Stomach - Glandular	* Testes	* Thyroid Gland	* Tongue
* Trachea	* Urinary Bladder		

---

**MISSING**

* Bone - Femur	* Thymus	* Zymbal's Gland	
----------------	----------	------------------	--

---

**AUTO PRECLUDES DIAG.**

* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Small - Ileum	* Intestine Small - Jejunum
---------------------------	---------------------------	---------------------------	-----------------------------

---

**OBSERVATIONS**

* Adrenal Gland Note: ONLY ONE			
* Bone Marrow		Hyperplasia	Mild
* Eye Note: NO RETINA			
* Kidney  [ Nephroblastoma TGLS = 2-2 ]		Nephroblastoma Nephropathy	Minimal
* Liver Note: TGL # 03 - NO MICROSCOPIC CORRELATE			
* Lung	Interstitium	Inflammation	Acute, Mild
* Pancreas	Acinar Cell	Atrophy Infiltration Cellular	Focal, Minimal Lymphocytic, Minimal
* Preputial Gland Note: ONLY ONE			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:20  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 6	<b>TRT#:</b> 4	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 238
	<b>DOSE:</b> 50PPM/M FUMON-04	<b>DISP:</b> Natural Death	<b>HISTO:</b> 21080100006

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

* Spleen [ Hematopoietic Cell Proliferation TGLS = 1-6 ]	Hematopoietic Cell Proliferation	Mild
---	----------------------------------	------

---

**PRIMARY CAUSE OF DEATH** - Kidney Nephroblastoma

---

Animal Note: COD...PROBABLE-NEPHROBLASTOMA

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:20  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 12	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 284
	<b>DOSE:</b> 0PPM/M FUMON-01	<b>DISP:</b> Harvest	<b>HISTO:</b> 21080100012

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Adrenal Gland	Blood Vessel - Aorta	Bone - Femur	Bone - Sternum
Bone Marrow	Brain - Cerebellum	Brain - Cerebrum	Coagulating Gland
Epididymis	Esophagus	Eye	Harderian Gland
Intestine Large - Colon	Intestine Large - Rectum	Intestine Small - Duodenum	Intestine Small - Ileum
Intestine Small - Jejunum	Lacrimal Gland	Larynx	Lung - Bronchus
Lymph Node - Mandibular	Lymph Node - Mesenteric	Nose	Parathyroid Gland
Peripheral Nerve - Sciatic	Prostate	Salivary Glands	Seminal Vesicle
Skeletal Muscle - Thigh	Skin	Spinal Cord - Thoracic	Spleen
Stomach - Forestomach	Stomach - Glandular	Testes	Thymus
Thyroid Gland	Tongue	Trachea	Urinary Bladder
Zymbal's Gland			

---

**MISSING**

Intestine Large - Cecum

---

**OBSERVATIONS**

Heart		Cardiomyopathy	Minimal
Kidney	Bilateral	Nephropathy	Minimal
Liver	Bile Duct	Hyperplasia	Minimal
	Hepatocyte	Vacuolization Cytoplasmic	Minimal
Mammary Gland		Cyst	Minimal
Pancreas	Acinar Cell	Atrophy	Focal, Minimal
Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 1-11 ]			
Preputial Gland		Inflammation	Chronic, Minimal

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:20  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 13	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 284
	<b>DOSE:</b> 0PPM/M FUMON-01	<b>DISP:</b> Harvest	<b>HISTO:</b> 21080100013

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Adrenal Gland	Blood Vessel - Aorta	Bone - Femur	Bone - Sternum
Bone Marrow	Brain - Cerebellum	Brain - Cerebrum	Coagulating Gland
Epididymis	Esophagus	Eye	Intestine Large - Colon
Intestine Large - Rectum	Intestine Small - Duodenum	Intestine Small - Ileum	Intestine Small - Jejunum
Kidney	Lacrimal Gland	Larynx	Lung - Bronchus
Lymph Node - Mandibular	Lymph Node - Mesenteric	Mammary Gland	Pancreas
Parathyroid Gland	Peripheral Nerve - Sciatic	Pituitary Gland	Preputial Gland
Prostate	Salivary Glands	Seminal Vesicle	Skeletal Muscle - Thigh
Skin	Spinal Cord - Thoracic	Spleen	Stomach - Forestomach
Stomach - Glandular	Testes	Thyroid Gland	Tongue
Trachea	Urinary Bladder		

---

**MISSING**

Intestine Large - Cecum	Zymbal's Gland
-------------------------	----------------

---

**OBSERVATIONS**

Bone	Turbinate	Hyperostosis	Mild
Harderian Gland		Infiltration Cellular	Lymphocytic, Minimal
Heart		Cardiomyopathy	Mild
Liver		Necrosis	Minimal
Nose	Nasolacrim Dct	Inflammation	Chronic, Minimal
Thymus		Hemorrhage	Minimal

---

**PRIMARY CAUSE OF DEATH** -

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:20  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 14	<b>TRT#:</b> 4	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 284
	<b>DOSE:</b> 50PPM/M FUMON-04	<b>DISP:</b> Harvest	<b>HISTO:</b> 21080100014

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Adrenal Gland	Blood Vessel - Aorta	Bone - Femur	Bone - Sternum
Bone Marrow	Brain - Cerebellum	Brain - Cerebrum	Coagulating Gland
Epididymis	Esophagus	Eye	Harderian Gland
Intestine Large - Colon	Intestine Small - Duodenum	Intestine Small - Ileum	Intestine Small - Jejunum
Kidney	Lacrimal Gland	Larynx	Lung - Bronchus
Lymph Node - Mandibular	Lymph Node - Mesenteric	Mammary Gland	Nose
Parathyroid Gland	Peripheral Nerve - Sciatic	Preputial Gland	Prostate
Salivary Glands	Seminal Vesicle	Skeletal Muscle - Thigh	Skin
Spinal Cord - Thoracic	Spleen	Stomach - Forestomach	Stomach - Glandular
Testes	Tongue	Trachea	Urinary Bladder
Zymbal's Gland			

---

**MISSING**

Intestine Large - Cecum

---

**OBSERVATIONS**

Heart		Cardiomyopathy	Minimal
Intestine Large	Epithelium, Rectum	Hyperplasia	Focal, Minimal
Liver		Basophilic Focus	
Pancreas	Acinar Cell	Atrophy	Focal, Mild
Pituitary Gland	Pars Distalis	Hyperplasia	Focal, Minimal
Preputial GI			
Note: ONLY ONE PRESENT			
Thymus		Hemorrhage	Minimal
Thyroid Gland	C Cell	Adenoma	

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:20  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 15	<b>TRT#:</b> 4	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 284
	<b>DOSE:</b> 50PPM/M FUMON-04	<b>DISP:</b> Harvest	<b>HISTO:</b> 21080100015

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Adrenal Gland	Blood Vessel - Aorta	Bone - Femur	Bone - Sternum
Bone Marrow	Brain - Cerebellum	Brain - Cerebrum	Coagulating Gland
Epididymis	Esophagus	Eye	Intestine Large - Colon
Intestine Large - Rectum	Intestine Small - Duodenum	Intestine Small - Ileum	Intestine Small - Jejunum
Larynx	Liver	Lung - Bronchus	Lymph Node - Mandibular
Mammary Gland	Nose	Pancreas	Parathyroid Gland
Peripheral Nerve - Sciatic	Pituitary Gland	Preputial Gland	Prostate
Salivary Glands	Seminal Vesicle	Skeletal Muscle - Thigh	Skin
Spinal Cord - Thoracic	Spleen	Stomach - Forestomach	Stomach - Glandular
Testes	Thyroid Gland	Tongue	Trachea
Urinary Bladder			

---

**MISSING**

Intestine Large - Cecum	Lymph Node - Mesenteric	Zymbal's Gland
-------------------------	-------------------------	----------------

---

**OBSERVATIONS**

Adrenal Gland			
Note: MEDULLA ONLY ONE			
Harderian Gland		Inflammation	Chronic, Minimal
Heart		Cardiomyopathy	Minimal
Kidney	Bilateral	Nephropathy	Minimal
Lacrimal Gland		Atrophy	Focal, Minimal
Lymph Node			
Note: MESENTERIC MISSING AT TRIM			
Thymus		Hemorrhage	Minimal

---

**PRIMARY CAUSE OF DEATH** -

---

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:20  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 16

**TRT#:** 4

**SEX:** Male

**DAY ON TEST:** 321

**DOSE:** 50PPM/M FUMON-04

**DISP:** Moribund

**HISTO:** 21080100016

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Gland	* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum
* Bone Marrow	* Brain - Cerebellum	* Brain - Cerebrum	* Coagulating Gland
* Epididymis	* Esophagus	* Heart	* Intestine Large - Cecum
* Intestine Large - Colon	* Intestine Large - Rectum	* Intestine Small - Duodenum	* Intestine Small - Ileum
* Intestine Small - Jejunum	* Kidney	* Lacrimal Gland	* Larynx
* Lung - Bronchus	* Lymph Node - Mandibular	* Mammary Gland	* Nose
* Pancreas	* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Pituitary Gland
* Prostate	* Salivary Glands	* Seminal Vesicle	* Skeletal Muscle - Thigh
* Skin	* Spinal Cord - Thoracic	* Spleen	* Stomach - Forestomach
* Stomach - Glandular	* Testes	* Thyroid Gland	* Tongue
* Trachea	* Urinary Bladder		

**MISSING**

\* Zymbal's Gland

**OBSERVATIONS**

* Adrenal Gland			
Note: MEDULLA ONLY ONE			
* Eye	Bilateral, Retina	Atrophy	Moderate
* Harderian Gland		Infiltration Cellular	Lymphocytic, Minimal
* Liver		Hepatodiaphragmatic Nodule	
		Necrosis	Moderate
[ Hepatodiaphragmatic Nodule TGLS = 2-6 ]			
* Lymph Node	Mesenteric	Hyperplasia	Mild
* Preputial Gland		Adenoma	
[ Adenoma TGLS = 1-14 ]			
* Skin			
Note: TGL#1-NOTED GROSSLY AS SKIN WAS PREPUTIAL			
* Thymus		Atrophy	Minimal
		Hemorrhage	Mild

**PRIMARY CAUSE OF DEATH**

- Preputial Gland Adenoma

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:20  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

**ANIMAL ID:** 16

**TRT#:** 4

**SEX:** Male

**DAY ON TEST:** 321

**DOSE:** 50PPM/M FUMON-04

**DISP:** Moribund

**HISTO:** 21080100016

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

Animal Note: COD...PROBABLE-PREPUTIAL GLAND,ADENOMA

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:20  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

<b>ANIMAL ID:</b> 19	<b>TRT#:</b> 1 <b>DOSE:</b> 0PPM/M FUMON-01	<b>SEX:</b> Male <b>DISP:</b> Moribund	<b>DAY ON TEST:</b> 334 <b>HISTO:</b> 21080100019
----------------------	--	---	--

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Brain - Cerebellum	* Brain - Cerebrum
* Coagulating Gland	* Epididymis	* Esophagus	* Intestine Large - Cecum
* Intestine Large - Colon	* Intestine Large - Rectum	* Intestine Small - Duodenum	* Intestine Small - Ileum
* Intestine Small - Jejunum	* Larynx	* Lung - Bronchus	* Lymph Node - Mandibular
* Lymph Node - Mesenteric	* Mammary Gland	* Nose	* Parathyroid Gland
* Peripheral Nerve - Sciatic	* Prostate	* Salivary Glands	* Seminal Vesicle
* Skeletal Muscle - Thigh	* Skin	* Spinal Cord - Thoracic	* Spleen
* Stomach - Forestomach	* Stomach - Glandular	* Testes	* Thyroid Gland
* Tongue	* Trachea	* Urinary Bladder	

**MISSING**

* Adrenal Gland	* Bone - Sternum	* Bone Marrow	* Lacrimal Gland
* Thymus	* Zymbal's Gland		

**OBSERVATIONS**

* Eye	Bilateral, Retina	Atrophy	Moderate
* Harderian Gland		Infiltration Cellular	Lymphocytic, Minimal
* Heart		Cardiomyopathy	Minimal
* Kidney	Bilateral	Nephropathy	Mild
* Liver		Necrosis	Moderate
	Hepatocyte	Vacuolization Cytoplasmic	Minimal
[ Necrosis TGLS = 1,2-6 + 6.1 ]			
* Pancreas	Acinar Cell	Atrophy	Focal, Minimal
* Pituitary Gland	Pars Distalis	Hyperplasia	Focal, Marked
* Preputial Gland		Inflammation	Chronic, Minimal

**PRIMARY CAUSE OF DEATH** - Liver Necrosis

Animal Note: B & B STAINING DOES NOT REVEAL BACTERIA IN FOCI OF NECROSIS

Animal Note: COD...PROBABLE-LIVER,NECROSIS

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92002-03  
Test Type: CHRONIC  
Species/Strain: Rat/F 344/NCTR

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
Test Compound: Fumonisin B1  
CAS Number: 116355-83-0

Date Report Requested: 10/15/2014  
Time Report Requested: 18:08:20  
First Dose M/F: NA / NA  
Lab: NCTR

---

<b>ANIMAL ID:</b> 20	<b>TRT#:</b> 5	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 319
	<b>DOSE:</b> 150PPM/MFUMON-05	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100020

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Adrenal Gland	Blood Vessel - Aorta	Bone - Femur	Bone - Sternum
Bone Marrow	Brain - Cerebellum	Brain - Cerebrum	Coagulating Gland
Epididymis	Esophagus	Eye	Heart
Intestine Large - Colon	Intestine Large - Rectum	Intestine Small - Duodenum	Intestine Small - Ileum
Intestine Small - Jejunum	Lacrimal Gland	Larynx	Lung - Bronchus
Lymph Node - Mandibular	Lymph Node - Mesenteric	Mammary Gland	Parathyroid Gland
Peripheral Nerve - Sciatic	Pituitary Gland	Preputial Gland	Prostate
Salivary Glands	Seminal Vesicle	Skeletal Muscle - Thigh	Skin
Spinal Cord - Thoracic	Spleen	Stomach - Forestomach	Stomach - Glandular
Testes	Thyroid Gland	Tongue	Trachea
Urinary Bladder	Zymbal's Gland		

---

**OBSERVATIONS**

Harderian Gland		Infiltration Cellular	Lymphocytic, Minimal
Intestine Large	Cecum	Parasite Metazoan	
* Kidney	Bilateral	Nephropathy	Minimal
* Liver		Hepatodiaphragmatic Nodule	
	Bile Duct	Hyperplasia	Minimal
[ Hepatodiaphragmatic Nodule TGLS = 1-6 ]			
Nose	Nasolacrim Dct	Inflammation	Chronic, Minimal
Pancreas	Acinar Cell	Atrophy	Focal, Minimal
Thymus		Hemorrhage	Minimal

---

PRIMARY CAUSE OF DEATH - UNCERTAIN

---

Animal Note: COD...UNKNOWN

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:20  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 21

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 319

**DOSE:** 150PPM/MFUMON-05

**DISP:** Moribund

**HISTO:** 21080100021

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Adrenal Gland	Blood Vessel - Aorta	Bone - Femur	Bone - Sternum
Bone Marrow	Brain - Cerebellum	Brain - Cerebrum	Coagulating Gland
Epididymis	Esophagus	Eye	Harderian Gland
Heart	Intestine Large - Cecum	Intestine Small - Duodenum	Intestine Small - Ileum
Intestine Small - Jejunum	* Kidney	Larynx	Lung - Bronchus
Lymph Node - Mandibular	Lymph Node - Mesenteric	Mammary Gland	Nose
Pancreas	Peripheral Nerve - Sciatic	Preputial Gland	Prostate
Salivary Glands	Seminal Vesicle	Skeletal Muscle - Thigh	Skin
Spinal Cord - Thoracic	Spleen	Stomach - Forestomach	Stomach - Glandular
Testes	Thyroid Gland	Tongue	Trachea
Urinary Bladder			

**MISSING**

Zymbal's Gland

**OBSERVATIONS**

Intestine Large	Colon	Parasite Metazoan	
	Rectum	Parasite Metazoan	
Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Liver	Bile Duct	Hyperplasia	Minimal
Parathyroid Gland		Hyperplasia	Focal, Mild
Pituitary Gland	Pars Distalis	Adenoma	
Thymus		Hemorrhage	Minimal

**PRIMARY CAUSE OF DEATH**

- UNCERTAIN

Animal Note: COD...UNKNOWN

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92002-03  
Test Type: CHRONIC  
Species/Strain: Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

Test Compound: Fumonisin B1  
CAS Number: 116355-83-0

Date Report Requested: 10/15/2014  
Time Report Requested: 18:08:20  
First Dose M/F: NA / NA  
Lab: NCTR

---

<b>ANIMAL ID:</b> 22	<b>TRT#:</b> 5	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 319
	<b>DOSE:</b> 150PPM/MFUMON-05	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100022

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Adrenal Gland	Blood Vessel - Aorta	Bone - Femur	Bone - Sternum
Bone Marrow	Brain - Cerebellum	Brain - Cerebrum	Coagulating Gland
Epididymis	Esophagus	Eye	Intestine Large - Cecum
Intestine Large - Colon	Intestine Large - Rectum	Intestine Small - Duodenum	Intestine Small - Ileum
Intestine Small - Jejunum	* Kidney	Lacrimal Gland	Larynx
Lung - Bronchus	Lymph Node - Mandibular	Lymph Node - Mesenteric	Mammary Gland
Nose	Parathyroid Gland	Peripheral Nerve - Sciatic	Preputial Gland
Prostate	Salivary Glands	Seminal Vesicle	Skeletal Muscle - Thigh
Skin	Spinal Cord - Thoracic	Spleen	Stomach - Forestomach
Stomach - Glandular	Testes	Thyroid Gland	Tongue
Trachea	Urinary Bladder	Zymbal's Gland	

---

**OBSERVATIONS**

Harderian Gland		Infiltration Cellular	Lymphocytic, Minimal
Heart		Cardiomyopathy	Mild
* Liver	Bile Duct	Hyperplasia	Minimal
		Necrosis	Minimal
Pancreas	Acinar Cell	Atrophy	Focal, Minimal
Pituitary Gland	Pars Distalis	Hyperplasia	Focal, Mild
Thymus		Hemorrhage	Minimal

---

PRIMARY CAUSE OF DEATH - UNCERTAIN

---

Animal Note: COD...UNKNOWN

---

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92002-03  
Test Type: CHRONIC  
Species/Strain: Rat/F 344/NCTR

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
Test Compound: Fumonisin B1  
CAS Number: 116355-83-0

Date Report Requested: 10/15/2014  
Time Report Requested: 18:08:20  
First Dose M/F: NA / NA  
Lab: NCTR

ANIMAL ID: 23

TRT#: 5

SEX: Male

DAY ON TEST: 319

DOSE: 150PPM/MFUMON-05

DISP: Moribund

HISTO: 21080100023

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland	Blood Vessel - Aorta	Bone - Femur	Bone - Sternum
Bone Marrow	Brain - Cerebellum	Brain - Cerebrum	Coagulating Gland
Epididymis	Esophagus	Eye	Intestine Large - Cecum
Intestine Large - Colon	Intestine Large - Rectum	Intestine Small - Duodenum	Intestine Small - Ileum
Intestine Small - Jejunum	Lacrimal Gland	Larynx	Lung - Bronchus
Lymph Node - Mandibular	Lymph Node - Mesenteric	Parathyroid Gland	Peripheral Nerve - Sciatic
Pituitary Gland	Prostate	Salivary Glands	Seminal Vesicle
Skeletal Muscle - Thigh	Skin	Spinal Cord - Thoracic	Spleen
Stomach - Forestomach	Stomach - Glandular	Thyroid Gland	Tongue
Trachea	Zymbal's Gland		

OBSERVATIONS

Harderian Gland		Inflammation	Chronic, Minimal
Heart		Cardiomyopathy	Minimal
* Kidney		Cyst	Mild
	Bilateral	Nephropathy	Minimal
* Liver	Bile Duct	Hyperplasia	Mild
Mammary Gland		Galactocele	Minimal
Nose	Nasolacrim Dct	Inflammation	Chronic, Minimal
Pancreas	Acinar Cell	Atrophy	Focal, Mild
Preputial Gland	Bilateral	Inflammation	Chronic, Minimal
Testes	Interstit Cell	Hyperplasia	Focal, Minimal
Thymus		Hemorrhage	Minimal
Urinary Bladder		Infiltration Cellular	Lymphocytic, Minimal

PRIMARY CAUSE OF DEATH

- UNCERTAIN

Animal Note: COD...UNKNOWN

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92002-03  
 Test Type: CHRONIC  
 Species/Strain: Rat/F 344/NCTR

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
 Test Compound: Fumonisin B1  
 CAS Number: 116355-83-0

Date Report Requested: 10/15/2014  
 Time Report Requested: 18:08:20  
 First Dose M/F: NA / NA  
 Lab: NCTR

ANIMAL ID: 30

TRT#: 1

SEX: Male

DAY ON TEST: 390

DOSE: 0PPM/M FUMON-01

DISP: Natural Death

HISTO: 21080100030

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Gland	* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum
* Brain - Cerebellum	* Brain - Cerebrum	* Coagulating Gland	* Epididymis
* Esophagus	* Eye	* Harderian Gland	* Intestine Large - Rectum
* Lacrimal Gland	* Lung - Bronchus	* Nose	* Parathyroid Gland
* Peripheral Nerve - Sciatic	* Pituitary Gland	* Preputial Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	* Skeletal Muscle - Thigh	* Skin
* Stomach - Forestomach	* Stomach - Glandular	* Testes	* Thyroid Gland
* Tongue	* Trachea	* Urinary Bladder	* Zymbal's Gland

MISSING

\* Mammary Gland

AUTO PRECLUDES DIAG.

* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Small - Duodenum	* Intestine Small - Ileum
* Intestine Small - Jejunum	* Pancreas		

OBSERVATIONS

* Bone Marrow		Leukemia Mononuclear	
* Brain		Leukemia Mononuclear	
* Heart		Cardiomyopathy	Mild
		Leukemia Mononuclear	
* Kidney		Leukemia Mononuclear	
* Larynx		Cyst	Mild
* Liver		Leukemia Mononuclear	
* Lung		Leukemia Mononuclear	
* Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Mild
	Mandibular	Leukemia Mononuclear	
	Mesenteric	Leukemia Mononuclear	
* Preputial GI			
Note: ONLY ONE			
* Spinal Cord	Thoracic	Hemorrhage	Mild
* Spleen		Leukemia Mononuclear	

[ Leukemia Mononuclear TGLS = 1-6.1 ]

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:20  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

**ANIMAL ID:** 30

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 390

**DOSE:** 0PPM/M FUMON-01

**DISP:** Natural Death

**HISTO:** 21080100030

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

\* Thymus

Leukemia Mononuclear

---

PRIMARY CAUSE OF DEATH

- Spleen Leukemia Mononuclear

---

Animal Note: COD...PROBABLE-LEUKEMIA MONONUCLEAR CELL SPLEEN

---

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92002-03  
Test Type: CHRONIC  
Species/Strain: Rat/F 344/NCTR

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
Test Compound: Fumonisin B1  
CAS Number: 116355-83-0

Date Report Requested: 10/15/2014  
Time Report Requested: 18:08:20  
First Dose M/F: NA / NA  
Lab: NCTR

ANIMAL ID: 32

TRT#: 4

SEX: Male

DAY ON TEST: 419

DOSE: 50PPM/M FUMON-04

DISP: Natural Death

HISTO: 21080100032

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Gland	* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum
* Brain - Cerebellum	* Brain - Cerebrum	* Coagulating Gland	* Epididymis
* Esophagus	* Harderian Gland	* Heart	* Intestine Large - Cecum
* Intestine Large - Colon	* Intestine Large - Rectum	* Intestine Small - Duodenum	* Intestine Small - Ileum
* Kidney	* Lacrimal Gland	* Larynx	* Lung - Bronchus
* Lymph Node - Mandibular	* Lymph Node - Mesenteric	* Nose	* Parathyroid Gland
* Peripheral Nerve - Sciatic	* Pituitary Gland	* Prostate	* Salivary Glands
* Seminal Vesicle	* Skeletal Muscle - Thigh	* Skin	* Spinal Cord - Thoracic
* Stomach - Forestomach	* Stomach - Glandular	* Testes	* Thymus
* Thyroid Gland	* Tongue	* Trachea	* Urinary Bladder
* Zymbal's Gland			

MISSING

\* Mammary Gland

AUTO PRECLUDES DIAG.

\* Eye

OBSERVATIONS

* Bone Marrow		Hyperplasia	Mild
* Intestine Small	Jejunum	Carcinoma	
[ Carcinoma TGLS = 1-7.2 ]			
* Liver	Bile Duct	Clear Cell Focus	
		Hyperplasia	Minimal
		Necrosis	Mild
* Pancreas	Acinar Cell	Atrophy	Focal, Minimal
* Preputial Gland		Inflammation	Chronic, Minimal
* Spleen		Hematopoietic Cell Proliferation	Mild

PRIMARY CAUSE OF DEATH

- Intestine Small Jejunum Carcinoma

Animal Note: COD...PROBABLE-SMALL INTESTINES,CARCINOMA

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:20  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 33	<b>TRT#:</b> 5	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 403
	<b>DOSE:</b> 150PPM/MFUMON-05	<b>DISP:</b> Natural Death	<b>HISTO:</b> 21080100033

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Blood Vessel - Aorta	Bone - Femur	Bone - Sternum	Brain - Cerebellum
Brain - Cerebrum	Coagulating Gland	Epididymis	Esophagus
Eye	Intestine Large - Cecum	Intestine Large - Colon	Intestine Large - Rectum
Intestine Small - Duodenum	Intestine Small - Ileum	Intestine Small - Jejunum	Lacrimal Gland
Larynx	Lung - Bronchus	Lymph Node - Mandibular	Lymph Node - Mesenteric
Mammary Gland	Nose	Pancreas	Parathyroid Gland
Peripheral Nerve - Sciatic	Salivary Glands	Seminal Vesicle	Skeletal Muscle - Thigh
Skin	Spinal Cord - Thoracic	Stomach - Forestomach	Stomach - Glandular
Testes	Thyroid Gland	Tongue	Trachea
Urinary Bladder	Zymbal's Gland		

---

**MISSING**

Pituitary Gland	Preputial Gland	Thymus
-----------------	-----------------	--------

---

**OBSERVATIONS**

Adrenal Gland	Cortex	Vacuolization Cytoplasmic	Focal, Minimal
Bone Marrow		Depletion	Mild
Harderian Gland		Infiltration Cellular	Lymphocytic, Minimal
Heart		Cardiomyopathy	Mild
* Kidney	Bilateral	Nephropathy	Mild
* Liver	Hepatocyte	Vacuolization Cytoplasmic	Moderate
Lung		Congestion	Mild
Prostate		Inflammation	Acute, Minimal
Spleen		Pigmentation	Minimal

---

**PRIMARY CAUSE OF DEATH** - UNCERTAIN

---

Animal Note: COD...UNKNOWN

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:20  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 34

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 454

**DOSE:** 15PPM/M FUMON-03

**DISP:** Moribund

**HISTO:** 21080100034

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Gland	* Blood Vessel - Aorta	* Bone - Sternum	* Bone Marrow
* Brain - Cerebellum	* Brain - Cerebrum	* Coagulating Gland	* Epididymis
* Esophagus	* Harderian Gland	* Intestine Large - Cecum	* Intestine Large - Colon
* Intestine Large - Rectum	* Intestine Small - Duodenum	* Intestine Small - Ileum	* Intestine Small - Jejunum
* Lacrimal Gland	* Lung - Bronchus	* Lymph Node - Mandibular	* Mammary Gland
* Nose	* Pancreas	* Parathyroid Gland	* Peripheral Nerve - Sciatic
* Prostate	* Salivary Glands	* Seminal Vesicle	* Skeletal Muscle - Thigh
* Skin	* Spinal Cord - Thoracic	* Stomach - Forestomach	* Stomach - Glandular
* Thyroid Gland	* Tongue	* Trachea	* Urinary Bladder
* Zymbal's Gland			

**OBSERVATIONS**

* Bone	Cartilage, Epiphysis, Femur	Hyperplasia	Mild
* Eye	Bilateral, Retina	Atrophy	Moderate
* Heart		Cardiomyopathy	Minimal
* Kidney	Bilateral	Nephropathy	Minimal
* Larynx		Cyst	Mild
* Liver	Bile Duct	Hyperplasia	Minimal
	Hepatocyte	Vacuolization Cytoplasmic	Minimal
* Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
* Preputial Gland		Adenoma	
	[ Adenoma TGLS = 1-10 ]		
* Spleen		Hematopoietic Cell Proliferation	Minimal
* Testes	Interstit Cell	Hyperplasia	Focal, Mild
* Thymus		Hyperplasia	Minimal

**PRIMARY CAUSE OF DEATH** - Preputial Gland Adenoma

Animal Note: COD...PROBABLE-PREPUTIAL GLAND,ADENOMA

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:20  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

<b>ANIMAL ID:</b> 36	<b>TRT#:</b> 3 <b>DOSE:</b> 15PPM/M FUMON-03	<b>SEX:</b> Male <b>DISP:</b> Moribund	<b>DAY ON TEST:</b> 442 <b>HISTO:</b> 21080100036
----------------------	---	---	--

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Gland	* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum
* Brain - Cerebellum	* Brain - Cerebrum	* Coagulating Gland	* Epididymis
* Esophagus	* Eye	* Harderian Gland	* Intestine Large - Cecum
* Intestine Large - Colon	* Intestine Large - Rectum	* Intestine Small - Duodenum	* Intestine Small - Jejunum
* Lacrimal Gland	* Larynx	* Lung - Bronchus	* Lymph Node - Mandibular
* Lymph Node - Mesenteric	* Mammary Gland	* Nose	* Pancreas
* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Prostate	* Salivary Glands
* Seminal Vesicle	* Skeletal Muscle - Thigh	* Skin	* Spinal Cord - Thoracic
* Stomach - Forestomach	* Stomach - Glandular	* Tongue	* Trachea
* Urinary Bladder	* Zymbal's Gland		

**OBSERVATIONS**

* Bone Marrow		Hyperplasia	Mild
* Heart		Cardiomyopathy	Mild
* Intestine Small	Ileum	Hyperplasia	Minimal
* Kidney	Bilateral	Nephropathy	Minimal
* Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Mild
* Pituitary Gland	Pars Distalis	Hypertrophy	Focal, Minimal
* Preputial Gland		Carcinoma	
		Inflammation	Chronic, Minimal
[ Carcinoma TGLS = 1-10.1 ]			
* Spleen		Hematopoietic Cell Proliferation	Minimal
* Testes	Interstit Cell	Adenoma	
	Interstit Cell	Hyperplasia	Focal, Mild
* Thymus		Atrophy	Moderate
* Thyroid Gland	C Cell	Adenoma	

**PRIMARY CAUSE OF DEATH** - Preputial Gland Carcinoma

Animal Note: COD...PROBABLE-PREPUTIAL GLAND,CARCINOMA

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:20  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 37

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 461

**DOSE:** 15PPM/M FUMON-03

**DISP:** Natural Death

**HISTO:** 21080100037

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Brain - Cerebellum
* Brain - Cerebrum	* Coagulating Gland	* Epididymis	* Esophagus
* Eye	* Harderian Gland	* Intestine Large - Cecum	* Intestine Large - Colon
* Intestine Large - Rectum	* Intestine Small - Jejunum	* Lacrimal Gland	* Lung - Bronchus
* Lymph Node - Mandibular	* Mammary Gland	* Parathyroid Gland	* Peripheral Nerve - Sciatic
* Preputial Gland	* Prostate	* Salivary Glands	* Seminal Vesicle
* Skeletal Muscle - Thigh	* Skin	* Spinal Cord - Thoracic	* Stomach - Forestomach
* Thyroid Gland	* Tongue	* Trachea	* Urinary Bladder
* Zymbal's Gland			

**MISSING**

* Larynx	* Pituitary Gland
----------	-------------------

**AUTO PRECLUDES DIAG.**

\* Intestine Small - Ileum

**OBSERVATIONS**

* Adrenal Gland		Leukemia Mononuclear	
* Bone Marrow		Leukemia Mononuclear	
* Heart		Cardiomyopathy	Minimal
* Intestine Small	Duodenum	Leukemia Mononuclear	
* Kidney		Leukemia Mononuclear	
* Liver		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 2-6 ]		
* Lung		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 4-5 + 5.1 ]		
* Lymph Node	Mesenteric	Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 3-11 ]		
* Nose	Olfactory Epi	Cytoplasmic Alteration Inflammation	Minimal Acute, Mild
* Pancreas	Acinar Cell	Atrophy Leukemia Mononuclear	Focal, Minimal
* Spleen		Leukemia Mononuclear	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:20  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 37	<b>TRT#:</b> 3	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 461
	<b>DOSE:</b> 15PPM/M FUMON-03	<b>DISP:</b> Natural Death	<b>HISTO:</b> 21080100037

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

[ Leukemia Mononuclear TGLS = 1-6 ]

* Stomach	Glandular	Erosion	Minimal
* Testes	Interstit Cell	Hyperplasia	Focal, Moderate
* Thymus		Leukemia Mononuclear	

---

**PRIMARY CAUSE OF DEATH** - Spleen Leukemia Mononuclear

---

Animal Note: COD...PROBABLE-LEUKEMIA MONONUCLEAR CELL

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:20  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

<b>ANIMAL ID:</b> 46	<b>TRT#:</b> 3	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 474
	<b>DOSE:</b> 15PPM/M FUMON-03	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100046

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Gland	* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum
* Bone Marrow	* Brain - Cerebellum	* Brain - Cerebrum	* Epididymis
* Esophagus	* Eye	* Harderian Gland	* Heart
* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum	* Intestine Small - Duodenum
* Intestine Small - Ileum	* Intestine Small - Jejunum	* Lacrimal Gland	* Larynx
* Lung - Bronchus	* Lymph Node - Mandibular	* Parathyroid Gland	* Peripheral Nerve - Sciatic
* Salivary Glands	* Skeletal Muscle - Thigh	* Skin	* Spinal Cord - Thoracic
* Stomach - Forestomach	* Stomach - Glandular	* Tongue	* Trachea
* Urinary Bladder	* Zymbal's Gland		

**MISSING**

\* Preputial Gland

**OBSERVATIONS**

* Brain	Hypothalamus	Compression	Mild
* Coagulating Gland		Atrophy	Mild
* Kidney	Bilateral	Nephropathy	Mild
* Liver		Clear Cell Focus	
	Bile Duct	Hyperplasia	Minimal
* Lung	Interstitium	Inflammation	Chronic, Minimal
* Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
* Mammary Gland		Galactocele	Mild
* Nose	Nasolacrim Dct	Inflammation	Chronic, Mild
* Pancreas	Acinar Cell	Atrophy	Focal, Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
	[ Adenoma TGLS = 1-11 ]		
* Prostate		Atrophy	Minimal
* Seminal Vesicle		Atrophy	Mild
* Spleen		Pigmentation	Minimal
* Testes	Interstit Cell	Hyperplasia	Focal, Minimal
* Thymus		Atrophy	Moderate
* Thyroid Gland	C Cell	Hyperplasia	Focal, Minimal

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:20  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

**ANIMAL ID:** 46

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 474

**DOSE:** 15PPM/M FUMON-03

**DISP:** Moribund

**HISTO:** 21080100046

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

PRIMARY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma

---

Animal Note: COD...PROBABLE-PITUITARY GL,ADENOMA

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:20  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

<b>ANIMAL ID:</b> 47	<b>TRT#:</b> 4	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 477
	<b>DOSE:</b> 50PPM/M FUMON-04	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100047

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Gland	* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum
* Brain - Cerebellum	* Brain - Cerebrum	* Coagulating Gland	* Epididymis
* Esophagus	* Eye	* Intestine Large - Cecum	* Intestine Large - Colon
* Intestine Large - Rectum	* Intestine Small - Duodenum	* Intestine Small - Ileum	* Intestine Small - Jejunum
* Lacrimal Gland	* Lung - Bronchus	* Lymph Node - Mandibular	* Lymph Node - Mesenteric
* Mammary Gland	* Nose	* Peripheral Nerve - Sciatic	* Salivary Glands
* Seminal Vesicle	* Skeletal Muscle - Thigh	* Skin	* Spinal Cord - Thoracic
* Testes	* Thyroid Gland	* Tongue	* Trachea
* Zymbal's Gland			

**MISSING**

* Larynx	* Parathyroid Gland
----------	---------------------

**OBSERVATIONS**

* Bone Marrow		Atrophy	Mild
* Brain	Hypothalamus	Compression	Mild
* Harderian Gland		Infiltration Cellular	Lymphocytic, Minimal
* Heart		Cardiomyopathy	Minimal
* Kidney	Bilateral, Pelvis	Inflammation	Acute, Mild
	Bilateral	Nephropathy	Mild
* Liver	Bile Duct	Hyperplasia	Mild
	Hepatocyte	Vacuolization Cytoplasmic	Mild
* Pancreas	Acinar Cell	Atrophy	Focal, Mild
* Pituitary Gland	Pars Distalis	Adenoma	
	[ Adenoma TGLS = 1-11 ]		
* Preputial Gland	Bilateral	Inflammation	Chronic, Minimal
* Prostate		Inflammation	Acute, Moderate
* Spleen		Pigmentation	Mild
* Stomach	Forestomach	Edema	Mild
	Epithelium, Forestomach	Hyperplasia	Minimal
	Glandular	Inflammation	Chronic, Mild
* Thymus		Atrophy	Mild

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:20  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 47	<b>TRT#:</b> 4	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 477
	<b>DOSE:</b> 50PPM/M FUMON-04	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100047

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

* Urinary Bladder	Dilatation	Moderate
[ Dilatation TGLS = 2-12 ]	Inflammation	Acute, Mild

---

**PRIMARY CAUSE OF DEATH** - Pituitary Gland Pars Distalis Adenoma

Animal Note: COD...PROBABLE-PITUITARY GL,ADENOMA

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:20  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

<b>ANIMAL ID:</b> 48	<b>TRT#:</b> 4 <b>DOSE:</b> 50PPM/M FUMON-04	<b>SEX:</b> Male <b>DISP:</b> Moribund	<b>DAY ON TEST:</b> 519 <b>HISTO:</b> 21080100048
----------------------	---	---	--

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Bone Marrow
* Brain - Cerebellum	* Brain - Cerebrum	* Coagulating Gland	* Esophagus
* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum	* Intestine Small - Duodenum
* Intestine Small - Ileum	* Intestine Small - Jejunum	* Larynx	* Lymph Node - Mandibular
* Pancreas	* Peripheral Nerve - Sciatic	* Preputial Gland	* Salivary Glands
* Skeletal Muscle - Thigh	* Skin	* Spinal Cord - Thoracic	* Stomach - Glandular
* Thyroid Gland	* Tongue	* Trachea	* Urinary Bladder
* Zymbal's Gland			

**MISSING**

* Epididymis	* Mammary Gland	* Parathyroid Gland
--------------	-----------------	---------------------

**OBSERVATIONS**

* Adrenal Gland	Cortex	Adenoma	
* Eye	Bilateral, Retina	Atrophy	Moderate
* Harderian Gland		Infiltration Cellular	Lymphocytic, Minimal
* Heart		Cardiomyopathy	Minimal
* Kidney		Mineralization	Minimal
	Bilateral	Nephropathy	Minimal
* Lacrimal Gland		Atrophy	Focal, Mild
* Liver		Tension Lipidosis	
	Hepatocyte	Vacuolization Cytoplasmic	Mild
* Lung	Bronchus	Squamous Cell Carcinoma	
	[ Squamous Cell Carcinoma TGLS = 2-5 ]		
* Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Mild
* Nose		Inflammation	Acute, Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
* Preputial GI			
Note: ONLY ONE			
* Prostate		Inflammation	Chronic Active, Minimal
* Seminal Vesicle		Atrophy	Mild
* Spleen		Inflammation	Chronic Active, Mild

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:20  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 48	<b>TRT#:</b> 4	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 519
	<b>DOSE:</b> 50PPM/M FUMON-04	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100048

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

[ Inflammation TGLS = 1-6 ]			
* Stomach	Epithelium, Forestomach	Hyperplasia	Moderate
	Forestomach	Inflammation	Chronic, Mild
* Testes	Interstitial Cell	Adenoma	
* Thymus		Atrophy	Mild

---

**PRIMARY CAUSE OF DEATH** - Lung Bronchus Squamous Cell Carcinoma

---

Animal Note: COD...PROBABLE-LUNG,SQUAM CEL CARC

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:20  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 50

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 537

**DOSE:** 15PPM/M FUMON-03

**DISP:** Moribund

**HISTO:** 21080100050

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Gland	* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum
* Brain - Cerebellum	* Brain - Cerebrum	* Coagulating Gland	* Epididymis
* Esophagus	* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum
* Intestine Small - Duodenum	* Intestine Small - Ileum	* Intestine Small - Jejunum	* Lacrimal Gland
* Larynx	* Lung - Bronchus	* Lymph Node - Mandibular	* Mammary Gland
* Pancreas	* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Salivary Glands
* Seminal Vesicle	* Skeletal Muscle - Thigh	* Skin	* Spinal Cord - Thoracic
* Stomach - Forestomach	* Stomach - Glandular	* Testes	* Thyroid Gland
* Tongue	* Trachea	* Urinary Bladder	

**MISSING**

\* Zymbal's Gland

**OBSERVATIONS**

* Bone Marrow		Depletion	Mild
* Brain	Hypothalamus	Compression	Mild
* Eye	Bilateral, Retina	Atrophy	Moderate
* Harderian Gland	Bilateral	Infiltration Cellular	Lymphocytic, Minimal
* Heart		Cardiomyopathy	Minimal
* Kidney	Bilateral	Nephropathy	Minimal
	Bilateral, Renal Tubule	Pigmentation	Mild
* Liver		Clear Cell Focus	
	Bile Duct	Hepatodiaphragmatic Nodule	
		Hyperplasia	Mild
	[ Hepatodiaphragmatic Nodule TGLS = 2-6 ]		
	[ Hyperplasia TGLS = 3-6.1 ]		
* Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
* Nose	Nasolacrim Dct	Inflammation	Chronic, Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
	[ Adenoma TGLS = 1-11 ]		
* Preputial Gland		Inflammation	Chronic, Minimal
* Prostate		Inflammation	Acute, Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:20  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 50	<b>TRT#:</b> 3	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 537
	<b>DOSE:</b> 15PPM/M FUMON-03	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100050

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

* Spleen	Pigmentation	Mild
* Thymus	Atrophy	Mild

Note: SLIDE 1

---

**PRIMARY CAUSE OF DEATH** - Pituitary Gland Pars Distalis Adenoma

---

Animal Note: COD...PROBABLE-PITUITARY GLAND,ADENOMA

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:20  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 51                      **TRT#:** 3                      **SEX:** Male                      **DAY ON TEST:** 523  
**DOSE:** 15PPM/M FUMON-03                      **DISP:** Moribund                      **HISTO:** 21080100051

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Sternum	* Brain - Cerebellum	* Brain - Cerebrum
* Coagulating Gland	* Epididymis	* Esophagus	* Harderian Gland
* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum	* Intestine Small - Duodenum
* Intestine Small - Ileum	* Intestine Small - Jejunum	* Lacrimal Gland	* Larynx
* Lung - Bronchus	* Lymph Node - Mandibular	* Mammary Gland	* Parathyroid Gland
* Peripheral Nerve - Sciatic	* Preputial Gland	* Salivary Glands	* Seminal Vesicle
* Skin	* Spinal Cord - Thoracic	* Stomach - Forestomach	* Stomach - Glandular
* Tongue	* Trachea	* Urinary Bladder	

**MISSING**

\* Zymbal's Gland

**OBSERVATIONS**

* Adrenal Gland	Medulla	Pheochromocytoma Benign	
* Bone	Cartilage, Epiphysis, Femur	Hyperplasia	Mild
	Synovial Tiss	Sarcoma	
	[ Sarcoma TGLS = 2-10.2 ]		
* Bone Marrow		Hyperplasia	Mild
* Eye	Bilateral, Retina	Atrophy	Moderate
* Heart		Cardiomyopathy	Minimal
* Kidney	Bilateral	Nephropathy	Mild
* Liver		Basophilic Focus	
		Eosinophilic Focus	
		Hematopoietic Cell Proliferation	Minimal
	Bile Duct	Hyperplasia	Mild
* Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
* Nose	Olfactory Epi	Cytoplasmic Alteration	Mild
* Pancreas	Acinar Cell	Atrophy	Focal, Moderate
	[ Atrophy TGLS = 1-6 ]		
* Pituitary Gland	Pars Distalis	Hypertrophy	Focal, Minimal
* Prostate		Inflammation	Acute, Mild
* Skeletal Muscle	Thigh	Hemorrhage	Marked

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:20  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 51	<b>TRT#:</b> 3	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 523
	<b>DOSE:</b> 15PPM/M FUMON-03	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100051

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

Note: TGL#2-NOTED GROSSLY AS SKELETAL MUSCLE WAS BONE

* Spleen		Hematopoietic Cell Proliferation	Mild
Note: TGL#1-NOTED GROSSLY AS SPLEEN WAS PANCREAS			
* Testes	Interstit Cell	Hyperplasia	Focal, Minimal
* Thymus		Atrophy	Mild
* Thyroid Gland	C Cell	Hyperplasia	Focal, Moderate

---

PRIMARY CAUSE OF DEATH - Bone Synovial Tiss Sarcoma

---

Animal Note: COD...PROBABLE-BONE,SYNOVIAL TISSUE SARCOMA

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:20  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 54

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 502

**DOSE:** 15PPM/M FUMON-03

**DISP:** Moribund

**HISTO:** 21080100054

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Gland	* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum
* Bone Marrow	* Brain - Cerebellum	* Brain - Cerebrum	* Coagulating Gland
* Epididymis	* Esophagus	* Eye	* Intestine Large - Cecum
* Intestine Large - Colon	* Intestine Large - Rectum	* Intestine Small - Duodenum	* Intestine Small - Ileum
* Intestine Small - Jejunum	* Kidney	* Larynx	* Lung - Bronchus
* Lymph Node - Mandibular	* Mammary Gland	* Pancreas	* Parathyroid Gland
* Peripheral Nerve - Sciatic	* Prostate	* Salivary Glands	* Seminal Vesicle
* Skeletal Muscle - Thigh	* Skin	* Spinal Cord - Thoracic	* Stomach - Forestomach
* Stomach - Glandular	* Thymus	* Thyroid Gland	* Tongue
* Trachea	* Urinary Bladder		

**MISSING**

\* Preputial Gland

**OBSERVATIONS**

* Harderian Gland		Infiltration Cellular	Lymphocytic, Minimal
* Heart		Cardiomyopathy	Mild
* Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Liver		Clear Cell Focus	
	Bile Duct	Hyperplasia	Minimal
	Hepatocyte	Vacuolization Cytoplasmic	Mild
	[ Vacuolization Cytoplasmic TGLS = 2-6.1 ]		
* Lymph Node	Mesenteric	Degeneration	Cystic, Mild
* Nose	Nasolacrim Dct	Inflammation	Chronic, Mild
* Pituitary Gland	Pars Distalis	Hyperplasia	Focal, Mild
* Spleen	Capsule	Inflammation	Chronic, Minimal
* Testes	Germinal Epith	Atrophy	Moderate
	Interstit Cell	Hyperplasia	Focal, Marked
* Zymbal's Gland		Carcinoma	
	[ Carcinoma TGLS = 1-13.1 ]		

**PRIMARY CAUSE OF DEATH**

- Zymbal's Gland Carcinoma

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:20  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

**ANIMAL ID:** 54

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 502

**DOSE:** 15PPM/M FUMON-03

**DISP:** Moribund

**HISTO:** 21080100054

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

Animal Note: COD...PROBABLE-ZYMBALS GLAND,CARCINOMA

---

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92002-03  
 Test Type: CHRONIC  
 Species/Strain: Rat/F 344/NCTR

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
 Test Compound: Fumonisin B1  
 CAS Number: 116355-83-0

Date Report Requested: 10/15/2014  
 Time Report Requested: 18:08:20  
 First Dose M/F: NA / NA  
 Lab: NCTR

ANIMAL ID: 55

TRT#: 2

SEX: Male

DAY ON TEST: 519

DOSE: 5PPM/M FUMON-02

DISP: Moribund

HISTO: 21080100055

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Gland	* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum
* Brain - Cerebellum	* Brain - Cerebrum	* Coagulating Gland	* Epididymis
* Esophagus	* Eye	* Intestine Large - Cecum	* Intestine Large - Colon
* Intestine Large - Rectum	* Intestine Small - Duodenum	* Intestine Small - Ileum	* Intestine Small - Jejunum
* Larynx	* Lung - Bronchus	* Lymph Node - Mandibular	* Mammary Gland
* Pancreas	* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Prostate
* Salivary Glands	* Seminal Vesicle	* Skeletal Muscle - Thigh	* Skin
* Spinal Cord - Thoracic	* Spleen	* Stomach - Forestomach	* Stomach - Glandular
* Thyroid Gland	* Trachea	* Zymbal's Gland	

MISSING

\* Thymus

OBSERVATIONS

* Blood Vessel			
Note: TGL#4-NOTED GROSSLY AS BLOOD VESSEL WAS LYMPH NODE			
* Bone Marrow		Hyperplasia	Mild
* Harderian Gland		Infiltration Cellular	Lymphocytic, Minimal
* Heart		Cardiomyopathy	Mild
	Coron Artery	Inflammation	Chronic, Mild
* Intest Small			
Note: TGL # 03 - NULLIFIED BY TRIMMER			
* Kidney	Artery, Pelvis	Inflammation	Chronic, Mild
	Bilateral	Nephropathy	Minimal
* Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Liver		Basophilic Focus	
* Lung		Infiltration Cellular	Histiocytic, Minimal
* Lymph Node	Mediastinal	Degeneration	Cystic, Mild
	Renal	Degeneration	Cystic, Marked
	Mesenteric	Hemorrhage	Minimal

[ Degeneration TGLS = 2-1.1 ]

[ Degeneration TGLS = 4-1 ]

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:20  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 55	<b>TRT#:</b> 2	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 519
	<b>DOSE:</b> 5PPM/M FUMON-02	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100055

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

[ Hemorrhage TGLS = 1-11 ]			
Mesentery	Artery	Inflammation	Chronic, Marked
[ Inflammation TGLS = 5,6-7 + 7.1 ]			
* Nose	Nasolacrim Dct	Inflammation	Chronic, Minimal
* Pancreas			
Note: TGL#5-NOTED GROSSLY AS PANCREAS WAS MESENTERY ARTERY			
* Pituitary Gland	Pars Distalis	Hypertrophy	Focal, Marked
* Preputial Gland		Inflammation	Chronic, Mild
* Testes	Bilateral, Interstit Cell	Hyperplasia	Focal, Mild
* Tongue	Artery	Inflammation	Chronic, Moderate
* Urinary Bladder	Transit Epithe	Hyperplasia	Mild
		Inflammation	Chronic, Mild

---

**PRIMARY CAUSE OF DEATH** - Mesentery Artery Inflammation

---

Animal Note: CAUSE OF DEATH IS ACTUALLY DEGENERATIVE ARTERIAL DISEASE

Animal Note: COD...PROBABLE-MESENTERY,INFLAMMATION ARTERY

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:20  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 56

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 560

**DOSE:** 0PPM/M FUMON-01

**DISP:** Moribund

**HISTO:** 21080100056

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Bone Marrow
* Brain - Cerebellum	* Brain - Cerebrum	* Coagulating Gland	* Epididymis
* Esophagus	* Harderian Gland	* Intestine Large - Cecum	* Intestine Large - Colon
* Intestine Large - Rectum	* Intestine Small - Duodenum	* Intestine Small - Ileum	* Intestine Small - Jejunum
* Larynx	* Lung - Bronchus	* Lymph Node - Mandibular	* Lymph Node - Mesenteric
* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Prostate	* Salivary Glands
* Seminal Vesicle	* Skeletal Muscle - Thigh	* Spinal Cord - Thoracic	* Stomach - Forestomach
* Stomach - Glandular	* Thyroid Gland	* Tongue	* Trachea
* Urinary Bladder	* Zymbal's Gland		

**MISSING**

\* Mammary Gland

**OBSERVATIONS**

* Adrenal Gland	Cortex	Hyperplasia	Focal, Mild
* Eye	Bilateral, Retina	Atrophy	Moderate
* Heart		Cardiomyopathy	Mild
* Kidney		Mineralization	Minimal
	Bilateral	Nephropathy	Minimal
* Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Liver		Hepatodiaphragmatic Nodule	
	Bile Duct	Hyperplasia	Minimal
	[ Hepatodiaphragmatic Nodule TGLS = 3-6 ]		
* Lung	Interstitium	Inflammation	Chronic, Minimal
* Nose	Olfactory Epi	Cytoplasmic Alteration	Minimal
	Nasolacrim Dct	Inflammation	Chronic, Minimal
* Pancreas	Acinar Cell	Atrophy	Focal, Mild
* Pituitary Gland	Pars Distalis	Adenoma	
* Preputial Gland		Inflammation	Chronic, Minimal
* Skin		Basal Cell Adenoma	
	[ Basal Cell Adenoma TGLS = 1-10.1 ]		
* Spleen	Capsule	Inflammation	Chronic, Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:20  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 56	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 560
	<b>DOSE:</b> 0PPM/M FUMON-01	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100056

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 2-6 ]			
* Testes	Bilateral, Interstit Cell	Hyperplasia	Focal, Minimal
* Thymus		Atrophy	Minimal

---

**PRIMARY CAUSE OF DEATH** - Spleen Leukemia Mononuclear

---

Animal Note: COD...PROBABLE-LEUKEMIA MONONUCLEAR CELL

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:20  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 59

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 540

**DOSE:** 15PPM/M FUMON-03

**DISP:** Moribund

**HISTO:** 21080100059

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Gland	* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum
* Brain - Cerebellum	* Brain - Cerebrum	* Coagulating Gland	* Epididymis
* Esophagus	* Eye	* Harderian Gland	* Intestine Large - Cecum
* Intestine Large - Colon	* Intestine Large - Rectum	* Intestine Small - Duodenum	* Intestine Small - Ileum
* Intestine Small - Jejunum	* Larynx	* Lymph Node - Mandibular	* Lymph Node - Mesenteric
* Pancreas	* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Salivary Glands
* Seminal Vesicle	* Skeletal Muscle - Thigh	* Skin	* Spinal Cord - Thoracic
* Stomach - Glandular	* Testes	* Thyroid Gland	* Tongue
* Trachea	* Urinary Bladder	* Zymbal's Gland	

**MISSING**

\* Mammary Gland

**OBSERVATIONS**

* Bone Marrow		Depletion	Minimal
* Brain	Hypothalamus	Compression	Minimal
* Heart		Cardiomyopathy	Mild
* Kidney	Bilateral	Nephropathy	Mild
* Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Liver		Basophilic Focus	
* Lung		Foreign Body	
	Bronchus	Inflammation	Chronic Active, Mild
* Nose	Olfactory Epi	Cytoplasmic Alteration	Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
	[ Adenoma TGLS = 2-11 ]		
* Preputial Gland		Inflammation	Chronic, Minimal
* Prostate		Inflammation	Chronic Active, Marked
	[ Inflammation TGLS = 1-12 ]		
* Spleen		Pigmentation	Minimal
* Stomach	Epithelium, Forestomach	Hyperplasia	Mild
* Thymus		Atrophy	Marked

**PRIMARY CAUSE OF DEATH** - Pituitary Gland Pars Distalis Adenoma

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:20  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

**ANIMAL ID:** 59

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 540

**DOSE:** 15PPM/M FUMON-03

**DISP:** Moribund

**HISTO:** 21080100059

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

---

Animal Note: COD...PROBABLE-PITUITARY GLAND,ADENOMA

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:20  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

<b>ANIMAL ID:</b> 60	<b>TRT#:</b> 5	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 533
	<b>DOSE:</b> 150PPM/MFUMON-05	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100060

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Adrenal Gland	Blood Vessel - Aorta	Bone - Femur	Bone - Sternum
Brain - Cerebellum	Brain - Cerebrum	Coagulating Gland	Esophagus
Eye	Intestine Large - Cecum	Intestine Large - Colon	Intestine Large - Rectum
Intestine Small - Duodenum	Intestine Small - Ileum	Intestine Small - Jejunum	* Kidney
Lacrimal Gland	Larynx	Lung - Bronchus	Parathyroid Gland
Peripheral Nerve - Sciatic	Pituitary Gland	Salivary Glands	Skeletal Muscle - Thigh
Skin	Spinal Cord - Thoracic	Stomach - Glandular	Testes
Thyroid Gland	Tongue	Trachea	Urinary Bladder
Zymbal's Gland			

**MISSING**

Mammary Gland

**OBSERVATIONS**

Bone Marrow		Leukemia Mononuclear	
Brain	Medulla	Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 3-3 ]			
Epididymis	Bilateral, Epithelium	Degeneration	Mucoid, Mild
Harderian Gland		Infiltration Cellular	Lymphocytic, Minimal
Heart		Leukemia Mononuclear	
* Liver		Leukemia Mononuclear	
Lung		Leukemia Mononuclear	
Lymph Node	Mandibular	Leukemia Mononuclear	
	Mesenteric	Leukemia Mononuclear	
Nose	Olfactory Epi	Cytoplasmic Alteration	Minimal
Pancreas	Acinar Cell	Atrophy	Focal, Minimal
Preputial Gland		Inflammation	Chronic, Minimal
Prostate		Atrophy	Mild
Seminal Vesicle		Atrophy	Mild
Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 2-6 ]			
Stomach	Epithelium, Forestomach	Hyperplasia	Mild

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:20  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 60	<b>TRT#:</b> 5	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 533
	<b>DOSE:</b> 150PPM/MFUMON-05	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100060

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

Note: TGL#1-NULLIFIED BY TRIMMER

Thymus	Atrophy	Mild
--------	---------	------

---

PRIMARY CAUSE OF DEATH - Spleen Leukemia Mononuclear

---

Animal Note: COD...PROBABLE-LEUKEMIA MONONUCLEAR CELL

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:20  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

<b>ANIMAL ID:</b> 66	<b>TRT#:</b> 2 <b>DOSE:</b> 5PPM/M FUMON-02	<b>SEX:</b> Male <b>DISP:</b> Moribund	<b>DAY ON TEST:</b> 550 <b>HISTO:</b> 21080100066
----------------------	--	---	--

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Gland	* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum
* Brain - Cerebellum	* Brain - Cerebrum	* Coagulating Gland	* Epididymis
* Esophagus	* Eye	* Heart	* Intestine Large - Cecum
* Intestine Large - Colon	* Intestine Large - Rectum	* Intestine Small - Duodenum	* Intestine Small - Ileum
* Intestine Small - Jejunum	* Lacrimal Gland	* Larynx	* Lung - Bronchus
* Lymph Node - Mandibular	* Mammary Gland	* Parathyroid Gland	* Peripheral Nerve - Sciatic
* Salivary Glands	* Seminal Vesicle	* Skeletal Muscle - Thigh	* Skin
* Spinal Cord - Thoracic	* Stomach - Forestomach	* Stomach - Glandular	* Thyroid Gland
* Tongue	* Trachea	* Urinary Bladder	

**MISSING**

* Pituitary Gland	* Zymbal's Gland
-------------------	------------------

**OBSERVATIONS**

* Adrenal Gland			
Note: ONLY ONE			
* Bone Marrow		Leukemia Mononuclear	
* Harderian Gland		Leukemia Mononuclear	
* Kidney	Bilateral, Renal Tubule	Pigmentation	Mild
* Liver	Bile Duct	Hyperplasia	Minimal
		Leukemia Mononuclear	
* Lung		Leukemia Mononuclear	
* Lymph Node	Mesenteric	Leukemia Mononuclear	
* Nose	Olfactory Epi	Cytoplasmic Alteration	Minimal
* Pancreas	Acinar Cell	Atrophy	Focal, Mild
* Preputial Gland		Inflammation	Chronic, Minimal
* Prostate		Inflammation	Chronic Active, Mild
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 2-6 ]			
* Testes	Germinal Epith	Atrophy	Marked
[ Atrophy TGLS = 1-10 ]		Mineralization	Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:20  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 66	<b>TRT#:</b> 2	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 550
	<b>DOSE:</b> 5PPM/M FUMON-02	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100066

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

\* Thymus Leukemia Mononuclear

Note: TGL#3-NULLIFIED BY TRIMMER

---

PRIMARY CAUSE OF DEATH - Spleen Leukemia Mononuclear

---

Animal Note: COD...PROBABLE-LEUKEMIA MONONUCLEAR CELL

Animal Note: TGL#4-CAVITY,NO SECTION TAKEN

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:20  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

<b>ANIMAL ID:</b> 68	<b>TRT#:</b> 2 <b>DOSE:</b> 5PPM/M FUMON-02	<b>SEX:</b> Male <b>DISP:</b> Moribund	<b>DAY ON TEST:</b> 579 <b>HISTO:</b> 21080100068
----------------------	--	---	--

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone - Femur	* Bone - Sternum	* Brain - Cerebellum	* Brain - Cerebrum
* Epididymis	* Esophagus	* Harderian Gland	* Heart
* Intestine Large - Rectum	* Intestine Small - Duodenum	* Intestine Small - Ileum	* Intestine Small - Jejunum
* Larynx	* Lung - Bronchus	* Pancreas	* Parathyroid Gland
* Peripheral Nerve - Sciatic	* Skin	* Spinal Cord - Thoracic	* Stomach - Glandular
* Thyroid Gland	* Tongue	* Trachea	* Urinary Bladder
* Zymbal's Gland			

**MISSING**

* Blood Vessel - Aorta	* Mammary Gland	* Preputial Gland	* Thymus
------------------------	-----------------	-------------------	----------

**OBSERVATIONS**

* Adrenal Gland		Leukemia Mononuclear	
* Bone Marrow		Leukemia Mononuclear	
* Coagulating Gland	Bilateral	Atrophy	Moderate
* Eye	Bilateral, Retina	Atrophy	Marked
* Intestine Large	Cecum	Leukemia Mononuclear	
	Colon	Leukemia Mononuclear	
* Kidney		Leukemia Mononuclear	
	Renal Tubule	Pigmentation	Mild
* Lacrimal Gland		Atrophy	Diffuse, Moderate
* Liver		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 3-6.1 ]		
* Lung		Leukemia Mononuclear	
* Lymph Node	Mandibular	Leukemia Mononuclear	
	Mesenteric	Leukemia Mononuclear	
* Nose	Nasolacrim Dct	Inflammation	Acute, Minimal
		Inflammation	Chronic, Minimal
* Pituitary Gland		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 4-11 ]		
* Prostate		Inflammation	Chronic Active, Mild
* Salivary Glands	Parotid GI	Atrophy	Diffuse, Moderate

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 68	<b>TRT#:</b> 2	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 579
	<b>DOSE:</b> 5PPM/M FUMON-02	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100068

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

* Seminal Vesicle	Bilateral	Atrophy	Moderate
* Skeletal Muscle	Thigh	Degeneration	Minimal
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 1,2-6 ]			
* Stomach	Epithelium, Forestomach	Hyperplasia	Mild
* Testes	Interstit Cell	Hyperplasia	Focal, Minimal

---

**PRIMARY CAUSE OF DEATH** - Spleen Leukemia Mononuclear

---

Animal Note: COD...PROBABLE-LEUKEMIA MONONUCLEAR CELL

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

<b>ANIMAL ID:</b> 69	<b>TRT#:</b> 5	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 551
	<b>DOSE:</b> 150PPM/MFUMON-05	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100069

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Adrenal Gland	Blood Vessel - Aorta	Bone - Femur	Bone - Sternum
Brain - Cerebellum	Brain - Cerebrum	Coagulating Gland	Epididymis
Esophagus	Eye	Intestine Large - Cecum	Intestine Large - Colon
Intestine Large - Rectum	Intestine Small - Duodenum	Intestine Small - Ileum	Intestine Small - Jejunum
Lacrimal Gland	Larynx	Lymph Node - Mandibular	Mammary Gland
Parathyroid Gland	Peripheral Nerve - Sciatic	Prostate	Salivary Glands
Seminal Vesicle	Skeletal Muscle - Thigh	Skin	Spinal Cord - Thoracic
Stomach - Forestomach	Stomach - Glandular	Testes	Thyroid Gland
Tongue	Trachea	Urinary Bladder	

**MISSING**

Zymbal's Gland

**OBSERVATIONS**

Bone Marrow		Hyperplasia	Mild
Brain	Hippocampus, Neuron	Necrosis	Mild
Harderian Gland		Infiltration Cellular	Lymphocytic, Minimal
Heart		Cardiomyopathy	Mild
* Kidney	Bilateral	Nephropathy	Minimal
* Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Minimal
	Hepatocyte	Vacuolization Cytoplasmic	Minimal
	[ Vacuolization Cytoplasmic TGLS = 2-6 ]		
Lung	Bronchus	Squamous Cell Carcinoma	
	[ Squamous Cell Carcinoma TGLS = 1-5.1 ]		
Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
Nose	Olfactory Epi	Cytoplasmic Alteration	Minimal
Pancreas	Acinar Cell	Atrophy	Focal, Minimal
Pituitary Gland	Pars Distalis	Adenoma	
Preputial Gland		Inflammation	Chronic, Minimal
Spleen		Hematopoietic Cell Proliferation	Mild
Thymus		Atrophy	Mild

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

**ANIMAL ID:** 69

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 551

**DOSE:** 150PPM/MFUMON-05

**DISP:** Moribund

**HISTO:** 21080100069

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

PRIMARY CAUSE OF DEATH - Lung Bronchus Squamous Cell Carcinoma

---

Animal Note: COD...PROBABLE-LUNG,SQUAMOUS CELL CARCINOMA

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

<b>ANIMAL ID:</b> 72	<b>TRT#:</b> 4	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 606
	<b>DOSE:</b> 50PPM/M FUMON-04	<b>DISP:</b> Natural Death	<b>HISTO:</b> 21080100072

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Brain - Cerebellum
* Brain - Cerebrum	* Coagulating Gland	* Epididymis	* Esophagus
* Harderian Gland	* Intestine Large - Rectum	* Intestine Small - Duodenum	* Kidney
* Lacrimal Gland	* Larynx	* Lung - Bronchus	* Parathyroid Gland
* Peripheral Nerve - Sciatic	* Salivary Glands	* Seminal Vesicle	* Skin
* Spinal Cord - Thoracic	* Stomach - Glandular	* Testes	* Thyroid Gland
* Tongue	* Trachea	* Urinary Bladder	* Zymbal's Gland

**MISSING**

* Mammary Gland	Ureter
-----------------	--------

**AUTO PRECLUDES DIAG.**

* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Small - Ileum	* Intestine Small - Jejunum
---------------------------	---------------------------	---------------------------	-----------------------------

**OBSERVATIONS**

* Adrenal Gland		Leukemia Mononuclear	
* Bone Marrow		Leukemia Mononuclear	
* Eye	Retina	Atrophy	Moderate
* Heart		Cardiomyopathy	Mild
* Liver		Leukemia Mononuclear	
* Lung		Leukemia Mononuclear	
* Lymph Node	Mandibular	Hemorrhage	Mild
	Mesenteric	Leukemia Mononuclear	
		[ Hemorrhage TGLS = 3-8 ]	
		[ Leukemia Mononuclear TGLS = 4-11 ]	
* Nose	Nasolacrim Dct	Inflammation	Acute, Minimal
* Pancreas		Adenoma	
		Note: ISLETS ADENOMA	
* Pituitary Gland		Leukemia Mononuclear	
* Preputial Gland		Inflammation	Chronic, Minimal
* Prostate		Inflammation	Chronic Active, Mild
* Skeletal Muscle	Thigh	Degeneration	Mild
* Spleen		Leukemia Mononuclear	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 72	<b>TRT#:</b> 4	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 606
	<b>DOSE:</b> 50PPM/M FUMON-04	<b>DISP:</b> Natural Death	<b>HISTO:</b> 21080100072

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

[ Leukemia Mononuclear TGLS = 1-6.1 ]

* Stomach	Forestomach	Inflammation	Chronic, Minimal
* Thymus		Leukemia Mononuclear	
Ureter			

Note: TGL # 02 - NO MICROSCOPIC CORRELATE

---

PRIMARY CAUSE OF DEATH - Spleen Leukemia Mononuclear

---

Animal Note: COD...PROBABLE-LEUKEMIA MONONUCLEAR CELL

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 76

**TRT#:** 2

**SEX:** Male

**DAY ON TEST:** 607

**DOSE:** 5PPM/M FUMON-02

**DISP:** Moribund

**HISTO:** 21080100076

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Brain - Cerebellum
* Brain - Cerebrum	* Epididymis	* Esophagus	* Eye
* Harderian Gland	* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum
* Intestine Small - Duodenum	* Intestine Small - Ileum	* Intestine Small - Jejunum	* Lacrimal Gland
* Lung - Bronchus	* Mammary Gland	* Parathyroid Gland	* Peripheral Nerve - Sciatic
* Prostate	* Salivary Glands	* Skeletal Muscle - Thigh	* Skin
* Spinal Cord - Thoracic	* Stomach - Forestomach	* Stomach - Glandular	* Thyroid Gland
* Tongue	* Trachea	* Urinary Bladder	* Zymbal's Gland

**OBSERVATIONS**

* Adrenal Gland	Medulla Cortex	Pheochromocytoma Benign Vacuolization Cytoplasmic Leukemia Mononuclear Inflammation	Focal, Mild  Chronic Active, Moderate
* Bone Marrow			
* Coagulating Gland			
* Eye			
Note: TGL#3-NULIFIED BY TRIMMER			
* Heart		Cardiomyopathy	Minimal
* Kidney	Bilateral Bilateral, Renal Tubule	Leukemia Mononuclear Nephropathy Pigmentation Inflammation	Mild Mild Chronic Active, Minimal
* Larynx		Hepatocellular Carcinoma	
* Liver	Bile Duct	Hyperplasia Leukemia Mononuclear	Moderate
[ Hepatocellular Carcinoma TGLS = 5,6-6.3 ]			
[ Leukemia Mononuclear TGLS = 2-6 ]			
* Lung		Leukemia Mononuclear	
* Lymph Node	Mandibular Mesenteric	Leukemia Mononuclear Leukemia Mononuclear	
* Nose	Olfactory Epi Nasolacrim Dct	Cytoplasmic Alteration Inflammation	Minimal Chronic, Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 76	<b>TRT#:</b> 2 <b>DOSE:</b> 5PPM/M FUMON-02	<b>SEX:</b> Male <b>DISP:</b> Moribund	<b>DAY ON TEST:</b> 607 <b>HISTO:</b> 21080100076
----------------------	--	---	--

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

* Pancreas	Acinar Cell	Atrophy	Focal, Mild
* Pituitary Gland	Pars Distalis	Hyperplasia	Focal, Marked
* Preputial Gland	Bilateral	Inflammation	Chronic Active, Mild
* Seminal Vesicle	Bilateral	Atrophy	Mild
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 1-6.1 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 4-10.1 ]			
* Thymus		Leukemia Mononuclear	

---

**PRIMARY CAUSE OF DEATH** - Spleen Leukemia Mononuclear

---

Animal Note: COD...PROBABLE-LEUKEMIA MONONUCLEAR CELL

---

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92002-03  
Test Type: CHRONIC  
Species/Strain: Rat/F 344/NCTR

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
Test Compound: Fumonisin B1  
CAS Number: 116355-83-0

Date Report Requested: 10/15/2014  
Time Report Requested: 18:08:21  
First Dose M/F: NA / NA  
Lab: NCTR

---

<b>ANIMAL ID:</b> 78	<b>TRT#:</b> 2	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 561
	<b>DOSE:</b> 5PPM/M FUMON-02	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100078

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

* Adrenal Gland	* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum
* Bone Marrow	* Brain - Cerebellum	* Brain - Cerebrum	* Coagulating Gland
* Epididymis	* Esophagus	* Harderian Gland	* Heart
* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum	* Intestine Small - Duodenum
* Intestine Small - Ileum	* Intestine Small - Jejunum	* Lacrimal Gland	* Larynx
* Lung - Bronchus	* Lymph Node - Mandibular	* Nose	* Pancreas
* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Prostate	* Salivary Glands
* Skeletal Muscle - Thigh	* Skin	* Spinal Cord - Thoracic	* Stomach - Forestomach
* Stomach - Glandular	* Testes	* Tongue	* Trachea
* Urinary Bladder	* Zymbal's Gland		

---

**MISSING**

* Mammary Gland	* Preputial Gland	* Thymus
-----------------	-------------------	----------

---

**OBSERVATIONS**

* Brain	Hypothalamus	Compression	Moderate
* Eye	Retina	Atrophy	Moderate
* Kidney	Bilateral	Nephropathy	Minimal
* Liver		Hepatodiaphragmatic Nodule	
		Leukemia Mononuclear	
[ Hepatodiaphragmatic Nodule TGLS = 2-6 ]			
* Lymph Node	Mesenteric	Leukemia Mononuclear	
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 3-11 ]			
* Seminal Vesicle	Bilateral	Atrophy	Mild
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 1-6 ]			
* Thyroid Gland	C Cell	Adenoma	

---

PRIMARY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma

---

Animal Note: COD...PROBABLE-PITUITARY GLAND,ADENOMA

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 80

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 614

**DOSE:** 15PPM/M FUMON-03

**DISP:** Moribund

**HISTO:** 21080100080

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Gland	* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum
* Brain - Cerebellum	* Brain - Cerebrum	* Coagulating Gland	* Epididymis
* Esophagus	* Harderian Gland	* Heart	* Intestine Large - Cecum
* Intestine Large - Colon	* Intestine Large - Rectum	* Intestine Small - Duodenum	* Intestine Small - Ileum
* Intestine Small - Jejunum	* Lacrimal Gland	* Larynx	* Lung - Bronchus
* Lymph Node - Mandibular	* Peripheral Nerve - Sciatic	* Prostate	* Salivary Glands
* Seminal Vesicle	* Skeletal Muscle - Thigh	* Skin	* Spinal Cord - Thoracic
* Stomach - Forestomach	* Stomach - Glandular	* Testes	* Tongue
* Trachea	* Urinary Bladder	* Zymbal's Gland	

**MISSING**

\* Parathyroid Gland

**OBSERVATIONS**

* Bone Marrow		Leukemia Mononuclear	
* Eye	Bilateral, Retina	Atrophy	Moderate
* Kidney	Bilateral	Nephropathy	Mild
	Bilateral, Renal Tubule	Pigmentation	Mild
* Liver		Carcinoma	Metastatic (Thyroid Gland)
	Hepatocyte	Degeneration	Cystic, Focal, Mild
	Bile Duct	Hyperplasia	Mild
		Leukemia Mononuclear	
	[ Carcinoma TGLS = 5-6 ]		
	[ Degeneration TGLS = 8-6.2 ]		
* Lung		Carcinoma	Metastatic (Thyroid Gland)
* Lymph Node	Mesenteric	Leukemia Mononuclear	
* Mammary Gland		Galactoceles	Moderate
	[ Galactoceles TGLS = 1-10.1 ]		
* Nose	Olfactory Epi	Cytoplasmic Alteration	Minimal
		Inflammation	Chronic, Mild
* Pancreas	Acinar Cell	Atrophy	Focal, Minimal
* Pituitary Gland	Pars Distalis	Adenoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 80	<b>TRT#:</b> 3	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 614
	<b>DOSE:</b> 15PPM/M FUMON-03	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100080

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

[ Adenoma TGLS = 7-11 ]			
* Preputial Gland	Bilateral	Inflammation	Chronic, Mild
Note: TGL#3-NULLIFIED BY TRIMMER			
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 4-6.1 ]			
* Thymus		Atrophy	Moderate
Note: TGL#6-NULLIFIED BY TRIMMER			
* Thyroid Gland	C Cell	Carcinoma	
[ Carcinoma TGLS = 2-4 ]			

---

PRIMARY CAUSE OF DEATH - Thyroid Gland C Cell Carcinoma

---

Animal Note: COD...PROBABLE-THYROID,C-CELL CARCINOMA

---

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 81                      **TRT#:** 2                      **SEX:** Male                      **DAY ON TEST:** 600  
**DOSE:** 5PPM/M FUMON-02                      **DISP:** Moribund                      **HISTO:** 21080100081

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Brain - Cerebellum
* Brain - Cerebrum	* Coagulating Gland	* Epididymis	* Esophagus
* Harderian Gland	* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum
* Intestine Small - Duodenum	* Intestine Small - Ileum	* Intestine Small - Jejunum	* Lacrimal Gland
* Larynx	* Lung - Bronchus	* Pancreas	* Parathyroid Gland
* Peripheral Nerve - Sciatic	* Prostate	* Salivary Glands	* Seminal Vesicle
* Skeletal Muscle - Thigh	* Skin	* Spinal Cord - Thoracic	* Stomach - Forestomach
* Tongue	* Trachea	* Urinary Bladder	

**MISSING**

* Mammary Gland	* Preputial Gland	* Zymbal's Gland
-----------------	-------------------	------------------

**OBSERVATIONS**

* Adrenal Gland		Leukemia Mononuclear	
* Bone Marrow		Leukemia Mononuclear	
* Eye	Bilateral, Retina	Atrophy	Moderate
* Heart		Cardiomyopathy	Mild
* Kidney	Bilateral	Nephropathy	Minimal
	Bilateral, Renal Tubule	Pigmentation	Mild
* Liver	Bile Duct	Hyperplasia	Marked
		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 3-6 ]		
* Lung		Leukemia Mononuclear	
* Lymph Node	Mandibular	Leukemia Mononuclear	
	Mesenteric	Leukemia Mononuclear	
	Thoracic	Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 4-14 ]		
Mesentery		Accessory Spleen	
	[ Accessory Spleen TGLS = 2-11 ]		
* Nose	Olfactory Epi	Cytoplasmic Alteration	Minimal
		Foreign Body	
		Inflammation	Chronic Active, Mild

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 81	<b>TRT#:</b> 2	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 600
	<b>DOSE:</b> 5PPM/M FUMON-02	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100081

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

* Pituitary Gland	Pars Distalis	Adenoma	
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 1-6.1 ]			
* Stomach	Glandular	Cyst	Minimal
* Testes	Bilateral, Interstit Cell	Adenoma	
* Thymus		Leukemia Mononuclear	
* Thyroid Gland	C Cell	Adenoma	

---

**PRIMARY CAUSE OF DEATH** - Spleen Leukemia Mononuclear

---

Animal Note: COD...PROBABLE-LEUKEMIA MONONUCLEAR CELL

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

<b>ANIMAL ID:</b> 83	<b>TRT#:</b> 2 <b>DOSE:</b> 5PPM/M FUMON-02	<b>SEX:</b> Male <b>DISP:</b> Moribund	<b>DAY ON TEST:</b> 582 <b>HISTO:</b> 21080100083
----------------------	--	---	--

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Gland	* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum
* Bone Marrow	* Brain - Cerebellum	* Brain - Cerebrum	* Coagulating Gland
* Epididymis	* Esophagus	* Intestine Large - Cecum	* Intestine Large - Colon
* Intestine Large - Rectum	* Intestine Small - Duodenum	* Intestine Small - Ileum	* Intestine Small - Jejunum
* Lacrimal Gland	* Larynx	* Lymph Node - Mandibular	* Mammary Gland
* Peripheral Nerve - Sciatic	* Prostate	* Salivary Glands	* Skeletal Muscle - Thigh
* Skin	* Spinal Cord - Thoracic	* Stomach - Forestomach	* Stomach - Glandular
* Tongue	* Trachea	* Urinary Bladder	* Zymbal's Gland

**MISSING**

\* Parathyroid Gland

**OBSERVATIONS**

* Esophagus			
Note: TGL#5-NULLIFIED BY TRIMMER			
* Eye	Iris	Inflammation	Acute, Mild
* Harderian Gland	Bilateral	Infiltration Cellular	Lymphocytic, Minimal
* Heart		Cardiomyopathy	Mild
* Kidney	Bilateral	Mineralization	Mild
	Bilateral	Nephropathy	Mild
* Liver	Bile Duct	Hyperplasia	Minimal
	Hepatocyte	Vacuolization Cytoplasmic	Mild
	[ Vacuolization Cytoplasmic TGLS = 2-6 ]		
* Lung	Bronchus	Squamous Cell Carcinoma	
	[ Squamous Cell Carcinoma TGLS = 4-5.2 ]		
* Lymph Node	Mediastinal	Carcinoma	Metastatic (Lung)
	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
	[ Carcinoma TGLS = 3-1.1 ]		
* Nose	Olfactory Epi	Cytoplasmic Alteration	Minimal
* Pancreas		Necrosis	Focal, Mild
Note: TGL#6-NULLIFIED BY TRIMMER			
* Pituitary Gland	Pars Distalis	Adenoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 83	<b>TRT#:</b> 2	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 582
	<b>DOSE:</b> 5PPM/M FUMON-02	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100083

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

* Preputial Gland	Bilateral	Inflammation	Chronic, Mild
* Seminal Vesicle	Bilateral	Atrophy	Mild
* Spleen		Hematopoietic Cell Proliferation	Minimal
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 1,7-10.1 ]			
* Thymus		Atrophy	Minimal
Note: TGL#3-NOTED GROSSLY AS THYMUS WAS LYMPH NODE			
* Thyroid Gland		Ultimobranchial Cyst	

---

**PRIMARY CAUSE OF DEATH** - Lung Bronchus Squamous Cell Carcinoma

Animal Note: COD...PROBABLE-LUNG,SQUAMOUS CELL CARCINOMA

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 84	<b>TRT#:</b> 4	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 582
	<b>DOSE:</b> 50PPM/M FUMON-04	<b>DISP:</b> Natural Death	<b>HISTO:</b> 21080100084

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

* Adrenal Gland	* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum
* Bone Marrow	* Brain - Cerebellum	* Brain - Cerebrum	* Epididymis
* Esophagus	* Eye	* Harderian Gland	* Intestine Large - Cecum
* Intestine Large - Colon	* Intestine Large - Rectum	* Intestine Small - Duodenum	* Intestine Small - Ileum
* Lacrimal Gland	* Larynx	* Lung - Bronchus	* Mammary Gland
* Nose	* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Salivary Glands
* Seminal Vesicle	* Skeletal Muscle - Thigh	* Skin	* Spinal Cord - Thoracic
* Spleen	* Stomach - Forestomach	* Stomach - Glandular	* Testes
* Thyroid Gland	* Tongue	* Trachea	* Urinary Bladder
* Zymbal's Gland			

---

**MISSING**

\* Thymus

---

**AUTO PRECLUDES DIAG.**

\* Intestine Small - Jejunum

---

**OBSERVATIONS**

* Adrenal Gl			
Note: MEDULLA ONLY ONE			
* Brain	Hypothalamus	Compression	Mild
	Ventricle	Hemorrhage	Mild
* Coagulating Gland		Inflammation	Acute, Mild
* Heart		Cardiomyopathy	Moderate
* Kidney	Bilateral	Nephropathy	Minimal
* Liver		Congestion	Mild
	Bile Duct	Hyperplasia	Mild
	Hepatocyte	Necrosis	Minimal
		Vacuolization Cytoplasmic	Mild
[ Congestion TGLS = 3-6 ]			
* Lymph Node	Mandibular	Hemorrhage	Mild
	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
* Pancreas	Acinar Cell	Atrophy	Focal, Moderate

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 84	<b>TRT#:</b> 4	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 582
	<b>DOSE:</b> 50PPM/M FUMON-04	<b>DISP:</b> Natural Death	<b>HISTO:</b> 21080100084

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

* Pituitary Gland [ Adenoma TGLS = 1-11 ]	Pars Distalis	Adenoma	
* Preputial Gland		Inflammation	Chronic, Minimal
* Prostate		Inflammation	Acute, Mild
* Testes Note: TGL # 02 - NO MICROSCOPIC CORRELATE Note: ONLY ONE			

---

**PRIMARY CAUSE OF DEATH** - Pituitary Gland Pars Distalis Adenoma

---

Animal Note: COD...PROBABLE-PITUITARY GLAND,ADENOMA

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

<b>ANIMAL ID:</b> 85	<b>TRT#:</b> 5	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 629
	<b>DOSE:</b> 150PPM/MFUMON-05	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100085

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Blood Vessel - Aorta	Bone - Femur	Bone - Sternum	Brain - Cerebellum
Brain - Cerebrum	Coagulating Gland	Epididymis	Esophagus
Harderian Gland	Intestine Large - Cecum	Intestine Large - Colon	Intestine Large - Rectum
Intestine Small - Duodenum	Intestine Small - Ileum	Intestine Small - Jejunum	Lacrimal Gland
Larynx	Lung - Bronchus	Mammary Gland	Parathyroid Gland
Peripheral Nerve - Sciatic	Pituitary Gland	Salivary Glands	Seminal Vesicle
Skeletal Muscle - Thigh	Spinal Cord - Thoracic	Stomach - Forestomach	Stomach - Glandular
Testes	Thyroid Gland	Tongue	Trachea
Urinary Bladder			

**MISSING**

Zymbal's Gland

**OBSERVATIONS**

Adrenal Gland	Medulla	Pheochromocytoma Benign	
Bone Marrow		Leukemia Mononuclear	
Eye	Bilateral, Retina	Atrophy	Moderate
Heart		Cardiomyopathy	Mild
		Leukemia Mononuclear	
* Kidney		Cyst	Mild
		Mineralization	Minimal
	Bilateral	Nephropathy	Minimal
[ Cyst TGLS = 2-2.1 ]			
* Liver	Bile Duct	Hyperplasia	Marked
		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 3-6 ]			
Lung		Leukemia Mononuclear	
Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
	Mandibular	Leukemia Mononuclear	
Nose	Olfactory Epi	Cytoplasmic Alteration	Moderate
Pancreas	Acinar Cell	Basophilic Focus	
Preputial Gland		Inflammation	Chronic Active, Mild

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 85	<b>TRT#:</b> 5	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 629
	<b>DOSE:</b> 150PPM/MFUMON-05	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100085

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

Prostate	Inflammation	Acute, Minimal
Skin [ Keratoacanthoma TGLS = 4-14 ]	Keratoacanthoma	
Spleen [ Leukemia Mononuclear TGLS = 1-6.1 ]	Leukemia Mononuclear	
Thymus	Atrophy	Moderate

---

**PRIMARY CAUSE OF DEATH** - Spleen Leukemia Mononuclear

Animal Note: COD...PROBABLE-LEUKEMIA MONONUCLEAR CELL

---



**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

<b>ANIMAL ID:</b> 86	<b>TRT#:</b> 5	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 629
	<b>DOSE:</b> 150PPM/MFUMON-05	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100086

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Blood Vessel - Aorta	Bone - Femur	Bone - Sternum	Bone Marrow
Brain - Cerebellum	Brain - Cerebrum	Coagulating Gland	Epididymis
Esophagus	Heart	Intestine Large - Cecum	Intestine Large - Colon
Intestine Large - Rectum	Intestine Small - Duodenum	Intestine Small - Ileum	Intestine Small - Jejunum
Larynx	Lung - Bronchus	Lymph Node - Mandibular	Nose
Parathyroid Gland	Peripheral Nerve - Sciatic	Prostate	Salivary Glands
Seminal Vesicle	Skeletal Muscle - Thigh	Skin	Spinal Cord - Thoracic
Spleen	Stomach - Forestomach	Stomach - Glandular	Thymus
Tongue	Trachea	Urinary Bladder	Zymbal's Gland

**MISSING**

Mammary Gland

**OBSERVATIONS**

Adrenal Gland	Cortex	Adenoma	
Eye	Bilateral, Retina	Atrophy	Moderate
	Bilateral, Lens	Cataract	Mild
Harderian Gland		Infiltration Cellular	Lymphocytic, Minimal
* Kidney	Renal Tubule	Hyperplasia	Focal, Minimal
	Bilateral	Nephropathy	Mild
Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Liver		Basophilic Focus	
		Clear Cell Focus	
		Eosinophilic Focus	
	Bile Duct	Hyperplasia	Mild
Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
Pancreas	Acinar Cell	Atrophy	Focal, Minimal
		Infiltration Cellular	Lymphocytic, Minimal
Pituitary Gland	Pars Distalis	Hyperplasia	Focal, Mild
	Pars Distalis	Hypertrophy	Focal, Moderate
Preputial Gland		Carcinoma	
		[ Carcinoma TGLS = 1-10.2 ]	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 86	<b>TRT#:</b> 5	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 629
	<b>DOSE:</b> 150PPM/MFUMON-05	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100086

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

Testes	Bilateral, Interstit Cell	Adenoma
[ Adenoma TGLS = 2-10.1 ]		
Thyroid Gland		Ultimobranchial Cyst

---

**PRIMARY CAUSE OF DEATH** - Preputial Gland Carcinoma

---

Animal Note: COD...PROBABLE-PREPUTIAL GLAND,CARCINOMA

---

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 87

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 615

**DOSE:** 0PPM/M FUMON-01

**DISP:** Moribund

**HISTO:** 21080100087

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Brain - Cerebellum
* Brain - Cerebrum	* Coagulating Gland	* Epididymis	* Esophagus
* Harderian Gland	* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum
* Intestine Small - Duodenum	* Intestine Small - Ileum	* Intestine Small - Jejunum	* Lacrimal Gland
* Lung - Bronchus	* Lymph Node - Mandibular	* Nose	* Pancreas
* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Preputial Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	* Skeletal Muscle - Thigh	* Spinal Cord - Thoracic
* Stomach - Forestomach	* Stomach - Glandular	* Testes	* Thymus
* Thyroid Gland	* Tongue	* Trachea	* Urinary Bladder
* Zymbal's Gland			

**OBSERVATIONS**

* Adrenal Gland	Cortex	Vacuolization Cytoplasmic	Focal, Minimal
* Bone Marrow		Hyperplasia	Mild
* Eye	Bilateral, Retina	Atrophy	Marked
	Bilateral, Lens	Cataract	Mild
* Heart		Cardiomyopathy	Mild
* Kidney	Bilateral	Nephropathy	Moderate
	[ Nephropathy TGLS = 1-2 ]		
* Larynx		Inflammation	Chronic, Minimal
* Liver		Clear Cell Focus	
	Bile Duct	Hyperplasia	Mild
		Inflammation	Chronic, Minimal
* Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
* Mammary Gland		Cyst	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
	[ Adenoma TGLS = 2-11 ]		
* Preputial GI			
	Note: ONLY ONE		
* Skin		Basal Cell Adenoma	
	[ Basal Cell Adenoma TGLS = 3-14 ]		

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 87	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 615
	<b>DOSE:</b> 0PPM/M FUMON-01	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100087

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

* Spleen	Congestion	Mild
----------	------------	------

---

PRIMARY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma

---

Animal Note: COD...PROBABLE-PITUITARY GLAND,ADENOMA

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 88

**TRT#:** 2

**SEX:** Male

**DAY ON TEST:** 587

**DOSE:** 5PPM/M FUMON-02

**DISP:** Moribund

**HISTO:** 21080100088

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Gland	* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum
* Bone Marrow	* Brain - Cerebellum	* Brain - Cerebrum	* Epididymis
* Esophagus	* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum
* Intestine Small - Duodenum	* Intestine Small - Ileum	* Intestine Small - Jejunum	* Lung - Bronchus
* Mammary Gland	* Peripheral Nerve - Sciatic	* Pituitary Gland	* Salivary Glands
* Skeletal Muscle - Thigh	* Skin	* Spinal Cord - Thoracic	* Spleen
* Stomach - Forestomach	* Stomach - Glandular	* Thymus	* Tongue
* Urinary Bladder	* Zymbal's Gland		

**MISSING**

* Larynx	* Parathyroid Gland
----------	---------------------

**OBSERVATIONS**

* Adrenal Gland			
Note: MEDULLA ONLY ONE			
* Coagulating Gland		Atrophy	Minimal
* Eye	Bilateral, Retina	Atrophy	Mild
* Harderian Gland	Bilateral	Infiltration Cellular	Lymphocytic, Minimal
* Heart		Cardiomyopathy	Mild
* Kidney	Bilateral	Nephropathy	Mild
* Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Liver		Inflammation	Chronic, Minimal
* Lymph Node	Mesenteric	Degeneration	Cystic, Moderate
	Mandibular	Hyperplasia	Minimal
	Mesenteric	Hyperplasia	Mild
* Nose		Foreign Body	
		Inflammation	Chronic Active, Minimal
* Pancreas		Hyperplasia	Focal, Minimal
Note: ISLETS			
* Preputial Gland		Adenoma	
[ Adenoma TGLS = 1-10 ]			
* Prostate		Inflammation	Acute, Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 88	<b>TRT#:</b> 2	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 587
	<b>DOSE:</b> 5PPM/M FUMON-02	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100088

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

Note: ON SLIDE 10			
* Seminal Vesicle		Atrophy	Moderate
* Testes	Interstit Cell	Adenoma	
	Interstit Cell	Hyperplasia	Focal, Mild
[ Adenoma TGLS = 2-10.1 ]			
* Thyroid Gland	C Cell	Carcinoma	
[ Carcinoma TGLS = 3-4 ]			
* Trachea		Inflammation	Chronic, Minimal

---

PRIMARY CAUSE OF DEATH - Preputial Gland Adenoma

---

Animal Note: COD...PROBABLE-PREPUTIAL GLAND,ADENOMA

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 91

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 633

**DOSE:** 0PPM/M FUMON-01

**DISP:** Moribund

**HISTO:** 21080100091

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Bone Marrow
* Brain - Cerebellum	* Brain - Cerebrum	* Epididymis	* Esophagus
* Harderian Gland	* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum
* Intestine Small - Duodenum	* Intestine Small - Ileum	* Intestine Small - Jejunum	* Lacrimal Gland
* Larynx	* Lung - Bronchus	* Lymph Node - Mandibular	* Lymph Node - Mesenteric
* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Salivary Glands	* Skeletal Muscle - Thigh
* Skin	* Spinal Cord - Thoracic	* Spleen	* Stomach - Forestomach
* Thyroid Gland	* Tongue	* Trachea	* Urinary Bladder
* Zymbal's Gland			

**MISSING**

* Preputial Gland	* Thymus
-------------------	----------

**OBSERVATIONS**

* Adrenal Gland	Cortex	Vacuolization Cytoplasmic	Focal, Minimal
* Brain	Hypothalamus	Compression	Moderate
* Coagulating Gland		Atrophy	Mild
* Eye	Bilateral, Retina	Atrophy	Marked
	Bilateral, Lens	Cataract	Mild
* Heart		Cardiomyopathy	Minimal
* Kidney	Bilateral	Nephropathy	Mild
* Liver	Bile Duct	Hyperplasia	Moderate
		Necrosis	Moderate
	Hepatocyte	Vacuolization Cytoplasmic	Mild
* Mammary Gland		Galactoceles	Mild
Mesentery	Fat	Necrosis	Mild
	[ Necrosis TGLS = 4-14 ]		
* Nose	Olfactory Epi	Cytoplasmic Alteration	Minimal
		Foreign Body	
	Nasolacrim Dct	Inflammation	Chronic Active, Moderate
		Inflammation	Chronic, Minimal
* Pancreas	Acinar Cell	Adenoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 91	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 633
	<b>DOSE:</b> 0PPM/M FUMON-01	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100091

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

* Pituitary Gland [ Adenoma TGLS = 3-11 ]	Pars Distalis	Adenoma	
* Prostate		Inflammation	Acute, Minimal
* Seminal Vesicle		Atrophy	Moderate
* Stomach	Glandular	Cyst	Minimal
* Testes [ Adenoma TGLS = 1,2-10.1 ]	Bilateral, Interstit Cell	Adenoma	

---

**PRIMARY CAUSE OF DEATH** - Pituitary Gland Pars Distalis Adenoma

---

Animal Note: COD...PROBABLE-PITUITARY GLAND,ADENOMA

---

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

<b>ANIMAL ID:</b> 93	<b>TRT#:</b> 4 <b>DOSE:</b> 50PPM/M FUMON-04	<b>SEX:</b> Male <b>DISP:</b> Moribund	<b>DAY ON TEST:</b> 594 <b>HISTO:</b> 21080100093
----------------------	---	---	--

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Brain - Cerebellum
* Brain - Cerebrum	* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum
* Intestine Small - Ileum	* Intestine Small - Jejunum	* Larynx	* Lung - Bronchus
* Mammary Gland	* Nose	* Peripheral Nerve - Sciatic	* Pituitary Gland
* Preputial Gland	* Salivary Glands	* Skeletal Muscle - Thigh	* Skin
* Spinal Cord - Thoracic	* Stomach - Forestomach	* Thymus	* Thyroid Gland
* Tongue	* Trachea	* Zymbal's Gland	

**MISSING**

* Coagulating Gland	* Epididymis	* Parathyroid Gland	* Seminal Vesicle
---------------------	--------------	---------------------	-------------------

**OBSERVATIONS**

* Adrenal Gland	Cortex	Vacuolization Cytoplasmic	Focal, Mild
* Bone Marrow		Hyperplasia	Moderate
* Esophagus	Muscularis	Inflammation	Chronic, Mild
* Eye	Bilateral, Retina	Atrophy	Marked
	Bilateral, Lens	Cataract	Mild
Note: TGL#3-NULIFIED BY TRIMMER			
* Harderian Gland		Infiltration Cellular	Lymphocytic, Minimal
* Heart		Cardiomyopathy	Mild
* Intestine Small	Duodenum	Mesothelioma Malignant	
* Kidney	Bilateral	Nephropathy	Minimal
	Renal Tubule	Pigmentation	Moderate
* Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Liver		Hematopoietic Cell Proliferation	Mild
	Bile Duct	Hyperplasia	Minimal
	Hepatocyte	Vacuolization Cytoplasmic	Mild
		[ Vacuolization Cytoplasmic TGLS = 4-6 ]	
* Lymph Node	Mandibular	Hyperplasia	Minimal
	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
* Pancreas		Mesothelioma Malignant	
		[ Mesothelioma Malignant TGLS = 6-7 ]	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 93	<b>TRT#:</b> 4	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 594
	<b>DOSE:</b> 50PPM/M FUMON-04	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100093

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

* Prostate	Epithelium	Hyperplasia	Focal, Mild
* Spleen		Hematopoietic Cell Proliferation	Moderate
		Mesothelioma Malignant	
	[ Hematopoietic Cell Proliferation TGLS = 1-6 ]		
* Stomach	Glandular	Mesothelioma Malignant	
* Testes	Bilateral, Interstit Cell	Adenoma	
		Mesothelioma Malignant	
	[ Adenoma TGLS = 5-10.1 ]		
	[ Mesothelioma Malignant TGLS = 5-10.1 ]		
Tissue NOS	Scrotal	Mesothelioma Malignant	
Note: TUNICA VAGINALIS			
	[ Mesothelioma Malignant TGLS = 7-14 ]		
* Urinary Bladder		Mesothelioma Malignant	

---

**PRIMARY CAUSE OF DEATH** - Tissue NOS Scrotal Mesothelioma Malignant

---

Animal Note: COD...PROBABLE-MESOTHELIOMA MALIGNANT

Animal Note: TGL#2-CAVITY FLUID,NO SECTION TAKEN

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

<b>ANIMAL ID:</b> 94	<b>TRT#:</b> 4 <b>DOSE:</b> 50PPM/M FUMON-04	<b>SEX:</b> Male <b>DISP:</b> Moribund	<b>DAY ON TEST:</b> 580 <b>HISTO:</b> 21080100094
----------------------	---	---	--

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Gland	* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum
* Brain - Cerebellum	* Brain - Cerebrum	* Coagulating Gland	* Epididymis
* Esophagus	* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum
* Intestine Small - Duodenum	* Intestine Small - Ileum	* Intestine Small - Jejunum	* Larynx
* Lung - Bronchus	* Mammary Gland	* Nose	* Parathyroid Gland
* Peripheral Nerve - Sciatic	* Pituitary Gland	* Seminal Vesicle	* Skeletal Muscle - Thigh
* Skin	* Spinal Cord - Thoracic	* Stomach - Glandular	* Tongue
* Trachea	* Urinary Bladder		

**MISSING**

\* Zymbal's Gland

**OBSERVATIONS**

* Bone Marrow		Leukemia Mononuclear	
* Brain		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 8-3 ]			
* Eye	Bilateral, Retina	Atrophy	Moderate
* Harderian Gland		Infiltration Cellular	Lymphocytic, Minimal
* Heart		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 7-1 ]			
* Kidney		Leukemia Mononuclear	
* Lacrimal Gland		Leukemia Mononuclear	
* Liver	Bile Duct	Hyperplasia	Moderate
[ Leukemia Mononuclear TGLS = 3-6.1 ]		Leukemia Mononuclear	
* Lung		Leukemia Mononuclear	
* Lymph Node	Mandibular	Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 5-11 ]	Mesenteric	Leukemia Mononuclear	
* Pancreas		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 6-7.2 ]			
* Preputial Gland	Bilateral	Inflammation	Chronic Active, Mild

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 94	<b>TRT#:</b> 4	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 580
	<b>DOSE:</b> 50PPM/M FUMON-04	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100094

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

* Prostate		Atrophy	Mild
* Salivary Glands		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 1-8 ]		
* Skin			
	Note: TGL # 02 - NO MICROSCOPIC CORRELATE		
* Spleen		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 4-6 ]		
* Stomach	Forestomach	Leukemia Mononuclear	
* Testes	Bilateral, Interstit Cell	Adenoma	
* Thymus		Leukemia Mononuclear	
* Thyroid Gland	C Cell	Adenoma	
		Leukemia Mononuclear	
* Urin Bladder			
	Note: TGL # 09 - NO MICROSCOPIC CORRELATE		

---

**PRIMARY CAUSE OF DEATH** - Spleen Leukemia Mononuclear

---

Animal Note: COD...PROBABLE-LEUKEMIA MONONUCLEAR CELL

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

<b>ANIMAL ID:</b> 98	<b>TRT#:</b> 4	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 589
	<b>DOSE:</b> 50PPM/M FUMON-04	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100098

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Gland	* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum
* Brain - Cerebellum	* Brain - Cerebrum	* Epididymis	* Esophagus
* Eye	* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum
* Intestine Small - Duodenum	* Intestine Small - Ileum	* Intestine Small - Jejunum	* Lacrimal Gland
* Larynx	* Lung - Bronchus	* Mammary Gland	* Nose
* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Salivary Glands	* Skeletal Muscle - Thigh
* Skin	* Spinal Cord - Thoracic	* Stomach - Forestomach	* Stomach - Glandular
* Thyroid Gland	* Tongue	* Trachea	

**OBSERVATIONS**

* Bone Marrow		Leukemia Mononuclear	
* Coagulating Gland	Bilateral	Atrophy	Mild
* Harderian Gland		Infiltration Cellular	Lymphocytic, Minimal
* Heart		Leukemia Mononuclear	
* Kidney	Renal Tubule	Hyperplasia	Focal, Minimal
		Leukemia Mononuclear	
* Liver	Bilateral, Renal Tubule Bile Duct	Pigmentation	Mild
		Hyperplasia	Moderate
		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 2-6.1 ]		
* Lung		Leukemia Mononuclear	
* Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
	Mandibular	Leukemia Mononuclear	
	Mesenteric	Leukemia Mononuclear	
* Pancreas	Acinar Cell	Atrophy	Focal, Mild
* Pituitary Gland	Pars Distalis	Adenoma	
* Preputial Gland		Inflammation	Chronic, Minimal
* Prostate		Atrophy	Mild
		Inflammation	Chronic, Mild
* Seminal Vesicle	Bilateral	Atrophy	Marked
* Spleen		Leukemia Mononuclear	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 98	<b>TRT#:</b> 4	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 589
	<b>DOSE:</b> 50PPM/M FUMON-04	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100098

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

[ Leukemia Mononuclear TGLS = 1-6 ]			
* Testes	Interstit Cell	Adenoma	
	Interstit Cell	Hyperplasia	Focal, Minimal
* Thymus		Leukemia Mononuclear	
* Urinary Bladder		Leukemia Mononuclear	
* Zymbal's Gland		Carcinoma	
[ Carcinoma TGLS = 3-13 ]			

---

**PRIMARY CAUSE OF DEATH** - Spleen Leukemia Mononuclear

---

Animal Note: COD...PROBABLE-LEUKEMIA MONONUCLEAR CELL

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 99      **TRT#:** 2      **SEX:** Male      **DAY ON TEST:** 596  
**DOSE:** 5PPM/M FUMON-02      **DISP:** Moribund      **HISTO:** 21080100099

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Gland	* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum
* Brain - Cerebellum	* Brain - Cerebrum	* Epididymis	* Esophagus
* Eye	* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum
* Intestine Small - Duodenum	* Intestine Small - Ileum	* Intestine Small - Jejunum	* Larynx
* Lung - Bronchus	* Mammary Gland	* Parathyroid Gland	* Peripheral Nerve - Sciatic
* Pituitary Gland	* Salivary Glands	* Skeletal Muscle - Thigh	* Skin
* Spinal Cord - Thoracic	* Stomach - Forestomach	* Stomach - Glandular	* Thymus
* Thyroid Gland	* Tongue	* Trachea	* Urinary Bladder
* Zymbal's Gland			

**OBSERVATIONS**

* Bone Marrow		Leukemia Mononuclear	
* Coagulating Gland	Bilateral	Atrophy	Minimal
* Harderian Gland	Bilateral	Infiltration Cellular	Lymphocytic, Minimal
* Heart		Cardiomyopathy	Minimal
* Kidney	Bilateral	Nephropathy	Minimal
	Bilateral, Renal Tubule	Pigmentation	Mild
* Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Liver	Bile Duct	Hyperplasia	Mild
		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 2-6.1 ]		
* Lymph Node	Mandibular	Leukemia Mononuclear	
	Mesenteric	Leukemia Mononuclear	
* Nose	Nasolacrim Dct	Inflammation	Chronic Active, Mild
		Leukemia Mononuclear	
* Pancreas	Acinar Cell	Atrophy	Focal, Minimal
* Preputial Gland		Inflammation	Chronic, Minimal
* Prostate		Atrophy	Mild
* Seminal Vesicle	Bilateral	Atrophy	Marked
* Spleen		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 1-6 ]		

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 99	<b>TRT#:</b> 2	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 596
	<b>DOSE:</b> 5PPM/M FUMON-02	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100099

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

* Testes	Bilateral, Interstit Cell	Adenoma
[ Adenoma TGLS = 3,4-10.1 ]		

---

**PRIMARY CAUSE OF DEATH** - Spleen Leukemia Mononuclear

---

Animal Note: COD...PROBABLE-LEUKEMIA MONONUCLEAR CELL

---

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 102

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 642

**DOSE:** 0PPM/M FUMON-01

**DISP:** Moribund

**HISTO:** 21080100102

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Bone Marrow
* Brain - Cerebellum	* Brain - Cerebrum	* Coagulating Gland	* Epididymis
* Esophagus	* Intestine Large - Cecum	* Intestine Large - Rectum	* Intestine Small - Duodenum
* Intestine Small - Ileum	* Intestine Small - Jejunum	* Larynx	* Lung - Bronchus
* Mammary Gland	* Pancreas	* Parathyroid Gland	* Peripheral Nerve - Sciatic
* Salivary Glands	* Seminal Vesicle	* Skeletal Muscle - Thigh	* Skin
* Spinal Cord - Thoracic	* Stomach - Forestomach	* Testes	* Thyroid Gland
* Tongue	* Trachea	* Urinary Bladder	* Zymbal's Gland

**OBSERVATIONS**

* Adrenal Gland	Medulla	Hyperplasia	Focal, Minimal
* Eye	Bilateral, Retina	Atrophy	Marked
	Bilateral, Lens	Cataract	Mild
	[ Cataract TGLS = 3-13 ]		
* Harderian Gland	Bilateral	Infiltration Cellular	Lymphocytic, Mild
* Heart		Cardiomyopathy	Moderate
* Intestine Large	Colon	Leukemia Mononuclear	
* Kidney	Bilateral	Nephropathy	Minimal
* Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Liver	Bile Duct	Hyperplasia	Moderate
		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 2-6 ]		
* Lung		Leukemia Mononuclear	
* Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
	Mandibular	Leukemia Mononuclear	
* Nose	Olfactory Epi	Cytoplasmic Alteration	Minimal
	Nasolacrim Dct	Inflammation	Chronic Active, Mild
* Pituitary Gland	Pars Distalis	Adenoma	
* Preputial Gland		Inflammation	Chronic, Minimal
* Prostate		Inflammation	Chronic Active, Mild
* Spleen		Leukemia Mononuclear	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 102	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 642
	<b>DOSE:</b> 0PPM/M FUMON-01	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100102

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

[ Leukemia Mononuclear TGLS = 1-6 ]

* Stomach	Glandular	Cyst	Minimal
* Thymus		Atrophy	Moderate

---

**PRIMARY CAUSE OF DEATH** - Spleen Leukemia Mononuclear

---

Animal Note: COD...PROBABLE-LEUKEMIA MONONUCLEAR CELL

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

<b>ANIMAL ID:</b> 104	<b>TRT#:</b> 5	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 594
	<b>DOSE:</b> 150PPM/MFUMON-05	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100104

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Blood Vessel - Aorta	Bone - Femur	Bone - Sternum	Brain - Cerebellum
Brain - Cerebrum	Epididymis	Esophagus	Eye
Harderian Gland	Intestine Large - Cecum	Intestine Large - Colon	Intestine Large - Rectum
Intestine Small - Duodenum	Intestine Small - Ileum	Intestine Small - Jejunum	Larynx
Lung - Bronchus	Lymph Node - Mandibular	Lymph Node - Mesenteric	Parathyroid Gland
Peripheral Nerve - Sciatic	Preputial Gland	Skeletal Muscle - Thigh	Skin
Spinal Cord - Thoracic	Stomach - Forestomach	Stomach - Glandular	Thyroid Gland
Tongue	Trachea	Urinary Bladder	Zymbal's Gland

**MISSING**

Mammary Gland	Pituitary Gland	Thymus
---------------	-----------------	--------

**OBSERVATIONS**

Adrenal Gland	Medulla	Hyperplasia	Focal, Moderate
Note: TGL#1-NOTED GROSSLY AS ADRENAL GLAND WAS LYMPH NODE			
Note: ONLY ONE			
Bone Marrow		Hyperplasia	Mild
Coagulating Gland	Bilateral	Atrophy	Mild
Heart		Cardiomyopathy	Mild
[ Cardiomyopathy TGLS = 3-1 ]			
* Kidney	Renal Tubule	Carcinoma	
	Renal Tubule	Hyperplasia	Focal, Mild
		Nephropathy	Minimal
[ Carcinoma TGLS = 2-2.1 ]			
Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Minimal
		Mixed Cell Focus	
		Tension Lipidosis	
Lung		Carcinoma	Metastatic (Kidney)
[ Carcinoma TGLS = 4-5 + 5.1 ]			
Lymph Node		Carcinoma	Metastatic (Kidney)

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 104	<b>TRT#:</b> 5	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 594
	<b>DOSE:</b> 150PPM/MFUMON-05	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100104

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

Note: MEDIASTINAL KIDNEY CA IN SLIDE 1A  
[ Carcinoma TGLS = 1-11 ]

Nose	Olfactory Epi	Cytoplasmic Alteration	Minimal
Pancreas		Adenoma	
Note: ISLETS ADENOMA			
Prostate		Atrophy	Mild
Salivary Glands	Parotid GI	Atrophy	Diffuse, Mild
	Submandibul GI	Inflammation	Chronic, Mild
Seminal Vesicle	Bilateral	Atrophy	Mild
Spleen		Hematopoietic Cell Proliferation	Minimal
Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 5-10.1 ]			

---

**PRIMARY CAUSE OF DEATH** - Kidney Renal Tubule Carcinoma

---

Animal Note: COD...PROBABLE-KIDNEY CARCINOMA

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 106

**TRT#:** 4

**SEX:** Male

**DAY ON TEST:** 631

**DOSE:** 50PPM/M FUMON-04

**DISP:** Moribund

**HISTO:** 21080100106

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Brain - Cerebellum
* Brain - Cerebrum	* Epididymis	* Esophagus	* Intestine Large - Cecum
* Intestine Large - Colon	* Intestine Large - Rectum	* Intestine Small - Duodenum	* Intestine Small - Ileum
* Intestine Small - Jejunum	* Larynx	* Lung - Bronchus	* Mammary Gland
* Pancreas	* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Salivary Glands
* Skeletal Muscle - Thigh	* Skin	* Spinal Cord - Thoracic	* Stomach - Forestomach
* Stomach - Glandular	* Thyroid Gland	* Tongue	* Trachea
* Urinary Bladder			

**MISSING**

* Thymus	* Zymbal's Gland
----------	------------------

**OBSERVATIONS**

* Adrenal Gland	Medulla	Hyperplasia	Focal, Minimal
* Bone Marrow		Leukemia Mononuclear	
* Coagulating Gland	Bilateral	Atrophy	Mild
* Eye	Bilateral, Retina	Atrophy	Marked
	Bilateral, Lens	Cataract	Minimal
Note: TGL#5-NULLIFIED BY TRIMMER			
* Harderian Gland	Bilateral	Infiltration Cellular	Lymphocytic, Minimal
* Heart		Cardiomyopathy	Mild
* Kidney		Leukemia Mononuclear	
	Bilateral	Nephropathy	Minimal
* Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Liver	Bile Duct	Hyperplasia	Marked
		Leukemia Mononuclear	
		[ Leukemia Mononuclear TGLS = 4-6 ]	
* Lung		Leukemia Mononuclear	
* Lymph Node	Mandibular	Leukemia Mononuclear	
	Mesenteric	Leukemia Mononuclear	
		[ Leukemia Mononuclear TGLS = 3-11 ]	
* Nose	Olfactory Epi	Cytoplasmic Alteration	Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 106

**TRT#:** 4

**SEX:** Male

**DAY ON TEST:** 631

**DOSE:** 50PPM/M FUMON-04

**DISP:** Moribund

**HISTO:** 21080100106

**ORGAN AND ACCOUNTABLE SITE STATUS**

* Pituitary Gland	Pars Distalis	Angiectasis	Mild
* Preputial Gland		Inflammation	Chronic, Minimal
* Prostate		Atrophy	Mild
* Seminal Vesicle	Bilateral	Atrophy	Marked
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 2-6 + 6.1 + 6.2 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 1-10.1 ]			

**PRIMARY CAUSE OF DEATH** - Spleen Leukemia Mononuclear

Animal Note: COD...PROBABLE-LEUKEMIA MONONUCLEAR CELL

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92002-03  
 Test Type: CHRONIC  
 Species/Strain: Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
 Test Compound: Fumonisin B1  
 CAS Number: 116355-83-0

Date Report Requested: 10/15/2014  
 Time Report Requested: 18:08:21  
 First Dose M/F: NA / NA  
 Lab: NCTR

**ANIMAL ID:** 107      **TRT#:** 1      **SEX:** Male      **DAY ON TEST:** 631  
**DOSE:** 0PPM/M FUMON-01      **DISP:** Moribund      **HISTO:** 21080100107

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Brain - Cerebellum
* Brain - Cerebrum	* Coagulating Gland	* Epididymis	* Esophagus
* Harderian Gland	* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum
* Intestine Small - Duodenum	* Intestine Small - Ileum	* Intestine Small - Jejunum	* Larynx
* Lung - Bronchus	* Mammary Gland	* Pancreas	* Parathyroid Gland
* Peripheral Nerve - Sciatic	* Salivary Glands	* Seminal Vesicle	* Skeletal Muscle - Thigh
* Spinal Cord - Thoracic	* Spleen	* Thyroid Gland	* Tongue
* Trachea	* Urinary Bladder	* Zymbal's Gland	

**MISSING**

* Pituitary Gland	* Thymus
-------------------	----------

**OBSERVATIONS**

* Adrenal Gland	Medulla	Pheochromocytoma Benign	
* Bone Marrow		Hyperplasia	Minimal
* Epididymis			
Note: ONLY ONE			
* Eye	Bilateral, Retina	Atrophy	Marked
	Lens	Cataract	Moderate
	Cornea	Inflammation	Chronic, Mild
* Heart		Cardiomyopathy	Mild
* Kidney		Cyst	Mild
	Artery, Bilateral	Inflammation	Chronic, Moderate
	Bilateral	Nephropathy	Marked
[ Nephropathy TGLS = 2-2 ]			
* Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Liver		Degeneration	Cystic, Focal, Minimal
		Eosinophilic Focus	
	Bile Duct	Hyperplasia	Mild
* Lymph Node	Mandibular	Hyperplasia	Minimal
	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
* Nose	Nasolacrim Dct	Inflammation	Chronic, Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 107	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 631
	<b>DOSE:</b> 0PPM/M FUMON-01	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100107

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

* Preputial Gland		Adenoma	
* Prostate		Atrophy	Mild
* Skin		Keratoacanthoma	
[ Keratoacanthoma TGLS = 4-10.1 ]			
* Spleen			
Note: TGL # 03 - NO MICROSCOPIC CORRELATE			
* Stomach	Forestomach	Edema	Moderate
	Glandular	Inflammation	Acute, Mild
[ Inflammation TGLS = 1-7 ]			
* Testes	Interstit Cell	Adenoma	
	Germinal Epith	Atrophy	Marked
		Granuloma Sperm	Mild
	Artery	Inflammation	Chronic, Moderate
[ Atrophy TGLS = 5-10 ]			

---

**PRIMARY CAUSE OF DEATH** - Kidney Bilateral Nephropathy

---

Animal Note: COD...PROBABLE-KIDNEY,NEPHROPATHY

---

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 112

**TRT#:** 2

**SEX:** Male

**DAY ON TEST:** 653

**DOSE:** 5PPM/M FUMON-02

**DISP:** Natural Death

**HISTO:** 21080100112

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Gland	* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum
* Brain - Cerebellum	* Brain - Cerebrum	* Epididymis	* Esophagus
* Eye	* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum
* Intestine Small - Duodenum	* Lung - Bronchus	* Lymph Node - Mandibular	* Lymph Node - Mesenteric
* Mammary Gland	* Nose	* Pancreas	* Parathyroid Gland
* Peripheral Nerve - Sciatic	* Pituitary Gland	* Preputial Gland	* Prostate
* Salivary Glands	* Skeletal Muscle - Thigh	* Skin	* Spinal Cord - Thoracic
* Stomach - Forestomach	* Stomach - Glandular	* Thymus	* Thyroid Gland
* Tongue	* Trachea	* Zymbal's Gland	

**MISSING**

\* Larynx

**AUTO PRECLUDES DIAG.**

\* Intestine Small - Ileum                      \* Intestine Small - Jejunum

**OBSERVATIONS**

* Bone Marrow		Hyperplasia	Minimal
* Coagulating Gland		Atrophy	Mild
* Harderian Gland		Infiltration Cellular	Lymphocytic, Minimal
* Heart		Cardiomyopathy	Mild
* Kidney	Bilateral	Nephropathy	Mild
* Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Liver		Clear Cell Focus	
		Degeneration	Cystic, Focal, Minimal
	Bile Duct	Hyperplasia	Minimal
* Seminal Vesicle	Bilateral	Atrophy	Mild
* Spleen		Hematopoietic Cell Proliferation	Minimal
* Testes	Bilateral, Interstit Cell	Adenoma	
	[ Adenoma TGLS = 1-10.1 ]		
* Urinary Bladder		Infiltration Cellular	Lymphocytic, Minimal

**PRIMARY CAUSE OF DEATH**

- UNCERTAIN

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

**ANIMAL ID:** 112

**TRT#:** 2

**SEX:** Male

**DAY ON TEST:** 653

**DOSE:** 5PPM/M FUMON-02

**DISP:** Natural Death

**HISTO:** 21080100112

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

Animal Note: COD...UNKNOWN

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 113

**TRT#:** 4

**SEX:** Male

**DAY ON TEST:** 618

**DOSE:** 50PPM/M FUMON-04

**DISP:** Natural Death

**HISTO:** 21080100113

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Gland	* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum
* Brain - Cerebellum	* Brain - Cerebrum	* Coagulating Gland	* Epididymis
* Esophagus	* Harderian Gland	* Heart	* Intestine Large - Cecum
* Intestine Large - Colon	* Intestine Large - Rectum	* Intestine Small - Duodenum	* Intestine Small - Ileum
* Intestine Small - Jejunum	* Lacrimal Gland	* Larynx	* Lung - Bronchus
* Lymph Node - Mandibular	* Mammary Gland	* Nose	* Parathyroid Gland
* Peripheral Nerve - Sciatic	* Preputial Gland	* Prostate	* Salivary Glands
* Seminal Vesicle	* Skeletal Muscle - Thigh	* Skin	* Spinal Cord - Thoracic
* Spleen	* Stomach - Forestomach	* Stomach - Glandular	* Thyroid Gland
* Tongue	* Trachea	* Urinary Bladder	* Zymbal's Gland

**OBSERVATIONS**

* Adrenal Gland			
Note: ONLY ONE			
* Bone Marrow		Depletion	Minimal
* Brain	Hypothalamus	Compression	Mild
* Eye	Retina	Atrophy	Moderate
	Bilateral, Lens	Cataract	Moderate
* Kidney	Bilateral	Nephropathy	Minimal
* Liver		Eosinophilic Focus	
	Bile Duct	Hyperplasia	Mild
* Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
* Pancreas	Acinar Cell	Adenoma	
	Acinar Cell	Atrophy	Focal, Minimal
* Pituitary Gland	Pars Intermed	Adenoma	
[ Adenoma TGLS = 2-11 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 1,3-10 ]			
* Thymus		Atrophy	Mild

**PRIMARY CAUSE OF DEATH** - Pituitary Gland Pars Intermed Adenoma

Animal Note: COD...PROBABLE-PITUITARY GLAND,ADENOMA

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

**ANIMAL ID:** 113

**TRT#:** 4

**SEX:** Male

**DAY ON TEST:** 618

**DOSE:** 50PPM/M FUMON-04

**DISP:** Natural Death

**HISTO:** 21080100113

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 114      **TRT#:** 1      **SEX:** Male      **DAY ON TEST:** 604  
**DOSE:** 0PPM/M FUMON-01      **DISP:** Natural Death      **HISTO:** 21080100114

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Bone Marrow
* Brain - Cerebellum	* Brain - Cerebrum	* Coagulating Gland	* Epididymis
* Esophagus	* Eye	* Harderian Gland	* Intestine Large - Cecum
* Intestine Large - Colon	* Intestine Large - Rectum	* Intestine Small - Duodenum	* Intestine Small - Ileum
* Intestine Small - Jejunum	* Lacrimal Gland	* Lung - Bronchus	* Lymph Node - Mandibular
* Mammary Gland	* Nose	* Parathyroid Gland	* Peripheral Nerve - Sciatic
* Preputial Gland	* Prostate	* Salivary Glands	* Seminal Vesicle
* Skeletal Muscle - Thigh	* Skin	* Spinal Cord - Thoracic	* Spleen
* Stomach - Forestomach	* Stomach - Glandular	* Thyroid Gland	* Tongue
* Trachea	* Urinary Bladder		

**MISSING**

* Larynx	* Thymus	* Zymbal's Gland
----------	----------	------------------

**OBSERVATIONS**

* Adrenal Gland	Cortex	Vacuolization Cytoplasmic	Focal, Mild
* Brain	Hypothalamus	Compression	Mild
* Heart		Cardiomyopathy	Mild
* Kidney		Cyst	Mild
	Bilateral	Nephropathy	Mild
* Liver		Necrosis	Minimal
* Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Mild
* Pancreas	Acinar Cell	Atrophy	Focal, Minimal
	Artery	Inflammation	Chronic, Mild
* Pituitary Gland	Pars Distalis	Adenoma	
	[ Adenoma TGLS = 1-11 ]		
* Testes	Interstit Cell	Adenoma	

**PRIMARY CAUSE OF DEATH** - Pituitary Gland Pars Distalis Adenoma

Animal Note: COD...PROBABLE-PITUITARY GLAND,ADENOMA

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

<b>ANIMAL ID:</b> 115	<b>TRT#:</b> 5	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 655
	<b>DOSE:</b> 150PPM/MFUMON-05	<b>DISP:</b> Natural Death	<b>HISTO:</b> 21080100115

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Adrenal Gland	Blood Vessel - Aorta	Bone - Femur	Bone - Sternum
Brain - Cerebellum	Brain - Cerebrum	Epididymis	Esophagus
Eye	Harderian Gland	* Kidney	Lacrimal Gland
Larynx	Lung - Bronchus	Lymph Node - Mandibular	Parathyroid Gland
Peripheral Nerve - Sciatic	Salivary Glands	Skeletal Muscle - Thigh	Spinal Cord - Thoracic
Stomach - Forestomach	Stomach - Glandular	Thyroid Gland	Tongue
Trachea	Urinary Bladder		

**MISSING**

Mammary Gland	Preputial Gland	Zymbal's Gland
---------------	-----------------	----------------

**AUTO PRECLUDES DIAG.**

Intestine Large - Cecum	Intestine Large - Colon	Intestine Large - Rectum	Intestine Small - Duodenum
Intestine Small - Ileum	Intestine Small - Jejunum		

**OBSERVATIONS**

Bone Marrow		Hyperplasia	Moderate
Coagulating Gland	Bilateral	Atrophy	Mild
Heart		Cardiomyopathy	Mild
* Liver		Fibrous Histiocytoma	Metastatic (Skin)
[ Fibrous Histiocytoma TGLS = 1-6 ]			
Lung		Fibrous Histiocytoma	Metastatic (Skin)
Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
Nose	Olfactory Epi	Cytoplasmic Alteration	Minimal
	Nasolacrim Dct	Inflammation	Acute, Mild
Pancreas	Acinar Cell	Atrophy	Focal, Mild
Pituitary Gland	Pars Distalis	Adenoma	
Prostate		Inflammation	Acute, Mild
Seminal Vesicle	Bilateral	Atrophy	Mild
Skin	Subcut Tiss	Fibrous Histiocytoma	
[ Fibrous Histiocytoma TGLS = 2-10.1 ]			
Spleen		Congestion	Mild
Testes	Bilateral, Interstit Cell	Adenoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

**ANIMAL ID:** 115

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 655

**DOSE:** 150PPM/MFUMON-05

**DISP:** Natural Death

**HISTO:** 21080100115

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

[ Adenoma TGLS = 3-10 ]

Thymus

Atrophy

Marked

---

**PRIMARY CAUSE OF DEATH**

- Skin Subcut Tiss Fibrous Histiocytoma

---

Animal Note: COD...PROBABLE-SKIN,FIBROUS HISTIOCYTOMA

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 116      **TRT#:** 1      **SEX:** Male      **DAY ON TEST:** 600  
**DOSE:** 0PPM/M FUMON-01      **DISP:** Moribund      **HISTO:** 21080100116

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Brain - Cerebellum
* Brain - Cerebrum	* Coagulating Gland	* Epididymis	* Esophagus
* Heart	* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum
* Intestine Small - Duodenum	* Intestine Small - Ileum	* Intestine Small - Jejunum	* Lacrimal Gland
* Larynx	* Lung - Bronchus	* Mammary Gland	* Pancreas
* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Pituitary Gland	* Preputial Gland
* Prostate	* Salivary Glands	* Skeletal Muscle - Thigh	* Skin
* Spinal Cord - Thoracic	* Stomach - Forestomach	* Stomach - Glandular	* Thyroid Gland
* Tongue	* Trachea	* Urinary Bladder	

**MISSING**

\* Zymbal's Gland

**OBSERVATIONS**

* Adrenal Gland		Leukemia Mononuclear Vacuolization Cytoplasmic	Focal, Mild
* Bone Marrow	Cortex	Leukemia Mononuclear	
* Eye	Retina	Atrophy	Marked
	Lens	Cataract	Marked
* Harderian Gland		Infiltration Cellular	Lymphocytic, Minimal
* Kidney	Bilateral	Nephropathy	Minimal
* Liver	Bile Duct	Hyperplasia	Marked
		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 4-6 ]		
* Lung		Leukemia Mononuclear	
* Lymph Node	Mandibular	Leukemia Mononuclear	
	Mesenteric	Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 5-11.1 ]		
* Nose	Olfactory Epi	Cytoplasmic Alteration	Minimal
* Seminal Vesicle		Atrophy	Mild
* Skin			

Note: TGL#3-NULIFIED BY TRIMMER

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 116	<b>TRT#:</b> 1 <b>DOSE:</b> 0PPM/M FUMON-01	<b>SEX:</b> Male <b>DISP:</b> Moribund	<b>DAY ON TEST:</b> 600 <b>HISTO:</b> 21080100116
-----------------------	--	---	--

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

* Spleen [ Leukemia Mononuclear TGLS = 1-6 ]		Leukemia Mononuclear	
* Testes [ Adenoma TGLS = 2-10.1 ]	Interstit Cell Interstit Cell	Adenoma Hyperplasia	Focal, Minimal
* Thymus		Atrophy	Mild

---

<b>PRIMARY CAUSE OF DEATH</b>	- Spleen Leukemia Mononuclear
-------------------------------	-------------------------------

---

Animal Note: COD...PROBABLE-LEUKEMIA MONONUCLEAR CELL

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 117

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 600

**DOSE:** 15PPM/M FUMON-03

**DISP:** Moribund

**HISTO:** 21080100117

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Gland	* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum
* Bone Marrow	* Brain - Cerebellum	* Brain - Cerebrum	* Coagulating Gland
* Epididymis	* Esophagus	* Eye	* Intestine Large - Cecum
* Intestine Large - Colon	* Intestine Large - Rectum	* Intestine Small - Duodenum	* Intestine Small - Ileum
* Intestine Small - Jejunum	* Lacrimal Gland	* Larynx	* Lung - Bronchus
* Lymph Node - Mandibular	* Lymph Node - Mesenteric	* Nose	* Parathyroid Gland
* Peripheral Nerve - Sciatic	* Preputial Gland	* Prostate	* Salivary Glands
* Seminal Vesicle	* Skeletal Muscle - Thigh	* Skin	* Spinal Cord - Thoracic
* Spleen	* Stomach - Forestomach	* Stomach - Glandular	* Testes
* Thyroid Gland	* Trachea	* Urinary Bladder	* Zymbal's Gland

**MISSING**

\* Thymus

**OBSERVATIONS**

* Brain	Hypothalamus	Compression	Minimal
* Harderian Gland		Infiltration Cellular	Lymphocytic, Minimal
* Heart		Cardiomyopathy	Minimal
* Kidney	Bilateral	Nephropathy	Minimal
* Liver		Eosinophilic Focus	
	Bile Duct	Hyperplasia	Mild
* Mammary Gland		Galactocele	Mild
* Pancreas	Acinar Cell	Atrophy	Focal, Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
	[ Adenoma TGLS = 1-11 ]		
* Tongue		Inflammation	Chronic, Minimal

**PRIMARY CAUSE OF DEATH** - Pituitary Gland Pars Distalis Adenoma

Animal Note: COD...PROBABLE-PITUITARY GLAND,ADENOMA

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 120

**TRT#:** 2

**SEX:** Male

**DAY ON TEST:** 621

**DOSE:** 5PPM/M FUMON-02

**DISP:** Moribund

**HISTO:** 21080100120

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Bone Marrow
* Brain - Cerebellum	* Brain - Cerebrum	* Epididymis	* Esophagus
* Eye	* Harderian Gland	* Intestine Large - Cecum	* Intestine Large - Colon
* Intestine Large - Rectum	* Intestine Small - Duodenum	* Intestine Small - Ileum	* Intestine Small - Jejunum
* Lacrimal Gland	* Larynx	* Lung - Bronchus	* Nose
* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Preputial Gland	* Salivary Glands
* Skeletal Muscle - Thigh	* Skin	* Spinal Cord - Thoracic	* Stomach - Forestomach
* Stomach - Glandular	* Thymus	* Tongue	* Trachea
* Urinary Bladder			

**MISSING**

\* Zymbal's Gland

**OBSERVATIONS**

* Adrenal Gland	Bilateral, Medulla Cortex	Hyperplasia Vacuolization Cytoplasmic	Focal, Marked Focal, Minimal
* Brain	Hypothalamus	Compression	Mild
* Coagulating Gland	Bilateral	Atrophy	Mild
* Heart	Atrium	Cardiomyopathy Thrombosis	Minimal Moderate
* Kidney	Bilateral Bilateral, Renal Tubule	Nephropathy Pigmentation	Minimal Mild
* Liver	Bile Duct	Hyperplasia Leukemia Mononuclear	Moderate
[ Leukemia Mononuclear TGLS = 1-6 ]			
* Lymph Node	Mandibular Mesenteric	Leukemia Mononuclear Leukemia Mononuclear	
* Mammary Gland		Galactoceles	Minimal
* Pancreas	Acinar Cell	Atrophy	Focal, Minimal
* Pituitary Gland	Pars Distalis	Adenoma Leukemia Mononuclear	
[ Adenoma TGLS = 2-11 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 120	<b>TRT#:</b> 2	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 621
	<b>DOSE:</b> 5PPM/M FUMON-02	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100120

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

* Prostate		Atrophy Inflammation	Mild Chronic Active, Mild
* Seminal Vesicle	Bilateral	Atrophy	Moderate
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 3-6 ]			
* Testes	Interstit Cell	Hyperplasia	Focal, Minimal
* Thyroid Gland	C Cell	Hyperplasia	Focal, Mild

---

**PRIMARY CAUSE OF DEATH** - Spleen Leukemia Mononuclear

---

Animal Note: COD...PROBABLE-LEUKEMIA MONONUCLEAR CELL

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 123

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 645

**DOSE:** 0PPM/M FUMON-01

**DISP:** Moribund

**HISTO:** 21080100123

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Gland	* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum
* Brain - Cerebellum	* Brain - Cerebrum	* Esophagus	* Harderian Gland
* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum	* Intestine Small - Duodenum
* Intestine Small - Ileum	* Intestine Small - Jejunum	* Lacrimal Gland	* Larynx
* Lung - Bronchus	* Lymph Node - Mandibular	* Mammary Gland	* Nose
* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Pituitary Gland	* Salivary Glands
* Skeletal Muscle - Thigh	* Spinal Cord - Thoracic	* Stomach - Forestomach	* Stomach - Glandular
* Thyroid Gland	* Tongue	* Trachea	* Urinary Bladder

**MISSING**

* Thymus	* Zymbal's Gland
----------	------------------

**OBSERVATIONS**

* Bone Marrow		Hyperplasia	Mild
* Coagulating Gland	Bilateral	Atrophy	Mild
Ear			
Note: TGL#5-NOTED GROSSLY AS EAR WAS SKIN			
* Epididymis	Epithelium	Degeneration	Mucoid, Minimal
* Eye	Bilateral, Retina	Atrophy	Marked
	Bilateral, Lens	Cataract	Moderate
* Heart		Cardiomyopathy	Mild
* Kidney		Liposarcoma	
		[ Liposarcoma TGLS = 2-2.1 ]	
* Liver		Clear Cell Focus	
	Hepatocyte	Vacuolization Cytoplasmic	Mild
		[ Vacuolization Cytoplasmic TGLS = 3-6 ]	
* Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
* Mammary Gland			
Note: TGL#4-NOTED GROSSLY AS MAMMARY GLAND WAS SKIN			
* Pancreas	Acinar Cell	Atrophy	Focal, Mild
* Preputial Gland		Inflammation	Chronic, Minimal
* Prostate		Atrophy	Mild

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 123	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 645
	<b>DOSE:</b> 0PPM/M FUMON-01	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100123

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

* Seminal Vesicle	Bilateral	Atrophy	Marked
* Skin	Subcut Tiss	Fibroma	
		Squamous Cell Papilloma	
	[ Fibroma TGLS = 4-10.1 ]		
	[ Squamous Cell Papilloma TGLS = 5-13.1 ]		
* Spleen		Hematopoietic Cell Proliferation	Mild
* Testes	Bilateral, Interstit Cell	Adenoma	
	[ Adenoma TGLS = 1-10.1 ]		

---

**PRIMARY CAUSE OF DEATH** - Kidney Liposarcoma

---

Animal Note: COD...PROBABLE-KIDNEY,LIPOSARCOMA

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 124

**TRT#:** 4

**SEX:** Male

**DAY ON TEST:** 612

**DOSE:** 50PPM/M FUMON-04

**DISP:** Moribund

**HISTO:** 21080100124

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Gland	* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum
* Brain - Cerebellum	* Brain - Cerebrum	* Coagulating Gland	* Epididymis
* Esophagus	* Harderian Gland	* Intestine Large - Cecum	* Intestine Large - Colon
* Intestine Large - Rectum	* Intestine Small - Duodenum	* Intestine Small - Ileum	* Intestine Small - Jejunum
* Kidney	* Lacrimal Gland	* Larynx	* Lung - Bronchus
* Mammary Gland	* Pancreas	* Parathyroid Gland	* Peripheral Nerve - Sciatic
* Prostate	* Salivary Glands	* Seminal Vesicle	* Skeletal Muscle - Thigh
* Skin	* Spinal Cord - Thoracic	* Stomach - Forestomach	* Stomach - Glandular
* Thymus	* Thyroid Gland	* Tongue	* Trachea
* Urinary Bladder			

**MISSING**

\* Zymbal's Gland

**OBSERVATIONS**

* Bone Marrow		Leukemia Mononuclear	
* Eye	Bilateral, Retina	Atrophy	Moderate
* Heart		Cardiomyopathy	Mild
* Liver	Bile Duct	Hyperplasia	Moderate
	[ Leukemia Mononuclear TGLS = 2-6 ]	Leukemia Mononuclear	
* Lung		Leukemia Mononuclear	
* Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
	Mandibular	Leukemia Mononuclear	
	Mesenteric	Leukemia Mononuclear	
* Nose	Olfactory Epi	Cytoplasmic Alteration	Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
	[ Adenoma TGLS = 3-11 ]		
* Preputial Gland		Inflammation	Chronic, Minimal
* Spleen		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 1-6 ]		
* Testes	Interstit Cell	Adenoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

**ANIMAL ID:** 124

**TRT#:** 4

**SEX:** Male

**DAY ON TEST:** 612

**DOSE:** 50PPM/M FUMON-04

**DISP:** Moribund

**HISTO:** 21080100124

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

[ Adenoma TGLS = 4-10 ]

Interstit Cell

Hyperplasia

Focal, Mild

---

**PRIMARY CAUSE OF DEATH**

- Spleen Leukemia Mononuclear

---

Animal Note: COD...PROBABLE-LEUKEMIA MONONUCLEAR CELL

---

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

<b>ANIMAL ID:</b> 125	<b>TRT#:</b> 1 <b>DOSE:</b> 0PPM/M FUMON-01	<b>SEX:</b> Male <b>DISP:</b> Natural Death	<b>DAY ON TEST:</b> 605 <b>HISTO:</b> 21080100125
-----------------------	--	--	--

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Gland	* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum
* Brain - Cerebellum	* Brain - Cerebrum	* Coagulating Gland	* Epididymis
* Esophagus	* Eye	* Intestine Large - Cecum	* Intestine Large - Colon
* Intestine Large - Rectum	* Intestine Small - Duodenum	* Lacrimal Gland	* Larynx
* Lung - Bronchus	* Lymph Node - Mandibular	* Mammary Gland	* Pancreas
* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Preputial Gland	* Prostate
* Salivary Glands	* Skeletal Muscle - Thigh	* Skin	* Spinal Cord - Thoracic
* Spleen	* Stomach - Forestomach	* Thyroid Gland	* Tongue
* Trachea	* Zymbal's Gland		

**MISSING**

* Lymph Node - Mesenteric	* Pituitary Gland	* Thymus	* Urinary Bladder
---------------------------	-------------------	----------	-------------------

**AUTO PRECLUDES DIAG.**

* Intestine Small - Ileum	* Intestine Small - Jejunum
---------------------------	-----------------------------

**OBSERVATIONS**

* Bone Marrow		Hyperplasia	Mild
* Harderian Gland	Bilateral	Infiltration Cellular	Lymphocytic, Minimal
* Heart		Cardiomyopathy	Mild
* Kidney	Bilateral	Mesothelioma Malignant	Minimal
		Nephropathy	
[ Mesothelioma Malignant TGLS = 1-2 ]			
* Liver	Hepatocyte	Vacuolization Cytoplasmic	Mild
[ Vacuolization Cytoplasmic TGLS = 2-6 ]			
* Lymph Node			
Note: TGL#5-NOTED GROSSLY AS LYMPH NODE WAS MESENTERY			
Mesentery		Mesothelioma Malignant	
[ Mesothelioma Malignant TGLS = 4,5-14 + 11 ]			
* Nose	Olfactory Epi	Cytoplasmic Alteration	Minimal
* Seminal Vesicle	Bilateral	Atrophy	Mild
* Stomach	Glandular	Mesothelioma Malignant	
* Testes	Bilateral, Interstit Cell	Adenoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

**ANIMAL ID:** 125

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 605

**DOSE:** 0PPM/M FUMON-01

**DISP:** Natural Death

**HISTO:** 21080100125

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

[ Adenoma TGLS = 3-10 ]

---

**PRIMARY CAUSE OF DEATH** - Mesentery Mesothelioma Malignant

---

Animal Note: COD...PROBABLE-MESOTHELIOMA MALIGNANT

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 126

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 628

**DOSE:** 15PPM/M FUMON-03

**DISP:** Natural Death

**HISTO:** 21080100126

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Gland	* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum
* Brain - Cerebellum	* Brain - Cerebrum	* Coagulating Gland	* Epididymis
* Esophagus	* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum
* Intestine Small - Duodenum	* Intestine Small - Ileum	* Intestine Small - Jejunum	* Lacrimal Gland
* Larynx	* Lung - Bronchus	* Mammary Gland	* Parathyroid Gland
* Peripheral Nerve - Sciatic	* Prostate	* Salivary Glands	* Skeletal Muscle - Thigh
* Skin	* Spinal Cord - Thoracic	* Stomach - Forestomach	* Thyroid Gland
* Tongue	* Trachea	* Urinary Bladder	

**MISSING**

* Pituitary Gland	* Zymbal's Gland
-------------------	------------------

**OBSERVATIONS**

* Bone Marrow		Leukemia Mononuclear	
* Eye	Bilateral, Retina	Atrophy	Moderate
* Harderian Gland		Infiltration Cellular	Lymphocytic, Minimal
* Heart		Leukemia Mononuclear	
* Kidney		Leukemia Mononuclear	
* Liver	Bilateral	Nephropathy	Mild
	Bile Duct	Hyperplasia	Mild
	Vein	Leukemia Mononuclear	
		Thrombosis	Marked
	[ Leukemia Mononuclear TGLS = 3-6 ]		
* Lung		Leukemia Mononuclear	
* Lymph Node	Mandibular	Leukemia Mononuclear	
	Mesenteric	Leukemia Mononuclear	
* Nose	Olfactory Epi	Cytoplasmic Alteration	Minimal
* Pancreas	Acinar Cell	Atrophy	Focal, Mild
* Preputial Gland		Inflammation	Chronic, Minimal
* Seminal Vesicle		Atrophy	Moderate
* Spleen		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 2-6 ]		

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 126	<b>TRT#:</b> 3	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 628
	<b>DOSE:</b> 15PPM/M FUMON-03	<b>DISP:</b> Natural Death	<b>HISTO:</b> 21080100126

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

* Stomach	Glandular	Erosion	Focal, Minimal
* Testes	Interstit Cell	Adenoma	
	Germinal Epith	Atrophy	Marked
[ Adenoma TGLS = 1-10 ]			
* Thymus		Leukemia Mononuclear	

---

**PRIMARY CAUSE OF DEATH** - Spleen Leukemia Mononuclear

---

Animal Note: COD...PROBABLE-LEUKEMIA MONONUCLEAR CELL

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

<b>ANIMAL ID:</b> 127	<b>TRT#:</b> 2 <b>DOSE:</b> 5PPM/M FUMON-02	<b>SEX:</b> Male <b>DISP:</b> Moribund	<b>DAY ON TEST:</b> 615 <b>HISTO:</b> 21080100127
-----------------------	--	---	--

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Gland	* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum
* Bone Marrow	* Brain - Cerebellum	* Brain - Cerebrum	* Coagulating Gland
* Epididymis	* Eye	* Intestine Large - Cecum	* Intestine Large - Colon
* Intestine Large - Rectum	* Intestine Small - Duodenum	* Intestine Small - Ileum	* Intestine Small - Jejunum
* Lung - Bronchus	* Mammary Gland	* Nose	* Pancreas
* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Salivary Glands	* Seminal Vesicle
* Skeletal Muscle - Thigh	* Skin	* Spinal Cord - Thoracic	* Testes
* Tongue	* Trachea	* Urinary Bladder	* Zymbal's Gland

**MISSING**

* Esophagus	* Thymus
-------------	----------

**OBSERVATIONS**

* Brain	Hypothalamus	Compression	Moderate
* Harderian Gland		Infiltration Cellular	Lymphocytic, Minimal
* Heart		Cardiomyopathy	Mild
* Kidney	Bilateral	Nephropathy	Mild
* Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Larynx		Cyst	Mild
* Liver	Bile Duct	Hyperplasia	Minimal
	Hepatocyte	Vacuolization Cytoplasmic	Marked
* Lymph Node	Mandibular	Hyperplasia	Mild
	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
	[ Adenoma TGLS = 1-11 ]		
* Preputial Gland		Inflammation	Chronic, Minimal
* Prostate		Inflammation	Chronic Active, Moderate
* Spleen		Hematopoietic Cell Proliferation	Mild
* Stomach	Glandular	Edema	Mild
	Epithelium, Forestomach	Hyperplasia	Mild
	Forestomach	Inflammation	Chronic, Mild
* Thyroid Gland	C Cell	Hyperplasia	Focal, Mild

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

**ANIMAL ID:** 127

**TRT#:** 2

**SEX:** Male

**DAY ON TEST:** 615

**DOSE:** 5PPM/M FUMON-02

**DISP:** Moribund

**HISTO:** 21080100127

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

PRIMARY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma

---

Animal Note: COD...PROBABLE-PITUITARY GLAND,ADENOMA

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 128

**TRT#:** 4

**SEX:** Male

**DAY ON TEST:** 615

**DOSE:** 50PPM/M FUMON-04

**DISP:** Moribund

**HISTO:** 21080100128

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Gland	* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum
* Brain - Cerebellum	* Brain - Cerebrum	* Coagulating Gland	* Epididymis
* Esophagus	* Eye	* Harderian Gland	* Intestine Large - Cecum
* Intestine Large - Colon	* Intestine Large - Rectum	* Intestine Small - Duodenum	* Intestine Small - Ileum
* Intestine Small - Jejunum	* Kidney	* Lacrimal Gland	* Larynx
* Lung - Bronchus	* Lymph Node - Mandibular	* Pancreas	* Parathyroid Gland
* Peripheral Nerve - Sciatic	* Salivary Glands	* Seminal Vesicle	* Skeletal Muscle - Thigh
* Spinal Cord - Thoracic	* Stomach - Forestomach	* Stomach - Glandular	* Thyroid Gland
* Tongue	* Trachea	* Urinary Bladder	* Zymbal's Gland

**MISSING**

* Mammary Gland	* Pituitary Gland	* Thymus
-----------------	-------------------	----------

**OBSERVATIONS**

* Bone Marrow		Leukemia Mononuclear	
* Brain	Hypothalamus	Compression	Moderate
* Esophagus			
Note: SLIDE 4A			
* Heart		Cardiomyopathy	Minimal
* Liver	Bile Duct	Hyperplasia	Moderate
		Leukemia Mononuclear	
* Lung		Leukemia Mononuclear	
* Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
	Mesenteric	Leukemia Mononuclear	
* Mammary GI			
Note: TGL#1-NOTED GROSSLY AS MAMMARY GLAND WAS SKIN			
* Nose	Olfactory Epi	Cytoplasmic Alteration	Minimal
* Pituitary GI			
Note: TGL # 04 - NO MICROSCOPIC CORRELATE			
* Preputial Gland		Inflammation	Chronic, Mild
* Prostate	Epithelium	Hyperplasia	Focal, Moderate
		Inflammation	Acute, Moderate

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

**ANIMAL ID:** 128

**TRT#:** 4

**SEX:** Male

**DAY ON TEST:** 615

**DOSE:** 50PPM/M FUMON-04

**DISP:** Moribund

**HISTO:** 21080100128

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

* Skin [ Fibroma TGLS = 1-10 ]	Subcut Tiss	Fibroma
* Spleen [ Leukemia Mononuclear TGLS = 3-6 ]		Leukemia Mononuclear
* Testes [ Adenoma TGLS = 2-10 ]	Interstit Cell	Adenoma

---

**PRIMARY CAUSE OF DEATH** - Spleen Leukemia Mononuclear

---

Animal Note: COD...PROBABLE-LEUKEMIA MONONUCLEAR CELL

---

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

<b>ANIMAL ID:</b> 130	<b>TRT#:</b> 4	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 664
	<b>DOSE:</b> 50PPM/M FUMON-04	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100130

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Brain - Cerebellum
* Brain - Cerebrum	* Coagulating Gland	* Esophagus	* Intestine Large - Cecum
* Intestine Large - Colon	* Intestine Large - Rectum	* Intestine Small - Duodenum	* Intestine Small - Ileum
* Intestine Small - Jejunum	* Larynx	* Lung - Bronchus	* Lymph Node - Mandibular
* Mammary Gland	* Nose	* Pancreas	* Parathyroid Gland
* Peripheral Nerve - Sciatic	* Pituitary Gland	* Salivary Glands	* Skeletal Muscle - Thigh
* Spinal Cord - Thoracic	* Stomach - Forestomach	* Stomach - Glandular	* Thymus
* Tongue	* Trachea	* Urinary Bladder	* Zymbal's Gland

**OBSERVATIONS**

* Adrenal Gland	Cortex	Hematopoietic Cell Proliferation	Minimal
	Cortex	Vacuolization Cytoplasmic	Focal, Minimal
* Bone Marrow		Hyperplasia	Minimal
* Coagulat GI			
Note: SLIDE 12			
* Epididymis	Epithelium	Degeneration	Mucoid, Minimal
* Eye	Bilateral, Retina	Atrophy	Marked
	Lens	Cataract	Moderate
* Harderian Gland	Bilateral	Infiltration Cellular	Lymphocytic, Minimal
* Heart		Cardiomyopathy	Mild
		Schwannoma Malignant	
* Kidney	Bilateral, Renal Tubule	Accumulation, Hyaline Droplet	Mild
* Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Liver	Bile Duct	Hyperplasia	Minimal
	Hepatocyte	Vacuolization Cytoplasmic	Mild
* Lung	Alveolar Epith	Hyperplasia	Focal, Marked
[ Hyperplasia TGLS = 3-5.1 ]			
* Lymph Node	Mesenteric	Hemorrhage	Mild
* Mammary GI			
Note: TGL#1-NOTED GROSSLY AS MAMMARY GLAND WAS SKIN			
* Preputial Gland		Inflammation	Chronic, Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 130	<b>TRT#:</b> 4	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 664
	<b>DOSE:</b> 50PPM/M FUMON-04	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100130

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

Note: ONLY ONE

* Prostate		Atrophy	Minimal
* Seminal Vesicle	Bilateral	Atrophy	Moderate
* Skin	Subcut Tiss	Histiocytic Sarcoma	
[ Histiocytic Sarcoma TGLS = 1-10 ]			
* Spleen		Hematopoietic Cell Proliferation	Moderate
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 2-10 ]			
* Thyroid Gland	C Cell	Hyperplasia	Focal, Moderate

---

**PRIMARY CAUSE OF DEATH** - Skin Subcut Tiss Histiocytic Sarcoma

---

Animal Note: COD...PROBABLE-SKIN,HISTIOCYTIC SARCOMA

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 131

**TRT#:** 2

**SEX:** Male

**DAY ON TEST:** 627

**DOSE:** 5PPM/M FUMON-02

**DISP:** Natural Death

**HISTO:** 21080100131

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Brain - Cerebellum
* Brain - Cerebrum	* Coagulating Gland	* Epididymis	* Esophagus
* Harderian Gland	* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum
* Intestine Small - Duodenum	* Intestine Small - Ileum	* Lacrimal Gland	* Larynx
* Lung - Bronchus	* Lymph Node - Mandibular	* Mammary Gland	* Nose
* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Preputial Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	* Skeletal Muscle - Thigh	* Skin
* Spinal Cord - Thoracic	* Stomach - Forestomach	* Stomach - Glandular	* Thyroid Gland
* Tongue	* Trachea	* Urinary Bladder	* Zymbal's Gland

**AUTO PRECLUDES DIAG.**

\* Intestine Small - Jejunum

**OBSERVATIONS**

* Adrenal Gland	Medulla	Pheochromocytoma Benign	
* Bone Marrow		Leukemia Mononuclear	
* Esophagus			
Note: TGL # 02 - NO MICROSCOPIC CORRELATE			
* Eye	Retrobulbar	Leukemia Mononuclear	
* Heart		Leukemia Mononuclear	
* Kidney	Bilateral	Nephropathy	Minimal
* Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Mild
		Leukemia Mononuclear	
* Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
* Pancreas	Acinar Cell	Atrophy	Focal, Moderate
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 3-11 ]			
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 1-6 ]			
* Testes	Bilateral, Interstit Cell	Hyperplasia	Focal, Mild
* Thymus		Atrophy	Moderate

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

**ANIMAL ID:** 131

**TRT#:** 2

**SEX:** Male

**DAY ON TEST:** 627

**DOSE:** 5PPM/M FUMON-02

**DISP:** Natural Death

**HISTO:** 21080100131

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

PRIMARY CAUSE OF DEATH - Spleen Leukemia Mononuclear

---

Animal Note: COD...PROBABLE-LEUKEMIA MONONUCLEAR CELL

---

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92002-03  
 Test Type: CHRONIC  
 Species/Strain: Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
 Test Compound: Fumonisin B1  
 CAS Number: 116355-83-0

Date Report Requested: 10/15/2014  
 Time Report Requested: 18:08:21  
 First Dose M/F: NA / NA  
 Lab: NCTR

ANIMAL ID: 132      TRT#: 5      SEX: Male      DAY ON TEST: 669  
 DOSE: 150PPM/MFUMON-05      DISP: Moribund      HISTO: 21080100132

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Blood Vessel - Aorta	Bone - Femur	Bone - Sternum	Brain - Cerebellum
Brain - Cerebrum	Epididymis	Esophagus	Harderian Gland
Intestine Large - Cecum	Intestine Large - Colon	Intestine Large - Rectum	Intestine Small - Duodenum
Intestine Small - Ileum	Intestine Small - Jejunum	Lacrimal Gland	Larynx
Lung - Bronchus	Parathyroid Gland	Peripheral Nerve - Sciatic	Preputial Gland
Skeletal Muscle - Thigh	Skin	Spinal Cord - Thoracic	Stomach - Glandular
Testes	Tongue	Trachea	Urinary Bladder
Zymbal's Gland			

**OBSERVATIONS**

Adrenal Gland	Medulla	Hyperplasia	Focal, Marked
	Medulla	Leukemia Mononuclear	
		Pheochromocytoma Benign	
Bone Marrow		Leukemia Mononuclear	
Coagulating Gland	Bilateral	Atrophy	Mild
Eye	Bilateral, Retina	Atrophy	Marked
	Bilateral, Lens	Cataract	Moderate
Heart		Cardiomyopathy	Minimal
		Leukemia Mononuclear	
* Kidney		Leukemia Mononuclear	
	Bilateral	Nephropathy	Mild
* Liver	Bile Duct	Hyperplasia	Moderate
		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 4-6 ]		
Lung		Leukemia Mononuclear	
Lymph Node	Mandibular	Leukemia Mononuclear	
	Mesenteric	Leukemia Mononuclear	
	Note: TGL#1-NOTED GROSSLY AS AXILLARY LYMPH NODE WAS MAMMARY GLAND		
Mammary Gland		Galactocele	Mild
	[ Galactocele TGLS = 1-14 ]		
Nose	Nasolacrim Dct	Inflammation	Chronic Active, Mild

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 132	<b>TRT#:</b> 5	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 669
	<b>DOSE:</b> 150PPM/MFUMON-05	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100132

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

Pancreas	Duct	Adenoma	
	Acinar Cell	Atrophy	Diffuse, Moderate
		Leukemia Mononuclear	
Pituitary Gland	Pars Distalis	Hyperplasia	Focal, Moderate
Prostate		Inflammation	Acute, Moderate
Salivary Glands	Parotid GI	Atrophy	Diffuse, Mild
Seminal Vesicle	Bilateral	Atrophy	Mild
Spleen		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 2-6 ]		
Stomach	Epithelium, Forestomach	Hyperplasia	Mild
	Forestomach	Leukemia Mononuclear	
Testes			
	Note: TGL # 03 - NO MICROSCOPIC CORRELATE		
Thymus		Leukemia Mononuclear	
Thyroid Gland	C Cell	Adenoma	Multiple

---

**PRIMARY CAUSE OF DEATH** - Spleen Leukemia Mononuclear

---

Animal Note: COD...PROBABLE-LEUKEMIA MONONUCLEAR CELL

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 133

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 672

**DOSE:** 0PPM/M FUMON-01

**DISP:** Moribund

**HISTO:** 21080100133

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Bone Marrow
* Brain - Cerebellum	* Brain - Cerebrum	* Coagulating Gland	* Epididymis
* Esophagus	* Harderian Gland	* Intestine Large - Cecum	* Intestine Large - Colon
* Intestine Large - Rectum	* Intestine Small - Duodenum	* Intestine Small - Ileum	* Intestine Small - Jejunum
* Larynx	* Lung - Bronchus	* Lymph Node - Mandibular	* Nose
* Pancreas	* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Preputial Gland
* Seminal Vesicle	* Skeletal Muscle - Thigh	* Skin	* Stomach - Glandular
* Tongue	* Trachea	* Urinary Bladder	

**MISSING**

* Spinal Cord - Thoracic	* Zymbal's Gland
--------------------------	------------------

**OBSERVATIONS**

* Adrenal Gland	Cortex	Hyperplasia	Focal, Mild
	Medulla	Hyperplasia	Focal, Minimal
	Cortex	Vacuolization Cytoplasmic	Diffuse, Mild
* Eye	Retina	Atrophy	Marked
	Bilateral, Lens	Cataract	Moderate
	[ Cataract TGLS = 2-13 ]		
* Heart		Cardiomyopathy	Minimal
* Kidney	Bilateral	Nephropathy	Marked
	[ Nephropathy TGLS = 1-2 ]		
* Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Liver		Mixed Cell Focus	
	Hepatocyte	Vacuolization Cytoplasmic	Moderate
* Lymph Node	Mesenteric	Atrophy	Mild
	Mesenteric	Hemorrhage	Minimal
* Mammary Gland		Cyst	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
	[ Adenoma TGLS = 3-11 ]		
* Prostate		Atrophy	Mild
* Salivary Glands	Parotid GI	Atrophy	Diffuse, Mild

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 133	<b>TRT#:</b> 1 <b>DOSE:</b> 0PPM/M FUMON-01	<b>SEX:</b> Male <b>DISP:</b> Moribund	<b>DAY ON TEST:</b> 672 <b>HISTO:</b> 21080100133
-----------------------	--	---	--

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

* Spleen	Lymph Follic	Atrophy Pigmentation	Mild Minimal
* Stomach	Epithelium, Forestomach Forestomach	Hyperplasia Inflammation	Marked Chronic Active, Moderate
* Testes	Interstit Cell Interstit Cell	Adenoma Hyperplasia	Focal, Minimal
[ Adenoma TGLS = 4-10 ]			
* Thymus		Atrophy Cyst	Moderate Mild
* Thyroid Gland	C Cell	Adenoma	

---

**PRIMARY CAUSE OF DEATH** - Kidney Bilateral Nephropathy

---

Animal Note: COD...PROBABLE-KIDNEY,NEPHROPATHY

---

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 134

**TRT#:** 4

**SEX:** Male

**DAY ON TEST:** 623

**DOSE:** 50PPM/M FUMON-04

**DISP:** Moribund

**HISTO:** 21080100134

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Brain - Cerebellum
* Brain - Cerebrum	* Coagulating Gland	* Epididymis	* Esophagus
* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum	* Intestine Small - Duodenum
* Intestine Small - Ileum	* Intestine Small - Jejunum	* Lacrimal Gland	* Larynx
* Lung - Bronchus	* Mammary Gland	* Pancreas	* Parathyroid Gland
* Peripheral Nerve - Sciatic	* Salivary Glands	* Seminal Vesicle	* Skeletal Muscle - Thigh
* Skin	* Spinal Cord - Thoracic	* Spleen	* Stomach - Forestomach
* Stomach - Glandular	* Thymus	* Thyroid Gland	* Tongue
* Trachea	* Urinary Bladder	* Zymbal's Gland	

**OBSERVATIONS**

* Adrenal Gland	Cortex	Angiectasis	Minimal
* Bone Marrow		Hyperplasia	Minimal
* Epididymis			
Note: ONLY ONE			
* Eye	Bilateral, Retina	Atrophy	Mild
* Harderian Gland		Infiltration Cellular	Lymphocytic, Minimal
* Heart		Cardiomyopathy	Mild
* Kidney	Renal Tubule	Hyperplasia	Focal, Minimal
	Bilateral	Nephropathy	Mild
* Liver	Bile Duct	Hyperplasia	Mild
		Inflammation	Chronic, Mild
		Mixed Cell Focus	
	Hepatocyte	Vacuolization Cytoplasmic	Moderate
[ Vacuolization Cytoplasmic TGLS = 4-6 ]			
* Lung	Alveolar Epith	Hyperplasia	Focal, Moderate
* Lymph Node	Mandibular	Degeneration	Cystic, Marked
	Mesenteric	Hemorrhage	Minimal
	Mandibular	Hyperplasia	Mild
[ Degeneration TGLS = 2-8 ]			
* Nose		Foreign Body	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 134	<b>TRT#:</b> 4	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 623
	<b>DOSE:</b> 50PPM/M FUMON-04	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100134

---

ORGAN AND ACCOUNTABLE SITE STATUS			
* Pituitary Gland	Pars Distalis	Inflammation	Chronic Active, Moderate
* Preputial Gland		Adenoma	
		Adenoma	
		Inflammation	Chronic, Minimal
[ Adenoma TGLS = 1-10 ]			
* Prostate	Epithelium	Hyperplasia	Focal, Moderate
* Saliv Glands			
Note: TGL#2-NOTED GROSSLY AS SALIVARY GLAND WAS LYMPH NODE			
* Testes	Interstit Cell	Adenoma	
	Germinal Epith	Atrophy	Mild
[ Adenoma TGLS = 3-10.1 ]			
PRIMARY CAUSE OF DEATH	- UNCERTAIN		
Animal Note: COD...UNKNOWN			

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 137

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 621

**DOSE:** 0PPM/M FUMON-01

**DISP:** Moribund

**HISTO:** 21080100137

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Brain - Cerebellum
* Brain - Cerebrum	* Epididymis	* Esophagus	* Harderian Gland
* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum	* Intestine Small - Duodenum
* Intestine Small - Ileum	* Intestine Small - Jejunum	* Lacrimal Gland	* Larynx
* Lung - Bronchus	* Lymph Node - Mandibular	* Pancreas	* Parathyroid Gland
* Peripheral Nerve - Sciatic	* Salivary Glands	* Skeletal Muscle - Thigh	* Skin
* Spinal Cord - Thoracic	* Stomach - Forestomach	* Stomach - Glandular	* Thymus
* Thyroid Gland	* Tongue	* Trachea	* Urinary Bladder
* Zymbal's Gland			

**MISSING**

\* Preputial Gland

**OBSERVATIONS**

* Adrenal Gland	Bilateral, Cortex	Vacuolization Cytoplasmic	Diffuse, Mild
* Bone Marrow		Leukemia Mononuclear	
* Brain	Hypothalamus	Compression	Mild
* Coagulating Gland	Bilateral	Atrophy	Mild
* Eye	Retina	Atrophy	Minimal
* Heart		Cardiomyopathy	Mild
* Kidney	Bilateral	Nephropathy	Mild
	Bilateral, Renal Tubule	Pigmentation	Mild
* Liver	Bile Duct	Hyperplasia	Moderate
		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 4-6 ]		
* Lung		Leukemia Mononuclear	
* Lymph Node	Mesenteric	Leukemia Mononuclear	
* Mammary Gland		Cyst	Mild
Mesentery	Fat	Necrosis	Mild
	[ Necrosis TGLS = 1-11 ]		
* Nose	Olfactory Epi	Cytoplasmic Alteration	Minimal
* Pituitary Gland	Pars Distalis	Adenoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 137	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 621
	<b>DOSE:</b> 0PPM/M FUMON-01	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100137

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

[ Adenoma TGLS = 5-11 ]			
* Prostate		Inflammation	Chronic Active, Marked
* Seminal Vesicle	Bilateral	Atrophy	Mild
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 2-7 ]			
* Testes	Interstit Cell	Adenoma	
[ Adenoma TGLS = 3-10 ]			

---

PRIMARY CAUSE OF DEATH	-		
CONTRIBUTORY CAUSE OF DEATH	- Pituitary Gland Pars Distalis	Adenoma;Spleen	Leukemia Mononuclear

---

Animal Note: COD...CONTRIBUTORY-LEUKEMIA MONONUCLEAR CELL -PITUITARY,ADENOMA

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 138

**TRT#:** 2

**SEX:** Male

**DAY ON TEST:** 677

**DOSE:** 5PPM/M FUMON-02

**DISP:** Moribund

**HISTO:** 21080100138

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Brain - Cerebellum
* Brain - Cerebrum	* Coagulating Gland	* Epididymis	* Esophagus
* Harderian Gland	* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum
* Intestine Small - Duodenum	* Intestine Small - Ileum	* Intestine Small - Jejunum	* Larynx
* Lung - Bronchus	* Mammary Gland	* Parathyroid Gland	* Peripheral Nerve - Sciatic
* Pituitary Gland	* Preputial Gland	* Salivary Glands	* Seminal Vesicle
* Skeletal Muscle - Thigh	* Skin	* Spinal Cord - Thoracic	* Stomach - Forestomach
* Stomach - Glandular	* Tongue	* Trachea	* Urinary Bladder

**MISSING**

\* Zymbal's Gland

**OBSERVATIONS**

* Adrenal Gland	Medulla	Hyperplasia	Focal, Mild
* Bone Marrow		Leukemia Mononuclear	
* Eye	Retina	Atrophy	Marked
	Lens	Cataract	Moderate
* Heart		Cardiomyopathy	Mild
* Kidney	Bilateral	Nephropathy	Mild
	Bilateral, Renal Tubule	Pigmentation	Minimal
* Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Liver		Hepatocellular Adenoma	
	Bile Duct	Hyperplasia	Moderate
		Leukemia Mononuclear	
	[ Hepatocellular Adenoma TGLS = 1-6 ]		
* Lung		Leukemia Mononuclear	
* Lymph Node	Mandibular	Leukemia Mononuclear	
	Mesenteric	Leukemia Mononuclear	
* Nose	Nasolacrim Dct	Inflammation	Chronic Active, Mild
* Pancreas		Leukemia Mononuclear	
	Note: TGL # 03 - NO MICROSCOPIC CORRELATE		
* Prostate		Inflammation	Chronic Active, Mild

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 138	<b>TRT#:</b> 2	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 677
	<b>DOSE:</b> 5PPM/M FUMON-02	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100138

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

\* Saliv Glands  
Note: TGL # 02 - NO MICROSCOPIC CORRELATE

\* Spleen  
[ Leukemia Mononuclear TGLS = 4-7 ]  
Leukemia Mononuclear

\* Testes  
[ Adenoma TGLS = 5,6-10 ]  
Bilateral, Interstit Cell  
Adenoma

\* Thymus  
Atrophy  
Moderate

\* Thyroid Gland  
C Cell  
Hyperplasia  
Focal, Moderate

---

PRIMARY CAUSE OF DEATH - Spleen Leukemia Mononuclear

---

Animal Note: COD...PROBABLE-LEUKEMIA MONONUCLEAR CELL

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 139

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 663

**DOSE:** 0PPM/M FUMON-01

**DISP:** Moribund

**HISTO:** 21080100139

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Brain - Cerebellum
* Brain - Cerebrum	* Epididymis	* Esophagus	* Heart
* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum	* Intestine Small - Duodenum
* Intestine Small - Ileum	* Intestine Small - Jejunum	* Larynx	* Lung - Bronchus
* Lymph Node - Mandibular	* Nose	* Pancreas	* Parathyroid Gland
* Peripheral Nerve - Sciatic	* Prostate	* Salivary Glands	* Skeletal Muscle - Thigh
* Spinal Cord - Thoracic	* Stomach - Forestomach	* Stomach - Glandular	* Tongue
* Trachea	* Urinary Bladder	* Zymbal's Gland	

**MISSING**

\* Mammary Gland

**OBSERVATIONS**

* Adrenal Gland	Medulla	Hyperplasia	Focal, Moderate
* Bone Marrow		Hyperplasia	Moderate
* Coagulating Gland	Bilateral	Atrophy	Mild
* Eye	Bilateral, Retina	Atrophy	Marked
	Bilateral, Lens	Cataract	Mild
* Harderian Gland		Infiltration Cellular	Lymphocytic, Minimal
* Kidney	Bilateral, Renal Tubule	Accumulation, Hyaline Droplet	Moderate
	Renal Tubule	Hyperplasia	Focal, Mild
	Bilateral	Nephropathy	Mild
* Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Liver		Clear Cell Focus	
		Degeneration	Cystic, Focal, Minimal
		Eosinophilic Focus	
	Bile Duct	Hyperplasia	Moderate
[ Hyperplasia TGLS = 4-6 ]			
* Lung		Sarcoma	Metastatic (Skin)
* Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
* Mammary Gland			

Note: TGL#1-NOTED GROSSLY AS MAMMARY GLAND WAS SKIN

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 139	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 663
	<b>DOSE:</b> 0PPM/M FUMON-01	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100139

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

* Pituitary Gland [ Adenoma TGLS = 5-11 ]	Pars Distalis	Adenoma	
* Preputial Gland		Hyperplasia Inflammation	Focal, Mild Chronic, Mild
Note: ONLY ONE			
* Seminal Vesicle	Bilateral	Atrophy	Moderate
* Skin [ Sarcoma TGLS = 1-10.1 ]	Subcut Tiss	Sarcoma	
* Spleen [ Hematopoietic Cell Proliferation TGLS = 2-7 ]		Hematopoietic Cell Proliferation	Marked
* Testes [ Adenoma TGLS = 3-10 ]	Interstit Cell Interstit Cell	Adenoma Hyperplasia	Focal, Minimal
* Thymus		Atrophy	Moderate
* Thyroid Gland	C Cell	Hyperplasia	Focal, Mild

---

**PRIMARY CAUSE OF DEATH** - Skin Subcut Tiss Sarcoma

---

Animal Note: COD...PROBABLE-SKIN,SARCOMA

---

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 140

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 663

**DOSE:** 150PPM/MFUMON-05

**DISP:** Moribund

**HISTO:** 21080100140

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Adrenal Gland	Blood Vessel - Aorta	Bone - Femur	Bone - Sternum
Brain - Cerebellum	Brain - Cerebrum	Coagulating Gland	Esophagus
Heart	Intestine Large - Cecum	Intestine Large - Colon	Intestine Large - Rectum
Intestine Small - Duodenum	Intestine Small - Ileum	Intestine Small - Jejunum	Lacrimal Gland
Lung - Bronchus	Lymph Node - Mesenteric	Mammary Gland	Nose
Parathyroid Gland	Peripheral Nerve - Sciatic	Pituitary Gland	Salivary Glands
Skeletal Muscle - Thigh	Skin	Spinal Cord - Thoracic	Stomach - Forestomach
Stomach - Glandular	Thymus	Thyroid Gland	Tongue
Trachea	Zymbal's Gland		

**OBSERVATIONS**

Bone Marrow		Hyperplasia	Mild
Epididymis		Mesothelioma Malignant	
Eye	Bilateral, Retina	Atrophy	Moderate
Harderian Gland		Infiltration Cellular	Lymphocytic, Minimal
* Kidney	Bilateral	Mesothelioma Malignant	
	Bilateral, Renal Tubule	Nephropathy	Minimal
		Pigmentation	Moderate
Larynx		Cyst	Mild
* Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Mild
		Inflammation	Chronic, Moderate
	Hepatocyte	Mesothelioma Malignant	
		Vacuolization Cytoplasmic	Minimal
[ Inflammation TGLS = 3-6 ]			
Lung		Infiltration Cellular	Lymphocytic, Minimal
Lymph Node	Mandibular	Hyperplasia	Mild
Pancreas		Mesothelioma Malignant	
[ Mesothelioma Malignant TGLS = 2-7 ]			
Preputial Gland		Inflammation	Chronic, Minimal
Prostate		Atrophy	Mild

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 140	<b>TRT#:</b> 5	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 663
	<b>DOSE:</b> 150PPM/MFUMON-05	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100140

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

Seminal Vesicle		Mesothelioma Malignant	
Skeletal Muscle	Abdominal	Mesothelioma Malignant	
	[ Mesothelioma Malignant TGLS = 5-14 ]		
Spleen		Hematopoietic Cell Proliferation	Minimal
		Mesothelioma Malignant	
Testes	Bilateral, Interstit Cell	Adenoma	
	[ Adenoma TGLS = 1,4-10.1 ]	Mesothelioma Malignant	
Urinary Bladder		Mesothelioma Malignant	

---

**PRIMARY CAUSE OF DEATH** - Pancreas Mesothelioma Malignant

---

Animal Note: COD...PROBABLE-MESOTHELIOMA MALIGNANT

---

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 144      **TRT#:** 4      **SEX:** Male      **DAY ON TEST:** 639  
**DOSE:** 50PPM/M FUMON-04      **DISP:** Natural Death      **HISTO:** 21080100144

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Brain - Cerebellum
* Brain - Cerebrum	* Epididymis	* Esophagus	* Eye
* Harderian Gland	* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum
* Intestine Small - Duodenum	* Intestine Small - Ileum	* Lacrimal Gland	* Larynx
* Lung - Bronchus	* Mammary Gland	* Nose	* Parathyroid Gland
* Peripheral Nerve - Sciatic	* Pituitary Gland	* Salivary Glands	* Skeletal Muscle - Thigh
* Skin	* Spinal Cord - Thoracic	* Spleen	* Stomach - Glandular
* Thymus	* Thyroid Gland	* Tongue	* Trachea
* Urinary Bladder	* Zymbal's Gland		

**OBSERVATIONS**

* Adrenal Gland Note: MEDULLA ONLY ONE	Cortex	Vacuolization Cytoplasmic	Focal, Minimal
* Bone Marrow		Hyperplasia	Mild
* Coagulating Gland * Esophagus Note: TGL # 03 - NO MICROSCOPIC CORRELATE Note: APPEARS AUTOLYSIS	Bilateral	Atrophy	Mild
* Heart		Cardiomyopathy	Mild
* Intestine Small [ Sarcoma TGLS = 2-7.1 ]	Jejunum	Sarcoma	
* Kidney	Bilateral	Nephropathy	Minimal
* Liver	Bile Duct	Hyperplasia Necrosis Tension Lipidosis	Mild Minimal
* Lung	Interstitial	Inflammation	Acute, Moderate
* Lymph Node	Mesenteric Mandibular Mesenteric	Hemorrhage Hyperplasia Hyperplasia	Minimal Minimal Mild
* Pancreas	Acinar Cell	Atrophy	Focal, Minimal
* Preputial Gland	Bilateral	Inflammation	Chronic, Mild

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 144	<b>TRT#:</b> 4	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 639
	<b>DOSE:</b> 50PPM/M FUMON-04	<b>DISP:</b> Natural Death	<b>HISTO:</b> 21080100144

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

* Prostate		Atrophy	Mild
* Seminal Vesicle	Bilateral	Atrophy	Mild
* Stomach	Forestomach	Inflammation	Acute, Mild
* Testes	Bilateral, Interstit Cell	Adenoma	

---

[ Adenoma TGLS = 1-10 ]

---

**PRIMARY CAUSE OF DEATH** - Lung Interstitium Inflammation

---

Animal Note: COD...PROBABLE-LUNG,INFLAMMATION

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 146      **TRT#:** 1      **SEX:** Male      **DAY ON TEST:** 635  
**DOSE:** 0PPM/M FUMON-01      **DISP:** Moribund      **HISTO:** 21080100146

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Brain - Cerebrum
* Epididymis	* Esophagus	* Eye	* Intestine Large - Cecum
* Intestine Large - Colon	* Intestine Large - Rectum	* Intestine Small - Ileum	* Intestine Small - Jejunum
* Larynx	* Lung - Bronchus	* Mammary Gland	* Parathyroid Gland
* Peripheral Nerve - Sciatic	* Salivary Glands	* Skeletal Muscle - Thigh	* Skin
* Spinal Cord - Thoracic	* Thyroid Gland	* Tongue	* Trachea
* Zymbal's Gland			

**OBSERVATIONS**

* Adrenal Gland	Medulla	Pheochromocytoma Benign	
	Medulla	Pheochromocytoma Malignant	
* Bone Marrow		Leukemia Mononuclear	
* Brain	Cerebellum, Meninges	Granular Cell Tumor Benign	
* Coagulating Gland	Bilateral	Atrophy	Mild
* Harderian Gland	Bilateral	Infiltration Cellular	Lymphocytic, Minimal
* Heart		Leukemia Mononuclear	
* Intestine Small	Duodenum	Leukemia Mononuclear	
* Kidney		Leukemia Mononuclear	
	Bilateral	Nephropathy	Mild
	Bilateral, Renal Tubule	Pigmentation	Moderate
* Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Liver	Bile Duct	Hyperplasia	Marked
		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 5-6 ]		
* Lung		Leukemia Mononuclear	
* Lymph Node	Mandibular	Leukemia Mononuclear	
	Mesenteric	Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 4-11 ]		
	[ Leukemia Mononuclear TGLS = 1-8 ]		
* Nose	Olfactory Epi	Cytoplasmic Alteration	Minimal
	Nasolacrim Dct	Inflammation	Chronic Active, Moderate

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92002-03  
Test Type: CHRONIC  
Species/Strain: Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
Test Compound: Fumonisin B1  
CAS Number: 116355-83-0

Date Report Requested: 10/15/2014  
Time Report Requested: 18:08:21  
First Dose M/F: NA / NA  
Lab: NCTR

---

<b>ANIMAL ID:</b> 146	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 635
	<b>DOSE:</b> 0PPM/M FUMON-01	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100146

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

* Pancreas		Adenoma	
	Acinar Cell	Atrophy	Diffuse, Moderate
		Leukemia Mononuclear	
Note: ISLETS ADENOMA			
* Pituitary Gland		Leukemia Mononuclear	
* Preputial Gland	Bilateral	Inflammation	Chronic, Minimal
* Prostate		Atrophy	Mild
	Epithelium	Hyperplasia	Focal, Mild
* Seminal Vesicle	Bilateral	Atrophy	Mild
		Leukemia Mononuclear	
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 3-7 ]			
* Stomach	Forestomach	Leukemia Mononuclear	
	Glandular	Necrosis	Minimal
* Testes	Germinal Epith	Atrophy	Minimal
	Bilateral, Interstit Cell	Hyperplasia	Focal, Mild
[ Atrophy TGLS = 2-10 ]			
* Thymus		Leukemia Mononuclear	
* Urinary Bladder		Leukemia Mononuclear	

---

PRIMARY CAUSE OF DEATH - Spleen Leukemia Mononuclear

---

Animal Note: COD...PROBABLE-LEUKEMIA MONONUCLEAR CELL

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 147

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 628

**DOSE:** 15PPM/M FUMON-03

**DISP:** Moribund

**HISTO:** 21080100147

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Gland	* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum
* Bone Marrow	* Brain - Cerebellum	* Brain - Cerebrum	* Epididymis
* Esophagus	* Harderian Gland	* Intestine Large - Cecum	* Intestine Large - Colon
* Intestine Large - Rectum	* Intestine Small - Duodenum	* Intestine Small - Ileum	* Intestine Small - Jejunum
* Larynx	* Lung - Bronchus	* Lymph Node - Mandibular	* Parathyroid Gland
* Peripheral Nerve - Sciatic	* Skeletal Muscle - Thigh	* Skin	* Spinal Cord - Thoracic
* Spleen	* Stomach - Glandular	* Testes	* Thymus
* Thyroid Gland	* Tongue	* Trachea	* Urinary Bladder
* Zymbal's Gland			

**OBSERVATIONS**

* Brain	Hypothalamus	Compression	Mild
* Coagulating Gland	Bilateral	Degeneration	Mild
* Eye	Retina	Atrophy	Minimal
* Heart		Cardiomyopathy	Mild
* Kidney	Bilateral	Nephropathy	Mild
* Lacrimal Gland		Atrophy	Focal, Mild
* Liver	Bile Duct	Hyperplasia	Minimal
	Hepatocyte	Vacuolization Cytoplasmic	Marked
	[ Vacuolization Cytoplasmic TGLS = 2-6 ]		
* Lung		Infiltration Cellular	Histiocytic, Minimal
* Lymph Node	Mesenteric	Hemorrhage	Minimal
* Mammary Gland		Cyst	Minimal
* Nose	Olfactory Epi	Cytoplasmic Alteration	Mild
		Foreign Body	
		Inflammation	Chronic Active, Minimal
* Pancreas		Hyperplasia	Focal, Mild
Note: ISLETS			
* Pituitary Gland	Pars Distalis	Adenoma	
	[ Adenoma TGLS = 1-11 ]		
* Preputial Gland	Bilateral	Inflammation	Chronic, Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 147	<b>TRT#:</b> 3	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 628
	<b>DOSE:</b> 15PPM/M FUMON-03	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100147

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

* Prostate		Atrophy	Mild
* Salivary Glands	Parotid GI	Atrophy	Diffuse, Moderate
* Seminal Vesicle	Bilateral	Atrophy	Marked
* Stomach	Epithelium, Forestomach	Hyperplasia	Moderate
	Forestomach	Inflammation	Chronic, Mild

---

**PRIMARY CAUSE OF DEATH** - Pituitary Gland Pars Distalis Adenoma

---

Animal Note: COD...PROBABLE-PITUITARY GLAND,ADENOMA

---

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 148

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 649

**DOSE:** 0PPM/M FUMON-01

**DISP:** Moribund

**HISTO:** 21080100148

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Brain - Cerebellum
* Brain - Cerebrum	* Coagulating Gland	* Esophagus	* Harderian Gland
* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum	* Intestine Small - Duodenum
* Intestine Small - Ileum	* Intestine Small - Jejunum	* Lacrimal Gland	* Larynx
* Lung - Bronchus	* Mammary Gland	* Nose	* Peripheral Nerve - Sciatic
* Prostate	* Salivary Glands	* Seminal Vesicle	* Skeletal Muscle - Thigh
* Skin	* Spinal Cord - Thoracic	* Stomach - Forestomach	* Stomach - Glandular
* Thymus	* Thyroid Gland	* Tongue	* Trachea
* Urinary Bladder	* Zymbal's Gland		

**MISSING**

\* Parathyroid Gland

**OBSERVATIONS**

* Adrenal Gland		Leukemia Mononuclear	
* Bone Marrow		Leukemia Mononuclear	
* Epididymis		Inflammation	Chronic, Mild
* Eye	Bilateral, Retina	Atrophy	Marked
	Bilateral, Lens	Cataract	Marked
* Heart		Cardiomyopathy	Mild
* Kidney	Bilateral	Nephropathy	Minimal
	Bilateral, Renal Tubule	Pigmentation	Mild
* Liver	Bile Duct	Hyperplasia	Moderate
		Leukemia Mononuclear	
* Lung		Leukemia Mononuclear	
* Lymph Node	Mesenteric	Degeneration	Cystic, Minimal
	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
	Mandibular	Leukemia Mononuclear	
* Pancreas	Acinar Cell	Atrophy	Focal, Moderate
* Pituitary Gland	Pars Distalis	Hyperplasia	Focal, Moderate
	[ Hyperplasia TGLS = 3-11 ]		
* Preputial Gland	Bilateral	Inflammation	Chronic, Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 148	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 649
	<b>DOSE:</b> 0PPM/M FUMON-01	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100148

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

* Spleen [ Leukemia Mononuclear TGLS = 1-7 ]		Leukemia Mononuclear
* Testes [ Adenoma TGLS = 2-10 ]	Bilateral, Interstit Cell	Adenoma

---

**PRIMARY CAUSE OF DEATH** - Spleen Leukemia Mononuclear

Animal Note: COD...PROBABLE-LEUKEMIA MONONUCLEAR CELL

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 150

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 673

**DOSE:** 15PPM/M FUMON-03

**DISP:** Moribund

**HISTO:** 21080100150

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Brain - Cerebellum
* Brain - Cerebrum	* Esophagus	* Harderian Gland	* Intestine Large - Cecum
* Intestine Large - Colon	* Intestine Large - Rectum	* Intestine Small - Duodenum	* Larynx
* Lung - Bronchus	* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Salivary Glands
* Skeletal Muscle - Thigh	* Skin	* Spinal Cord - Thoracic	* Stomach - Glandular
* Trachea	* Urinary Bladder	* Zymbal's Gland	

**MISSING**

\* Mammary Gland

**OBSERVATIONS**

* Adrenal Gland		Leukemia Mononuclear	
* Bone Marrow		Leukemia Mononuclear	
* Brain		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 8-3 ]			
* Coagulating Gland	Bilateral	Atrophy	Mild
* Epididymis	Epithelium	Degeneration	Mucoid, Minimal
		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 7-10 ]			
* Eye	Bilateral, Retina	Atrophy	Marked
	Bilateral, Lens	Cataract	Mild
* Heart		Leukemia Mononuclear	
* Intestine Small	Ileum	Leukemia Mononuclear	
	Jejunum	Leukemia Mononuclear	
* Kidney		Leukemia Mononuclear	
	Bilateral	Nephropathy	Minimal
* Lacrimal Gland		Leukemia Mononuclear	
* Liver	Bile Duct	Hyperplasia	Minimal
		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 2-6 ]			
* Lung		Leukemia Mononuclear	
* Lymph Node	Axillary	Leukemia Mononuclear	

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92002-03  
 Test Type: CHRONIC  
 Species/Strain: Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
 Test Compound: Fumonisin B1  
 CAS Number: 116355-83-0

Date Report Requested: 10/15/2014  
 Time Report Requested: 18:08:21  
 First Dose M/F: NA / NA  
 Lab: NCTR

<b>ANIMAL ID:</b> 150	<b>TRT#:</b> 3 <b>DOSE:</b> 15PPM/M FUMON-03	<b>SEX:</b> Male <b>DISP:</b> Moribund	<b>DAY ON TEST:</b> 673 <b>HISTO:</b> 21080100150
-----------------------	---	---	--

**ORGAN AND ACCOUNTABLE SITE STATUS**

Deep Cervical		Leukemia Mononuclear	
Mandibular		Leukemia Mononuclear	
Mesenteric		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 10-14.1 ]			
[ Leukemia Mononuclear TGLS = 9-8 ]			
[ Leukemia Mononuclear TGLS = 4-14 ]			
[ Leukemia Mononuclear TGLS = 11-10.2 ]			
* Nose	Nasolacrim Dct	Inflammation	Acute, Minimal
* Pancreas		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 3-7 ]			
* Pituitary Gland		Leukemia Mononuclear	
* Preputial Gland	Bilateral	Inflammation	Chronic, Minimal
* Prostate		Inflammation	Chronic Active, Moderate
* Seminal Vesicle	Bilateral	Atrophy	Mild
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 1-7 ]			
* Stomach	Epithelium, Forestomach	Hyperplasia	Moderate
	Forestomach	Leukemia Mononuclear	
* Testes	Bilateral, Germinal Epith	Atrophy	Moderate
	Interstit Cell	Hyperplasia	Focal, Minimal
Note: TGL#6-NULIFIED BY TRIMMER			
* Thymus		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 5-1.1 ]			
* Thyroid Gland		Leukemia Mononuclear	
* Tongue		Leukemia Mononuclear	

PRIMARY CAUSE OF DEATH - Spleen Leukemia Mononuclear

Animal Note: COD...PROBABLE-LEUKEMIA MONONUCLEAR CELL

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

<b>ANIMAL ID:</b> 153	<b>TRT#:</b> 4	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 640
	<b>DOSE:</b> 50PPM/M FUMON-04	<b>DISP:</b> Natural Death	<b>HISTO:</b> 21080100153

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Gland	* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum
* Bone Marrow	* Brain - Cerebellum	* Brain - Cerebrum	* Coagulating Gland
* Epididymis	* Esophagus	* Harderian Gland	* Heart
* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum	* Intestine Small - Duodenum
* Intestine Small - Ileum	* Intestine Small - Jejunum	* Lacrimal Gland	* Larynx
* Lung - Bronchus	* Pancreas	* Peripheral Nerve - Sciatic	* Salivary Glands
* Seminal Vesicle	* Skeletal Muscle - Thigh	* Skin	* Spinal Cord - Thoracic
* Spleen	* Stomach - Forestomach	* Stomach - Glandular	* Testes
* Tongue	* Trachea		

**MISSING**

* Mammary Gland	* Parathyroid Gland	* Thymus	* Zymbal's Gland
-----------------	---------------------	----------	------------------

**OBSERVATIONS**

* Brain [ Hemorrhage TGLS = 1-3 ]	Hypothalamus	Hemorrhage	Moderate
* Eye	Bilateral, Retina	Atrophy	Mild
* Kidney	Bilateral	Nephropathy	Minimal
* Liver	Bile Duct	Hyperplasia	Mild
* Lymph Node	Mandibular	Infiltration Cellular	Histiocytic, Minimal
	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
* Nose	Olfactory Epi	Cytoplasmic Alteration	Minimal
	Nasolacrim Dct	Inflammation	Acute, Minimal
		Inflammation	Chronic Active, Minimal
* Pituitary Gland [ Hemorrhage TGLS = 2-11 ]		Hemorrhage	Marked
* Preputial Gland		Inflammation	Chronic, Mild
* Prostate		Inflammation	Acute, Mild
* Thyroid Gland	Follicle	Cyst	Moderate
* Urinary Bladder		Inflammation	Acute, Mild

**PRIMARY CAUSE OF DEATH** - Pituitary Gland Hemorrhage

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

**ANIMAL ID:** 153

**TRT#:** 4

**SEX:** Male

**DAY ON TEST:** 640

**DOSE:** 50PPM/M FUMON-04

**DISP:** Natural Death

**HISTO:** 21080100153

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

Animal Note: COD...PROBABLE-PITUITARY GLAND,HEMORRHAGE

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 154

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 635

**DOSE:** 0PPM/M FUMON-01

**DISP:** Moribund

**HISTO:** 21080100154

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Brain - Cerebellum
* Brain - Cerebrum	* Epididymis	* Esophagus	* Eye
* Harderian Gland	* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum
* Intestine Small - Duodenum	* Intestine Small - Jejunum	* Lacrimal Gland	* Lung - Bronchus
* Mammary Gland	* Pancreas	* Parathyroid Gland	* Peripheral Nerve - Sciatic
* Salivary Glands	* Skeletal Muscle - Thigh	* Skin	* Spinal Cord - Thoracic
* Tongue	* Trachea	* Urinary Bladder	* Zymbal's Gland

**MISSING**

\* Preputial Gland

**OBSERVATIONS**

* Adrenal Gland		Leukemia Mononuclear	
* Bone Marrow		Leukemia Mononuclear	
* Brain	Hypothalamus	Compression	Minimal
* Coagulating Gland		Atrophy	Mild
* Heart		Cardiomyopathy	Mild
* Intestine Small	Ileum	Leukemia Mononuclear	
* Kidney		Leukemia Mononuclear	
	Bilateral	Nephropathy	Moderate
* Larynx		Cyst	Minimal
* Liver	Bile Duct	Hyperplasia	Moderate
		Leukemia Mononuclear	
* Lung		Leukemia Mononuclear	
* Lymph Node	Mandibular	Leukemia Mononuclear	
	Mesenteric	Leukemia Mononuclear	
* Nose	Olfactory Epi	Cytoplasmic Alteration	Minimal
	Nasolacrim Dct	Inflammation	Chronic, Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
	[ Adenoma TGLS = 3-11 ]		
* Preputial GI			
	Note: TGL#1-NO SECTION TAKEN MISSING AT TRIM		

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 154	<b>TRT#:</b> 1 <b>DOSE:</b> 0PPM/M FUMON-01	<b>SEX:</b> Male <b>DISP:</b> Moribund	<b>DAY ON TEST:</b> 635 <b>HISTO:</b> 21080100154
-----------------------	--	---	--

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

* Prostate		Inflammation	Chronic Active, Marked
* Seminal Vesicle		Atrophy	Mild
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 2-7 ]			
* Stomach	Glandular Epithelium, Forestomach	Erosion Hyperplasia	Focal, Minimal Mild
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 4-10 ]			
* Thymus		Leukemia Mononuclear	
* Thyroid Gland	C Cell	Adenoma	

---

**PRIMARY CAUSE OF DEATH** - Spleen Leukemia Mononuclear

---

Animal Note: COD...PROBABLE-LEUKEMIA MONONUCLEAR CELL

---

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 156

**TRT#:** 2

**SEX:** Male

**DAY ON TEST:** 656

**DOSE:** 5PPM/M FUMON-02

**DISP:** Natural Death

**HISTO:** 21080100156

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Gland	* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum
* Brain - Cerebellum	* Brain - Cerebrum	* Coagulating Gland	* Epididymis
* Esophagus	* Harderian Gland	* Intestine Large - Cecum	* Intestine Large - Colon
* Intestine Large - Rectum	* Intestine Small - Duodenum	* Intestine Small - Ileum	* Intestine Small - Jejunum
* Lacrimal Gland	* Lung - Bronchus	* Parathyroid Gland	* Peripheral Nerve - Sciatic
* Preputial Gland	* Salivary Glands	* Seminal Vesicle	* Skeletal Muscle - Thigh
* Spinal Cord - Thoracic	* Stomach - Forestomach	* Stomach - Glandular	* Testes
* Thymus	* Tongue	* Trachea	* Urinary Bladder
* Zymbal's Gland			

**OBSERVATIONS**

* Adrenal Gland			
Note: ONLY ONE			
* Bone Marrow		Leukemia Mononuclear	
* Brain	Hypothalamus	Compression	Moderate
* Eye	Retina	Atrophy	Minimal
* Heart		Cardiomyopathy	Moderate
* Kidney	Bilateral	Nephropathy	Mild
* Larynx		Inflammation	Chronic, Minimal
* Liver	Bile Duct	Hyperplasia	Mild
* Lymph Node	Mandibular	Infiltration Cellular	Histiocytic, Minimal
	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
* Mammary Gland		Cyst	Mild
* Nose	Nasolacrim Dct	Inflammation	Chronic Active, Mild
* Pancreas		Carcinoma	
Note: ISLETS			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 2-11 ]			
* Prostate		Inflammation	Chronic Active, Minimal
* Skin	Subcut Tiss	Lipoma	
[ Lipoma TGLS = 1-14 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 156	<b>TRT#:</b> 2	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 656
	<b>DOSE:</b> 5PPM/M FUMON-02	<b>DISP:</b> Natural Death	<b>HISTO:</b> 21080100156

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

* Spleen		Leukemia Mononuclear	
* Thyroid Gland	C Cell	Hyperplasia	Focal, Moderate
<b>PRIMARY CAUSE OF DEATH</b>	- Pituitary Gland Pars Distalis Adenoma		

---

Animal Note: COD...PROBABLE-PITUITARY GLAND,ADENOMA

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 158

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 692

**DOSE:** 0PPM/M FUMON-01

**DISP:** Moribund

**HISTO:** 21080100158

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Brain - Cerebellum
* Brain - Cerebrum	* Esophagus	* Intestine Large - Cecum	* Intestine Large - Colon
* Intestine Large - Rectum	* Intestine Small - Duodenum	* Intestine Small - Ileum	* Intestine Small - Jejunum
* Larynx	* Lung - Bronchus	* Mammary Gland	* Parathyroid Gland
* Peripheral Nerve - Sciatic	* Salivary Glands	* Skeletal Muscle - Thigh	* Skin
* Stomach - Forestomach	* Stomach - Glandular	* Thyroid Gland	* Tongue
* Trachea	* Urinary Bladder	* Zymbal's Gland	

**MISSING**

* Pituitary Gland	* Preputial Gland
-------------------	-------------------

**OBSERVATIONS**

* Adrenal Gland	Medulla	Pheochromocytoma Benign	
* Bone Marrow		Leukemia Mononuclear	
* Brain		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 6,7-3 ]			
* Coagulating Gland	Bilateral	Atrophy	Moderate
* Epididymis		Mesothelioma Malignant	
* Eye	Bilateral, Retina	Atrophy	Moderate
	Bilateral, Lens	Cataract	Mild
* Harderian Gland		Infiltration Cellular	Lymphocytic, Minimal
* Heart		Leukemia Mononuclear	
* Kidney		Hydronephrosis	Mild
	Bilateral	Nephropathy	Mild
	Bilateral, Renal Tubule	Pigmentation	Mild
* Lacrimal Gland		Leukemia Mononuclear	
* Liver	Bile Duct	Hyperplasia	Mild
		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 5-6 ]			
* Lung		Leukemia Mononuclear	
* Lymph Node	Mandibular	Leukemia Mononuclear	
	Mesenteric	Leukemia Mononuclear	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 158	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 692
	<b>DOSE:</b> 0PPM/M FUMON-01	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100158

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

* Nose	Olfactory Epi	Cytoplasmic Alteration	Minimal
* Pancreas	Acinar Cell	Atrophy	Focal, Moderate
* Prostate		Atrophy	Mild
* Seminal Vesicle	Bilateral	Atrophy	Marked
* Spinal Cord	Thoracic	Leukemia Mononuclear	
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 1-7 ]			
* Testes	Interstit Cell	Adenoma	
	Germinal Epith	Atrophy	Marked
		Mesothelioma Malignant	
[ Adenoma TGLS = 3-10 ]			
* Thymus		Leukemia Mononuclear	
Tissue NOS	Pelvic	Mesothelioma Malignant	
[ Mesothelioma Malignant TGLS = 2-14 ]			

---

**PRIMARY CAUSE OF DEATH** - Tissue NOS Pelvic Mesothelioma Malignant

---

Animal Note: COD...PROBABLE-MESOTHELIUM MALIGNANT

Animal Note: TGL#4-NO SECTION TAKEN CAVITY FLUID

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 160      **TRT#:** 5      **SEX:** Male      **DAY ON TEST:** 652  
**DOSE:** 150PPM/MFUMON-05      **DISP:** Moribund      **HISTO:** 21080100160

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Blood Vessel - Aorta	Bone - Femur	Bone - Sternum	Bone Marrow
Brain - Cerebellum	Brain - Cerebrum	Epididymis	Esophagus
Eye	Intestine Large - Cecum	Intestine Large - Colon	Intestine Large - Rectum
Intestine Small - Duodenum	Intestine Small - Ileum	Intestine Small - Jejunum	Lacrimal Gland
Lung - Bronchus	Mammary Gland	Parathyroid Gland	Peripheral Nerve - Sciatic
Salivary Glands	Skeletal Muscle - Thigh	Skin	Spinal Cord - Thoracic
Spleen	Stomach - Forestomach	Stomach - Glandular	Thyroid Gland
Trachea	Urinary Bladder		

**MISSING**

Zymbal's Gland

**OBSERVATIONS**

Adrenal Gland [ Carcinoma TGLS = 2-11 ]	Cortex	Carcinoma	
Coagulating Gland	Bilateral	Atrophy	Mild
Harderian Gland	Bilateral	Infiltration Cellular	Lymphocytic, Minimal
Heart		Cardiomyopathy	Minimal
* Kidney		Cyst	Mild
	Bilateral	Nephropathy	Minimal
Larynx		Inflammation	Chronic, Minimal
* Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Mild
[ Hyperplasia TGLS = 4-6.1 ]			
Lung		Carcinoma	Metastatic (Adrenal Gland)
		Infiltration Cellular	Histiocytic, Minimal
Lymph Node	Mandibular	Degeneration	Cystic, Mild
	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
Nose	Olfactory Epi	Cytoplasmic Alteration	Minimal
Pancreas	Acinar Cell	Atrophy	Focal, Mild
Pituitary Gland	Pars Distalis	Hyperplasia	Focal, Minimal
Preputial Gland	Bilateral	Inflammation	Chronic Active, Mild

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 160	<b>TRT#:</b> 5	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 652
	<b>DOSE:</b> 150PPM/MFUMON-05	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100160

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

Prostate		Atrophy	Mild
Seminal Vesicle	Bilateral	Atrophy	Moderate
Testes	Interstitial Cell Germinal Epith	Adenoma Atrophy	Minimal
[ Adenoma TGLS = 1-10 ]			
Thymus		Atrophy	Mild
Note: TGL#3-NOTED GROSSLY AS THYMUS WAS TISSUE NOS			
Tissue NOS	Mediastinum	Inflammation	Chronic, Mild
[ Inflammation TGLS = 3-1.1 ]			
Tongue		Inflammation	Chronic, Minimal

---

**PRIMARY CAUSE OF DEATH** - Adrenal Gland Cortex Carcinoma

---

Animal Note: COD...PROBABLE-ADRENAL CORTEX,CARCINOMA

---

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 166

**TRT#:** 2

**SEX:** Male

**DAY ON TEST:** 687

**DOSE:** 5PPM/M FUMON-02

**DISP:** Moribund

**HISTO:** 21080100166

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Brain - Cerebellum
* Brain - Cerebrum	* Coagulating Gland	* Epididymis	* Esophagus
* Harderian Gland	* Intestine Large - Cecum	* Intestine Large - Rectum	* Intestine Small - Duodenum
* Intestine Small - Ileum	* Intestine Small - Jejunum	* Larynx	* Lung - Bronchus
* Pancreas	* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Prostate
* Salivary Glands	* Seminal Vesicle	* Skeletal Muscle - Thigh	* Skin
* Spinal Cord - Thoracic	* Stomach - Forestomach	* Stomach - Glandular	* Tongue
* Trachea	* Urinary Bladder	* Zymbal's Gland	

**MISSING**

\* Preputial Gland

**OBSERVATIONS**

* Adrenal Gland	Cortex	Vacuolization Cytoplasmic	Focal, Mild
* Bone Marrow		Leukemia Mononuclear	
* Eye	Bilateral, Retina	Atrophy	Moderate
* Heart		Leukemia Mononuclear	
* Intestine Large	Colon	Ulcer	Mild
* Kidney	Bilateral	Nephropathy	Mild
	Bilateral, Renal Tubule	Pigmentation	Mild
* Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Liver	Bile Duct	Hyperplasia	Marked
		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 2,4-6+6.1 ]		
* Lung		Leukemia Mononuclear	
* Lymph Node	Mandibular	Leukemia Mononuclear	
	Mesenteric	Leukemia Mononuclear	
* Mammary Gland		Galactoceles	Mild
* Nose		Foreign Body	
		Inflammation	Chronic, Mild
* Pituitary Gland	Pars Distalis	Adenoma	
		Leukemia Mononuclear	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 166	<b>TRT#:</b> 2	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 687
	<b>DOSE:</b> 5PPM/M FUMON-02	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100166

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

[ Adenoma TGLS = 3-11 ]			
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 1-7 ]			
* Testes	Interstit Cell	Adenoma	
	Interstit Cell	Hyperplasia	Focal, Minimal
* Thymus		Leukemia Mononuclear	
* Thyroid Gland	C Cell	Hyperplasia	Focal, Mild

---

PRIMARY CAUSE OF DEATH

-

CONTRIBUTORY CAUSE OF DEATH

- Pituitary Gland Pars Distalis Adenoma;Spleen Leukemia Mononuclear

---

Animal Note: COD...CONTRIBUTORY-LEUKEMIA MONONUCLEAR CELL

-PITUITARY GLAND,ADENOMA

---

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 167

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 666

**DOSE:** 15PPM/M FUMON-03

**DISP:** Moribund

**HISTO:** 21080100167

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Brain - Cerebellum
* Brain - Cerebrum	* Esophagus	* Intestine Large - Cecum	* Intestine Large - Colon
* Intestine Large - Rectum	* Intestine Small - Duodenum	* Intestine Small - Ileum	* Intestine Small - Jejunum
* Lacrimal Gland	* Larynx	* Lung - Bronchus	* Lymph Node - Mandibular
* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Skeletal Muscle - Thigh	* Skin
* Spinal Cord - Thoracic	* Thyroid Gland	* Tongue	* Trachea
* Urinary Bladder	* Zymbal's Gland		

**MISSING**

\* Epididymis

**OBSERVATIONS**

* Adrenal Gland	Cortex	Vacuolization Cytoplasmic	Diffuse, Mild
* Bone Marrow		Depletion	Mild
* Brain	Hypothalamus	Compression	Mild
* Coagulating Gland		Atrophy	Minimal
* Eye	Bilateral, Retina	Atrophy	Marked
	Bilateral, Lens	Cataract	Moderate
	[ Cataract TGLS = 2-13 ]		
* Harderian Gland		Infiltration Cellular	Lymphocytic, Minimal
* Heart		Cardiomyopathy	Mild
* Kidney	Bilateral	Nephropathy	Moderate
* Liver	Bile Duct	Hyperplasia	Mild
	Hepatocyte	Vacuolization Cytoplasmic	Marked
	[ Vacuolization Cytoplasmic TGLS = 1-6 ]		
* Lymph Node	Mesenteric	Atrophy	Mild
	Mesenteric	Infiltration Cellular	Histiocytic, Mild
* Mammary Gland		Cyst	Minimal
* Nose	Olfactory Epi	Cytoplasmic Alteration	Mild
* Pancreas	Acinar Cell	Adenoma	
* Pituitary Gland	Pars Distalis	Adenoma	
	[ Adenoma TGLS = 3-11 ]		

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 167	<b>TRT#:</b> 3	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 666
	<b>DOSE:</b> 15PPM/M FUMON-03	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100167

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

* Preputial Gland		Inflammation	Chronic, Minimal
* Prostate		Atrophy	Moderate
		Fibrosis	Moderate
* Salivary Glands	Parotid GI	Atrophy	Diffuse, Moderate
* Seminal Vesicle	Bilateral	Atrophy	Moderate
* Spleen	Lymph Follic	Atrophy	Mild
		Pigmentation	Mild
* Stomach	Epithelium, Forestomach	Hyperplasia	Marked
	Forestomach	Inflammation	Chronic, Moderate
	Glandular	Inflammation	Chronic, Minimal
* Testes	Bilateral, Germinal Epith	Atrophy	Marked
	[ Atrophy TGLS = 4-10 ]		
* Thymus		Atrophy	Minimal

---

**PRIMARY CAUSE OF DEATH** - Pituitary Gland Pars Distalis Adenoma

---

Animal Note: COD...PROBABLE-PITUITARY GLAND,ADENOMA

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 170

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 667

**DOSE:** 0PPM/M FUMON-01

**DISP:** Natural Death

**HISTO:** 21080100170

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Bone Marrow
* Brain - Cerebellum	* Brain - Cerebrum	* Coagulating Gland	* Epididymis
* Esophagus	* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum
* Intestine Small - Duodenum	* Intestine Small - Ileum	* Intestine Small - Jejunum	* Lacrimal Gland
* Larynx	* Lung - Bronchus	* Lymph Node - Mandibular	* Nose
* Pancreas	* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Preputial Gland
* Salivary Glands	* Seminal Vesicle	* Skeletal Muscle - Thigh	* Spinal Cord - Thoracic
* Stomach - Forestomach	* Stomach - Glandular	* Testes	* Thyroid Gland
* Tongue	* Trachea	* Urinary Bladder	

**MISSING**

\* Zymbal's Gland

**OBSERVATIONS**

* Adrenal Gland	Medulla	Pheochromocytoma Benign	
* Brain	Hypothalamus	Compression	Mild
* Eye	Bilateral, Lens	Cataract	Mild
	Optic Nerve	Necrosis	Mild
[ Cataract TGLS = 3-13 ]			
* Harderian Gland		Infiltration Cellular	Lymphocytic, Mild
* Heart		Cardiomyopathy	Moderate
* Kidney	Bilateral	Nephropathy	Mild
* Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Moderate
		Inflammation	Chronic, Mild
		Mixed Cell Focus	
* Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Mild
* Mammary Gland		Cyst	Minimal
[ Cyst TGLS = 2-10 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 5-11 ]			
* Prostate		Adenoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 170

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 667

**DOSE:** 0PPM/M FUMON-01

**DISP:** Natural Death

**HISTO:** 21080100170

**ORGAN AND ACCOUNTABLE SITE STATUS**

* Saliv Glands Note: TGL # 04 - NO MICROSCOPIC CORRELATE	Inflammation	Acute, Mild
* Skin [ Inflammation TGLS = 1-14 ]	Inflammation	Chronic, Moderate
* Spleen	Congestion	Mild
* Thymus	Atrophy	Moderate
	Hemorrhage	Mild

**PRIMARY CAUSE OF DEATH** - Pituitary Gland Pars Distalis Adenoma

Animal Note: COD...PROBABLE-PITUITARY,ADENOMA

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 171

**TRT#:** 4

**SEX:** Male

**DAY ON TEST:** 691

**DOSE:** 50PPM/M FUMON-04

**DISP:** Natural Death

**HISTO:** 21080100171

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Gland	* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum
* Bone Marrow	* Brain - Cerebellum	* Coagulating Gland	* Epididymis
* Esophagus	* Eye	* Harderian Gland	* Intestine Large - Cecum
* Intestine Large - Colon	* Intestine Large - Rectum	* Intestine Small - Duodenum	* Intestine Small - Jejunum
* Lacrimal Gland	* Larynx	* Lung - Bronchus	* Nose
* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Prostate	* Salivary Glands
* Seminal Vesicle	* Skeletal Muscle - Thigh	* Skin	* Spinal Cord - Thoracic
* Spleen	* Stomach - Forestomach	* Stomach - Glandular	* Tongue
* Trachea	* Urinary Bladder	* Zymbal's Gland	

**MISSING**

\* Thymus

**AUTO PRECLUDES DIAG.**

\* Intestine Small - Ileum

**OBSERVATIONS**

* Bone	Joint	Inflammation	Chronic, Mild
* Brain	Hypothalamus	Compression	Minimal
	Cerebrum	Hemorrhage	Mild
* Heart		Cardiomyopathy	Moderate
* Kidney	Renal Tubule	Hyperplasia	Focal, Marked
	Bilateral	Nephropathy	Minimal
* Liver		Eosinophilic Focus	
	Bile Duct	Hyperplasia	Moderate
* Lymph Node	Mandibular	Hemorrhage	Minimal
	Mandibular	Hyperplasia	Mild
	Mesenteric	Infiltration Cellular	Histiocytic, Mild
* Mammary Gland		Cyst	Minimal
* Pancreas	Acinar Cell	Atrophy	Focal, Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
	[ Adenoma TGLS = 1-11 ]		
* Preputial Gland		Inflammation	Chronic, Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 171	<b>TRT#:</b> 4	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 691
	<b>DOSE:</b> 50PPM/M FUMON-04	<b>DISP:</b> Natural Death	<b>HISTO:</b> 21080100171

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

* Testes	Bilateral, Interstit Cell	Adenoma	
* Thyroid Gland	Follicle	Cyst	Mild

---

**PRIMARY CAUSE OF DEATH** - Pituitary Gland Pars Distalis Adenoma

---

Animal Note: COD...PROBABLE-PITUITARY GLAND,ADENOMA

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

<b>ANIMAL ID:</b> 172	<b>TRT#:</b> 1 <b>DOSE:</b> 0PPM/M FUMON-01	<b>SEX:</b> Male <b>DISP:</b> Moribund	<b>DAY ON TEST:</b> 705 <b>HISTO:</b> 21080100172
-----------------------	--	---	--

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Brain - Cerebellum
* Brain - Cerebrum	* Epididymis	* Esophagus	* Harderian Gland
* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum	* Intestine Small - Duodenum
* Intestine Small - Jejunum	* Larynx	* Lung - Bronchus	* Pancreas
* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Salivary Glands	* Skeletal Muscle - Thigh
* Skin	* Spinal Cord - Thoracic	* Stomach - Forestomach	* Stomach - Glandular
* Thyroid Gland	* Tongue	* Trachea	* Urinary Bladder
* Zymbal's Gland			

**OBSERVATIONS**

* Adrenal Gland Note: MEDULLA ONLY ONE		Leukemia Mononuclear	
* Bone Marrow		Leukemia Mononuclear	
* Coagulating Gland [ Atrophy TGLS = 2-10 ]	Bilateral	Atrophy	Marked
* Eye	Bilateral, Retina Bilateral, Lens	Atrophy Cataract	Marked Marked
* Heart Note: TGL # 04 - NO MICROSCOPIC CORRELATE		Cardiomyopathy	Minimal
* Intestine Small	Ileum	Leukemia Mononuclear	
* Kidney [ Pigmentation TGLS = 5-2 ]	Bilateral Bilateral, Renal Tubule	Nephropathy Pigmentation	Minimal Mild
* Lacrimal Gland		Leukemia Mononuclear	
* Liver [ Leukemia Mononuclear TGLS = 6-6 ]	Bile Duct	Hyperplasia Leukemia Mononuclear	Mild
* Lung		Leukemia Mononuclear	
* Lymph Node	Mandibular Mesenteric	Leukemia Mononuclear Leukemia Mononuclear	
* Mammary Gland		Fibroadenoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 172	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 705
	<b>DOSE:</b> 0PPM/M FUMON-01	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100172

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

[ Fibroadenoma TGLS = 7-10.1 ]			
* Nose	Olfactory Epi	Cytoplasmic Alteration	Minimal
* Pituitary Gland		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 1-11 ]			
* Preputial Gland		Hyperplasia	Focal, Moderate
		Inflammation	Chronic, Minimal
* Prostate		Atrophy	Mild
* Seminal Vesicle	Bilateral	Atrophy	Marked
Note: TGL # 03 - NO MICROSCOPIC CORRELATE			
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 8-7 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 9,10-10.1 ]			
* Thymus		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 11-1.1 ]			

---

**PRIMARY CAUSE OF DEATH** - Spleen Leukemia Mononuclear

---

Animal Note: COD...PROBABLE-LEUKEMIA MONONUCLEAR CELL

---

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 174

**TRT#:** 4

**SEX:** Male

**DAY ON TEST:** 673

**DOSE:** 50PPM/M FUMON-04

**DISP:** Moribund

**HISTO:** 21080100174

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Bone Marrow
* Brain - Cerebellum	* Brain - Cerebrum	* Coagulating Gland	* Epididymis
* Esophagus	* Eye	* Intestine Large - Cecum	* Intestine Large - Colon
* Intestine Large - Rectum	* Intestine Small - Duodenum	* Intestine Small - Ileum	* Intestine Small - Jejunum
* Larynx	* Lung - Bronchus	* Lymph Node - Mandibular	* Mammary Gland
* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Pituitary Gland	* Salivary Glands
* Seminal Vesicle	* Skeletal Muscle - Thigh	* Spinal Cord - Thoracic	* Spleen
* Stomach - Forestomach	* Stomach - Glandular	* Thymus	* Thyroid Gland
* Tongue	* Trachea	* Urinary Bladder	

**MISSING**

* Nose	* Zymbal's Gland
--------	------------------

**OBSERVATIONS**

* Adrenal Gland	Cortex	Vacuolization Cytoplasmic	Focal, Mild
* Harderian Gland		Hyperplasia	Focal, Mild
		Inflammation	Chronic, Minimal
* Heart		Cardiomyopathy	Moderate
* Kidney	Bilateral	Nephropathy	Minimal
* Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Liver		Clear Cell Focus	
	Bile Duct	Hyperplasia	Mild
[ Clear Cell Focus TGLS = 1-6 ]			
* Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Mild
* Pancreas	Acinar Cell	Atrophy	Focal, Mild
* Preputial Gland		Inflammation	Chronic, Minimal
* Prostate		Inflammation	Acute, Minimal
* Skin		Inflammation	Chronic, Mild
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 2-10.1 ]			

**PRIMARY CAUSE OF DEATH**

- UNCERTAIN

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

**ANIMAL ID:** 174

**TRT#:** 4

**SEX:** Male

**DAY ON TEST:** 673

**DOSE:** 50PPM/M FUMON-04

**DISP:** Moribund

**HISTO:** 21080100174

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

Animal Note: COD...UNKNOWN

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

<b>ANIMAL ID:</b> 178	<b>TRT#:</b> 5	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 697
	<b>DOSE:</b> 150PPM/MFUMON-05	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100178

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Adrenal Gland	Blood Vessel - Aorta	Bone - Femur	Bone - Sternum
Brain - Cerebellum	Brain - Cerebrum	Coagulating Gland	Epididymis
Esophagus	Harderian Gland	Intestine Large - Cecum	Intestine Large - Colon
Intestine Large - Rectum	Intestine Small - Duodenum	Intestine Small - Ileum	Intestine Small - Jejunum
Lacrimal Gland	Larynx	Lung - Bronchus	Mammary Gland
Parathyroid Gland	Peripheral Nerve - Sciatic	Pituitary Gland	Salivary Glands
Skeletal Muscle - Thigh	Spinal Cord - Thoracic	Stomach - Forestomach	Stomach - Glandular
Thyroid Gland	Tongue	Trachea	Urinary Bladder
Zymbal's Gland			

**MISSING**

Thymus

**OBSERVATIONS**

Bone Marrow		Hyperplasia	Mild
Coagulat GI			
Note: TGL # 04 - NO MICROSCOPIC CORRELATE			
Eye	Bilateral, Retina	Atrophy	Marked
	Bilateral, Lens	Cataract	Moderate
	Optic Nerve	Degeneration	Mild
[ Cataract TGLS = 5-13 ]			
Heart		Cardiomyopathy	Mild
* Kidney	Bilateral	Nephropathy	Mild
* Liver		Clear Cell Focus	
	Bile Duct	Hyperplasia	Mild
		Mixed Cell Focus	
Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
	Mandibular	Leukemia Mononuclear	
Mammary GI			
Note: TGL#1-NOTED GROSSLY AS MAMMARY GLAND WAS SKIN			
Nose	Olfactory Epi	Cytoplasmic Alteration	Minimal
		Foreign Body	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 178	<b>TRT#:</b> 5	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 697
	<b>DOSE:</b> 150PPM/MFUMON-05	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100178

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

Pancreas	Acinar Cell	Inflammation	Chronic Active, Mild
Preputial Gland	Bilateral	Atrophy	Focal, Moderate
Prostate		Inflammation	Chronic, Minimal
Seminal Vesicle	Bilateral	Inflammation	Chronic, Mild
Skin		Atrophy	Mild
		Basal Cell Adenoma	
		Histiocytic Sarcoma	
	[ Basal Cell Adenoma TGLS = 1-10 ]		
	[ Histiocytic Sarcoma TGLS = 1-10 ]		
Spleen		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 2-7 ]		
Testes	Interstitial Cell	Adenoma	
	[ Adenoma TGLS = 3-10.1 ]		

---

PRIMARY CAUSE OF DEATH	-
CONTRIBUTORY CAUSE OF DEATH	- Skin Basal Cell Adenoma;Skin Histiocytic Sarcoma

---

Animal Note: COD...CONTRIBUTORY-BASAL CELL ADENOMA -HISTIOCYTIC SARCOMA

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 179

**TRT#:** 2

**SEX:** Male

**DAY ON TEST:** 697

**DOSE:** 5PPM/M FUMON-02

**DISP:** Moribund

**HISTO:** 21080100179

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Brain - Cerebellum
* Brain - Cerebrum	* Coagulating Gland	* Esophagus	* Harderian Gland
* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum	* Intestine Small - Duodenum
* Intestine Small - Ileum	* Intestine Small - Jejunum	* Larynx	* Lung - Bronchus
* Mammary Gland	* Nose	* Parathyroid Gland	* Peripheral Nerve - Sciatic
* Salivary Glands	* Seminal Vesicle	* Skeletal Muscle - Thigh	* Skin
* Spinal Cord - Thoracic	* Stomach - Glandular	* Thyroid Gland	* Tongue
* Trachea	* Urinary Bladder	* Zymbal's Gland	

**OBSERVATIONS**

* Adrenal Gland		Leukemia Mononuclear Pheochromocytoma Benign	
	Medulla		
Note: ONLY ONE MEDULLA			
* Bone	Cartilage, Joint	Degeneration	Mild
* Bone Marrow		Leukemia Mononuclear	
* Epididymis	Epithelium	Hyperplasia	Moderate
* Eye	Bilateral, Retina	Atrophy	Marked
	Bilateral, Lens	Cataract	Moderate
[ Cataract TGLS = 5-13 ]			
* Heart		Cardiomyopathy	Mild
	Atrium	Thrombosis	Marked
[ Thrombosis TGLS = 4-1 ]			
* Kidney	Bilateral	Nephropathy	Mild
	Bilateral, Renal Tubule	Pigmentation	Mild
* Lacrimal Gland		Atrophy	Focal, Mild
		Infiltration Cellular	Lymphocytic, Minimal
* Liver	Bile Duct	Hyperplasia	Moderate
		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 3-6 ]			
* Lung		Leukemia Mononuclear	
* Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 179	<b>TRT#:</b> 2	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 697
	<b>DOSE:</b> 5PPM/M FUMON-02	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100179

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

* Pancreas	Mandibular	Leukemia Mononuclear	
* Pituitary Gland	Acinar Cell	Atrophy	Focal, Moderate
	Pars Distalis	Adenoma	
[ Adenoma TGLS = 6-11 ]			
* Preputial Gland		Inflammation	Chronic, Minimal
* Prostate		Inflammation	Acute, Minimal
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 2-7 ]			
* Stomach	Forestomach	Squamous Cell Papilloma	
Note: FOUND AFTER PWG REVIEW			
* Testes	Interstit Cell	Adenoma	
	Interstit Cell	Hyperplasia	Focal, Mild
[ Adenoma TGLS = 1-10 ]			
* Thymus		Leukemia Mononuclear	

---

**PRIMARY CAUSE OF DEATH** - Spleen Leukemia Mononuclear

---

Animal Note: COD...PROBABLE-LEUKEMIA MONONUCLEAR CELL

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

<b>ANIMAL ID:</b> 181	<b>TRT#:</b> 4	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 662
	<b>DOSE:</b> 50PPM/M FUMON-04	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100181

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Bone Marrow
* Brain - Cerebellum	* Brain - Cerebrum	* Epididymis	* Esophagus
* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Small - Duodenum	* Intestine Small - Ileum
* Intestine Small - Jejunum	* Lung - Bronchus	* Parathyroid Gland	* Peripheral Nerve - Sciatic
* Salivary Glands	* Skeletal Muscle - Thigh	* Skin	* Spinal Cord - Thoracic
* Stomach - Glandular	* Thymus	* Thyroid Gland	* Tongue
* Trachea	* Urinary Bladder	* Zymbal's Gland	

**OBSERVATIONS**

* Adrenal Gland	Bilateral, Cortex	Vacuolization Cytoplasmic	Diffuse, Minimal
* Brain	Hypothalamus	Compression	Mild
* Coagulating Gland	Bilateral	Atrophy	Mild
* Eye	Bilateral, Retina	Atrophy	Moderate
	Lens	Cataract	Minimal
* Harderian Gland		Infiltration Cellular	Lymphocytic, Minimal
* Heart		Cardiomyopathy	Minimal
* Intestine Large	Rectum	Hemorrhage	Minimal
* Kidney	Renal Tubule	Hyperplasia	Focal, Minimal
	Bilateral	Nephropathy	Moderate
* Lacrimal Gland		Atrophy	Focal, Mild
		Infiltration Cellular	Lymphocytic, Minimal
* Larynx		Inflammation	Chronic, Minimal
* Liver	Bile Duct	Hyperplasia	Minimal
		Tension Lipidosis	
	Hepatocyte	Vacuolization Cytoplasmic	Marked
* Lymph Node	Mesenteric	Atrophy	Mild
	Mandibular	Hyperplasia	Minimal
	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
* Mammary Gland		Cyst	Mild
* Nose		Inflammation	Chronic, Minimal
* Pancreas	Acinar Cell	Adenoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 181	<b>TRT#:</b> 4	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 662
	<b>DOSE:</b> 50PPM/M FUMON-04	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100181

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

* Pituitary Gland [ Adenoma TGLS = 1-11 ]	Pars Distalis	Adenoma	
* Preputial Gland		Inflammation	Chronic, Minimal
* Prostate		Inflammation	Chronic Active, Mild
* Seminal Vesicle	Bilateral	Atrophy	Moderate
* Spleen		Pigmentation	Minimal
* Stomach [ Ulcer TGLS = 2-7 ]	Forestomach Forestomach	Inflammation Ulcer	Chronic, Moderate Marked
* Testes	Bilateral, Interstit Cell	Hyperplasia	Focal, Minimal

---

**PRIMARY CAUSE OF DEATH** - Pituitary Gland Pars Distalis Adenoma

---

Animal Note: COD...PROBABLE-PITUITARY GLAND,ADENOMA

---

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 182      **TRT#:** 4      **SEX:** Male      **DAY ON TEST:** 680  
**DOSE:** 50PPM/M FUMON-04      **DISP:** Natural Death      **HISTO:** 21080100182

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Brain - Cerebellum
* Brain - Cerebrum	* Epididymis	* Esophagus	* Eye
* Intestine Large - Colon	* Intestine Large - Rectum	* Intestine Small - Duodenum	* Larynx
* Lung - Bronchus	* Lymph Node - Mandibular	* Mammary Gland	* Nose
* Pancreas	* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Prostate
* Salivary Glands	* Skeletal Muscle - Thigh	* Skin	* Spinal Cord - Thoracic
* Stomach - Forestomach	* Stomach - Glandular	* Tongue	* Trachea
* Urinary Bladder	* Zymbal's Gland		

**AUTO PRECLUDES DIAG.**

* Intestine Large - Cecum	* Intestine Small - Ileum	* Intestine Small - Jejunum	* Thyroid Gland
---------------------------	---------------------------	-----------------------------	-----------------

**OBSERVATIONS**

* Adrenal Gland Note: ONLY ONE	Medulla	Hyperplasia	Focal, Mild
* Bone Marrow		Hyperplasia	Minimal
* Coagulating Gland		Atrophy	Minimal
* Harderian Gland		Infiltration Cellular	Lymphocytic, Minimal
* Heart		Cardiomyopathy	Mild
* Kidney  [ Carcinoma TGLS = 2-2 ]	Renal Tubule	Carcinoma Nephropathy	Minimal
* Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Liver		Basophilic Focus	
* Lung  [ Carcinoma TGLS = 3-5 + 5.1 ]	Bile Duct	Hyperplasia Carcinoma	Mild Metastatic (Kidney)
* Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Mild
* Pituitary Gland  [ Adenoma TGLS = 4-11 ]	Pars Distalis	Adenoma	
* Preputial Gland	Bilateral	Inflammation	Chronic, Mild
* Seminal Vesicle	Bilateral	Atrophy	Mild

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 182	<b>TRT#:</b> 4	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 680
	<b>DOSE:</b> 50PPM/M FUMON-04	<b>DISP:</b> Natural Death	<b>HISTO:</b> 21080100182

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

* Spleen		Depletion	Focal, Mild
		Hematopoietic Cell Proliferation	Moderate
* Testes	Interstit Cell	Adenoma	
[ Adenoma TGLS = 1-10 ]			
* Thymus		Atrophy	Moderate

---

**PRIMARY CAUSE OF DEATH** - Kidney Renal Tubule Carcinoma

---

Animal Note: COD...PROBABLE-KIDNEY,CARCINOMA

---

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92002-03  
 Test Type: CHRONIC  
 Species/Strain: Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
 Test Compound: Fumonisin B1  
 CAS Number: 116355-83-0

Date Report Requested: 10/15/2014  
 Time Report Requested: 18:08:21  
 First Dose M/F: NA / NA  
 Lab: NCTR

**ANIMAL ID:** 183      **TRT#:** 5      **SEX:** Male      **DAY ON TEST:** 701  
**DOSE:** 150PPM/MFUMON-05      **DISP:** Moribund      **HISTO:** 21080100183

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Blood Vessel - Aorta	Bone - Femur	Bone - Sternum	Brain - Cerebellum
Brain - Cerebrum	Epididymis	Esophagus	Intestine Large - Cecum
Intestine Large - Colon	Intestine Large - Rectum	Intestine Small - Duodenum	Intestine Small - Ileum
Intestine Small - Jejunum	Lacrimal Gland	Lung - Bronchus	Mammary Gland
Parathyroid Gland	Peripheral Nerve - Sciatic	Pituitary Gland	Preputial Gland
Salivary Glands	Skeletal Muscle - Thigh	Spinal Cord - Thoracic	Stomach - Forestomach
Stomach - Glandular	Thyroid Gland	Tongue	Trachea
Urinary Bladder	Zymbal's Gland		

**OBSERVATIONS**

Adrenal Gland	Cortex	Vacuolization Cytoplasmic	Diffuse, Mild
Bone Marrow		Leukemia Mononuclear	
Coagulating Gland	Bilateral	Atrophy	Moderate
Eye	Bilateral, Retina	Atrophy	Marked
	Bilateral, Lens	Cataract	Moderate
Harderian Gland	Bilateral	Infiltration Cellular	Lymphocytic, Minimal
Heart		Cardiomyopathy	Mild
* Kidney	Bilateral, Renal Tubule	Accumulation, Hyaline Droplet	Marked
	Renal Tubule	Hyperplasia	Focal, Moderate
	Bilateral	Nephropathy	Mild
Larynx		Cyst	Minimal
* Liver		Eosinophilic Focus	
		Histiocytic Sarcoma	Metastatic (Skin)
	Bile Duct	Hyperplasia	Mild
		Leukemia Mononuclear	
	[ Histiocytic Sarcoma TGLS = 3,6,7,8-6+6.1+6.2 ]		
Lung		Histiocytic Sarcoma	Metastatic (Skin)
	[ Histiocytic Sarcoma TGLS = 4-5+5.1 ]		
Lymph Node	Mesenteric	Hemorrhage	Mild
	Mandibular	Leukemia Mononuclear	
Nose	Olfactory Epi	Cytoplasmic Alteration	Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 183	<b>TRT#:</b> 5	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 701
	<b>DOSE:</b> 150PPM/MFUMON-05	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100183

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

Pancreas		Histiocytic Sarcoma	Metastatic (Skin)
Prostate		Histiocytic Sarcoma	Metastatic (Skin)
Seminal Vesicle	Bilateral	Atrophy	Marked
Skel Muscle			
Note: TGL#5-NOTED GROSSLY AS SKELETAL MUSCLE WAS SKIN			
Skin	Subcut Tiss	Histiocytic Sarcoma	
[ Histiocytic Sarcoma TGLS = 5,9-14+14.1 ]			
Spleen		Histiocytic Sarcoma	Metastatic (Skin)
[ Leukemia Mononuclear TGLS = 1-7 ]			
Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 2-10.1 ]			
Thymus		Atrophy	Minimal

---

**PRIMARY CAUSE OF DEATH** - Skin Subcut Tiss Histiocytic Sarcoma

---

Animal Note: COD...PROBABLE-SKIN,HISTIOCYTIC SARCOMA

---

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 184

**TRT#:** 4

**SEX:** Male

**DAY ON TEST:** 673

**DOSE:** 50PPM/M FUMON-04

**DISP:** Moribund

**HISTO:** 21080100184

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Brain - Cerebellum
* Brain - Cerebrum	* Coagulating Gland	* Epididymis	* Esophagus
* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum	* Intestine Small - Duodenum
* Intestine Small - Ileum	* Intestine Small - Jejunum	* Larynx	* Lung - Bronchus
* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Prostate	* Salivary Glands
* Seminal Vesicle	* Skeletal Muscle - Thigh	* Spinal Cord - Thoracic	* Stomach - Forestomach
* Stomach - Glandular	* Thyroid Gland	* Tongue	* Trachea
* Urinary Bladder	* Zymbal's Gland		

**MISSING**

\* Preputial Gland

**OBSERVATIONS**

* Adrenal Gland	Cortex	Hyperplasia	Focal, Moderate
* Bone Marrow		Leukemia Mononuclear	
* Eye	Bilateral, Retina	Atrophy	Marked
	Bilateral, Lens	Cataract	Moderate
	[ Cataract TGLS = 7-13 ]		
* Harderian Gland		Infiltration Cellular	Lymphocytic, Minimal
* Heart		Cardiomyopathy	Mild
* Kidney	Bilateral	Nephropathy	Minimal
* Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Liver	Bile Duct	Hyperplasia	Moderate
	[ Leukemia Mononuclear TGLS = 6-6 ]	Leukemia Mononuclear	
* Lung		Leukemia Mononuclear	
* Lymph Node	Mesenteric	Degeneration	Cystic, Mild
	Mandibular	Leukemia Mononuclear	
* Mammary Gland		Cyst	Minimal
* Nose	Olfactory Epi	Cytoplasmic Alteration	Minimal
	Nasolacrim Dct	Inflammation	Chronic Active, Mild
* Pancreas		Adenoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 184	<b>TRT#:</b> 4	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 673
	<b>DOSE:</b> 50PPM/M FUMON-04	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100184

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

* Pituitary Gland [ Adenoma TGLS = 8-11 ]	Pars Distalis	Adenoma	
* Skin [ Hemangioma TGLS = 2-14 ] [ Squamous Cell Papilloma TGLS = 1-14 ]	Tail	Hemangioma Squamous Cell Papilloma	
* Spleen [ Fibrosis TGLS = 5-7 ] [ Leukemia Mononuclear TGLS = 4-7 ]		Fibrosis Leukemia Mononuclear	Focal, Moderate
* Testes [ Adenoma TGLS = 3-10 ]	Interstit Cell Interstit Cell	Adenoma Hyperplasia	Focal, Minimal
* Thymus		Atrophy	Moderate

---

**PRIMARY CAUSE OF DEATH** - Spleen Leukemia Mononuclear

---

Animal Note: COD...PROBABLE-LEUKEMIA MONONUCLEAR CELL

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 185

**TRT#:** 2

**SEX:** Male

**DAY ON TEST:** 666

**DOSE:** 5PPM/M FUMON-02

**DISP:** Moribund

**HISTO:** 21080100185

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Bone Marrow
* Brain - Cerebellum	* Brain - Cerebrum	* Coagulating Gland	* Epididymis
* Esophagus	* Eye	* Harderian Gland	* Intestine Large - Cecum
* Intestine Large - Colon	* Intestine Large - Rectum	* Intestine Small - Duodenum	* Intestine Small - Ileum
* Intestine Small - Jejunum	* Lung - Bronchus	* Mammary Gland	* Nose
* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Salivary Glands	* Skeletal Muscle - Thigh
* Skin	* Spinal Cord - Thoracic	* Thymus	* Thyroid Gland
* Tongue	* Trachea	* Urinary Bladder	* Zymbal's Gland

**OBSERVATIONS**

* Adrenal Gland	Cortex	Hyperplasia	Focal, Minimal
* Brain	Hypothalamus	Compression	Moderate
* Heart	Epicardium	Inflammation	Chronic, Mild
	Pericardium	Inflammation	Chronic, Minimal
	[ Inflammation TGLS = 3-1 ]		
* Kidney	Bilateral	Nephropathy	Minimal
* Lacrimal Gland		Atrophy	Focal, Mild
* Larynx		Cyst	Mild
* Liver	Bile Duct	Hyperplasia	Mild
	Hepatocyte	Mixed Cell Focus	
* Lung		Vacuolization Cytoplasmic	Minimal
	Note: ALSO IN SLIDE 1	Alveolar/Bronchiolar Carcinoma	
	[ Alveolar/Bronchiolar Carcinoma TGLS = 1,2-5 + 5.1 ]		
* Lymph Node	Mandibular	Hyperplasia	Mild
	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
* Pancreas	Acinar Cell	Atrophy	Focal, Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
	[ Adenoma TGLS = 4-11 ]		
* Preputial Gland	Bilateral	Inflammation	Chronic, Mild
* Prostate		Atrophy	Mild

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 185	<b>TRT#:</b> 2	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 666
	<b>DOSE:</b> 5PPM/M FUMON-02	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100185

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

* Seminal Vesicle	Bilateral	Cyst Atrophy	Minimal Minimal
* Skel Muscle			
Note: TGL # 06 - NO MICROSCOPIC CORRELATE			
* Spleen		Congestion	Mild
* Stomach	Epithelium, Forestomach Forestomach Glandular	Hyperplasia Inflammation Inflammation	Marked Chronic, Moderate Chronic, Mild
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 5-10 ]			

---

**PRIMARY CAUSE OF DEATH** - Lung Alveolar/Bronchiolar Carcinoma

---

Animal Note: COD...PROBABLE-ALVEOLAR/BRONCHIOLAR CARCINOMA

---

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 186

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 673

**DOSE:** 15PPM/M FUMON-03

**DISP:** Moribund

**HISTO:** 21080100186

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Bone Marrow
* Brain - Cerebellum	* Coagulating Gland	* Epididymis	* Esophagus
* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum	* Intestine Small - Duodenum
* Intestine Small - Ileum	* Intestine Small - Jejunum	* Lacrimal Gland	* Larynx
* Lung - Bronchus	* Lymph Node - Mandibular	* Mammary Gland	* Nose
* Pancreas	* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Pituitary Gland
* Prostate	* Salivary Glands	* Skeletal Muscle - Thigh	* Skin
* Spinal Cord - Thoracic	* Spleen	* Stomach - Forestomach	* Stomach - Glandular
* Thymus	* Thyroid Gland	* Tongue	* Trachea
* Urinary Bladder	* Zymbal's Gland		

**MISSING**

\* Preputial Gland

**OBSERVATIONS**

* Adrenal Gland	Medulla	Pheochromocytoma Benign	
* Brain	Cerebrum	Astrocytoma Malignant	
* Eye	Cornea	Inflammation	Acute, Moderate
[ Inflammation TGLS = 2-13 ]			
* Harderian Gland		Carcinoma	
[ Carcinoma TGLS = 3-13 ]			
* Heart		Cardiomyopathy	Mild
* Kidney	Renal Tubule	Hyperplasia	Focal, Mild
		Nephropathy	Mild
* Liver	Bile Duct	Hyperplasia	Minimal
		Mixed Cell Focus	
	Hepatocyte	Vacuolization Cytoplasmic	Minimal
* Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Mild
* Seminal Vesicle	Bilateral	Atrophy	Mild
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 1-10 ]			

**PRIMARY CAUSE OF DEATH**

- Brain Cerebrum Astrocytoma Malignant

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

**ANIMAL ID:** 186

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 673

**DOSE:** 15PPM/M FUMON-03

**DISP:** Moribund

**HISTO:** 21080100186

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

---

Animal Note: COD...PROBABLE-BRAIN ASTROCYTOMA MALIGNANT

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 187      **TRT#:** 3      **SEX:** Male      **DAY ON TEST:** 666  
**DOSE:** 15PPM/M FUMON-03      **DISP:** Moribund      **HISTO:** 21080100187

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Brain - Cerebellum
* Brain - Cerebrum	* Epididymis	* Esophagus	* Eye
* Harderian Gland	* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum
* Intestine Small - Duodenum	* Intestine Small - Ileum	* Intestine Small - Jejunum	* Larynx
* Lung - Bronchus	* Mammary Gland	* Pancreas	* Parathyroid Gland
* Peripheral Nerve - Sciatic	* Salivary Glands	* Skeletal Muscle - Thigh	* Skin
* Spinal Cord - Thoracic	* Stomach - Forestomach	* Stomach - Glandular	* Tongue
* Trachea	* Urinary Bladder	* Zymbal's Gland	

**OBSERVATIONS**

* Adrenal Gland		Leukemia Mononuclear	
	Medulla	Pheochromocytoma Benign	
* Bone Marrow		Leukemia Mononuclear	
* Coagulating Gland	Bilateral	Atrophy	Mild
* Heart		Leukemia Mononuclear	
* Kidney	Bilateral	Nephropathy	Mild
* Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Liver	Bile Duct	Hyperplasia	Moderate
		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 6-6 ]		
* Lung		Leukemia Mononuclear	
* Lymph Node	Mandibular	Leukemia Mononuclear	
	Mesenteric	Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 4-11 ]		
Mesentery	Fat	Necrosis	Moderate
	[ Necrosis TGLS = 3-11 ]		
* Nose	Olfactory Epi	Cytoplasmic Alteration	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
	[ Adenoma TGLS = 8-11 ]		
* Preputial Gland		Inflammation	Chronic, Minimal
* Prostate		Inflammation	Chronic Active, Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 187	<b>TRT#:</b> 3	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 666
	<b>DOSE:</b> 15PPM/M FUMON-03	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100187

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

* Seminal Vesicle	Bilateral	Atrophy	Mild
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 5-7 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 1,2-10 ]			
* Thymus		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 7-1.1 ]			
* Thyroid Gland	C Cell	Hyperplasia	Focal, Mild

---

PRIMARY CAUSE OF DEATH - Spleen Leukemia Mononuclear

---

Animal Note: COD...PROBABLE-LEUKEMIA MONONUCLEAR CELL

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 189

**TRT#:** 4

**SEX:** Male

**DAY ON TEST:** 720

**DOSE:** 50PPM/M FUMON-04

**DISP:** Moribund

**HISTO:** 21080100189

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Brain - Cerebellum
* Brain - Cerebrum	* Coagulating Gland	* Epididymis	* Esophagus
* Harderian Gland	* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum
* Intestine Small - Duodenum	* Intestine Small - Ileum	* Intestine Small - Jejunum	* Lacrimal Gland
* Larynx	* Lung - Bronchus	* Mammary Gland	* Nose
* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Prostate	* Salivary Glands
* Skeletal Muscle - Thigh	* Skin	* Spinal Cord - Thoracic	* Stomach - Forestomach
* Stomach - Glandular	* Thyroid Gland	* Tongue	* Trachea
* Urinary Bladder	* Zymbal's Gland		

**MISSING**

\* Pituitary Gland

**OBSERVATIONS**

* Adrenal Gland	Medulla	Hyperplasia	Focal, Moderate
	Medulla	Leukemia Mononuclear	
		Pheochromocytoma Benign	
* Bone Marrow		Leukemia Mononuclear	
* Brain		Leukemia Mononuclear	
* Eye	Bilateral, Retina	Atrophy	Marked
	Bilateral, Lens	Cataract	Mild
	[ Cataract TGLS = 4,5-13 ]		
* Heart		Cardiomyopathy	Mild
		Leukemia Mononuclear	
* Kidney		Leukemia Mononuclear	
	Bilateral	Nephropathy	Minimal
* Liver	Bile Duct	Hyperplasia	Moderate
		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 2-6 ]		
* Lung		Leukemia Mononuclear	
* Lymph Node	Mandibular	Leukemia Mononuclear	
	Mesenteric	Leukemia Mononuclear	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 189	<b>TRT#:</b> 4	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 720
	<b>DOSE:</b> 50PPM/M FUMON-04	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100189

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

* Pancreas	Acinar Cell	Atrophy	Diffuse, Marked
* Preputial Gland		Inflammation	Chronic, Minimal
* Seminal Vesicle	Bilateral	Atrophy	Mild
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 1-7 ]			
* Testes	Interstit Cell	Adenoma	
	Interstit Cell	Hyperplasia	Focal, Mild
[ Adenoma TGLS = 6-10 ]			
[ Hyperplasia TGLS = 6-10 ]			
* Thymus		Atrophy	Minimal
Note: TGL # 03 - NO MICROSCOPIC CORRELATE			

---

**PRIMARY CAUSE OF DEATH** - Spleen Leukemia Mononuclear

---

Animal Note: COD...PROBABLE-LEUKEMIA MONONUCLEAR CELL

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 190

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 720

**DOSE:** 15PPM/M FUMON-03

**DISP:** Moribund

**HISTO:** 21080100190

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Bone Marrow
* Brain - Cerebellum	* Brain - Cerebrum	* Epididymis	* Esophagus
* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum	* Intestine Small - Duodenum
* Intestine Small - Ileum	* Intestine Small - Jejunum	* Larynx	* Lung - Bronchus
* Lymph Node - Mandibular	* Mammary Gland	* Nose	* Pancreas
* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Pituitary Gland	* Salivary Glands
* Skeletal Muscle - Thigh	* Spinal Cord - Thoracic	* Stomach - Forestomach	* Stomach - Glandular
* Tongue	* Trachea	* Urinary Bladder	* Zymbal's Gland

**OBSERVATIONS**

* Adrenal Gland	Cortex	Hyperplasia	Focal, Mild
* Coagulating Gland	Bilateral	Atrophy	Moderate
* Eye	Bilateral, Retina	Atrophy	Marked
	Bilateral, Lens	Cataract	Marked
[ Cataract TGLS = 3-13 ]			
* Harderian Gland		Infiltration Cellular	Lymphocytic, Minimal
* Heart		Cardiomyopathy	Mild
* Kidney	Bilateral	Nephropathy	Minimal
* Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Liver	Bile Duct	Hyperplasia	Mild
	Hepatocyte	Vacuolization Cytoplasmic	Minimal
* Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
* Preputial Gland	Bilateral	Inflammation	Chronic, Mild
* Prostate		Inflammation	Chronic, Mild
* Seminal Vesicle	Bilateral	Atrophy	Moderate
* Skin	Subcut Tiss	Sarcoma	
[ Sarcoma TGLS = 1-14 ]			
* Spleen		Leukemia Mononuclear	
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 2-10.1 ]			
* Thymus		Atrophy	Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

**ANIMAL ID:** 190

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 720

**DOSE:** 15PPM/M FUMON-03

**DISP:** Moribund

**HISTO:** 21080100190

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

\* Thyroid Gland

C Cell

Hyperplasia

Focal, Minimal

---

PRIMARY CAUSE OF DEATH

- Skin Subcut Tiss Sarcoma

---

Animal Note: COD...PROBABLE-SKIN,SARCOMA

---

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 191      **TRT#:** 1      **SEX:** Male      **DAY ON TEST:** 671  
**DOSE:** 0PPM/M FUMON-01      **DISP:** Moribund      **HISTO:** 21080100191

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Brain - Cerebellum
* Brain - Cerebrum	* Coagulating Gland	* Epididymis	* Esophagus
* Harderian Gland	* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum
* Intestine Small - Duodenum	* Intestine Small - Ileum	* Intestine Small - Jejunum	* Larynx
* Lung - Bronchus	* Mammary Gland	* Nose	* Parathyroid Gland
* Peripheral Nerve - Sciatic	* Salivary Glands	* Seminal Vesicle	* Skeletal Muscle - Thigh
* Skin	* Spinal Cord - Thoracic	* Stomach - Glandular	* Testes
* Tongue	* Trachea	* Urinary Bladder	

**OBSERVATIONS**

* Adrenal Gland	Medulla	Hyperplasia	Focal, Mild
	Cortex	Leukemia Mononuclear	
* Bone Marrow		Vacuolization Cytoplasmic	Focal, Mild
* Eye	Bilateral, Retina	Leukemia Mononuclear	
	Bilateral, Lens	Atrophy	Moderate
* Heart		Cataract	Mild
		Cardiomyopathy	Moderate
* Kidney	Renal Tubule	Leukemia Mononuclear	
		Hyperplasia	Focal, Mild
	Bilateral	Leukemia Mononuclear	
	Bilateral, Renal Tubule	Nephropathy	Moderate
* Lacrimal Gland		Pigmentation	Mild
* Liver	Bile Duct	Infiltration Cellular	Lymphocytic, Minimal
		Hyperplasia	Marked
		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 2-6 ]		
* Lung		Leukemia Mononuclear	
* Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
	Mandibular	Leukemia Mononuclear	
	Mesenteric	Leukemia Mononuclear	
* Pancreas		Adenoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

<b>ANIMAL ID:</b> 191	<b>TRT#:</b> 1 <b>DOSE:</b> 0PPM/M FUMON-01	<b>SEX:</b> Male <b>DISP:</b> Moribund	<b>DAY ON TEST:</b> 671 <b>HISTO:</b> 21080100191
<b>ORGAN AND ACCOUNTABLE SITE STATUS</b>			
Note: ISLETS ADENOMA	Acinar Cell	Atrophy	Focal, Minimal
* Pituitary Gland	Pars Distalis	Adenoma Leukemia Mononuclear	
[ Adenoma TGLS = 3-11 ]			
* Preputial Gland		Inflammation	Chronic, Mild
* Prostate		Inflammation	Chronic Active, Mild
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 1-7 ]			
* Stomach	Epithelium, Forestomach	Hyperplasia Leukemia Mononuclear	Mild
* Thymus			
* Thyroid Gland	C Cell	Hyperplasia Ultimobranchial Cyst Carcinoma	Focal, Marked
* Zymbal's Gland			
[ Carcinoma TGLS = 4-13 ]			
PRIMARY CAUSE OF DEATH	- Spleen Leukemia Mononuclear		
Animal Note: COD...PROBABLE-LEUKEMIA MONONUCLEAR CELL			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 192

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 686

**DOSE:** 15PPM/M FUMON-03

**DISP:** Natural Death

**HISTO:** 21080100192

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Brain - Cerebellum
* Brain - Cerebrum	* Coagulating Gland	* Epididymis	* Esophagus
* Harderian Gland	* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum
* Intestine Small - Duodenum	* Intestine Small - Ileum	* Lung - Bronchus	* Nose
* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Pituitary Gland	* Prostate
* Salivary Glands	* Skeletal Muscle - Thigh	* Skin	* Spinal Cord - Thoracic
* Stomach - Forestomach	* Stomach - Glandular	* Thymus	* Thyroid Gland
* Tongue	* Trachea	* Urinary Bladder	* Zymbal's Gland

**MISSING**

* Lacrimal Gland	* Mammary Gland
------------------	-----------------

**AUTO PRECLUDES DIAG.**

\* Intestine Small - Jejunum

**OBSERVATIONS**

* Adrenal Gland	Bilateral, Medulla	Hyperplasia	Focal, Moderate
* Bone Marrow		Leukemia Mononuclear	
* Brain		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 5-3 ]			
* Eye	Bilateral, Retina	Atrophy	Marked
	Bilateral, Lens	Cataract	Mild
* Heart		Leukemia Mononuclear	
* Kidney		Leukemia Mononuclear	
	Bilateral	Nephropathy	Mild
* Larynx		Cyst	Mild
* Liver	Bile Duct	Hyperplasia	Moderate
		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 4-6 ]			
* Lung		Leukemia Mononuclear	
* Lymph Node	Mandibular	Leukemia Mononuclear	
	Mesenteric	Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 6-11 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 192	<b>TRT#:</b> 3	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 686
	<b>DOSE:</b> 15PPM/M FUMON-03	<b>DISP:</b> Natural Death	<b>HISTO:</b> 21080100192

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

* Pancreas	Acinar Cell	Basophilic Focus	
* Preputial Gland		Inflammation	Chronic Active, Mild
* Seminal Vesicle	Bilateral	Atrophy	Mild
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 3-7 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 1,2-10.1 ]			

---

**PRIMARY CAUSE OF DEATH** - Spleen Leukemia Mononuclear

---

Animal Note: COD...PROBABLE-LEUKEMIA MONONUCLEAR CELL

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

<b>ANIMAL ID:</b> 193	<b>TRT#:</b> 2	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 687
	<b>DOSE:</b> 5PPM/M FUMON-02	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100193

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Gland	* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum
* Brain - Cerebellum	* Brain - Cerebrum	* Epididymis	* Esophagus
* Harderian Gland	* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum
* Intestine Small - Duodenum	* Intestine Small - Ileum	* Intestine Small - Jejunum	* Larynx
* Lung - Bronchus	* Lymph Node - Mandibular	* Mammary Gland	* Nose
* Pancreas	* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Pituitary Gland
* Salivary Glands	* Skeletal Muscle - Thigh	* Spinal Cord - Thoracic	* Stomach - Forestomach
* Stomach - Glandular	* Tongue	* Trachea	* Urinary Bladder
* Zymbal's Gland			

**OBSERVATIONS**

* Bone Marrow		Leukemia Mononuclear	
* Coagulating Gland	Bilateral	Atrophy	Mild
* Epididymis			
Note: ONLY ONE			
* Eye	Bilateral, Retina	Atrophy	Marked
	Bilateral, Lens	Cataract	Minimal
* Heart	Valve	Inflammation	Chronic, Mild
* Kidney		Leukemia Mononuclear	
	Bilateral	Nephropathy	Minimal
* Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Liver	Bile Duct	Hyperplasia	Marked
		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 3-6 ]			
* Lung		Leukemia Mononuclear	
* Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
* Preputial Gland		Inflammation	Chronic, Minimal
* Prostate		Atrophy	Mild
* Seminal Vesicle	Bilateral	Atrophy	Moderate
* Skin		Keratoacanthoma	Multiple
[ Keratoacanthoma TGLS = 4,5-14+14.1 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 193	<b>TRT#:</b> 2	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 687
	<b>DOSE:</b> 5PPM/M FUMON-02	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100193

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

* Spleen		Fibrosis	Focal, Moderate
		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 2-7 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 1-10.1 ]			
* Thymus		Atrophy	Marked
* Thyroid Gland	C Cell	Hyperplasia	Focal, Moderate

---

PRIMARY CAUSE OF DEATH - Spleen Leukemia Mononuclear

Animal Note: COD...PROBABLE-LEUKEMIA MONONUCLEAR CELL

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 194

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 684

**DOSE:** 15PPM/M FUMON-03

**DISP:** Moribund

**HISTO:** 21080100194

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Brain - Cerebellum
* Brain - Cerebrum	* Esophagus	* Harderian Gland	* Intestine Large - Colon
* Intestine Large - Rectum	* Intestine Small - Duodenum	* Intestine Small - Ileum	* Intestine Small - Jejunum
* Lacrimal Gland	* Larynx	* Lung - Bronchus	* Mammary Gland
* Pancreas	* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Prostate
* Salivary Glands	* Skeletal Muscle - Thigh	* Spinal Cord - Thoracic	* Stomach - Forestomach
* Thyroid Gland	* Tongue	* Trachea	* Urinary Bladder
* Zymbal's Gland			

**MISSING**

\* Thymus

**OBSERVATIONS**

* Adrenal Gland	Medulla	Pheochromocytoma Benign	
* Bone Marrow		Leukemia Mononuclear	
* Brain		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 6-3 ]			
* Coagulating Gland	Bilateral	Atrophy	Moderate
* Epididymis	Bilateral, Epithelium	Degeneration	Mucoid, Minimal
* Eye	Bilateral, Retina	Atrophy	Marked
	Bilateral, Lens	Cataract	Mild
* Heart		Cardiomyopathy	Minimal
		Leukemia Mononuclear	
* Intestine Large	Cecum	Leukemia Mononuclear	
* Kidney	Bilateral, Renal Tubule	Pigmentation	Mild
* Liver	Bile Duct	Hyperplasia	Marked
		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 4-6 ]			
* Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Mild
	Mandibular	Leukemia Mononuclear	
* Nose	Nasolacrim Dct	Inflammation	Chronic, Mild
* Pituitary Gland	Pars Distalis	Hyperplasia	Focal, Mild

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 194	<b>TRT#:</b> 3	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 684
	<b>DOSE:</b> 15PPM/M FUMON-03	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100194

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

* Preputial Gland Note: ONLY ONE		Inflammation	Chronic, Minimal
* Seminal Vesicle	Bilateral	Atrophy	Marked
* Skin	Sebaceous Gl Subcut Tiss	Adenoma Hemangioma	
[ Hemangioma TGLS = 5-10 ]			
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 3-7 ]			
* Stomach	Glandular	Erosion	Focal, Mild
* Testes	Interstit Cell Germinal Epith	Adenoma Atrophy	Marked
[ Adenoma TGLS = 1-10 ]			
[ Atrophy TGLS = 2-10 ]			

---

**PRIMARY CAUSE OF DEATH** - Spleen Leukemia Mononuclear

---

Animal Note: COD...PROBABLE-LEUKEMIA MONONUCLEAR CELL

---

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 195

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 726

**DOSE:** 150PPM/MFUMON-05

**DISP:** Moribund

**HISTO:** 21080100195

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Blood Vessel - Aorta	Bone - Femur	Bone - Sternum	Brain - Cerebellum
Brain - Cerebrum	Coagulating Gland	Epididymis	Esophagus
Harderian Gland	Intestine Large - Cecum	Intestine Large - Colon	Intestine Large - Rectum
Intestine Small - Duodenum	Intestine Small - Ileum	Intestine Small - Jejunum	Larynx
Lung - Bronchus	Nose	Parathyroid Gland	Peripheral Nerve - Sciatic
Seminal Vesicle	Skeletal Muscle - Thigh	Spinal Cord - Thoracic	Tongue
Trachea	Urinary Bladder	Zymbal's Gland	

**OBSERVATIONS**

Adrenal Gland	Medulla	Hyperplasia	Focal, Mild
		Leukemia Mononuclear	
Bone Marrow		Leukemia Mononuclear	
Eye	Bilateral, Retina	Atrophy	Moderate
	Bilateral, Lens	Cataract	Minimal
Heart		Cardiomyopathy	Mild
		Leukemia Mononuclear	
* Kidney		Leukemia Mononuclear	
	Bilateral	Nephropathy	Mild
	Bilateral, Renal Tubule	Pigmentation	Mild
Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Liver	Bile Duct	Hyperplasia	Moderate
		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 4-6 ]		
Lung		Leukemia Mononuclear	
Lymph Node	Mandibular	Leukemia Mononuclear	
	Mesenteric	Leukemia Mononuclear	
Mammary Gland		Galactocele	Minimal
Pancreas	Acinar Cell	Atrophy	Focal, Marked
Pituitary Gland	Pars Distalis	Adenoma	
	[ Adenoma TGLS = 7-11 ]		
Preputial Gland		Adenoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 195	<b>TRT#:</b> 5	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 726
	<b>DOSE:</b> 150PPM/MFUMON-05	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100195

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

Note: TGL#1-NULLIFIED BY TRIMMER

Note: ONLY ONE

Prostate		Atrophy Inflammation	Mild Acute, Mild
Salivary Glands	Parotid GI	Atrophy	Diffuse, Moderate
Skin	Hair Follicle	Atrophy	Moderate
Spleen		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 2,3-7 ]		
Stomach	Epithelium, Forestomach Forestomach Glandular Forestomach	Hyperplasia Inflammation Necrosis Ulcer	Marked Chronic, Mild Mild Marked
	[ Necrosis TGLS = 6-7 ]		
Testes	Bilateral, Interstit Cell	Adenoma	
	[ Adenoma TGLS = 5-10 ]		
Thymus		Leukemia Mononuclear	
Thyroid Gland	C Cell	Hyperplasia	Focal, Minimal

---

**PRIMARY CAUSE OF DEATH** - Spleen Leukemia Mononuclear

---

Animal Note: COD...PROBABLE-LEUKEMIA MONONUCLEAR CELL

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 196      **TRT#:** 4      **SEX:** Male      **DAY ON TEST:** 684  
**DOSE:** 50PPM/M FUMON-04      **DISP:** Moribund      **HISTO:** 21080100196

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Gland	* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum
* Brain - Cerebellum	* Brain - Cerebrum	* Coagulating Gland	* Epididymis
* Esophagus	* Harderian Gland	* Intestine Large - Cecum	* Intestine Large - Colon
* Intestine Large - Rectum	* Intestine Small - Duodenum	* Intestine Small - Ileum	* Intestine Small - Jejunum
* Lacrimal Gland	* Larynx	* Lung - Bronchus	* Nose
* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Seminal Vesicle	* Skeletal Muscle - Thigh
* Skin	* Spinal Cord - Thoracic	* Stomach - Glandular	* Thymus
* Tongue	* Trachea	* Urinary Bladder	* Zymbal's Gland

**MISSING**

\* Mammary Gland

**OBSERVATIONS**

* Bone Marrow		Depletion	Minimal
* Brain	Hypothalamus	Compression	Minimal
[ Compression TGLS = 3-3 ]			
* Eye	Bilateral, Retina	Atrophy	Marked
	Bilateral, Lens	Cataract	Moderate
[ Cataract TGLS = 2-13 ]			
* Heart		Cardiomyopathy	Mild
* Kidney	Bilateral	Nephropathy	Minimal
* Liver	Bile Duct	Hyperplasia	Minimal
	Hepatocyte	Vacuolization Cytoplasmic	Moderate
* Lymph Node	Mandibular	Infiltration Cellular	Histiocytic, Minimal
	Mesenteric	Infiltration Cellular	Histiocytic, Mild
* Pancreas	Acinar Cell	Atrophy	Focal, Mild
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 1-11 ]			
* Preputial Gland	Bilateral	Inflammation	Chronic Active, Mild
* Prostate		Inflammation	Acute, Mild
* Salivary Glands	Parotid GI	Atrophy	Diffuse, Moderate
* Spleen		Congestion	Mild

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 196	<b>TRT#:</b> 4	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 684
	<b>DOSE:</b> 50PPM/M FUMON-04	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100196

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

* Stomach	Epithelium, Forestomach	Hyperplasia	Moderate
	Forestomach	Inflammation	Chronic, Mild
	Forestomach	Ulcer	Moderate
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 4-10 ]			
* Thyroid Gland	C Cell	Hyperplasia	Focal, Mild

---

PRIMARY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma

---

Animal Note: COD...PROBABLE-PITUITARY GLAND,ADENOMA

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 198      **TRT#:** 4      **SEX:** Male      **DAY ON TEST:** 728  
**DOSE:** 50PPM/M FUMON-04      **DISP:** Moribund      **HISTO:** 21080100198

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Brain - Cerebellum
* Brain - Cerebrum	* Coagulating Gland	* Epididymis	* Esophagus
* Harderian Gland	* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum
* Intestine Small - Duodenum	* Intestine Small - Ileum	* Intestine Small - Jejunum	* Larynx
* Lung - Bronchus	* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Salivary Glands
* Seminal Vesicle	* Skeletal Muscle - Thigh	* Skin	* Spinal Cord - Thoracic
* Stomach - Forestomach	* Stomach - Glandular	* Thymus	* Thyroid Gland
* Tongue	* Trachea	* Zymbal's Gland	

**OBSERVATIONS**

* Adrenal Gland		Leukemia Mononuclear	
	Medulla	Pheochromocytoma Benign	
* Bone Marrow		Leukemia Mononuclear	
* Eye	Bilateral, Retina	Atrophy	Marked
	Bilateral, Lens	Cataract	Moderate
* Heart		Cardiomyopathy	Minimal
* Kidney	Bilateral	Nephropathy	Mild
* Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Liver	Bile Duct	Hyperplasia	Moderate
		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 3-6 ]		
* Lung		Alveolar/Bronchiolar Adenoma	
	[ Alveolar/Bronchiolar Adenoma TGLS = 6-5.1 ]		
* Lymph Node	Mandibular	Leukemia Mononuclear	
	Mesenteric	Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 8-11 ]		
* Mammary Gland		Cyst	Minimal
Mesentery	Fat	Necrosis	Moderate
	[ Necrosis TGLS = 5-11 ]		
* Nose	Nasolacrim Dct	Inflammation	Chronic Active, Minimal
* Pancreas	Acinar Cell	Atrophy	Focal, Mild

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 198	<b>TRT#:</b> 4	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 728
	<b>DOSE:</b> 50PPM/M FUMON-04	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100198

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

* Pituitary Gland [ Adenoma TGLS = 2-11 ]	Pars Distalis	Adenoma	
* Preputial Gland		Inflammation	Chronic, Mild
* Prostate		Inflammation	Chronic, Minimal
* Spleen [ Leukemia Mononuclear TGLS = 1-7 ]		Leukemia Mononuclear Leukemia Mononuclear	
* Testes [ Adenoma TGLS = 7-10 ]	Interstit Cell Germinal Epith	Adenoma Atrophy	Mild
* Urinary Bladder [ Leukemia Mononuclear TGLS = 4-12 ]		Leukemia Mononuclear	

---

**PRIMARY CAUSE OF DEATH** - Spleen Leukemia Mononuclear

---

Animal Note: COD...PROBABLE-LEUKEMIA MONONUCLEAR CELL

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

<b>ANIMAL ID:</b> 199	<b>TRT#:</b> 3	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 728
	<b>DOSE:</b> 15PPM/M FUMON-03	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100199

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Gland	* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum
* Brain - Cerebellum	* Brain - Cerebrum	* Esophagus	* Harderian Gland
* Heart	* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum
* Intestine Small - Duodenum	* Intestine Small - Ileum	* Intestine Small - Jejunum	* Larynx
* Lung - Bronchus	* Mammary Gland	* Nose	* Parathyroid Gland
* Peripheral Nerve - Sciatic	* Pituitary Gland	* Salivary Glands	* Skeletal Muscle - Thigh
* Skin	* Spinal Cord - Thoracic	* Stomach - Forestomach	* Stomach - Glandular
* Thyroid Gland	* Tongue	* Trachea	* Urinary Bladder

**MISSING**

\* Zymbal's Gland

**OBSERVATIONS**

* Bone Marrow		Leukemia Mononuclear	
* Coagulating Gland	Bilateral	Atrophy	Moderate
* Epididymis	Bilateral	Atrophy	Mild
* Eye	Bilateral, Retina	Atrophy	Marked
	Bilateral, Lens	Cataract	Moderate
* Kidney		Mineralization	Minimal
	Bilateral	Nephropathy	Minimal
	Bilateral, Renal Tubule	Pigmentation	Mild
* Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Liver	Bile Duct	Hyperplasia	Moderate
		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 4,5-6+6.1 ]		
* Lung		Leukemia Mononuclear	
* Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
	Mandibular	Leukemia Mononuclear	
	Mesenteric	Leukemia Mononuclear	
* Pancreas	Acinar Cell	Atrophy	Diffuse, Mild
* Preputial Gland		Inflammation	Chronic, Mild
* Prostate		Atrophy	Mild

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 199	<b>TRT#:</b> 3	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 728
	<b>DOSE:</b> 15PPM/M FUMON-03	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100199

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

* Seminal Vesicle	Bilateral	Atrophy	Marked
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 3-7 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 1,2-10 ]			
* Thymus		Atrophy	Mild

---

**PRIMARY CAUSE OF DEATH** - Spleen Leukemia Mononuclear

---

Animal Note: COD...PROBABLE-LEUKEMIA MONONUCLEAR CELL

---

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 200

**TRT#:** 4

**SEX:** Male

**DAY ON TEST:** 729

**DOSE:** 50PPM/M FUMON-04

**DISP:** Moribund

**HISTO:** 21080100200

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Bone Marrow
* Brain - Cerebellum	* Brain - Cerebrum	* Epididymis	* Esophagus
* Harderian Gland	* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum
* Intestine Small - Duodenum	* Intestine Small - Ileum	* Intestine Small - Jejunum	* Lacrimal Gland
* Larynx	* Lung - Bronchus	* Lymph Node - Mandibular	* Pancreas
* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Salivary Glands	* Skeletal Muscle - Thigh
* Skin	* Spinal Cord - Thoracic	* Stomach - Forestomach	* Stomach - Glandular
* Tongue	* Trachea	* Urinary Bladder	

**MISSING**

\* Zymbal's Gland

**OBSERVATIONS**

* Adrenal Gland	Bilateral, Medulla Cortex	Hyperplasia Vacuolization Cytoplasmic	Focal, Moderate Focal, Mild
* Coagulating Gland	Bilateral	Atrophy	Marked
* Eye	Bilateral, Retina Bilateral, Lens	Atrophy Cataract	Marked Marked
* Heart		Cardiomyopathy	Minimal
* Kidney	Bilateral	Nephropathy	Minimal
* Liver	Bile Duct	Hyperplasia	Mild
* Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Mild
* Mammary Gland		Cyst	Mild
* Nose	Nasolacrim Dct	Inflammation	Chronic Active, Moderate
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 2-11 ]			
* Preputial Gland	Bilateral	Inflammation	Chronic, Minimal
* Prostate		Adenoma Inflammation	Acute, Moderate
* Seminal Vesicle	Bilateral	Atrophy	Marked
* Spleen	Lymph Follic	Atrophy Pigmentation	Mild Moderate

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 200	<b>TRT#:</b> 4	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 729
	<b>DOSE:</b> 50PPM/M FUMON-04	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100200

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

* Testes	Interstit Cell Germinal Epith	Adenoma Atrophy	Marked
Note: MASS ONLY CONFIRMED UNILATERALLY [ Adenoma TGLS = 1-10 ]			
* Thymus		Atrophy	Minimal
* Thyroid Gland	C Cell	Hyperplasia	Focal, Mild

---

PRIMARY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma

---

Animal Note: COD...PROBABLE-PITUITARY GLAND,ADENOMA

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

<b>ANIMAL ID:</b> 201	<b>TRT#:</b> 1 <b>DOSE:</b> 0PPM/M FUMON-01	<b>SEX:</b> Male <b>DISP:</b> Moribund	<b>DAY ON TEST:</b> 729 <b>HISTO:</b> 21080100201
-----------------------	--	---	--

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Brain - Cerebellum
* Brain - Cerebrum	* Epididymis	* Esophagus	* Intestine Large - Cecum
* Intestine Large - Colon	* Intestine Large - Rectum	* Intestine Small - Duodenum	* Intestine Small - Ileum
* Intestine Small - Jejunum	* Lacrimal Gland	* Larynx	* Lung - Bronchus
* Mammary Gland	* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Prostate
* Salivary Glands	* Skeletal Muscle - Thigh	* Spinal Cord - Thoracic	* Stomach - Forestomach
* Stomach - Glandular	* Tongue	* Trachea	* Urinary Bladder

**MISSING**

* Pituitary Gland	* Zymbal's Gland
-------------------	------------------

**OBSERVATIONS**

* Adrenal Gland	Medulla Medulla	Hyperplasia Pheochromocytoma Benign Leukemia Mononuclear	Focal, Marked
* Bone Marrow			
* Coagulating Gland	Bilateral	Atrophy	Mild
* Eye	Bilateral, Retina Bilateral, Lens	Atrophy Cataract	Marked Mild
* Harderian Gland		Infiltration Cellular	Lymphocytic, Minimal
* Heart		Cardiomyopathy Leukemia Mononuclear Thrombosis	Mild Marked
[ Thrombosis TGLS = 5-1 ]	Atrium		
* Kidney	Bilateral	Nephropathy	Mild
* Liver	Bile Duct	Hyperplasia Leukemia Mononuclear	Marked
[ Leukemia Mononuclear TGLS = 4-6 ]			
* Lung		Leukemia Mononuclear	
* Lymph Node	Mesenteric Mandibular	Infiltration Cellular Leukemia Mononuclear	Histiocytic, Mild
* Nose	Nasolacrim Dct	Inflammation	Chronic, Minimal
* Pancreas	Acinar Cell	Atrophy	Focal, Mild

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 201	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 729
	<b>DOSE:</b> 0PPM/M FUMON-01	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100201

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

* Preputial Gland		Inflammation	Acute, Minimal
* Seminal Vesicle	Bilateral	Atrophy	Moderate
* Skin		Basal Cell Adenoma	
[ Basal Cell Adenoma TGLS = 1-14 ]			
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 2-7 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 3-10 ]			
* Thymus		Atrophy	Marked
* Thyroid Gland	C Cell	Hyperplasia	Focal, Mild

---

**PRIMARY CAUSE OF DEATH** - Spleen Leukemia Mononuclear

---

Animal Note: COD...PROBABLE-LEUKEMIA MONONUCLEAR CELL

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 204      **TRT#:** 2      **SEX:** Male      **DAY ON TEST:** 687  
**DOSE:** 5PPM/M FUMON-02      **DISP:** Moribund      **HISTO:** 21080100204

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Gland	* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum
* Bone Marrow	* Brain - Cerebellum	* Brain - Cerebrum	* Coagulating Gland
* Epididymis	* Esophagus	* Intestine Large - Cecum	* Intestine Large - Colon
* Intestine Large - Rectum	* Intestine Small - Duodenum	* Intestine Small - Ileum	* Intestine Small - Jejunum
* Lacrimal Gland	* Lung - Bronchus	* Nose	* Pancreas
* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Preputial Gland	* Salivary Glands
* Seminal Vesicle	* Skeletal Muscle - Thigh	* Skin	* Spinal Cord - Thoracic
* Spleen	* Stomach - Forestomach	* Stomach - Glandular	* Thymus
* Thyroid Gland	* Tongue	* Trachea	* Zymbal's Gland

**OBSERVATIONS**

* Brain	Hypothalamus	Compression	Minimal
* Eye	Retina	Atrophy	Minimal
* Harderian Gland		Infiltration Cellular	Lymphocytic, Minimal
* Heart		Cardiomyopathy	Mild
* Kidney	Bilateral	Nephropathy	Mild
* Larynx		Inflammation	Chronic, Minimal
* Liver		Angiectasis	Focal, Minimal
		Basophilic Focus	
	Bile Duct	Hyperplasia	Mild
	Hepatocyte	Vacuolization Cytoplasmic	Minimal
* Lymph Node	Mandibular	Hyperplasia	Minimal
	Mesenteric	Infiltration Cellular	Histiocytic, Mild
* Mammary Gland		Galactocele	Mild
[ Galactocele TGLS = 2-10 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 3-11 ]			
* Prostate		Inflammation	Acute, Mild
* Testes	Interstit Cell	Adenoma	
[ Adenoma TGLS = 1-10 ]			
* Urinary Bladder		Infiltration Cellular	Lymphocytic, Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

**ANIMAL ID:** 204

**TRT#:** 2

**SEX:** Male

**DAY ON TEST:** 687

**DOSE:** 5PPM/M FUMON-02

**DISP:** Moribund

**HISTO:** 21080100204

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

PRIMARY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma

---

Animal Note: COD...PROBABLE-PITUITARY GLAND,ADENOMA

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 205

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 673

**DOSE:** 150PPM/MFUMON-05

**DISP:** Moribund

**HISTO:** 21080100205

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Blood Vessel - Aorta	Bone - Femur	Bone - Sternum	Brain - Cerebellum
Brain - Cerebrum	Coagulating Gland	Esophagus	Eye
Intestine Large - Cecum	Intestine Large - Colon	Intestine Large - Rectum	Intestine Small - Duodenum
Intestine Small - Ileum	Intestine Small - Jejunum	Larynx	Lung - Bronchus
Lymph Node - Mandibular	Nose	Parathyroid Gland	Peripheral Nerve - Sciatic
Preputial Gland	Prostate	Salivary Glands	Skin
Spinal Cord - Thoracic	Tongue	Trachea	Urinary Bladder

**MISSING**

Thymus	Zymbal's Gland
--------	----------------

**OBSERVATIONS**

Adrenal Gland		Leukemia Mononuclear	
Bone Marrow		Leukemia Mononuclear	
Brain	Hypothalamus	Compression	Mild
Epididymis	Epithelium	Degeneration	Mucoid, Mild
Harderian Gland		Infiltration Cellular	Lymphocytic, Minimal
Heart		Cardiomyopathy	Minimal
* Kidney	Bilateral	Nephropathy	Mild
Lacrimal Gland		Cyst	Minimal
		Infiltration Cellular	Lymphocytic, Minimal
* Liver	Bile Duct	Hyperplasia	Marked
		Leukemia Mononuclear	
Lung		Leukemia Mononuclear	
Note: TGL#4-NULLIFIED BY TRIMMER			
Lymph Node	Mesenteric	Leukemia Mononuclear	
Mammary Gland		Cyst	Mild
Pancreas		Carcinoma	
Note: ISLETS			
Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 5-11 ]			
Seminal Vesicle		Atrophy	Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 205	<b>TRT#:</b> 5	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 673
	<b>DOSE:</b> 150PPM/MFUMON-05	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100205

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

Skeletal Muscle	Thigh	Degeneration	Mild
Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 2-7 ]			
Stomach	Glandular	Edema	Mild
	Forestomach	Inflammation	Chronic Active, Moderate
	Forestomach	Ulcer	Moderate
Testes	Interstit Cell	Adenoma	
	Germinal Epith	Atrophy	Marked
		Mineralization	Marked
[ Adenoma TGLS = 1-10.1 ]			
Thymus			
Note: TGL # 03 - NO MICROSCOPIC CORRELATE			
Thyroid Gland	C Cell	Adenoma	

---

PRIMARY CAUSE OF DEATH -

CONTRIBUTORY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma;Spleen Leukemia Mononuclear

---

Animal Note: COD...CONTRIBUTORY-LEUKEMIA MONONUCLEAR CELL -PITUITARY GLAND,ADENOMA

---

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 210

**TRT#:** 4

**SEX:** Male

**DAY ON TEST:** 739

**DOSE:** 50PPM/M FUMON-04

**DISP:** Terminal Sacrifice

**HISTO:** 21080100210

**ORGAN AND ACCOUNTABLE SITE STATUS**

**MISSING**

\* Prostate

**OBSERVATIONS**

* Kidney	Renal Tubule Bilateral	Hyperplasia Nephropathy Basophilic Focus Degeneration	Focal, Mild Mild
* Liver	Bile Duct Pars Distalis	Hyperplasia Adenoma	Cystic, Focal, Minimal Mild
* Pituitary Gland [ Adenoma TGLS = 4-11 ]			
* Prostate Note: NOT ON SLIDE Note: TGL # 03 - NO MICROSCOPIC CORRELATE			
* Testes [ Atrophy TGLS = 1,2-10 ]	Interstit Cell Germinal Epith Interstit Cell	Adenoma Atrophy Hyperplasia	Marked Focal, Marked

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 211	<b>TRT#:</b> 4	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> 50PPM/M FUMON-04	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100211

---

<b>OBSERVATIONS</b>			
Ear		Keratoacanthoma	
[ Keratoacanthoma TGLS = 5-13 ]			
* Kidney	Bilateral	Nephropathy	Minimal
* Liver		Angiectasis	Focal, Mild
		Clear Cell Focus	
		Eosinophilic Focus	
	Bile Duct	Hyperplasia	Mild
		Tension Lipidosis	
Mesentery	Fat	Necrosis	Mild
[ Necrosis TGLS = 3=11 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 1,2-10.1 ]			
* Thyroid Gland	C Cell	Carcinoma	
[ Carcinoma TGLS = 4-4 ]			

---

<b>PRIMARY CAUSE OF DEATH</b>	-
-------------------------------	---

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 212	<b>TRT#:</b> 4 <b>DOSE:</b> 50PPM/M FUMON-04	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 739 <b>HISTO:</b> 21080100212
<b>OBSERVATIONS</b>			
* Eye [ Cataract TGLS = 4,5-13 ]	Bilateral, Retina Bilateral, Lens	Atrophy Cataract	Marked Moderate
* Kidney [ Carcinoma TGLS = 3-2 ]	Renal Tubule Bilateral	Carcinoma Nephropathy	Mild
* Liver [ Hyperplasia TGLS = 6-6.1 ]	Bile Duct	Clear Cell Focus Hyperplasia Tension Lipidosis	Mild
Mesentery [ Necrosis TGLS = 2-11 ]	Fat	Necrosis	Moderate
* Testes [ Adenoma TGLS = 1-10 ] [ Atrophy TGLS = 1-10 ]	Interstitial Cell Germinal Epith	Adenoma Atrophy	Marked
<hr/> <b>PRIMARY CAUSE OF DEATH</b> - <hr/>			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 213

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 739

**DOSE:** 0PPM/M FUMON-01

**DISP:** Terminal Sacrifice

**HISTO:** 21080100213

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Brain - Cerebellum
* Brain - Cerebrum	* Esophagus	* Intestine Large - Cecum	* Intestine Large - Colon
* Intestine Large - Rectum	* Intestine Small - Duodenum	* Intestine Small - Ileum	* Intestine Small - Jejunum
* Lacrimal Gland	* Larynx	* Lung - Bronchus	* Parathyroid Gland
* Peripheral Nerve - Sciatic	* Preputial Gland	* Prostate	* Salivary Glands
* Skeletal Muscle - Thigh	* Skin	* Spinal Cord - Thoracic	* Stomach - Forestomach
* Stomach - Glandular	* Tongue	* Trachea	* Urinary Bladder
* Zymbal's Gland			

**MISSING**

* Mammary Gland	* Thymus
-----------------	----------

**OBSERVATIONS**

* Adrenal Gland		Leukemia Mononuclear	
* Bone Marrow		Leukemia Mononuclear	
* Coagulating Gland	Bilateral	Atrophy	Minimal
* Epididymis	Epithelium	Degeneration	Mucoid, Minimal
* Eye	Bilateral, Retina	Atrophy	Moderate
* Harderian Gland		Infiltration Cellular	Lymphocytic, Minimal
* Heart		Cardiomyopathy	Mild
* Kidney	Bilateral	Nephropathy	Minimal
* Liver	Bile Duct	Hyperplasia	Marked
		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 2-6 ]		
* Lung		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 4,5,6,7,8-5 + 5.1 ]		
* Lymph Node	Mandibular	Leukemia Mononuclear	
	Mesenteric	Leukemia Mononuclear	
* Nose	Olfactory Epi	Cytoplasmic Alteration	Minimal
* Pancreas		Carcinoma	
Note: ISLETS			
* Pituitary Gland		Leukemia Mononuclear	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

**ANIMAL ID:** 213

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 739

**DOSE:** 0PPM/M FUMON-01

**DISP:** Terminal Sacrifice

**HISTO:** 21080100213

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

[ Leukemia Mononuclear TGLS = 9-11 ]

\* Preputial GI

Note: ONLY ONE

\* Seminal Vesicle

Bilateral

Atrophy

Mild

\* Spleen

Leukemia Mononuclear

[ Leukemia Mononuclear TGLS = 1-7 ]

\* Testes

Interstit Cell

Adenoma

Note: ONLY UNILATERAL CONFIRMATION OF NODULE

[ Adenoma TGLS = 3-10 ]

\* Thyroid Gland

C Cell

Adenoma

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

<b>ANIMAL ID:</b> 214	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> 0PPM/M FUMON-01	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100214

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Gland	* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum
* Bone Marrow	* Brain - Cerebellum	* Brain - Cerebrum	* Epididymis
* Esophagus	* Harderian Gland	* Intestine Large - Cecum	* Intestine Large - Colon
* Intestine Large - Rectum	* Intestine Small - Duodenum	* Intestine Small - Ileum	* Intestine Small - Jejunum
* Larynx	* Lung - Bronchus	* Lymph Node - Mandibular	* Nose
* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Pituitary Gland	* Preputial Gland
* Salivary Glands	* Skeletal Muscle - Thigh	* Skin	* Spinal Cord - Thoracic
* Stomach - Forestomach	* Stomach - Glandular	* Thymus	* Thyroid Gland
* Tongue	* Trachea	* Urinary Bladder	

**MISSING**

* Mammary Gland	* Zymbal's Gland
-----------------	------------------

**OBSERVATIONS**

* Coagulating Gland		Atrophy	Mild
* Eye	Bilateral, Retina	Atrophy	Moderate
	Bilateral, Lens	Cataract	Mild
* Heart		Cardiomyopathy	Mild
* Kidney	Bilateral	Nephropathy	Mild
* Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Liver		Degeneration	Cystic, Focal, Mild
	Bile Duct	Hyperplasia	Moderate
		Leukemia Mononuclear	
* Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
* Pancreas	Acinar Cell	Atrophy	Focal, Marked
* Prostate	Epithelium	Hyperplasia	Focal, Minimal
* Seminal Vesicle		Atrophy	Mild
* Spleen		Leukemia Mononuclear	
* Testes	Bilateral, Interstit Cell	Adenoma	

[ Adenoma TGLS = 1-10.1 ]

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 215

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 739

**DOSE:** 150PPM/MFUMON-05

**DISP:** Terminal Sacrifice

**HISTO:** 21080100215

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Blood Vessel - Aorta	Bone - Femur	Bone - Sternum	Brain - Cerebellum
Brain - Cerebrum	Coagulating Gland	Epididymis	Esophagus
Intestine Large - Cecum	Intestine Large - Colon	Intestine Large - Rectum	Intestine Small - Duodenum
Intestine Small - Ileum	Intestine Small - Jejunum	Larynx	Lung - Bronchus
Parathyroid Gland	Peripheral Nerve - Sciatic	Salivary Glands	Seminal Vesicle
Skeletal Muscle - Thigh	Skin	Spinal Cord - Thoracic	Spleen
Stomach - Forestomach	Stomach - Glandular	Thyroid Gland	Tongue
Trachea	Urinary Bladder	Zymbal's Gland	

**OBSERVATIONS**

Adrenal Gland Note: ONLY ONE	Medulla	Pheochromocytoma Benign	
Bone Marrow		Hyperplasia	Mild
Eye  [ Cataract TGLS = 2-13 ]	Bilateral, Retina Bilateral, Lens	Atrophy Cataract	Marked Marked
Harderian Gland		Infiltration Cellular	Lymphocytic, Minimal
Heart		Cardiomyopathy	Mild
* Kidney	Bilateral	Nephropathy	Minimal
Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Liver	Bile Duct	Hyperplasia Mixed Cell Focus	Moderate
Lymph Node	Mesenteric Mandibular	Degeneration Hyperplasia	Cystic, Mild Mild
Mammary Gland		Cyst	Mild
Nose		Foreign Body	
Pancreas Note: ISLETS [ Hyperplasia TGLS = 1-7 ]		Hyperplasia	Focal, Marked
Pituitary Gland [ Adenoma TGLS = 3-11 ]	Pars Distalis	Adenoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 215	<b>TRT#:</b> 5	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> 150PPM/MFUMON-05	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100215

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

Preputial Gland Note: ONLY ONE		Inflammation	Chronic, Minimal
Prostate		Inflammation	Acute, Mild
Testes	Interstitial Cell	Adenoma	
	Germinal Epith	Atrophy	Minimal
Thymus		Atrophy	Mild

---

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 216

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 739

**DOSE:** 150PPM/MFUMON-05

**DISP:** Terminal Sacrifice

**HISTO:** 21080100216

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Blood Vessel - Aorta	Bone - Femur	Bone - Sternum	Bone Marrow
Brain - Cerebellum	Brain - Cerebrum	Coagulating Gland	Epididymis
Esophagus	Harderian Gland	Intestine Large - Cecum	Intestine Large - Colon
Intestine Large - Rectum	Intestine Small - Duodenum	Intestine Small - Ileum	Intestine Small - Jejunum
Lacrimal Gland	Larynx	Lung - Bronchus	Lymph Node - Mandibular
Mammary Gland	Nose	Pancreas	Parathyroid Gland
Peripheral Nerve - Sciatic	Salivary Glands	Seminal Vesicle	Skeletal Muscle - Thigh
Skin	Spinal Cord - Thoracic	Spleen	Stomach - Forestomach
Stomach - Glandular	Testes	Thyroid Gland	Tongue
Trachea	Urinary Bladder	Zymbal's Gland	

**MISSING**

Thymus

**OBSERVATIONS**

Adrenal Gland	Bilateral, Cortex	Vacuolization Cytoplasmic	Focal, Mild
Eye	Bilateral, Retina	Atrophy	Marked
	Bilateral, Lens	Cataract	Moderate
[ Cataract TGLS = 3-13 ]			
Heart		Cardiomyopathy	Mild
* Kidney	Renal Tubule	Carcinoma	
	Bilateral	Nephropathy	Minimal
[ Carcinoma TGLS = 1-2 ]			
* Liver		Basophilic Focus	
		Eosinophilic Focus	
	Bile Duct	Hyperplasia	Moderate
	Hepatocyte	Vacuolization Cytoplasmic	Mild
Lung		Carcinoma	Metastatic (Kidney)
[ Carcinoma TGLS = 4-5 + 5.1 ]			
Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Mild
Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 2-11 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 216	<b>TRT#:</b> 5	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> 150PPM/MFUMON-05	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100216

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

Preputial Gland	Bilateral	Inflammation	Chronic, Minimal
Prostate		Adenoma	
		Inflammation	Chronic Active, Mild
Sem Ves			
Note: TGL # 05 - NO MICROSCOPIC CORRELATE			

---

PRIMARY CAUSE OF DEATH	-
------------------------	---

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 217

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 739

**DOSE:** 150PPM/MFUMON-05

**DISP:** Terminal Sacrifice

**HISTO:** 21080100217

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Bone - Femur	Bone - Sternum	Brain - Cerebellum	Brain - Cerebrum
Coagulating Gland	Epididymis	Esophagus	Eye
Intestine Large - Cecum	Intestine Large - Colon	Intestine Large - Rectum	Intestine Small - Duodenum
Intestine Small - Ileum	Intestine Small - Jejunum	Larynx	Lung - Bronchus
Lymph Node - Mesenteric	Mammary Gland	Nose	Parathyroid Gland
Peripheral Nerve - Sciatic	Pituitary Gland	Prostate	Seminal Vesicle
Skeletal Muscle - Thigh	Skin	Spinal Cord - Thoracic	Spleen
Stomach - Forestomach	Stomach - Glandular	Thymus	Tongue
Trachea	Urinary Bladder	Zymbal's Gland	

**MISSING**

Blood Vessel - Aorta

**OBSERVATIONS**

Adrenal Gland	Cortex	Vacuolization Cytoplasmic	Focal, Minimal
Bone Marrow		Depletion	Minimal
Harderian Gland		Infiltration Cellular	Lymphocytic, Minimal
Heart		Cardiomyopathy	Moderate
* Kidney	Bilateral	Nephropathy	Mild
Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Moderate
	Hepatocyte	Vacuolization Cytoplasmic	Mild
Lymph Node	Mandibular	Degeneration	Cystic, Mild
	Mandibular	Hyperplasia	Mild
Pancreas	Acinar Cell	Adenoma	
	Acinar Cell	Atrophy	Focal, Minimal
Preputial Gland		Inflammation	Chronic, Minimal
Salivary Glands		Infiltration Cellular	Lymphocytic, Minimal
Testes	Bilateral, Interstit Cell	Adenoma	
	[ Adenoma TGLS = 1-10.1 ]		
Thyroid Gland	C Cell	Hyperplasia	Focal, Mild

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

**ANIMAL ID:** 217

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 739

**DOSE:** 150PPM/MFUMON-05

**DISP:** Terminal Sacrifice

**HISTO:** 21080100217

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

**ANIMAL ID:** 218

**TRT#:** 2

**SEX:** Male

**DAY ON TEST:** 739

**DOSE:** 5PPM/M FUMON-02

**DISP:** Terminal Sacrifice

**HISTO:** 21080100218

---

**OBSERVATIONS**

* Eye	Bilateral, Retina	Atrophy	Marked
	Bilateral, Lens	Cataract	Marked
[ Cataract TGLS = 2-13 ]			
* Kidney	Renal Tubule	Hyperplasia	Focal, Moderate
	Bilateral	Nephropathy	Mild
* Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Mild
[ Basophilic Focus TGLS = 4-6.1 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 3-11 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 1-10 ]			

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92002-03  
Test Type: CHRONIC  
Species/Strain: Rat/F 344/NCTR

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
Test Compound: Fumonisin B1  
CAS Number: 116355-83-0

Date Report Requested: 10/15/2014  
Time Report Requested: 18:08:21  
First Dose M/F: NA / NA  
Lab: NCTR

ANIMAL ID: 219

TRT#: 2

SEX: Male

DAY ON TEST: 739

DOSE: 5PPM/M FUMON-02

DISP: Terminal Sacrifice

HISTO: 21080100219

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

\* Intestine Small - Ileum

OBSERVATIONS

\* Intest Small

Note: TGL # 04 - NO MICROSCOPIC CORRELATE

* Kidney	Bilateral	Nephropathy	Mild
* Liver		Basophilic Focus	
		Clear Cell Focus	
		Degeneration	Cystic, Focal, Mild
	Bile Duct	Hyperplasia	Mild
		Tension Lipidosis	
* Mammary Gland			
Note: TGL#2-NOTED GROSSLY AS MAMMARY GLAND WAS SKIN			
* Preputial Gland		Adenoma	
[ Adenoma TGLS = 1-10 ]			
* Skin	Subcut Tiss	Fibroma	
[ Fibroma TGLS = 2-10 ]			
* Testes	Interstit Cell	Adenoma	
[ Adenoma TGLS = 3-10.1 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 220

**TRT#:** 2  
**DOSE:** 5PPM/M FUMON-02

**SEX:** Male  
**DISP:** Terminal Sacrifice

**DAY ON TEST:** 739  
**HISTO:** 21080100220

**OBSERVATIONS**

* Kidney	Bilateral	Nephropathy	Moderate
* Liver	Bile Duct	Clear Cell Focus	
		Hyperplasia	Moderate
	Hepatocyte	Mixed Cell Focus	
	[ Vacuolization Cytoplasmic TGLS = 4-1.3 ]	Vacuolization Cytoplasmic	Mild
* Pancreas	Artery	Inflammation	Chronic, Mild
	[ Inflammation TGLS = 1-7 ]		
* Spleen		Fibrosis	Focal, Mild
	[ Fibrosis TGLS = 2-7 ]		
* Testes	Bilateral, Interstit Cell	Adenoma	
	[ Adenoma TGLS = 3-10.1 ]		

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 221

**TRT#:** 2

**SEX:** Male

**DAY ON TEST:** 739

**DOSE:** 5PPM/M FUMON-02

**DISP:** Terminal Sacrifice

**HISTO:** 21080100221

**OBSERVATIONS**

* Kidney	Bilateral	Nephropathy	Mild
* Liver		Basophilic Focus	
		Clear Cell Focus	
		Degeneration	Cystic, Focal, Mild
	Bile Duct	Hyperplasia	Mild
	Hepatocyte	Vacuolization Cytoplasmic	Minimal
* Seminal Vesicle	Bilateral	Atrophy	Moderate
[ Atrophy TGLS = 4-10 ]			
* Skin		Trichoepithelioma	
[ Trichoepithelioma TGLS = 3-14 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 1,2-10 ]			

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 222

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 739

**DOSE:** 15PPM/M FUMON-03

**DISP:** Terminal Sacrifice

**HISTO:** 21080100222

**OBSERVATIONS**

* Eye	Bilateral, Retina	Atrophy	Marked
	Bilateral, Lens	Cataract	Moderate
[ Cataract TGLS = 5-13 ]			
* Kidney	Bilateral	Nephropathy	Minimal
	Bilateral, Renal Tubule	Pigmentation	Mild
* Liver		Basophilic Focus	
		Eosinophilic Focus	
	Bile Duct	Hyperplasia	Mild
		Inflammation	Chronic, Minimal
		Tension Lipidosis	
* Mammary Gland		Galactocele	Moderate
[ Galactocele TGLS = 1-10 ]			
* Pancreas	Acinar Cell	Adenoma	
	Acinar Cell	Atrophy	Focal, Minimal
		Carcinoma	
Note: ISLETS CARC			
[ Carcinoma TGLS = 3-7 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 4-11 ]			
* Testes	Interstit Cell	Adenoma	
[ Adenoma TGLS = 2-10 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 223	<b>TRT#:</b> 3 <b>DOSE:</b> 15PPM/M FUMON-03	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 739 <b>HISTO:</b> 21080100223
<b>OBSERVATIONS</b>			
* Kidney	Bilateral	Nephropathy	Mild
* Liver		Clear Cell Focus Eosinophilic Focus	
	Bile Duct	Hyperplasia	Mild
* Testes	Bilateral, Interstit Cell	Mixed Cell Focus Adenoma	
[ Adenoma TGLS = 1-10 ]			
<b>PRIMARY CAUSE OF DEATH</b> -			

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 224

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 739

**DOSE:** 15PPM/M FUMON-03

**DISP:** Terminal Sacrifice

**HISTO:** 21080100224

**OBSERVATIONS**

* Kidney	Renal Tubule	Hyperplasia	Focal, Mild
	Artery, Bilateral	Inflammation	Chronic, Moderate
	Bilateral	Nephropathy	Mild
	Bilateral, Renal Tubule	Pigmentation	Minimal
* Liver	Bile Duct	Hyperplasia	Mild
	Hepatocyte	Vacuolization Cytoplasmic	Minimal
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 3,4-10 ]			
Tissue NOS		Inflammation	Chronic, Marked
[ Inflammation TGLS = 1,2,5-14 + 11 ]			

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 225

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 739

**DOSE:** 15PPM/M FUMON-03

**DISP:** Terminal Sacrifice

**HISTO:** 21080100225

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Skeletal Muscle - Thigh

**OBSERVATIONS**

* Adrenal Gland	Medulla	Pheochromocytoma Malignant	
[ Pheochromocytoma Malignant TGLS = 3-11 ]			
* Kidney	Bilateral	Nephropathy	Mild
	Bilateral, Renal Tubule	Pigmentation	Minimal
* Liver	Bile Duct	Hyperplasia	Minimal
* Skeletal Muscle		Fibrosarcoma	
[ Fibrosarcoma TGLS = 4-14 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 1,2-10 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

**ANIMAL ID:** 228

**TRT#:** 2  
**DOSE:** 5PPM/M FUMON-02

**SEX:** Male  
**DISP:** Terminal Sacrifice

**DAY ON TEST:** 739  
**HISTO:** 21080100228

---

**OBSERVATIONS**

* Kidney	Bilateral	Nephropathy	Mild
* Liver		Clear Cell Focus	
		Eosinophilic Focus	
		Inflammation	Chronic, Mild
* Testes	Hepatocyte	Vacuolization Cytoplasmic	Minimal
	Interstit Cell	Adenoma	
[ Adenoma TGLS = 1-10 ]			

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 256

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 706

**DOSE:** 0PPM/M FUMON-01

**DISP:** Moribund

**HISTO:** 21080100256

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Bone Marrow
* Brain - Cerebellum	* Brain - Cerebrum	* Esophagus	* Intestine Large - Cecum
* Intestine Large - Colon	* Intestine Large - Rectum	* Intestine Small - Duodenum	* Intestine Small - Ileum
* Intestine Small - Jejunum	* Larynx	* Lung - Bronchus	* Mammary Gland
* Pancreas	* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Salivary Glands
* Skeletal Muscle - Thigh	* Skin	* Spinal Cord - Thoracic	* Stomach - Glandular
* Thymus	* Tongue	* Trachea	* Urinary Bladder

**MISSING**

\* Zymbal's Gland

**OBSERVATIONS**

* Adrenal Gland	Cortex	Hyperplasia	Focal, Minimal
	Medulla	Hyperplasia	Focal, Mild
* Coagulating Gland	Bilateral	Atrophy	Mild
* Epididymis	Bilateral	Atrophy	Mild
	[ Atrophy TGLS = 8-10 ]		
* Eye	Bilateral, Retina	Atrophy	Moderate
	Bilateral, Lens	Cataract	Moderate
* Harderian Gland		Infiltration Cellular	Lymphocytic, Minimal
* Heart		Cardiomyopathy	Mild
* Kidney	Bilateral	Nephropathy	Moderate
	[ Nephropathy TGLS = 4-2 ]		
* Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Liver		Hepatodiaphragmatic Nodule	
	Bile Duct	Hyperplasia	Minimal
		Leukemia Mononuclear	
	Note: HDN IS ACTUALLY ON 6.1		
	[ Hepatodiaphragmatic Nodule TGLS = 5-6 ]		
	[ Leukemia Mononuclear TGLS = 3-6 ]		
* Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Mild
	Mandibular	Leukemia Mononuclear	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 256	<b>TRT#:</b> 1 <b>DOSE:</b> 0PPM/M FUMON-01	<b>SEX:</b> Male <b>DISP:</b> Moribund	<b>DAY ON TEST:</b> 706 <b>HISTO:</b> 21080100256
-----------------------	--	---	--

---

<b>ORGAN AND ACCOUNTABLE SITE STATUS</b>			
* Nose	Olfactory Epi	Cytoplasmic Alteration	Mild
* Pituitary Gland [ Adenoma TGLS = 6-11 ]	Pars Distalis	Adenoma	
* Preputial Gland	Bilateral	Inflammation	Chronic, Minimal
* Prostate		Inflammation	Chronic Active, Mild
* Seminal Vesicle [ Atrophy TGLS = 7-10 ]	Bilateral	Atrophy	Mild
* Spleen [ Leukemia Mononuclear TGLS = 1-7 ]		Leukemia Mononuclear	
* Stomach	Epithelium, Forestomach Forestomach Forestomach	Hyperplasia Inflammation Leukemia Mononuclear	Moderate Chronic, Moderate
* Testes [ Atrophy TGLS = 2-10 ]	Bilateral, Germinal Epith	Atrophy	Mild
* Thyroid Gland	C Cell	Hyperplasia	Focal, Marked

---

<b>PRIMARY CAUSE OF DEATH</b>	- Pituitary Gland Pars Distalis Adenoma
-------------------------------	---

---

Animal Note: COD...PROBABLE-PITUITARY GLAND,ADENOMA

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

<b>ANIMAL ID:</b> 257	<b>TRT#:</b> 3	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 727
	<b>DOSE:</b> 15PPM/M FUMON-03	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100257

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Brain - Cerebellum
* Brain - Cerebrum	* Esophagus	* Harderian Gland	* Intestine Large - Cecum
* Intestine Large - Colon	* Intestine Large - Rectum	* Intestine Small - Duodenum	* Intestine Small - Ileum
* Intestine Small - Jejunum	* Lacrimal Gland	* Larynx	* Lung - Bronchus
* Lymph Node - Mandibular	* Nose	* Parathyroid Gland	* Peripheral Nerve - Sciatic
* Salivary Glands	* Skeletal Muscle - Thigh	* Spinal Cord - Thoracic	* Stomach - Forestomach
* Stomach - Glandular	* Thymus	* Thyroid Gland	* Tongue
* Trachea	* Urinary Bladder		

**MISSING**

\* Zymbal's Gland

**OBSERVATIONS**

* Adrenal Gland		Leukemia Mononuclear	
* Bone Marrow		Leukemia Mononuclear	
* Coagulating Gland	Bilateral	Atrophy	Mild
* Epididymis	Bilateral	Atrophy	Mild
* Eye	Bilateral, Retina	Atrophy	Marked
* Heart		Cardiomyopathy	Mild
* Kidney	Bilateral	Nephropathy	Mild
* Liver	Bile Duct	Hyperplasia	Marked
		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 6,7,8-6 ]		
* Lung		Leukemia Mononuclear	
* Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Mild
* Mammary Gland		Cyst	Minimal
* Pancreas	Acinar Cell	Atrophy	Diffuse, Marked
		Carcinoma	
	Note: ISLETS CARCINOMA		
	[ Carcinoma TGLS = 4-7 ]		
* Pituitary Gland	Pars Distalis	Adenoma	
	[ Adenoma TGLS = 10-11 ]		

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 257	<b>TRT#:</b> 3	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 727
	<b>DOSE:</b> 15PPM/M FUMON-03	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100257

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

* Preputial Gland	Bilateral	Inflammation	Chronic, Mild
* Prostate		Atrophy	Mild
		Inflammation	Chronic Active, Mild
* Seminal Vesicle	Bilateral	Atrophy	Marked
* Skin	Subcut Tiss	Fibroma	
[ Fibroma TGLS = 1-10 ]			
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 5-7 ]			
* Testes	Interstit Cell	Adenoma	
	Germinal Epith	Atrophy	Marked
		Mineralization	Mild
[ Adenoma TGLS = 2-10 ]			
[ Atrophy TGLS = 3-10 ]			
[ Mineralization TGLS = 2,3-10 ]			
Tissue NOS		Chordoma	
[ Chordoma TGLS = 9-14 ]			

---

**PRIMARY CAUSE OF DEATH** - Spleen Leukemia Mononuclear

---

Animal Note: COD...PROBABLE-LEUKEMIA MONONUCLEAR CELL

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 258

**TRT#:** 2

**SEX:** Male

**DAY ON TEST:** 692

**DOSE:** 5PPM/M FUMON-02

**DISP:** Moribund

**HISTO:** 21080100258

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Brain - Cerebellum
* Brain - Cerebrum	* Coagulating Gland	* Esophagus	* Eye
* Harderian Gland	* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum
* Intestine Small - Duodenum	* Intestine Small - Ileum	* Intestine Small - Jejunum	* Larynx
* Lung - Bronchus	* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Skeletal Muscle - Thigh
* Skin	* Spinal Cord - Thoracic	* Stomach - Forestomach	* Stomach - Glandular
* Thyroid Gland	* Tongue	* Trachea	* Urinary Bladder
* Zymbal's Gland			

**OBSERVATIONS**

* Adrenal Gland	Medulla	Hyperplasia	Focal, Minimal
	Medulla	Pheochromocytoma Benign	
* Bone Marrow		Hyperplasia	Mild
* Brain	Hypothalamus	Compression	Mild
* Epididymis	Bilateral, Epithelium	Degeneration	Mucoid, Mild
* Heart		Cardiomyopathy	Mild
* Kidney	Bilateral	Nephropathy	Mild
* Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Liver	Bile Duct	Hyperplasia	Mild
		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 7-6 ]		
* Lymph Node	Mandibular	Leukemia Mononuclear	
	Mesenteric	Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 5-14 ]		
* Mammary Gland		Cyst	Minimal
* Nose	Olfactory Epi	Cytoplasmic Alteration	Mild
* Pancreas	Acinar Cell	Atrophy	Focal, Mild
		Carcinoma	
	Note: ISLET CARCINOMA		
* Pituitary Gland	Pars Distalis	Adenoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 258	<b>TRT#:</b> 2	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 692
	<b>DOSE:</b> 5PPM/M FUMON-02	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100258

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

[ Adenoma TGLS = 6-11 ]			
* Preputial Gland	Bilateral	Inflammation	Chronic, Mild
* Prostate		Inflammation	Chronic Active, Marked
[ Inflammation TGLS = 3-12 ]			
* Salivary Glands		Cyst	Minimal
[ Cyst TGLS = 1-8 ]			
* Seminal Vesicle	Bilateral	Atrophy	Mild
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 4-7 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 2-10.1 ]			
* Thymus		Atrophy	Moderate

---

**PRIMARY CAUSE OF DEATH** - Spleen Leukemia Mononuclear

---

Animal Note: COD...PROBABLE-LEUKEMIA MONONUCLEAR CELL

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:21  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 259      **TRT#:** 3      **SEX:** Male      **DAY ON TEST:** 685  
**DOSE:** 15PPM/M FUMON-03      **DISP:** Moribund      **HISTO:** 21080100259

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Brain - Cerebellum
* Brain - Cerebrum	* Epididymis	* Esophagus	* Eye
* Harderian Gland	* Heart	* Intestine Large - Cecum	* Intestine Large - Rectum
* Intestine Small - Duodenum	* Intestine Small - Ileum	* Intestine Small - Jejunum	* Lacrimal Gland
* Larynx	* Lung - Bronchus	* Lymph Node - Mandibular	* Pancreas
* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Salivary Glands	* Skeletal Muscle - Thigh
* Skin	* Spinal Cord - Thoracic	* Stomach - Forestomach	* Stomach - Glandular
* Thymus	* Tongue	* Trachea	* Urinary Bladder

**MISSING**

\* Zymbal's Gland

**OBSERVATIONS**

* Adrenal Gland	Medulla	Hyperplasia	Focal, Marked
* Bone Marrow		Hyperplasia	Mild
* Coagulating Gland	Bilateral	Atrophy	Moderate
* Intestine Large	Colon	Hyperplasia	Mild
* Kidney	Bilateral	Nephropathy	Mild
* Liver		Eosinophilic Focus	
		Hepatocellular Carcinoma	
	Bile Duct	Hyperplasia	Mild
	[ Hepatocellular Carcinoma TGLS = 6,7-6.1 ]		
* Lymph Node	Mesenteric	Hemorrhage	Minimal
	Mesenteric	Infiltration Cellular	Histiocytic, Mild
* Mammary Gland		Carcinoma	
	[ Carcinoma TGLS = 1-14 ]		
* Nose	Olfactory Epi	Cytoplasmic Alteration	Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
	[ Adenoma TGLS = 5-11 ]		
* Preputial Gland		Inflammation	Chronic, Minimal
* Prostate		Inflammation	Chronic, Mild
* Seminal Vesicle	Bilateral	Atrophy	Marked

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 259	<b>TRT#:</b> 3	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 685
	<b>DOSE:</b> 15PPM/M FUMON-03	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100259

---

<b>ORGAN AND ACCOUNTABLE SITE STATUS</b>			
* Spleen	Lymph Follic	Atrophy	Minimal
* Testes [ Adenoma TGLS = 2,3-10.1 ]	Bilateral, Interstit Cell	Adenoma	
* Thyroid Gland [ Carcinoma TGLS = 4-4 ]	C Cell	Carcinoma	

---

<b>PRIMARY CAUSE OF DEATH</b>	- Mammary Gland Carcinoma
-------------------------------	---------------------------

---

Animal Note: COD...PROBABLE-MAMMARY GLAND,CARCINOMA

---

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92002-03  
Test Type: CHRONIC  
Species/Strain: Rat/F 344/NCTR

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
Test Compound: Fumonisin B1  
CAS Number: 116355-83-0

Date Report Requested: 10/15/2014  
Time Report Requested: 18:08:22  
First Dose M/F: NA / NA  
Lab: NCTR

ANIMAL ID: 260

TRT#: 1

SEX: Male

DAY ON TEST: 697

DOSE: 0PPM/M FUMON-01

DISP: Natural Death

HISTO: 21080100260

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Gland	* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum
* Bone Marrow	* Brain - Cerebellum	* Brain - Cerebrum	* Coagulating Gland
* Epididymis	* Esophagus	* Eye	* Harderian Gland
* Heart	* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum
* Intestine Small - Duodenum	* Lacrimal Gland	* Larynx	* Lung - Bronchus
* Lymph Node - Mandibular	* Nose	* Parathyroid Gland	* Peripheral Nerve - Sciatic
* Preputial Gland	* Salivary Glands	* Seminal Vesicle	* Skeletal Muscle - Thigh
* Skin	* Spinal Cord - Thoracic	* Spleen	* Stomach - Glandular
* Thymus	* Thyroid Gland	* Tongue	* Trachea
* Urinary Bladder	* Zymbal's Gland		

AUTO PRECLUDES DIAG.

* Intestine Small - Ileum	* Intestine Small - Jejunum
---------------------------	-----------------------------

OBSERVATIONS

* Intest Small			
Note: TGL # 04- NO MICROSCOPIC CORRELATE			
* Kidney	Bilateral	Nephropathy	Minimal
* Liver	Bile Duct	Hyperplasia	Mild
* Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Mild
* Mammary Gland		Cyst	Minimal
* Pancreas	Acinar Cell	Atrophy	Focal, Minimal
* Pituitary Gland		Hemorrhage	Marked
Note: TGL#3-NULLIFIED BY TRIMMER			
* Prostate		Inflammation	Chronic, Minimal
* Stomach	Forestomach	Squamous Cell Papilloma	
* Testes	Bilateral, Interstit Cell	Adenoma	

[ Adenoma TGLS = 1,2-10.1 ]

PRIMARY CAUSE OF DEATH - Pituitary Gland Hemorrhage

Animal Note: COD...PROBABLE-PITUITARY GLAND,HEMORRHAGE

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

<b>ANIMAL ID:</b> 265	<b>TRT#:</b> 5	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 708
	<b>DOSE:</b> 150PPM/MFUMON-05	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100265

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Adrenal Gland	Blood Vessel - Aorta	Bone - Femur	Bone - Sternum
Brain - Cerebellum	Brain - Cerebrum	Epididymis	Esophagus
Eye	Harderian Gland	Intestine Large - Cecum	Intestine Large - Colon
Intestine Large - Rectum	Intestine Small - Duodenum	Intestine Small - Ileum	Intestine Small - Jejunum
Lacrimal Gland	Larynx	Lung - Bronchus	Mammary Gland
Peripheral Nerve - Sciatic	Prostate	Salivary Glands	Skeletal Muscle - Thigh
Skin	Spinal Cord - Thoracic	Stomach - Forestomach	Stomach - Glandular
Testes	Thyroid Gland	Tongue	Trachea
Urinary Bladder			

**MISSING**

Parathyroid Gland	Zymbal's Gland
-------------------	----------------

**OBSERVATIONS**

Bone Marrow		Leukemia Mononuclear	
Coagulating Gland	Bilateral	Atrophy	Mild
Heart		Cardiomyopathy	Mild
	Valve	Inflammation	Chronic, Minimal
	Atrium	Thrombosis	Mild
* Kidney	Renal Tubule	Hyperplasia	Focal, Mild
	Bilateral	Nephropathy	Mild
* Liver	Bile Duct	Hyperplasia	Moderate
		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 2-6 ]			
Lymph Node	Mandibular	Leukemia Mononuclear	
	Mesenteric	Leukemia Mononuclear	
Nose	Nasolacrim Dct	Inflammation	Chronic Active, Mild
		Inflammation	Acute, Minimal
Pancreas	Acinar Cell	Atrophy	Focal, Mild
		Leukemia Mononuclear	
Pituitary Gland	Pars Distalis	Adenoma	
Preputial Gland		Inflammation	Chronic, Moderate

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 265	<b>TRT#:</b> 5	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 708
	<b>DOSE:</b> 150PPM/MFUMON-05	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100265

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

Seminal Vesicle	Bilateral	Atrophy	Moderate
Spleen		Fibrosis Leukemia Mononuclear	Focal, Mild
[ Fibrosis TGLS = 1-7 ]			
Thymus		Atrophy	Moderate
Note: ON SLIDE 7			

---

**PRIMARY CAUSE OF DEATH** - Spleen Leukemia Mononuclear

---

Animal Note: COD...PROBABLE-LEUKEMIA MONONUCLEAR CELL

---



**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 267

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 740

**DOSE:** 0PPM/M FUMON-01

**DISP:** Natural Death

**HISTO:** 21080100267

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Brain - Cerebellum
* Brain - Cerebrum	* Coagulating Gland	* Epididymis	* Esophagus
* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum	* Intestine Small - Duodenum
* Intestine Small - Ileum	* Lacrimal Gland	* Larynx	* Lung - Bronchus
* Mammary Gland	* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Preputial Gland
* Salivary Glands	* Skeletal Muscle - Thigh	* Spinal Cord - Thoracic	* Thyroid Gland
* Tongue	* Trachea	* Urinary Bladder	

**MISSING**

\* Zymbal's Gland

**AUTO PRECLUDES DIAG.**

\* Eye   \* Intestine Small - Jejunum

**OBSERVATIONS**

* Adrenal Gland		Leukemia Mononuclear	
* Bone Marrow		Leukemia Mononuclear	
* Eye			
Note: TGL # 06 - NO MICROSCOPIC CORRELATE			
* Harderian Gland	Bilateral	Infiltration Cellular	Lymphocytic, Minimal
* Heart		Cardiomyopathy	Moderate
		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 5-1 ]			
* Kidney	Bilateral	Nephropathy	Moderate
[ Nephropathy TGLS = 3-2 ]			
* Liver		Leukemia Mononuclear	
		Mixed Cell Focus	
[ Leukemia Mononuclear TGLS = 4-6 ]			
* Lung		Leukemia Mononuclear	
* Lymph Node	Mandibular	Leukemia Mononuclear	
	Mesenteric	Leukemia Mononuclear	
* Nose	Olfactory Epi	Cytoplasmic Alteration	Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 267	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 740
	<b>DOSE:</b> 0PPM/M FUMON-01	<b>DISP:</b> Natural Death	<b>HISTO:</b> 21080100267

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

* Pancreas	Acinar Cell	Atrophy	Focal, Mild
* Pituitary Gland	Pars Distalis	Adenoma	
* Prostate		Inflammation	Acute, Mild
* Seminal Vesicle	Bilateral	Atrophy	Moderate
* Skin	Subcut Tiss	Fibroma	
	[ Fibroma TGLS = 7-10.2 ]		
* Spleen		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 2-7 ]		
* Stomach	Epithelium, Forestomach	Hyperplasia	Marked
	Forestomach	Inflammation	Chronic, Moderate
	Glandular	Inflammation	Chronic, Minimal
	Forestomach	Ulcer	Mild
* Testes	Bilateral, Interstit Cell	Adenoma	
	[ Adenoma TGLS = 1-10.1 ]		
* Thymus		Leukemia Mononuclear	

---

**PRIMARY CAUSE OF DEATH** - Spleen Leukemia Mononuclear

---

Animal Note: COD...PROBABLE-LEUKEMIA MONONUCLEAR CELL

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 268	<b>TRT#:</b> 4 <b>DOSE:</b> 50PPM/M FUMON-04	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 740 <b>HISTO:</b> 21080100268
-----------------------	---	---	--

---

**OBSERVATIONS**

* Eye	Bilateral, Retina	Atrophy	Marked
	Bilateral, Lens	Cataract	Marked
[ Cataract TGLS = 3-13 ]			
* Kidney	Renal Tubule	Carcinoma	
	Bilateral	Nephropathy	Minimal
* Liver		Degeneration	Cystic, Focal, Minimal
	Bile Duct	Hyperplasia	Mild
* Lymph Node	Mesenteric	Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 2-11 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 1-10.1 ]			

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 269      **TRT#:** 5      **SEX:** Male      **DAY ON TEST:** 740  
**DOSE:** 150PPM/MFUMON-05      **DISP:** Terminal Sacrifice      **HISTO:** 21080100269

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Adrenal Gland	Blood Vessel - Aorta	Bone - Femur	Bone - Sternum
Brain - Cerebellum	Brain - Cerebrum	Epididymis	Esophagus
Harderian Gland	Intestine Large - Cecum	Intestine Large - Colon	Intestine Large - Rectum
Intestine Small - Duodenum	Intestine Small - Ileum	Intestine Small - Jejunum	Larynx
Lung - Bronchus	Parathyroid Gland	Peripheral Nerve - Sciatic	Prostate
Salivary Glands	Skeletal Muscle - Thigh	Skin	Spinal Cord - Thoracic
Spleen	Stomach - Glandular	Thymus	Tongue
Trachea	Urinary Bladder	Zymbal's Gland	

**OBSERVATIONS**

Bone Marrow		Hyperplasia	Minimal
Coagulating Gland		Atrophy	Mild
Eye	Bilateral, Retina	Atrophy	Marked
	Bilateral, Lens	Cataract	Moderate
[ Cataract TGLS = 4-13 ]			
Heart		Cardiomyopathy	Moderate
* Kidney	Renal Tubule	Carcinoma	
[ Carcinoma TGLS = 1-2 ]			
Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Liver		Basophilic Focus	
		Clear Cell Focus	
	Bile Duct	Hyperplasia	Moderate
		Mixed Cell Focus	
Lymph Node	Mandibular	Hyperplasia	Mild
	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 5-10 ]			
Nose	Olfactory Epi	Cytoplasmic Alteration	Mild
	Nasolacrim Dct	Inflammation	Chronic Active, Mild
Pancreas	Artery	Inflammation	Chronic, Marked
[ Inflammation TGLS = 2-7 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 269	<b>TRT#:</b> 5	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 740
	<b>DOSE:</b> 150PPM/MFUMON-05	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100269

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

Pituitary Gland [ Cyst TGLS = 6-11 ]	Pars Distalis	Cyst	Mild
Preputial Gland		Inflammation	Chronic, Minimal
Seminal Vesicle		Atrophy	Mild
Stomach	Epithelium, Forestomach	Hyperplasia	Minimal
Testes [ Adenoma TGLS = 3-10.1 ]	Bilateral, Interstit Cell	Adenoma	
Thyroid Gland	C Cell	Hyperplasia	Focal, Marked

---

PRIMARY CAUSE OF DEATH -

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 270	<b>TRT#:</b> 2	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 740
	<b>DOSE:</b> 5PPM/M FUMON-02	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100270

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Blood Vessel - Aorta

---

**OBSERVATIONS**

* Blood Vessel [ Inflammation TGLS = 4-11 ]	Mesent Artery	Inflammation	Chronic, Marked
* Kidney	Artery, Bilateral Bilateral	Inflammation Nephropathy	Chronic, Mild Mild
* Liver  [ Mixed Cell Focus TGLS = 5-1.3 ]	Bile Duct	Basophilic Focus Clear Cell Focus Hyperplasia Mixed Cell Focus Tension Lipidosis	Mild
* Pituitary Gland [ Adenoma TGLS = 3-11 ]	Pars Distalis	Adenoma	
* Testes [ Adenoma TGLS = 1-10 ]	Bilateral, Interstit Cell	Adenoma	

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

**ANIMAL ID:** 271

**TRT#:** 2  
**DOSE:** 5PPM/M FUMON-02

**SEX:** Male  
**DISP:** Terminal Sacrifice

**DAY ON TEST:** 740  
**HISTO:** 21080100271

---

**OBSERVATIONS**

* Kidney	Bilateral	Nephropathy	Mild
* Liver		Clear Cell Focus	
		Eosinophilic Focus	
		Hepatocellular Adenoma	
	Bile Duct	Hyperplasia	Mild
		Tension Lipidosis	
[ Hepatocellular Adenoma TGLS = 1-1 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 2-10.1 ]			

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 272

**TRT#:** 2

**SEX:** Male

**DAY ON TEST:** 740

**DOSE:** 5PPM/M FUMON-02

**DISP:** Terminal Sacrifice

**HISTO:** 21080100272

**OBSERVATIONS**

* Kidney	Bilateral	Nephropathy	Mild
* Liver	Bile Duct	Basophilic Focus Hyperplasia Leukemia Mononuclear Mixed Cell Focus	Mild
[ Leukemia Mononuclear TGLS = 1-1 ]			
Mesentery	Fat	Necrosis	Mild
[ Necrosis TGLS = 4-14 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 7-11 ]			
* Skin	Subcut Tiss	Fibroma	
[ Fibroma TGLS = 9-14.1 ]			
* Spleen		Leukemia Mononuclear	
Note: TGL # 03 - NO MICROSCOPIC CORRELATE			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 2,8-10.1 ]			
* Thyroid Gland	Follicular Cel	Carcinoma	
[ Carcinoma TGLS = 6-4 ]			
* Zymbal's Gland		Carcinoma	
[ Carcinoma TGLS = 5-13 ]			

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

**ANIMAL ID:** 273

**TRT#:** 2

**SEX:** Male

**DAY ON TEST:** 740

**DOSE:** 5PPM/M FUMON-02

**DISP:** Terminal Sacrifice

**HISTO:** 21080100273

---

**OBSERVATIONS**

* Kidney	Bilateral	Nephropathy	Marked
* Liver	Bile Duct	Clear Cell Focus	
		Hyperplasia	Moderate
		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 1-1 ]			
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 4-7 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 2-10.1 ]			

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 274

**TRT#:** 4

**SEX:** Male

**DAY ON TEST:** 740

**DOSE:** 50PPM/M FUMON-04

**DISP:** Terminal Sacrifice

**HISTO:** 21080100274

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Lung - Bronchus

**OBSERVATIONS**

* Kidney	Bilateral, Renal Tubule	Carcinoma Nephropathy	Minimal
Note: DESCRETE TUMOR FOCI SUGGEST METASTASIS IN LEFT KIDNEY [ Carcinoma TGLS = 1-2 ]			
* Liver	Bile Duct	Basophilic Focus Eosinophilic Focus Hyperplasia Mixed Cell Focus	Mild
[ Basophilic Focus TGLS = 9-6.1 ] [ Hyperplasia TGLS = 9-6.1 ]			
* Lung		Carcinoma	Metastatic (Kidney)
[ Carcinoma TGLS = 3,4,5,6,7-5 +5.1 ]			
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 8-7 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 2-10.1 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 275	<b>TRT#:</b> 4 <b>DOSE:</b> 50PPM/M FUMON-04	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 740 <b>HISTO:</b> 21080100275
<b>OBSERVATIONS</b>			
* Kidney [ Carcinoma TGLS = 1-2 ]	Renal Tubule Bilateral	Carcinoma Nephropathy	Minimal
* Liver [ Leukemia Mononuclear TGLS = 3-7 ]	Bile Duct	Basophilic Focus Degeneration Hyperplasia Leukemia Mononuclear Leukemia Mononuclear	Cystic, Focal, Minimal Minimal
* Spleen [ Leukemia Mononuclear TGLS = 3-7 ]			
* Testes [ Adenoma TGLS = 2-10 ]	Bilateral, Interstit Cell	Adenoma	
<hr/> <b>PRIMARY CAUSE OF DEATH</b> - <hr/>			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 276

**TRT#:** 4

**SEX:** Male

**DAY ON TEST:** 740

**DOSE:** 50PPM/M FUMON-04

**DISP:** Terminal Sacrifice

**HISTO:** 21080100276

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Lung - Bronchus

**OBSERVATIONS**

* Kidney		Cyst	Mild
	Bilateral	Nephropathy	Minimal
* Liver	Bile Duct	Hyperplasia	Marked
		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 2-1 ]		
* Lung		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 3,5,6,7,8-5 + 5.1 ]		
* Testes	Bilateral, Interstit Cell	Adenoma	
	[ Adenoma TGLS = 1-10 ]		
* Thyroid Gland	C Cell	Carcinoma	
	[ Carcinoma TGLS = 4-4 ]		

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 277

**TRT#:** 4  
**DOSE:** 50PPM/M FUMON-04

**SEX:** Male  
**DISP:** Terminal Sacrifice

**DAY ON TEST:** 740  
**HISTO:** 21080100277

**OBSERVATIONS**

* Eye	Bilateral, Retina	Atrophy	Moderate
	Bilateral, Lens	Cataract	Moderate
	[ Cataract TGLS = 3-13 ]		
* Kidney		Cyst	Moderate
	Renal Tubule	Hyperplasia	Focal, Marked
	Artery	Inflammation	Chronic, Mild
	Bilateral	Nephropathy	Mild
	Note: THE CYST WALL IS LINED BY HYPERTROPHIED EPITHELIAL CELLS		
* Liver		Clear Cell Focus	
	Bile Duct	Hyperplasia	Mild
* Mammary Gland			
	Note: TGL#4-NOTED GROSSLY AS MAMMARY GLAND WAS SKIN		
* Skin	Subcut Tissue	Fibroma	
	[ Fibroma TGLS = 4-14 ]		
* Spleen		Fibrosis	Focal, Moderate
	[ Fibrosis TGLS = 1-7 ]		
* Testes	Bilateral, Interstitium Cell	Adenoma	
	[ Adenoma TGLS = 2-10.1 ]		

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 278

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 740

**DOSE:** 0PPM/M FUMON-01

**DISP:** Terminal Sacrifice

**HISTO:** 21080100278

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Brain - Cerebrum
* Coagulating Gland	* Epididymis	* Esophagus	* Harderian Gland
* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum	* Intestine Small - Duodenum
* Intestine Small - Ileum	* Intestine Small - Jejunum	* Lacrimal Gland	* Larynx
* Lung - Bronchus	* Nose	* Parathyroid Gland	* Peripheral Nerve - Sciatic
* Salivary Glands	* Seminal Vesicle	* Skeletal Muscle - Thigh	* Skin
* Spinal Cord - Thoracic	* Stomach - Forestomach	* Stomach - Glandular	* Tongue
* Trachea	* Urinary Bladder	* Zymbal's Gland	

**OBSERVATIONS**

* Adrenal Gland		Leukemia Mononuclear	
* Bone Marrow		Leukemia Mononuclear	
* Brain	Cerebellum, Meninges	Granular Cell Tumor Benign	
* Eye	Bilateral, Retina	Atrophy	Marked
	Bilateral, Lens	Cataract	Moderate
	[ Cataract TGLS = 5-13 ]		
* Heart		Cardiomyopathy	Minimal
* Kidney	Bilateral	Nephropathy	Mild
	Bilateral, Renal Tubule	Pigmentation	Mild
* Liver	Bile Duct	Hyperplasia	Marked
	[ Leukemia Mononuclear TGLS = 2-6 ]	Leukemia Mononuclear	
* Lung		Leukemia Mononuclear	
* Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
	Mandibular	Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 1-8 ]		
* Mammary Gland		Cyst	Minimal
* Pancreas	Acinar Cell	Atrophy	Focal, Mild
* Pituitary Gland	Pars Distalis	Adenoma	
	[ Adenoma TGLS = 6-11 ]		
* Preputial Gland		Inflammation	Chronic, Mild

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 278	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 740
	<b>DOSE:</b> 0PPM/M FUMON-01	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100278

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

* Prostate		Inflammation	Chronic Active, Mild
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 4-7 ]			
* Testes	Interstit Cell	Adenoma	
	Germinal Epith	Atrophy	Minimal
[ Adenoma TGLS = 3-10 ]			
* Thymus		Atrophy	Moderate
* Thyroid Gland		Inflammation	Chronic, Minimal

---

PRIMARY CAUSE OF DEATH

---

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

ANIMAL ID: 279	TRT#: 3 DOSE: 15PPM/M FUMON-03	SEX: Male DISP: Terminal Sacrifice	DAY ON TEST: 740 HISTO: 21080100279
<b>OBSERVATIONS</b>			
* Eye [ Cataract TGLS = 6-13 ]	Bilateral, Retina Lens	Atrophy Cataract	Marked Moderate
* Kidney	Bilateral	Nephropathy	Minimal
* Liver	Bilateral, Renal Tubule	Pigmentation Clear Cell Focus Degeneration Hepatocellular Adenoma	Minimal Cystic, Focal, Mild
[ Degeneration TGLS = 4-6.1 ]	Bile Duct	Hyperplasia Tension Lipidosis	Mild
* Pituitary Gland [ Adenoma TGLS = 5-11 ]	Pars Distalis	Adenoma	
* Spleen [ Infarct TGLS = 7-7.2 ] [ Leukemia Mononuclear TGLS = 1-7 ]		Infarct Leukemia Mononuclear	Focal, Moderate
* Testes [ Adenoma TGLS = 2-10.1 ]	Bilateral, Interstit Cell	Adenoma	
* Thyroid Gland [ Adenoma TGLS = 3-4 ]	C Cell C Cell	Adenoma Hyperplasia	Focal, Mild
PRIMARY CAUSE OF DEATH	-		

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 280

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 740

**DOSE:** 15PPM/M FUMON-03

**DISP:** Terminal Sacrifice

**HISTO:** 21080100280

**OBSERVATIONS**

* Kidney	Bilateral	Nephropathy	Mild
* Liver		Clear Cell Focus	
		Eosinophilic Focus	
		Hepatocellular Adenoma	
	Bile Duct	Hyperplasia	Moderate
		Tension Lipidosis	
[ Hepatocellular Adenoma TGLS = 4-1.3 ]			
* Mammary Gland		Galactocele	Moderate
[ Galactocele TGLS = 1-10 ]			
* Testes	Interstitial Cell	Adenoma	
	Germinal Epith	Atrophy	Marked
	Interstitial Cell	Hyperplasia	Focal, Mild
[ Adenoma TGLS = 3-10.1 ]			
[ Atrophy TGLS = 2-10.1 ]			

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 281

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 740

**DOSE:** 15PPM/M FUMON-03

**DISP:** Terminal Sacrifice

**HISTO:** 21080100281

**OBSERVATIONS**

* Kidney	Renal Tubule Bilateral	Hyperplasia Nephropathy	Focal, Mild Moderate
* Liver		Basophilic Focus Inflammation Necrosis	Chronic, Minimal Minimal
* Pancreas	Hepatocyte Acinar Cell Artery	Vacuolization Cytoplasmic Atrophy Inflammation	Minimal Focal, Minimal Chronic, Marked
Note: THE LESION IS ACTUALLY IN SLIDE 1 [ Inflammation TGLS = 3-7 ]			
* Skin		Keratoacanthoma	
[ Keratoacanthoma TGLS = 5-14 ]			
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 2-7 ]			
* Testes	Interstit Cell	Adenoma	
[ Adenoma TGLS = 1-10 ]			
* Thyroid Gland	C Cell	Adenoma	
[ Adenoma TGLS = 4-4 ]			

**PRIMARY CAUSE OF DEATH**

-

Animal Note: TGL #5 NOTED GROSSLY AS MAMMARY GLAND WAS SKIN

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 282

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 740

**DOSE:** 15PPM/M FUMON-03

**DISP:** Terminal Sacrifice

**HISTO:** 21080100282

**OBSERVATIONS**

* Kidney	Renal Tubule Bilateral	Hyperplasia Nephropathy	Focal, Mild Mild
* Liver	Bile Duct	Basophilic Focus Eosinophilic Focus Hyperplasia Mixed Cell Focus	Moderate
* Mammary Gland [ Galactocele TGLS = 1-10 ]		Galactocele	Moderate
* Pituitary Gland [ Adenoma TGLS = 2-11 ]	Pars Distalis	Adenoma	
* Skin [ Keratoacanthoma TGLS = 4-14 ]		Keratoacanthoma	
* Testes [ Adenoma TGLS = 3-10.1 ]	Interstit Cell	Adenoma	

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 283

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 740

**DOSE:** 150PPM/MFUMON-05

**DISP:** Terminal Sacrifice

**HISTO:** 21080100283

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Blood Vessel - Aorta	Bone - Femur	Bone - Sternum	Bone Marrow
Brain - Cerebellum	Brain - Cerebrum	Coagulating Gland	Epididymis
Esophagus	Harderian Gland	Intestine Large - Cecum	Intestine Large - Colon
Intestine Large - Rectum	Intestine Small - Duodenum	Intestine Small - Ileum	Intestine Small - Jejunum
Lacrimal Gland	Lung - Bronchus	Lymph Node - Mandibular	Mammary Gland
Parathyroid Gland	Peripheral Nerve - Sciatic	Seminal Vesicle	Skeletal Muscle - Thigh
Spinal Cord - Thoracic	Stomach - Forestomach	Stomach - Glandular	Thymus
Tongue	Trachea	Urinary Bladder	Zymbal's Gland

**MISSING**

Larynx

**OBSERVATIONS**

Adrenal Gland	Cortex	Vacuolization Cytoplasmic	Focal, Minimal
Eye	Bilateral, Retina	Atrophy	Marked
	Bilateral, Lens	Cataract	Mild
	[ Cataract TGLS = 3-13 ]		
Heart		Cardiomyopathy	Minimal
* Kidney	Renal Tubule	Hyperplasia	Focal, Minimal
	Bilateral	Nephropathy	Mild
* Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Mild
		Tension Lipidosis	
Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Mild
Mammary Gland			
	Note: TGL#1-NOTED GROSSLY AS MAMMARY GLAND WAS SKIN		
Nose	Olfactory Epi	Cytoplasmic Alteration	Minimal
	Nasolacrim Dct	Inflammation	Chronic Active, Mild
Pancreas	Acinar Cell	Atrophy	Focal, Mild
Pituitary Gland	Pars Distalis	Adenoma	
	[ Adenoma TGLS = 4-11 ]		
Preputial Gland	Bilateral	Inflammation	Chronic Active, Mild

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 283

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 740

**DOSE:** 150PPM/MFUMON-05

**DISP:** Terminal Sacrifice

**HISTO:** 21080100283

**ORGAN AND ACCOUNTABLE SITE STATUS**

Prostate		Inflammation	Chronic Active, Moderate
Salivary Glands	Parotid GI	Atrophy	Focal, Mild
Skin	Subcut Tiss	Lipoma	
[ Lipoma TGLS = 1-10 ]			
Spleen		Congestion	Minimal
Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 2-6.1 ]			
Thyroid Gland	C Cell	Adenoma	
PRIMARY CAUSE OF DEATH	-		

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 284      **TRT#:** 5      **SEX:** Male      **DAY ON TEST:** 740  
**DOSE:** 150PPM/MFUMON-05      **DISP:** Terminal Sacrifice      **HISTO:** 21080100284

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Blood Vessel - Aorta	Bone - Femur	Bone - Sternum	Bone Marrow
Brain - Cerebellum	Brain - Cerebrum	Coagulating Gland	Esophagus
Harderian Gland	Heart	Intestine Large - Cecum	Intestine Large - Colon
Intestine Large - Rectum	Intestine Small - Duodenum	Intestine Small - Ileum	Intestine Small - Jejunum
Lacrimal Gland	Larynx	Lung - Bronchus	Lymph Node - Mandibular
Mammary Gland	Nose	Parathyroid Gland	Peripheral Nerve - Sciatic
Preputial Gland	Prostate	Salivary Glands	Skeletal Muscle - Thigh
Skin	Spinal Cord - Thoracic	Spleen	Stomach - Forestomach
Stomach - Glandular	Tongue	Urinary Bladder	Zymbal's Gland

**OBSERVATIONS**

Adrenal Gland	Medulla	Pheochromocytoma Benign	
Epididymis	Epithelium	Degeneration	Mucoid, Mild
Eye	Bilateral, Retina	Atrophy	Marked
	Bilateral, Lens	Cataract	Moderate
* Kidney	Renal Tubule	Carcinoma	
	Bilateral, Renal Tubule	Cytoplasmic Alteration	Mild
	Bilateral	Nephropathy	Mild
	[ Carcinoma TGLS = 1-2 ]		
* Liver		Clear Cell Focus	
		Degeneration	Cystic, Focal, Mild
		Eosinophilic Focus	
	Bile Duct	Hyperplasia	Moderate
Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
Pancreas	Acinar Cell	Atrophy	Focal, Moderate
Pituitary Gland	Pars Nervosa	Cyst	Marked
Seminal Vesicle		Atrophy	Mild
Testes	Bilateral, Interstit Cell	Adenoma	
	[ Adenoma TGLS = 2-10 ]		
Thymus		Atrophy	Mild
Thyroid Gland	C Cell	Hyperplasia	Focal, Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

**ANIMAL ID:** 284

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 740

**DOSE:** 150PPM/MFUMON-05

**DISP:** Terminal Sacrifice

**HISTO:** 21080100284

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

Trachea	Inflammation	Chronic, Minimal
---------	--------------	------------------

---

PRIMARY CAUSE OF DEATH

-

---

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

<b>ANIMAL ID:</b> 285	<b>TRT#:</b> 5	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 740
	<b>DOSE:</b> 150PPM/MFUMON-05	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100285

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Adrenal Gland	Blood Vessel - Aorta	Bone - Femur	Bone - Sternum
Brain - Cerebellum	Brain - Cerebrum	Epididymis	Esophagus
Harderian Gland	Heart	Intestine Large - Cecum	Intestine Large - Colon
Intestine Large - Rectum	Intestine Small - Duodenum	Intestine Small - Ileum	Intestine Small - Jejunum
Lacrimal Gland	Lung - Bronchus	Nose	Parathyroid Gland
Peripheral Nerve - Sciatic	Preputial Gland	Salivary Glands	Skeletal Muscle - Thigh
Skin	Spinal Cord - Thoracic	Stomach - Forestomach	Stomach - Glandular
Thyroid Gland	Tongue	Trachea	Urinary Bladder
Zymbal's Gland			

**OBSERVATIONS**

Bone Marrow		Angiectasis	Marked
		Hyperplasia	Mild
Coagulating Gland	Bilateral	Atrophy	Mild
Eye	Bilateral, Retina	Atrophy	Marked
	Bilateral, Lens	Cataract	Moderate
[ Cataract TGLS = 3-13 ]			
* Kidney	Bilateral	Nephropathy	Mild
	Bilateral, Renal Tubule	Pigmentation	Mild
Larynx		Inflammation	Chronic, Minimal
* Liver		Basophilic Focus	
		Degeneration	Cystic, Focal, Minimal
		Eosinophilic Focus	
	Bile Duct	Hyperplasia	Moderate
Lymph Node	Mandibular	Hyperplasia	Mild
	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 1-10.1 ]			
Pancreas	Acinar Cell	Atrophy	Focal, Minimal
	Acinar Cell	Hyperplasia	Focal, Moderate
Pituitary Gland	Pars Distalis	Adenoma	

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 285	<b>TRT#:</b> 5	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 740
	<b>DOSE:</b> 150PPM/MFUMON-05	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100285

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

Preputial GI Note: ONLY ONE			
Prostate		Inflammation	Chronic Active, Minimal
Seminal Vesicle	Bilateral	Atrophy	Mild
Skin Note: TGL # 04 - NO MICROSCOPIC CORRELATE			
Spleen		Congestion	Minimal
Testes [ Adenoma TGLS = 2-10 ]	Bilateral, Interstit Cell	Adenoma	
Thymus		Atrophy	Mild

---

<b>PRIMARY CAUSE OF DEATH</b>	-
-------------------------------	---

---

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92002-03  
 Test Type: CHRONIC  
 Species/Strain: Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
 Test Compound: Fumonisin B1  
 CAS Number: 116355-83-0

Date Report Requested: 10/15/2014  
 Time Report Requested: 18:08:22  
 First Dose M/F: NA / NA  
 Lab: NCTR

ANIMAL ID: 286      TRT#: 5      SEX: Male      DAY ON TEST: 740  
 DOSE: 150PPM/MFUMON-05      DISP: Terminal Sacrifice      HISTO: 21080100286

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Adrenal Gland	Blood Vessel - Aorta	Bone - Femur	Bone - Sternum
Brain - Cerebellum	Brain - Cerebrum	Coagulating Gland	Epididymis
Esophagus	Harderian Gland	Intestine Large - Cecum	Intestine Large - Colon
Intestine Large - Rectum	Intestine Small - Duodenum	Intestine Small - Ileum	Intestine Small - Jejunum
Lacrimal Gland	Larynx	Lung - Bronchus	Lymph Node - Mandibular
Lymph Node - Mesenteric	Pancreas	Parathyroid Gland	Peripheral Nerve - Sciatic
Preputial Gland	Prostate	Salivary Glands	Seminal Vesicle
Skeletal Muscle - Thigh	Skin	Spinal Cord - Thoracic	Spleen
Stomach - Forestomach	Stomach - Glandular	Tongue	Trachea
Urinary Bladder	Zymbal's Gland		

**OBSERVATIONS**

Bone Marrow		Hyperplasia	Mild
Eye	Bilateral, Retina	Atrophy	Moderate
	Bilateral, Lens	Cataract	Mild
[ Cataract TGLS = 5-13 ]			
Heart		Cardiomyopathy	Mild
* Kidney	Bilateral	Nephropathy	Moderate
	Bilateral, Renal Tubule	Pigmentation	Mild
* Liver		Basophilic Focus	
		Eosinophilic Focus	
		Hepatodiaphragmatic Nodule	
		Tension Lipidosis	
	Hepatocyte	Vacuolization Cytoplasmic	Mild
[ Eosinophilic Focus TGLS = 2-2.2 ]			
[ Hepatodiaphragmatic Nodule TGLS = 3-6.1 ]			
Mammary Gland		Galactocele	Moderate
[ Galactocele TGLS = 4-10.1 ]			
Mesentery	Fat	Necrosis	Moderate
[ Necrosis TGLS = 1-14 ]			
Nose	Nasolacrim Dct	Inflammation	Chronic Active, Mild

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 286	<b>TRT#:</b> 5	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 740
	<b>DOSE:</b> 150PPM/MFUMON-05	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100286

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

Pituitary Gland [ Adenoma TGLS = 6-11 ]	Pars Distalis	Adenoma	
Testes	Interstit Cell Germinal Epith	Adenoma Atrophy	Marked
Note: TGL # 07 - NO MICROSCOPIC CORRELATE			
Thymus		Atrophy	Mild
Note: SLIDE 7			
Thyroid Gland	C Cell	Adenoma	

---

PRIMARY CAUSE OF DEATH -

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 305

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 701

**DOSE:** 15PPM/M FUMON-03

**DISP:** Natural Death

**HISTO:** 21080100305

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Brain - Cerebellum
* Brain - Cerebrum	* Esophagus	* Intestine Large - Cecum	* Intestine Large - Colon
* Intestine Large - Rectum	* Intestine Small - Duodenum	* Intestine Small - Ileum	* Lacrimal Gland
* Larynx	* Lung - Bronchus	* Lymph Node - Mandibular	* Mammary Gland
* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Pituitary Gland	* Skeletal Muscle - Thigh
* Skin	* Stomach - Forestomach	* Stomach - Glandular	* Tongue
* Trachea	* Urinary Bladder	* Zymbal's Gland	

**AUTO PRECLUDES DIAG.**

\* Intestine Small - Jejunum

**OBSERVATIONS**

* Adrenal Gland	Medulla	Hyperplasia	Focal, Mild
	Medulla	Leukemia Mononuclear	
* Bone Marrow		Pheochromocytoma Benign	
* Brain		Leukemia Mononuclear	
		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 4-3 ]		
* Coagulating Gland	Bilateral	Atrophy	Moderate
* Epididymis	Bilateral	Atrophy	Mild
* Eye	Retina	Atrophy	Moderate
* Harderian Gland		Leukemia Mononuclear	
* Heart		Leukemia Mononuclear	
* Kidney		Leukemia Mononuclear	
	Bilateral	Nephropathy	Mild
* Liver	Bile Duct	Hyperplasia	Marked
		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 3-6 ]		
* Lung		Leukemia Mononuclear	
* Lymph Node	Mesenteric	Leukemia Mononuclear	
* Nose	Olfactory Epi	Cytoplasmic Alteration	Minimal
* Pancreas	Acinar Cell	Atrophy	Focal, Mild

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 305	<b>TRT#:</b> 3	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 701
	<b>DOSE:</b> 15PPM/M FUMON-03	<b>DISP:</b> Natural Death	<b>HISTO:</b> 21080100305

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

* Preputial Gland	Bilateral	Inflammation	Chronic, Mild
* Prostate		Inflammation	Chronic, Mild
* Salivary Glands	Parotid GI	Atrophy	Diffuse, Mild
* Seminal Vesicle	Bilateral	Atrophy	Marked
* Spinal Cord	Thoracic	Leukemia Mononuclear	
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 2-7 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 1-10 ]			
* Thymus		Leukemia Mononuclear	
* Thyroid Gland	C Cell	Adenoma	

---

**PRIMARY CAUSE OF DEATH** - Spleen Leukemia Mononuclear

---

Animal Note: COD...PROBABLE-LEUKEMIA MONONUCLEAR CELL

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

<b>ANIMAL ID:</b> 306	<b>TRT#:</b> 5	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 715
	<b>DOSE:</b> 150PPM/MFUMON-05	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100306

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Adrenal Gland	Blood Vessel - Aorta	Bone - Femur	Bone - Sternum
Brain - Cerebellum	Brain - Cerebrum	Epididymis	Esophagus
Harderian Gland	Intestine Large - Cecum	Intestine Large - Colon	Intestine Large - Rectum
Intestine Small - Duodenum	Intestine Small - Ileum	Intestine Small - Jejunum	Larynx
Lung - Bronchus	Parathyroid Gland	Peripheral Nerve - Sciatic	Prostate
Salivary Glands	Skeletal Muscle - Thigh	Skin	Spinal Cord - Thoracic
Stomach - Forestomach	Stomach - Glandular	Tongue	Trachea
Urinary Bladder	Zymbal's Gland		

**OBSERVATIONS**

Adrenal Gland			
Note: ONLY ONE			
Bone Marrow		Leukemia Mononuclear	
Coagulating Gland	Bilateral	Atrophy	Minimal
[ Atrophy TGLS = 6-10 ]			
Eye	Retina	Atrophy	Mild
	Lens	Cataract	Mild
Heart	Valve	Cardiomyopathy	Minimal
		Inflammation	Chronic, Mild
* Kidney		Leukemia Mononuclear	
	Bilateral	Nephropathy	Mild
	Bilateral, Renal Tubule	Pigmentation	Moderate
Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Liver	Bile Duct	Hyperplasia	Moderate
		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 1-6 ]			
Lung		Leukemia Mononuclear	
Lymph Node	Mandibular	Leukemia Mononuclear	
	Mesenteric	Leukemia Mononuclear	
Mammary Gland		Galactocele	Mild
[ Galactocele TGLS = 8-10 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 306	<b>TRT#:</b> 5	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 715
	<b>DOSE:</b> 150PPM/MFUMON-05	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100306

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

Nose	Nasolacrim Dct	Inflammation	Chronic, Minimal
Pancreas	Acinar Cell	Atrophy	Focal, Minimal
	Acinar Cell	Basophilic Focus	
Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 9-11 ]			
Preputial Gland		Inflammation	Chronic, Mild
Seminal Vesicle	Bilateral	Atrophy	Moderate
[ Atrophy TGLS = 7-10 ]			
Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 5-7 ]			
Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 2,3-10.1 ]			
Thymus		Cyst	Mild
		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 4-1.1 ]			
Thyroid Gland	C Cell	Hyperplasia	Focal, Mild

---

**PRIMARY CAUSE OF DEATH** - Spleen Leukemia Mononuclear

---

Animal Note: COD...PROBABLE-LEUKEMIA MONONUCLEAR CELL

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 307

**TRT#:** 4

**SEX:** Male

**DAY ON TEST:** 715

**DOSE:** 50PPM/M FUMON-04

**DISP:** Moribund

**HISTO:** 21080100307

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Brain - Cerebellum
* Esophagus	* Eye	* Intestine Large - Cecum	* Intestine Large - Colon
* Intestine Large - Rectum	* Intestine Small - Duodenum	* Intestine Small - Ileum	* Intestine Small - Jejunum
* Larynx	* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Salivary Glands
* Skeletal Muscle - Thigh	* Spinal Cord - Thoracic	* Stomach - Glandular	* Thyroid Gland
* Tongue	* Trachea	* Urinary Bladder	* Zymbal's Gland

**OBSERVATIONS**

* Adrenal Gland	Bilateral, Medulla	Hyperplasia	Focal, Mild
* Bone Marrow		Leukemia Mononuclear	
* Brain	Cerebrum	Oligodendroglioma Malignant	
* Coagulating Gland	Bilateral	Atrophy	Mild
* Epididymis	Bilateral	Atrophy	Mild
* Harderian Gland		Infiltration Cellular	Lymphocytic, Minimal
* Heart		Cardiomyopathy	Mild
* Kidney	Renal Tubule	Hyperplasia	Focal, Mild
	Bilateral	Nephropathy	Minimal
	Bilateral, Renal Tubule	Pigmentation	Mild
* Lacrimal Gland		Atrophy	Focal, Mild
		Infiltration Cellular	Lymphocytic, Mild
* Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Mild
		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 5-6 ]			
* Lung		Infiltration Cellular	Histiocytic, Minimal
* Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
	Mandibular	Leukemia Mononuclear	
* Mammary Gland	Epithelium	Hyperplasia	Mild
* Nose	Olfactory Epi	Cytoplasmic Alteration	Minimal
* Pancreas	Acinar Cell	Atrophy	Focal, Minimal
* Pituitary Gland	Pars Distalis	Hemorrhage	Mild

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 307	<b>TRT#:</b> 4	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 715
	<b>DOSE:</b> 50PPM/M FUMON-04	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100307

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

* Preputial Gland	Bilateral	Inflammation	Chronic, Minimal
* Prostate		Atrophy	Mild
		Leukemia Mononuclear	
* Seminal Vesicle	Bilateral	Atrophy	Marked
[ Atrophy TGLS = 4-10 ]			
* Skin		Basal Cell Adenoma	
[ Basal Cell Adenoma TGLS = 1-14 ]			
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 2-7 ]			
* Stomach	Forestomach	Inflammation	Chronic, Mild
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 3-10 ]			
* Thymus		Leukemia Mononuclear	

---

**PRIMARY CAUSE OF DEATH** - Brain Cerebrum Oligodendroglioma Malignant

---

Animal Note: COD...PROBABLE-BRAIN,OLIGODENDROGLIOMA MALIGNANT

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

<b>ANIMAL ID:</b> 309	<b>TRT#:</b> 5	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 726
	<b>DOSE:</b> 150PPM/MFUMON-05	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100309

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Blood Vessel - Aorta	Bone - Femur	Bone - Sternum	Bone Marrow
Brain - Cerebellum	Brain - Cerebrum	Coagulating Gland	Esophagus
Harderian Gland	Intestine Large - Cecum	Intestine Large - Colon	Intestine Large - Rectum
Intestine Small - Duodenum	Intestine Small - Ileum	Intestine Small - Jejunum	Larynx
Lung - Bronchus	Mammary Gland	Pancreas	Peripheral Nerve - Sciatic
Salivary Glands	Seminal Vesicle	Skeletal Muscle - Thigh	Skin
Spinal Cord - Thoracic	Spleen	Stomach - Forestomach	Stomach - Glandular
Thymus	Tongue	Trachea	Urinary Bladder
Zymbal's Gland			

**OBSERVATIONS**

Adrenal Gland	Bilateral, Medulla	Pheochromocytoma Benign	
Epididymis		Mesothelioma Malignant	
Eye	Bilateral, Retina	Atrophy	Marked
	Lens	Cataract	Minimal
Heart	Valve	Cardiomyopathy	Mild
	Bilateral	Inflammation	Chronic, Mild
* Kidney		Nephropathy	Mild
Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Liver		Basophilic Focus	
		Clear Cell Focus	
	Bile Duct	Hyperplasia	Mild
		Mixed Cell Focus	
Lymph Node	Mandibular	Degeneration	Cystic, Minimal
	Mesenteric	Degeneration	Cystic, Mild
	Mandibular	Hemorrhage	Mild
Mammary Gl			
Note: TGL#1-NOTED GROSSLY AS MAMMARY GLAND WAS PREPUTIAL GLAND			
Nose	Olfactory Epi	Cytoplasmic Alteration	Minimal
	Nasolacrim Dct	Inflammation	Chronic, Mild
Parathyroid Gland		Pigmentation	Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 309	<b>TRT#:</b> 5	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 726
	<b>DOSE:</b> 150PPM/MFUMON-05	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100309

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

Pituitary Gland	Pars Distalis	Adenoma	
Preputial Gland		Adenoma	
[ Adenoma TGLS = 1-14 ]			
Prostate	Epithelium	Hyperplasia	Focal, Minimal
Testes	Bilateral, Interstit Cell	Adenoma	
		Mesothelioma Malignant	
Thyroid Gland	C Cell	Hyperplasia	Focal, Minimal

---

**PRIMARY CAUSE OF DEATH** - Preputial Gland Adenoma

---

Animal Note: COD...PROBABLE-PREPUTIAL GLAND,ADENOMA

---

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 310

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 722

**DOSE:** 0PPM/M FUMON-01

**DISP:** Moribund

**HISTO:** 21080100310

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Bone Marrow
* Brain - Cerebellum	* Brain - Cerebrum	* Esophagus	* Harderian Gland
* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum	* Intestine Small - Duodenum
* Intestine Small - Ileum	* Intestine Small - Jejunum	* Lacrimal Gland	* Larynx
* Lung - Bronchus	* Mammary Gland	* Nose	* Parathyroid Gland
* Peripheral Nerve - Sciatic	* Salivary Glands	* Skeletal Muscle - Thigh	* Skin
* Spinal Cord - Thoracic	* Stomach - Forestomach	* Stomach - Glandular	* Thyroid Gland
* Tongue	* Trachea	* Urinary Bladder	* Zymbal's Gland

**OBSERVATIONS**

* Adrenal Gland	Bilateral, Cortex	Vacuolization Cytoplasmic	Focal, Minimal
* Brain	Hypothalamus	Compression	Mild
* Coagulating Gland	Bilateral	Atrophy	Marked
* Epididymis	Bilateral, Epithelium	Degeneration	Mucoid, Minimal
* Eye	Bilateral, Retina	Atrophy	Marked
	Bilateral, Lens	Cataract	Marked
	[ Cataract TGLS = 5-13 ]		
* Heart		Cardiomyopathy	Mild
* Kidney		Leukemia Mononuclear	
	Bilateral	Nephropathy	Mild
	Bilateral, Renal Tubule	Pigmentation	Mild
* Liver	Bile Duct	Hyperplasia	Marked
		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 4-6 ]		
* Lung		Leukemia Mononuclear	
* Lymph Node	Mandibular	Leukemia Mononuclear	
	Mesenteric	Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 1-8 ]		
* Pancreas	Acinar Cell	Adenoma	
* Pituitary Gland	Pars Distalis	Adenoma	
		Leukemia Mononuclear	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 310	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 722
	<b>DOSE:</b> 0PPM/M FUMON-01	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100310

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

[ Adenoma TGLS = 6,8-11 ]			
* Preputial Gland	Bilateral	Inflammation	Chronic, Mild
* Prostate		Atrophy	Minimal
		Inflammation	Chronic, Minimal
* Seminal Vesicle	Bilateral	Atrophy	Marked
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 3-7 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 2,7-10.1 ]			
* Thymus		Atrophy	Minimal

---

PRIMARY CAUSE OF DEATH

-

CONTRIBUTORY CAUSE OF DEATH

- Pituitary Gland Pars Distalis Adenoma;Spleen Leukemia Mononuclear

---

Animal Note: COD...CONTRIBUTORY-PITUITARY GLAND,ADENOMA

-LEUKEMIA MONONUCLEAR CELL

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

<b>ANIMAL ID:</b> 311	<b>TRT#:</b> 1 <b>DOSE:</b> 0PPM/M FUMON-01	<b>SEX:</b> Male <b>DISP:</b> Moribund	<b>DAY ON TEST:</b> 715 <b>HISTO:</b> 21080100311
-----------------------	--	---	--

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Bone Marrow
* Brain - Cerebellum	* Brain - Cerebrum	* Esophagus	* Intestine Large - Cecum
* Intestine Large - Colon	* Intestine Large - Rectum	* Intestine Small - Duodenum	* Intestine Small - Ileum
* Intestine Small - Jejunum	* Lacrimal Gland	* Lung - Bronchus	* Lymph Node - Mandibular
* Pancreas	* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Salivary Glands
* Skeletal Muscle - Thigh	* Skin	* Spinal Cord - Thoracic	* Stomach - Glandular
* Tongue	* Trachea	* Urinary Bladder	

**MISSING**

* Mammary Gland	* Thymus	* Zymbal's Gland
-----------------	----------	------------------

**OBSERVATIONS**

* Adrenal Gland	Cortex	Vacuolization Cytoplasmic	Focal, Minimal
* Brain	Hypothalamus	Compression	Mild
* Coagulating Gland	Bilateral	Atrophy	Moderate
* Epididymis	Bilateral	Atrophy	Mild
	Epithelium	Degeneration	Mucoid, Minimal
* Eye	Bilateral, Retina	Atrophy	Moderate
* Harderian Gland		Infiltration Cellular	Lymphocytic, Mild
* Heart		Cardiomyopathy	Minimal
* Kidney	Bilateral	Nephropathy	Minimal
* Larynx		Inflammation	Chronic Active, Mild
* Liver	Bile Duct	Hyperplasia	Mild
		Tension Lipidosis	
* Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
* Nose	Olfactory Epi	Cytoplasmic Alteration	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
	[ Adenoma TGLS = 2-11 ]		
* Preputial Gland		Inflammation	Chronic, Minimal
Note: ONLY ONE			
* Prostate		Atrophy	Moderate
		Inflammation	Chronic Active, Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 311	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 715
	<b>DOSE:</b> 0PPM/M FUMON-01	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100311

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

* Seminal Vesicle	Bilateral	Atrophy	Marked
* Spleen		Pigmentation	Mild
* Stomach	Epithelium, Forestomach	Hyperplasia	Mild
	Forestomach	Inflammation	Chronic, Mild
* Testes	Bilateral, Germinal Epith	Atrophy	Marked
[ Atrophy TGLS = 1-10 ]			
* Thyroid Gland	C Cell	Adenoma	

---

**PRIMARY CAUSE OF DEATH** - Pituitary Gland Pars Distalis Adenoma

---

Animal Note: COD...PROBABLE-PITUITARY,ADENOMA

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 312

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 708

**DOSE:** 0PPM/M FUMON-01

**DISP:** Moribund

**HISTO:** 21080100312

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Gland	* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum
* Bone Marrow	* Brain - Cerebellum	* Brain - Cerebrum	* Coagulating Gland
* Epididymis	* Esophagus	* Harderian Gland	* Intestine Large - Cecum
* Intestine Large - Colon	* Intestine Large - Rectum	* Intestine Small - Duodenum	* Intestine Small - Ileum
* Intestine Small - Jejunum	* Lacrimal Gland	* Larynx	* Lung - Bronchus
* Salivary Glands	* Skeletal Muscle - Thigh	* Skin	* Spinal Cord - Thoracic
* Stomach - Forestomach	* Stomach - Glandular	* Tongue	* Trachea
* Urinary Bladder	* Zymbal's Gland		

**MISSING**

* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Thymus
---------------------	------------------------------	----------

**OBSERVATIONS**

* Brain	Hypothalamus	Compression	Mild
* Eye	Bilateral, Retina	Atrophy	Minimal
* Heart		Cardiomyopathy	Mild
* Kidney	Bilateral	Nephropathy	Moderate
* Liver		Eosinophilic Focus	
	Bile Duct	Hyperplasia	Mild
	Hepatocyte	Vacuolization Cytoplasmic	Minimal
* Lymph Node	Mandibular	Degeneration	Cystic, Moderate
	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
* Mammary Gland		Cyst	Minimal
* Nose	Nasolacrim Dct	Inflammation	Chronic, Minimal
* Pancreas		Adenoma	
	Acinar Cell	Atrophy	Focal, Minimal
Note: ISLETS ADENOMA			
Note: LESION SLIDE 6			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 1-11 ]			
* Preputial Gland		Inflammation	Chronic, Minimal
* Prostate		Atrophy	Mild

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 312	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 708
	<b>DOSE:</b> 0PPM/M FUMON-01	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100312

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

* Seminal Vesicle	Bilateral	Atrophy	Moderate
* Spleen		Pigmentation	Mild
* Testes	Bilateral, Germinal Epith	Atrophy	Mild
* Thyroid Gland	C Cell	Adenoma	

---

**PRIMARY CAUSE OF DEATH** - Pituitary Gland Pars Distalis Adenoma

---

Animal Note: COD...PROBABLE-PITUITARY,ADENOMA

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 316

**TRT#:** 2

**SEX:** Male

**DAY ON TEST:** 720

**DOSE:** 5PPM/M FUMON-02

**DISP:** Natural Death

**HISTO:** 21080100316

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Bone Marrow
* Brain - Cerebellum	* Brain - Cerebrum	* Coagulating Gland	* Epididymis
* Esophagus	* Eye	* Harderian Gland	* Intestine Large - Cecum
* Intestine Large - Colon	* Intestine Large - Rectum	* Intestine Small - Duodenum	* Intestine Small - Ileum
* Intestine Small - Jejunum	* Larynx	* Lung - Bronchus	* Pancreas
* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Salivary Glands	* Seminal Vesicle
* Skeletal Muscle - Thigh	* Skin	* Spinal Cord - Thoracic	* Stomach - Forestomach
* Thymus	* Thyroid Gland	* Tongue	* Trachea
* Urinary Bladder	* Zymbal's Gland		

**OBSERVATIONS**

* Adrenal Gland	Medulla Cortex	Hyperplasia Vacuolization Cytoplasmic	Focal, Minimal Focal, Minimal
* Epididymis Note: ONLY ONE			
* Heart		Cardiomyopathy	Mild
* Kidney	Bilateral	Nephropathy	Marked
* Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Liver		Congestion Degeneration Hepatodiaphragmatic Nodule	Moderate Cystic, Focal, Mild
	Bile Duct	Hyperplasia	Mild
[ Congestion TGLS = 3-6.1 ] [ Hepatodiaphragmatic Nodule TGLS = 1,3-6+6.1 ]			
* Lymph Node	Mesenteric Mandibular	Infiltration Cellular Leukemia Mononuclear	Histiocytic, Minimal
* Mammary Gland		Cyst	Minimal
* Nose	Olfactory Epi	Cytoplasmic Alteration	Minimal
* Pituitary Gland [ Adenoma TGLS = 2-11 ]	Pars Distalis	Adenoma	
* Preputial Gland	Bilateral	Inflammation	Chronic Active, Mild

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 316	<b>TRT#:</b> 2	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 720
	<b>DOSE:</b> 5PPM/M FUMON-02	<b>DISP:</b> Natural Death	<b>HISTO:</b> 21080100316

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

* Prostate		Inflammation	Chronic Active, Mild
* Spleen		Leukemia Mononuclear	
* Stomach	Glandular	Cyst	Minimal
* Testes	Interstit Cell	Hyperplasia	Focal, Minimal

---

Note: ONLY ONE

---

**PRIMARY CAUSE OF DEATH** - Pituitary Gland Pars Distalis Adenoma

---

Animal Note: COD...PROBABLE-PITUITARY GLAND,ADENOMA

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

<b>ANIMAL ID:</b> 318	<b>TRT#:</b> 5	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 736
	<b>DOSE:</b> 150PPM/MFUMON-05	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100318

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Blood Vessel - Aorta	Bone - Femur	Bone - Sternum	Bone Marrow
Brain - Cerebellum	Brain - Cerebrum	Coagulating Gland	Esophagus
Intestine Large - Cecum	Intestine Large - Colon	Intestine Large - Rectum	Intestine Small - Duodenum
Intestine Small - Ileum	Intestine Small - Jejunum	Larynx	Lung - Bronchus
Parathyroid Gland	Peripheral Nerve - Sciatic	Prostate	Salivary Glands
Seminal Vesicle	Skeletal Muscle - Thigh	Skin	Spinal Cord - Thoracic
Spleen	Stomach - Forestomach	Stomach - Glandular	Thymus
Thyroid Gland	Tongue	Trachea	Urinary Bladder

**MISSING**

Zymbal's Gland

**OBSERVATIONS**

Adrenal Gland Note: MEDULLA ONLY ONE	Cortex	Vacuolization Cytoplasmic	Focal, Minimal
Brain	Hypothalamus	Compression	Mild
Epididymis		Inflammation	Chronic, Minimal
Eye	Retina	Atrophy	Minimal
Harderian Gland	Bilateral	Infiltration Cellular	Lymphocytic, Minimal
Heart		Cardiomyopathy	Mild
* Kidney	Bilateral	Nephropathy	Minimal
	Renal Tubule	Pigmentation	Minimal
Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Liver		Basophilic Focus	
		Hepatodiaphragmatic Nodule	
	Bile Duct	Hyperplasia	Mild
		Inflammation	Chronic, Mild
		Mixed Cell Focus	
	Hepatocyte	Vacuolization Cytoplasmic	Minimal
[ Hepatodiaphragmatic Nodule TGLS = 4-6 ]			
Lymph Node	Mandibular	Hyperplasia	Mild
	Mesenteric	Inflammation	Chronic, Mild

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 318	<b>TRT#:</b> 5	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 736
	<b>DOSE:</b> 150PPM/MFUMON-05	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100318

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

Mammary Gland		Cyst	Minimal
Mesentery	Fat	Necrosis	Mild
[ Necrosis TGLS = 1-14 ]			
Nose	Nasolacrim Dct	Inflammation	Chronic Active, Mild
Pancreas	Acinar Cell	Atrophy	Focal, Minimal
Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 3-11 ]			
Preputial Gland		Inflammation	Chronic Active, Minimal
Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 2-10 ]			

---

**PRIMARY CAUSE OF DEATH** - Pituitary Gland Pars Distalis Adenoma

---

Animal Note: COD...PROBABLE-PITUITARY,ADENOMA

---

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 319

**TRT#:** 2

**SEX:** Male

**DAY ON TEST:** 729

**DOSE:** 5PPM/M FUMON-02

**DISP:** Moribund

**HISTO:** 21080100319

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Brain - Cerebellum
* Brain - Cerebrum	* Epididymis	* Esophagus	* Harderian Gland
* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum	* Intestine Small - Duodenum
* Intestine Small - Ileum	* Intestine Small - Jejunum	* Lacrimal Gland	* Larynx
* Lung - Bronchus	* Mammary Gland	* Parathyroid Gland	* Peripheral Nerve - Sciatic
* Pituitary Gland	* Salivary Glands	* Skeletal Muscle - Thigh	* Skin
* Spinal Cord - Thoracic	* Stomach - Forestomach	* Stomach - Glandular	* Thyroid Gland
* Tongue	* Trachea		

**MISSING**

* Adrenal Gland	* Coagulating Gland	* Preputial Gland	* Prostate
* Seminal Vesicle	* Urinary Bladder	* Zymbal's Gland	

**OBSERVATIONS**

* Bone Marrow		Leukemia Mononuclear	
* Eye	Retina	Atrophy	Mild
	Bilateral, Lens	Cataract	Mild
* Heart		Leukemia Mononuclear	
* Kidney		Leukemia Mononuclear	
	Bilateral	Nephropathy	Marked
	[ Nephropathy TGLS = 4-2 ]		
* Liver	Bile Duct	Hyperplasia	Moderate
		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 1-6 ]		
* Lung	Alveolar Epith	Hyperplasia	Focal, Mild
		Leukemia Mononuclear	
* Lymph Node	Mandibular	Leukemia Mononuclear	
	Mesenteric	Leukemia Mononuclear	
* Nose	Olfactory Epi	Cytoplasmic Alteration	Mild
	Nasolacrim Dct	Inflammation	Chronic Active, Mild
* Pancreas	Acinar Cell	Atrophy	Diffuse, Moderate
* Saliv Glands			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 319	<b>TRT#:</b> 2	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 729
	<b>DOSE:</b> 5PPM/M FUMON-02	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100319

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

Note: TGL # 05 - NO MICROSCOPIC CORRELATE

* Spleen		Leukemia Mononuclear
[ Leukemia Mononuclear TGLS = 2-7 ]		
* Testes	Bilateral, Interstit Cell	Adenoma
[ Adenoma TGLS = 3-10 ]		
* Thymus		Leukemia Mononuclear

---

PRIMARY CAUSE OF DEATH - Spleen Leukemia Mononuclear

---

Animal Note: COD...PROBABLE-LEUKEMIA MONONUCLEAR CELL

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 321

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 729

**DOSE:** 0PPM/M FUMON-01

**DISP:** Moribund

**HISTO:** 21080100321

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Gland	* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum
* Brain - Cerebellum	* Brain - Cerebrum	* Coagulating Gland	* Esophagus
* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum	* Intestine Small - Duodenum
* Intestine Small - Ileum	* Intestine Small - Jejunum	* Lacrimal Gland	* Larynx
* Lung - Bronchus	* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Salivary Glands
* Seminal Vesicle	* Skeletal Muscle - Thigh	* Skin	* Spinal Cord - Thoracic
* Stomach - Forestomach	* Stomach - Glandular	* Thymus	* Tongue
* Trachea	* Urinary Bladder		

**MISSING**

\* Zymbal's Gland

**OBSERVATIONS**

* Bone Marrow		Hyperplasia	Mild
		Myelofibrosis	Mild
* Brain	Hypothalamus	Compression	Mild
* Epididymis		Mesothelioma Malignant	
* Eye	Bilateral, Retina	Atrophy	Marked
	Bilateral, Lens	Cataract	Marked
* Harderian Gland		Infiltration Cellular	Lymphocytic, Minimal
* Heart		Cardiomyopathy	Mild
* Kidney	Bilateral	Nephropathy	Moderate
* Liver		Eosinophilic Focus	
	Bile Duct	Hyperplasia	Minimal
* Lymph Node	Mesenteric	Degeneration	Cystic, Minimal
	Mandibular	Hyperplasia	Mild
	Mandibular	Infiltration Cellular	Histiocytic, Minimal
* Mammary Gland		Galactocele	Mild
Mesentery	Fat	Necrosis	Mild
[ Necrosis TGLS = 1-14 ]			
* Nose	Olfactory Epi	Cytoplasmic Alteration	Minimal
* Pancreas		Carcinoma	

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 321	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 729
	<b>DOSE:</b> 0PPM/M FUMON-01	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100321

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

Note: ISLET CARCINOMA			
* Pituitary Gland [ Adenoma TGLS = 3-11 ]	Pars Distalis	Adenoma	
* Preputial Gland Note: ONLY ONE		Inflammation	Chronic, Minimal
* Prostate		Inflammation	Chronic Active, Mild
* Sem Ves Note: TGL # 02 - NO MICROSCOPIC CORRELATE			
* Spleen		Hematopoietic Cell Proliferation	Minimal
* Testes	Interstit Cell	Adenoma	
* Thyroid Gland	C Cell	Hyperplasia Ultimobranchial Cyst	Focal, Minimal

---

**PRIMARY CAUSE OF DEATH** - Pituitary Gland Pars Distalis Adenoma

---

Animal Note: COD...PROBABLE-PITUITARY GLAND,ADENOMA

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 322

**TRT#:** 2

**SEX:** Male

**DAY ON TEST:** 739

**DOSE:** 5PPM/M FUMON-02

**DISP:** Terminal Sacrifice

**HISTO:** 21080100322

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Brain - Cerebellum

**OBSERVATIONS**

* Brain [ Compression TGLS = 4-3.2 ]	Cerebrum	Compression	Marked
* Kidney	Bilateral	Nephropathy	Mild
* Liver	Bile Duct	Eosinophilic Focus Hyperplasia Inflammation Tension Lipidosis	Minimal Chronic, Minimal
* Pituitary Gland Note: SEE SLIDE 3B FROM WET TISSUE [ Carcinoma TGLS = 2-3.1 ]	Pars Distalis	Carcinoma	
* Testes [ Adenoma TGLS = 1,3-3 ]	Bilateral, Interstit Cell	Adenoma	

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 323	<b>TRT#:</b> 2	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> 5PPM/M FUMON-02	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100323

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Lung - Bronchus

---

**OBSERVATIONS**

* Kidney	Bilateral	Nephropathy	Moderate
* Liver		Basophilic Focus	
		Clear Cell Focus	
		Eosinophilic Focus	
	Bile Duct	Hyperplasia	Mild
		Leukemia Mononuclear	
* Lung		Alveolar/Bronchiolar Adenoma	
	[ Alveolar/Bronchiolar Adenoma TGLS = 2-5 ]		
* Spleen		Hematopoietic Cell Proliferation	Minimal
	[ Hematopoietic Cell Proliferation TGLS = 3-7 ]		
* Testes	Bilateral, Interstit Cell	Adenoma	
	[ Adenoma TGLS = 1-3 ]		

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

**ANIMAL ID:** 324

**TRT#:** 2

**SEX:** Male

**DAY ON TEST:** 739

**DOSE:** 5PPM/M FUMON-02

**DISP:** Terminal Sacrifice

**HISTO:** 21080100324

---

**OBSERVATIONS**

* Kidney	Bilateral	Nephropathy	Marked
* Liver		Basophilic Focus	
		Clear Cell Focus	
		Hepatodiaphragmatic Nodule	
	Bile Duct	Hyperplasia	Mild
		Mixed Cell Focus	
[ Basophilic Focus TGLS = 3-1.3 ]			
[ Hepatodiaphragmatic Nodule TGLS = 3-1.3 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 1,2-3 ]			

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 325

**TRT#:** 4

**SEX:** Male

**DAY ON TEST:** 739

**DOSE:** 50PPM/M FUMON-04

**DISP:** Terminal Sacrifice

**HISTO:** 21080100325

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Brain - Cerebellum

\* Brain - Cerebrum

**OBSERVATIONS**

* Brain [ Compression TGLS = 5-3.2 ]	Hypothalamus	Compression	Moderate
* Kidney	Renal Tubule Bilateral	Hyperplasia Nephropathy	Focal, Mild Minimal
* Liver [ Hepatodiaphragmatic Nodule TGLS = 1-1 ] [ Leukemia Mononuclear TGLS = 2-1 ]	Bile Duct	Hepatodiaphragmatic Nodule Hyperplasia Leukemia Mononuclear	Mild
* Pituitary Gland [ Adenoma TGLS = 6-3.3 ]	Pars Distalis	Adenoma	
* Spleen [ Leukemia Mononuclear TGLS = 3-3 ]		Leukemia Mononuclear	
* Testes [ Mesothelioma Malignant TGLS = 4-3.1 ]	Germinal Epith	Atrophy Mesothelioma Malignant	Marked

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 326

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 739

**DOSE:** 0PPM/M FUMON-01

**DISP:** Terminal Sacrifice

**HISTO:** 21080100326

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Brain - Cerebellum
* Brain - Cerebrum	* Epididymis	* Esophagus	* Intestine Large - Cecum
* Intestine Large - Colon	* Intestine Large - Rectum	* Intestine Small - Duodenum	* Intestine Small - Ileum
* Intestine Small - Jejunum	* Lacrimal Gland	* Larynx	* Lung - Bronchus
* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Salivary Glands	* Skeletal Muscle - Thigh
* Skin	* Spinal Cord - Thoracic	* Spleen	* Stomach - Forestomach
* Thymus	* Tongue	* Trachea	* Urinary Bladder
* Zymbal's Gland			

**OBSERVATIONS**

* Adrenal Gland	Medulla	Pheochromocytoma Benign	
	[ Pheochromocytoma Benign TGLS = 7-11 ]		
* Bone Marrow		Depletion	Minimal
* Coagulating Gland		Atrophy	Mild
* Eye	Bilateral, Retina	Atrophy	Marked
	Lens	Cataract	Mild
	[ Cataract TGLS = 5-13 ]		
* Harderian Gland	Bilateral	Infiltration Cellular	Lymphocytic, Minimal
* Heart		Cardiomyopathy	Mild
* Kidney	Bilateral	Nephropathy	Moderate
	[ Nephropathy TGLS = 1-2 ]		
* Liver	Bile Duct	Hyperplasia	Mild
	Hepatocyte	Vacuolization Cytoplasmic	Mild
* Lymph Node	Mandibular	Hemorrhage	Minimal
	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
* Mammary Gland		Cyst	Minimal
* Nose	Olfactory Epi	Cytoplasmic Alteration	Mild
* Pancreas	Acinar Cell	Atrophy	Focal, Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
	[ Adenoma TGLS = 6-11 ]		
* Preputial Gland		Hyperplasia	Focal, Mild

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 326	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> 0PPM/M FUMON-01	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100326

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

[ Hyperplasia TGLS = 2-10 ]	Bilateral	Inflammation	Chronic, Minimal
* Prostate		Inflammation	Acute, Mild
* Seminal Vesicle		Atrophy	Moderate
* Stomach	Glandular	Cyst	Minimal
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 3,4-10 ]			
* Thyroid Gland	C Cell	Adenoma	

---

PRIMARY CAUSE OF DEATH -

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 327

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 739

**DOSE:** 0PPM/M FUMON-01

**DISP:** Terminal Sacrifice

**HISTO:** 21080100327

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Bone Marrow
* Brain - Cerebellum	* Brain - Cerebrum	* Coagulating Gland	* Epididymis
* Esophagus	* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum
* Intestine Small - Duodenum	* Intestine Small - Ileum	* Intestine Small - Jejunum	* Lacrimal Gland
* Larynx	* Lung - Bronchus	* Lymph Node - Mandibular	* Parathyroid Gland
* Peripheral Nerve - Sciatic	* Salivary Glands	* Seminal Vesicle	* Skeletal Muscle - Thigh
* Skin	* Spinal Cord - Thoracic	* Stomach - Glandular	* Thyroid Gland
* Tongue	* Trachea	* Urinary Bladder	* Zymbal's Gland

**MISSING**

\* Thymus

**OBSERVATIONS**

* Adrenal Gland	Bilateral, Medulla	Hyperplasia	Focal, Moderate
* Brain	Hypothalamus	Compression	Moderate
* Eye	Bilateral, Retina	Atrophy	Marked
	Bilateral, Lens	Cataract	Minimal
* Harderian Gland		Infiltration Cellular	Lymphocytic, Minimal
* Heart		Cardiomyopathy	Mild
* Kidney	Bilateral	Nephropathy	Moderate
* Liver	Bile Duct	Hyperplasia	Mild
		Mixed Cell Focus	
* Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Mild
* Mammary Gland		Galactocele	Mild
* Nose	Nasolacrim Dct	Inflammation	Chronic Active, Mild
* Pancreas	Acinar Cell	Atrophy	Focal, Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
	[ Adenoma TGLS = 1-11 ]		
* Preputial Gland		Inflammation	Chronic, Minimal
* Prostate		Inflammation	Acute, Minimal
* Spleen		Hematopoietic Cell Proliferation	Mild
* Stomach	Forestomach	Edema	Mild

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

**ANIMAL ID:** 327

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 739

**DOSE:** 0PPM/M FUMON-01

**DISP:** Terminal Sacrifice

**HISTO:** 21080100327

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

\* Testes

Interstit Cell

Adenoma

Interstit Cell

Hyperplasia

Focal, Minimal

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 328

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 739

**DOSE:** 0PPM/M FUMON-01

**DISP:** Terminal Sacrifice

**HISTO:** 21080100328

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Bone Marrow
* Brain - Cerebellum	* Brain - Cerebrum	* Epididymis	* Esophagus
* Harderian Gland	* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum
* Intestine Small - Duodenum	* Intestine Small - Ileum	* Intestine Small - Jejunum	* Lacrimal Gland
* Larynx	* Lung - Bronchus	* Parathyroid Gland	* Peripheral Nerve - Sciatic
* Prostate	* Salivary Glands	* Skeletal Muscle - Thigh	* Skin
* Spinal Cord - Thoracic	* Stomach - Forestomach	* Stomach - Glandular	* Tongue
* Trachea	* Urinary Bladder	* Zymbal's Gland	

**MISSING**

\* Mammary Gland

**OBSERVATIONS**

* Adrenal Gland	Cortex	Vacuolization Cytoplasmic	Focal, Mild
* Brain	Hypothalamus	Compression	Mild
* Coagulating Gland	Bilateral	Atrophy	Minimal
* Eye	Bilateral, Retina	Atrophy	Marked
	Bilateral, Lens	Cataract	Mild
* Heart		Cardiomyopathy	Minimal
* Kidney	Bilateral	Nephropathy	Moderate
	Bilateral, Renal Tubule	Pigmentation	Mild
* Liver		Angiectasis	Focal, Minimal
		Basophilic Focus	
	Bile Duct	Hyperplasia	Mild
	Hepatocyte	Vacuolization Cytoplasmic	Mild
* Lymph Node	Mandibular	Hyperplasia	Mild
	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
* Nose	Olfactory Epi	Cytoplasmic Alteration	Minimal
* Pancreas		Adenoma	
	Note: ISLETS ADENOMA		
* Pituitary Gland	Pars Distalis	Adenoma	
	[ Adenoma TGLS = 1-11 ]		

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 328	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> 0PPM/M FUMON-01	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100328

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

* Preputial Gland		Inflammation	Chronic, Mild
* Seminal Vesicle	Bilateral	Atrophy	Moderate
* Spleen		Hematopoietic Cell Proliferation	Minimal
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 3,4-10 ]			
* Thymus		Atrophy	Marked
* Thyroid Gland	C Cell	Hyperplasia	Focal, Marked
[ Hyperplasia TGLS = 2-4 ]			

---

PRIMARY CAUSE OF DEATH

---

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

**ANIMAL ID:** 329

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 739

**DOSE:** 15PPM/M FUMON-03

**DISP:** Terminal Sacrifice

**HISTO:** 21080100329

---

**OBSERVATIONS**

\* Kidney

Bilateral

Nephropathy

Mild

\* Liver

Clear Cell Focus

Degeneration

Cystic, Focal, Minimal

\* Testes

Bile Duct

Hyperplasia

Mild

[ Adenoma TGLS = 1-3 ]

Bilateral, Interstit Cell

Adenoma

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 330

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 739

**DOSE:** 15PPM/M FUMON-03

**DISP:** Terminal Sacrifice

**HISTO:** 21080100330

**OBSERVATIONS**

* Kidney	Bilateral	Nephropathy	Moderate
* Liver		Basophilic Focus	
		Clear Cell Focus	
		Congestion	Mild
	Bile Duct	Hyperplasia	Mild
		Tension Lipidosis	
[ Congestion TGLS = 5-6 ]			
* Mammary Gland		Galactoceles	Moderate
	Epithelium	Hyperplasia	Mild
[ Galactoceles TGLS = 1-3 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 4-3.2 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 2,3-3.1 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

<b>ANIMAL ID:</b> 331	<b>TRT#:</b> 5	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> 150PPM/MFUMON-05	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100331

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Blood Vessel - Aorta	Bone - Femur	Bone - Sternum	Brain - Cerebellum
Brain - Cerebrum	Coagulating Gland	Epididymis	Esophagus
Heart	Intestine Large - Cecum	Intestine Large - Colon	Intestine Large - Rectum
Intestine Small - Duodenum	Intestine Small - Ileum	Intestine Small - Jejunum	Lacrimal Gland
Larynx	Lung - Bronchus	Lymph Node - Mandibular	Mammary Gland
Pancreas	Parathyroid Gland	Peripheral Nerve - Sciatic	Salivary Glands
Seminal Vesicle	Skeletal Muscle - Thigh	Skin	Spinal Cord - Thoracic
Stomach - Forestomach	Stomach - Glandular	Tongue	Trachea
Urinary Bladder			

**MISSING**

Thymus	Zymbal's Gland
--------	----------------

**OBSERVATIONS**

Adrenal Gland	Cortex	Vacuolization Cytoplasmic	Focal, Mild
Bone Marrow		Hyperplasia	Mild
Eye	Bilateral, Retina	Atrophy	Marked
	Bilateral, Lens	Cataract	Mild
Harderian Gland		Infiltration Cellular	Lymphocytic, Minimal
* Kidney	Bilateral	Nephropathy	Mild
	Bilateral, Renal Tubule	Pigmentation	Minimal
* Liver	Bile Duct	Hyperplasia	Mild
		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 1-6 ]		
Lung		Leukemia Mononuclear	
Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
Nose	Olfactory Epi	Cytoplasmic Alteration	Minimal
Pituitary Gland	Pars Distalis	Angiectasis	Mild
	Pars Intermed	Cyst	Mild
	[ Angiectasis TGLS = 3-11 ]		
Preputial Gland		Inflammation	Chronic, Minimal
Prostate	Epithelium	Hyperplasia	Focal, Mild

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 331	<b>TRT#:</b> 5	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> 150PPM/MFUMON-05	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100331

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

Spleen		Leukemia Mononuclear
Testes	Bilateral, Interstit Cell	Adenoma
[ Adenoma TGLS = 2-10 ]		
Thyroid Gland	C Cell	Adenoma

---

PRIMARY CAUSE OF DEATH -

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

<b>ANIMAL ID:</b> 332	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> 0PPM/M FUMON-01	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100332

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone - Femur	* Bone - Sternum	* Brain - Cerebellum	* Brain - Cerebrum
* Epididymis	* Esophagus	* Harderian Gland	* Intestine Large - Cecum
* Intestine Large - Colon	* Intestine Large - Rectum	* Intestine Small - Duodenum	* Intestine Small - Ileum
* Intestine Small - Jejunum	* Lacrimal Gland	* Larynx	* Lung - Bronchus
* Mammary Gland	* Pancreas	* Parathyroid Gland	* Peripheral Nerve - Sciatic
* Salivary Glands	* Skeletal Muscle - Thigh	* Spinal Cord - Thoracic	* Stomach - Forestomach
* Stomach - Glandular	* Thymus	* Thyroid Gland	* Tongue
* Trachea	* Zymbal's Gland		

**MISSING**

\* Blood Vessel - Aorta

**OBSERVATIONS**

* Adrenal Gland	Cortex	Vacuolization Cytoplasmic	Focal, Mild
* Bone Marrow		Leukemia Mononuclear	
* Coagulating Gland	Bilateral	Atrophy	Minimal
* Eye	Bilateral, Retina	Atrophy	Marked
	Bilateral, Lens	Cataract	Moderate
* Heart		Cardiomyopathy	Mild
* Kidney	Bilateral	Nephropathy	Moderate
	Bilateral, Renal Tubule	Pigmentation	Mild
* Liver	Bile Duct	Hyperplasia	Mild
		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 1-6 ]		
* Lymph Node	Mandibular	Hyperplasia	Minimal
	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
* Nose	Olfactory Epi	Cytoplasmic Alteration	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
	[ Adenoma TGLS = 5-11 ]		
* Preputial Gland		Inflammation	Chronic, Minimal
* Prostate		Inflammation	Acute, Minimal
* Seminal Vesicle	Bilateral	Atrophy	Mild

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 332	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> 0PPM/M FUMON-01	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100332

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

* Skin [ Lipoma TGLS = 4-14 ]	Subcut Tiss	Lipoma	
* Spleen [ Leukemia Mononuclear TGLS = 2-7 ]		Leukemia Mononuclear	
* Testes [ Adenoma TGLS = 3-10 ]	Bilateral, Interstit Cell	Adenoma	
* Urinary Bladder		Infiltration Cellular	Lymphocytic, Minimal

---

PRIMARY CAUSE OF DEATH -

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

**ANIMAL ID:** 333

**TRT#:** 4

**SEX:** Male

**DAY ON TEST:** 739

**DOSE:** 50PPM/M FUMON-04

**DISP:** Terminal Sacrifice

**HISTO:** 21080100333

---

**OBSERVATIONS**

* Eye	Bilateral, Retina	Atrophy	Marked
	Bilateral, Lens	Cataract	Marked
[ Cataract TGLS = 3-3.2 ]			
* Kidney	Bilateral	Nephropathy	Minimal
* Liver	Bile Duct	Hyperplasia	Mild
		Leukemia Mononuclear	
		Tension Lipidosis	
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 1-3 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 2-3.1 ]			

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

**ANIMAL ID:** 334

**TRT#:** 4  
**DOSE:** 50PPM/M FUMON-04

**SEX:** Male  
**DISP:** Terminal Sacrifice

**DAY ON TEST:** 739  
**HISTO:** 21080100334

---

**OBSERVATIONS**

* Eye	Bilateral, Retina	Atrophy	Marked
	Bilateral, Lens	Cataract	Marked
[ Cataract TGLS = 5-13 ]			
* Kidney	Renal Tubule	Hyperplasia	Focal, Marked
	Bilateral	Nephropathy	Mild
* Liver	Bile Duct	Hyperplasia	Minimal
	Hepatocyte	Vacuolization Cytoplasmic	Minimal
* Lymph Node	Mandibular	Degeneration	Cystic, Marked
[ Degeneration TGLS = 1-3 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 2,3,4-3.1 ]			

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

**ANIMAL ID:** 351

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 741

**DOSE:** 15PPM/M FUMON-03

**DISP:** Terminal Sacrifice

**HISTO:** 21080100351

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Kidney

---

**OBSERVATIONS**

* Liver	Bile Duct	Hyperplasia Leukemia Mononuclear	Moderate
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 2-3 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 1-3 ]			

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

**ANIMAL ID:** 352

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 741

**DOSE:** 15PPM/M FUMON-03

**DISP:** Terminal Sacrifice

**HISTO:** 21080100352

---

**OBSERVATIONS**

* Kidney	Bilateral	Nephropathy	Mild
* Liver	Bile Duct	Clear Cell Focus Hyperplasia Mixed Cell Focus Tension Lipidosis	Mild
[ Mixed Cell Focus TGLS = 3-6.1 ]	Hepatocyte	Vacuolization Cytoplasmic	Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 2-11 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 1-3 ]			

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 353

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 741

**DOSE:** 150PPM/MFUMON-05

**DISP:** Terminal Sacrifice

**HISTO:** 21080100353

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Blood Vessel - Aorta	Bone - Femur	Bone - Sternum	Bone Marrow
Brain - Cerebellum	Brain - Cerebrum	Coagulating Gland	Esophagus
Intestine Large - Cecum	Intestine Large - Colon	Intestine Large - Rectum	Intestine Small - Duodenum
Intestine Small - Ileum	Intestine Small - Jejunum	Larynx	Lung - Bronchus
Nose	Parathyroid Gland	Peripheral Nerve - Sciatic	Salivary Glands
Seminal Vesicle	Skeletal Muscle - Thigh	Skin	Spinal Cord - Thoracic
Stomach - Forestomach	Stomach - Glandular	Thymus	Tongue
Trachea	Urinary Bladder		

**MISSING**

Zymbal's Gland

**OBSERVATIONS**

Adrenal Gland	Medulla	Pheochromocytoma Benign	
	Cortex	Vacuolization Cytoplasmic	Focal, Minimal
Epididymis	Epithelium	Degeneration	Mucoid, Minimal
Eye	Bilateral, Retina	Atrophy	Moderate
Harderian Gland		Infiltration Cellular	Lymphocytic, Minimal
Heart		Cardiomyopathy	Mild
* Kidney	Bilateral	Nephropathy	Mild
Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Liver		Basophilic Focus	
		Clear Cell Focus	
	Bile Duct	Hyperplasia	Mild
		Mixed Cell Focus	
		Tension Lipidosis	
[ Mixed Cell Focus TGLS = 1-6.1 ]			
[ Tension Lipidosis TGLS = 2-6 ]			
Lymph Node	Mandibular	Hyperplasia	Minimal
	Mesenteric	Infiltration Cellular	Histiocytic, Mild
Mammary Gland		Galactocele	Moderate
[ Galactocele TGLS = 6-14 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 353	<b>TRT#:</b> 5	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 741
	<b>DOSE:</b> 150PPM/MFUMON-05	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100353

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

Pancreas	Acinar Cell	Atrophy	Focal, Mild
	Artery	Inflammation	Chronic, Mild
Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 5-11 ]			
Preputial Gland		Foreign Body	
		Inflammation	Chronic Active, Minimal
Prostate		Inflammation	Chronic Active, Mild
Skin			
Note: TGL#6-NOTED GROSSLY AS SKIN WAS MAMMARY GLAND			
Spleen		Hematopoietic Cell Proliferation	Minimal
Testes	Interstit Cell	Adenoma	
	Germinal Epith	Atrophy	Moderate
[ Adenoma TGLS = 3-10.1 ]			
[ Atrophy TGLS = 4-10.1 ]			
Thyroid Gland	C Cell	Adenoma	

---

PRIMARY CAUSE OF DEATH -

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 354

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 741

**DOSE:** 150PPM/MFUMON-05

**DISP:** Terminal Sacrifice

**HISTO:** 21080100354

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Blood Vessel - Aorta	Bone - Femur	Bone - Sternum	Bone Marrow
Brain - Cerebellum	Brain - Cerebrum	Coagulating Gland	Epididymis
Esophagus	Harderian Gland	Intestine Large - Cecum	Intestine Large - Colon
Intestine Large - Rectum	Intestine Small - Duodenum	Intestine Small - Ileum	Intestine Small - Jejunum
Lacrimal Gland	Lung - Bronchus	Lymph Node - Mandibular	Mammary Gland
Parathyroid Gland	Peripheral Nerve - Sciatic	Prostate	Salivary Glands
Seminal Vesicle	Skeletal Muscle - Thigh	Skin	Spinal Cord - Thoracic
Spleen	Stomach - Forestomach	Stomach - Glandular	Thymus
Thyroid Gland	Tongue	Trachea	Urinary Bladder

**MISSING**

Larynx	Zymbal's Gland
--------	----------------

**OBSERVATIONS**

Adrenal Gland	Medulla	Pheochromocytoma Benign	
[ Pheochromocytoma Benign TGLS = 1-11 ]			
Eye	Bilateral, Retina	Atrophy	Moderate
Heart		Cardiomyopathy	Mild
* Kidney	Renal Tubule	Hyperplasia	Focal, Moderate
	Bilateral	Nephropathy	Mild
* Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Mild
		Tension Lipidosis	
Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
Nose		Foreign Body	
		Inflammation	Chronic Active, Mild
Pancreas	Acinar Cell	Adenoma	
Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 2-11 ]			
Preputial Gland		Inflammation	Chronic, Mild
Testes	Bilateral, Interstit Cell	Adenoma	

**PRIMARY CAUSE OF DEATH** -

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

**ANIMAL ID:** 354

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 741

**DOSE:** 150PPM/MFUMON-05

**DISP:** Terminal Sacrifice

**HISTO:** 21080100354

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 355

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 741

**DOSE:** 150PPM/MFUMON-05

**DISP:** Terminal Sacrifice

**HISTO:** 21080100355

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Adrenal Gland	Blood Vessel - Aorta	Bone - Femur	Bone - Sternum
Brain - Cerebellum	Brain - Cerebrum	Epididymis	Esophagus
Heart	Intestine Large - Cecum	Intestine Large - Colon	Intestine Large - Rectum
Intestine Small - Duodenum	Intestine Small - Ileum	Intestine Small - Jejunum	Larynx
Lung - Bronchus	Parathyroid Gland	Peripheral Nerve - Sciatic	Salivary Glands
Skeletal Muscle - Thigh	Skin	Spinal Cord - Thoracic	Stomach - Forestomach
Stomach - Glandular	Thymus	Thyroid Gland	Tongue
Trachea	Urinary Bladder		

**MISSING**

Mammary Gland	Zymbal's Gland
---------------	----------------

**OBSERVATIONS**

Adrenal Gland			
Note: ONLY ONE			
Bone Marrow		Leukemia Mononuclear	
Coagulating Gland		Atrophy	Mild
Eye	Bilateral, Retina	Atrophy	Mild
Harderian Gland		Infiltration Cellular	Lymphocytic, Minimal
* Kidney	Renal Tubule	Carcinoma	
[ Carcinoma TGLS = 1-2 ]			
Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Mild
		Leukemia Mononuclear	
Lymph Node	Mandibular	Degeneration	Cystic, Moderate
	Mandibular	Hyperplasia	Mild
	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
Nose	Olfactory Epi	Cytoplasmic Alteration	Minimal
	Nasolacrim Dct	Inflammation	Chronic Active, Moderate
Pancreas	Acinar Cell	Atrophy	Focal, Mild
Pituitary Gland	Pars Distalis	Cyst	Mild

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 355

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 741

**DOSE:** 150PPM/MFUMON-05

**DISP:** Terminal Sacrifice

**HISTO:** 21080100355

**ORGAN AND ACCOUNTABLE SITE STATUS**

Preputial Gland Note: ONLY ONE	Pars Distalis	Hyperplasia Inflammation	Focal, Marked Chronic, Mild
Prostate		Inflammation	Chronic Active, Mild
Seminal Vesicle [ Atrophy TGLS = 4-10 ]	Bilateral	Atrophy	Moderate
Spleen [ Leukemia Mononuclear TGLS = 3-7 ]		Leukemia Mononuclear	
Testes [ Adenoma TGLS = 2-10.1 ]	Bilateral, Interstit Cell	Adenoma	
PRIMARY CAUSE OF DEATH	-		

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

**ANIMAL ID:** 356

**TRT#:** 2

**SEX:** Male

**DAY ON TEST:** 741

**DOSE:** 5PPM/M FUMON-02

**DISP:** Terminal Sacrifice

**HISTO:** 21080100356

---

**OBSERVATIONS**

* Kidney	Bilateral	Nephropathy	Mild
* Liver	Bile Duct	Hyperplasia	Mild
		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 1-1 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 3-3 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 2-3 ]			

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

**ANIMAL ID:** 357

**TRT#:** 2

**SEX:** Male

**DAY ON TEST:** 741

**DOSE:** 5PPM/M FUMON-02

**DISP:** Terminal Sacrifice

**HISTO:** 21080100357

---

**OBSERVATIONS**

* Kidney	Bilateral	Nephropathy	Mild
* Liver		Basophilic Focus	
		Eosinophilic Focus	
	Bile Duct	Hyperplasia	Mild
		Inflammation	Chronic, Mild
		Tension Lipidosis	
* Testes	Hepatocyte	Vacuolization Cytoplasmic	Minimal
[ Adenoma TGLS = 1-3 ]	Bilateral, Interstit Cell	Adenoma	

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 366

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 725

**DOSE:** 150PPM/MFUMON-05

**DISP:** Moribund

**HISTO:** 21080100366

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Blood Vessel - Aorta	Bone - Femur	Bone - Sternum	Bone Marrow
Brain - Cerebellum	Brain - Cerebrum	Coagulating Gland	Epididymis
Esophagus	Eye	Intestine Large - Cecum	Intestine Large - Colon
Intestine Large - Rectum	Intestine Small - Duodenum	Intestine Small - Ileum	Intestine Small - Jejunum
Larynx	Lung - Bronchus	Mammary Gland	Nose
Parathyroid Gland	Peripheral Nerve - Sciatic	Salivary Glands	Seminal Vesicle
Skeletal Muscle - Thigh	Skin	Spinal Cord - Thoracic	Spleen
Stomach - Forestomach	Stomach - Glandular	Thyroid Gland	Tongue
Trachea	Urinary Bladder		

**MISSING**

Adrenal Gland	Zymbal's Gland
---------------	----------------

**OBSERVATIONS**

Harderian Gland		Infiltration Cellular	Lymphocytic, Minimal
Heart		Cardiomyopathy	Minimal
* Kidney	Renal Tubule	Carcinoma	
	Renal Tubule	Hyperplasia	Focal, Mild
	Bilateral	Nephropathy	Mild
[ Carcinoma TGLS = 2-2 ]			
Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Liver	Bile Duct	Hyperplasia	Mild
	Hepatocyte	Vacuolization Cytoplasmic	Mild
Lymph Node	Mandibular	Degeneration	Cystic, Moderate
	Mandibular	Hyperplasia	Mild
	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
Pancreas	Acinar Cell	Atrophy	Focal, Minimal
Pituitary Gland	Pars Distalis	Carcinoma	
[ Carcinoma TGLS = 1-11 ]			
Preputial Gland	Bilateral	Inflammation	Chronic, Mild
Prostate		Inflammation	Chronic Active, Mild
Testes	Interstit Cell	Adenoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 366	<b>TRT#:</b> 5	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 725
	<b>DOSE:</b> 150PPM/MFUMON-05	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100366

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

[ Adenoma TGLS = 3-10 ]	Interstit Cell	Hyperplasia	Focal, Mild
Thymus		Atrophy	Minimal

---

**PRIMARY CAUSE OF DEATH** - Pituitary Gland Pars Distalis Carcinoma

Animal Note: COD...PROBABLE-PITUITARY,CARCINOMA

---

Experiment Number: 92002-03  
Test Type: CHRONIC  
Species/Strain: Rat/F 344/NCTR

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
Test Compound: Fumonisin B1  
CAS Number: 116355-83-0

Date Report Requested: 10/15/2014  
Time Report Requested: 18:08:22  
First Dose M/F: NA / NA  
Lab: NCTR

ANIMAL ID: 368

TRT#: 1

SEX: Male

DAY ON TEST: 739

DOSE: 0PPM/M FUMON-01

DISP: Terminal Sacrifice

HISTO: 21080100368

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Gland	* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum
* Bone Marrow	* Brain - Cerebellum	* Brain - Cerebrum	* Coagulating Gland
* Epididymis	* Esophagus	* Harderian Gland	* Intestine Large - Cecum
* Intestine Large - Colon	* Intestine Large - Rectum	* Intestine Small - Duodenum	* Intestine Small - Ileum
* Intestine Small - Jejunum	* Lacrimal Gland	* Larynx	* Lung - Bronchus
* Lymph Node - Mesenteric	* Mammary Gland	* Parathyroid Gland	* Peripheral Nerve - Sciatic
* Preputial Gland	* Prostate	* Salivary Glands	* Seminal Vesicle
* Skeletal Muscle - Thigh	* Skin	* Spinal Cord - Thoracic	* Spleen
* Stomach - Forestomach	* Stomach - Glandular	* Thymus	* Thyroid Gland
* Tongue	* Trachea	* Urinary Bladder	* Zymbal's Gland

OBSERVATIONS

* Eye	Bilateral, Retina	Atrophy	Marked
	Bilateral, Lens	Cataract	Moderate
* Heart		Cardiomyopathy	Mild
* Kidney	Bilateral	Nephropathy	Mild
* Liver		Clear Cell Focus	
	Bile Duct	Hyperplasia	Mild
* Lymph Node	Mandibular	Degeneration	Cystic, Mild
* Nose	Nasolacrim Dct	Inflammation	Chronic Active, Mild
* Pancreas	Acinar Cell	Atrophy	Focal, Mild
* Pituitary Gland	Pars Distalis	Adenoma	
	Pars Intermed	Cyst	Mild
* Testes	Bilateral, Interstit Cell	Adenoma	

[ Adenoma TGLS = 1-10 ]

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 369

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 739

**DOSE:** 0PPM/M FUMON-01

**DISP:** Terminal Sacrifice

**HISTO:** 21080100369

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Bone Marrow
* Brain - Cerebellum	* Brain - Cerebrum	* Epididymis	* Esophagus
* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum	* Intestine Small - Duodenum
* Intestine Small - Ileum	* Intestine Small - Jejunum	* Lung - Bronchus	* Mammary Gland
* Nose	* Pancreas	* Parathyroid Gland	* Peripheral Nerve - Sciatic
* Preputial Gland	* Salivary Glands	* Skeletal Muscle - Thigh	* Skin
* Spinal Cord - Thoracic	* Stomach - Forestomach	* Stomach - Glandular	* Thymus
* Tongue	* Trachea		

**MISSING**

\* Zymbal's Gland

**OBSERVATIONS**

* Adrenal Gland	Cortex	Vacuolization Cytoplasmic	Focal, Mild
* Coagulating Gland		Atrophy	Mild
* Eye	Bilateral, Retina	Atrophy	Moderate
	Lens	Cataract	Mild
* Harderian Gland		Infiltration Cellular	Lymphocytic, Minimal
* Heart		Cardiomyopathy	Moderate
* Kidney	Bilateral	Nephropathy	Moderate
* Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Larynx		Inflammation	Chronic Active, Mild
* Liver		Clear Cell Focus	
		Degeneration	Cystic, Focal, Mild
	Bile Duct	Hyperplasia	Mild
		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 4,5-6+6.1 ]		
* Lymph Node	Mandibular	Degeneration	Cystic, Moderate
	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
	[ Degeneration TGLS = 3-8 ]		
* Pituitary Gland	Pars Distalis	Hyperplasia	Focal, Mild
* Preputial GI			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 369	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> 0PPM/M FUMON-01	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100369

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

Note: ONLY ONE

* Prostate		Atrophy	Mild
* Seminal Vesicle		Atrophy	Marked
* Skin			
Note: TGL # 06 - NO MICROSCOPIC CORRELATE			
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 1-7 ]			
* Testes	Interstit Cell	Adenoma	
[ Adenoma TGLS = 2-10.1 ]			
* Thyroid Gland	C Cell	Hyperplasia	Focal, Mild
* Urinary Bladder		Infiltration Cellular	Lymphocytic, Minimal

---

PRIMARY CAUSE OF DEATH

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

**ANIMAL ID:** 370

**TRT#:** 4

**SEX:** Male

**DAY ON TEST:** 739

**DOSE:** 50PPM/M FUMON-04

**DISP:** Terminal Sacrifice

**HISTO:** 21080100370

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Preputial Gland

---

**OBSERVATIONS**

* Kidney	Renal Tubule Bilateral	Adenoma Nephropathy	Minimal
* Liver	Bile Duct	Basophilic Focus Hyperplasia	Mild
* Preputial GI			
Note: TGL # 01 - NO MICROSCOPIC CORRELATE			
* Spleen		Fibrosis	Focal, Moderate
Note: LESION IS ACTUALLY IN 7A [ Fibrosis TGLS = 2-3 ]			

---

PRIMARY CAUSE OF DEATH

---

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 378	<b>TRT#:</b> 3	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> 15PPM/M FUMON-03	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100378

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**MISSING**

\* Thyroid Gland

---

**OBSERVATIONS**

* Kidney	Bilateral	Nephropathy	Minimal
* Liver	Bile Duct	Hyperplasia Tension Lipidosis	Mild
* Seminal Vesicle [ Atrophy TGLS = 3-3.1 ]	Bilateral	Atrophy	Marked
* Spleen [ Leukemia Mononuclear TGLS = 4-3.1 ]		Leukemia Mononuclear	
* Testes [ Adenoma TGLS = 1-3 ] [ Atrophy TGLS = 2-3 ]	Interstit Cell Germinal Epith	Adenoma Atrophy	Marked
* Thyroid Gland Note: TGL # 5,6- NO MICROSCOPIC CORRELATE			

---

PRIMARY CAUSE OF DEATH

---

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 379

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 739

**DOSE:** 15PPM/M FUMON-03

**DISP:** Terminal Sacrifice

**HISTO:** 21080100379

**ORGAN AND ACCOUNTABLE SITE STATUS**

**MISSING**

\* Mammary Gland

**OBSERVATIONS**

* Kidney	Bilateral	Nephropathy	Mild
* Liver	Bile Duct	Hyperplasia	Minimal
	Hepatocyte	Vacuolization Cytoplasmic	Mild
	[ Hyperplasia TGLS = 3-1 ]		
* Pituitary Gland	Pars Distalis	Adenoma	
	[ Adenoma TGLS = 4-3.1 ]		
* Skin		Keratoacanthoma	
	Subcut Tiss	Lipoma	
	[ Keratoacanthoma TGLS = 2-3 ]		
	[ Lipoma TGLS = 1-3.1 ]		
* Testes	Interstit Cell	Adenoma	
	[ Adenoma TGLS = 5-3.1 ]		

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92002-03  
Test Type: CHRONIC  
Species/Strain: Rat/F 344/NCTR

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
Test Compound: Fumonisin B1  
CAS Number: 116355-83-0

Date Report Requested: 10/15/2014  
Time Report Requested: 18:08:22  
First Dose M/F: NA / NA  
Lab: NCTR

---

ANIMAL ID: 380	TRT#: 3	SEX: Male	DAY ON TEST: 739
	DOSE: 15PPM/M FUMON-03	DISP: Terminal Sacrifice	HISTO: 21080100380

---

ORGAN AND ACCOUNTABLE SITE STATUS

---

MISSING

\* Tongue

---

OBSERVATIONS

* Kidney	Bilateral	Nephropathy	Mild
* Liver		Degeneration	Cystic, Focal, Minimal
		Eosinophilic Focus	
	Bile Duct	Hyperplasia	Mild
		Tension Lipidosis	
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 4-3.1 ]			
* Testes	Interstit Cell	Adenoma	
	Germinal Epith	Atrophy	Marked
	Interstit Cell	Hyperplasia	Focal, Moderate
[ Adenoma TGLS = 2-3 ]			
[ Atrophy TGLS = 1-3 ]			
* Tongue			
Note: TGL # 03 - NO MICROSCOPIC CORRELATE			

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 381	<b>TRT#:</b> 3 <b>DOSE:</b> 15PPM/M FUMON-03	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 739 <b>HISTO:</b> 21080100381
-----------------------	---	---	--

---

**OBSERVATIONS**

* Kidney	Bilateral	Leukemia Mononuclear Nephropathy	Minimal
* Liver	Bile Duct	Hepatodiaphragmatic Nodule Hyperplasia Leukemia Mononuclear	Marked
[ Hepatodiaphragmatic Nodule TGLS = 3-1 ]			
* Skin		Trichoepithelioma	
[ Trichoepithelioma TGLS = 1-3 ]			
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 4-3.1 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 2-3 ]			

---

PRIMARY CAUSE OF DEATH -

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 382

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 739

**DOSE:** 150PPM/MFUMON-05

**DISP:** Terminal Sacrifice

**HISTO:** 21080100382

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Blood Vessel - Aorta	Bone - Femur	Bone - Sternum	Bone Marrow
Brain - Cerebellum	Brain - Cerebrum	Coagulating Gland	Epididymis
Esophagus	Intestine Large - Cecum	Intestine Large - Colon	Intestine Large - Rectum
Intestine Small - Duodenum	Intestine Small - Ileum	Intestine Small - Jejunum	Larynx
Lung - Bronchus	Lymph Node - Mandibular	Mammary Gland	Nose
Pancreas	Parathyroid Gland	Peripheral Nerve - Sciatic	Preputial Gland
Salivary Glands	Seminal Vesicle	Skeletal Muscle - Thigh	Skin
Spinal Cord - Thoracic	Spleen	Stomach - Forestomach	Stomach - Glandular
Thyroid Gland	Tongue	Trachea	Urinary Bladder
Zymbal's Gland			

**MISSING**

Pituitary Gland

**OBSERVATIONS**

Adrenal Gland	Cortex	Vacuolization Cytoplasmic	Focal, Mild
Bone	Epiphysis	Degeneration	Mild
Eye	Bilateral, Retina	Atrophy	Moderate
Harderian Gland		Infiltration Cellular	Lymphocytic, Minimal
Heart		Cardiomyopathy	Mild
* Kidney	Bilateral	Nephropathy	Mild
Lacrimal Gland		Atrophy	Focal, Minimal
* Liver		Basophilic Focus	
		Clear Cell Focus	
		Eosinophilic Focus	
	Bile Duct	Hyperplasia	Moderate
Note: THERE APPEARS TO BE AN ABNORMAL SHAPE OF THE CAUDATE LOBE.		NO OTHER ABNORMALITY WAS RECOGNIZED	
Note: TGL # 01 - NO MICROSCOPIC CORRELATE			
[ Eosinophilic Focus TGLS = 2-6 ]			
Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
Prostate	Epithelium	Cytoplasmic Alteration	Mild
Testes	Bilateral, Interstit Cell	Adenoma	

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

**ANIMAL ID:** 382

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 739

**DOSE:** 150PPM/MFUMON-05

**DISP:** Terminal Sacrifice

**HISTO:** 21080100382

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

[ Adenoma TGLS = 3-10.1 ]

Thymus

Atrophy

Mild

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92002-03  
 Test Type: CHRONIC  
 Species/Strain: Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
 Test Compound: Fumonisin B1  
 CAS Number: 116355-83-0

Date Report Requested: 10/15/2014  
 Time Report Requested: 18:08:22  
 First Dose M/F: NA / NA  
 Lab: NCTR

ANIMAL ID: 383

TRT#: 5

SEX: Male

DAY ON TEST: 739

DOSE: 150PPM/MFUMON-05

DISP: Terminal Sacrifice

HISTO: 21080100383

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Blood Vessel - Aorta	Bone - Femur	Bone - Sternum	Bone Marrow
Brain - Cerebellum	Brain - Cerebrum	Coagulating Gland	Epididymis
Esophagus	Harderian Gland	Intestine Large - Cecum	Intestine Large - Colon
Intestine Large - Rectum	Intestine Small - Duodenum	Intestine Small - Ileum	Intestine Small - Jejunum
Lacrimal Gland	Larynx	Lung - Bronchus	Lymph Node - Mandibular
Mammary Gland	Nose	Parathyroid Gland	Peripheral Nerve - Sciatic
Preputial Gland	Salivary Glands	Seminal Vesicle	Skeletal Muscle - Thigh
Skin	Spinal Cord - Thoracic	Stomach - Forestomach	Stomach - Glandular
Thymus	Thyroid Gland	Tongue	Trachea
Urinary Bladder	Zymbal's Gland		

**OBSERVATIONS**

Adrenal Gland	Medulla	Hyperplasia	Focal, Moderate
Eye	Bilateral, Retina	Atrophy	Moderate
Heart		Cardiomyopathy	Mild
* Kidney	Renal Tubule	Adenoma	
		Cyst	Moderate
	Bilateral	Nephropathy	Moderate
[ Cyst TGLS = 1-2 ]			
* Liver		Basophilic Focus	
		Eosinophilic Focus	
	Bile Duct	Hyperplasia	Moderate
		Tension Lipidosis	
	Hepatocyte	Vacuolization Cytoplasmic	Minimal
Lung	Alveolar Epith	Hyperplasia	Focal, Mild
Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
Pancreas	Acinar Cell	Atrophy	Focal, Marked
		Carcinoma	
Note: ISLET CARCINOMA			
[ Carcinoma TGLS = 4-7 ]			
Pituitary Gland	Pars Distalis	Adenoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

**ANIMAL ID:** 383

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 739

**DOSE:** 150PPM/MFUMON-05

**DISP:** Terminal Sacrifice

**HISTO:** 21080100383

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

[ Adenoma TGLS = 2-11 ]

Prostate

Inflammation

Chronic Active, Minimal

Spleen

Hematopoietic Cell Proliferation

Minimal

Testes

Bilateral, Interstit Cell

Adenoma

[ Adenoma TGLS = 3-10.1 ]

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 384

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 739

**DOSE:** 150PPM/MFUMON-05

**DISP:** Terminal Sacrifice

**HISTO:** 21080100384

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Blood Vessel - Aorta	Bone - Femur	Bone - Sternum	Bone Marrow
Brain - Cerebellum	Brain - Cerebrum	Epididymis	Esophagus
Intestine Large - Cecum	Intestine Large - Colon	Intestine Large - Rectum	Intestine Small - Duodenum
Intestine Small - Ileum	Intestine Small - Jejunum	Larynx	Lung - Bronchus
Parathyroid Gland	Peripheral Nerve - Sciatic	Seminal Vesicle	Skeletal Muscle - Thigh
Skin	Spinal Cord - Thoracic	Spleen	Stomach - Forestomach
Stomach - Glandular	Thymus	Tongue	Trachea
Urinary Bladder			

**MISSING**

Mammary Gland	Zymbal's Gland
---------------	----------------

**OBSERVATIONS**

Adrenal Gland	Cortex	Adenoma	
Coagulating Gland		Infiltration Cellular	Lymphocytic, Mild
Eye	Bilateral, Retina	Atrophy	Moderate
	Bilateral, Lens	Cataract	Mild
Harderian Gland		Infiltration Cellular	Lymphocytic, Minimal
Heart		Cardiomyopathy	Minimal
* Kidney	Bilateral	Cyst	Mild
	Bilateral	Nephropathy	Mild
Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Liver		Basophilic Focus	
		Clear Cell Focus	
	Bile Duct	Hyperplasia	Moderate
Lymph Node	Mandibular	Degeneration	Cystic, Minimal
	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
Nose	Olfactory Epi	Cytoplasmic Alteration	Minimal
	Nasolacrim Dct	Inflammation	Chronic Active, Mild
Pancreas	Acinar Cell	Atrophy	Focal, Minimal
Pituitary Gland	Pars Distalis	Adenoma	
	Pars Nervosa	Atypical Cells	Mild

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 384

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 739

**DOSE:** 150PPM/MFUMON-05

**DISP:** Terminal Sacrifice

**HISTO:** 21080100384

**ORGAN AND ACCOUNTABLE SITE STATUS**

Preputial Gland	Rathkes Cleft	Cyst	Moderate
Prostate		Inflammation	Chronic, Mild
Salivary Glands	Submandibul GI	Inflammation	Chronic Active, Minimal
Testes	Bilateral, Interstit Cell	Cytoplasmic Alteration	Focal, Mild
[ Adenoma TGLS = 1-10 ]		Adenoma	
Thyroid Gland	C Cell	Adenoma	
PRIMARY CAUSE OF DEATH	-		

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

**ANIMAL ID:** 385

**TRT#:** 2

**SEX:** Male

**DAY ON TEST:** 739

**DOSE:** 5PPM/M FUMON-02

**DISP:** Terminal Sacrifice

**HISTO:** 21080100385

---

**OBSERVATIONS**

* Kidney	Bilateral	Nephropathy	Moderate
* Liver	Bile Duct	Hyperplasia	Marked
* Lymph Node		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 3-3.2 ]		Leukemia Mononuclear	
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 5-3.1 ]			
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 4-3.1 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 1,2-3 ]			

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 386      **TRT#:** 1      **SEX:** Male      **DAY ON TEST:** 739  
**DOSE:** 0PPM/M FUMON-01      **DISP:** Terminal Sacrifice      **HISTO:** 21080100386

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Bone Marrow
* Brain - Cerebellum	* Brain - Cerebrum	* Coagulating Gland	* Epididymis
* Esophagus	* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum
* Intestine Small - Duodenum	* Intestine Small - Ileum	* Intestine Small - Jejunum	* Larynx
* Lung - Bronchus	* Mammary Gland	* Parathyroid Gland	* Peripheral Nerve - Sciatic
* Prostate	* Salivary Glands	* Seminal Vesicle	* Skeletal Muscle - Thigh
* Skin	* Spinal Cord - Thoracic	* Stomach - Forestomach	* Stomach - Glandular
* Thymus	* Tongue	* Trachea	* Urinary Bladder
* Zymbal's Gland			

**OBSERVATIONS**

* Adrenal Gland	Medulla	Pheochromocytoma Benign	
* Eye	Retina	Atrophy	Mild
* Harderian Gland	Bilateral	Infiltration Cellular	Lymphocytic, Minimal
* Heart		Cardiomyopathy	Minimal
* Kidney	Bilateral	Nephropathy	Moderate
* Lacrimal Gland		Infiltration Cellular	Lymphocytic, Mild
* Liver		Hemorrhage	Minimal
	Bile Duct	Hyperplasia	Mild
	Hepatocyte	Vacuolization Cytoplasmic	Minimal
* Lymph Node	Mandibular	Degeneration	Cystic, Mild
	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
* Nose	Olfactory Epi	Cytoplasmic Alteration	Minimal
* Pancreas	Acinar Cell	Atrophy	Diffuse, Moderate
	Duct	Hyperplasia	Focal, Mild
* Pituitary Gland	Pars Distalis	Adenoma	
* Preputial Gland		Inflammation	Chronic, Mild
* Spleen		Leukemia Mononuclear	
* Testes	Bilateral, Interstit Cell	Adenoma	
	[ Adenoma TGLS = 1-3 + 10.1 ]		
* Thyroid Gland	C Cell	Adenoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

**ANIMAL ID:** 386

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 739

**DOSE:** 0PPM/M FUMON-01

**DISP:** Terminal Sacrifice

**HISTO:** 21080100386

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

<b>ANIMAL ID:</b> 387	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> 0PPM/M FUMON-01	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100387

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Brain - Cerebellum
* Brain - Cerebrum	* Esophagus	* Intestine Large - Cecum	* Intestine Large - Colon
* Intestine Large - Rectum	* Intestine Small - Duodenum	* Intestine Small - Ileum	* Intestine Small - Jejunum
* Lacrimal Gland	* Larynx	* Lung - Bronchus	* Parathyroid Gland
* Peripheral Nerve - Sciatic	* Skeletal Muscle - Thigh	* Spinal Cord - Thoracic	* Spleen
* Stomach - Glandular	* Tongue	* Trachea	* Urinary Bladder

**MISSING**

* Pituitary Gland	* Zymbal's Gland
-------------------	------------------

**OBSERVATIONS**

* Adrenal Gland		Infiltration Cellular	Lymphocytic, Mild
	Medulla	Pheochromocytoma Benign	
* Bone Marrow		Hyperplasia	Mild
* Coagulating Gland		Atrophy	Mild
* Epididymis	Epithelium	Degeneration	Mucoid, Mild
* Eye	Bilateral, Retina	Atrophy	Moderate
* Harderian Gland		Infiltration Cellular	Lymphocytic, Minimal
* Heart		Cardiomyopathy	Mild
* Kidney	Bilateral	Nephropathy	Mild
* Liver	Hepatocyte	Vacuolization Cytoplasmic	Marked
* Lymph Node	Mandibular	Degeneration	Cystic, Moderate
	Mesenteric	Degeneration	Cystic, Moderate
	[ Degeneration TGLS = 6-11 ]		
* Mammary Gland		Galactocele	Minimal
	Note: TGL#7-HAS SKIN AND MAMMARY GLAND		
	[ Galactocele TGLS = 7-10.2 ]		
* Nose	Nasolacrim Dct	Inflammation	Acute, Minimal
* Pancreas	Acinar Cell	Atrophy	Focal, Moderate
* Pituitary Gl			
	Note: TGL # 05 - NO MICROSCOPIC CORRELATE		
* Preputial Gland	Bilateral	Inflammation	Chronic, Mild

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 387	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> 0PPM/M FUMON-01	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100387

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

* Prostate		Inflammation	Acute, Minimal
* Salivary Glands	Parotid GI	Atrophy	Diffuse, Marked
* Seminal Vesicle		Atrophy	Moderate
Note: ALSO BLOCK 12 [ Atrophy TGLS = 4-3 ]			
* Skin	Subcut Tiss	Fibroma	
Note: TGL#7-HAS SKIN AND MAMMARY GLAND [ Fibroma TGLS = 7-10.2 ]			
* Spleen			
Note: TGL # 01- NO MICROSCOPIC CORRELATE			
* Stomach	Epithelium, Forestomach	Hyperplasia	Moderate
* Testes	Interstit Cell	Adenoma	
	Germinal Epith	Atrophy	Marked
[ Atrophy TGLS = 2,3-3 ]			
* Thymus		Atrophy	Mild
* Thyroid Gland	C Cell	Adenoma	
	C Cell	Carcinoma	

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 388

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 739

**DOSE:** 15PPM/M FUMON-03

**DISP:** Terminal Sacrifice

**HISTO:** 21080100388

**ORGAN AND ACCOUNTABLE SITE STATUS**

**MISSING**

\* Lymph Node

**OBSERVATIONS**

* Kidney	Bilateral	Nephropathy	Mild
* Liver	Bile Duct	Hyperplasia	Moderate
		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 2,5-1+1.3 ]		
* Lymph Node			
	Note: TGL#1-NULLIFIED BY TRIMMER		
* Spleen		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 3-3 ]		
* Testes	Bilateral, Interstit Cell	Adenoma	
	[ Adenoma TGLS = 4-3 ]		

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 404

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 739

**DOSE:** 0PPM/M FUMON-01

**DISP:** Terminal Sacrifice

**HISTO:** 21080100404

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Bone Marrow
* Brain - Cerebellum	* Brain - Cerebrum	* Epididymis	* Esophagus
* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum	* Intestine Small - Duodenum
* Intestine Small - Ileum	* Intestine Small - Jejunum	* Lacrimal Gland	* Larynx
* Lung - Bronchus	* Lymph Node - Mandibular	* Nose	* Pancreas
* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Prostate	* Salivary Glands
* Skeletal Muscle - Thigh	* Skin	* Spinal Cord - Thoracic	* Stomach - Glandular
* Thyroid Gland	* Tongue	* Trachea	* Urinary Bladder
* Zymbal's Gland			

**MISSING**

\* Preputial Gland

**OBSERVATIONS**

* Adrenal Gland	Cortex	Vacuolization Cytoplasmic	Diffuse, Mild
* Coagulating Gland		Atrophy	Minimal
* Eye	Bilateral, Retina	Atrophy	Moderate
* Harderian Gland	Bilateral	Infiltration Cellular	Lymphocytic, Minimal
* Heart		Cardiomyopathy	Minimal
* Kidney	Bilateral	Nephropathy	Moderate
	Bilateral, Renal Tubule	Pigmentation	Minimal
	[ Nephropathy TGLS = 1-2 ]		
* Liver	Bile Duct	Hyperplasia	Minimal
	Hepatocyte	Tension Lipidosis	
	[ Vacuolization Cytoplasmic TGLS = 3-6 ]	Vacuolization Cytoplasmic	Marked
* Lung			
	Note: TGL # 06 - NO MICROSCOPIC CORRELATE		
* Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
* Mammary Gland		Fibroadenoma	
	[ Fibroadenoma TGLS = 7-10.2 ]		
* Pituitary Gland	Pars Distalis	Adenoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 404	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> 0PPM/M FUMON-01	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100404

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

[ Adenoma TGLS = 5-11 ]			
* Seminal Vesicle		Atrophy	Marked
* Spleen		Fibrosis	Focal, Mild
		Leukemia Mononuclear	
[ Fibrosis TGLS = 2-7 ]			
* Stomach	Forestomach	Erosion	Focal, Minimal
	Epithelium, Forestomach	Hyperplasia	Moderate
	Forestomach	Inflammation	Chronic, Mild
* Testes	Germinal Epith	Atrophy	Marked
[ Atrophy TGLS = 4-10 ]			
* Thymus		Atrophy	Mild

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 405

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 739

**DOSE:** 0PPM/M FUMON-01

**DISP:** Terminal Sacrifice

**HISTO:** 21080100405

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Bone Marrow
* Brain - Cerebellum	* Brain - Cerebrum	* Coagulating Gland	* Epididymis
* Esophagus	* Harderian Gland	* Intestine Large - Cecum	* Intestine Large - Colon
* Intestine Large - Rectum	* Intestine Small - Duodenum	* Intestine Small - Ileum	* Intestine Small - Jejunum
* Lacrimal Gland	* Larynx	* Lung - Bronchus	* Pancreas
* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Salivary Glands	* Seminal Vesicle
* Skeletal Muscle - Thigh	* Skin	* Spinal Cord - Thoracic	* Stomach - Forestomach
* Stomach - Glandular	* Tongue	* Trachea	* Urinary Bladder
* Zymbal's Gland			

**MISSING**

\* Thymus

**OBSERVATIONS**

* Adrenal Gland	Cortex Medulla	Hyperplasia Pheochromocytoma Benign	Focal, Minimal
* Eye	Cortex Bilateral, Retina	Vacuolization Cytoplasmic Atrophy	Focal, Mild Mild
* Heart		Cardiomyopathy	Minimal
* Kidney	Bilateral Bilateral, Renal Tubule	Nephropathy Pigmentation	Moderate Minimal
	[ Nephropathy TGLS = 2-2 ]		
* Liver		Eosinophilic Focus Hepatodiaphragmatic Nodule Hyperplasia	
	Bile Duct [ Hepatodiaphragmatic Nodule TGLS = 4-6 ]		Moderate
* Lymph Node	Mandibular Mesenteric	Degeneration Infiltration Cellular	Cystic, Minimal Histiocytic, Mild
* Mammary Gland		Galactocele	Minimal
* Nose	Olfactory Epi	Cytoplasmic Alteration Foreign Body Inflammation	Mild Chronic Active, Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 405	<b>TRT#:</b> 1 <b>DOSE:</b> 0PPM/M FUMON-01	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 739 <b>HISTO:</b> 21080100405
-----------------------	--	---	--

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

* Pituitary Gland [ Adenoma TGLS = 5-11 ]	Pars Distalis	Adenoma	
* Preputial Gland [ Adenoma TGLS = 1-10.1 ]		Adenoma	
* Prostate		Inflammation	Chronic Active, Mild
* Spleen		Pigmentation	Minimal
* Testes [ Adenoma TGLS = 3-10 ]	Interstit Cell	Adenoma	
* Thyroid Gland Tissue NOS Note: BRUNNERS GLAND [ Cyst TGLS = 6-14 ]	C Cell	Hyperplasia Cyst	Focal, Mild Mild

---

PRIMARY CAUSE OF DEATH -

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

**ANIMAL ID:** 406

**TRT#:** 2  
**DOSE:** 5PPM/M FUMON-02

**SEX:** Male  
**DISP:** Terminal Sacrifice

**DAY ON TEST:** 739  
**HISTO:** 21080100406

---

**OBSERVATIONS**

* Kidney	Bilateral	Nephropathy	Moderate
* Liver	Bile Duct	Eosinophilic Focus Hyperplasia Mixed Cell Focus	Mild

[ Eosinophilic Focus TGLS = 1-1 ]

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

**ANIMAL ID:** 407

**TRT#:** 2

**SEX:** Male

**DAY ON TEST:** 739

**DOSE:** 5PPM/M FUMON-02

**DISP:** Terminal Sacrifice

**HISTO:** 21080100407

---

**OBSERVATIONS**

* Kidney		Cyst	Minimal
	Bilateral	Nephropathy	Mild
* Liver	Bile Duct	Hyperplasia	Minimal
		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 1-1 ]			
* Skin	Subcut Tiss	Fibroma	
[ Fibroma TGLS = 2-3.1 ]			
* Spleen		Leukemia Mononuclear	
		Liposarcoma	
[ Leukemia Mononuclear TGLS = 4-3 ]			
[ Liposarcoma TGLS = 5-3 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 3-3.1 ]			

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92002-03  
Test Type: CHRONIC  
Species/Strain: Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
Test Compound: Fumonisin B1  
CAS Number: 116355-83-0

Date Report Requested: 10/15/2014  
Time Report Requested: 18:08:22  
First Dose M/F: NA / NA  
Lab: NCTR

---

<b>ANIMAL ID:</b> 408	<b>TRT#:</b> 3 <b>DOSE:</b> 15PPM/M FUMON-03	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 739 <b>HISTO:</b> 21080100408
-----------------------	---	---	--

---

**OBSERVATIONS**

* Kidney	Bilateral	Nephropathy	Mild
* Liver	Bile Duct	Clear Cell Focus Hyperplasia Leukemia Mononuclear	Mild
* Lymph Node [ Degeneration TGLS = 1-3.1 ]	Deep Cervical	Degeneration	Cystic, Mild
Mesentery [ Necrosis TGLS = 2-3.1 ]	Fat	Necrosis	Mild
* Pituitary Gland [ Adenoma TGLS = 5-3.1 ]	Pars Distalis	Adenoma	
* Testes [ Adenoma TGLS = 4-3 ] [ Atrophy TGLS = 3-3 ]	Interstitial Cell Germinal Epith Interstitial Cell	Adenoma Atrophy Hyperplasia	Marked Focal, Minimal

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 409

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 739

**DOSE:** 15PPM/M FUMON-03

**DISP:** Terminal Sacrifice

**HISTO:** 21080100409

**OBSERVATIONS**

* Kidney	Bilateral	Nephropathy	Mild
* Liver		Clear Cell Focus	
		Eosinophilic Focus	
	Bile Duct	Hyperplasia	Mild
		Mixed Cell Focus	
* Lymph Node	Mandibular	Degeneration	Cystic, Marked
[ Degeneration TGLS = 3-3.1 ]			
Mesentery	Fat	Necrosis	Minimal
[ Necrosis TGLS = 1-3.1 ]			
* Spleen		Congestion	Moderate
[ Congestion TGLS = 4-7 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 2-3 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 410

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 739

**DOSE:** 15PPM/M FUMON-03

**DISP:** Terminal Sacrifice

**HISTO:** 21080100410

**OBSERVATIONS**

* Adrenal Gland	Medulla	Pheochromocytoma Benign	
	[ Pheochromocytoma Benign TGLS = 3-3 ]		
* Kidney	Bilateral	Nephropathy	Mild
* Liver		Clear Cell Focus	
		Degeneration	Cystic, Focal, Minimal
		Eosinophilic Focus	
	Bile Duct	Hyperplasia	Mild
	Hepatocyte	Vacuolization Cytoplasmic	Minimal
* Testes	Interstitial Cell	Adenoma	
	Germinal Epith	Atrophy	Marked
	[ Adenoma TGLS = 2-3 ]		
	[ Atrophy TGLS = 1-3 ]		

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 411	<b>TRT#:</b> 3 <b>DOSE:</b> 15PPM/M FUMON-03	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 739 <b>HISTO:</b> 21080100411
<b>OBSERVATIONS</b>			
* Eye	Retina	Atrophy	Marked
	Lens	Cataract	Marked
[ Cataract TGLS = 5-3.1 ]			
* Kidney	Bilateral	Leukemia Mononuclear Nephropathy	Marked
[ Leukemia Mononuclear TGLS = 1-2 ]			
* Liver	Bile Duct	Hyperplasia Leukemia Mononuclear	Marked
[ Leukemia Mononuclear TGLS = 2-1 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 6-3.1 ]			
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 3-3.1 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 4-3 ]			
<hr/> <b>PRIMARY CAUSE OF DEATH</b> -			

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 412	<b>TRT#:</b> 3	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> 15PPM/M FUMON-03	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100412

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**MISSING**

\* Thymus

---

**OBSERVATIONS**

* Kidney		Leukemia Mononuclear	
	Bilateral	Nephropathy	Moderate
	[ Leukemia Mononuclear TGLS = 2-2 ]		
	[ Nephropathy TGLS = 2-2 ]		
* Liver	Bile Duct	Hyperplasia	Moderate
		Leukemia Mononuclear	
* Lymph Node	Mandibular	Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 4-3 ]		
* Pituitary Gland	Pars Distalis	Adenoma	
	[ Adenoma TGLS = 6-11 ]		
* Spleen		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 1-3 ]		
* Testes	Bilateral, Interstit Cell	Adenoma	
	[ Adenoma TGLS = 3-3 ]		
* Thymus			
	Note: TGL # 05 - NO MICROSCOPIC CORRELATE		

---

PRIMARY CAUSE OF DEATH

---

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

**ANIMAL ID:** 413

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 739

**DOSE:** 15PPM/M FUMON-03

**DISP:** Terminal Sacrifice

**HISTO:** 21080100413

---

**OBSERVATIONS**

* Heart [ Thrombosis TGLS = 1-3 ]	Atrium	Thrombosis	Marked
* Kidney	Artery Bilateral	Inflammation Nephropathy	Chronic, Mild Mild
* Liver		Clear Cell Focus Degeneration	Cystic, Focal, Minimal
	Bile Duct	Hyperplasia	Mild
	Hepatocyte	Vacuolization Cytoplasmic	Mild
* Pituitary Gland [ Adenoma TGLS = 2-3 ]	Pars Distalis	Adenoma	

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

**ANIMAL ID:** 414

**TRT#:** 4  
**DOSE:** 50PPM/M FUMON-04

**SEX:** Male  
**DISP:** Terminal Sacrifice

**DAY ON TEST:** 739  
**HISTO:** 21080100414

---

**OBSERVATIONS**

* Kidney	Renal Tubule Bilateral	Hyperplasia Nephropathy Clear Cell Focus	Focal, Mild Minimal
* Liver	Bile Duct	Hyperplasia Tension Lipidosis	Minimal
* Testes [ Adenoma TGLS = 1,2-3 + 10 ]	Bilateral, Interstit Cell	Adenoma	

---

PRIMARY CAUSE OF DEATH

---

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

**ANIMAL ID:** 415

**TRT#:** 4  
**DOSE:** 50PPM/M FUMON-04

**SEX:** Male  
**DISP:** Terminal Sacrifice

**DAY ON TEST:** 739  
**HISTO:** 21080100415

---

**OBSERVATIONS**

* Kidney	Renal Tubule Bilateral	Hyperplasia Nephropathy	Focal, Marked Mild
* Liver	Bile Duct	Hyperplasia Leukemia Mononuclear	Moderate
* Lymph Node Note: NOTED GROSSLY AS CERVICAL [ Degeneration TGLS = 2-3.1 ]	Mandibular	Degeneration	Cystic, Marked
* Pituitary Gland [ Adenoma TGLS = 4-3 ]	Pars Distalis	Adenoma	
* Skin [ Lipoma TGLS = 1-3 ]	Subcut Tiss	Lipoma	
* Spleen [ Leukemia Mononuclear TGLS = 3-3.1 ]		Leukemia Mononuclear	

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 416      **TRT#:** 5      **SEX:** Male      **DAY ON TEST:** 739  
**DOSE:** 150PPM/MFUMON-05      **DISP:** Terminal Sacrifice      **HISTO:** 21080100416

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Blood Vessel - Aorta	Bone - Femur	Bone - Sternum	Bone Marrow
Brain - Cerebellum	Brain - Cerebrum	Esophagus	Intestine Large - Cecum
Intestine Large - Colon	Intestine Large - Rectum	Intestine Small - Duodenum	Intestine Small - Ileum
Intestine Small - Jejunum	Lacrimal Gland	Larynx	Lung - Bronchus
Lymph Node - Mandibular	Mammary Gland	Parathyroid Gland	Peripheral Nerve - Sciatic
Salivary Glands	Skeletal Muscle - Thigh	Spinal Cord - Thoracic	Spleen
Stomach - Forestomach	Stomach - Glandular	Tongue	Trachea
Urinary Bladder	Zymbal's Gland		

**MISSING**

Preputial Gland

**OBSERVATIONS**

Adrenal Gland	Bilateral, Cortex Medulla	Angiectasis Hyperplasia	Mild Focal, Minimal
Coagulating Gland		Atrophy	Mild
Epididymis	Epithelium	Degeneration	Mucoid, Mild
Eye	Bilateral, Retina Bilateral, Lens	Atrophy Cataract	Mild Mild
Harderian Gland	Bilateral	Infiltration Cellular	Lymphocytic, Minimal
Heart		Cardiomyopathy	Mild
* Kidney	Renal Tubule  Renal Tubule Bilateral	Adenoma Cyst Hyperplasia Nephropathy	Mild  Focal, Mild Mild
[ Cyst TGLS = 3-2 ]			
* Liver	Bile Duct	Basophilic Focus Hyperplasia Mixed Cell Focus	Mild
	Hepatocyte	Vacuolization Cytoplasmic	Mild
Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Mild
Nose	Olfactory Epi	Cytoplasmic Alteration	Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 416	<b>TRT#:</b> 5	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> 150PPM/MFUMON-05	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100416

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

Pancreas	Acinar Cell	Atrophy	Focal, Mild
Pituitary Gland	Pars Distalis	Hyperplasia	Focal, Marked
Prostate		Atrophy	Mild
Seminal Vesicle		Atrophy	Marked
Skin		Basal Cell Adenoma	
		Trichoepithelioma	
	[ Basal Cell Adenoma TGLS = 2-10.1 ]		
	[ Trichoepithelioma TGLS = 1-10.1 ]		
Testes	Interstit Cell	Adenoma	
	Germinal Epith	Atrophy	Marked
	[ Adenoma TGLS = 5-10 ]		
	[ Atrophy TGLS = 4-10 ]		
Thymus		Atrophy	Mild
Thyroid Gland	C Cell	Adenoma	

---

PRIMARY CAUSE OF DEATH -

---

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92002-03  
 Test Type: CHRONIC  
 Species/Strain: Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
 Test Compound: Fumonisin B1  
 CAS Number: 116355-83-0

Date Report Requested: 10/15/2014  
 Time Report Requested: 18:08:22  
 First Dose M/F: NA / NA  
 Lab: NCTR

ANIMAL ID: 417      TRT#: 5      SEX: Male      DAY ON TEST: 739  
 DOSE: 150PPM/MFUMON-05      DISP: Terminal Sacrifice      HISTO: 21080100417

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Blood Vessel - Aorta	Bone - Femur	Bone - Sternum	Bone Marrow
Brain - Cerebellum	Brain - Cerebrum	Epididymis	Esophagus
Eye	Harderian Gland	Intestine Large - Cecum	Intestine Large - Colon
Intestine Large - Rectum	Intestine Small - Duodenum	Intestine Small - Ileum	Intestine Small - Jejunum
Larynx	Lung - Bronchus	Lymph Node - Mandibular	Pancreas
Parathyroid Gland	Peripheral Nerve - Sciatic	Salivary Glands	Skeletal Muscle - Thigh
Spinal Cord - Thoracic	Stomach - Glandular	Thyroid Gland	Tongue
Trachea	Urinary Bladder	Zymbal's Gland	

**OBSERVATIONS**

Adrenal Gland	Cortex	Hematopoietic Cell Proliferation	Minimal
Note: TGL#6-NOTED GROSSLY AS ADRENAL GLAND WAS RENAL LYMPH NODE			
Coagulating Gland	Bilateral	Atrophy	Mild
Heart		Cardiomyopathy	Minimal
* Kidney	Renal Tubule	Carcinoma	
		Nephropathy	Mild
[ Carcinoma TGLS = 1-2 ]			
Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Liver		Basophilic Focus	
		Hepatodiaphragmatic Nodule	
		Mixed Cell Focus	
	Hepatocyte	Vacuolization Cytoplasmic	Mild
[ Hepatodiaphragmatic Nodule TGLS = 2-6 ]			
Lung		Carcinoma	Metastatic (Kidney)
[ Carcinoma TGLS = 4-5 + 5.1 ]			
Lymph Node	Mediastinal	Carcinoma	Metastatic (Kidney)
	Renal	Carcinoma	Metastatic (Kidney)
	Mesenteric	Infiltration Cellular	Histiocytic, Mild
[ Carcinoma TGLS = 5-1.1 ]			
[ Carcinoma TGLS = 6-11 ]			
Mammary Gland		Galactocele	Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 417	<b>TRT#:</b> 5	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> 150PPM/MFUMON-05	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100417

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

Nose	Nasolacrim Dct	Inflammation	Chronic Active, Mild
Pituitary Gland	Pars Distalis	Adenoma	
Preputial Gland	Bilateral	Inflammation	Chronic, Minimal
Prostate	Epithelium	Hyperplasia	Focal, Moderate
Seminal Vesicle	Bilateral	Atrophy	Marked
Skin		Basal Cell Adenoma	
[ Basal Cell Adenoma TGLS = 7-10.1 ]			
Spleen		Fibrosis	Focal, Mild
Stomach	Forestomach	Edema	Mild
Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 3-10 ]			
Thymus		Atrophy	Moderate
Note: TGL#5-NOTED GROSSLY AS THYMUS WAS MEDIASTINAL LYMPN NODE			

---

PRIMARY CAUSE OF DEATH

---

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 418

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 739

**DOSE:** 150PPM/MFUMON-05

**DISP:** Terminal Sacrifice

**HISTO:** 21080100418

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Adrenal Gland	Blood Vessel - Aorta	Bone - Femur	Bone - Sternum
Brain - Cerebellum	Brain - Cerebrum	Esophagus	Harderian Gland
Heart	Intestine Large - Cecum	Intestine Large - Colon	Intestine Large - Rectum
Intestine Small - Duodenum	Intestine Small - Ileum	Intestine Small - Jejunum	Lacrimal Gland
Lung - Bronchus	Parathyroid Gland	Peripheral Nerve - Sciatic	Pituitary Gland
Salivary Glands	Skeletal Muscle - Thigh	Skin	Spinal Cord - Thoracic
Stomach - Forestomach	Stomach - Glandular	Thyroid Gland	Tongue
Trachea	Urinary Bladder	Zymbal's Gland	

**OBSERVATIONS**

Bone Marrow		Hyperplasia	Moderate
Coagulating Gland	Bilateral	Atrophy	Mild
Epididymis	Epithelium	Degeneration	Mucoid, Mild
Note: ONLY ONE			
Eye	Bilateral, Retina	Atrophy	Minimal
* Kidney	Renal Tubule	Carcinoma	
		Nephropathy	Minimal
[ Carcinoma TGLS = 2-2 ]			
Larynx		Inflammation	Chronic, Minimal
* Liver	Bile Duct	Hyperplasia	Mild
Lung		Carcinoma	Metastatic (Kidney)
[ Carcinoma TGLS = 7-5 + 5.1 ]			
Lymph Node	Mandibular	Hyperplasia	Mild
	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
Mammary Gland		Galactocele	Mild
Mesentery		Carcinoma	Metastatic (Kidney)
[ Carcinoma TGLS = 1-14 ]			
Nose	Olfactory Epi	Cytoplasmic Alteration	Minimal
Pancreas		Carcinoma	Metastatic (Kidney)
		Mixed Tumor Benign	
Preputial Gland		Inflammation	Chronic, Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 418	<b>TRT#:</b> 5	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> 150PPM/MFUMON-05	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100418

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

Prostate		Atrophy	Minimal
Seminal Vesicle	Bilateral	Atrophy	Marked
[ Atrophy TGLS = 3-10 ]			
Spleen		Carcinoma	Metastatic (Kidney)
[ Carcinoma TGLS = 4-7 ]		Hematopoietic Cell Proliferation	Minimal
Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 5,6-10 ]			
Thymus		Atrophy	Minimal

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 419

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 739

**DOSE:** 150PPM/MFUMON-05

**DISP:** Terminal Sacrifice

**HISTO:** 21080100419

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Blood Vessel - Aorta	Bone - Femur	Bone - Sternum	Brain - Cerebellum
Brain - Cerebrum	Esophagus	Heart	Intestine Large - Cecum
Intestine Large - Colon	Intestine Large - Rectum	Intestine Small - Duodenum	Intestine Small - Ileum
Intestine Small - Jejunum	Lacrimal Gland	Larynx	Lung - Bronchus
Lymph Node - Mandibular	Parathyroid Gland	Peripheral Nerve - Sciatic	Salivary Glands
Skeletal Muscle - Thigh	Skin	Spinal Cord - Thoracic	Stomach - Fore stomach
Stomach - Glandular	Tongue	Trachea	Urinary Bladder
Zymbal's Gland			

**MISSING**

Epididymis

**OBSERVATIONS**

Adrenal Gland	Cortex	Hyperplasia	Focal, Minimal
Bone Marrow		Hyperplasia	Mild
Coagulating Gland	Bilateral	Atrophy	Minimal
Eye	Bilateral, Retina	Atrophy	Moderate
Harderian Gland	Bilateral	Infiltration Cellular	Lymphocytic, Minimal
* Kidney	Renal Tubule	Carcinoma	
	Bilateral	Nephropathy	Mild
	[ Carcinoma TGLS = 4-2 ]		
* Liver		Clear Cell Focus	
		Hepatodiaphragmatic Nodule	
	Bile Duct	Hyperplasia	Moderate
		Inflammation	Chronic, Minimal
	[ Hepatodiaphragmatic Nodule TGLS = 5-6 ]		
Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Mild
Mammary Gland	Epithelium	Hyperplasia	Focal, Mild
Nose	Olfactory Epi	Cytoplasmic Alteration	Mild
	Nasolacrim Dct	Inflammation	Chronic Active, Mild
Pancreas	Acinar Cell	Atrophy	Focal, Mild
Pituitary Gland	Pars Distalis	Adenoma	

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 419	<b>TRT#:</b> 5	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> 150PPM/MFUMON-05	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100419

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

Preputial Gland	Bilateral	Inflammation	Chronic, Mild
Prostate		Atrophy	Mild
Seminal Vesicle	Bilateral	Atrophy	Marked
Skin			
Note: TGL#2-NOTED GROSSLY AS SKIN WAS TESTES			
Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 6-7 ]			
Testes	Bilateral, Interstit Cell	Adenoma	
[ Mesothelioma Malignant TGLS = 1,2,3-10 + 14 ]			
Thymus		Atrophy	Mild
Thyroid Gland	C Cell	Adenoma	

---

PRIMARY CAUSE OF DEATH -

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 420

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 739

**DOSE:** 150PPM/MFUMON-05

**DISP:** Terminal Sacrifice

**HISTO:** 21080100420

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Blood Vessel - Aorta	Bone - Femur	Bone - Sternum	Brain - Cerebellum
Brain - Cerebrum	Epididymis	Esophagus	Harderian Gland
Intestine Large - Cecum	Intestine Large - Colon	Intestine Large - Rectum	Intestine Small - Duodenum
Intestine Small - Ileum	Intestine Small - Jejunum	Larynx	Lung - Bronchus
Mammary Gland	Nose	Parathyroid Gland	Peripheral Nerve - Sciatic
Salivary Glands	Skeletal Muscle - Thigh	Skin	Spinal Cord - Thoracic
Stomach - Forestomach	Stomach - Glandular	Thyroid Gland	Tongue
Trachea	Urinary Bladder	Zymbal's Gland	

**MISSING**

Preputial Gland

**OBSERVATIONS**

Adrenal Gland	Bilateral, Medulla	Pheochromocytoma Benign	
Bone Marrow		Leukemia Mononuclear	
Coagulating Gland	Bilateral	Atrophy	Mild
Eye	Bilateral, Retina	Atrophy	Mild
Heart		Cardiomyopathy	Mild
* Kidney	Renal Tubule	Adenoma	
	Bilateral	Nephropathy	Mild
Lacrimal Gland	Duct	Hyperplasia	Mild
* Liver	Bile Duct	Hyperplasia	Marked
		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 2-6 ]		
Lung	Interstitial	Inflammation	Chronic, Moderate
Lymph Node	Mesenteric	Degeneration	Cystic, Marked
	Mandibular	Leukemia Mononuclear	
	[ Degeneration TGLS = 4-4 ]		
Pancreas	Acinar Cell	Atrophy	Focal, Moderate
Pituitary Gland		Leukemia Mononuclear	
Prostate		Atrophy	Mild
		Inflammation	Chronic, Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 420	<b>TRT#:</b> 5	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> 150PPM/MFUMON-05	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100420

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

Seminal Vesicle	Bilateral	Atrophy	Marked
Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 1-7 ]			
Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 3-10 ]			
Thymus		Atrophy	Moderate

---

PRIMARY CAUSE OF DEATH -

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 421      **TRT#:** 5      **SEX:** Male      **DAY ON TEST:** 739  
**DOSE:** 150PPM/MFUMON-05      **DISP:** Terminal Sacrifice      **HISTO:** 21080100421

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Blood Vessel - Aorta	Bone - Femur	Bone - Sternum	Bone Marrow
Brain - Cerebellum	Brain - Cerebrum	Esophagus	Eye
Harderian Gland	Intestine Large - Cecum	Intestine Large - Colon	Intestine Large - Rectum
Intestine Small - Duodenum	Intestine Small - Ileum	Intestine Small - Jejunum	Larynx
Lung - Bronchus	Lymph Node - Mandibular	Mammary Gland	Parathyroid Gland
Peripheral Nerve - Sciatic	Salivary Glands	Skeletal Muscle - Thigh	Skin
Spinal Cord - Thoracic	Spleen	Stomach - Forestomach	Stomach - Glandular
Tongue	Trachea	Urinary Bladder	Zymbal's Gland

**OBSERVATIONS**

Adrenal Gland	Bilateral, Cortex	Hyperplasia	Focal, Mild
Coagulating Gland	Bilateral	Atrophy	Moderate
Epididymis		Atrophy	Mild
Heart		Cardiomyopathy	Minimal
* Kidney	Bilateral	Nephropathy	Mild
Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Liver	Bile Duct	Hepatocellular Adenoma	
		Hyperplasia	Mild
		Tension Lipidosis	
[ Hepatocellular Adenoma TGLS = 2-6 ]			
Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
Nose	Olfactory Epi	Cytoplasmic Alteration	Minimal
Pancreas	Acinar Cell	Atrophy	Focal, Minimal
Pituitary Gland	Pars Distalis	Adenoma	
Preputial Gland	Bilateral	Inflammation	Chronic, Mild
Prostate		Atrophy	Mild
Seminal Vesicle	Bilateral	Atrophy	Marked
Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 1-10 ]			
Thymus		Atrophy	Mild
Thyroid Gland	C Cell	Adenoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

**ANIMAL ID:** 421

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 739

**DOSE:** 150PPM/MFUMON-05

**DISP:** Terminal Sacrifice

**HISTO:** 21080100421

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

C Cell

Hyperplasia

Focal, Moderate

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

<b>ANIMAL ID:</b> 422	<b>TRT#:</b> 5	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> 150PPM/MFUMON-05	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100422

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Adrenal Gland	Blood Vessel - Aorta	Bone - Femur	Bone - Sternum
Bone Marrow	Brain - Cerebrum	Esophagus	Harderian Gland
Intestine Large - Cecum	Intestine Large - Colon	Intestine Large - Rectum	Intestine Small - Duodenum
Intestine Small - Ileum	Intestine Small - Jejunum	Larynx	Lung - Bronchus
Lymph Node - Mandibular	Nose	Parathyroid Gland	Peripheral Nerve - Sciatic
Preputial Gland	Salivary Glands	Skeletal Muscle - Thigh	Skin
Spinal Cord - Thoracic	Stomach - Forestomach	Stomach - Glandular	Thymus
Thyroid Gland	Tongue	Trachea	Urinary Bladder
Zymbal's Gland			

**MISSING**

Brain - Cerebellum

**OBSERVATIONS**

Coagulating Gland	Bilateral	Atrophy	Mild
Epididymis		Mesothelioma Malignant	
Eye	Retina	Atrophy	Moderate
	Lens	Cataract	Moderate
Heart		Cardiomyopathy	Minimal
* Kidney		Cyst	Marked
	Bilateral	Nephropathy	Mild
[ Cyst TGLS = 1-2 + 2.1 ]			
Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Liver	Bile Duct	Hyperplasia	Moderate
Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Mild
Mammary Gland		Fibroadenoma	
Pancreas		Adenoma	
	Acinar Cell	Atrophy	Focal, Mild
Note: ISLETS ADENOMA			
Pituitary Gland	Pars Distalis	Adenoma	
Prostate		Atrophy	Minimal
Seminal Vesicle	Bilateral	Atrophy	Marked

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 422	<b>TRT#:</b> 5	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> 150PPM/MFUMON-05	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100422

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

Spleen		Leukemia Mononuclear	
Testes	Interstit Cell	Adenoma	
	Germinal Epith	Atrophy	Marked
		Mesothelioma Malignant	

[ Adenoma TGLS = 2-10 ]

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

<b>ANIMAL ID:</b> 451	<b>TRT#:</b> 1 <b>DOSE:</b> 0PPM/M FUMON-01	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 739 <b>HISTO:</b> 21080100451
-----------------------	--	---	--

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Bone Marrow
* Brain - Cerebellum	* Brain - Cerebrum	* Esophagus	* Intestine Large - Cecum
* Intestine Large - Colon	* Intestine Large - Rectum	* Intestine Small - Duodenum	* Intestine Small - Ileum
* Intestine Small - Jejunum	* Lacrimal Gland	* Lung - Bronchus	* Nose
* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Salivary Glands	* Skeletal Muscle - Thigh
* Skin	* Spinal Cord - Thoracic	* Stomach - Forestomach	* Stomach - Glandular
* Tongue	* Trachea	* Urinary Bladder	* Zymbal's Gland

**MISSING**

\* Larynx

**OBSERVATIONS**

* Adrenal Gland	Medulla Cortex	Pheochromocytoma Benign Vacuolization Cytoplasmic	Focal, Mild
* Brain	Pons	Oligodendroglioma Malignant	
* Coagulating Gland		Atrophy	Minimal
* Epididymis	Epithelium	Degeneration	Mucoid, Mild
* Eye	Bilateral, Retina	Atrophy	Moderate
* Harderian Gland	Bilateral	Infiltration Cellular	Lymphocytic, Minimal
* Heart		Cardiomyopathy	Minimal
* Kidney	Bilateral	Nephropathy	Moderate
* Liver		Degeneration	Cystic, Focal, Minimal
	Bile Duct	Hyperplasia	Mild
* Lymph Node	Mandibular Mesenteric	Hyperplasia Infiltration Cellular	Minimal Histiocytic, Minimal
* Mammary Gland		Cyst	Mild
* Pancreas	Acinar Cell Acinar Cell	Atrophy Hyperplasia	Focal, Mild Focal, Moderate
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 2-11 ]			
* Preputial Gland		Inflammation	Chronic, Minimal
* Prostate		Inflammation	Chronic Active, Moderate

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 451	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> 0PPM/M FUMON-01	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100451

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

* Seminal Vesicle	Bilateral	Atrophy	Mild
* Spleen		Depletion	Focal, Mild
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 1-10 ]			
* Thymus		Atrophy	Minimal
* Thyroid Gland	C Cell	Adenoma	

---

PRIMARY CAUSE OF DEATH                    -

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 452

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 739

**DOSE:** 0PPM/M FUMON-01

**DISP:** Terminal Sacrifice

**HISTO:** 21080100452

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Bone Marrow
* Brain - Cerebellum	* Brain - Cerebrum	* Esophagus	* Intestine Large - Cecum
* Intestine Large - Colon	* Intestine Large - Rectum	* Intestine Small - Duodenum	* Intestine Small - Ileum
* Intestine Small - Jejunum	* Lacrimal Gland	* Larynx	* Lung - Bronchus
* Lymph Node - Mandibular	* Mammary Gland	* Nose	* Parathyroid Gland
* Peripheral Nerve - Sciatic	* Salivary Glands	* Skeletal Muscle - Thigh	* Skin
* Spinal Cord - Thoracic	* Stomach - Forestomach	* Stomach - Glandular	* Thymus
* Tongue	* Trachea	* Urinary Bladder	* Zymbal's Gland

**OBSERVATIONS**

* Adrenal Gland	Cortex	Hyperplasia	Focal, Marked
	Medulla	Hyperplasia	Focal, Mild
* Coagulating Gland		Atrophy	Minimal
* Epididymis	Epithelium	Degeneration	Mucoid, Mild
* Eye	Retina	Atrophy	Moderate
* Harderian Gland		Atrophy	Focal, Mild
	Bilateral	Infiltration Cellular	Lymphocytic, Minimal
* Heart		Cardiomyopathy	Mild
* Kidney	Bilateral	Nephropathy	Mild
* Liver		Basophilic Focus	
		Degeneration	Cystic, Focal, Mild
	Bile Duct	Hyperplasia	Moderate
		Mixed Cell Focus	
	Hepatocyte	Vacuolization Cytoplasmic	Minimal
[ Mixed Cell Focus TGLS = 1-6 ]			
* Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
* Pancreas	Acinar Cell	Atrophy	Focal, Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
* Preputial Gland	Bilateral	Inflammation	Chronic, Minimal
* Prostate		Inflammation	Chronic, Mild
* Seminal Vesicle	Bilateral	Atrophy	Marked

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 452	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> 0PPM/M FUMON-01	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100452

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

[ Atrophy TGLS = 2-10 ]			
* Spleen		Leukemia Mononuclear	
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 3-10 ]			
* Thyroid Gland	C Cell	Hyperplasia	Focal, Moderate
PRIMARY CAUSE OF DEATH	-		

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 453

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 739

**DOSE:** 0PPM/M FUMON-01

**DISP:** Terminal Sacrifice

**HISTO:** 21080100453

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Brain - Cerebellum
* Brain - Cerebrum	* Esophagus	* Intestine Large - Cecum	* Intestine Large - Colon
* Intestine Large - Rectum	* Intestine Small - Duodenum	* Intestine Small - Ileum	* Intestine Small - Jejunum
* Larynx	* Lung - Bronchus	* Nose	* Peripheral Nerve - Sciatic
* Skeletal Muscle - Thigh	* Spinal Cord - Thoracic	* Stomach - Forestomach	* Stomach - Glandular
* Tongue	* Trachea	* Urinary Bladder	* Zymbal's Gland

**OBSERVATIONS**

* Adrenal Gland		Leukemia Mononuclear	
	Medulla	Pheochromocytoma Benign	
* Bone Marrow		Leukemia Mononuclear	
* Coagulating Gland	Bilateral	Atrophy	Mild
* Epididymis	Bilateral, Epithelium	Degeneration	Mucoid, Moderate
* Eye	Bilateral, Retina	Atrophy	Marked
* Harderian Gland		Atrophy	Focal, Mild
		Infiltration Cellular	Lymphocytic, Minimal
* Heart		Cardiomyopathy	Minimal
* Kidney		Leukemia Mononuclear	
	Bilateral	Nephropathy	Mild
	Bilateral, Renal Tubule	Pigmentation	Minimal
* Lacrimal Gland		Leukemia Mononuclear	
* Liver	Bile Duct	Hyperplasia	Marked
		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 2-6 ]		
* Lung		Leukemia Mononuclear	
* Lymph Node	Mandibular	Leukemia Mononuclear	
	Mesenteric	Leukemia Mononuclear	
		Leukemia Mononuclear	
	Note: TGL IS ABDOMINAL LYMPH NODE		
	[ Leukemia Mononuclear TGLS = 3-14 ]		
* Mammary Gland		Cyst	Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 453	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> 0PPM/M FUMON-01	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100453

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

* Pancreas Note: ISLET CARCINOMA		Carcinoma	
* Parathyroid Gland		Adenoma	
* Pituitary Gland [ Adenoma TGLS = 7-11 ]	Pars Distalis	Adenoma	
* Preputial Gland Note: ONLY ONE		Inflammation	Chronic, Mild
* Prostate		Inflammation	Chronic Active, Marked
* Salivary Glands	Submandibul GI	Cytoplasmic Alteration	Focal, Mild
* Seminal Vesicle	Bilateral	Atrophy	Marked
* Skin [ Keratoacanthoma TGLS = 4-14 ]		Keratoacanthoma	
* Spleen [ Leukemia Mononuclear TGLS = 1-7 ]		Leukemia Mononuclear	
* Testes [ Adenoma TGLS = 5,8-10 ]	Bilateral, Interstit Cell	Adenoma	
* Thymus		Leukemia Mononuclear	
* Thyroid Gland Tissue NOS Note: TGL#6-NO MICROSCOPIC CORRELATE	C Cell	Hyperplasia	Focal, Mild

---

PRIMARY CAUSE OF DEATH -

---

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92002-03  
Test Type: CHRONIC  
Species/Strain: Rat/F 344/NCTR

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
Test Compound: Fumonisin B1  
CAS Number: 116355-83-0

Date Report Requested: 10/15/2014  
Time Report Requested: 18:08:22  
First Dose M/F: NA / NA  
Lab: NCTR

---

ANIMAL ID: 454	TRT#: 3	SEX: Male	DAY ON TEST: 739
	DOSE: 15PPM/M FUMON-03	DISP: Terminal Sacrifice	HISTO: 21080100454

---

ORGAN AND ACCOUNTABLE SITE STATUS

---

MISSING

\* Salivary Glands

---

OBSERVATIONS

* Kidney	Bilateral	Nephropathy	Mild
* Liver		Clear Cell Focus	
	Bile Duct	Hyperplasia	Mild
* Lymph Node	Mandibular	Degeneration	Cystic, Moderate
[ Degeneration TGLS = 1-3 ]			
* Saliv Glands			
Note: TGL#1-NOTED GROSSLY AS SALIVARY GLAND WAS LYMPH NODE			
* Skin	Subcut Tiss	Fibroma	
[ Fibroma TGLS = 4-3 ]			
* Testes	Interstit Cell	Adenoma	
	Germinal Epith	Atrophy	Marked
[ Adenoma TGLS = 3-3.1 ]			
[ Atrophy TGLS = 2-3.1 ]			

---

PRIMARY CAUSE OF DEATH

---

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

**ANIMAL ID:** 455

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 739

**DOSE:** 15PPM/M FUMON-03

**DISP:** Terminal Sacrifice

**HISTO:** 21080100455

---

**OBSERVATIONS**

* Kidney		Leukemia Mononuclear	
	Bilateral	Nephropathy	Moderate
* Liver	Bile Duct	Hyperplasia	Marked
		Leukemia Mononuclear	
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 2-3 ]			
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 1-3 ]			

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

**ANIMAL ID:** 456

**TRT#:** 4  
**DOSE:** 50PPM/M FUMON-04

**SEX:** Male  
**DISP:** Terminal Sacrifice

**DAY ON TEST:** 739  
**HISTO:** 21080100456

---

**OBSERVATIONS**

* Kidney	Bilateral, Renal Tubule Renal Tubule	Adenoma Hyperplasia	Focal, Moderate
* Liver	Bilateral Bile Duct	Nephropathy Hyperplasia Leukemia Mononuclear Mixed Cell Focus	Mild Marked
[ Leukemia Mononuclear TGLS = 2-1 ]			
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 3-3 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 1-3 ]			

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 457

**TRT#:** 4

**SEX:** Male

**DAY ON TEST:** 739

**DOSE:** 50PPM/M FUMON-04

**DISP:** Terminal Sacrifice

**HISTO:** 21080100457

**OBSERVATIONS**

* Eye	Retina	Atrophy	Marked
	Lens	Cataract	Moderate
[ Cataract TGLS = 5-3 ]			
* Kidney	Renal Tubule	Carcinoma	
		Nephropathy	Mild
[ Carcinoma TGLS = 2-2 ]			
* Liver		Basophilic Focus	
		Eosinophilic Focus	
	Bile Duct	Hyperplasia	Mild
		Leukemia Mononuclear	
* Seminal Vesicle	Bilateral	Atrophy	Marked
[ Atrophy TGLS = 4-3.1 ]			
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 1-3 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 3-3.1 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 458	<b>TRT#:</b> 4	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> 50PPM/M FUMON-04	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100458

---

**OBSERVATIONS**

* Adrenal Gland [ Pheochromocytoma Benign TGLS = 2-3 ]	Medulla	Pheochromocytoma Benign	
* Kidney [ Carcinoma TGLS = 3-2 ]	Renal Tubule	Carcinoma Cyst Hyperplasia	Mild Focal, Marked
* Liver Mesentery [ Fibroma TGLS = 4-3.1 ]	Bile Duct	Hyperplasia Mixed Cell Focus Fibroma	Mild
* Pituitary Gland [ Adenoma TGLS = 6-3.2 ]	Pars Distalis	Adenoma	
* Spleen [ Depletion TGLS = 1-3 ]		Depletion	Focal, Mild
* Testes [ Adenoma TGLS = 5-3 ]	Interstit Cell	Adenoma	

---

PRIMARY CAUSE OF DEATH -

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 459

**TRT#:** 4

**SEX:** Male

**DAY ON TEST:** 739

**DOSE:** 50PPM/M FUMON-04

**DISP:** Terminal Sacrifice

**HISTO:** 21080100459

**OBSERVATIONS**

* Kidney	Renal Tubule Bilateral	Hyperplasia Nephropathy	Focal, Moderate Minimal
* Liver	Bile Duct	Basophilic Focus Hepatodiaphragmatic Nodule Hyperplasia Leukemia Mononuclear Necrosis	Moderate Minimal
	[ Hepatodiaphragmatic Nodule TGLS = 5-1 ] [ Leukemia Mononuclear TGLS = 1-1 ]		
* Pituitary Gland	Pars Distalis	Adenoma	
	[ Adenoma TGLS = 2-3 ]		
* Spleen		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 3-3 ]		
* Testes	Bilateral, Interstit Cell	Adenoma	
	[ Adenoma TGLS = 4-3.1 ]		

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 460

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 739

**DOSE:** 150PPM/MFUMON-05

**DISP:** Terminal Sacrifice

**HISTO:** 21080100460

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Adrenal Gland	Blood Vessel - Aorta	Bone - Femur	Bone - Sternum
Bone Marrow	Brain - Cerebellum	Brain - Cerebrum	Esophagus
Intestine Large - Cecum	Intestine Large - Colon	Intestine Large - Rectum	Intestine Small - Duodenum
Intestine Small - Ileum	Intestine Small - Jejunum	Larynx	Lung - Bronchus
Lymph Node - Mandibular	Mammary Gland	Nose	Pancreas
Parathyroid Gland	Peripheral Nerve - Sciatic	Salivary Glands	Skeletal Muscle - Thigh
Skin	Spinal Cord - Thoracic	Stomach - Forestomach	Stomach - Glandular
Thymus	Tongue	Trachea	Urinary Bladder
Zymbal's Gland			

**OBSERVATIONS**

Brain	Hypothalamus	Compression	Mild
Coagulating Gland	Bilateral	Atrophy	Mild
Epididymis	Epithelium	Degeneration	Mucoid, Minimal
Eye	Retina	Atrophy	Mild
Harderian Gland		Infiltration Cellular	Lymphocytic, Minimal
Heart		Cardiomyopathy	Minimal
* Kidney	Renal Tubule	Adenoma	
		Cyst	Moderate
	Bilateral	Nephropathy	Mild
[ Cyst TGLS = 4-2 ]			
Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Liver		Eosinophilic Focus	
	Bile Duct	Hyperplasia	Moderate
		Inflammation	Chronic, Mild
		Pigmentation	Mild
	Hepatocyte	Vacuolization Cytoplasmic	Mild
Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 3-11 ]			
Preputial Gland	Bilateral	Inflammation	Chronic, Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 460	<b>TRT#:</b> 5	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> 150PPM/MFUMON-05	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100460

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

Prostate		Inflammation	Chronic Active, Mild
Seminal Vesicle	Bilateral	Atrophy	Marked
Spleen		Pigmentation	Minimal
Testes	Interstit Cell	Adenoma	
	Germinal Epith	Atrophy	Marked
	[ Adenoma TGLS = 1-10 ]		
	[ Atrophy TGLS = 2-10 ]		
Thyroid Gland	C Cell	Adenoma	

---

PRIMARY CAUSE OF DEATH -

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 461

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 739

**DOSE:** 150PPM/MFUMON-05

**DISP:** Terminal Sacrifice

**HISTO:** 21080100461

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Blood Vessel - Aorta	Bone - Femur	Bone - Sternum	Bone Marrow
Brain - Cerebellum	Brain - Cerebrum	Esophagus	Harderian Gland
Intestine Large - Cecum	Intestine Large - Colon	Intestine Large - Rectum	Intestine Small - Duodenum
Intestine Small - Ileum	Intestine Small - Jejunum	Larynx	Lung - Bronchus
Nose	Parathyroid Gland	Peripheral Nerve - Sciatic	Salivary Glands
Skeletal Muscle - Thigh	Skin	Spinal Cord - Thoracic	Stomach - Forestomach
Stomach - Glandular	Thymus	Tongue	Trachea
Urinary Bladder			

**MISSING**

Zymbal's Gland

**OBSERVATIONS**

Adrenal Gland		Leukemia Mononuclear	
Note: MEDULLA ONLY ONE			
Coagulating Gland	Bilateral	Atrophy	Mild
Epididymis	Bilateral, Epithelium	Degeneration	Mucoid, Mild
Eye	Bilateral, Retina	Atrophy	Mild
Heart		Cardiomyopathy	Mild
* Kidney	Renal Tubule	Adenoma	
	Bilateral	Nephropathy	Minimal
Note: HURTLE CELL TYPE			
Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Liver		Basophilic Focus	
		Clear Cell Focus	
	Bile Duct	Hyperplasia	Moderate
		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 2-6 ]			
Lymph Node	Mandibular	Leukemia Mononuclear	
	Mesenteric	Leukemia Mononuclear	
Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 4-10 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 461	<b>TRT#:</b> 5	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> 150PPM/MFUMON-05	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100461

---

<b>ORGAN AND ACCOUNTABLE SITE STATUS</b>			
Pancreas	Acinar Cell	Atrophy Carcinoma	Focal, Minimal
Note: ISLET CARCINOMA			
Pituitary Gland	Pars Distalis	Hyperplasia	Focal, Marked
Preputial Gland	Bilateral	Inflammation	Chronic, Mild
Prostate		Atrophy	Mild
Seminal Vesicle	Bilateral	Atrophy	Moderate
Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 3-7 ]			
Testes	Interstit Cell Germinal Epith	Adenoma Atrophy	Marked
[ Adenoma TGLS = 1-10 ]			
Thyroid Gland	C Cell	Hyperplasia	Focal, Marked

---

<b>PRIMARY CAUSE OF DEATH</b>	-
-------------------------------	---

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 462

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 739

**DOSE:** 150PPM/MFUMON-05

**DISP:** Terminal Sacrifice

**HISTO:** 21080100462

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Blood Vessel - Aorta	Bone - Femur	Bone - Sternum	Brain - Cerebellum
Brain - Cerebrum	Coagulating Gland	Epididymis	Esophagus
Intestine Large - Cecum	Intestine Large - Colon	Intestine Large - Rectum	Intestine Small - Duodenum
Intestine Small - Ileum	Intestine Small - Jejunum	Lacrimal Gland	Larynx
Lung - Bronchus	Lymph Node - Mandibular	Nose	Parathyroid Gland
Peripheral Nerve - Sciatic	Salivary Glands	Seminal Vesicle	Skeletal Muscle - Thigh
Skin	Spinal Cord - Thoracic	Stomach - Forestomach	Stomach - Glandular
Tongue	Trachea	Urinary Bladder	Zymbal's Gland

**MISSING**

Thymus

**OBSERVATIONS**

Adrenal Gland Note: MEDULLA ONE EXAMINED	Cortex	Vacuolization Cytoplasmic	Focal, Minimal
Bone Marrow		Depletion	Mild
Brain	Hypothalamus	Compression	Moderate
Eye	Retina	Atrophy	Minimal
Harderian Gland		Infiltration Cellular	Lymphocytic, Minimal
Heart		Cardiomyopathy	Mild
* Kidney [ Carcinoma TGLS = 1-6 ]	Renal Tubule Bilateral	Carcinoma Nephropathy	Mild
* Liver [ Eosinophilic Focus TGLS = 4-2 ]		Basophilic Focus Eosinophilic Focus	
	Bile Duct Hepatocyte	Hyperplasia Vacuolization Cytoplasmic	Mild Minimal
Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
Mammary Gland		Cyst	Minimal
Mesentery [ Necrosis TGLS = 3-14 ]	Fat	Necrosis	Mild

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 462	<b>TRT#:</b> 5	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> 150PPM/MFUMON-05	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100462

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

Pancreas		Adenoma Infiltration Cellular	Lymphocytic, Minimal
Note: ISLETS ADENOMA			
Pituitary Gland [ Adenoma TGLS = 5-11 ]	Pars Distalis	Adenoma	
Preputial Gland		Inflammation	Chronic Active, Mild
Prostate		Inflammation	Chronic Active, Mild
Spleen [ Leukemia Mononuclear TGLS = 2-7 ]		Leukemia Mononuclear	
Testes [ Adenoma TGLS = 6-10 ]	Bilateral, Interstit Cell	Adenoma	
Thyroid Gland	C Cell	Hyperplasia	Focal, Moderate

---

PRIMARY CAUSE OF DEATH -

---

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92002-03  
Test Type: CHRONIC  
Species/Strain: Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
Test Compound: Fumonisin B1  
CAS Number: 116355-83-0

Date Report Requested: 10/15/2014  
Time Report Requested: 18:08:22  
First Dose M/F: NA / NA  
Lab: NCTR

---

<b>ANIMAL ID:</b> 7	<b>TRT#:</b> 10	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 245
	<b>DOSE:</b> 0PPM/F FUMON-10	<b>DISP:</b> Harvest	<b>HISTO:</b> 21080100007

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Adrenal Gland	Blood Vessel - Aorta	Bone - Femur	Bone - Sternum
Bone Marrow	Brain - Cerebellum	Brain - Cerebrum	Clitoral Gland
Esophagus	Eye	Intestine Large - Cecum	Intestine Large - Colon
Intestine Large - Rectum	Intestine Small - Duodenum	Intestine Small - Ileum	Intestine Small - Jejunum
Larynx	Lung - Bronchus	Lymph Node - Mandibular	Lymph Node - Mesenteric
Mammary Gland	Nose	Ovary	Parathyroid Gland
Peripheral Nerve - Sciatic	Pituitary Gland	Salivary Glands	Skeletal Muscle - Thigh
Spinal Cord - Thoracic	Spleen	Stomach - Forestomach	Stomach - Glandular
Thymus	Thyroid Gland	Tongue	Trachea
Uterus	Vagina	Zymbal's Gland	

---

**MISSING**

Urinary Bladder

---

**OBSERVATIONS**

Harderian Gland		Infiltration Cellular	Lymphocytic, Minimal
Heart		Cardiomyopathy	Minimal
Kidney	Bilateral	Mineralization	Mild
Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
Liver		Inflammation	Chronic, Minimal
Pancreas		Infiltration Cellular	Lymphocytic, Minimal
Skin		Inflammation	Chronic Active, Mild

---

PRIMARY CAUSE OF DEATH

---

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92002-03  
Test Type: CHRONIC  
Species/Strain: Rat/F 344/NCTR

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
Test Compound: Fumonisin B1  
CAS Number: 116355-83-0

Date Report Requested: 10/15/2014  
Time Report Requested: 18:08:22  
First Dose M/F: NA / NA  
Lab: NCTR

---

ANIMAL ID: 8	TRT#: 11	SEX: Female	DAY ON TEST: 326
	DOSE: 5PPM/F FUMON-11	DISP: Harvest	HISTO: 21080100008

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Adrenal Gland	Blood Vessel - Aorta	Bone - Femur	Bone - Sternum
Brain - Cerebellum	Brain - Cerebrum	Clitoral Gland	Esophagus
Eye	Heart	Intestine Large - Colon	Intestine Large - Rectum
Intestine Small - Duodenum	Intestine Small - Ileum	Intestine Small - Jejunum	Larynx
Lung - Bronchus	Lymph Node - Mandibular	Lymph Node - Mesenteric	Nose
Ovary	Parathyroid Gland	Peripheral Nerve - Sciatic	Salivary Glands
Skeletal Muscle - Thigh	Skin	Spinal Cord - Thoracic	Spleen
Stomach - Forestomach	Thymus	Thyroid Gland	Tongue
Trachea	Urinary Bladder	Vagina	Zymbal's Gland

---

**MISSING**

Intestine Large - Cecum

---

**OBSERVATIONS**

Adrenal Gland		Myelofibrosis	Mild
Note: ONLY ONE		Inflammation	Chronic, Minimal
Bone Marrow	Bilateral	Mineralization	Minimal
Harderian Gland	Bilateral	Infiltration Cellular	Lymphocytic, Minimal
Kidney		Clear Cell Focus	
Lacrimal Gland		Hyperplasia	Minimal
Liver	Bile Duct	Galactocele	Minimal
Mammary Gland		Hyperplasia	Focal, Minimal
Pancreas	Acinar Cell	Hyperplasia	Focal, Minimal
Pituitary Gland	Pars Distalis	Cyst	Minimal
Stomach	Glandular	Cyst	Minimal
Uterus	Endometrium	Cyst	Minimal

---

PRIMARY CAUSE OF DEATH

---

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

<b>ANIMAL ID:</b> 9	<b>TRT#:</b> 11 <b>DOSE:</b> 5PPM/F FUMON-11	<b>SEX:</b> Female <b>DISP:</b> Harvest	<b>DAY ON TEST:</b> 326 <b>HISTO:</b> 21080100009
---------------------	---	--	--

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Adrenal Gland	Blood Vessel - Aorta	Bone - Femur	Bone - Sternum
Brain - Cerebellum	Brain - Cerebrum	Clitoral Gland	Esophagus
Eye	Harderian Gland	Heart	Intestine Large - Colon
Intestine Large - Rectum	Intestine Small - Duodenum	Intestine Small - Ileum	Intestine Small - Jejunum
Larynx	Lung - Bronchus	Mammary Gland	Ovary
Pancreas	Parathyroid Gland	Peripheral Nerve - Sciatic	Pituitary Gland
Skeletal Muscle - Thigh	Skin	Spinal Cord - Thoracic	Stomach - Glandular
Thyroid Gland	Tongue	Trachea	Urinary Bladder
Uterus	Vagina		

**MISSING**

Intestine Large - Cecum	Lymph Node - Mandibular	Stomach - Forestomach	Thymus
Zymbal's Gland			

**OBSERVATIONS**

Bone Marrow		Myelofibrosis	Minimal
Kidney	Bilateral	Mineralization	Minimal
Lacrimal Gland		Cytoplasmic Alteration	Minimal
Liver		Basophilic Focus	
		Hepatodiaphragmatic Nodule	
		Inflammation	Chronic, Minimal
[ Hepatodiaphragmatic Nodule TGLS = 1-6 ]			
Lung	Interstitial	Inflammation	Chronic, Minimal
Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
Nose	Olfactory Epi	Cytoplasmic Alteration	Minimal
Salivary Glands	Parotid GI	Hyperplasia	Focal, Mild
Spleen		Pigmentation	Minimal
Thymus			

Note: MISSING AT TRIM

<b>PRIMARY CAUSE OF DEATH</b>	-
-------------------------------	---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 10

**TRT#:** 13

**SEX:** Female

**DAY ON TEST:** 326

**DOSE:** 50PPM/F FUMON-13

**DISP:** Harvest

**HISTO:** 21080100010

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Blood Vessel - Aorta	Bone - Femur	Bone - Sternum	Bone Marrow
Brain - Cerebellum	Brain - Cerebrum	Esophagus	Eye
Intestine Large - Colon	Intestine Large - Rectum	Intestine Small - Duodenum	Intestine Small - Ileum
Intestine Small - Jejunum	Lung - Bronchus	Lymph Node - Mandibular	Mammary Gland
Nose	Ovary	Pancreas	Parathyroid Gland
Peripheral Nerve - Sciatic	Pituitary Gland	Salivary Glands	Skeletal Muscle - Thigh
Skin	Spinal Cord - Thoracic	Spleen	Stomach - Forestomach
Stomach - Glandular	Thymus	Thyroid Gland	Tongue
Trachea	Urinary Bladder	Vagina	

**MISSING**

Clitoral Gland	Intestine Large - Cecum	Zymbal's Gland
----------------	-------------------------	----------------

**OBSERVATIONS**

Adrenal Gland	Cortex	Hyperplasia	Focal, Minimal
Harderian Gland	Bilateral	Infiltration Cellular	Lymphocytic, Minimal
Heart		Cardiomyopathy	Minimal
Kidney	Bilateral	Mineralization	Minimal
Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
Larynx		Inflammation	Chronic, Minimal
Liver	Bile Duct	Hyperplasia	Minimal
Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
Mesentery	Fat	Necrosis	Mild
[ Necrosis TGLS = 3-14 ]			
Ovary			
Note: TGL#2-NOTED GROSSLY AS OVARY WAS OVIDUCT			
Oviduct		Cyst	Mild
[ Cyst TGLS = 2-10 ]			
Uterus		Hydrometra	Mild
[ Hydrometra TGLS = 1-10 ]			

**PRIMARY CAUSE OF DEATH** -

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92002-03  
Test Type: CHRONIC  
Species/Strain: Rat/F 344/NCTR

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
Test Compound: Fumonisin B1  
CAS Number: 116355-83-0

Date Report Requested: 10/15/2014  
Time Report Requested: 18:08:22  
First Dose M/F: NA / NA  
Lab: NCTR

---

<b>ANIMAL ID:</b> 11	<b>TRT#:</b> 13	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 326
	<b>DOSE:</b> 50PPM/F FUMON-13	<b>DISP:</b> Harvest	<b>HISTO:</b> 21080100011

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Adrenal Gland	Blood Vessel - Aorta	Bone - Femur	Bone - Sternum
Bone Marrow	Brain - Cerebellum	Brain - Cerebrum	Clitoral Gland
Esophagus	Eye	Heart	Intestine Large - Colon
Intestine Large - Rectum	Intestine Small - Duodenum	Intestine Small - Ileum	Intestine Small - Jejunum
Larynx	Lung - Bronchus	Lymph Node - Mandibular	Lymph Node - Mesenteric
Mammary Gland	Ovary	Parathyroid Gland	Peripheral Nerve - Sciatic
Pituitary Gland	Salivary Glands	Skeletal Muscle - Thigh	Skin
Spinal Cord - Thoracic	Spleen	Stomach - Forestomach	Stomach - Glandular
Thymus	Thyroid Gland	Tongue	Trachea
Urinary Bladder	Vagina	Zymbal's Gland	

---

**MISSING**

Intestine Large - Cecum

---

**OBSERVATIONS**

Harderian Gland	Bilateral	Inflammation	Chronic, Mild
Kidney	Bilateral	Mineralization	Minimal
Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
Liver		Inflammation	Chronic, Minimal
Nose	Nasolacrim Dct	Inflammation	Chronic Active, Minimal
		Inflammation	Chronic, Minimal
Pancreas	Acinar Cell	Atrophy	Focal, Minimal
Uterus	Endometrium	Inflammation	Chronic Active, Minimal
Zymbals GI			

Note: ONLY ONE

---

PRIMARY CAUSE OF DEATH

---

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92002-03  
 Test Type: CHRONIC  
 Species/Strain: Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
 Test Compound: Fumonisin B1  
 CAS Number: 116355-83-0

Date Report Requested: 10/15/2014  
 Time Report Requested: 18:08:22  
 First Dose M/F: NA / NA  
 Lab: NCTR

---

ANIMAL ID: 17	TRT#: 10 DOSE: 0PPM/F FUMON-10	SEX: Female DISP: Moribund	DAY ON TEST: 321 HISTO: 21080100017
---------------	-----------------------------------	-------------------------------	--

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Gland	* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum
* Bone Marrow	* Brain - Cerebellum	* Brain - Cerebrum	* Clitoral Gland
* Esophagus	* Eye	* Heart	* Intestine Large - Cecum
* Intestine Large - Colon	* Intestine Large - Rectum	* Intestine Small - Duodenum	* Intestine Small - Ileum
* Intestine Small - Jejunum	* Lacrimal Gland	* Larynx	* Lymph Node - Mandibular
* Lymph Node - Mesenteric	* Ovary	* Pancreas	* Parathyroid Gland
* Peripheral Nerve - Sciatic	* Pituitary Gland	* Salivary Glands	* Skeletal Muscle - Thigh
* Skin	* Spinal Cord - Thoracic	* Spleen	* Stomach - Forestomach
* Stomach - Glandular	* Thyroid Gland	* Tongue	* Trachea
* Urinary Bladder	* Uterus	* Vagina	* Zymbal's Gland

**MISSING**

* Lung - Bronchus	* Thymus
-------------------	----------

**OBSERVATIONS**

* Harderian Gland		Inflammation	Chronic, Mild
* Kidney	Bilateral	Mineralization	Minimal
* Liver		Basophilic Focus	
		Hepatodiaphragmatic Nodule	
[ Hepatodiaphragmatic Nodule TGLS = 2-6 ]			
* Lung			
Note: MISSING AT TRIM			
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 1-14 ]			
* Nose	Nasolacrim Dct	Inflammation	Chronic, Minimal
* Thymus			
Note: MISSING AT TRIM			

---

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

Animal Note: COD...PROBABLE-MAMMARY GL,FIBROADENOMA

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 18

**TRT#:** 13

**SEX:** Female

**DAY ON TEST:** 314

**DOSE:** 50PPM/F FUMON-13

**DISP:** Moribund

**HISTO:** 21080100018

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Gland	* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum
* Bone Marrow	* Brain - Cerebellum	* Brain - Cerebrum	* Clitoral Gland
* Esophagus	* Eye	* Heart	* Intestine Large - Cecum
* Intestine Large - Colon	* Intestine Large - Rectum	* Intestine Small - Duodenum	* Intestine Small - Ileum
* Intestine Small - Jejunum	* Larynx	* Lung - Bronchus	* Lymph Node - Mandibular
* Lymph Node - Mesenteric	* Mammary Gland	* Nose	* Ovary
* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Salivary Glands	* Skeletal Muscle - Thigh
* Spinal Cord - Thoracic	* Spleen	* Stomach - Forestomach	* Stomach - Glandular
* Thymus	* Thyroid Gland	* Tongue	* Trachea
* Urinary Bladder	* Vagina		

**MISSING**

\* Zymbal's Gland

**OBSERVATIONS**

* Harderian Gland		Infiltration Cellular	Lymphocytic, Minimal
* Kidney	Bilateral	Mineralization	Minimal
* Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Liver		Basophilic Focus	
		Hepatodiaphragmatic Nodule	
[ Hepatodiaphragmatic Nodule TGLS = 2-6 ]			
* Lymph Node	Deep Cervical	Hyperplasia	Mild
[ Hyperplasia TGLS = 4-8.1 ]			
* Pancreas	Acinar Cell	Atrophy	Focal, Minimal
* Pituitary Gland	Pars Distalis	Cyst	Minimal
* Skin		Inflammation	Chronic, Mild
[ Inflammation TGLS = 3-14 ]			
* Uterus		Hydrometra	Moderate
[ Hydrometra TGLS = 1-10 ]			

**PRIMARY CAUSE OF DEATH** - UNCERTAIN

Animal Note: COD...UNKNOWN

\* PROTOCOL REQUIRED TISSUE



Experiment Number: 92002-03  
 Test Type: CHRONIC  
 Species/Strain: Rat/F 344/NCTR

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
 Test Compound: Fumonisin B1  
 CAS Number: 116355-83-0

Date Report Requested: 10/15/2014  
 Time Report Requested: 18:08:22  
 First Dose M/F: NA / NA  
 Lab: NCTR

ANIMAL ID: 27

TRT#: 12

SEX: Female

DAY ON TEST: 406

DOSE: 15PPM/F FUMON-12

DISP: Moribund

HISTO: 21080100027

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Gland	* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum
* Brain - Cerebellum	* Brain - Cerebrum	* Clitoral Gland	* Esophagus
* Eye	* Heart	* Intestine Large - Cecum	* Intestine Large - Colon
* Intestine Large - Rectum	* Intestine Small - Duodenum	* Intestine Small - Ileum	* Intestine Small - Jejunum
* Larynx	* Lung - Bronchus	* Lymph Node - Mandibular	* Ovary
* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Pituitary Gland	* Salivary Glands
* Skeletal Muscle - Thigh	* Skin	* Spinal Cord - Thoracic	* Stomach - Forestomach
* Stomach - Glandular	* Thyroid Gland	* Tongue	* Trachea
* Urinary Bladder	* Uterus	* Vagina	* Zymbal's Gland

OBSERVATIONS

* Adrenal Gland			
Note: ONLY ONE			
* Bone Marrow		Hyperplasia	Mild
* Harderian Gland	Bilateral	Inflammation	Chronic, Minimal
* Kidney	Bilateral	Mineralization	Minimal
		Nephropathy	Minimal
* Lacrimal Gland		Atrophy	Focal, Mild
* Liver		Basophilic Focus	
		Hematopoietic Cell Proliferation	Minimal
* Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
* Mammary Gland		Carcinoma	
[ Carcinoma TGLS = 1-10.1 ]			
* Nose	Olfactory Epi	Cytoplasmic Alteration	Mild
* Pancreas	Acinar Cell	Atrophy	Focal, Minimal
* Spleen		Hematopoietic Cell Proliferation	Mild
* Thymus		Hyperplasia	Mild

PRIMARY CAUSE OF DEATH - Mammary Gland Carcinoma

Animal Note: COD...PROBABLE-MAMMARY GLAND,CARCINOMA

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 31

**TRT#:** 13

**SEX:** Female

**DAY ON TEST:** 400

**DOSE:** 50PPM/F FUMON-13

**DISP:** Moribund

**HISTO:** 21080100031

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Gland	* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum
* Bone Marrow	* Brain - Cerebellum	* Brain - Cerebrum	* Clitoral Gland
* Esophagus	* Eye	* Harderian Gland	* Heart
* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum	* Intestine Small - Duodenum
* Intestine Small - Ileum	* Intestine Small - Jejunum	* Lacrimal Gland	* Larynx
* Lung - Bronchus	* Lymph Node - Mandibular	* Nose	* Ovary
* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Salivary Glands	* Skeletal Muscle - Thigh
* Skin	* Spinal Cord - Thoracic	* Stomach - Forestomach	* Stomach - Glandular
* Thymus	* Thyroid Gland	* Tongue	* Trachea
* Urinary Bladder	* Uterus	* Zymbal's Gland	

**OBSERVATIONS**

* Adrenal Gland			
Note: ONLY ONE			
* Harderian Gland			
Note: TGL # 1,2- NULLIFIED BY TRIMMER			
* Kidney	Bilateral	Mineralization	Minimal
* Liver		Basophilic Focus	
		Inflammation	Chronic, Minimal
	Hepatocyte	Vacuolization Cytoplasmic	Minimal
* Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
* Mammary Gland		Galactocele	Mild
* Pancreas	Acinar Cell	Atrophy	Focal, Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 3-11 ]			
* Spleen		Pigmentation	Minimal
* Vagina		Inflammation	Chronic Active, Mild

**PRIMARY CAUSE OF DEATH** - Pituitary Gland Pars Distalis Adenoma

Animal Note: COD...PROBABLE-PITUITARY,ADENOMA

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

<b>ANIMAL ID:</b> 35	<b>TRT#:</b> 14	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 477
	<b>DOSE:</b> 100PPM/FFUMON-14	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100035

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Adrenal Gland	Blood Vessel - Aorta	Bone - Femur	Bone - Sternum
Bone Marrow	Brain - Cerebellum	Brain - Cerebrum	Esophagus
Eye	Heart	Intestine Large - Cecum	Intestine Large - Colon
Intestine Large - Rectum	Intestine Small - Duodenum	Intestine Small - Ileum	Intestine Small - Jejunum
Lacrimal Gland	Larynx	Lung - Bronchus	Lymph Node - Mandibular
Mammary Gland	Ovary	Pancreas	Parathyroid Gland
Peripheral Nerve - Sciatic	Salivary Glands	Skeletal Muscle - Thigh	Skin
Spinal Cord - Thoracic	Stomach - Forestomach	Stomach - Glandular	Thymus
Thyroid Gland	Tongue	Trachea	Vagina
Zymbal's Gland			

**MISSING**

Clitoral Gland	Urinary Bladder
----------------	-----------------

**OBSERVATIONS**

Adrenal Gland			
Note: only one			
Harderian Gland	Bilateral	Infiltration Cellular	Lymphocytic, Minimal
* Kidney	Bilateral	Mineralization	Minimal
* Liver		Basophilic Focus	
		Clear Cell Focus	
		Tension Lipidosis	
Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
Nose	Olfactory Epi	Cytoplasmic Alteration	Minimal
Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 1-11 ]			
Spleen		Hematopoietic Cell Proliferation	Mild
Uterus	Endometrium	Hemorrhage	Minimal
		Prolapse	
[ Prolapse TGLS = 2-10 ]			

<b>PRIMARY CAUSE OF DEATH</b>	- Uterus Prolapse
-------------------------------	-------------------

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

**ANIMAL ID:** 35

**TRT#:** 14

**SEX:** Female

**DAY ON TEST:** 477

**DOSE:** 100PPM/FFUMON-14

**DISP:** Moribund

**HISTO:** 21080100035

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

Animal Note: COD...PROBABLE-UTERUS,PROLAPSE

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 38      **TRT#:** 11      **SEX:** Female      **DAY ON TEST:** 468  
**DOSE:** 5PPM/F FUMON-11      **DISP:** Moribund      **HISTO:** 21080100038

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Gland	* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum
* Brain - Cerebellum	* Brain - Cerebrum	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum
* Intestine Small - Duodenum	* Intestine Small - Ileum	* Intestine Small - Jejunum	* Lacrimal Gland
* Larynx	* Lung - Bronchus	* Mammary Gland	* Nose
* Ovary	* Pancreas	* Parathyroid Gland	* Peripheral Nerve - Sciatic
* Salivary Glands	* Skeletal Muscle - Thigh	* Skin	* Spinal Cord - Thoracic
* Stomach - Forestomach	* Thyroid Gland	* Tongue	* Trachea
* Urinary Bladder	* Vagina	* Zymbal's Gland	

**OBSERVATIONS**

* Bone Marrow		Leukemia Mononuclear	
* Eye	Bilateral, Retina	Atrophy	Moderate
* Harderian Gland	Bilateral	Infiltration Cellular	Lymphocytic, Minimal
* Heart			
Note: TGL # 03 - NO MICROSCOPIC CORRELATE			
* Kidney	Bilateral	Mineralization	Minimal
	Bilateral, Renal Tubule	Pigmentation	Moderate
* Liver	Bile Duct	Hyperplasia	Moderate
	Hepatocyte	Leukemia Mononuclear	
		Vacuolization Cytoplasmic	Marked
	[ Hyperplasia TGLS = 5-6.2 ]		
	[ Leukemia Mononuclear TGLS = 2-6 ]		
* Lung		Leukemia Mononuclear	
* Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
	Mandibular	Leukemia Mononuclear	
Mesentery	Fat	Necrosis	Mild
	[ Necrosis TGLS = 4-14 ]		
* Pituitary Gland	Pars Distalis	Cyst	Mild
		Leukemia Mononuclear	
* Spleen		Leukemia Mononuclear	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 38	<b>TRT#:</b> 11	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 468
	<b>DOSE:</b> 5PPM/F FUMON-11	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100038

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

[ Leukemia Mononuclear TGLS = 1-6.1 ]

* Stomach	Glandular	Cyst	Minimal
* Thymus		Leukemia Mononuclear	
* Uterus		Hydrometra	Moderate

---

**PRIMARY CAUSE OF DEATH** - Spleen Leukemia Mononuclear

---

Animal Note: COD...PROBABLE-LEUKEMIA MONONUCLEAR CELL

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

<b>ANIMAL ID:</b> 39	<b>TRT#:</b> 11	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 460
	<b>DOSE:</b> 5PPM/F FUMON-11	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100039

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Brain - Cerebellum
* Brain - Cerebrum	* Clitoral Gland	* Esophagus	* Heart
* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum	* Intestine Small - Duodenum
* Intestine Small - Ileum	* Intestine Small - Jejunum	* Lacrimal Gland	* Larynx
* Lung - Bronchus	* Lymph Node - Mandibular	* Lymph Node - Mesenteric	* Mammary Gland
* Nose	* Pancreas	* Parathyroid Gland	* Peripheral Nerve - Sciatic
* Salivary Glands	* Skeletal Muscle - Thigh	* Spinal Cord - Thoracic	* Stomach - Forestomach
* Thyroid Gland	* Tongue	* Trachea	* Urinary Bladder
* Vagina	* Zymbal's Gland		

**MISSING**

\* Thymus

**OBSERVATIONS**

* Adrenal Gland	Cortex	Inflammation	Chronic, Minimal
* Bone Marrow		Hyperplasia	Mild
* Eye	Retina	Atrophy	Moderate
* Harderian Gland	Bilateral	Infiltration Cellular	Lymphocytic, Minimal
* Kidney	Bilateral	Mineralization	Minimal
* Liver		Basophilic Focus	
		Hematopoietic Cell Proliferation	Minimal
* Lung			
Note: RIGHT MISSING			
* Ovary	Follicle	Cyst	Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
* Skin		Inflammation	Chronic, Minimal
* Spleen		Hematopoietic Cell Proliferation	Moderate
* Stomach	Glandular	Cyst	Minimal
* Uterus	Endometrium	Inflammation	Chronic Active, Moderate
		Prolapse	

[ Prolapse TGLS = 1-12 ]

\* Vagina

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

**ANIMAL ID:** 39

**TRT#:** 11

**SEX:** Female

**DAY ON TEST:** 460

**DOSE:** 5PPM/F FUMON-11

**DISP:** Moribund

**HISTO:** 21080100039

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

Note: TGL#1-NOTED GROSSLY AS VAGINA WAS UTERUS

---

PRIMARY CAUSE OF DEATH

- Uterus Prolapse

---

Animal Note: COD...PROBABLE-UTERUS,PROLAPSE

---

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 40      **TRT#:** 12      **SEX:** Female      **DAY ON TEST:** 453  
**DOSE:** 15PPM/F FUMON-12      **DISP:** Moribund      **HISTO:** 21080100040

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Gland	* Blood Vessel - Aorta	* Brain - Cerebellum	* Brain - Cerebrum
* Esophagus	* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum
* Intestine Small - Duodenum	* Intestine Small - Ileum	* Intestine Small - Jejunum	* Lacrimal Gland
* Larynx	* Lung - Bronchus	* Lymph Node - Mandibular	* Mammary Gland
* Ovary	* Pancreas	* Parathyroid Gland	* Peripheral Nerve - Sciatic
* Salivary Glands	* Skeletal Muscle - Thigh	* Skin	* Spinal Cord - Thoracic
* Stomach - Forestomach	* Thymus	* Tongue	* Trachea
* Urinary Bladder	* Vagina	* Zymbal's Gland	

**MISSING**

* Bone - Sternum	* Bone Marrow	* Clitoral Gland
------------------	---------------	------------------

**OBSERVATIONS**

* Bone	Femur	Hyperostosis	Moderate
* Eye	Bilateral, Retina	Atrophy	Moderate
* Harderian Gland	Bilateral	Infiltration Cellular	Lymphocytic, Minimal
* Heart		Cardiomyopathy	Minimal
* Kidney	Bilateral	Mineralization	Minimal
	Bilateral	Nephropathy	Minimal
* Liver		Basophilic Focus	
		Hepatodiaphragmatic Nodule	
		Tension Lipidosis	
	[ Hepatodiaphragmatic Nodule TGLS = 1-6 ]		
* Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
* Nose	Olfactory Epi	Cytoplasmic Alteration	Mild
	Nasolacrim Dct	Inflammation	Chronic, Mild
* Pituitary Gland	Pars Distalis	Cyst	Minimal
* Spleen		Hematopoietic Cell Proliferation	Moderate
* Stomach	Glandular	Cyst	Minimal
* Thyroid Gland	C Cell	Adenoma	
* Uterus	Endometrium	Polyp Stromal	

[ Polyp Stromal TGLS = 2-12 ]

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 40	<b>TRT#:</b> 12	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 453
	<b>DOSE:</b> 15PPM/F FUMON-12	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100040

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

\* Vagina

Note: TGL#2-NOTED GROSSLY AS VAGINA WAS UTERUS

---

PRIMARY CAUSE OF DEATH - Uterus Endometrium Polyp Stromal

---

Animal Note: COD...PROBABLE-UTERUS,POLYP STROMAL

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

<b>ANIMAL ID:</b> 41	<b>TRT#:</b> 11 <b>DOSE:</b> 5PPM/F FUMON-11	<b>SEX:</b> Female <b>DISP:</b> Moribund	<b>DAY ON TEST:</b> 509 <b>HISTO:</b> 21080100041
----------------------	---	---	--

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Gland	* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum
* Bone Marrow	* Brain - Cerebellum	* Brain - Cerebrum	* Esophagus
* Eye	* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum
* Intestine Small - Duodenum	* Intestine Small - Ileum	* Intestine Small - Jejunum	* Larynx
* Lung - Bronchus	* Lymph Node - Mandibular	* Ovary	* Parathyroid Gland
* Peripheral Nerve - Sciatic	* Salivary Glands	* Skeletal Muscle - Thigh	* Skin
* Spinal Cord - Thoracic	* Stomach - Forestomach	* Stomach - Glandular	* Thyroid Gland
* Tongue	* Trachea	* Urinary Bladder	* Uterus
* Vagina			

**MISSING**

* Clitoral Gland	* Zymbal's Gland
------------------	------------------

**OBSERVATIONS**

* Harderian Gland	Bilateral	Infiltration Cellular	Lymphocytic, Minimal
* Heart		Cardiomyopathy	Minimal
* Kidney	Bilateral	Mineralization	Minimal
		Nephropathy	Minimal
	Bilateral, Renal Tubule	Pigmentation	Minimal
* Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Liver		Basophilic Focus	
		Inflammation	Chronic, Minimal
* Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
* Mammary Gland		Carcinoma	
* Nose	Olfactory Epi	Cytoplasmic Alteration	Minimal
	Nasolacrim Dct	Inflammation	Chronic Active, Mild
* Pancreas	Acinar Cell	Atrophy	Focal, Minimal
		Infiltration Cellular	Lymphocytic, Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
	Pars Distalis	Cyst	Mild
* Spleen		Pigmentation	Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 41	<b>TRT#:</b> 11	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 509
	<b>DOSE:</b> 5PPM/F FUMON-11	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100041

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

* Thymus	Hemorrhage	Minimal
----------	------------	---------

---

PRIMARY CAUSE OF DEATH - Mammary Gland Carcinoma

---

Animal Note: COD...PROBABLE-MAMMARY GLAND,CARCINOMA

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

<b>ANIMAL ID:</b> 42	<b>TRT#:</b> 12 <b>DOSE:</b> 15PPM/F FUMON-12	<b>SEX:</b> Female <b>DISP:</b> Moribund	<b>DAY ON TEST:</b> 509 <b>HISTO:</b> 21080100042
----------------------	--	---	--

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Gland	* Blood Vessel - Aorta	* Bone Marrow	* Brain - Cerebellum
* Brain - Cerebrum	* Clitoral Gland	* Esophagus	* Eye
* Heart	* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum
* Intestine Small - Duodenum	* Intestine Small - Ileum	* Intestine Small - Jejunum	* Larynx
* Lung - Bronchus	* Lymph Node - Mandibular	* Ovary	* Parathyroid Gland
* Peripheral Nerve - Sciatic	* Pituitary Gland	* Salivary Glands	* Skeletal Muscle - Thigh
* Skin	* Spinal Cord - Thoracic	* Stomach - Forestomach	* Stomach - Glandular
* Thyroid Gland	* Tongue	* Trachea	* Urinary Bladder
* Uterus	* Vagina	* Zymbal's Gland	

**OBSERVATIONS**

* Bone	Femur	Hyperostosis	Moderate
	Sternum	Hyperostosis	Moderate
	Turbinates	Hyperostosis	Mild
* Harderian Gland	Bilateral	Inflammation	Chronic, Minimal
* Kidney	Bilateral	Mineralization	Mild
* Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Liver		Basophilic Focus	
		Inflammation	Chronic, Minimal
* Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
* Mammary Gland		Fibroadenoma	
	[ Fibroadenoma TGLS = 1-10.1 ]		
* Nose	Olfactory Epi	Cytoplasmic Alteration	Minimal
* Pancreas	Acinar Cell	Atrophy	Focal, Minimal
* Spleen		Pigmentation	Minimal
* Thymus		Hyperplasia	Mild

**PRIMARY CAUSE OF DEATH** - Mammary Gland Fibroadenoma

Animal Note: COD...PROBABLE-MAMMARY GLAND,FIBROADENOMA

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

<b>ANIMAL ID:</b> 43	<b>TRT#:</b> 12	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 509
	<b>DOSE:</b> 15PPM/F FUMON-12	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100043

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Gland	* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum
* Bone Marrow	* Brain - Cerebellum	* Brain - Cerebrum	* Esophagus
* Heart	* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum
* Intestine Small - Duodenum	* Intestine Small - Ileum	* Intestine Small - Jejunum	* Lacrimal Gland
* Larynx	* Lung - Bronchus	* Lymph Node - Mandibular	* Mammary Gland
* Ovary	* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Salivary Glands
* Skeletal Muscle - Thigh	* Skin	* Spinal Cord - Thoracic	* Spleen
* Stomach - Forestomach	* Stomach - Glandular	* Tongue	* Trachea
* Urinary Bladder	* Uterus	* Vagina	* Zymbal's Gland

**OBSERVATIONS**

* Adrenal Gland			
Note: ONLY ONE			
* Clitoral Gland		Adenoma	
[ Adenoma TGLS = 1-10.1 ]			
* Eye	Retina	Atrophy	Mild
* Harderian Gland	Bilateral	Inflammation	Chronic, Minimal
* Kidney	Bilateral	Mineralization	Minimal
* Liver		Basophilic Focus	
		Tension Lipidosis	
* Lung			
Note: TGL #3,4 - NO MICROSCOPIC CORRELATE			
* Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
* Nose	Olfactory Epi	Cytoplasmic Alteration	Minimal
* Pancreas	Acinar Cell	Atrophy	Focal, Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
* Thymus		Hyperplasia	Minimal
* Thyroid Gland	C Cell	Hyperplasia	Focal, Minimal
* Urin Bladder			
Note: TGL#2-NULLIFIED BY TRIMMER (MISSING AT TRIM)			

**PRIMARY CAUSE OF DEATH** - Clitoral Gland Adenoma

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

**ANIMAL ID:** 43

**TRT#:** 12

**SEX:** Female

**DAY ON TEST:** 509

**DOSE:** 15PPM/F FUMON-12

**DISP:** Moribund

**HISTO:** 21080100043

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

Animal Note: COD...PROBABLE-CLITORAL GL,ADENOMA

---

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92002-03  
 Test Type: CHRONIC  
 Species/Strain: Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
 Test Compound: Fumonisin B1  
 CAS Number: 116355-83-0

Date Report Requested: 10/15/2014  
 Time Report Requested: 18:08:22  
 First Dose M/F: NA / NA  
 Lab: NCTR

ANIMAL ID: 44      TRT#: 11      SEX: Female      DAY ON TEST: 463  
 DOSE: 5PPM/F FUMON-11      DISP: Moribund      HISTO: 21080100044

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Gland	* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum
* Bone Marrow	* Brain - Cerebellum	* Brain - Cerebrum	* Esophagus
* Eye	* Heart	* Intestine Large - Cecum	* Intestine Large - Colon
* Intestine Large - Rectum	* Intestine Small - Duodenum	* Intestine Small - Ileum	* Intestine Small - Jejunum
* Larynx	* Lung - Bronchus	* Lymph Node - Mandibular	* Mammary Gland
* Ovary	* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Salivary Glands
* Skeletal Muscle - Thigh	* Spinal Cord - Thoracic	* Spleen	* Stomach - Forestomach
* Thymus	* Thyroid Gland	* Tongue	* Trachea
* Urinary Bladder	* Uterus	* Vagina	* Zymbal's Gland

**MISSING**

\* Clitoral Gland      \* Pituitary Gland

**OBSERVATIONS**

* Harderian Gland		Infiltration Cellular	Lymphocytic, Minimal
* Kidney		Mineralization	Mild
		Nephropathy	Minimal
* Lacrimal Gland		Infiltration Cellular	Lymphocytic, Mild
* Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Chronic, Minimal
* Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
* Nose	Olfactory Epi	Cytoplasmic Alteration	Minimal
* Pancreas	Acinar Cell	Atrophy	Focal, Mild
* Skin		Inflammation	Chronic Active, Mild
		Ulcer	Mild
* Stomach	Glandular	Cyst	Minimal

PRIMARY CAUSE OF DEATH      - UNCERTAIN

Animal Note: COD...UNKNOWN

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

<b>ANIMAL ID:</b> 45	<b>TRT#:</b> 14	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 477
	<b>DOSE:</b> 100PPM/FFUMON-14	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100045

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Blood Vessel - Aorta	Bone - Femur	Bone - Sternum	Brain - Cerebellum
Brain - Cerebrum	Esophagus	Intestine Large - Cecum	Intestine Large - Colon
Intestine Large - Rectum	Intestine Small - Duodenum	Intestine Small - Ileum	Intestine Small - Jejunum
Larynx	Lung - Bronchus	Mammary Gland	Ovary
Pancreas	Peripheral Nerve - Sciatic	Pituitary Gland	Salivary Glands
Skeletal Muscle - Thigh	Skin	Spinal Cord - Thoracic	Stomach - Forestomach
Stomach - Glandular	Tongue	Trachea	Urinary Bladder
Vagina	Zymbal's Gland		

**MISSING**

Clitoral Gland	Parathyroid Gland
----------------	-------------------

**OBSERVATIONS**

Adrenal Gland	Medulla	Hyperplasia	Focal, Mild
Bone Marrow		Leukemia Mononuclear	
Clitoral Gl			
Note: MISSING AT TRIM			
Eye	Retina	Atrophy	Moderate
Harderian Gland	Bilateral	Inflammation	Chronic, Mild
Heart		Leukemia Mononuclear	
* Kidney		Leukemia Mononuclear	
	Bilateral	Mineralization	Minimal
Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Liver		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 1,4-6+6.2 ]			
Lymph Node	Mandibular	Leukemia Mononuclear	
	Mesenteric	Leukemia Mononuclear	
Nose	Nasolacrim Dct	Inflammation	Acute, Minimal
Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 2-6.1 ]			
Thymus		Leukemia Mononuclear	
Thyroid Gland	C Cell	Hyperplasia	Focal, Marked

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 45	<b>TRT#:</b> 14	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 477
	<b>DOSE:</b> 100PPM/FFUMON-14	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100045

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

Uterus	Endometrium	Polyp Stromal
[ Polyp Stromal TGLS = 3-10 ]		

---

**PRIMARY CAUSE OF DEATH** - Spleen Leukemia Mononuclear

---

Animal Note: COD...PROBABLE-LEUKEMIA MONUC

---

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 49

**TRT#:** 12

**SEX:** Female

**DAY ON TEST:** 495

**DOSE:** 15PPM/F FUMON-12

**DISP:** Moribund

**HISTO:** 21080100049

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Brain - Cerebellum
* Brain - Cerebrum	* Lacrimal Gland	* Larynx	* Lung - Bronchus
* Mammary Gland	* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Skin
* Spinal Cord - Thoracic	* Tongue	* Zymbal's Gland	

**OBSERVATIONS**

* Adrenal Gland		Leukemia Mononuclear	
Note: ONLY ONE			
* Bone Marrow		Leukemia Mononuclear	
* Brain		Leukemia Mononuclear	
* Clitoral Gland		Leukemia Mononuclear	
* Esophagus		Leukemia Mononuclear	
* Eye	Bilateral, Retina	Atrophy	Moderate
	Bilateral, Lens	Cataract	Mild
* Harderian Gland		Leukemia Mononuclear	
* Heart		Leukemia Mononuclear	
* Intestine Large	Cecum	Leukemia Mononuclear	
	Colon	Leukemia Mononuclear	
	Rectum	Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 6-7.1 ]			
* Intestine Small	Duodenum	Leukemia Mononuclear	
	Ileum	Leukemia Mononuclear	
	Jejunum	Leukemia Mononuclear	
* Kidney		Leukemia Mononuclear	
	Bilateral	Mineralization	Minimal
* Liver		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 4-6 ]			
* Lung		Leukemia Mononuclear	
* Lymph Node	Mandibular	Leukemia Mononuclear	
	Mesenteric	Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 3-11 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

<b>ANIMAL ID:</b> 49	<b>TRT#:</b> 12 <b>DOSE:</b> 15PPM/F FUMON-12	<b>SEX:</b> Female <b>DISP:</b> Moribund	<b>DAY ON TEST:</b> 495 <b>HISTO:</b> 21080100049
----------------------	--	---	--

**ORGAN AND ACCOUNTABLE SITE STATUS**

* Nose	Olfactory Epi Nasolacrim Dct	Cytoplasmic Alteration Inflammation	Minimal Chronic Active, Mild
* Ovary		Leukemia Mononuclear	
* Pancreas		Leukemia Mononuclear	
* Pituitary Gland		Leukemia Mononuclear	
* Salivary Glands		Leukemia Mononuclear	
* Skeletal Muscle	Thigh	Degeneration	Mild
* Skin			
Note: TGL#5-NULIFIED BY TRIMMER			
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 1-6 ]			
* Stomach	Forestomach Glandular	Leukemia Mononuclear Leukemia Mononuclear	
* Thymus		Leukemia Mononuclear	
* Thyroid Gland	C Cell	Hyperplasia	Diffuse, Mild
		Leukemia Mononuclear	
* Trachea		Leukemia Mononuclear	
* Urinary Bladder		Leukemia Mononuclear	
* Uterus		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 2-10 ]			
* Vagina		Leukemia Mononuclear	

PRIMARY CAUSE OF DEATH - Spleen Leukemia Mononuclear

Animal Note: COD...PROBABLE-LEUKEMIA MONONUCLEAR CELL

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

<b>ANIMAL ID:</b> 52	<b>TRT#:</b> 11 <b>DOSE:</b> 5PPM/F FUMON-11	<b>SEX:</b> Female <b>DISP:</b> Moribund	<b>DAY ON TEST:</b> 498 <b>HISTO:</b> 21080100052
----------------------	---	---	--

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Gland	* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum
* Bone Marrow	* Brain - Cerebellum	* Brain - Cerebrum	* Clitoral Gland
* Esophagus	* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum
* Intestine Small - Duodenum	* Intestine Small - Ileum	* Intestine Small - Jejunum	* Lacrimal Gland
* Larynx	* Lung - Bronchus	* Ovary	* Pancreas
* Peripheral Nerve - Sciatic	* Salivary Glands	* Skeletal Muscle - Thigh	* Skin
* Spinal Cord - Thoracic	* Stomach - Forestomach	* Stomach - Glandular	* Tongue
* Trachea	* Uterus	* Vagina	* Zymbal's Gland

**MISSING**

\* Parathyroid Gland

**OBSERVATIONS**

* Brain	Hypothalamus	Compression	Mild
* Eye	Retina	Atrophy	Moderate
* Harderian Gland		Infiltration Cellular	Lymphocytic, Minimal
* Heart		Cardiomyopathy	Minimal
* Kidney	Bilateral	Mineralization	Minimal
	Bilateral	Nephropathy	Minimal
* Liver		Basophilic Focus	
		Hepatodiaphragmatic Nodule	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Chronic, Mild
	[ Hepatodiaphragmatic Nodule TGLS = 1-6 ]		
* Lymph Node	Mandibular	Degeneration	Cystic, Minimal
	Mesenteric	Infiltration Cellular	Histiocytic, Mild
* Mammary Gland		Cyst	Minimal
		Fibroadenoma	
	[ Fibroadenoma TGLS = 3-10.1 ]		
* Nose	Olfactory Epi	Cytoplasmic Alteration	Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
	[ Adenoma TGLS = 2-11 ]		

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 52	<b>TRT#:</b> 11	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 498
	<b>DOSE:</b> 5PPM/F FUMON-11	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100052

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

* Spleen		Pigmentation	Minimal
* Thymus		Atrophy	Mild
* Thyroid Gland	C Cell	Hyperplasia	Focal, Minimal
* Urinary Bladder		Infiltration Cellular	Lymphocytic, Minimal

---

**PRIMARY CAUSE OF DEATH** - Pituitary Gland Pars Distalis Adenoma

---

Animal Note: COD...PROBABLE-PITUITARY GLAND,ADENOMA

---

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92002-03  
 Test Type: CHRONIC  
 Species/Strain: Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
 Test Compound: Fumonisin B1  
 CAS Number: 116355-83-0

Date Report Requested: 10/15/2014  
 Time Report Requested: 18:08:22  
 First Dose M/F: NA / NA  
 Lab: NCTR

ANIMAL ID: 53

TRT#: 10

SEX: Female

DAY ON TEST: 537

DOSE: 0PPM/F FUMON-10

DISP: Moribund

HISTO: 21080100053

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Gland	* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum
* Brain - Cerebellum	* Brain - Cerebrum	* Clitoral Gland	* Esophagus
* Eye	* Heart	* Intestine Large - Cecum	* Intestine Large - Colon
* Intestine Large - Rectum	* Intestine Small - Duodenum	* Intestine Small - Jejunum	* Larynx
* Lung - Bronchus	* Lymph Node - Mandibular	* Mammary Gland	* Ovary
* Pancreas	* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Salivary Glands
* Skeletal Muscle - Thigh	* Skin	* Spinal Cord - Thoracic	* Stomach - Forestomach
* Stomach - Glandular	* Thymus	* Thyroid Gland	* Tongue
* Trachea	* Urinary Bladder	* Vagina	* Zymbal's Gland

**MISSING**

\* Intestine Small - Ileum

**OBSERVATIONS**

* Bone Marrow		Hyperplasia	Mild
* Harderian Gland		Infiltration Cellular	Lymphocytic, Minimal
* Kidney	Bilateral	Mineralization	Minimal
	Bilateral	Nephropathy	Mild
* Lacrimal Gland		Cytoplasmic Alteration	Mild
	Duct	Proliferation	Focal, Mild
* Liver		Basophilic Focus	
		Hematopoietic Cell Proliferation	Minimal
* Lung		Infiltration Cellular	Histiocytic, Minimal
* Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
* Nose	Olfactory Epi	Cytoplasmic Alteration	Minimal
* Pituitary Gland	Pars Distalis	Angiectasis	Mild
* Spleen		Hematopoietic Cell Proliferation	Mild
		[ Hematopoietic Cell Proliferation TGLS = 2-6 ]	
* Uterus	Endometrium	Inflammation	Chronic, Mild
	Endometrium	Polyp Stromal	
		Prolapse	
		[ Polyp Stromal TGLS = 3-12 ]	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

**ANIMAL ID:** 53

**TRT#:** 10

**SEX:** Female

**DAY ON TEST:** 537

**DOSE:** 0PPM/F FUMON-10

**DISP:** Moribund

**HISTO:** 21080100053

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

[ Prolapse TGLS = 1-10 ]

\* Vagina

Note: TGL#3-NOTED GROSSLY AS VAGINA WAS UTERUS

---

PRIMARY CAUSE OF DEATH

- Uterus Endometrium Polyp Stromal

---

Animal Note: COD...PROBABLE-UTERUS,STROMAL POLYP

---

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 57                      **TRT#:** 10                      **SEX:** Female                      **DAY ON TEST:** 574  
**DOSE:** 0PPM/F FUMON-10                      **DISP:** Moribund                      **HISTO:** 21080100057

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Brain - Cerebellum
* Brain - Cerebrum	* Esophagus	* Eye	* Intestine Large - Cecum
* Intestine Large - Colon	* Intestine Large - Rectum	* Intestine Small - Duodenum	* Intestine Small - Ileum
* Intestine Small - Jejunum	* Lacrimal Gland	* Larynx	* Lung - Bronchus
* Lymph Node - Mandibular	* Ovary	* Pancreas	* Parathyroid Gland
* Peripheral Nerve - Sciatic	* Salivary Glands	* Skeletal Muscle - Thigh	* Skin
* Spinal Cord - Thoracic	* Stomach - Forestomach	* Thymus	* Tongue
* Trachea	* Urinary Bladder	* Uterus	* Vagina
* Zymbal's Gland			

**OBSERVATIONS**

* Adrenal Gland	Bilateral, Cortex	Vacuolization Cytoplasmic	Focal, Mild
* Bone Marrow		Hyperplasia	Mild
* Brain	Hypothalamus	Compression	Moderate
* Clitoral Gland		Adenoma	
[ Adenoma TGLS = 1-10 ]			
* Harderian Gland		Infiltration Cellular	Lymphocytic, Minimal
* Heart		Cardiomyopathy	Mild
		Mesothelioma Malignant	Metastatic (Uncertain Primary Site)
* Kidney	Bilateral	Mineralization	Minimal
	Bilateral	Nephropathy	Moderate
[ Nephropathy TGLS = 4-2 ]			
* Liver		Angiectasis	Focal, Mild
		Hepatodiaphragmatic Nodule	
		Leukemia Mononuclear	
[ Hepatodiaphragmatic Nodule TGLS = 6-6.1 ]		Mixed Cell Focus	
[ Leukemia Mononuclear TGLS = 5-6.1 ]			
* Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
* Mammary Gland	Epithelium	Hyperplasia	Focal, Mild
Mesentery	Fat	Necrosis	Moderate

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 57	<b>TRT#:</b> 10	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 574
	<b>DOSE:</b> 0PPM/F FUMON-10	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100057

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

[ Necrosis TGLS = 2-14 ]			
* Nose	Olfactory Epi Nasolacrim Dct	Cytoplasmic Alteration Inflammation	Minimal Chronic, Mild
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 8-11 ]			
* Skin			
Note: TGL # 09 - NO MICROSCOPIC CORRELATE			
Note: TGL#9-10 RECUT 3/28/97 RECUT SKIN NORMAL			
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 3-6 ]			
* Stomach	Glandular, Serosa	Inflammation	Chronic, Mild
* Thyroid Gland	Follicle	Hyperplasia	Moderate
[ Hyperplasia TGLS = 7-4 ]			

---

**PRIMARY CAUSE OF DEATH** - Pituitary Gland Pars Distalis Adenoma

---

Animal Note: COD...PROBABLE-PITUITARY GL,ADENOMA

---

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92002-03  
 Test Type: CHRONIC  
 Species/Strain: Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
 Test Compound: Fumonisin B1  
 CAS Number: 116355-83-0

Date Report Requested: 10/15/2014  
 Time Report Requested: 18:08:22  
 First Dose M/F: NA / NA  
 Lab: NCTR

<b>ANIMAL ID:</b> 58	<b>TRT#:</b> 13 <b>DOSE:</b> 50PPM/F FUMON-13	<b>SEX:</b> Female <b>DISP:</b> Moribund	<b>DAY ON TEST:</b> 539 <b>HISTO:</b> 21080100058
----------------------	--	---	--

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Gland	* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum
* Bone Marrow	* Brain - Cerebellum	* Brain - Cerebrum	* Esophagus
* Eye	* Harderian Gland	* Heart	* Intestine Large - Cecum
* Intestine Large - Colon	* Intestine Large - Rectum	* Intestine Small - Duodenum	* Intestine Small - Ileum
* Intestine Small - Jejunum	* Lacrimal Gland	* Lung - Bronchus	* Lymph Node - Mandibular
* Nose	* Ovary	* Pancreas	* Parathyroid Gland
* Peripheral Nerve - Sciatic	* Salivary Glands	* Skeletal Muscle - Thigh	* Skin
* Spinal Cord - Thoracic	* Stomach - Forestomach	* Stomach - Glandular	* Thyroid Gland
* Tongue	* Urinary Bladder	* Vagina	* Zymbal's Gland

**MISSING**

\* Larynx

**OBSERVATIONS**

* Clitoral Gland		Hyperplasia	Focal, Minimal
* Kidney	Bilateral	Mineralization	Minimal
* Liver		Basophilic Focus	
		Inflammation	Chronic, Minimal
* Lung		Infiltration Cellular	Histiocytic, Minimal
* Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 1-14 ]			
* Pituitary Gland	Pars Distalis	Cyst	Minimal
* Spleen	Capsule	Cyst	Minimal
* Thymus		Cyst	Minimal
* Trachea		Inflammation	Chronic, Minimal
* Uterus	Endometrium	Cyst	Mild

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

Animal Note: COD...PROBABLE-MAMMARY GLAND,FIBROADENOMA

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

<b>ANIMAL ID:</b> 61	<b>TRT#:</b> 11 <b>DOSE:</b> 5PPM/F FUMON-11	<b>SEX:</b> Female <b>DISP:</b> Moribund	<b>DAY ON TEST:</b> 565 <b>HISTO:</b> 21080100061
----------------------	---	---	--

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Gland	* Blood Vessel - Aorta	* Brain - Cerebellum	* Brain - Cerebrum
* Clitoral Gland	* Esophagus	* Eye	* Heart
* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum	* Intestine Small - Duodenum
* Intestine Small - Ileum	* Intestine Small - Jejunum	* Lacrimal Gland	* Larynx
* Lung - Bronchus	* Lymph Node - Mandibular	* Mammary Gland	* Pancreas
* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Salivary Glands	* Skeletal Muscle - Thigh
* Skin	* Spinal Cord - Thoracic	* Stomach - Forestomach	* Thyroid Gland
* Tongue	* Trachea	* Urinary Bladder	* Uterus
* Vagina	* Zymbal's Gland		

**OBSERVATIONS**

* Bone	Femur	Hyperostosis	Mild
	Sternum	Hyperostosis	Mild
	Turbinates	Hyperostosis	Marked
* Bone Marrow		Leukemia Mononuclear	
* Harderian Gland	Bilateral	Infiltration Cellular	Lymphocytic, Minimal
* Kidney	Bilateral	Mineralization	Minimal
	Bilateral, Renal Tubule	Pigmentation	Mild
* Liver		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 4-6.1 ]		
* Lung		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 3-5 + 5.1 ]		
* Lymph Node	Mesenteric	Leukemia Mononuclear	
Mesentery	Fat	Necrosis	Minimal
	[ Necrosis TGLS = 6-14 ]		
* Nose	Olfactory Epi	Cytoplasmic Alteration	Mild
* Ovary	Periovarn Tiss	Cyst	Mild
	[ Cyst TGLS = 1-10 ]		
* Pituitary Gland	Pars Distalis	Cyst	Mild
	[ Leukemia Mononuclear TGLS = 5-11 ]	Leukemia Mononuclear	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 61	<b>TRT#:</b> 11	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 565
	<b>DOSE:</b> 5PPM/F FUMON-11	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100061

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

* Spleen [ Leukemia Mononuclear TGLS = 2-6 ]		Leukemia Mononuclear	
* Stomach	Glandular	Cyst	Minimal
* Thymus		Leukemia Mononuclear	

---

**PRIMARY CAUSE OF DEATH** - Spleen Leukemia Mononuclear

---

Animal Note: COD...PROBABLE-LEUKEMIA MONONUCLEAR CELL

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 62

**TRT#:** 11

**SEX:** Female

**DAY ON TEST:** 586

**DOSE:** 5PPM/F FUMON-11

**DISP:** Natural Death

**HISTO:** 21080100062

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Gland	* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum
* Brain - Cerebellum	* Brain - Cerebrum	* Clitoral Gland	* Esophagus
* Eye	* Heart	* Intestine Large - Cecum	* Intestine Large - Colon
* Intestine Large - Rectum	* Intestine Small - Duodenum	* Intestine Small - Ileum	* Intestine Small - Jejunum
* Lung - Bronchus	* Lymph Node - Mandibular	* Nose	* Ovary
* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Salivary Glands	* Skeletal Muscle - Thigh
* Skin	* Spinal Cord - Thoracic	* Spleen	* Stomach - Forestomach
* Stomach - Glandular	* Thymus	* Thyroid Gland	* Tongue
* Trachea	* Uterus	* Vagina	* Zymbal's Gland

**MISSING**

\* Urinary Bladder

**OBSERVATIONS**

* Bone Marrow		Depletion	Minimal
* Brain	Hypothalamus	Compression	Mild
* Harderian Gland		Infiltration Cellular	Lymphocytic, Minimal
* Kidney	Bilateral	Mineralization	Mild
* Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Larynx		Inflammation	Chronic, Minimal
* Liver		Basophilic Focus	
		Hepatodiaphragmatic Nodule	
[ Hepatodiaphragmatic Nodule TGLS = 2-6 ]			
* Lung		Congestion	Moderate
* Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
* Mammary Gland		Cyst	Minimal
		Fibroadenoma	
[ Fibroadenoma TGLS = 1-10.1 ]			
* Pancreas	Acinar Cell	Atrophy	Focal, Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 3-11 ]			

**PRIMARY CAUSE OF DEATH** - Pituitary Gland Pars Distalis Adenoma

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

**ANIMAL ID:** 62

**TRT#:** 11

**SEX:** Female

**DAY ON TEST:** 586

**DOSE:** 5PPM/F FUMON-11

**DISP:** Natural Death

**HISTO:** 21080100062

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

---

Animal Note: COD...PROBABLE-PITUITARY GLAND,ADENOMA

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

<b>ANIMAL ID:</b> 65	<b>TRT#:</b> 12	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 554
	<b>DOSE:</b> 15PPM/F FUMON-12	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100065

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Gland	* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum
* Brain - Cerebellum	* Brain - Cerebrum	* Esophagus	* Harderian Gland
* Heart	* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Small - Duodenum
* Intestine Small - Ileum	* Intestine Small - Jejunum	* Lacrimal Gland	* Larynx
* Lung - Bronchus	* Mammary Gland	* Nose	* Ovary
* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Salivary Glands	* Skeletal Muscle - Thigh
* Skin	* Spinal Cord - Thoracic	* Stomach - Forestomach	* Thymus
* Tongue	* Trachea	* Zymbal's Gland	

**OBSERVATIONS**

* Bone Marrow		Hyperplasia	Mild
* Clitoral Gland		Adenoma	
Note: ONLY ONE			
* Eye	Bilateral, Retina	Atrophy	Moderate
* Intestine Large	Rectum	Schwannoma Malignant	Metastatic (Uterus)
[ Schwannoma Malignant TGLS = 1-7.2 ]			
* Kidney	Bilateral	Mineralization	Minimal
* Liver		Basophilic Focus	
		Mixed Cell Focus	
* Lymph Node	Mandibular	Hyperplasia	Mild
	Mesenteric	Hyperplasia	Mild
* Pancreas	Acinar Cell	Atrophy	Focal, Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
* Spleen		Hematopoietic Cell Proliferation	Mild
* Stomach	Glandular	Cyst	Minimal
* Thyroid Gland	C Cell	Adenoma	
* Urinary Bladder		Schwannoma Malignant	Metastatic (Uterus)
* Uterus		Schwannoma Malignant	
[ Schwannoma Malignant TGLS = 2-10.1 ]			
* Vagina		Schwannoma Malignant	Metastatic (Uterus)

**PRIMARY CAUSE OF DEATH** - Uterus Schwannoma Malignant

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

**ANIMAL ID:** 65

**TRT#:** 12

**SEX:** Female

**DAY ON TEST:** 554

**DOSE:** 15PPM/F FUMON-12

**DISP:** Moribund

**HISTO:** 21080100065

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

Animal Note: COD...PROBABLE-UTERUS,SCHWANNOMA MALIGNANT

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 67                      **TRT#:** 14                      **SEX:** Female                      **DAY ON TEST:** 536  
**DOSE:** 100PPM/FFUMON-14                      **DISP:** Moribund                      **HISTO:** 21080100067

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Adrenal Gland	Blood Vessel - Aorta	Brain - Cerebellum	Brain - Cerebrum
Esophagus	Intestine Large - Cecum	Intestine Large - Colon	Intestine Large - Rectum
Intestine Small - Duodenum	Intestine Small - Ileum	Intestine Small - Jejunum	Larynx
Lung - Bronchus	Mammary Gland	Nose	Ovary
Pancreas	Parathyroid Gland	Peripheral Nerve - Sciatic	Salivary Glands
Skeletal Muscle - Thigh	Skin	Spinal Cord - Thoracic	Stomach - Forestomach
Stomach - Glandular	Tongue	Trachea	Urinary Bladder
Uterus	Vagina	Zymbal's Gland	

**OBSERVATIONS**

Bone	Femur	Hyperostosis	Mild
	Sternum	Hyperostosis	Mild
Bone Marrow		Leukemia Mononuclear	
Clitoral Gland		Inflammation	Chronic, Minimal
Eye	Retina	Atrophy	Moderate
Harderian Gland	Bilateral	Infiltration Cellular	Lymphocytic, Mild
Heart		Leukemia Mononuclear	
* Kidney	Renal Tubule	Pigmentation	Mild
Lacrimal Gland		Leukemia Mononuclear	
* Liver		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 2-6.1 ]		
Lung		Leukemia Mononuclear	
Lymph Node	Mandibular	Leukemia Mononuclear	
	Mesenteric	Leukemia Mononuclear	
Pituitary Gland	Pars Distalis	Adenoma	
	[ Adenoma TGLS = 3-11 ]		
Spleen		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 1-6 ]		
Thymus		Leukemia Mononuclear	
Thyroid Gland	C Cell	Hyperplasia	Focal, Mild

**PRIMARY CAUSE OF DEATH** - Spleen Leukemia Mononuclear

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

**ANIMAL ID:** 67

**TRT#:** 14

**SEX:** Female

**DAY ON TEST:** 536

**DOSE:** 100PPM/FFUMON-14

**DISP:** Moribund

**HISTO:** 21080100067

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

Animal Note: COD...PROBABLE-LEUKEMIA MONONUCLEAR CELL

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 70

**TRT#:** 12

**SEX:** Female

**DAY ON TEST:** 554

**DOSE:** 15PPM/F FUMON-12

**DISP:** Natural Death

**HISTO:** 21080100070

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Gland	* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum
* Bone Marrow	* Brain - Cerebellum	* Brain - Cerebrum	* Clitoral Gland
* Esophagus	* Eye	* Intestine Large - Cecum	* Intestine Large - Colon
* Intestine Large - Rectum	* Intestine Small - Duodenum	* Intestine Small - Ileum	* Intestine Small - Jejunum
* Larynx	* Lung - Bronchus	* Ovary	* Pancreas
* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Salivary Glands	* Skeletal Muscle - Thigh
* Skin	* Spinal Cord - Thoracic	* Stomach - Forestomach	* Stomach - Glandular
* Thyroid Gland	* Tongue	* Trachea	* Urinary Bladder
* Uterus	* Vagina	* Zymbal's Gland	

**OBSERVATIONS**

* Brain	Hypothalamus	Compression	Minimal
* Harderian Gland	Bilateral	Infiltration Cellular	Lymphocytic, Minimal
* Heart		Cardiomyopathy	Mild
* Kidney	Bilateral	Mineralization	Minimal
	Bilateral	Nephropathy	Minimal
* Lacrimal Gland		Infiltration Cellular	Lymphocytic, Mild
* Liver		Basophilic Focus	
		Clear Cell Focus	
		Tension Lipidosis	
* Lung			
Note: TGL#4-NULIFIED BY TRIMMER			
* Lymph Node	Mandibular	Hemorrhage	Mild
	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
* Mammary Gland		Cyst	Mild
* Nose	Olfactory Epi	Cytoplasmic Alteration	Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 3-11 ]			
* Spleen		Pigmentation	Minimal
* Thymus		Hemorrhage	Mild
* Uterus			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

**ANIMAL ID:** 70

**TRT#:** 12

**SEX:** Female

**DAY ON TEST:** 554

**DOSE:** 15PPM/F FUMON-12

**DISP:** Natural Death

**HISTO:** 21080100070

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

Note: TGL#1-NULLIFIED BY TRIMMER

\* Vagina

Note: TGL # 02 - NO MICROSCOPIC CORRELATE

---

**PRIMARY CAUSE OF DEATH** - Pituitary Gland Pars Distalis Adenoma

---

Animal Note: COD...PROBABLE-PITUITARY GLAND,ADENOMA

---

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92002-03  
Test Type: CHRONIC  
Species/Strain: Rat/F 344/NCTR

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
Test Compound: Fumonisin B1  
CAS Number: 116355-83-0

Date Report Requested: 10/15/2014  
Time Report Requested: 18:08:22  
First Dose M/F: NA / NA  
Lab: NCTR

---

ANIMAL ID: 75	TRT#: 10	SEX: Female	DAY ON TEST: 572
	DOSE: 0PPM/F FUMON-10	DISP: Moribund	HISTO: 21080100075

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

* Adrenal Gland	* Blood Vessel - Aorta	* Bone Marrow	* Brain - Cerebellum
* Brain - Cerebrum	* Clitoral Gland	* Esophagus	* Eye
* Heart	* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum
* Intestine Small - Duodenum	* Intestine Small - Ileum	* Intestine Small - Jejunum	* Lacrimal Gland
* Larynx	* Lung - Bronchus	* Lymph Node - Mandibular	* Mammary Gland
* Ovary	* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Pituitary Gland
* Salivary Glands	* Skin	* Spinal Cord - Thoracic	* Spleen
* Stomach - Forestomach	* Stomach - Glandular	* Thymus	* Thyroid Gland
* Tongue	* Trachea	* Urinary Bladder	* Vagina

---

**MISSING**

\* Zymbal's Gland

---

**OBSERVATIONS**

* Bone	Femur	Hyperostosis	Marked
	Sternum	Hyperostosis	Marked
* Harderian Gland	Bilateral	Infiltration Cellular	Lymphocytic, Mild
* Kidney	Bilateral	Mineralization	Mild
* Liver		Basophilic Focus	
		Inflammation	Chronic, Minimal
* Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
* Nose	Olfactory Epi	Cytoplasmic Alteration	Mild
* Pancreas	Acinar Cell	Atrophy	Focal, Minimal
* Pituitary Gl			
Note: TGL # 02 - NO MICROSCOPIC CORRELATE			
* Skeletal Muscle	Thigh	Atrophy	Mild
	[ Atrophy TGLS = 3-9.2 ]		
* Uterus		Hydrometra	Marked
	[ Hydrometra TGLS = 1-10 ]		

---

PRIMARY CAUSE OF DEATH - UNCERTAIN

---

Animal Note: COD...UNKNOWN

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

<b>ANIMAL ID:</b> 77	<b>TRT#:</b> 12 <b>DOSE:</b> 15PPM/F FUMON-12	<b>SEX:</b> Female <b>DISP:</b> Moribund	<b>DAY ON TEST:</b> 561 <b>HISTO:</b> 21080100077
----------------------	--	---	--

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Gland	* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum
* Brain - Cerebellum	* Brain - Cerebrum	* Clitoral Gland	* Esophagus
* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum	* Intestine Small - Duodenum
* Intestine Small - Ileum	* Intestine Small - Jejunum	* Larynx	* Lung - Bronchus
* Mammary Gland	* Nose	* Ovary	* Pancreas
* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Pituitary Gland	* Salivary Glands
* Skeletal Muscle - Thigh	* Skin	* Spinal Cord - Thoracic	* Stomach - Forestomach
* Thyroid Gland	* Tongue	* Trachea	* Urinary Bladder
* Uterus	* Vagina		

**MISSING**

\* Zymbal's Gland

**OBSERVATIONS**

* Bone [ Cyst TGLS = 1-14 ]	Mandible	Cyst	Marked
* Bone Marrow		Hyperplasia	Mild
* Eye	Bilateral, Retina	Atrophy	Moderate
* Harderian Gland		Infiltration Cellular	Lymphocytic, Minimal
* Heart		Cardiomyopathy	Minimal
* Kidney		Mineralization	Minimal
	Bilateral, Renal Tubule	Pigmentation	Minimal
* Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Liver		Basophilic Focus	
* Lymph Node	Mandibular	Degeneration	Cystic, Mild
	Mandibular	Hyperplasia	Mild
	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
* Spleen		Hematopoietic Cell Proliferation	Minimal
* Stomach	Glandular	Cyst	Minimal
* Thymus		Cyst	Mild

**PRIMARY CAUSE OF DEATH** - Bone Mandible Cyst

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

**ANIMAL ID:** 77

**TRT#:** 12

**SEX:** Female

**DAY ON TEST:** 561

**DOSE:** 15PPM/F FUMON-12

**DISP:** Moribund

**HISTO:** 21080100077

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

Animal Note: COD...PROBABLE-BONE MANDIBLE,CYST

---

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

<b>ANIMAL ID:</b> 79	<b>TRT#:</b> 10	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 596
	<b>DOSE:</b> 0PPM/F FUMON-10	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100079

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Gland	* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum
* Brain - Cerebellum	* Brain - Cerebrum	* Esophagus	* Eye
* Heart	* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum
* Intestine Small - Duodenum	* Intestine Small - Ileum	* Intestine Small - Jejunum	* Larynx
* Lung - Bronchus	* Lymph Node - Mandibular	* Nose	* Ovary
* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Skeletal Muscle - Thigh	* Spinal Cord - Thoracic
* Thyroid Gland	* Tongue	* Trachea	* Urinary Bladder
* Vagina	* Zymbal's Gland		

**MISSING**

\* Clitoral Gland

**OBSERVATIONS**

* Bone Marrow		Hyperplasia	Mild
* Harderian Gland	Bilateral	Infiltration Cellular	Lymphocytic, Minimal
* Kidney	Bilateral	Mineralization	Mild
	Bilateral	Nephropathy	Minimal
* Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Liver		Basophilic Focus	
	Hepatocyte	Vacuolization Cytoplasmic	Marked
* Lung		Infiltration Cellular	Histiocytic, Minimal
* Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
* Mammary Gland		Galactocele	Mild
Note: TGL#1-NOTED GROSSLY AS MAMMARY GLAND WAS SKIN			
* Pancreas	Acinar Cell	Atrophy	Focal, Mild
		Inflammation	Chronic, Mild
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 3-11 ]			
* Salivary Glands	Submandibul GI	Atrophy	Marked
* Skin	Subcut Tiss	Schwannoma Malignant	
[ Schwannoma Malignant TGLS = 1-10.1 ]			
* Spleen		Hematopoietic Cell Proliferation	Mild

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 79	<b>TRT#:</b> 10 <b>DOSE:</b> 0PPM/F FUMON-10	<b>SEX:</b> Female <b>DISP:</b> Moribund	<b>DAY ON TEST:</b> 596 <b>HISTO:</b> 21080100079
----------------------	---	---	--

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

* Stomach	Glandular Epithelium, Forestomach Forestomach	Cyst Hyperplasia Inflammation	Minimal Mild Chronic, Mild
* Thymus		Atrophy	Mild
* Uterus	Endometrium	Polyp Stromal	

Note: TGL#2-NULIFIED BY TRIMMER

---

**PRIMARY CAUSE OF DEATH** - Skin Subcut Tiss Schwannoma Malignant

---

Animal Note: COD...PROBABLE-SKIN,SCHWANNOMA MALIGNANT

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 82

**TRT#:** 12

**SEX:** Female

**DAY ON TEST:** 610

**DOSE:** 15PPM/F FUMON-12

**DISP:** Moribund

**HISTO:** 21080100082

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Gland	* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum
* Bone Marrow	* Brain - Cerebellum	* Brain - Cerebrum	* Clitoral Gland
* Esophagus	* Eye	* Intestine Large - Cecum	* Intestine Large - Colon
* Intestine Large - Rectum	* Intestine Small - Duodenum	* Intestine Small - Ileum	* Intestine Small - Jejunum
* Larynx	* Lung - Bronchus	* Lymph Node - Mandibular	* Ovary
* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Salivary Glands	* Skeletal Muscle - Thigh
* Skin	* Spinal Cord - Thoracic	* Stomach - Forestomach	* Stomach - Glandular
* Thymus	* Tongue	* Trachea	* Urinary Bladder
* Uterus	* Vagina	* Zymbal's Gland	

**OBSERVATIONS**

* Brain	Hypothalamus	Compression	Moderate
* Harderian Gland	Bilateral	Infiltration Cellular	Lymphocytic, Minimal
* Heart		Cardiomyopathy	Mild
* Kidney	Bilateral	Mineralization	Minimal
	Bilateral	Nephropathy	Minimal
* Lacrimal Gland		Infiltration Cellular	Lymphocytic, Mild
* Liver		Angiectasis	Focal, Minimal
		Basophilic Focus	
* Lung		Infiltration Cellular	Histiocytic, Minimal
* Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Mild
* Mammary Gland		Carcinoma	
* Nose	Olfactory Epi	Cytoplasmic Alteration	Minimal
	Nasolacrim Dct	Inflammation	Chronic, Mild
* Ovary			
Note: TGL # 01 - NULLIFIED BY TRIMMER			
* Pancreas	Acinar Cell	Atrophy	Focal, Minimal
		Infiltration Cellular	Lymphocytic, Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 2-11 ]			
* Spleen		Pigmentation	Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 82	<b>TRT#:</b> 12	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 610
	<b>DOSE:</b> 15PPM/F FUMON-12	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100082

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

* Thyroid Gland	C Cell	Hyperplasia	Focal, Marked
-----------------	--------	-------------	---------------

---

PRIMARY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma

---

Animal Note: COD...PROBABLE-PITUITARY GLAND,ADENOMA

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

<b>ANIMAL ID:</b> 89	<b>TRT#:</b> 13 <b>DOSE:</b> 50PPM/F FUMON-13	<b>SEX:</b> Female <b>DISP:</b> Moribund	<b>DAY ON TEST:</b> 580 <b>HISTO:</b> 21080100089
----------------------	--	---	--

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Bone Marrow
* Brain - Cerebellum	* Brain - Cerebrum	* Esophagus	* Intestine Large - Cecum
* Intestine Large - Colon	* Intestine Large - Rectum	* Intestine Small - Duodenum	* Intestine Small - Ileum
* Intestine Small - Jejunum	* Larynx	* Lung - Bronchus	* Lymph Node - Mandibular
* Ovary	* Pancreas	* Parathyroid Gland	* Peripheral Nerve - Sciatic
* Pituitary Gland	* Salivary Glands	* Skeletal Muscle - Thigh	* Skin
* Spinal Cord - Thoracic	* Spleen	* Stomach - Forestomach	* Stomach - Glandular
* Thyroid Gland	* Tongue	* Trachea	* Urinary Bladder
* Uterus	* Vagina		

**MISSING**

* Clitoral Gland	* Zymbal's Gland
------------------	------------------

**OBSERVATIONS**

* Adrenal Gland Note: ONLY ONE	Cortex	Angiectasis	Minimal
* Eye	Bilateral, Retina	Atrophy	Moderate
* Harderian Gland		Infiltration Cellular	Lymphocytic, Minimal
* Heart		Cardiomyopathy	Minimal
* Kidney	Bilateral	Mineralization	Minimal
	Bilateral	Nephropathy	Minimal
* Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Liver		Basophilic Focus	
* Lung Note: TGL # 2,3- NO MICROSCOPIC CORRELATE			
* Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Mild
* Mammary Gland [ Fibroadenoma TGLS = 1-10 ]		Fibroadenoma	
* Nose	Olfactory Epi	Cytoplasmic Alteration	Minimal
* Thymus		Cyst	Minimal

<b>PRIMARY CAUSE OF DEATH</b>	- Mammary Gland Fibroadenoma
-------------------------------	------------------------------

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

**ANIMAL ID:** 89

**TRT#:** 13

**SEX:** Female

**DAY ON TEST:** 580

**DOSE:** 50PPM/F FUMON-13

**DISP:** Moribund

**HISTO:** 21080100089

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

Animal Note: COD...PROBABLE-MAMMARY GLAND,FIBROADENOMA

---

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92002-03  
 Test Type: CHRONIC  
 Species/Strain: Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
 Test Compound: Fumonisin B1  
 CAS Number: 116355-83-0

Date Report Requested: 10/15/2014  
 Time Report Requested: 18:08:23  
 First Dose M/F: NA / NA  
 Lab: NCTR

**ANIMAL ID:** 90      **TRT#:** 13      **SEX:** Female      **DAY ON TEST:** 582  
**DOSE:** 50PPM/F FUMON-13      **DISP:** Moribund      **HISTO:** 21080100090

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Brain - Cerebellum
* Brain - Cerebrum	* Clitoral Gland	* Esophagus	* Harderian Gland
* Heart	* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum
* Intestine Small - Duodenum	* Intestine Small - Ileum	* Intestine Small - Jejunum	* Lung - Bronchus
* Lymph Node - Mandibular	* Mammary Gland	* Ovary	* Parathyroid Gland
* Peripheral Nerve - Sciatic	* Salivary Glands	* Skeletal Muscle - Thigh	* Skin
* Spinal Cord - Thoracic	* Stomach - Forestomach	* Stomach - Glandular	* Thymus
* Thyroid Gland	* Tongue	* Trachea	* Urinary Bladder
* Uterus	* Vagina	* Zymbal's Gland	

**OBSERVATIONS**

* Adrenal Gland	Bilateral, Cortex	Angiectasis	Minimal
* Bone	Maxilla	Sarcoma	
[ Sarcoma TGLS = 1-9.1 ]			
* Bone Marrow		Hyperplasia	Mild
* Eye	Bilateral, Retina	Atrophy	Marked
	Bilateral, Lens	Cataract	Mild
* Kidney		Infiltration Cellular	Lymphocytic, Minimal
	Bilateral	Mineralization	Minimal
* Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Larynx		Inflammation	Chronic, Minimal
* Liver		Basophilic Focus	
		Hematopoietic Cell Proliferation	Minimal
* Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Mild
* Nose	Nasolacrim Dct	Inflammation	Chronic Active, Minimal
* Pancreas	Acinar Cell	Atrophy	Focal, Minimal
* Pituitary Gland	Pars Distalis	Cyst	Moderate
* Spleen		Hematopoietic Cell Proliferation	Mild

PRIMARY CAUSE OF DEATH - Bone Maxilla Sarcoma

Animal Note: COD...PROBABLE-BONE MAXILLA,SARCOMA

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

<b>ANIMAL ID:</b> 92	<b>TRT#:</b> 12	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 634
	<b>DOSE:</b> 15PPM/F FUMON-12	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100092

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Brain - Cerebellum
* Brain - Cerebrum	* Esophagus	* Eye	* Intestine Large - Cecum
* Intestine Large - Colon	* Intestine Large - Rectum	* Intestine Small - Duodenum	* Intestine Small - Ileum
* Intestine Small - Jejunum	* Lacrimal Gland	* Lung - Bronchus	* Lymph Node - Mandibular
* Nose	* Ovary	* Pancreas	* Parathyroid Gland
* Peripheral Nerve - Sciatic	* Skeletal Muscle - Thigh	* Skin	* Spinal Cord - Thoracic
* Thymus	* Tongue	* Trachea	* Urinary Bladder
* Uterus	* Vagina		

**MISSING**

\* Zymbal's Gland

**OBSERVATIONS**

* Adrenal Gland	Cortex	Vacuolization Cytoplasmic	Focal, Moderate
* Bone Marrow		Depletion	Minimal
* Brain	Hypothalamus	Compression	Marked
* Clitoral Gland		Hyperplasia	Focal, Mild
* Harderian Gland		Infiltration Cellular	Lymphocytic, Minimal
* Heart		Cardiomyopathy	Minimal
* Kidney	Bilateral	Mineralization	Minimal
	Bilateral	Nephropathy	Minimal
* Larynx		Inflammation	Acute, Minimal
* Liver		Inflammation	Chronic, Mild
	Hepatocyte	Vacuolization Cytoplasmic	Moderate
	[ Vacuolization Cytoplasmic TGLS = 2,3,4,5-6+6.1 ]		
* Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
* Mammary Gland		Cyst	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
	[ Adenoma TGLS = 1-11 ]		
* Salivary Glands	Parotid GI	Atrophy	Mild
* Spleen		Pigmentation	Mild
* Stomach	Glandular	Cyst	Minimal

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 92	<b>TRT#:</b> 12	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 634
	<b>DOSE:</b> 15PPM/F FUMON-12	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100092

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

	Forestomach	Edema	Mild
	Forestomach	Erosion	Focal, Minimal
* Thyroid Gland	C Cell	Hyperplasia	Focal, Mild

---

**PRIMARY CAUSE OF DEATH** - Pituitary Gland Pars Distalis Adenoma

---

Animal Note: COD...PROBABLE-PITUITARY GLAND,ADENOMA

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

<b>ANIMAL ID:</b> 95	<b>TRT#:</b> 13 <b>DOSE:</b> 50PPM/F FUMON-13	<b>SEX:</b> Female <b>DISP:</b> Moribund	<b>DAY ON TEST:</b> 580 <b>HISTO:</b> 21080100095
----------------------	--	---	--

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Gland	* Blood Vessel - Aorta	* Brain - Cerebellum	* Brain - Cerebrum
* Clitoral Gland	* Esophagus	* Heart	* Intestine Large - Cecum
* Intestine Large - Colon	* Intestine Large - Rectum	* Intestine Small - Duodenum	* Intestine Small - Ileum
* Intestine Small - Jejunum	* Lacrimal Gland	* Larynx	* Lung - Bronchus
* Mammary Gland	* Ovary	* Pancreas	* Peripheral Nerve - Sciatic
* Pituitary Gland	* Salivary Glands	* Skeletal Muscle - Thigh	* Skin
* Spinal Cord - Thoracic	* Stomach - Forestomach	* Thymus	* Thyroid Gland
* Tongue	* Trachea	* Urinary Bladder	* Uterus
* Zymbal's Gland			

**MISSING**

* Lymph Node - Mandibular	* Parathyroid Gland
---------------------------	---------------------

**OBSERVATIONS**

* Bone	Femur	Hyperostosis	Minimal
	Sternum	Hyperostosis	Minimal
* Bone Marrow		Leukemia Mononuclear	
* Eye	Bilateral, Retina	Atrophy	Marked
	Bilateral, Lens	Cataract	Marked
	[ Cataract TGLS = 3-13 ]		
* Harderian Gland		Infiltration Cellular	Lymphocytic, Minimal
* Kidney	Bilateral	Mineralization	Mild
	Bilateral, Renal Tubule	Pigmentation	Mild
* Liver	Bile Duct	Hyperplasia	Mild
		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 2-6.1 ]		
* Lung		Leukemia Mononuclear	
* Lymph Node	Mesenteric	Leukemia Mononuclear	
* Nose	Olfactory Epi	Cytoplasmic Alteration	Minimal
* Spleen		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 1-6 ]		
* Stomach	Glandular	Cyst	Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

**ANIMAL ID:** 95

**TRT#:** 13

**SEX:** Female

**DAY ON TEST:** 580

**DOSE:** 50PPM/F FUMON-13

**DISP:** Moribund

**HISTO:** 21080100095

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

\* Vagina

Leukemia Mononuclear

---

PRIMARY CAUSE OF DEATH

- Spleen Leukemia Mononuclear

---

Animal Note: COD...PROBABLE-LEUKEMIA MONONUCLEAR CELL

---

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92002-03  
 Test Type: CHRONIC  
 Species/Strain: Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
 Test Compound: Fumonisin B1  
 CAS Number: 116355-83-0

Date Report Requested: 10/15/2014  
 Time Report Requested: 18:08:23  
 First Dose M/F: NA / NA  
 Lab: NCTR

ANIMAL ID: 96                      TRT#: 14                      SEX: Female                      DAY ON TEST: 596  
 DOSE: 100PPM/FFUMON-14                      DISP: Moribund                      HISTO: 21080100096

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Adrenal Gland	Blood Vessel - Aorta	Bone Marrow	Brain - Cerebellum
Brain - Cerebrum	Esophagus	Harderian Gland	Intestine Large - Cecum
Intestine Large - Colon	Intestine Large - Rectum	Intestine Small - Duodenum	Intestine Small - Ileum
Intestine Small - Jejunum	Larynx	Lung - Bronchus	Lymph Node - Mandibular
Ovary	Parathyroid Gland	Peripheral Nerve - Sciatic	Salivary Glands
Skeletal Muscle - Thigh	Skin	Spinal Cord - Thoracic	Stomach - Forestomach
Stomach - Glandular	Thymus	Tongue	Trachea
Urinary Bladder	Vagina	Zymbal's Gland	

**OBSERVATIONS**

Bone	Femur	Hyperostosis	Moderate
	Sternum	Hyperostosis	Moderate
Brain	Hypothalamus	Compression	Moderate
Clitoral Gland		Hyperplasia	Focal, Minimal
Eye	Bilateral, Retina	Atrophy	Marked
	Bilateral, Lens	Cataract	Mild
[ Cataract TGLS = 3-13 ]			
Heart		Cardiomyopathy	Minimal
* Kidney	Bilateral	Mineralization	Minimal
Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Liver		Basophilic Focus	
		Eosinophilic Focus	
		Hepatodiaphragmatic Nodule	
		Inflammation	Chronic, Minimal
[ Hepatodiaphragmatic Nodule TGLS = 1-6 ]			
Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
Mammary Gland		Galactocele	Mild
Nose	Olfactory Epi	Cytoplasmic Alteration	Minimal
Pancreas	Acinar Cell	Atrophy	Focal, Minimal
Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 2-11 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 96	<b>TRT#:</b> 14	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 596
	<b>DOSE:</b> 100PPM/FFUMON-14	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100096

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

Spleen		Pigmentation	Minimal
Thyroid Gland	C Cell	Hyperplasia	Focal, Minimal
Uterus		Hydrometra	Minimal

---

**PRIMARY CAUSE OF DEATH** - Pituitary Gland Pars Distalis Adenoma

Animal Note: COD...PROBABLE-PITUITARY GLAND,ADENOMA

---

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

<b>ANIMAL ID:</b> 97	<b>TRT#:</b> 14	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 589
	<b>DOSE:</b> 100PPM/FFUMON-14	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100097

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Blood Vessel - Aorta	Bone - Femur	Bone - Sternum	Brain - Cerebellum
Brain - Cerebrum	Clitoral Gland	Esophagus	Harderian Gland
Heart	Intestine Large - Cecum	Intestine Large - Colon	Intestine Large - Rectum
Intestine Small - Duodenum	Intestine Small - Ileum	Intestine Small - Jejunum	Larynx
Lung - Bronchus	Lymph Node - Mandibular	Lymph Node - Mesenteric	Pancreas
Parathyroid Gland	Peripheral Nerve - Sciatic	Salivary Glands	Skeletal Muscle - Thigh
Skin	Spinal Cord - Thoracic	Stomach - Forestomach	Thymus
Thyroid Gland	Tongue	Trachea	Urinary Bladder
Uterus	Vagina		

**MISSING**

Zymbal's Gland

**OBSERVATIONS**

Adrenal Gland	Bilateral, Cortex	Angiectasis	Minimal
Note: MEDULLA ONLY ONE			
Bone Marrow		Depletion	Mild
Brain	Hypothalamus	Compression	Marked
Eye	Bilateral, Retina	Atrophy	Moderate
	Bilateral, Lens	Cataract	Mild
* Kidney	Bilateral	Mineralization	Minimal
	Bilateral	Nephropathy	Minimal
Lacrimal Gland		Atrophy	Focal, Mild
		Infiltration Cellular	Lymphocytic, Minimal
* Liver		Basophilic Focus	
		Inflammation	Chronic, Mild
		Mixed Cell Focus	
Mammary Gland		Galactocele	Minimal
Nose	Nasolacrim Dct	Inflammation	Chronic Active, Moderate
Ovary	Follicle	Cyst	Minimal
Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 1-11 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 97	<b>TRT#:</b> 14	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 589
	<b>DOSE:</b> 100PPM/FFUMON-14	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100097

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

Spleen		Pigmentation	Mild
Stomach	Glandular	Cyst	Minimal

---

**PRIMARY CAUSE OF DEATH** - Pituitary Gland Pars Distalis Adenoma

---

Animal Note: COD...PROBABLE-PITUITARY GLAND,ADENOMA

---

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 100

**TRT#:** 11

**SEX:** Female

**DAY ON TEST:** 624

**DOSE:** 5PPM/F FUMON-11

**DISP:** Moribund

**HISTO:** 21080100100

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Brain - Cerebellum	* Brain - Cerebrum	* Clitoral Gland
* Esophagus	* Eye	* Harderian Gland	* Intestine Large - Cecum
* Intestine Large - Colon	* Intestine Large - Rectum	* Intestine Small - Duodenum	* Intestine Small - Ileum
* Intestine Small - Jejunum	* Larynx	* Lung - Bronchus	* Ovary
* Peripheral Nerve - Sciatic	* Salivary Glands	* Skeletal Muscle - Thigh	* Skin
* Spinal Cord - Thoracic	* Stomach - Forestomach	* Tongue	* Trachea
* Urinary Bladder	* Uterus	* Vagina	* Zymbal's Gland

**MISSING**

\* Parathyroid Gland

**OBSERVATIONS**

* Adrenal Gland		Leukemia Mononuclear	
	Cortex	Vacuolization Cytoplasmic	Focal, Mild
* Bone	Femur	Hyperostosis	Minimal
	Sternum	Hyperostosis	Minimal
* Bone Marrow		Leukemia Mononuclear	
* Clitoral GI			
Note: ONLY ONE			
* Heart		Cardiomyopathy	Mild
* Kidney	Bilateral	Mineralization	Mild
* Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Minimal
		Leukemia Mononuclear	
* Lymph Node	Mandibular	Leukemia Mononuclear	
	Mesenteric	Leukemia Mononuclear	
* Mammary Gland	Epithelium	Hyperplasia	Focal, Mild
* Nose	Olfactory Epi	Cytoplasmic Alteration	Mild
* Pancreas	Acinar Cell	Atrophy	Focal, Mild
* Pituitary Gland	Pars Distalis	Cyst	Minimal
* Spleen		Leukemia Mononuclear	

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 100	<b>TRT#:</b> 11	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 624
	<b>DOSE:</b> 5PPM/F FUMON-11	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100100

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

[ Leukemia Mononuclear TGLS = 1-6.1 ]

* Stomach	Glandular	Cyst	Minimal
* Thymus		Leukemia Mononuclear	
* Thyroid Gland	C Cell	Hyperplasia	Focal, Mild

---

**PRIMARY CAUSE OF DEATH** - Spleen Leukemia Mononuclear

---

Animal Note: COD...PROBABLE-LEUKEMIA MONONUCLEAR CELL

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 101

**TRT#:** 10

**SEX:** Female

**DAY ON TEST:** 638

**DOSE:** 0PPM/F FUMON-10

**DISP:** Moribund

**HISTO:** 21080100101

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Gland	* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum
* Brain - Cerebellum	* Brain - Cerebrum	* Clitoral Gland	* Esophagus
* Eye	* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum
* Intestine Small - Duodenum	* Intestine Small - Jejunum	* Lacrimal Gland	* Larynx
* Lung - Bronchus	* Lymph Node - Mandibular	* Ovary	* Pancreas
* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Salivary Glands	* Skeletal Muscle - Thigh
* Skin	* Spinal Cord - Thoracic	* Stomach - Forestomach	* Thymus
* Thyroid Gland	* Tongue	* Trachea	* Urinary Bladder
* Uterus	* Vagina		

**MISSING**

\* Zymbal's Gland

**OBSERVATIONS**

* Bone Marrow		Hyperplasia	Mild
* Brain	Hypothalamus	Compression	Moderate
* Harderian Gland	Bilateral	Infiltration Cellular	Lymphocytic, Minimal
* Heart		Cardiomyopathy	Minimal
* Intestine Small	Ileum	Inflammation	Chronic, Mild
* Kidney	Bilateral	Mineralization	Mild
	Bilateral	Nephropathy	Minimal
* Liver		Basophilic Focus	
		Eosinophilic Focus	
		Inflammation	Chronic, Mild
* Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
* Mammary Gland		Galactocele	Mild
* Nose	Olfactory Epi	Cytoplasmic Alteration	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
	[ Adenoma TGLS = 1-11 ]		
* Spleen		Pigmentation	Minimal
* Stomach	Glandular	Cyst	Minimal

**PRIMARY CAUSE OF DEATH** - Pituitary Gland Pars Distalis Adenoma

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

**ANIMAL ID:** 101

**TRT#:** 10

**SEX:** Female

**DAY ON TEST:** 638

**DOSE:** 0PPM/F FUMON-10

**DISP:** Moribund

**HISTO:** 21080100101

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

---

Animal Note: COD...PROBABLE-PITUITARY GLAND,ADENOMA

---

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92002-03  
 Test Type: CHRONIC  
 Species/Strain: Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
 Test Compound: Fumonisin B1  
 CAS Number: 116355-83-0

Date Report Requested: 10/15/2014  
 Time Report Requested: 18:08:23  
 First Dose M/F: NA / NA  
 Lab: NCTR

**ANIMAL ID:** 103

**TRT#:** 11

**SEX:** Female

**DAY ON TEST:** 642

**DOSE:** 5PPM/F FUMON-11

**DISP:** Moribund

**HISTO:** 21080100103

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Brain - Cerebellum	* Brain - Cerebrum	* Esophagus
* Harderian Gland	* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum
* Intestine Small - Duodenum	* Intestine Small - Ileum	* Intestine Small - Jejunum	* Lacrimal Gland
* Larynx	* Lung - Bronchus	* Parathyroid Gland	* Peripheral Nerve - Sciatic
* Skeletal Muscle - Thigh	* Skin	* Spinal Cord - Thoracic	* Tongue
* Trachea			

**MISSING**

\* Zymbal's Gland

**OBSERVATIONS**

* Adrenal Gland		Leukemia Mononuclear	
	Cortex	Vacuolization Cytoplasmic	Focal, Mild
* Bone	Femur	Hyperostosis	Mild
	Sternum	Hyperostosis	Mild
* Bone Marrow		Leukemia Mononuclear	
* Brain		Leukemia Mononuclear	
* Clitoral Gland		Leukemia Mononuclear	
* Eye	Retina	Atrophy	Moderate
Note: TGL#9-NO SECTION TAKEN			
* Heart		Leukemia Mononuclear	
* Kidney		Leukemia Mononuclear	
		Mineralization	Minimal
* Liver	Bile Duct	Hyperplasia	Moderate
		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 8-6 ]			
* Lung		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 10,11,12,13,14-5 + 5.1 ]			
* Lymph Node	Mandibular	Leukemia Mononuclear	
	Mesenteric	Leukemia Mononuclear	
* Mammary Gland		Fibroadenoma	
		Leukemia Mononuclear	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 103	<b>TRT#:</b> 11	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 642
	<b>DOSE:</b> 5PPM/F FUMON-11	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100103

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

[ Fibroadenoma TGLS = 1-10.1 ]			
Mesentery		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 6-11.1 ]			
* Nose	Olfactory Epi	Cytoplasmic Alteration	Mild
	Nasolacrim Dct	Inflammation	Chronic Active, Moderate
* Ovary		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 3-10 ]			
* Pancreas		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 4-7 ]			
* Pituitary Gland		Leukemia Mononuclear	
* Salivary Glands		Leukemia Mononuclear	
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 5-6 ]			
* Stomach	Forestomach	Leukemia Mononuclear	
	Glandular	Leukemia Mononuclear	
* Thymus		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 7-1.1 ]			
* Thyroid Gland		Leukemia Mononuclear	
* Urinary Bladder		Leukemia Mononuclear	
* Uterus		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 2-10 ]			
* Vagina		Leukemia Mononuclear	

---

**PRIMARY CAUSE OF DEATH** - Spleen Leukemia Mononuclear

---

Animal Note: COD...PROBABLE-LEUKEMIA MONONUCLEAR CELL

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 105

**TRT#:** 10

**SEX:** Female

**DAY ON TEST:** 587

**DOSE:** 0PPM/F FUMON-10

**DISP:** Moribund

**HISTO:** 21080100105

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Brain - Cerebellum
* Brain - Cerebrum	* Esophagus	* Heart	* Intestine Large - Cecum
* Intestine Large - Colon	* Intestine Large - Rectum	* Intestine Small - Duodenum	* Intestine Small - Ileum
* Intestine Small - Jejunum	* Larynx	* Lung - Bronchus	* Lymph Node - Mandibular
* Nose	* Ovary	* Pancreas	* Parathyroid Gland
* Peripheral Nerve - Sciatic	* Pituitary Gland	* Salivary Glands	* Skeletal Muscle - Thigh
* Spinal Cord - Thoracic	* Spleen	* Stomach - Forestomach	* Stomach - Glandular
* Thymus	* Thyroid Gland	* Tongue	* Trachea
* Urinary Bladder	* Vagina	* Zymbal's Gland	

**OBSERVATIONS**

* Adrenal Gland	Bilateral, Cortex	Angiectasis	Minimal
* Bone Marrow		Hyperplasia	Minimal
* Clitoral Gland		Adenoma	
* Eye	Retina	Atrophy	Marked
	Lens	Cataract	Mild
* Harderian Gland		Infiltration Cellular	Lymphocytic, Minimal
* Kidney	Bilateral	Mineralization	Mild
* Lacrimal Gland		Infiltration Cellular	Lymphocytic, Mild
* Liver		Basophilic Focus	
		Inflammation	Chronic, Minimal
* Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
* Mammary Gland		Cyst	Mild
Note: TGL#1-NOTED GROSSLY AS MAMMARY GLAND WAS SKIN			
* Skin	Subcut Tiss	Fibroma	
[ Fibroma TGLS = 1-10.1 ]			
* Uterus	Endometrium	Cyst	Mild

**PRIMARY CAUSE OF DEATH** - Skin Subcut Tiss Fibroma

Animal Note: COD...PROBABLE-SKIN,FIBROMA

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 108

**TRT#:** 10

**SEX:** Female

**DAY ON TEST:** 604

**DOSE:** 0PPM/F FUMON-10

**DISP:** Natural Death

**HISTO:** 21080100108

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Gland	* Blood Vessel - Aorta	* Brain - Cerebellum	* Brain - Cerebrum
* Clitoral Gland	* Esophagus	* Harderian Gland	* Lacrimal Gland
* Lung - Bronchus	* Mammary Gland	* Nose	* Ovary
* Pancreas	* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Pituitary Gland
* Salivary Glands	* Skeletal Muscle - Thigh	* Skin	* Spinal Cord - Thoracic
* Stomach - Forestomach	* Stomach - Glandular	* Thyroid Gland	* Tongue
* Urinary Bladder	* Uterus	* Vagina	* Zymbal's Gland

**AUTO PRECLUDES DIAG.**

* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum	* Intestine Small - Duodenum
* Intestine Small - Ileum	* Intestine Small - Jejunum		

**OBSERVATIONS**

* Adrenal Gland			
Note: ONLY ONE			
* Bone	Femur	Hyperostosis	Moderate
	Sternum	Hyperostosis	Moderate
	Turbinates	Hyperostosis	Moderate
* Bone Marrow		Leukemia Mononuclear	
* Eye	Lens	Cataract	Moderate
* Heart		Leukemia Mononuclear	
* Kidney	Bilateral	Mineralization	Minimal
* Larynx		Inflammation	Chronic, Minimal
* Liver		Hepatodiaphragmatic Nodule	
		Leukemia Mononuclear	
	[ Hepatodiaphragmatic Nodule TGLS = 3-6 ]		
	[ Leukemia Mononuclear TGLS = 4-6 ]		
* Lung		Leukemia Mononuclear	
* Lymph Node	Mandibular	Leukemia Mononuclear	
	Mesenteric	Leukemia Mononuclear	
Mesentery		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 2-11.1 ]		

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

**ANIMAL ID:** 108

**TRT#:** 10

**SEX:** Female

**DAY ON TEST:** 604

**DOSE:** 0PPM/F FUMON-10

**DISP:** Natural Death

**HISTO:** 21080100108

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

\* Pituitary Gl

Note: TGL # 05 - NO MICROSCOPIC CORRELATE

\* Spleen

[ Leukemia Mononuclear TGLS = 1-6.1 ]

Leukemia Mononuclear

\* Thymus

Leukemia Mononuclear

\* Trachea

Inflammation

Chronic, Minimal

---

PRIMARY CAUSE OF DEATH

- Spleen Leukemia Mononuclear

---

Animal Note: COD...PROBABLE-LEUKEMIA MONONUCLEAR CELL

---

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 109

**TRT#:** 11

**SEX:** Female

**DAY ON TEST:** 635

**DOSE:** 5PPM/F FUMON-11

**DISP:** Moribund

**HISTO:** 21080100109

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Brain - Cerebellum	* Brain - Cerebrum	* Esophagus
* Eye	* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum
* Intestine Small - Duodenum	* Intestine Small - Ileum	* Intestine Small - Jejunum	* Lung - Bronchus
* Pancreas	* Peripheral Nerve - Sciatic	* Skin	* Spinal Cord - Thoracic
* Thyroid Gland	* Trachea	* Urinary Bladder	* Zymbal's Gland

**MISSING**

* Larynx	* Parathyroid Gland	* Vagina
----------	---------------------	----------

**OBSERVATIONS**

* Adrenal Gland	Cortex	Vacuolization Cytoplasmic	Diffuse, Mild
* Bone	Femur	Hyperostosis	Minimal
	Sternum	Hyperostosis	Minimal
* Bone Marrow		Hyperplasia	Mild
* Clitoral Gland		Cyst	Mild
			[ Cyst TGLS = 1-10 ]
* Harderian Gland	Bilateral	Infiltration Cellular	Lymphocytic, Minimal
* Heart		Cardiomyopathy	Minimal
		Mineralization	Moderate
* Kidney	Bilateral	Hydronephrosis	Marked
	Bilateral	Mineralization	Mild
			[ Hydronephrosis TGLS = 4-2 ]
* Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Liver		Basophilic Focus	
		Hematopoietic Cell Proliferation	Minimal
		Inflammation	Chronic, Minimal
	Hepatocyte	Vacuolization Cytoplasmic	Minimal
* Lymph Node	Mandibular	Atrophy	Mild
	Mesenteric	Atrophy	Mild
	Mesenteric	Hemorrhage	Minimal
* Mammary Gland		Fibroadenoma	
			[ Fibroadenoma TGLS = 2-10 ]

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 109	<b>TRT#:</b> 11	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 635
	<b>DOSE:</b> 5PPM/F FUMON-11	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100109

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

* Nose	Nasolacrim Dct	Inflammation	Acute, Minimal
* Ovary	Rete Ovarii	Hyperplasia	Mild
Note: ONLY ONE			
* Pituitary Gland	Pars Distalis	Cyst	Mild
	Pars Distalis	Hyperplasia	Focal, Mild
* Salivary Glands		Atrophy	Moderate
* Skeletal Muscle	Thigh	Mineralization	Mild
* Spleen	Lymph Follic	Atrophy	Moderate
* Stomach	Forestomach	Erosion	Focal, Minimal
	Glandular	Erosion	Focal, Minimal
	Epithelium, Forestomach	Hyperplasia	Moderate
	Forestomach	Inflammation	Chronic, Moderate
* Thymus		Atrophy	Mild
* Tongue		Mineralization	Mild
* Uterus		Atrophy	Moderate
	Cervix	Sarcoma	

[ Sarcoma TGLS = 3-10 ]

---

**PRIMARY CAUSE OF DEATH** - Uterus Cervix Sarcoma

---

Animal Note: COD...PROBABLE-UTERUS CERVIX,SARCOMA

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 110

**TRT#:** 10

**SEX:** Female

**DAY ON TEST:** 614

**DOSE:** 0PPM/F FUMON-10

**DISP:** Moribund

**HISTO:** 21080100110

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Brain - Cerebellum
* Brain - Cerebrum	* Esophagus	* Harderian Gland	* Intestine Large - Cecum
* Intestine Large - Colon	* Intestine Large - Rectum	* Intestine Small - Duodenum	* Intestine Small - Ileum
* Intestine Small - Jejunum	* Lung - Bronchus	* Lymph Node - Mandibular	* Mammary Gland
* Ovary	* Pancreas	* Parathyroid Gland	* Peripheral Nerve - Sciatic
* Salivary Glands	* Skeletal Muscle - Thigh	* Skin	* Spinal Cord - Thoracic
* Stomach - Forestomach	* Stomach - Glandular	* Thymus	* Thyroid Gland
* Tongue	* Trachea	* Urinary Bladder	* Uterus
* Vagina	* Zymbal's Gland		

**MISSING**

\* Clitoral Gland

**OBSERVATIONS**

* Adrenal Gland	Medulla	Pheochromocytoma Benign	
* Bone Marrow		Hyperplasia	Moderate
* Eye	Retina	Atrophy	Moderate
* Heart		Cardiomyopathy	Minimal
	Valve	Inflammation	Chronic, Mild
* Kidney	Bilateral	Mineralization	Mild
	Bilateral	Nephropathy	Minimal
	Bilateral, Renal Tubule	Pigmentation	Mild
* Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Larynx		Inflammation	Chronic, Minimal
* Liver	Bile Duct	Hyperplasia	Mild
		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 2-6 ]		
* Lung		Leukemia Mononuclear	
* Lymph Node	Mesenteric	Hemorrhage	Mild
* Nose	Olfactory Epi	Cytoplasmic Alteration	Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
	[ Adenoma TGLS = 3-11 ]		

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

**ANIMAL ID:** 110

**TRT#:** 10

**SEX:** Female

**DAY ON TEST:** 614

**DOSE:** 0PPM/F FUMON-10

**DISP:** Moribund

**HISTO:** 21080100110

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

\* Spleen

Leukemia Mononuclear

[ Leukemia Mononuclear TGLS = 1-6.1 ]

---

PRIMARY CAUSE OF DEATH

- Spleen Leukemia Mononuclear

---

Animal Note: COD...PROBABLE-LEUKEMIA MONONUCLEAR CELL

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 111

**TRT#:** 12

**SEX:** Female

**DAY ON TEST:** 635

**DOSE:** 15PPM/F FUMON-12

**DISP:** Moribund

**HISTO:** 21080100111

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Brain - Cerebellum
* Brain - Cerebrum	* Clitoral Gland	* Esophagus	* Harderian Gland
* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum	* Intestine Small - Duodenum
* Intestine Small - Ileum	* Intestine Small - Jejunum	* Larynx	* Lung - Bronchus
* Ovary	* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Skeletal Muscle - Thigh
* Skin	* Spinal Cord - Thoracic	* Stomach - Forestomach	* Thyroid Gland
* Tongue	* Trachea	* Uterus	* Vagina
* Zymbal's Gland			

**OBSERVATIONS**

* Adrenal Gland		Leukemia Mononuclear	
* Bone Marrow		Leukemia Mononuclear	
* Eye	Retina	Atrophy	Mild
* Heart		Leukemia Mononuclear	
* Kidney	Bilateral	Mineralization	Mild
	Bilateral	Nephropathy	Minimal
	Bilateral, Renal Tubule	Pigmentation	Mild
* Lacrimal Gland		Leukemia Mononuclear	
* Liver	Bile Duct	Hyperplasia	Moderate
		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 3-6 ]		
* Lung		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 5-5 + 5.1 ]		
* Lymph Node	Mandibular	Leukemia Mononuclear	
	Mesenteric	Leukemia Mononuclear	
* Mammary Gland		Cyst	Moderate
	[ Fibroadenoma TGLS = 2-10 ]	Fibroadenoma	
* Nose	Olfactory Epi	Cytoplasmic Alteration	Minimal
* Pancreas		Leukemia Mononuclear	
* Pituitary Gland	Pars Distalis	Cyst	Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 111	<b>TRT#:</b> 12	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 635
	<b>DOSE:</b> 15PPM/F FUMON-12	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100111

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

Note: TGL#4-NULLIFIED BY TRIMMER

* Salivary Glands		Leukemia Mononuclear	
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 1-6 ]			
* Stomach	Glandular	Cyst	Minimal
	Glandular	Erosion	Focal, Mild
* Thymus		Leukemia Mononuclear	
* Urinary Bladder		Leukemia Mononuclear	

---

**PRIMARY CAUSE OF DEATH** - Spleen Leukemia Mononuclear

---

Animal Note: COD...PROBABLE-LEUKEMIA MONONUCLEAR CELL

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 118

**TRT#:** 12

**SEX:** Female

**DAY ON TEST:** 642

**DOSE:** 15PPM/F FUMON-12

**DISP:** Moribund

**HISTO:** 21080100118

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Bone Marrow
* Brain - Cerebellum	* Brain - Cerebrum	* Clitoral Gland	* Esophagus
* Eye	* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum
* Intestine Small - Duodenum	* Intestine Small - Ileum	* Intestine Small - Jejunum	* Larynx
* Lung - Bronchus	* Lymph Node - Mandibular	* Ovary	* Parathyroid Gland
* Peripheral Nerve - Sciatic	* Salivary Glands	* Skeletal Muscle - Thigh	* Spinal Cord - Thoracic
* Stomach - Forestomach	* Stomach - Glandular	* Thymus	* Thyroid Gland
* Tongue	* Trachea	* Urinary Bladder	* Uterus
* Vagina	* Zymbal's Gland		

**OBSERVATIONS**

* Adrenal Gland	Bilateral, Cortex Bilateral, Cortex	Angiectasis Pigmentation	Minimal Minimal
* Brain	Hypothalamus	Compression	Moderate
* Harderian Gland		Infiltration Cellular	Lymphocytic, Minimal
* Heart		Cardiomyopathy	Minimal
* Kidney	Bilateral Bilateral	Mineralization Nephropathy	Mild Minimal
* Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Liver		Angiectasis Mixed Cell Focus Tension Lipidosis	Focal, Minimal
* Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Mild
* Mammary Gland		Adenoma Carcinoma Galactocele	Multiple Moderate
	[ Adenoma TGLS = 4-14 BY EPL ] [ Carcinoma TGLS = 1,2-10.1 ]		
* Nose	Olfactory Epi Nasolacrim Dct	Cytoplasmic Alteration Inflammation	Moderate Chronic, Minimal
* Pancreas	Acinar Cell	Atrophy	Focal, Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 118	<b>TRT#:</b> 12	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 642
	<b>DOSE:</b> 15PPM/F FUMON-12	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100118

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

* Pituitary Gland [ Adenoma TGLS = 3-11 ]	Pars Distalis	Adenoma	
* Skin		Cyst Epithelial Inclusion	
* Spleen		Pigmentation	Minimal
* Vagina			

Note: TGL#4-NOTED GROSSLY AS VAGINA WAS MAMMARY GLAND

---

PRIMARY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma

---

Animal Note: COD...PROBABLE-PITUITARY GLAND,ADENOMA

---

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

<b>ANIMAL ID:</b> 119	<b>TRT#:</b> 14	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 600
	<b>DOSE:</b> 100PPM/FFUMON-14	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100119

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Blood Vessel - Aorta	Bone - Femur	Bone - Sternum	Bone Marrow
Brain - Cerebrum	Clitoral Gland	Esophagus	Intestine Large - Cecum
Intestine Large - Colon	Intestine Large - Rectum	Intestine Small - Duodenum	Intestine Small - Ileum
Intestine Small - Jejunum	Lacrimal Gland	Larynx	Lung - Bronchus
Ovary	Pancreas	Parathyroid Gland	Peripheral Nerve - Sciatic
Salivary Glands	Skeletal Muscle - Thigh	Skin	Spinal Cord - Thoracic
Stomach - Forestomach	Stomach - Glandular	Thymus	Tongue
Trachea	Urinary Bladder	Uterus	Vagina

**MISSING**

Brain - Cerebellum	Zymbal's Gland
--------------------	----------------

**OBSERVATIONS**

Adrenal Gland Note: MEDULLA ONLY ONE	Cortex	Angiectasis	Minimal
Brain	Hypothalamus	Compression	Moderate
Eye	Retina	Atrophy	Minimal
Harderian Gland		Infiltration Cellular	Lymphocytic, Minimal
Heart		Cardiomyopathy	Minimal
* Kidney	Bilateral	Mineralization	Mild
	Bilateral	Nephropathy	Minimal
* Liver		Basophilic Focus	
		Inflammation	Chronic, Mild
		Mixed Cell Focus	
		Necrosis	Minimal
Lymph Node	Mandibular	Hyperplasia	Minimal
	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
Mammary Gland		Cyst	Minimal
Nose	Nasolacrim Dct	Inflammation	Chronic Active, Mild
Pituitary Gland [ Adenoma TGLS = 1-11 ]	Pars Distalis	Adenoma	
Spleen		Pigmentation	Mild

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 119	<b>TRT#:</b> 14	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 600
	<b>DOSE:</b> 100PPM/FFUMON-14	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100119

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

Thyroid Gland	C Cell	Hyperplasia	Focal, Minimal
---------------	--------	-------------	----------------

---

**PRIMARY CAUSE OF DEATH** - Pituitary Gland Pars Distalis Adenoma

---

Animal Note: COD...PROBABLE-PITUITARY GLAND,ADENOMA

---

Experiment Number: 92002-03  
 Test Type: CHRONIC  
 Species/Strain: Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
 Test Compound: Fumonisin B1  
 CAS Number: 116355-83-0

Date Report Requested: 10/15/2014  
 Time Report Requested: 18:08:23  
 First Dose M/F: NA / NA  
 Lab: NCTR

ANIMAL ID: 121      TRT#: 12      SEX: Female      DAY ON TEST: 617  
 DOSE: 15PPM/F FUMON-12      DISP: Moribund      HISTO: 21080100121

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Brain - Cerebellum	* Brain - Cerebrum	* Clitoral Gland
* Esophagus	* Harderian Gland	* Intestine Large - Cecum	* Intestine Large - Colon
* Intestine Large - Rectum	* Intestine Small - Duodenum	* Intestine Small - Jejunum	* Larynx
* Lung - Bronchus	* Mammary Gland	* Ovary	* Pancreas
* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Salivary Glands	* Skeletal Muscle - Thigh
* Skin	* Spinal Cord - Thoracic	* Stomach - Forestomach	* Thyroid Gland
* Tongue	* Trachea	* Urinary Bladder	* Uterus
* Vagina	* Zymbal's Gland		

**OBSERVATIONS**

* Adrenal Gland		Leukemia Mononuclear	
* Bone	Femur	Hyperostosis	Mild
	Sternum	Hyperostosis	Mild
	Turbinates	Hyperostosis	Mild
* Bone Marrow		Leukemia Mononuclear	
* Eye	Bilateral, Retina	Atrophy	Moderate
* Heart		Leukemia Mononuclear	
* Intestine Small	Ileum	Leukemia Mononuclear	
* Kidney	Pelvis, Transit Epithe	Hyperplasia	Mild
	Bilateral	Mineralization	Minimal
* Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Liver	Bile Duct	Hyperplasia	Moderate
		Leukemia Mononuclear	
* Lung		Leukemia Mononuclear	
* Lymph Node	Mandibular	Leukemia Mononuclear	
	Mesenteric	Leukemia Mononuclear	
* Nose		Inflammation	Chronic Active, Mild
* Pituitary Gland		Leukemia Mononuclear	
* Spleen		Leukemia Mononuclear	
		[ Leukemia Mononuclear TGLS = 1-6.1 ]	
* Stomach	Glandular	Cyst	Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

**ANIMAL ID:** 121

**TRT#:** 12

**SEX:** Female

**DAY ON TEST:** 617

**DOSE:** 15PPM/F FUMON-12

**DISP:** Moribund

**HISTO:** 21080100121

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

Note: ON SLIDE 7

\* Thymus

Leukemia Mononuclear

---

PRIMARY CAUSE OF DEATH

- Spleen Leukemia Mononuclear

---

Animal Note: COD...PROBABLE-LEUKEMIA MONONUCLEAR CELL

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 122

**TRT#:** 10

**SEX:** Female

**DAY ON TEST:** 603

**DOSE:** 0PPM/F FUMON-10

**DISP:** Moribund

**HISTO:** 21080100122

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Gland	* Blood Vessel - Aorta	* Brain - Cerebellum	* Brain - Cerebrum
* Clitoral Gland	* Esophagus	* Eye	* Intestine Large - Cecum
* Intestine Large - Colon	* Intestine Large - Rectum	* Intestine Small - Duodenum	* Intestine Small - Ileum
* Intestine Small - Jejunum	* Lacrimal Gland	* Larynx	* Lung - Bronchus
* Mammary Gland	* Nose	* Ovary	* Pancreas
* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Pituitary Gland	* Salivary Glands
* Skeletal Muscle - Thigh	* Skin	* Spinal Cord - Thoracic	* Stomach - Forestomach
* Stomach - Glandular	* Thymus	* Thyroid Gland	* Tongue
* Trachea	* Urinary Bladder	* Uterus	* Vagina
* Zymbal's Gland			

**OBSERVATIONS**

* Bone	Femur	Hyperostosis	Moderate
	Sternum	Hyperostosis	Moderate
	Turbinates	Hyperostosis	Mild
* Bone Marrow		Leukemia Mononuclear	
* Harderian Gland		Infiltration Cellular	Lymphocytic, Minimal
* Heart		Cardiomyopathy	Mild
* Kidney		Leukemia Mononuclear	
	Bilateral	Mineralization	Mild
	Bilateral, Renal Tubule	Pigmentation	Mild
* Liver	Bile Duct	Hyperplasia	Mild
		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 2-6 ]		
* Lung		Leukemia Mononuclear	
* Lymph Node	Mandibular	Leukemia Mononuclear	
	Mesenteric	Leukemia Mononuclear	
* Spleen		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 1-6 ]		

**PRIMARY CAUSE OF DEATH** - Spleen Leukemia Mononuclear

Animal Note: COD...PROBABLE-LEUKEMIA MONONUCLEAR CELL

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

**ANIMAL ID:** 122

**TRT#:** 10

**SEX:** Female

**DAY ON TEST:** 603

**DOSE:** 0PPM/F FUMON-10

**DISP:** Moribund

**HISTO:** 21080100122

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 129

**TRT#:** 13

**SEX:** Female

**DAY ON TEST:** 664

**DOSE:** 50PPM/F FUMON-13

**DISP:** Moribund

**HISTO:** 21080100129

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Gland	* Blood Vessel - Aorta	* Brain - Cerebellum	* Brain - Cerebrum
* Clitoral Gland	* Esophagus	* Intestine Large - Cecum	* Intestine Large - Colon
* Intestine Large - Rectum	* Intestine Small - Ileum	* Intestine Small - Jejunum	* Larynx
* Lung - Bronchus	* Ovary	* Pancreas	* Parathyroid Gland
* Peripheral Nerve - Sciatic	* Salivary Glands	* Skeletal Muscle - Thigh	* Skin
* Spinal Cord - Thoracic	* Stomach - Forestomach	* Stomach - Glandular	* Thyroid Gland
* Tongue	* Trachea	* Urinary Bladder	* Uterus
* Vagina			

**MISSING**

\* Pituitary Gland

**OBSERVATIONS**

* Bone	Femur	Hyperostosis	Minimal
	Sternum	Hyperostosis	Minimal
* Bone Marrow		Hyperplasia	Mild
* Eye	Bilateral, Retina	Atrophy	Moderate
* Harderian Gland	Bilateral	Inflammation	Chronic, Mild
* Heart		Cardiomyopathy	Minimal
* Intestine Small	Duodenum	Leiomyosarcoma	
	[ Leiomyosarcoma TGLS = 2-7 ]		
* Kidney	Bilateral	Mineralization	Minimal
* Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Liver		Basophilic Focus	
		Inflammation	Chronic, Mild
* Lung	Alveolar Epith	Hyperplasia	Focal, Moderate
* Lymph Node	Mesenteric	Degeneration	Cystic, Moderate
	Mandibular	Hyperplasia	Mild
	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
* Mammary Gland		Fibroadenoma	
	[ Fibroadenoma TGLS = 1-10 ]		
* Nose	Olfactory Epi	Cytoplasmic Alteration	Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 129

**TRT#:** 13

**SEX:** Female

**DAY ON TEST:** 664

**DOSE:** 50PPM/F FUMON-13

**DISP:** Moribund

**HISTO:** 21080100129

**ORGAN AND ACCOUNTABLE SITE STATUS**

	Inflammation	Acute, Minimal
* Spleen	Hematopoietic Cell Proliferation	Minimal
* Thymus	Atrophy	Moderate
* Zymbal's Gland	Adenoma	
[ Adenoma TGLS = 3-13 ]		

**PRIMARY CAUSE OF DEATH** - Intestine Small Duodenum Leiomyosarcoma

Animal Note: COD...PROBABLE-SMALL INTESTINES,LEIOMYOSARCOMA DUODENUM

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

<b>ANIMAL ID:</b> 135	<b>TRT#:</b> 11 <b>DOSE:</b> 5PPM/F FUMON-11	<b>SEX:</b> Female <b>DISP:</b> Moribund	<b>DAY ON TEST:</b> 630 <b>HISTO:</b> 21080100135
-----------------------	---	---	--

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Brain - Cerebellum	* Brain - Cerebrum	* Esophagus
* Heart	* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum
* Intestine Small - Duodenum	* Intestine Small - Ileum	* Intestine Small - Jejunum	* Larynx
* Lung - Bronchus	* Lymph Node - Mandibular	* Ovary	* Pancreas
* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Salivary Glands	* Skeletal Muscle - Thigh
* Skin	* Spinal Cord - Thoracic	* Stomach - Forestomach	* Thymus
* Thyroid Gland	* Tongue	* Trachea	* Urinary Bladder
* Uterus	* Vagina	* Zymbal's Gland	

**OBSERVATIONS**

* Adrenal Gland	Bilateral, Cortex	Angiectasis	Mild
* Bone	Femur	Hyperostosis	Minimal
	Sternum	Hyperostosis	Minimal
* Bone Marrow		Hyperplasia	Minimal
* Clitoral Gland		Hyperplasia	Focal, Mild
* Eye	Bilateral, Retina	Atrophy	Marked
	Bilateral, Lens	Cataract	Moderate
* Harderian Gland	Bilateral	Inflammation	Chronic, Mild
* Kidney	Bilateral	Mineralization	Mild
* Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Liver		Basophilic Focus	
		Inflammation	Chronic, Mild
* Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Mild
* Mammary Gland		Fibroadenoma	
	[ Fibroadenoma TGLS = 1-10 ]		
* Nose	Nasolacrim Dct	Inflammation	Chronic, Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
* Spleen		Hematopoietic Cell Proliferation	Minimal
* Stomach	Glandular	Cyst	Minimal

**PRIMARY CAUSE OF DEATH** - Mammary Gland Fibroadenoma

Animal Note: COD...PROBABLE-MAMMARY GLAND,FIBROADENOMA

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

**ANIMAL ID:** 135

**TRT#:** 11

**SEX:** Female

**DAY ON TEST:** 630

**DOSE:** 5PPM/F FUMON-11

**DISP:** Moribund

**HISTO:** 21080100135

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 136

**TRT#:** 13

**SEX:** Female

**DAY ON TEST:** 630

**DOSE:** 50PPM/F FUMON-13

**DISP:** Moribund

**HISTO:** 21080100136

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Brain - Cerebellum	* Brain - Cerebrum	* Clitoral Gland
* Esophagus	* Harderian Gland	* Intestine Large - Cecum	* Intestine Large - Colon
* Intestine Large - Rectum	* Intestine Small - Duodenum	* Intestine Small - Ileum	* Intestine Small - Jejunum
* Lacrimal Gland	* Larynx	* Lung - Bronchus	* Mammary Gland
* Ovary	* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Salivary Glands
* Skeletal Muscle - Thigh	* Skin	* Spinal Cord - Thoracic	* Stomach - Forestomach
* Stomach - Glandular	* Thymus	* Thyroid Gland	* Tongue
* Trachea	* Urinary Bladder	* Uterus	* Vagina
* Zymbal's Gland			

**OBSERVATIONS**

* Adrenal Gland	Cortex	Cyst	Mild
	Cortex	Hyperplasia	Focal, Mild
Note: MEDULLA ONLY ONE			
* Bone	Femur	Hyperostosis	Mild
	Sternum	Hyperostosis	Mild
* Bone Marrow		Leukemia Mononuclear	
* Eye	Bilateral, Retina	Atrophy	Moderate
* Heart		Cardiomyopathy	Minimal
* Kidney	Bilateral	Mineralization	Minimal
	Bilateral, Renal Tubule	Pigmentation	Mild
* Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Moderate
		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 3-6 ]			
* Lung		Leukemia Mononuclear	
* Lymph Node	Mandibular	Leukemia Mononuclear	
	Mesenteric	Leukemia Mononuclear	
* Nose	Nasolacrim Dct	Inflammation	Chronic Active, Mild
* Pancreas	Acinar Cell	Atrophy	Focal, Mild
* Pituitary Gland	Pars Distalis	Adenoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

**ANIMAL ID:** 136

**TRT#:** 13

**SEX:** Female

**DAY ON TEST:** 630

**DOSE:** 50PPM/F FUMON-13

**DISP:** Moribund

**HISTO:** 21080100136

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

[ Adenoma TGLS = 2-11 ]

\* Spleen

Leukemia Mononuclear

[ Leukemia Mononuclear TGLS = 1-7 ]

---

PRIMARY CAUSE OF DEATH

- Spleen Leukemia Mononuclear

---

Animal Note: COD...PROBABLE-LEUKEMIA MONONUCLEAR CELL

---

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92002-03  
Test Type: CHRONIC  
Species/Strain: Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
Test Compound: Fumonisin B1  
CAS Number: 116355-83-0

Date Report Requested: 10/15/2014  
Time Report Requested: 18:08:23  
First Dose M/F: NA / NA  
Lab: NCTR

ANIMAL ID: 141

TRT#: 10

SEX: Female

DAY ON TEST: 677

DOSE: 0PPM/F FUMON-10

DISP: Moribund

HISTO: 21080100141

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Gland	* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum
* Bone Marrow	* Brain - Cerebellum	* Brain - Cerebrum	* Esophagus
* Eye	* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum
* Intestine Small - Duodenum	* Intestine Small - Ileum	* Intestine Small - Jejunum	* Lacrimal Gland
* Larynx	* Lung - Bronchus	* Lymph Node - Mandibular	* Ovary
* Pancreas	* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Salivary Glands
* Skeletal Muscle - Thigh	* Skin	* Spinal Cord - Thoracic	* Spleen
* Stomach - Forestomach	* Stomach - Glandular	* Thymus	* Thyroid Gland
* Tongue	* Trachea	* Urinary Bladder	* Uterus
* Vagina	* Zymbal's Gland		

**MISSING**

\* Clitoral Gland

**OBSERVATIONS**

* Brain	Hypothalamus	Compression	Moderate
* Harderian Gland	Bilateral	Inflammation	Chronic, Mild
* Heart		Cardiomyopathy	Minimal
* Kidney	Bilateral	Mineralization	Mild
	Bilateral	Nephropathy	Minimal
* Liver		Basophilic Focus	
* Lymph Node	Mesenteric	Hemorrhage	Mild
* Mammary Gland		Fibroadenoma	
	Epithelium	Hyperplasia	Focal, Mild
	[ Fibroadenoma TGLS = 2-14 ]		
* Nose	Olfactory Epi	Cytoplasmic Alteration	Minimal
	Nasolacrim Dct	Inflammation	Chronic Active, Moderate
* Pituitary Gland	Pars Distalis	Adenoma	
	[ Adenoma TGLS = 1-11 ]		

PRIMARY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma

Animal Note: COD...PROBABLE-PITUITARY,ADENOMA

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 142

**TRT#:** 14

**SEX:** Female

**DAY ON TEST:** 677

**DOSE:** 100PPM/FFUMON-14

**DISP:** Moribund

**HISTO:** 21080100142

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Adrenal Gland	Blood Vessel - Aorta	Bone - Femur	Bone - Sternum
Brain - Cerebellum	Brain - Cerebrum	Clitoral Gland	Esophagus
Eye	Intestine Large - Cecum	Intestine Large - Colon	Intestine Large - Rectum
Intestine Small - Duodenum	Intestine Small - Ileum	Intestine Small - Jejunum	Larynx
Lung - Bronchus	Lymph Node - Mandibular	Nose	Ovary
Parathyroid Gland	Peripheral Nerve - Sciatic	Pituitary Gland	Salivary Glands
Skeletal Muscle - Thigh	Skin	Spinal Cord - Thoracic	Stomach - Forestomach
Stomach - Glandular	Thymus	Tongue	Trachea
Urinary Bladder	Uterus	Vagina	Zymbal's Gland

**OBSERVATIONS**

Bone Marrow		Hyperplasia	Mild
Harderian Gland	Bilateral	Infiltration Cellular	Lymphocytic, Mild
Heart		Cardiomyopathy	Minimal
* Kidney	Bilateral	Mineralization	Minimal
	Bilateral	Nephropathy	Minimal
Lacrimal Gland		Infiltration Cellular	Lymphocytic, Mild
* Liver		Basophilic Focus	
		Inflammation	Chronic, Moderate
Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
Mammary Gland		Cyst	Minimal
Pancreas	Acinar Cell	Atrophy	Focal, Minimal
Spleen		Hematopoietic Cell Proliferation	Minimal
Thyroid Gland	C Cell	Adenoma	

**PRIMARY CAUSE OF DEATH**

- UNCERTAIN

Animal Note: COD...UNKNOWN

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

<b>ANIMAL ID:</b> 143	<b>TRT#:</b> 12 <b>DOSE:</b> 15PPM/F FUMON-12	<b>SEX:</b> Female <b>DISP:</b> Moribund	<b>DAY ON TEST:</b> 642 <b>HISTO:</b> 21080100143
-----------------------	--	---	--

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Bone Marrow
* Brain - Cerebellum	* Brain - Cerebrum	* Eye	* Heart
* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum	* Intestine Small - Duodenum
* Intestine Small - Ileum	* Intestine Small - Jejunum	* Larynx	* Lung - Bronchus
* Lymph Node - Mandibular	* Ovary	* Pancreas	* Parathyroid Gland
* Peripheral Nerve - Sciatic	* Salivary Glands	* Skeletal Muscle - Thigh	* Skin
* Spinal Cord - Thoracic	* Stomach - Forestomach	* Thymus	* Thyroid Gland
* Tongue	* Trachea	* Urinary Bladder	* Uterus
* Vagina	* Zymbal's Gland		

**MISSING**

* Clitoral Gland	* Esophagus
------------------	-------------

**OBSERVATIONS**

* Adrenal Gland	Bilateral, Cortex	Angiectasis	Minimal
* Harderian Gland		Infiltration Cellular	Lymphocytic, Minimal
* Kidney	Bilateral	Mineralization	Minimal
* Lacrimal Gland		Infiltration Cellular	Lymphocytic, Mild
* Liver		Basophilic Focus	Multiple
[ Basophilic Focus TGLS = 4-6.1 ]			
* Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Mild
* Mammary Gland		Cyst	Moderate
		Fibroadenoma	
[ Cyst TGLS = 2-14.1 ]			
[ Fibroadenoma TGLS = 1-14 ]			
* Nose	Nasolacrim Dct	Inflammation	Chronic, Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 3-11 ]			
* Spleen		Hematopoietic Cell Proliferation	Mild
* Stomach	Glandular	Cyst	Minimal

<b>PRIMARY CAUSE OF DEATH</b>	- Mammary Gland Fibroadenoma
-------------------------------	------------------------------

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

**ANIMAL ID:** 143

**TRT#:** 12

**SEX:** Female

**DAY ON TEST:** 642

**DOSE:** 15PPM/F FUMON-12

**DISP:** Moribund

**HISTO:** 21080100143

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

Animal Note: COD...PROBABLE-MAMMARY GLAND,FIBROADENOMA

---

\* PROTOCOL REQUIRED TISSUE



Experiment Number: 92002-03  
 Test Type: CHRONIC  
 Species/Strain: Rat/F 344/NCTR

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
 Test Compound: Fumonisin B1  
 CAS Number: 116355-83-0

Date Report Requested: 10/15/2014  
 Time Report Requested: 18:08:23  
 First Dose M/F: NA / NA  
 Lab: NCTR

ANIMAL ID: 145      TRT#: 13      SEX: Female      DAY ON TEST: 649  
 DOSE: 50PPM/F FUMON-13      DISP: Moribund      HISTO: 21080100145

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Gland	* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum
* Bone Marrow	* Brain - Cerebellum	* Brain - Cerebrum	* Esophagus
* Harderian Gland	* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum
* Intestine Small - Duodenum	* Intestine Small - Ileum	* Intestine Small - Jejunum	* Larynx
* Lung - Bronchus	* Pancreas	* Parathyroid Gland	* Peripheral Nerve - Sciatic
* Salivary Glands	* Skeletal Muscle - Thigh	* Spinal Cord - Thoracic	* Stomach - Forestomach
* Stomach - Glandular	* Thyroid Gland	* Tongue	* Trachea
* Urinary Bladder	* Vagina	* Zymbal's Gland	

**OBSERVATIONS**

* Clitoral Gland		Adenoma	
* Eye	Retina	Atrophy	Moderate
* Heart		Cardiomyopathy	Minimal
* Kidney	Bilateral	Mineralization	Minimal
* Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Liver		Basophilic Focus	
		Inflammation	Chronic, Mild
		Mixed Cell Focus	
* Lung		Metaplasia	Osseous, Minimal
* Lymph Node	Mandibular	Degeneration	Cystic, Mild
	Mesenteric	Hemorrhage	Mild
	Mandibular	Hyperplasia	Minimal
* Mammary Gland		Galactocele	Mild
* Nose	Nasolacrim Dct	Inflammation	Chronic Active, Minimal
* Ovary	Bilateral	Inflammation	Chronic, Moderate
* Pituitary Gland	Pars Distalis	Adenoma	
* Skin		Squamous Cell Carcinoma	
	[ Squamous Cell Carcinoma TGLS = 1-14 ]		
* Spleen		Hematopoietic Cell Proliferation	Minimal
* Thymus		Cyst	Minimal
* Uterus	Endometrium	Polyp Stromal	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

**ANIMAL ID:** 145

**TRT#:** 13

**SEX:** Female

**DAY ON TEST:** 649

**DOSE:** 50PPM/F FUMON-13

**DISP:** Moribund

**HISTO:** 21080100145

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

PRIMARY CAUSE OF DEATH - Skin Squamous Cell Carcinoma

---

Animal Note: COD...PROBABLE-SKIN,SQUAMOUS CELL CARCINOMA

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 149

**TRT#:** 12

**SEX:** Female

**DAY ON TEST:** 635

**DOSE:** 15PPM/F FUMON-12

**DISP:** Moribund

**HISTO:** 21080100149

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Brain - Cerebellum
* Brain - Cerebrum	* Clitoral Gland	* Esophagus	* Intestine Large - Cecum
* Intestine Large - Colon	* Intestine Large - Rectum	* Intestine Small - Duodenum	* Intestine Small - Ileum
* Intestine Small - Jejunum	* Lacrimal Gland	* Lung - Bronchus	* Ovary
* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Salivary Glands	* Skeletal Muscle - Thigh
* Spinal Cord - Thoracic	* Stomach - Forestomach	* Stomach - Glandular	* Thyroid Gland
* Tongue	* Trachea	* Uterus	* Vagina

**MISSING**

\* Zymbal's Gland

**OBSERVATIONS**

* Adrenal Gland		Leukemia Mononuclear	
	Cortex	Vacuolization Cytoplasmic	Focal, Mild
* Bone Marrow		Leukemia Mononuclear	
* Brain	Hypothalamus	Compression	Moderate
* Clitoral GI			
Note: ONLY ONE			
* Eye	Bilateral, Retina	Atrophy	Marked
* Harderian Gland		Infiltration Cellular	Lymphocytic, Minimal
* Heart		Leukemia Mononuclear	
* Kidney		Leukemia Mononuclear	
	Bilateral	Mineralization	Minimal
	Bilateral	Nephropathy	Mild
* Larynx		Inflammation	Chronic, Minimal
* Liver		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 3-6 ]			
* Lung		Leukemia Mononuclear	
* Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
	Mandibular	Leukemia Mononuclear	
	Mesenteric	Leukemia Mononuclear	
* Mammary Gland		Fibroadenoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 149	<b>TRT#:</b> 12	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 635
	<b>DOSE:</b> 15PPM/F FUMON-12	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100149

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

[ Fibroadenoma TGLS = 1-10 ]			
* Nose	Olfactory Epi	Cytoplasmic Alteration	Minimal
* Pancreas		Leukemia Mononuclear	
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 2-11 ]			
* Skin		Cyst Epithelial Inclusion	
* Spleen		Leukemia Mononuclear	
* Thymus		Leukemia Mononuclear	
* Urinary Bladder		Leukemia Mononuclear	

---

PRIMARY CAUSE OF DEATH

-

CONTRIBUTORY CAUSE OF DEATH

- Pituitary Gland Pars Distalis Adenoma;Spleen Leukemia Mononuclear

---

Animal Note: COD...CONTRIBUTORY-LEUKEMIA MONONUCLEAR CELL

-PITUITARY GLAND,ADENOMA

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

<b>ANIMAL ID:</b> 151	<b>TRT#:</b> 14	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 673
	<b>DOSE:</b> 100PPM/FFUMON-14	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100151

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Blood Vessel - Aorta	Brain - Cerebellum	Brain - Cerebrum	Clitoral Gland
Esophagus	Intestine Large - Cecum	Intestine Large - Colon	Intestine Large - Rectum
Intestine Small - Duodenum	Intestine Small - Ileum	Intestine Small - Jejunum	Larynx
Lung - Bronchus	Ovary	Parathyroid Gland	Peripheral Nerve - Sciatic
Pituitary Gland	Salivary Glands	Skeletal Muscle - Thigh	Skin
Spinal Cord - Thoracic	Stomach - Forestomach	Stomach - Glandular	Trachea
Urinary Bladder	Vagina	Zymbal's Gland	

**OBSERVATIONS**

Adrenal Gland		Leukemia Mononuclear	
Bone	Femur	Hyperostosis	Minimal
	Sternum	Hyperostosis	Minimal
Bone Marrow		Leukemia Mononuclear	
Eye	Retina	Atrophy	Mild
Harderian Gland		Leukemia Mononuclear	
Heart		Leukemia Mononuclear	
* Kidney	Bilateral	Leukemia Mononuclear	
		Mineralization	Minimal
Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Liver	Bile Duct	Hyperplasia	Moderate
		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 8-6 ]			
Lung		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 3,4,5,6,7-5.1 ]			
Lymph Node	Mandibular	Leukemia Mononuclear	
	Mesenteric	Leukemia Mononuclear	
Mammary Gland		Fibroadenoma	
		Galactocele	Moderate
[ Fibroadenoma TGLS = 1-10.1 ]			
Nose	Olfactory Epi	Cytoplasmic Alteration	Minimal
Pancreas	Acinar Cell	Atrophy	Focal, Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 151	<b>TRT#:</b> 14	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 673
	<b>DOSE:</b> 100PPM/FFUMON-14	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100151

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 2-7 ]			
Thymus		Leukemia Mononuclear	
Thyroid Gland	C Cell	Hyperplasia	Focal, Moderate
Tongue		Infiltration Cellular	Mast Cell, Marked
Uterus	Endometrium	Polyp Stromal	

---

**PRIMARY CAUSE OF DEATH** - Spleen Leukemia Mononuclear

---

Animal Note: COD...PROBABLE-LEUKEMIA MONONUCLEAR CELL

---

Experiment Number: 92002-03  
 Test Type: CHRONIC  
 Species/Strain: Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
 Test Compound: Fumonisin B1  
 CAS Number: 116355-83-0

Date Report Requested: 10/15/2014  
 Time Report Requested: 18:08:23  
 First Dose M/F: NA / NA  
 Lab: NCTR

ANIMAL ID: 152

TRT#: 12

SEX: Female

DAY ON TEST: 638

DOSE: 15PPM/F FUMON-12

DISP: Moribund

HISTO: 21080100152

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Brain - Cerebellum	* Brain - Cerebrum	* Clitoral Gland
* Esophagus	* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum
* Intestine Small - Duodenum	* Intestine Small - Ileum	* Intestine Small - Jejunum	* Larynx
* Lung - Bronchus	* Nose	* Parathyroid Gland	* Peripheral Nerve - Sciatic
* Salivary Glands	* Skin	* Spinal Cord - Thoracic	* Stomach - Forestomach
* Tongue	* Trachea	* Uterus	* Zymbal's Gland

**OBSERVATIONS**

* Adrenal Gland		Leukemia Mononuclear	
* Bone	Femur	Hyperostosis	Mild
	Sternum	Hyperostosis	Mild
* Bone Marrow		Leukemia Mononuclear	
* Brain	Hypothalamus	Compression	Mild
* Eye	Bilateral, Retina	Atrophy	Marked
	Lens	Cataract	Moderate
* Harderian Gland		Infiltration Cellular	Lymphocytic, Minimal
* Heart		Leukemia Mononuclear	
* Kidney		Leukemia Mononuclear	
	Bilateral	Mineralization	Minimal
	Bilateral	Nephropathy	Mild
* Lacrimal Gland		Leukemia Mononuclear	
* Liver		Hepatodiaphragmatic Nodule	
		Leukemia Mononuclear	
		[ Hepatodiaphragmatic Nodule TGLS = 6-6 ]	
		[ Leukemia Mononuclear TGLS = 6,7,8,9-6 + 6.1 + 6.2 ]	
* Lung		Leukemia Mononuclear	
* Lymph Node	Mandibular	Leukemia Mononuclear	
	Mesenteric	Leukemia Mononuclear	
	Pancreatic	Leukemia Mononuclear	
		[ Leukemia Mononuclear TGLS = 2-7 ]	
		[ Leukemia Mononuclear TGLS = 4-11 ]	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 152	<b>TRT#:</b> 12	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 638
	<b>DOSE:</b> 15PPM/F FUMON-12	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100152

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

* Mammary Gland [ Fibroadenoma TGLS = 3-10 ]		Fibroadenoma	
Mesentery [ Necrosis TGLS = 5-14 ]	Fat	Necrosis	Moderate
* Ovary		Leukemia Mononuclear	
* Pancreas		Hyperplasia Leukemia Mononuclear	Focal, Moderate
Note: ISLETS Note: TGL#2-NOTED GROSSLY AS PANCREAS WAS LYMPH NODE			
* Pituitary Gland [ Leukemia Mononuclear TGLS = 10-11 ]		Leukemia Mononuclear	
* Skeletal Muscle	Thigh	Degeneration	Minimal
* Spleen [ Leukemia Mononuclear TGLS = 1-7 ]		Leukemia Mononuclear	
* Stomach	Glandular	Leukemia Mononuclear	
* Thymus		Leukemia Mononuclear	
* Thyroid Gland	C Cell	Hyperplasia	Focal, Mild
* Urinary Bladder		Leukemia Mononuclear	
* Vagina		Leukemia Mononuclear	

---

PRIMARY CAUSE OF DEATH - Spleen Leukemia Mononuclear

---

Animal Note: COD...PROBABLE-LEUKEMIA MONONUCLEAR CELL

---

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 155

**TRT#:** 12

**SEX:** Female

**DAY ON TEST:** 691

**DOSE:** 15PPM/F FUMON-12

**DISP:** Moribund

**HISTO:** 21080100155

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Gland	* Brain - Cerebellum	* Brain - Cerebrum	* Clitoral Gland
* Esophagus	* Eye	* Harderian Gland	* Intestine Large - Cecum
* Intestine Large - Colon	* Intestine Large - Rectum	* Intestine Small - Duodenum	* Intestine Small - Ileum
* Intestine Small - Jejunum	* Lacrimal Gland	* Larynx	* Lung - Bronchus
* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Salivary Glands	* Skeletal Muscle - Thigh
* Skin	* Spinal Cord - Thoracic	* Tongue	* Trachea

**MISSING**

* Blood Vessel - Aorta	* Zymbal's Gland
------------------------	------------------

**OBSERVATIONS**

* Adrenal Gland			
Note: ONLY ONE			
* Bone	Femur	Hyperostosis	Minimal
	Sternum	Hyperostosis	Minimal
* Bone Marrow		Leukemia Mononuclear	
* Heart		Leukemia Mononuclear	
* Kidney		Leukemia Mononuclear	
	Bilateral	Mineralization	Mild
* Liver	Bile Duct	Hyperplasia	Mild
		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 3-6 ]		
* Lung		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 5-5 + 5.1 ]		
* Lymph Node	Mandibular	Leukemia Mononuclear	
	Mesenteric	Leukemia Mononuclear	
* Mammary Gland		Leukemia Mononuclear	
* Nose	Nasolacrim Dct	Inflammation	Chronic Active, Mild
* Ovary		Leukemia Mononuclear	
* Pancreas		Leukemia Mononuclear	
* Pituitary Gland		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 6-11 ]		

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 155

**TRT#:** 12

**SEX:** Female

**DAY ON TEST:** 691

**DOSE:** 15PPM/F FUMON-12

**DISP:** Moribund

**HISTO:** 21080100155

**ORGAN AND ACCOUNTABLE SITE STATUS**

* Spleen [ Leukemia Mononuclear TGLS = 1-7 ]		Leukemia Mononuclear
* Stomach	Forestomach Glandular	Leukemia Mononuclear Leukemia Mononuclear
* Thymus [ Leukemia Mononuclear TGLS = 4-1.1 ]		Leukemia Mononuclear
* Thyroid Gland		Leukemia Mononuclear
* Urinary Bladder		Leukemia Mononuclear
* Uterus [ Leukemia Mononuclear TGLS = 2-10 ]		Leukemia Mononuclear
* Vagina		Leukemia Mononuclear

**PRIMARY CAUSE OF DEATH** - Spleen Leukemia Mononuclear

Animal Note: COD...PROBABLE-LEUKEMIA MONONUCLEAR CELL

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92002-03  
Test Type: CHRONIC  
Species/Strain: Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
Test Compound: Fumonisin B1  
CAS Number: 116355-83-0

Date Report Requested: 10/15/2014  
Time Report Requested: 18:08:23  
First Dose M/F: NA / NA  
Lab: NCTR

ANIMAL ID: 157

TRT#: 13

SEX: Female

DAY ON TEST: 642

DOSE: 50PPM/F FUMON-13

DISP: Moribund

HISTO: 21080100157

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Gland	* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum
* Brain - Cerebellum	* Brain - Cerebrum	* Heart	* Intestine Large - Cecum
* Intestine Large - Colon	* Intestine Large - Rectum	* Intestine Small - Duodenum	* Intestine Small - Ileum
* Intestine Small - Jejunum	* Larynx	* Lung - Bronchus	* Mammary Gland
* Nose	* Ovary	* Parathyroid Gland	* Pituitary Gland
* Salivary Glands	* Skeletal Muscle - Thigh	* Skin	* Spinal Cord - Thoracic
* Stomach - Forestomach	* Stomach - Glandular	* Thymus	* Thyroid Gland
* Tongue	* Trachea	* Urinary Bladder	* Vagina
* Zymbal's Gland			

**MISSING**

\* Peripheral Nerve - Sciatic

**INSUFFICIENT TISSUE**

\* Esophagus

**OBSERVATIONS**

* Bone Marrow		Hyperplasia	Mild
* Clitoral Gland		Adenoma	
[ Adenoma TGLS = 1-10 ]			
* Eye	Bilateral, Retina	Atrophy	Moderate
* Harderian Gland	Bilateral	Infiltration Cellular	Lymphocytic, Minimal
* Kidney		Mineralization	Minimal
	Bilateral	Nephropathy	Minimal
* Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Liver		Basophilic Focus	
* Lymph Node	Mandibular	Hyperplasia	Minimal
	Mesenteric	Infiltration Cellular	Histiocytic, Mild
* Pancreas	Acinar Cell	Atrophy	Diffuse, Mild
* Spleen		Hematopoietic Cell Proliferation	Moderate
* Uterus		Hydrometra	Mild

**PRIMARY CAUSE OF DEATH**

- Clitoral Gland Adenoma

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

**ANIMAL ID:** 157

**TRT#:** 13

**SEX:** Female

**DAY ON TEST:** 642

**DOSE:** 50PPM/F FUMON-13

**DISP:** Moribund

**HISTO:** 21080100157

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

Animal Note: COD...PROBABLE-CLITORAL GLAND,ADENOMA

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 159

**TRT#:** 11

**SEX:** Female

**DAY ON TEST:** 652

**DOSE:** 5PPM/F FUMON-11

**DISP:** Moribund

**HISTO:** 21080100159

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Brain - Cerebellum
* Brain - Cerebrum	* Clitoral Gland	* Esophagus	* Intestine Large - Cecum
* Intestine Large - Colon	* Intestine Large - Rectum	* Intestine Small - Duodenum	* Intestine Small - Ileum
* Intestine Small - Jejunum	* Lacrimal Gland	* Larynx	* Lung - Bronchus
* Mammary Gland	* Ovary	* Pancreas	* Parathyroid Gland
* Peripheral Nerve - Sciatic	* Salivary Glands	* Skeletal Muscle - Thigh	* Skin
* Spinal Cord - Thoracic	* Thyroid Gland	* Tongue	* Trachea
* Urinary Bladder	* Vagina	* Zymbal's Gland	

**MISSING**

\* Thymus

**OBSERVATIONS**

* Adrenal Gland	Bilateral, Cortex	Vacuolization Cytoplasmic	Diffuse, Mild
* Bone Marrow		Leukemia Mononuclear	
* Eye	Bilateral, Retina	Atrophy	Moderate
	Bilateral, Lens	Cataract	Moderate
* Harderian Gland	Bilateral	Infiltration Cellular	Lymphocytic, Minimal
* Heart		Cardiomyopathy	Mild
	Atrium	Thrombosis	Marked
Note: TGL # 05 - NULLIFIED BY TRIMMER [ Thrombosis TGLS = 6-1 ]			
* Kidney	Bilateral	Mineralization	Mild
	Bilateral, Renal Tubule	Necrosis	Mild
	Bilateral, Renal Tubule	Pigmentation	Moderate
* Lacrimal Gland			
Note: TGL#4-NO MICROSCOPIC CORRELATE			
* Liver	Bile Duct	Hyperplasia	Mild
		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 2-6 ]			
* Lung		Leukemia Mononuclear	
* Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 159	<b>TRT#:</b> 11	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 652
	<b>DOSE:</b> 5PPM/F FUMON-11	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100159

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

* Nose	Mandibular	Leukemia Mononuclear	
* Pituitary Gland	Mesenteric	Leukemia Mononuclear	
* Spleen	Nasolacrim Dct	Inflammation	Chronic, Mild
	Pars Distalis	Cyst	Minimal
		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 1-7 ]		
* Stomach	Glandular	Erosion	Focal, Moderate
	Epithelium, Forestomach	Hyperplasia	Moderate
	Forestomach	Inflammation	Chronic, Mild
* Thymus			
	Note: TGL#3-NULLIFIED BY TRIMMER		
* Uterus		Hydrometra	Minimal

---

**PRIMARY CAUSE OF DEATH** - Spleen Leukemia Mononuclear

---

Animal Note: COD...PROBABLE-LEUKEMIA MONONUCLEAR CELL

---

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92002-03  
Test Type: CHRONIC  
Species/Strain: Rat/F 344/NCTR

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
Test Compound: Fumonisin B1  
CAS Number: 116355-83-0

Date Report Requested: 10/15/2014  
Time Report Requested: 18:08:23  
First Dose M/F: NA / NA  
Lab: NCTR

ANIMAL ID: 161

TRT#: 14

SEX: Female

DAY ON TEST: 661

DOSE: 100PPM/FFUMON-14

DISP: Natural Death

HISTO: 21080100161

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland	Blood Vessel - Aorta	Bone - Femur	Bone - Sternum
Bone Marrow	Brain - Cerebellum	Brain - Cerebrum	Clitoral Gland
Esophagus	Eye	Harderian Gland	Intestine Large - Rectum
Intestine Small - Duodenum	Larynx	Lung - Bronchus	Lymph Node - Mandibular
Nose	Ovary	Pancreas	Parathyroid Gland
Peripheral Nerve - Sciatic	Salivary Glands	Skeletal Muscle - Thigh	Skin
Spinal Cord - Thoracic	Stomach - Forestomach	Stomach - Glandular	Thyroid Gland
Tongue	Trachea	Uterus	Vagina
Zymbal's Gland			

MISSING

Thymus

AUTO PRECLUDES DIAG.

Intestine Large - Cecum	Intestine Large - Colon	Intestine Small - Ileum	Intestine Small - Jejunum
-------------------------	-------------------------	-------------------------	---------------------------

OBSERVATIONS

Heart		Cardiomyopathy	Minimal
* Kidney	Bilateral	Mineralization	Minimal
	Bilateral	Nephropathy	Minimal
Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
Note: TGL # 03 - NO MICROSCOPIC CORRELATE			
* Liver		Basophilic Focus	
		Hepatodiaphragmatic Nodule	
[ Hepatodiaphragmatic Nodule TGLS = 4-6.1 ]			
Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
Mammary Gland		Galactoceles	Mild
Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 2-11 ]			
Spleen	Lymph Follic	Atrophy	Moderate
		Pigmentation	Mild
Urinary Bladder	Transit Epithel	Papilloma	
[ Papilloma TGLS = 1-12.1 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 161	<b>TRT#:</b> 14	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 661
	<b>DOSE:</b> 100PPM/FFUMON-14	<b>DISP:</b> Natural Death	<b>HISTO:</b> 21080100161

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

PRIMARY CAUSE OF DEATH - Urinary Bladder Transit Epithe Papilloma

---

Animal Note: COD...PROBABLE-URINARY BLADDER,PAPILLOMA

---

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 162

**TRT#:** 14

**SEX:** Female

**DAY ON TEST:** 684

**DOSE:** 100PPM/FFUMON-14

**DISP:** Moribund

**HISTO:** 21080100162

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Blood Vessel - Aorta	Bone - Femur	Bone - Sternum	Brain - Cerebellum
Brain - Cerebrum	Esophagus	Eye	Intestine Large - Cecum
Intestine Large - Colon	Intestine Large - Rectum	Intestine Small - Duodenum	Intestine Small - Ileum
Intestine Small - Jejunum	Larynx	Lung - Bronchus	Ovary
Pancreas	Parathyroid Gland	Peripheral Nerve - Sciatic	Skeletal Muscle - Thigh
Skin	Spinal Cord - Thoracic	Tongue	Trachea
Urinary Bladder	Uterus	Vagina	Zymbal's Gland

**OBSERVATIONS**

Adrenal Gland		Leukemia Mononuclear	
Bone Marrow		Leukemia Mononuclear	
Brain		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 4-3 ]			
Clitoral Gland		Inflammation	Chronic, Minimal
Harderian Gland		Infiltration Cellular	Lymphocytic, Minimal
Heart		Cardiomyopathy	Mild
		Leukemia Mononuclear	
* Kidney	Bilateral	Mineralization	Minimal
	Bilateral	Nephropathy	Mild
	Bilateral, Renal Tubule	Pigmentation	Mild
Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Liver	Bile Duct	Hyperplasia	Moderate
		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 3-6 ]			
Lung		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 5-5 + 5.1 ]			
Lymph Node	Mandibular	Leukemia Mononuclear	
	Mesenteric	Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 2-11 ]			
Mammary Gland	Epithelium	Hyperplasia	Mild
Nose	Olfactory Epi	Cytoplasmic Alteration	Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 162	<b>TRT#:</b> 14	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 684
	<b>DOSE:</b> 100PPM/FFUMON-14	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100162

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

Pituitary Gland	Pars Distalis	Adenoma	
Salivary Glands	Parotid GI	Atrophy	Moderate
Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 1-7.2 ]			
Stomach	Epithelium, Forestomach	Hyperplasia	Moderate
	Forestomach	Leukemia Mononuclear	
	Glandular	Leukemia Mononuclear	
Thymus		Leukemia Mononuclear	
Thyroid Gland	C Cell	Adenoma	

---

**PRIMARY CAUSE OF DEATH** - Spleen Leukemia Mononuclear

---

Animal Note: COD...PROBABLE-LEUKEMIA MONONUCLEAR CELL

---

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

<b>ANIMAL ID:</b> 163	<b>TRT#:</b> 11 <b>DOSE:</b> 5PPM/F FUMON-11	<b>SEX:</b> Female <b>DISP:</b> Moribund	<b>DAY ON TEST:</b> 651 <b>HISTO:</b> 21080100163
-----------------------	---	---	--

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Gland	* Blood Vessel - Aorta	* Brain - Cerebellum	* Brain - Cerebrum
* Clitoral Gland	* Esophagus	* Intestine Large - Cecum	* Intestine Large - Colon
* Intestine Large - Rectum	* Intestine Small - Duodenum	* Intestine Small - Ileum	* Intestine Small - Jejunum
* Lacrimal Gland	* Lung - Bronchus	* Lymph Node - Mandibular	* Nose
* Ovary	* Pancreas	* Parathyroid Gland	* Peripheral Nerve - Sciatic
* Salivary Glands	* Skeletal Muscle - Thigh	* Skin	* Spinal Cord - Thoracic
* Stomach - Forestomach	* Stomach - Glandular	* Thymus	* Tongue
* Urinary Bladder	* Uterus	* Vagina	

**MISSING**

\* Zymbal's Gland

**OBSERVATIONS**

* Bone	Femur	Hyperostosis	Minimal
	Sternum	Hyperostosis	Minimal
* Bone Marrow		Hyperplasia	Mild
* Eye	Retina	Atrophy	Minimal
* Harderian Gland		Infiltration Cellular	Lymphocytic, Minimal
* Heart		Cardiomyopathy	Minimal
* Kidney	Bilateral	Mineralization	Minimal
	Bilateral	Nephropathy	Minimal
* Larynx		Foreign Body	
		Inflammation	Chronic, Mild
* Liver		Basophilic Focus	
		Hematopoietic Cell Proliferation	Minimal
		Inflammation	Chronic, Minimal
* Lung	Interstitium	Inflammation	Chronic, Minimal
* Lymph Node	Mesenteric	Degeneration	Cystic, Minimal
	Mesenteric	Infiltration Cellular	Histiocytic, Mild
* Mammary Gland		Carcinoma	
		Fibroadenoma	
		Galactocele	Mild

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 163	<b>TRT#:</b> 11	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 651
	<b>DOSE:</b> 5PPM/F FUMON-11	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100163

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

[ Carcinoma TGLS = 1-20.1 ]			
[ Fibroadenoma TGLS = 2-10.1 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 3-11 ]			
* Spleen		Hematopoietic Cell Proliferation	Mild
* Thyroid Gland	C Cell	Hyperplasia	Focal, Minimal
* Trachea	Epithelium	Hyperplasia	Minimal

---

PRIMARY CAUSE OF DEATH	-
CONTRIBUTORY CAUSE OF DEATH	- Mammary Gland Carcinoma; Mammary Gland Fibroadenoma

---

Animal Note: COD...CONTRIBUTORY-MAMMARY GLAND,CARCINOMA -MAMMARY GLAND,FIBROADENOMA

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 164

**TRT#:** 14

**SEX:** Female

**DAY ON TEST:** 659

**DOSE:** 100PPM/FFUMON-14

**DISP:** Moribund

**HISTO:** 21080100164

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Blood Vessel - Aorta	Bone - Femur	Bone - Sternum	Brain - Cerebellum
Brain - Cerebrum	Esophagus	Heart	Intestine Large - Cecum
Intestine Large - Colon	Intestine Large - Rectum	Intestine Small - Duodenum	Intestine Small - Ileum
Intestine Small - Jejunum	Lacrimal Gland	Larynx	Lung - Bronchus
Lymph Node - Mandibular	Mammary Gland	Nose	Ovary
Parathyroid Gland	Peripheral Nerve - Sciatic	Salivary Glands	Skeletal Muscle - Thigh
Skin	Spinal Cord - Thoracic	Stomach - Forestomach	Stomach - Glandular
Thymus	Thyroid Gland	Tongue	Trachea
Urinary Bladder	Vagina		

**MISSING**

Zymbal's Gland

**OBSERVATIONS**

Adrenal Gland	Medulla	Pheochromocytoma Benign	
Bone Marrow		Leukemia Mononuclear	
Clitoral Gland		Adenoma	
[ Adenoma TGLS = 1-10 ]			
Eye	Bilateral, Retina	Atrophy	Marked
	Bilateral, Lens	Cataract	Marked
[ Cataract TGLS = 4-13 ]			
Harderian Gland	Bilateral	Infiltration Cellular	Lymphocytic, Minimal
* Kidney	Bilateral	Mineralization	Minimal
	Bilateral	Nephropathy	Minimal
* Liver		Basophilic Focus	
		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 3-6 ]			
Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
Pancreas	Acinar Cell	Atrophy	Focal, Minimal
Pituitary Gland	Pars Distalis	Cyst	Mild
Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 2-7 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

**ANIMAL ID:** 164

**TRT#:** 14

**SEX:** Female

**DAY ON TEST:** 659

**DOSE:** 100PPM/FFUMON-14

**DISP:** Moribund

**HISTO:** 21080100164

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

Uterus

Endometrium

Cyst

Minimal

---

PRIMARY CAUSE OF DEATH

- Spleen Leukemia Mononuclear

---

Animal Note: COD...PROBABLE-LEUKEMIA MONONUCLEAR CELL

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 165

**TRT#:** 14

**SEX:** Female

**DAY ON TEST:** 659

**DOSE:** 100PPM/FFUMON-14

**DISP:** Moribund

**HISTO:** 21080100165

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Blood Vessel - Aorta	Brain - Cerebellum	Brain - Cerebrum	Esophagus
Intestine Large - Cecum	Intestine Large - Colon	Intestine Large - Rectum	Intestine Small - Duodenum
Intestine Small - Ileum	Intestine Small - Jejunum	Larynx	Lung - Bronchus
Nose	Ovary	Parathyroid Gland	Peripheral Nerve - Sciatic
Salivary Glands	Skeletal Muscle - Thigh	Skin	Spinal Cord - Thoracic
Stomach - Forestomach	Stomach - Glandular	Tongue	Trachea
Vagina	Zymbal's Gland		

**MISSING**

Clitoral Gland	Thymus
----------------	--------

**OBSERVATIONS**

Adrenal Gland		Leukemia Mononuclear	
	Cortex	Vacuolization Cytoplasmic	Focal, Mild
Bone	Femur	Hyperostosis	Moderate
	Sternum	Hyperostosis	Moderate
Bone Marrow		Leukemia Mononuclear	
Eye	Bilateral, Retina	Atrophy	Moderate
Harderian Gland		Infiltration Cellular	Lymphocytic, Minimal
Heart		Cardiomyopathy	Minimal
* Kidney		Leukemia Mononuclear	
	Bilateral	Mineralization	Minimal
	Bilateral	Nephropathy	Minimal
Lacrimal Gland		Leukemia Mononuclear	
* Liver		Basophilic Focus	
		Leukemia Mononuclear	
		[ Leukemia Mononuclear TGLS = 4-6 ]	
Lung		Leukemia Mononuclear	
Lymph Node	Mandibular	Leukemia Mononuclear	
	Mesenteric	Leukemia Mononuclear	
Mammary Gland		Galactoceles	Mild
Ovary			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

**ANIMAL ID:** 165

**TRT#:** 14

**SEX:** Female

**DAY ON TEST:** 659

**DOSE:** 100PPM/FFUMON-14

**DISP:** Moribund

**HISTO:** 21080100165

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

Note: TGL # 03 - NO MICROSCOPIC CORRELATE

Pancreas	Acinar Cell	Atrophy	Focal, Minimal
Pituitary Gland	Pars Distalis	Hyperplasia	Focal, Mild
Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 1-7 ]			
Thyroid Gland	C Cell	Adenoma	
Urinary Bladder		Infiltration Cellular	Lymphocytic, Minimal
Uterus	Endometrium	Polyp Stromal	
[ Polyp Stromal TGLS = 2-10 ]			

---

**PRIMARY CAUSE OF DEATH** - Spleen Leukemia Mononuclear

---

Animal Note: COD...PROBABLE-LEUKEMIA MONONUCLEAR CELL

---



**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 168

**TRT#:** 12

**SEX:** Female

**DAY ON TEST:** 652

**DOSE:** 15PPM/F FUMON-12

**DISP:** Moribund

**HISTO:** 21080100168

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone Marrow	* Brain - Cerebellum	* Brain - Cerebrum
* Clitoral Gland	* Esophagus	* Intestine Large - Cecum	* Intestine Large - Colon
* Intestine Large - Rectum	* Intestine Small - Duodenum	* Intestine Small - Ileum	* Intestine Small - Jejunum
* Lacrimal Gland	* Larynx	* Lung - Bronchus	* Nose
* Ovary	* Pancreas	* Parathyroid Gland	* Peripheral Nerve - Sciatic
* Salivary Glands	* Skeletal Muscle - Thigh	* Skin	* Spinal Cord - Thoracic
* Stomach - Forestomach	* Stomach - Glandular	* Thyroid Gland	* Tongue
* Trachea	* Urinary Bladder	* Uterus	* Vagina
* Zymbal's Gland			

**MISSING**

\* Thymus

**OBSERVATIONS**

* Adrenal Gland	Cortex	Vacuolization Cytoplasmic	Focal, Mild
* Bone	Femur	Hyperostosis	Moderate
	Sternum	Hyperostosis	Moderate
* Brain	Hypothalamus	Compression	Moderate
* Eye	Bilateral, Retina	Atrophy	Moderate
* Harderian Gland	Bilateral	Infiltration Cellular	Lymphocytic, Mild
* Heart		Cardiomyopathy	Minimal
* Kidney	Bilateral	Mineralization	Minimal
	Bilateral	Nephropathy	Minimal
* Liver		Basophilic Focus	
		Eosinophilic Focus	
	Hepatocyte	Vacuolization Cytoplasmic	Moderate
	[ Eosinophilic Focus TGLS = 3-6 ]		
* Lymph Node	Mandibular	Hyperplasia	Minimal
	Mesenteric	Infiltration Cellular	Histiocytic, Mild
* Mammary Gland		Carcinoma	
	[ Carcinoma TGLS = 1-10 ]		
* Pituitary Gland	Pars Distalis	Adenoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

**ANIMAL ID:** 168

**TRT#:** 12

**SEX:** Female

**DAY ON TEST:** 652

**DOSE:** 15PPM/F FUMON-12

**DISP:** Moribund

**HISTO:** 21080100168

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

[ Adenoma TGLS = 2-11 ]

\* Spleen

Hematopoietic Cell Proliferation

Mild

---

**PRIMARY CAUSE OF DEATH**

- Pituitary Gland Pars Distalis Adenoma

---

Animal Note: COD...PROBABLE-PITUITARY GLAND,ADENOMA

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 169

**TRT#:** 11

**SEX:** Female

**DAY ON TEST:** 659

**DOSE:** 5PPM/F FUMON-11

**DISP:** Moribund

**HISTO:** 21080100169

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Brain - Cerebellum
* Brain - Cerebrum	* Clitoral Gland	* Esophagus	* Eye
* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum	* Intestine Small - Duodenum
* Intestine Small - Ileum	* Intestine Small - Jejunum	* Larynx	* Lung - Bronchus
* Lymph Node - Mandibular	* Ovary	* Pancreas	* Parathyroid Gland
* Peripheral Nerve - Sciatic	* Salivary Glands	* Skeletal Muscle - Thigh	* Skin
* Spinal Cord - Thoracic	* Stomach - Forestomach	* Stomach - Glandular	* Thymus
* Tongue	* Trachea	* Urinary Bladder	* Vagina
* Zymbal's Gland			

**OBSERVATIONS**

* Adrenal Gland	Cortex	Vacuolization Cytoplasmic	Focal, Mild
* Bone Marrow		Hyperplasia	Minimal
* Clitoral GI			
Note: ONLY ONE			
* Harderian Gland		Infiltration Cellular	Lymphocytic, Mild
* Heart		Cardiomyopathy	Minimal
* Kidney	Bilateral	Mineralization	Mild
	Bilateral	Nephropathy	Minimal
* Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Liver		Hepatodiaphragmatic Nodule	
		Tension Lipidosis	
[ Hepatodiaphragmatic Nodule TGLS = 2-6 ]			
* Lymph Node	Mesenteric	Degeneration	Cystic, Mild
	Mesenteric	Hyperplasia	Mild
* Mammary Gland		Fibroadenoma	Multiple
[ Fibroadenoma TGLS = 1-10 ]			
* Nose	Olfactory Epi	Metaplasia	Marked
Note: ONLY RESPIRATORY EPITHELIUM RECOGNIZED			
* Pituitary Gland	Pars Distalis	Adenoma	
* Spleen		Hematopoietic Cell Proliferation	Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

**ANIMAL ID:** 169

**TRT#:** 11

**SEX:** Female

**DAY ON TEST:** 659

**DOSE:** 5PPM/F FUMON-11

**DISP:** Moribund

**HISTO:** 21080100169

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

\* Thyroid Gland

C Cell

Hyperplasia

Focal, Mild

\* Uterus

Endometrium

Polyp Stromal

---

**PRIMARY CAUSE OF DEATH**

- Mammary Gland Fibroadenoma

---

Animal Note: COD...PROBABLE-MAMMARY GLAND,FIBROADENOMA

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 173

**TRT#:** 13

**SEX:** Female

**DAY ON TEST:** 705

**DOSE:** 50PPM/F FUMON-13

**DISP:** Moribund

**HISTO:** 21080100173

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Brain - Cerebellum	* Brain - Cerebrum	* Clitoral Gland
* Esophagus	* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum
* Intestine Small - Duodenum	* Intestine Small - Ileum	* Intestine Small - Jejunum	* Lacrimal Gland
* Larynx	* Lung - Bronchus	* Nose	* Ovary
* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Salivary Glands	* Skeletal Muscle - Thigh
* Skin	* Spinal Cord - Thoracic	* Stomach - Glandular	* Tongue
* Trachea	* Urinary Bladder	* Vagina	

**MISSING**

\* Zymbal's Gland

**OBSERVATIONS**

* Adrenal Gland		Leukemia Mononuclear	
* Bone	Femur	Hyperostosis	Minimal
	Sternum	Hyperostosis	Minimal
* Bone Marrow		Leukemia Mononuclear	
* Brain	Hypothalamus	Compression	Minimal
* Eye	Bilateral, Retina	Atrophy	Moderate
* Harderian Gland		Infiltration Cellular	Lymphocytic, Minimal
* Heart		Leukemia Mononuclear	
* Kidney	Renal Tubule	Hyperplasia	Focal, Minimal
	Bilateral	Mineralization	Mild
* Liver	Bile Duct	Hyperplasia	Mild
		Leukemia Mononuclear	
		[ Leukemia Mononuclear TGLS = 6-6 ]	
* Lung		Leukemia Mononuclear	
* Lymph Node	Mandibular	Leukemia Mononuclear	
	Mesenteric	Leukemia Mononuclear	
	Thoracic	Leukemia Mononuclear	
		Leukemia Mononuclear	
		[ Leukemia Mononuclear TGLS = 1-10.1 ]	
		[ Leukemia Mononuclear TGLS = 2-8 ]	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 173

**TRT#:** 13

**SEX:** Female

**DAY ON TEST:** 705

**DOSE:** 50PPM/F FUMON-13

**DISP:** Moribund

**HISTO:** 21080100173

**ORGAN AND ACCOUNTABLE SITE STATUS**

[ Leukemia Mononuclear TGLS = 3-14 ]			
* Mammary Gland		Cyst	Mild
* Pancreas		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 5-7 ]			
* Pituitary Gland		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 8-11 ]			
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 4-7 ]			
* Stomach	Epithelium, Forestomach	Hyperplasia	Minimal
* Thymus		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 7-1.1 ]			
* Thyroid Gland	C Cell	Hyperplasia	Focal, Mild
* Uterus	Cervix	Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 9-12 ]			

**PRIMARY CAUSE OF DEATH** - Spleen Leukemia Mononuclear

Animal Note: COD...PROBABLE-LEUKEMIA MONONUCLEAR CELL

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 175

**TRT#:** 10

**SEX:** Female

**DAY ON TEST:** 697

**DOSE:** 0PPM/F FUMON-10

**DISP:** Moribund

**HISTO:** 21080100175

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Brain - Cerebellum	* Brain - Cerebrum	* Esophagus
* Eye	* Harderian Gland	* Intestine Large - Cecum	* Intestine Large - Colon
* Intestine Large - Rectum	* Intestine Small - Duodenum	* Intestine Small - Ileum	* Intestine Small - Jejunum
* Lung - Bronchus	* Nose	* Ovary	* Pancreas
* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Salivary Glands	* Skeletal Muscle - Thigh
* Skin	* Spinal Cord - Thoracic	* Stomach - Forestomach	* Stomach - Glandular
* Tongue	* Trachea	* Urinary Bladder	* Uterus
* Vagina	* Zymbal's Gland		

**OBSERVATIONS**

* Adrenal Gland	Bilateral, Cortex	Angiectasis	Minimal
* Bone	Femur	Hyperostosis	Minimal
	Sternum	Hyperostosis	Minimal
* Bone Marrow		Leukemia Mononuclear	
* Clitoral Gland		Adenoma	
* Heart		Cardiomyopathy	Mild
* Kidney	Bilateral	Mineralization	Mild
	Bilateral	Nephropathy	Minimal
* Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Larynx		Inflammation	Acute, Minimal
* Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Minimal
		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 2-6 ]		
* Lung		Leukemia Mononuclear	
* Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Mild
	Mandibular	Leukemia Mononuclear	
	Mesenteric	Leukemia Mononuclear	
* Mammary Gland		Fibroadenoma	
	[ Fibroadenoma TGLS = 4-14		
* Pituitary Gland	BY EPL ]		
	Pars Distalis	Adenoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 175	<b>TRT#:</b> 10	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 697
	<b>DOSE:</b> 0PPM/F FUMON-10	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100175

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

	Pars Distalis	Angiectasis	Moderate
[ Angiectasis TGLS = 3-11 ]			
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 1-7 ]			
* Thymus		Leukemia Mononuclear	
* Thyroid Gland	C Cell	Hyperplasia	Focal, Mild

---

**PRIMARY CAUSE OF DEATH** - Spleen Leukemia Mononuclear

---

Animal Note: COD...PROBABLE-LEUKEMIA MONONUCLEAR CELL

---

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 176

**TRT#:** 10

**SEX:** Female

**DAY ON TEST:** 697

**DOSE:** 0PPM/F FUMON-10

**DISP:** Moribund

**HISTO:** 21080100176

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone Marrow	* Brain - Cerebellum	* Brain - Cerebrum
* Clitoral Gland	* Esophagus	* Eye	* Harderian Gland
* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum	* Intestine Small - Duodenum
* Intestine Small - Ileum	* Intestine Small - Jejunum	* Lacrimal Gland	* Lung - Bronchus
* Ovary	* Pancreas	* Peripheral Nerve - Sciatic	* Salivary Glands
* Skeletal Muscle - Thigh	* Skin	* Spinal Cord - Thoracic	* Stomach - Forestomach
* Stomach - Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder	* Uterus	* Vagina	

**MISSING**

* Parathyroid Gland	* Zymbal's Gland
---------------------	------------------

**OBSERVATIONS**

* Adrenal Gland	Bilateral, Cortex	Angiectasis	Minimal
* Bone	Femur	Hyperostosis	Mild
	Sternum	Hyperostosis	Mild
* Heart		Cardiomyopathy	Minimal
* Kidney	Artery	Inflammation	Chronic, Mild
	Bilateral	Mineralization	Mild
	Bilateral	Nephropathy	Mild
* Lacrimal Gland			
Note: TGL # 05 - NO MICROSCOPIC CORRELATE			
* Larynx		Inflammation	Chronic, Minimal
* Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Mild
		Inflammation	Chronic, Mild
		Mixed Cell Focus	
[ Mixed Cell Focus TGLS = 3,4-6 ]			
* Lymph Node	Mandibular	Hemorrhage	Mild
	Mesenteric	Infiltration Cellular	Histiocytic, Mild
* Mammary Gland		Fibroadenoma	Multiple
[ Fibroadenoma TGLS = 1,6-10+14 BY EPL ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 176	<b>TRT#:</b> 10 <b>DOSE:</b> 0PPM/F FUMON-10	<b>SEX:</b> Female <b>DISP:</b> Moribund	<b>DAY ON TEST:</b> 697 <b>HISTO:</b> 21080100176
-----------------------	---	---	--

---

<b>ORGAN AND ACCOUNTABLE SITE STATUS</b>			
* Nose	Olfactory Epi	Cytoplasmic Alteration	Minimal
* Pituitary Gland [ Adenoma TGLS = 2-11 ]	Pars Distalis	Adenoma	
* Spleen		Hematopoietic Cell Proliferation	Minimal
* Tongue	Artery	Inflammation	Chronic, Minimal

---

<b>PRIMARY CAUSE OF DEATH</b>	- Mammary Gland Fibroadenoma
-------------------------------	------------------------------

---

Animal Note: COD...PROBABLE-MAMMARY GLAND,FIBROADENOMA

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 177

**TRT#:** 12

**SEX:** Female

**DAY ON TEST:** 676

**DOSE:** 15PPM/F FUMON-12

**DISP:** Moribund

**HISTO:** 21080100177

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Gland	* Blood Vessel - Aorta	* Bone Marrow	* Brain - Cerebellum
* Brain - Cerebrum	* Esophagus	* Eye	* Intestine Large - Cecum
* Intestine Large - Colon	* Intestine Large - Rectum	* Intestine Small - Duodenum	* Intestine Small - Ileum
* Intestine Small - Jejunum	* Larynx	* Lung - Bronchus	* Ovary
* Pancreas	* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Salivary Glands
* Skeletal Muscle - Thigh	* Skin	* Spinal Cord - Thoracic	* Spleen
* Stomach - Forestomach	* Stomach - Glandular	* Thymus	* Thyroid Gland
* Tongue	* Trachea	* Urinary Bladder	* Uterus
* Vagina			

**MISSING**

\* Zymbal's Gland

**OBSERVATIONS**

* Bone	Femur	Hyperostosis	Mild
	Sternum	Hyperostosis	Mild
* Brain	Hypothalamus	Compression	Marked
* Clitoral Gland	Bilateral	Adenoma	
* Harderian Gland		Infiltration Cellular	Lymphocytic, Minimal
* Heart		Cardiomyopathy	Minimal
* Kidney	Bilateral	Mineralization	Minimal
	Bilateral	Nephropathy	Mild
* Lacrimal Gland		Infiltration Cellular	Lymphocytic, Mild
* Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Chronic, Mild
		Mixed Cell Focus	
	Hepatocyte	Vacuolization Cytoplasmic	Mild
* Lymph Node	Mandibular	Hyperplasia	Minimal
	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
* Mammary Gland		Cyst	Minimal
		Fibroadenoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

**ANIMAL ID:** 177

**TRT#:** 12

**SEX:** Female

**DAY ON TEST:** 676

**DOSE:** 15PPM/F FUMON-12

**DISP:** Moribund

**HISTO:** 21080100177

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

[ Fibroadenoma TGLS = 1-10.1 ]

\* Nose

Nasolacrim Dct

Inflammation

Chronic Active, Minimal

\* Pituitary Gland

Pars Distalis

Adenoma

[ Adenoma TGLS = 2-11 ]

---

**PRIMARY CAUSE OF DEATH**

- Pituitary Gland Pars Distalis Adenoma

---

Animal Note: COD...PROBABLE-PITUITARY GLAND,ADENOMA

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

<b>ANIMAL ID:</b> 180	<b>TRT#:</b> 12	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 669
	<b>DOSE:</b> 15PPM/F FUMON-12	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100180

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Brain - Cerebellum	* Brain - Cerebrum	* Esophagus
* Heart	* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum
* Intestine Small - Duodenum	* Intestine Small - Ileum	* Intestine Small - Jejunum	* Lacrimal Gland
* Larynx	* Lung - Bronchus	* Lymph Node - Mandibular	* Mammary Gland
* Ovary	* Pancreas	* Parathyroid Gland	* Peripheral Nerve - Sciatic
* Skeletal Muscle - Thigh	* Skin	* Spinal Cord - Thoracic	* Stomach - Forestomach
* Stomach - Glandular	* Thyroid Gland	* Tongue	* Trachea
* Urinary Bladder	* Zymbal's Gland		

**OBSERVATIONS**

* Adrenal Gland		Leukemia Mononuclear	
* Bone	Femur	Hyperostosis	Minimal
	Sternum	Hyperostosis	Minimal
* Bone Marrow		Leukemia Mononuclear	
* Clitoral Gland		Adenoma	
* Eye	Bilateral, Retina	Atrophy	Marked
	Bilateral, Lens	Cataract	Marked
[ Cataract TGLS = 4-13 ]			
* Harderian Gland	Bilateral	Infiltration Cellular	Lymphocytic, Minimal
* Kidney	Bilateral	Leukemia Mononuclear	
	Bilateral	Mineralization	Minimal
	Bilateral	Nephropathy	Minimal
* Liver	Bile Duct	Hyperplasia	Mild
		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 3-6 ]			
* Lung		Leukemia Mononuclear	
		Metaplasia	Osseous, Minimal
* Lymph Node	Mesenteric	Leukemia Mononuclear	
* Nose	Nasolacrim Dct	Inflammation	Chronic Active, Mild
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 5-11 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 180	<b>TRT#:</b> 12	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 669
	<b>DOSE:</b> 15PPM/F FUMON-12	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100180

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

* Salivary Glands	Parotid GI	Atrophy	Moderate
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 1-7 ]			
* Thymus		Leukemia Mononuclear	
* Uterus		Leukemia Mononuclear	
* Vagina		Polyp	
[ Polyp TGLS = 2-12 ]			

---

**PRIMARY CAUSE OF DEATH** - Spleen Leukemia Mononuclear

---

Animal Note: COD...PROBABLE-LEUKEMIA MONONUCLEAR CELL

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 188

**TRT#:** 14

**SEX:** Female

**DAY ON TEST:** 660

**DOSE:** 100PPM/FFUMON-14

**DISP:** Moribund

**HISTO:** 21080100188

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Adrenal Gland	Bone Marrow	Brain - Cerebellum	Brain - Cerebrum
Clitoral Gland	Esophagus	Intestine Large - Cecum	Intestine Large - Colon
Intestine Large - Rectum	Intestine Small - Duodenum	Intestine Small - Ileum	Intestine Small - Jejunum
Lacrimal Gland	Larynx	Lung - Bronchus	Lymph Node - Mandibular
Pancreas	Parathyroid Gland	Peripheral Nerve - Sciatic	Salivary Glands
Skeletal Muscle - Thigh	Skin	Spinal Cord - Thoracic	Stomach - Forestomach
Stomach - Glandular	Thymus	Thyroid Gland	Tongue
Trachea	Urinary Bladder	Uterus	Zymbal's Gland

**MISSING**

Blood Vessel - Aorta

**OBSERVATIONS**

Bone	Femur	Hyperostosis	Moderate
	Sternum	Hyperostosis	Moderate
	Turbinates	Hyperostosis	Mild
Brain		Carcinoma	Metastatic (Pituitary Gland)
	Hypothalamus	Compression	Moderate
[ Carcinoma TGLS = 3-3 ]			
Eye	Bilateral, Retina	Atrophy	Marked
	Bilateral, Lens	Cataract	Moderate
Harderian Gland		Infiltration Cellular	Lymphocytic, Minimal
Heart		Cardiomyopathy	Minimal
* Kidney	Bilateral	Mineralization	Mild
	Bilateral	Nephropathy	Minimal
* Liver		Basophilic Focus	
		Hepatodiaphragmatic Nodule	
	Bile Duct	Hyperplasia	Mild
		Inflammation	Chronic, Minimal
		Tension Lipidosis	
[ Hepatodiaphragmatic Nodule TGLS = 2-6 ]			
Lymph Node	Mesenteric	Hemorrhage	Mild

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 188	<b>TRT#:</b> 14	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 660
	<b>DOSE:</b> 100PPM/FFUMON-14	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100188

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

Mammary Gland		Cyst	Mild
Nose	Olfactory Epi	Cytoplasmic Alteration	Minimal
Ovary	Follicle	Cyst	Mild
Pituitary Gland	Pars Distalis	Carcinoma	
[ Carcinoma TGLS = 1-11 ]			
Spleen		Pigmentation	Mild
Vagina		Liposarcoma	
Note: LESION IS ACTUALLY TISSUE NOS SLIDE 12			

---

**PRIMARY CAUSE OF DEATH** - Pituitary Gland Pars Distalis Carcinoma

---

Animal Note: COD...PROBABLE-PITUITARY GLAND,CARCINOMA

---

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 197

**TRT#:** 14

**SEX:** Female

**DAY ON TEST:** 671

**DOSE:** 100PPM/FFUMON-14

**DISP:** Natural Death

**HISTO:** 21080100197

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Adrenal Gland	Blood Vessel - Aorta	Brain - Cerebellum	Brain - Cerebrum
Clitoral Gland	Esophagus	Eye	Harderian Gland
Intestine Large - Cecum	Intestine Large - Colon	Intestine Small - Duodenum	Intestine Small - Ileum
Lacrimal Gland	Larynx	Lung - Bronchus	Lymph Node - Mandibular
Mammary Gland	Nose	Ovary	Pancreas
Parathyroid Gland	Peripheral Nerve - Sciatic	Pituitary Gland	Salivary Glands
Skeletal Muscle - Thigh	Spinal Cord - Thoracic	Stomach - Forestomach	Stomach - Glandular
Thyroid Gland	Tongue	Trachea	Urinary Bladder

**MISSING**

Thymus	Vagina	Zymbal's Gland
--------	--------	----------------

**AUTO PRECLUDES DIAG.**

Intestine Small - Jejunum

**OBSERVATIONS**

Bone	Femur	Hyperostosis	Mild
	Sternum	Hyperostosis	Mild
Bone Marrow		Hyperplasia	Mild
Heart		Cardiomyopathy	Minimal
Intestine Large	Rectum	Histiocytic Sarcoma	Metastatic (Skin)
* Kidney	Bilateral	Mineralization	Mild
	Bilateral	Nephropathy	Minimal
* Liver		Histiocytic Sarcoma	Metastatic (Skin)
	[ Histiocytic Sarcoma TGLS = 3,4,5-6+6.1+6.2 ]		
Lung		Histiocytic Sarcoma	Metastatic (Skin)
Lymph Node	Mesenteric	Hemorrhage	Minimal
Mammary GI			
	Note: TGL#1-NOTED GROSSLY AS MAMMARY GLAND WAS SKIN		
Skeletal Muscle		Histiocytic Sarcoma	Metastatic (Skin)
Skin	Subcut Tiss	Histiocytic Sarcoma	
	[ Histiocytic Sarcoma TGLS = 1-10 ]		
Spleen		Histiocytic Sarcoma	Metastatic (Skin)

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 197	<b>TRT#:</b> 14	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 671
	<b>DOSE:</b> 100PPM/FFUMON-14	<b>DISP:</b> Natural Death	<b>HISTO:</b> 21080100197

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

[ Histiocytic Sarcoma TGLS = 2-7 ]

Uterus		Hydrometra	Mild
	Cervix	Hypertrophy	Mild

---

**PRIMARY CAUSE OF DEATH** - Skin Subcut Tiss Histiocytic Sarcoma

---

Animal Note: COD...PROBABLE-SKIN,HISTIOCYTIC SARCOMA

---

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92002-03  
Test Type: CHRONIC  
Species/Strain: Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
Test Compound: Fumonisin B1  
CAS Number: 116355-83-0

Date Report Requested: 10/15/2014  
Time Report Requested: 18:08:23  
First Dose M/F: NA / NA  
Lab: NCTR

ANIMAL ID: 202

TRT#: 14

SEX: Female

DAY ON TEST: 680

DOSE: 100PPM/FFUMON-14

DISP: Moribund

HISTO: 21080100202

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Blood Vessel - Aorta	Brain - Cerebellum	Brain - Cerebrum	Esophagus
Harderian Gland	Intestine Large - Cecum	Intestine Large - Colon	Intestine Large - Rectum
Intestine Small - Duodenum	Intestine Small - Ileum	Intestine Small - Jejunum	Lacrimal Gland
Larynx	Lung - Bronchus	Lymph Node - Mandibular	Ovary
Parathyroid Gland	Peripheral Nerve - Sciatic	Salivary Glands	Skeletal Muscle - Thigh
Spinal Cord - Thoracic	Stomach - Forestomach	Thymus	Thyroid Gland
Tongue	Trachea	Urinary Bladder	Uterus
Vagina			

**MISSING**

Zymbal's Gland

**OBSERVATIONS**

Adrenal Gland	Medulla	Hyperplasia Leukemia Mononuclear	Focal, Mild
Bone	Femur Sternum	Hyperostosis Hyperostosis	Mild Mild
Bone Marrow		Leukemia Mononuclear	
Clitoral Gland		Inflammation	Chronic, Minimal
Eye	Bilateral, Retina Bilateral, Lens	Atrophy Cataract	Marked Marked
[ Cataract TGLS = 2-13 ]			
Heart		Alveolar/Bronchiolar Carcinoma	Metastatic (Lung)
* Kidney	Bilateral, Renal Tubule Bilateral Bilateral	Accumulation, Hyaline Droplet Mineralization Nephropathy	Mild Minimal Minimal
* Liver	Bile Duct Hepatocyte	Hepatodiaphragmatic Nodule Hyperplasia Leukemia Mononuclear Vacuolization Cytoplasmic	Mild Mild
[ Hepatodiaphragmatic Nodule TGLS = 4,7-6 + 6.1 ]			
Lung		Alveolar/Bronchiolar Carcinoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 202	<b>TRT#:</b> 14	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 680
	<b>DOSE:</b> 100PPM/FFUMON-14	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100202

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

[ Alveolar/Bronchiolar Carcinoma TGLS = 5-14 ]			
Lymph Node	Mesenteric	Leukemia Mononuclear	
Mammary Gland		Galactocele	Mild
[ Galactocele TGLS = 3-10 ]			
Nose	Olfactory Epi	Cytoplasmic Alteration	Minimal
Pancreas	Acinar Cell	Atrophy	Diffuse, Moderate
Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 6-11 ]			
Skin	Head, Subcut Tiss	Melanoma Malignant	
[ Melanoma Malignant TGLS = 1-13 ]			
Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 8-7 ]			
Stomach	Glandular	Fibrosis	Mild

---

**PRIMARY CAUSE OF DEATH** - Lung Alveolar/Bronchiolar Carcinoma

---

Animal Note: COD...PROBABLE-ALVEOLAR/BRONCHIOLAR CARCINOMA

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 203

**TRT#:** 11

**SEX:** Female

**DAY ON TEST:** 715

**DOSE:** 5PPM/F FUMON-11

**DISP:** Moribund

**HISTO:** 21080100203

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Gland	* Blood Vessel - Aorta	* Brain - Cerebellum	* Brain - Cerebrum
* Esophagus	* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum
* Intestine Small - Duodenum	* Intestine Small - Ileum	* Intestine Small - Jejunum	* Larynx
* Lung - Bronchus	* Mammary Gland	* Ovary	* Parathyroid Gland
* Peripheral Nerve - Sciatic	* Salivary Glands	* Skeletal Muscle - Thigh	* Skin
* Spinal Cord - Thoracic	* Stomach - Forestomach	* Stomach - Glandular	* Thymus
* Thyroid Gland	* Tongue	* Trachea	* Urinary Bladder
* Vagina	* Zymbal's Gland		

**OBSERVATIONS**

* Bone	Femur	Hyperostosis	Mild
	Sternum	Hyperostosis	Mild
* Bone Marrow		Hyperplasia	Minimal
* Brain	Hypothalamus	Compression	Minimal
* Clitoral Gland		Inflammation	Chronic, Minimal
* Eye	Retina	Atrophy	Marked
	Lens	Cataract	Marked
	[ Cataract TGLS = 2-13 ]		
* Harderian Gland		Inflammation	Chronic, Mild
* Heart		Cardiomyopathy	Minimal
* Kidney	Bilateral	Mineralization	Minimal
	Bilateral	Nephropathy	Minimal
	Bilateral, Renal Tubule	Pigmentation	Minimal
* Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Liver		Basophilic Focus	
		Inflammation	Chronic, Minimal
* Lymph Node	Mandibular	Hyperplasia	Mild
	Mesenteric	Infiltration Cellular	Histiocytic, Mild
* Nose	Nasolacrim Dct	Inflammation	Chronic Active, Moderate
* Pancreas	Acinar Cell	Atrophy	Focal, Mild
* Pituitary Gland	Pars Distalis	Adenoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

**ANIMAL ID:** 203

**TRT#:** 11

**SEX:** Female

**DAY ON TEST:** 715

**DOSE:** 5PPM/F FUMON-11

**DISP:** Moribund

**HISTO:** 21080100203

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

[ Adenoma TGLS = 3-11 ]

\* Spleen

Pigmentation

Minimal

\* Uterus

Hydrometra

Moderate

---

[ Hydrometra TGLS = 1-10 ]

**PRIMARY CAUSE OF DEATH** - Pituitary Gland Pars Distalis Adenoma

---

Animal Note: COD...PROBABLE-PITUITARY GLAND,ADENOMA

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

<b>ANIMAL ID:</b> 206	<b>TRT#:</b> 10 <b>DOSE:</b> 0PPM/F FUMON-10	<b>SEX:</b> Female <b>DISP:</b> Moribund	<b>DAY ON TEST:</b> 734 <b>HISTO:</b> 21080100206
-----------------------	---	---	--

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone Marrow	* Brain - Cerebellum	* Brain - Cerebrum
* Esophagus	* Eye	* Intestine Large - Cecum	* Intestine Large - Colon
* Intestine Large - Rectum	* Intestine Small - Duodenum	* Intestine Small - Ileum	* Intestine Small - Jejunum
* Larynx	* Lung - Bronchus	* Ovary	* Parathyroid Gland
* Peripheral Nerve - Sciatic	* Salivary Glands	* Skeletal Muscle - Thigh	* Skin
* Spinal Cord - Thoracic	* Stomach - Glandular	* Thyroid Gland	* Tongue
* Urinary Bladder	* Uterus	* Vagina	

**MISSING**

* Pituitary Gland	* Zymbal's Gland
-------------------	------------------

**OBSERVATIONS**

* Adrenal Gland	Bilateral, Cortex	Pigmentation	Mild
* Bone	Femur Sternum	Hyperostosis Hyperostosis	Minimal Minimal
* Clitoral Gland		Adenoma	
* Harderian Gland	Bilateral	Inflammation	Chronic, Mild
* Heart		Cardiomyopathy	Mild
* Kidney	Bilateral Bilateral Bilateral, Renal Tubule	Mineralization Nephropathy Pigmentation	Mild Minimal Mild
* Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Liver		Pigmentation	Minimal
	Hepatocyte	Vacuolization Cytoplasmic	Mild
* Lung	Interstitium	Inflammation	Chronic Active, Mild
* Lymph Node	Mandibular Mesenteric	Hyperplasia Infiltration Cellular	Minimal Histiocytic, Minimal
* Mammary Gland		Cyst	Minimal
* Nose	Olfactory Epi	Cytoplasmic Alteration	Minimal
* Pancreas	Acinar Cell	Atrophy	Diffuse, Marked
* Spleen		Pigmentation	Mild
* Stomach	Epithelium, Forestomach	Hyperplasia	Mild

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 206	<b>TRT#:</b> 10	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 734
	<b>DOSE:</b> 0PPM/F FUMON-10	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100206

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

* Thymus	Atrophy	Mild
* Trachea	Inflammation	Chronic, Minimal

---

**PRIMARY CAUSE OF DEATH** - Lung Interstitium Inflammation

Animal Note: COD...PROBABLE-LUNG,INFLAMMATION

---

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

<b>ANIMAL ID:</b> 207	<b>TRT#:</b> 13 <b>DOSE:</b> 50PPM/F FUMON-13	<b>SEX:</b> Female <b>DISP:</b> Moribund	<b>DAY ON TEST:</b> 679 <b>HISTO:</b> 21080100207
-----------------------	--	---	--

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Bone Marrow
* Brain - Cerebellum	* Brain - Cerebrum	* Esophagus	* Intestine Large - Cecum
* Intestine Large - Colon	* Intestine Large - Rectum	* Intestine Small - Duodenum	* Intestine Small - Ileum
* Intestine Small - Jejunum	* Larynx	* Lung - Bronchus	* Lymph Node - Mandibular
* Ovary	* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Salivary Glands
* Skeletal Muscle - Thigh	* Skin	* Spinal Cord - Thoracic	* Stomach - Forestomach
* Stomach - Glandular	* Thymus	* Thyroid Gland	* Tongue
* Trachea	* Urinary Bladder	* Uterus	* Vagina
* Zymbal's Gland			

**OBSERVATIONS**

* Adrenal Gland	Cortex	Vacuolization Cytoplasmic	Focal, Minimal
* Brain		Hydrocephalus	Minimal
* Clitoral Gland		Cyst	Mild
* Eye	Bilateral, Retina	Atrophy	Marked
* Harderian Gland		Atrophy	Focal, Mild
	Bilateral	Infiltration Cellular	Lymphocytic, Minimal
* Heart		Cardiomyopathy	Minimal
* Kidney	Renal Tubule	Adenoma	
	Bilateral	Mineralization	Minimal
	Bilateral	Nephropathy	Minimal
* Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Liver		Basophilic Focus	
		Eosinophilic Focus	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Chronic, Mild
		Mixed Cell Focus	
		Tension Lipidosis	
[ Eosinophilic Focus TGLS = 2-6.1 ]			
[ Inflammation TGLS = 2-6.1 ]			
* Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 207	<b>TRT#:</b> 13 <b>DOSE:</b> 50PPM/F FUMON-13	<b>SEX:</b> Female <b>DISP:</b> Moribund	<b>DAY ON TEST:</b> 679 <b>HISTO:</b> 21080100207
-----------------------	--	---	--

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

* Mammary Gland		Galactocele	Mild
* Nose	Nasolacrim Dct	Inflammation	Chronic, Mild
* Pancreas		Infiltration Cellular	Lymphocytic, Minimal
* Pituitary Gland [ Adenoma TGLS = 1-11 ]	Pars Distalis	Adenoma	
* Spleen		Pigmentation	Minimal

---

**PRIMARY CAUSE OF DEATH** - Pituitary Gland Pars Distalis Adenoma

---

Animal Note: COD...PROBABLE-PITUITARY GLAND,ADENOMA

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 208

**TRT#:** 10

**SEX:** Female

**DAY ON TEST:** 680

**DOSE:** 0PPM/F FUMON-10

**DISP:** Moribund

**HISTO:** 21080100208

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Brain - Cerebellum	* Brain - Cerebrum	* Clitoral Gland
* Esophagus	* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum
* Intestine Small - Duodenum	* Intestine Small - Ileum	* Intestine Small - Jejunum	* Lacrimal Gland
* Larynx	* Lung - Bronchus	* Lymph Node - Mandibular	* Ovary
* Pancreas	* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Salivary Glands
* Skeletal Muscle - Thigh	* Skin	* Spinal Cord - Thoracic	* Stomach - Forestomach
* Stomach - Glandular	* Thymus	* Tongue	* Trachea
* Urinary Bladder	* Uterus	* Vagina	

**MISSING**

\* Zymbal's Gland

**OBSERVATIONS**

* Adrenal Gland	Bilateral, Cortex	Angiectasis	Minimal
* Bone	Femur	Hyperostosis	Mild
	Sternum	Hyperostosis	Mild
	Turbinates	Hyperostosis	Mild
* Bone Marrow		Depletion	Mild
* Brain	Hypothalamus	Compression	Moderate
* Eye	Bilateral, Retina	Atrophy	Marked
	Bilateral, Lens	Cataract	Moderate
* Harderian Gland		Infiltration Cellular	Lymphocytic, Mild
* Heart		Cardiomyopathy	Mild
* Kidney	Bilateral	Mineralization	Mild
	Bilateral	Nephropathy	Minimal
* Liver		Basophilic Focus	
		Inflammation	Chronic, Mild
		Mixed Cell Focus	
* Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Mild
* Mammary Gland		Fibroadenoma	
		Galactocele	Mild

[ Fibroadenoma TGLS = 1-10.1 ]

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 208	<b>TRT#:</b> 10	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 680
	<b>DOSE:</b> 0PPM/F FUMON-10	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100208

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

* Nose	Nasolacrim Dct	Inflammation	Acute, Minimal
* Pituitary Gland [ Adenoma TGLS = 2-11 ]	Pars Distalis	Adenoma	
* Spleen		Pigmentation	Mild
* Thyroid Gland	C Cell	Hyperplasia	Focal, Minimal

---

**PRIMARY CAUSE OF DEATH** - Pituitary Gland Pars Distalis Adenoma

---

Animal Note: COD...PROBABLE-PITUITARY GLAND,ADENOMA

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 209

**TRT#:** 14

**SEX:** Female

**DAY ON TEST:** 724

**DOSE:** 100PPM/FFUMON-14

**DISP:** Natural Death

**HISTO:** 21080100209

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Blood Vessel - Aorta	Bone Marrow	Brain - Cerebellum	Esophagus
Eye	Heart	Intestine Large - Cecum	Intestine Large - Colon
Intestine Large - Rectum	Intestine Small - Duodenum	Intestine Small - Jejunum	Larynx
Lung - Bronchus	Lymph Node - Mandibular	Lymph Node - Mesenteric	Ovary
Pancreas	Parathyroid Gland	Peripheral Nerve - Sciatic	Salivary Glands
Skeletal Muscle - Thigh	Skin	Spinal Cord - Thoracic	Spleen
Stomach - Forestomach	Stomach - Glandular	Thymus	Thyroid Gland
Tongue	Trachea	Urinary Bladder	Uterus
Vagina			

**MISSING**

Zymbal's Gland

**AUTO PRECLUDES DIAG.**

Intestine Small - Ileum

**OBSERVATIONS**

Adrenal Gland	Bilateral, Cortex	Angiectasis	Minimal
Bone	Femur	Hyperostosis	Mild
	Sternum	Hyperostosis	Mild
Brain	Cerebrum	Meningioma Malignant	
Clitoral Gland		Adenoma	
[ Adenoma TGLS = 1-10 ]			
Harderian Gland	Bilateral	Infiltration Cellular	Lymphocytic, Mild
* Kidney	Bilateral	Mineralization	Minimal
Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Liver		Basophilic Focus	
		Tension Lipidosis	
Mammary Gland		Cyst	Mild
Nose	Nasolacrim Dct	Inflammation	Chronic Active, Mild
Pituitary Gland	Pars Distalis	Hyperplasia	Focal, Marked

**PRIMARY CAUSE OF DEATH** - Brain Cerebrum Meningioma Malignant

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

**ANIMAL ID:** 209

**TRT#:** 14

**SEX:** Female

**DAY ON TEST:** 724

**DOSE:** 100PPM/FFUMON-14

**DISP:** Natural Death

**HISTO:** 21080100209

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

Animal Note: COD...PROBABLE-BRAIN,MENINGIOMA MALIGNANT

---

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92002-03  
Test Type: CHRONIC  
Species/Strain: Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
Test Compound: Fumonisin B1  
CAS Number: 116355-83-0

Date Report Requested: 10/15/2014  
Time Report Requested: 18:08:23  
First Dose M/F: NA / NA  
Lab: NCTR

---

<b>ANIMAL ID:</b> 226	<b>TRT#:</b> 13	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> 50PPM/F FUMON-13	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100226

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Lung - Bronchus

---

**OBSERVATIONS**

* Clitoral Gland		Adenoma	
[ Adenoma TGLS = 1-10 ]			
* Kidney	Bilateral	Mineralization	Minimal
	Bilateral	Nephropathy	Minimal
* Liver		Basophilic Focus	
		Clear Cell Focus	
		Hepatodiaphragmatic Nodule	
		Inflammation	Chronic, Minimal
	Hepatocyte	Vacuolization Cytoplasmic	Mild
[ Hepatodiaphragmatic Nodule TGLS = 2-1 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 3-11 ]			

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92002-03  
Test Type: CHRONIC  
Species/Strain: Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
Test Compound: Fumonisin B1  
CAS Number: 116355-83-0

Date Report Requested: 10/15/2014  
Time Report Requested: 18:08:23  
First Dose M/F: NA / NA  
Lab: NCTR

---

<b>ANIMAL ID:</b> 227	<b>TRT#:</b> 13	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> 50PPM/F FUMON-13	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100227

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Lung - Bronchus

---

**OBSERVATIONS**

* Kidney	Renal Tubule Bilateral Bilateral	Hyperplasia Mineralization Nephropathy	Focal, Mild Minimal Minimal
* Liver		Basophilic Focus Eosinophilic Focus Mixed Cell Focus	
[ Mixed Cell Focus TGLS = 1,2-1 ]			
* Lung		Infiltration Cellular	Histiocytic, Minimal
* Mammary Gland		Cyst Galactocele	Mild Mild
[ Galactocele TGLS = 3-10 ]	Epithelium	Hyperplasia	Moderate
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 4-11 ]			

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE



Experiment Number: 92002-03  
Test Type: CHRONIC  
Species/Strain: Rat/F 344/NCTR

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
Test Compound: Fumonisin B1  
CAS Number: 116355-83-0

Date Report Requested: 10/15/2014  
Time Report Requested: 18:08:23  
First Dose M/F: NA / NA  
Lab: NCTR

---

ANIMAL ID: 229	TRT#: 13	SEX: Female	DAY ON TEST: 739
	DOSE: 50PPM/F FUMON-13	DISP: Terminal Sacrifice	HISTO: 21080100229

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Lung - Bronchus

---

**OBSERVATIONS**

* Adrenal Gland	Medulla	Pheochromocytoma Benign	
	[ Pheochromocytoma Benign TGLS = 1-11 ]		
* Kidney	Bilateral	Infarct	Chronic, Mild
	Bilateral	Mineralization	Minimal
		Nephropathy	Minimal
* Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Chronic, Moderate
* Uterus	Endometrium	Polyp Stromal	
	[ Polyp Stromal TGLS = 2-10 ]		

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 230

**TRT#:** 13

**SEX:** Female

**DAY ON TEST:** 739

**DOSE:** 50PPM/F FUMON-13

**DISP:** Terminal Sacrifice

**HISTO:** 21080100230

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Lung - Bronchus

**OBSERVATIONS**

* Kidney	Bilateral	Mineralization	Minimal
	Bilateral	Nephropathy	Minimal
* Liver		Basophilic Focus	
		Eosinophilic Focus	
		Mixed Cell Focus	
	Hepatocyte	Vacuolization Cytoplasmic	Mild
	[ Vacuolization Cytoplasmic TGLS = 1-1 ]		
* Lung		Alveolar/Bronchiolar Adenoma	
* Pituitary Gland	Pars Distalis	Adenoma	
	[ Adenoma TGLS = 2-11 ]		

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

**ANIMAL ID:** 231

**TRT#:** 13

**SEX:** Female

**DAY ON TEST:** 739

**DOSE:** 50PPM/F FUMON-13

**DISP:** Terminal Sacrifice

**HISTO:** 21080100231

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Lung - Bronchus

---

**OBSERVATIONS**

* Kidney	Bilateral	Mineralization	Minimal
	Bilateral	Nephropathy	Minimal
* Liver	Bile Duct	Hyperplasia	Moderate
		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 1-1 ]		
* Spleen		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 2-7 ]		

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

**ANIMAL ID:** 232

**TRT#:** 13

**SEX:** Female

**DAY ON TEST:** 739

**DOSE:** 50PPM/F FUMON-13

**DISP:** Terminal Sacrifice

**HISTO:** 21080100232

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Lung - Bronchus

---

**OBSERVATIONS**

* Kidney	Bilateral	Mineralization	Minimal
	Bilateral	Nephropathy	Minimal
* Liver		Basophilic Focus	
		Inflammation	Chronic, Mild
		Tension Lipidosis	
		Fibroadenoma	
* Mammary Gland			
[ Fibroadenoma TGLS = 1-10 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 2-11 ]			

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92002-03  
 Test Type: CHRONIC  
 Species/Strain: Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
 Test Compound: Fumonisin B1  
 CAS Number: 116355-83-0

Date Report Requested: 10/15/2014  
 Time Report Requested: 18:08:23  
 First Dose M/F: NA / NA  
 Lab: NCTR

ANIMAL ID: 233

TRT#: 10

SEX: Female

DAY ON TEST: 739

DOSE: 0PPM/F FUMON-10

DISP: Terminal Sacrifice

HISTO: 21080100233

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Bone Marrow
* Brain - Cerebellum	* Brain - Cerebrum	* Clitoral Gland	* Esophagus
* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum	* Intestine Small - Duodenum
* Intestine Small - Ileum	* Intestine Small - Jejunum	* Larynx	* Lung - Bronchus
* Lymph Node - Mandibular	* Pancreas	* Parathyroid Gland	* Peripheral Nerve - Sciatic
* Salivary Glands	* Skeletal Muscle - Thigh	* Skin	* Spinal Cord - Thoracic
* Spleen	* Stomach - Forestomach	* Stomach - Glandular	* Thyroid Gland
* Tongue	* Trachea	* Vagina	* Zymbal's Gland

**MISSING**

* Thymus	* Urinary Bladder
----------	-------------------

**OBSERVATIONS**

* Adrenal Gland	Bilateral, Cortex	Vacuolization Cytoplasmic	Focal, Mild
* Brain			
Note: THE NEURON RICH AND VASCULAR RICH AREA OF THE MIDDLE SECTION PROBABLY		REPRESENTS AN UNUSUAL SECTION OF THE SUBFORMED ORGAN	
* Eye	Retina	Atrophy	Marked
[ Atrophy TGLS = 3-13 ]			
* Harderian Gland		Infiltration Cellular	Lymphocytic, Minimal
* Heart		Cardiomyopathy	Mild
* Kidney	Bilateral	Mineralization	Mild
	Bilateral	Nephropathy	Minimal
* Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Liver		Basophilic Focus	
		Clear Cell Focus	
		Inflammation	Chronic, Minimal
		Mixed Cell Focus	
		Tension Lipidosis	
[ Clear Cell Focus TGLS = 4-6.1 ]			
* Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 2-10.1 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 233	<b>TRT#:</b> 10	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> 0PPM/F FUMON-10	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100233

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

* Nose	Olfactory Epi	Cytoplasmic Alteration	Minimal
* Ovary		Granular Cell Tumor Benign	
	[ Granular Cell Tumor Benign TGLS = 1-10 ]		
* Pituitary Gland	Pars Distalis	Cyst	Mild
* Uterus	Endometrium	Polyp Stromal	

---

PRIMARY CAUSE OF DEATH

---

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 234

**TRT#:** 10

**SEX:** Female

**DAY ON TEST:** 739

**DOSE:** 0PPM/F FUMON-10

**DISP:** Terminal Sacrifice

**HISTO:** 21080100234

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Gland	* Blood Vessel - Aorta	* Bone Marrow	* Brain - Cerebellum
* Brain - Cerebrum	* Esophagus	* Intestine Large - Cecum	* Intestine Large - Colon
* Intestine Large - Rectum	* Intestine Small - Duodenum	* Intestine Small - Ileum	* Intestine Small - Jejunum
* Lacrimal Gland	* Larynx	* Lung - Bronchus	* Lymph Node - Mandibular
* Nose	* Ovary	* Parathyroid Gland	* Peripheral Nerve - Sciatic
* Salivary Glands	* Skeletal Muscle - Thigh	* Skin	* Spinal Cord - Thoracic
* Stomach - Forestomach	* Stomach - Glandular	* Thymus	* Tongue
* Trachea	* Urinary Bladder	* Vagina	* Zymbal's Gland

**OBSERVATIONS**

* Adrenal Gland			
Note: ONLY ONE			
* Bone	Femur	Hyperostosis	Marked
	Sternum	Hyperostosis	Marked
	Turbinates	Hyperostosis	Mild
* Brain	Hypothalamus	Compression	Mild
* Clitoral Gland		Adenoma	
* Eye	Bilateral, Retina	Atrophy	Moderate
* Harderian Gland		Infiltration Cellular	Lymphocytic, Minimal
* Heart		Cardiomyopathy	Minimal
* Kidney	Bilateral	Mineralization	Mild
	Bilateral	Nephropathy	Mild
* Liver		Basophilic Focus	
		Hepatodiaphragmatic Nodule	
	Bile Duct	Hyperplasia	Mild
		Mixed Cell Focus	
[ Hepatodiaphragmatic Nodule TGLS = 1-6 ]			
* Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
* Mammary Gland		Cyst	Minimal
* Pancreas	Acinar Cell	Atrophy	Focal, Minimal
* Pituitary Gland	Pars Distalis	Adenoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 234	<b>TRT#:</b> 10	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> 0PPM/F FUMON-10	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100234

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

[ Adenoma TGLS = 2-11 ]

* Spleen		Pigmentation	Minimal
* Thyroid Gland	C Cell	Hyperplasia	Focal, Minimal
* Uterus	Endometrium	Cyst	Minimal

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 235      **TRT#:** 10      **SEX:** Female      **DAY ON TEST:** 739  
**DOSE:** 0PPM/F FUMON-10      **DISP:** Terminal Sacrifice      **HISTO:** 21080100235

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone Marrow	* Brain - Cerebellum	* Brain - Cerebrum
* Clitoral Gland	* Esophagus	* Intestine Large - Cecum	* Intestine Large - Colon
* Intestine Large - Rectum	* Intestine Small - Duodenum	* Intestine Small - Ileum	* Intestine Small - Jejunum
* Larynx	* Lung - Bronchus	* Mammary Gland	* Nose
* Ovary	* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Salivary Glands
* Skeletal Muscle - Thigh	* Skin	* Spinal Cord - Thoracic	* Stomach - Forestomach
* Thymus	* Thyroid Gland	* Tongue	* Trachea
* Urinary Bladder	* Uterus	* Vagina	* Zymbal's Gland

**OBSERVATIONS**

* Adrenal Gland	Bilateral, Cortex	Angiectasis	Mild
* Bone	Femur	Hyperostosis	Mild
	Sternum	Hyperostosis	Mild
* Eye	Bilateral, Retina	Atrophy	Moderate
* Harderian Gland		Inflammation	Chronic, Mild
* Heart		Cardiomyopathy	Mild
* Kidney	Bilateral	Mineralization	Mild
	Bilateral	Nephropathy	Minimal
* Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
Note: TGL#6-NULIFIED BY TRIMMER			
* Liver		Basophilic Focus	
		Mixed Cell Focus	
Note: TGL # 01 - NO MICROSCOPIC CORRELATE			
[ Basophilic Focus TGLS = 8-6.1 ]			
[ Mixed Cell Focus TGLS = 4,5-6 ]			
* Lymph Node	Mandibular	Hyperplasia	Mild
	Mesenteric	Infiltration Cellular	Histiocytic, Mild
* Mammary Gland			
Note: TGL#2-NULIFIED BY TRIMMER			
* Pancreas	Acinar Cell	Atrophy	Focal, Minimal
	Acinar Cell	Hyperplasia	Focal, Marked

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 235	<b>TRT#:</b> 10	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> 0PPM/F FUMON-10	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100235

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

* Pituitary Gland [ Cyst TGLS = 7-11 ]	Pars Distalis	Cyst	Minimal
* Skin Note: TGL#3-NULLIFIED BY TRIMMER			
* Spleen		Pigmentation	Minimal
* Stomach	Glandular	Cyst	Minimal

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

<b>ANIMAL ID:</b> 236	<b>TRT#:</b> 10 <b>DOSE:</b> 0PPM/F FUMON-10	<b>SEX:</b> Female <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 739 <b>HISTO:</b> 21080100236
-----------------------	---	---	--

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Gland	* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum
* Bone Marrow	* Brain - Cerebellum	* Brain - Cerebrum	* Esophagus
* Harderian Gland	* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum
* Intestine Small - Duodenum	* Intestine Small - Ileum	* Intestine Small - Jejunum	* Larynx
* Lung - Bronchus	* Lymph Node - Mandibular	* Ovary	* Parathyroid Gland
* Peripheral Nerve - Sciatic	* Salivary Glands	* Skeletal Muscle - Thigh	* Skin
* Spinal Cord - Thoracic	* Stomach - Forestomach	* Stomach - Glandular	* Thymus
* Thyroid Gland	* Tongue	* Trachea	* Urinary Bladder
* Uterus	* Vagina	* Zymbal's Gland	

**OBSERVATIONS**

* Clitoral Gland		Adenoma	
* Eye	Bilateral, Retina	Atrophy	Moderate
* Heart		Cardiomyopathy	Minimal
* Kidney	Bilateral	Mineralization	Minimal
	Bilateral	Nephropathy	Minimal
* Lacrimal Gland		Infiltration Cellular	Lymphocytic, Mild
* Liver	Bile Duct	Hyperplasia	Mild
		Inflammation	Chronic, Minimal
	Hepatocyte	Tension Lipidosis	
	[ Vacuolization Cytoplasmic TGLS = 1-6 ]	Vacuolization Cytoplasmic	Moderate
* Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
* Mammary Gland		Fibroadenoma	
	[ Fibroadenoma TGLS = 2-10 ]		
* Nose	Olfactory Epi	Cytoplasmic Alteration	Minimal
* Pancreas	Acinar Cell	Atrophy	Focal, Marked
	Note: LESION ON SLIDE 6		
* Pituitary Gland	Pars Distalis	Adenoma	
* Spleen		Hematopoietic Cell Proliferation	Minimal

PRIMARY CAUSE OF DEATH -

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 237      **TRT#:** 14      **SEX:** Female      **DAY ON TEST:** 739  
**DOSE:** 100PPM/FFUMON-14      **DISP:** Terminal Sacrifice      **HISTO:** 21080100237

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Blood Vessel - Aorta	Bone Marrow	Brain - Cerebellum	Brain - Cerebrum
Esophagus	Intestine Large - Cecum	Intestine Large - Colon	Intestine Large - Rectum
Intestine Small - Duodenum	Intestine Small - Ileum	Intestine Small - Jejunum	Lacrimal Gland
Larynx	Lung - Bronchus	Lymph Node - Mandibular	Ovary
Parathyroid Gland	Peripheral Nerve - Sciatic	Salivary Glands	Skeletal Muscle - Thigh
Skin	Spinal Cord - Thoracic	Stomach - Forestomach	Thymus
Thyroid Gland	Tongue	Trachea	Urinary Bladder
Uterus	Vagina	Zymbal's Gland	

**OBSERVATIONS**

Adrenal Gland	Cortex	Vacuolization Cytoplasmic	Focal, Mild
Bone	Femur	Hyperostosis	Moderate
	Sternum	Hyperostosis	Moderate
Brain	Hypothalamus	Compression	Mild
Clitoral Gland		Adenoma	
[ Adenoma TGLS = 6-10 ]			
Eye	Retina	Atrophy	Moderate
Harderian Gland	Bilateral	Infiltration Cellular	Lymphocytic, Minimal
Heart		Cardiomyopathy	Mild
* Kidney	Bilateral	Mineralization	Minimal
	Bilateral	Nephropathy	Moderate
Lacrimal GI			
Note: TGL # 03 - NO MICROSCOPIC CORRELATE			
* Liver		Basophilic Focus	
		Inflammation	Chronic, Moderate
		Mixed Cell Focus	
	Hepatocyte	Vacuolization Cytoplasmic	Mild
[ Inflammation TGLS = 2-6 ]			
[ Mixed Cell Focus TGLS = 1-6 ]			
Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Mild
Mammary Gland		Galactocele	Marked

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 237	<b>TRT#:</b> 14	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> 100PPM/FFUMON-14	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100237

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

[ Galactoceles TGLS = 5-10 ]			
Mesentery	Fat	Necrosis	Moderate
[ Necrosis TGLS = 4-14 ]			
Nose	Nasolacrimal Duct	Inflammation	Chronic Active, Minimal
Pancreas	Acinar Cell	Atrophy	Focal, Marked
Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 7-11 ]			
Spleen		Pigmentation	Mild
Stomach	Glandular	Cyst	Mild

---

PRIMARY CAUSE OF DEATH -

---

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92002-03  
Test Type: CHRONIC  
Species/Strain: Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
Test Compound: Fumonisin B1  
CAS Number: 116355-83-0

Date Report Requested: 10/15/2014  
Time Report Requested: 18:08:23  
First Dose M/F: NA / NA  
Lab: NCTR

ANIMAL ID: 238

TRT#: 14

SEX: Female

DAY ON TEST: 739

DOSE: 100PPM/FFUMON-14

DISP: Terminal Sacrifice

HISTO: 21080100238

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Blood Vessel - Aorta	Bone Marrow	Brain - Cerebellum	Brain - Cerebrum
Esophagus	Eye	Harderian Gland	Heart
Intestine Large - Cecum	Intestine Large - Colon	Intestine Large - Rectum	Intestine Small - Duodenum
Intestine Small - Ileum	Intestine Small - Jejunum	Larynx	Lung - Bronchus
Nose	Ovary	Parathyroid Gland	Peripheral Nerve - Sciatic
Salivary Glands	Skeletal Muscle - Thigh	Skin	Spinal Cord - Thoracic
Stomach - Forestomach	Stomach - Glandular	Thymus	Thyroid Gland
Tongue	Trachea	Urinary Bladder	Uterus
Vagina	Zymbal's Gland		

**MISSING**

Clitoral Gland

**OBSERVATIONS**

Adrenal Gland	Medulla	Pheochromocytoma Benign	
[ Pheochromocytoma Benign TGLS = 1-11 ]			
Bone	Femur	Hyperostosis	Moderate
	Sternum	Hyperostosis	Moderate
Brain	Hypothalamus	Compression	Mild
* Kidney	Bilateral	Mineralization	Minimal
	Bilateral	Nephropathy	Minimal
Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Liver		Basophilic Focus	
		Hepatodiaphragmatic Nodule	
		Inflammation	Chronic, Minimal
[ Hepatodiaphragmatic Nodule TGLS = 4-6 ]			
Lymph Node	Mandibular	Degeneration	Cystic, Minimal
	Mandibular	Hyperplasia	Minimal
	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
Mammary Gland		Carcinoma	
[ Carcinoma TGLS = 2-10 ]			
Pancreas	Acinar Cell	Atrophy	Focal, Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

**ANIMAL ID:** 238

**TRT#:** 14

**SEX:** Female

**DAY ON TEST:** 739

**DOSE:** 100PPM/FFUMON-14

**DISP:** Terminal Sacrifice

**HISTO:** 21080100238

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

Pituitary Gland  
[ Adenoma TGLS = 3-11 ]

Pars Distalis

Adenoma

Spleen

Pigmentation

Minimal

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 239

**TRT#:** 14

**SEX:** Female

**DAY ON TEST:** 739

**DOSE:** 100PPM/FFUMON-14

**DISP:** Terminal Sacrifice

**HISTO:** 21080100239

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Adrenal Gland	Bone - Femur	Bone - Sternum	Brain - Cerebellum
Brain - Cerebrum	Clitoral Gland	Esophagus	Intestine Large - Cecum
Intestine Large - Colon	Intestine Large - Rectum	Intestine Small - Duodenum	Intestine Small - Ileum
Intestine Small - Jejunum	Larynx	Lung - Bronchus	Lymph Node - Mesenteric
Mammary Gland	Ovary	Parathyroid Gland	Peripheral Nerve - Sciatic
Salivary Glands	Skeletal Muscle - Thigh	Spinal Cord - Thoracic	Stomach - Forestomach
Stomach - Glandular	Thymus	Thyroid Gland	Tongue
Trachea	Urinary Bladder	Zymbal's Gland	

**MISSING**

Blood Vessel - Aorta

**OBSERVATIONS**

Adrenal Gland			
Note: ONLY ONE			
Bone Marrow		Hyperplasia	Mild
Eye	Retina	Atrophy	Mild
Harderian Gland		Hyperplasia	Focal, Minimal
Heart		Cardiomyopathy	Minimal
* Kidney	Bilateral	Mineralization	Minimal
	Bilateral	Nephropathy	Minimal
Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
Note: TGL # 05 - NO MICROSCOPIC CORRELATE			
* Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Mild
	Hepatocyte	Vacuolization Cytoplasmic	Mild
Lymph Node	Mandibular	Hyperplasia	Minimal
Mammary Gland			
Note: TGL#2-NOTED GROSSLY AS MAMMARY GLAND WAS SKIN			
Nose	Olfactory Epi	Cytoplasmic Alteration	Mild
Pancreas	Acinar Cell	Atrophy	Focal, Minimal
Pituitary Gland	Pars Distalis	Adenoma	

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 239	<b>TRT#:</b> 14	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> 100PPM/FFUMON-14	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100239

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

[ Adenoma TGLS = 3,4-10 ]			
Skin	Subcut Tiss	Fibroma	
[ Fibroma TGLS = 2-10 ]			
Spleen		Hematopoietic Cell Proliferation	Mild
Uterus	Endometrium	Polyp Stromal	
[ Polyp Stromal TGLS = 1-10 ]			
Vagina		Inflammation	Acute, Mild

---

PRIMARY CAUSE OF DEATH

---

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 240

**TRT#:** 14

**SEX:** Female

**DAY ON TEST:** 739

**DOSE:** 100PPM/FFUMON-14

**DISP:** Terminal Sacrifice

**HISTO:** 21080100240

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Blood Vessel - Aorta	Bone - Femur	Bone - Sternum	Bone Marrow
Brain - Cerebellum	Brain - Cerebrum	Esophagus	Eye
Heart	Intestine Large - Cecum	Intestine Large - Colon	Intestine Large - Rectum
Intestine Small - Duodenum	Intestine Small - Ileum	Intestine Small - Jejunum	Lacrimal Gland
Larynx	Lung - Bronchus	Lymph Node - Mandibular	Mammary Gland
Ovary	Pancreas	Parathyroid Gland	Peripheral Nerve - Sciatic
Salivary Glands	Skeletal Muscle - Thigh	Skin	Spinal Cord - Thoracic
Spleen	Stomach - Forestomach	Stomach - Glandular	Thyroid Gland
Tongue	Trachea	Urinary Bladder	Vagina

**MISSING**

Zymbal's Gland

**OBSERVATIONS**

Adrenal Gland	Cortex	Hyperplasia	Focal, Minimal
	Medulla	Hyperplasia	Focal, Moderate
Clitoral Gland		Adenoma	
[ Adenoma TGLS = 1-10 ]			
Harderian Gland	Bilateral	Infiltration Cellular	Lymphocytic, Minimal
* Kidney	Bilateral	Mineralization	Minimal
	Bilateral	Nephropathy	Minimal
Lacrimal GI			
Note: TGL # 03- NO MICROSCOPIC CORRELATE			
* Liver		Basophilic Focus	
		Eosinophilic Focus	
		Inflammation	Chronic, Minimal
		Tension Lipidosis	
[ Eosinophilic Focus TGLS = 5-6.1 ]			
Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
Nose	Nasolacrim Dct	Inflammation	Chronic Active, Mild
Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 4-11 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

**ANIMAL ID:** 240

**TRT#:** 14

**SEX:** Female

**DAY ON TEST:** 739

**DOSE:** 100PPM/FFUMON-14

**DISP:** Terminal Sacrifice

**HISTO:** 21080100240

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

Thymus

Atrophy

Mild

Uterus

Endometrium

Polyp Stromal

[ Polyp Stromal TGLS = 2-10 ]

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 241

**TRT#:** 14

**SEX:** Female

**DAY ON TEST:** 739

**DOSE:** 100PPM/FFUMON-14

**DISP:** Terminal Sacrifice

**HISTO:** 21080100241

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Blood Vessel - Aorta	Bone Marrow	Brain - Cerebellum	Brain - Cerebrum
Esophagus	Intestine Large - Cecum	Intestine Large - Colon	Intestine Large - Rectum
Intestine Small - Duodenum	Intestine Small - Ileum	Intestine Small - Jejunum	Lacrimal Gland
Larynx	Lung - Bronchus	Lymph Node - Mandibular	Lymph Node - Mesenteric
Ovary	Pancreas	Parathyroid Gland	Peripheral Nerve - Sciatic
Salivary Glands	Skeletal Muscle - Thigh	Skin	Spinal Cord - Thoracic
Stomach - Forestomach	Stomach - Glandular	Thyroid Gland	Tongue
Trachea	Urinary Bladder	Uterus	Vagina
Zymbal's Gland			

**MISSING**

Thymus

**OBSERVATIONS**

Adrenal Gland	Bilateral, Cortex	Angiectasis	Mild
Bone	Femur	Hyperostosis	Mild
	Sternum	Hyperostosis	Mild
Brain	Hypothalamus	Compression	Mild
Clitoral Gland		Inflammation	Chronic, Minimal
Note: ONLY ONE			
Eye	Bilateral, Retina	Atrophy	Moderate
Harderian Gland	Bilateral	Infiltration Cellular	Lymphocytic, Minimal
Heart		Cardiomyopathy	Minimal
* Kidney	Bilateral	Nephropathy	Mild
* Liver		Basophilic Focus	
		Eosinophilic Focus	
		Hepatodiaphragmatic Nodule	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Chronic, Minimal
		Mixed Cell Focus	
	Hepatocyte	Vacuolization Cytoplasmic	Minimal

[ Hyperplasia TGLS = 3-6.1 ]

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 241	<b>TRT#:</b> 14	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> 100PPM/FFUMON-14	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100241

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

Mammary Gland [ Fibroadenoma TGLS = 1-10 ]		Fibroadenoma	
Nose	Olfactory Epi Nasolacrim Dct	Cytoplasmic Alteration Inflammation	Mild Chronic Active, Mild
Pituitary Gland [ Adenoma TGLS = 2-11 ]	Pars Distalis	Adenoma	
Spleen		Pigmentation	Minimal

---

PRIMARY CAUSE OF DEATH -

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

<b>ANIMAL ID:</b> 242	<b>TRT#:</b> 14	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> 100PPM/FFUMON-14	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100242

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Blood Vessel - Aorta	Bone - Femur	Bone - Sternum	Bone Marrow
Brain - Cerebellum	Brain - Cerebrum	Esophagus	Harderian Gland
Intestine Large - Cecum	Intestine Large - Colon	Intestine Large - Rectum	Intestine Small - Duodenum
Intestine Small - Ileum	Intestine Small - Jejunum	Lacrimal Gland	Larynx
Lung - Bronchus	Lymph Node - Mandibular	Ovary	Parathyroid Gland
Peripheral Nerve - Sciatic	Salivary Glands	Skeletal Muscle - Thigh	Skin
Spinal Cord - Thoracic	Stomach - Forestomach	Stomach - Glandular	Tongue
Trachea	Urinary Bladder	Uterus	Vagina
Zymbal's Gland			

**OBSERVATIONS**

Adrenal Gland	Bilateral, Cortex	Angiectasis	Minimal
Clitoral Gland	Bilateral	Adenoma	
[ Adenoma TGLS = 3-10 ]			
Eye	Retina	Atrophy	Moderate
Heart		Cardiomyopathy	Minimal
* Kidney	Bilateral	Mineralization	Minimal
	Bilateral	Nephropathy	Minimal
* Liver		Basophilic Focus	
		Inflammation	Chronic, Minimal
		Mixed Cell Focus	
		Tension Lipidosis	
	Hepatocyte	Vacuolization Cytoplasmic	Minimal
[ Basophilic Focus TGLS = 1,2-6 ]			
[ Mixed Cell Focus TGLS = 6-6.1 ]			
Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
Mammary Gland		Galactoceles	Mild
[ Galactoceles TGLS = 4-10 ]			
Nose	Olfactory Epi	Cytoplasmic Alteration	Minimal
Pancreas	Acinar Cell	Atrophy	Focal, Minimal
Pituitary Gland	Pars Distalis	Adenoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 242	<b>TRT#:</b> 14	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> 100PPM/FFUMON-14	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100242

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

[ Adenoma TGLS = 5-11 ]			
Spleen		Hematopoietic Cell Proliferation	Minimal
		Pigmentation	Minimal
Thymus		Cyst	Minimal
Thyroid Gland	C Cell	Hyperplasia	Focal, Marked
PRIMARY CAUSE OF DEATH	-		

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 243

**TRT#:** 14

**SEX:** Female

**DAY ON TEST:** 739

**DOSE:** 100PPM/FFUMON-14

**DISP:** Terminal Sacrifice

**HISTO:** 21080100243

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Adrenal Gland	Blood Vessel - Aorta	Bone - Femur	Bone - Sternum
Brain - Cerebellum	Brain - Cerebrum	Esophagus	Intestine Large - Cecum
Intestine Large - Colon	Intestine Large - Rectum	Intestine Small - Duodenum	Intestine Small - Ileum
Intestine Small - Jejunum	Lung - Bronchus	Nose	Ovary
Parathyroid Gland	Peripheral Nerve - Sciatic	Pituitary Gland	Salivary Glands
Skeletal Muscle - Thigh	Skin	Spinal Cord - Thoracic	Stomach - Forestomach
Stomach - Glandular	Thymus	Thyroid Gland	Tongue
Trachea	Urinary Bladder	Uterus	Vagina
Zymbal's Gland			

**MISSING**

Larynx

**OBSERVATIONS**

Bone Marrow		Hyperplasia	Mild
Clitoral Gland	Bilateral	Inflammation	Acute, Minimal
Eye	Retina	Atrophy	Moderate
Harderian Gland		Infiltration Cellular	Lymphocytic, Minimal
Heart		Cardiomyopathy	Mild
* Kidney	Bilateral	Mineralization	Mild
Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Mild
		Inflammation	Chronic, Moderate
		Leukemia Mononuclear	
Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
	Mandibular	Leukemia Mononuclear	
Mammary Gland		Fibroadenoma	Multiple
[ Fibroadenoma TGLS = 1,2-10.1 ]			
Pancreas	Acinar Cell	Atrophy	Focal, Mild
Spleen		Leukemia Mononuclear	

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

**ANIMAL ID:** 243

**TRT#:** 14

**SEX:** Female

**DAY ON TEST:** 739

**DOSE:** 100PPM/FFUMON-14

**DISP:** Terminal Sacrifice

**HISTO:** 21080100243

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

---

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92002-03  
Test Type: CHRONIC  
Species/Strain: Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
Test Compound: Fumonisin B1  
CAS Number: 116355-83-0

Date Report Requested: 10/15/2014  
Time Report Requested: 18:08:23  
First Dose M/F: NA / NA  
Lab: NCTR

---

<b>ANIMAL ID:</b> 244	<b>TRT#:</b> 11	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> 5PPM/F FUMON-11	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100244

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Lung - Bronchus

---

**OBSERVATIONS**

* Kidney	Bilateral	Mineralization	Mild
	Bilateral	Nephropathy	Minimal
* Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Chronic, Minimal
		Mixed Cell Focus	
		Tension Lipidosis	
	[ Mixed Cell Focus TGLS = 1,5-1+1.3 ]		
* Mammary Gland		Fibroadenoma	
	[ Fibroadenoma TGLS = 4-10 ]		
* Ovary	Periovarn Tiss	Cyst	Moderate
	[ Cyst TGLS = 2-10 ]		
* Pituitary Gland	Pars Distalis	Adenoma	
	[ Adenoma TGLS = 3-11 ]		

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 245

**TRT#:** 11

**SEX:** Female

**DAY ON TEST:** 739

**DOSE:** 5PPM/F FUMON-11

**DISP:** Terminal Sacrifice

**HISTO:** 21080100245

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Lung - Bronchus

**OBSERVATIONS**

* Kidney	Bilateral	Mineralization	Minimal
	Bilateral	Nephropathy	Mild
	Bilateral, Renal Tubule	Pigmentation	Minimal
* Liver		Basophilic Focus	
		Clear Cell Focus	
		Mixed Cell Focus	
	[ Basophilic Focus TGLS = 3-1 ]		
* Lung		Infiltration Cellular	Histiocytic, Minimal
* Mammary Gland		Galactoceles	Moderate
	[ Galactoceles TGLS = 1-10 ]		
Mesentery	Fat	Necrosis	Mild
	[ Necrosis TGLS = 2-14 ]		
* Pituitary Gland	Pars Distalis	Angiectasis	Mild
	[ Angiectasis TGLS = 4-11 ]		

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92002-03  
Test Type: CHRONIC  
Species/Strain: Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

Test Compound: Fumonisin B1  
CAS Number: 116355-83-0

Date Report Requested: 10/15/2014  
Time Report Requested: 18:08:23  
First Dose M/F: NA / NA  
Lab: NCTR

---

<b>ANIMAL ID:</b> 246	<b>TRT#:</b> 11	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> 5PPM/F FUMON-11	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100246

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Lung - Bronchus

---

**OBSERVATIONS**

* Kidney		Cyst	Mild
	Bilateral	Mineralization	Minimal
	Bilateral	Nephropathy	Moderate
* Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Minimal
		Mixed Cell Focus	
		Necrosis	Minimal
	Hepatocyte	Vacuolization Cytoplasmic	Minimal
* Lung	Alveolar Epith	Hyperplasia	Focal, Mild
* Mammary Gland		Carcinoma	
		Galactocele	Mild
	[ Carcinoma TGLS = 1-10 ]		
* Pituitary Gland	Pars Distalis	Adenoma	
	[ Adenoma TGLS = 2-11 ]		

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92002-03  
Test Type: CHRONIC  
Species/Strain: Rat/F 344/NCTR

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
Test Compound: Fumonisin B1  
CAS Number: 116355-83-0

Date Report Requested: 10/15/2014  
Time Report Requested: 18:08:23  
First Dose M/F: NA / NA  
Lab: NCTR

ANIMAL ID: 247

TRT#: 11

SEX: Female

DAY ON TEST: 739

DOSE: 5PPM/F FUMON-11

DISP: Terminal Sacrifice

HISTO: 21080100247

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

\* Lung - Bronchus

OBSERVATIONS

* Kidney	Bilateral	Mineralization	Minimal
	Bilateral, Renal Tubule	Pigmentation	Mild
* Liver		Basophilic Focus	
		Clear Cell Focus	
		Inflammation	Chronic, Mild
		Mixed Cell Focus	
		Tension Lipidosis	
	Hepatocyte	Vacuolization Cytoplasmic	Minimal
* Mammary Gland		Fibroadenoma	
	[ Fibroadenoma TGLS = 1-14 ]		
* Pituitary Gland	Pars Distalis	Adenoma	
	[ Adenoma TGLS = 2-11 ]		
* Spleen		Hematopoietic Cell Proliferation	Minimal
	Lymph Follic	Hyperplasia	Focal, Marked
	[ Hyperplasia TGLS = 3-6 ]		

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 248

**TRT#:** 11

**SEX:** Female

**DAY ON TEST:** 739

**DOSE:** 5PPM/F FUMON-11

**DISP:** Terminal Sacrifice

**HISTO:** 21080100248

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Lung - Bronchus

**OBSERVATIONS**

* Kidney	Bilateral Bilateral, Renal Tubule	Mineralization Pigmentation	Mild Mild
* Liver		Angiectasis Basophilic Focus Inflammation Mixed Cell Focus Fibroadenoma	Focal, Minimal Chronic, Minimal
* Mammary Gland [ Fibroadenoma TGLS = 1-10 ]			
* Pituitary Gland [ Adenoma TGLS = 3-11 ]	Pars Distalis	Adenoma	
* Uterus [ Polyp Stromal TGLS = 2-10 ]	Endometrium	Polyp Stromal	

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 249

**TRT#:** 12

**SEX:** Female

**DAY ON TEST:** 739

**DOSE:** 15PPM/F FUMON-12

**DISP:** Terminal Sacrifice

**HISTO:** 21080100249

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Lung - Bronchus

**OBSERVATIONS**

* Kidney	Bilateral	Mineralization	Minimal
	Bilateral	Nephropathy	Minimal
* Liver		Basophilic Focus	
		Inflammation	Chronic, Minimal
* Mammary Gland		Fibroadenoma	
		Galactocele	Mild
		[ Fibroadenoma TGLS = 2-10.1 ]	
		[ Galactocele TGLS = 1-10.1 ]	
* Pituitary Gland	Pars Distalis	Adenoma	
		[ Adenoma TGLS = 3-11 ]	

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 250

**TRT#:** 12

**SEX:** Female

**DAY ON TEST:** 739

**DOSE:** 15PPM/F FUMON-12

**DISP:** Terminal Sacrifice

**HISTO:** 21080100250

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Lung - Bronchus

**OBSERVATIONS**

\* Clitoral Gland

Adenoma

Inflammation

Chronic Active, Marked

[ Inflammation TGLS = 3-10 ]

\* Kidney

Bilateral

Nephropathy

Mild

\* Lacrimal Gland

Infiltration Cellular

Lymphocytic, Mild

[ Infiltration Cellular TGLS = 2-8 ]

\* Liver

Basophilic Focus

Hepatodiaphragmatic Nodule

Hyperplasia

Minimal

Inflammation

Chronic, Minimal

[ Hepatodiaphragmatic Nodule TGLS = 1-1 ]

\* Pituitary Gland

Pars Distalis

Adenoma

[ Adenoma TGLS = 4-11 ]

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE



Experiment Number: 92002-03  
Test Type: CHRONIC  
Species/Strain: Rat/F 344/NCTR

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
Test Compound: Fumonisin B1  
CAS Number: 116355-83-0

Date Report Requested: 10/15/2014  
Time Report Requested: 18:08:23  
First Dose M/F: NA / NA  
Lab: NCTR

---

ANIMAL ID: 251	TRT#: 12	SEX: Female	DAY ON TEST: 739
	DOSE: 15PPM/F FUMON-12	DISP: Terminal Sacrifice	HISTO: 21080100251

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Lung - Bronchus

---

**OBSERVATIONS**

* Kidney	Bilateral	Mineralization	Mild
	Bilateral	Nephropathy	Minimal
* Liver		Basophilic Focus	
		Eosinophilic Focus	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Chronic, Minimal
		[ Basophilic Focus TGLS = 4-1.3+1.4+1.5 ]	
		[ Eosinophilic Focus TGLS = 1-1 ]	
* Lung	Alveolar Epith	Hyperplasia	Focal, Moderate
* Pituitary Gland	Pars Distalis	Adenoma	
		[ Adenoma TGLS = 3-11 ]	
* Uterus		Hydrometra	Marked
		[ Hydrometra TGLS = 2-10 ]	

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 252

**TRT#:** 12

**SEX:** Female

**DAY ON TEST:** 739

**DOSE:** 15PPM/F FUMON-12

**DISP:** Terminal Sacrifice

**HISTO:** 21080100252

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Lung - Bronchus

**OBSERVATIONS**

* Kidney	Bilateral	Mineralization	Minimal
	Bilateral	Nephropathy	Minimal
* Liver		Basophilic Focus	
		Eosinophilic Focus	
		Inflammation	Chronic, Minimal
		Mixed Cell Focus	
		Tension Lipidosis	
[ Inflammation TGLS = 3-1.3 ]			
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 1-10.1 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 2-11 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 253

**TRT#:** 13

**SEX:** Female

**DAY ON TEST:** 706

**DOSE:** 50PPM/F FUMON-13

**DISP:** Moribund

**HISTO:** 21080100253

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Brain - Cerebellum	* Brain - Cerebrum	* Clitoral Gland
* Esophagus	* Eye	* Harderian Gland	* Intestine Large - Cecum
* Intestine Large - Colon	* Intestine Large - Rectum	* Intestine Small - Duodenum	* Intestine Small - Ileum
* Intestine Small - Jejunum	* Larynx	* Lung - Bronchus	* Ovary
* Pancreas	* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Salivary Glands
* Skeletal Muscle - Thigh	* Skin	* Spinal Cord - Thoracic	* Stomach - Glandular
* Thyroid Gland	* Tongue	* Trachea	* Urinary Bladder
* Uterus	* Vagina	* Zymbal's Gland	

**OBSERVATIONS**

* Adrenal Gland	Bilateral, Cortex	Vacuolization Cytoplasmic	Focal, Moderate
* Bone	Femur	Hyperostosis	Moderate
	Sternum	Hyperostosis	Moderate
* Bone Marrow		Leukemia Mononuclear	
* Heart		Cardiomyopathy	Minimal
* Kidney	Bilateral	Nephropathy	Minimal
	Bilateral, Renal Tubule	Pigmentation	Minimal
* Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Liver	Bile Duct	Hyperplasia	Mild
		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 3-6 ]		
* Lung		Leukemia Mononuclear	
* Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Moderate
	Mandibular	Leukemia Mononuclear	
* Mammary Gland		Cyst	Mild
	[ Fibroadenoma TGLS = 1-10.1 ]	Fibroadenoma	
* Nose	Olfactory Epi	Cytoplasmic Alteration	Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
	[ Adenoma TGLS = 4-11 ]		
* Spleen		Leukemia Mononuclear	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 253	<b>TRT#:</b> 13	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 706
	<b>DOSE:</b> 50PPM/F FUMON-13	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100253

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

[ Leukemia Mononuclear TGLS = 2-7 ]

* Stomach	Epithelium, Forestomach	Hyperplasia	Moderate
	Forestomach	Inflammation	Chronic, Minimal
* Thymus		Leukemia Mononuclear	

---

**PRIMARY CAUSE OF DEATH** - Spleen Leukemia Mononuclear

---

Animal Note: COD...PROBABLE-LEUKEMIA MONONUCLEAR CELL

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 254      **TRT#:** 10      **SEX:** Female      **DAY ON TEST:** 706  
**DOSE:** 0PPM/F FUMON-10      **DISP:** Moribund      **HISTO:** 21080100254

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Gland	* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum
* Brain - Cerebellum	* Brain - Cerebrum	* Esophagus	* Eye
* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum	* Intestine Small - Duodenum
* Intestine Small - Ileum	* Intestine Small - Jejunum	* Lung - Bronchus	* Lymph Node - Mandibular
* Ovary	* Pancreas	* Peripheral Nerve - Sciatic	* Salivary Glands
* Skeletal Muscle - Thigh	* Skin	* Spinal Cord - Thoracic	* Stomach - Forestomach
* Stomach - Glandular	* Thymus	* Thyroid Gland	* Tongue
* Trachea	* Urinary Bladder	* Vagina	

**MISSING**

* Clitoral Gland	* Parathyroid Gland	* Zymbal's Gland
------------------	---------------------	------------------

**OBSERVATIONS**

* Bone Marrow		Hyperplasia	Mild
* Harderian Gland		Infiltration Cellular	Lymphocytic, Minimal
* Heart		Cardiomyopathy	Minimal
* Kidney	Bilateral, Renal Tubule	Accumulation, Hyaline Droplet	Mild
	Bilateral	Mineralization	Minimal
	Bilateral	Nephropathy	Minimal
* Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Larynx		Inflammation	Chronic, Minimal
* Liver		Basophilic Focus	
		Hematopoietic Cell Proliferation	Mild
		Mixed Cell Focus	
* Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
* Mammary Gland		Carcinoma	
		Galactocele	Moderate
[ Carcinoma TGLS = 1-10.1 ]			
* Nose	Olfactory Epi	Cytoplasmic Alteration	Minimal
	Nasolacrim Dct	Inflammation	Chronic Active, Mild
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 3-11 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 254	<b>TRT#:</b> 10	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 706
	<b>DOSE:</b> 0PPM/F FUMON-10	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100254

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

* Spleen		Hematopoietic Cell Proliferation	Mild
		Pigmentation	Minimal
* Uterus	Endometrium	Leiomyosarcoma	
		Polyp Stromal	
[ Leiomyosarcoma TGLS = 2-10 ]			

---

**PRIMARY CAUSE OF DEATH** - Mammary Gland Carcinoma

---

Animal Note: COD...PROBABLE-MAMMARY GLAND,CARCINOMA

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

<b>ANIMAL ID:</b> 255	<b>TRT#:</b> 13 <b>DOSE:</b> 50PPM/F FUMON-13	<b>SEX:</b> Female <b>DISP:</b> Moribund	<b>DAY ON TEST:</b> 699 <b>HISTO:</b> 21080100255
-----------------------	--	---	--

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Bone Marrow
* Brain - Cerebellum	* Brain - Cerebrum	* Clitoral Gland	* Esophagus
* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum	* Intestine Small - Duodenum
* Intestine Small - Ileum	* Intestine Small - Jejunum	* Larynx	* Lung - Bronchus
* Lymph Node - Mandibular	* Nose	* Ovary	* Pancreas
* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Skeletal Muscle - Thigh	* Skin
* Spinal Cord - Thoracic	* Stomach - Glandular	* Thymus	* Thyroid Gland
* Tongue	* Trachea	* Urinary Bladder	* Uterus
* Vagina	* Zymbal's Gland		

**OBSERVATIONS**

* Adrenal Gland	Bilateral, Cortex	Angiectasis	Mild
* Eye	Bilateral, Retina	Atrophy	Moderate
* Harderian Gland		Infiltration Cellular	Lymphocytic, Minimal
* Heart		Cardiomyopathy	Minimal
* Kidney	Bilateral	Mineralization	Mild
	Bilateral	Nephropathy	Minimal
* Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Liver		Inflammation	Chronic, Minimal
	Hepatocyte	Vacuolization Cytoplasmic	Marked
	[ Vacuolization Cytoplasmic TGLS = 3-6.1 ]		
* Lymph Node	Mesenteric	Hemorrhage	Mild
	Mesenteric	Infiltration Cellular	Histiocytic, Mild
* Mammary Gland		Fibroadenoma	Multiple
	[ Fibroadenoma TGLS = 1-10.1 ]		
* Pituitary Gland	Pars Distalis	Adenoma	
	[ Adenoma TGLS = 2-11 ]		
* Salivary Glands	Parotid GI	Atrophy	Moderate
* Spleen		Pigmentation	Moderate
* Stomach	Epithelium, Forestomach	Hyperplasia	Marked
	Forestomach	Inflammation	Chronic, Mild

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

**ANIMAL ID:** 255

**TRT#:** 13

**SEX:** Female

**DAY ON TEST:** 699

**DOSE:** 50PPM/F FUMON-13

**DISP:** Moribund

**HISTO:** 21080100255

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

PRIMARY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma

---

Animal Note: COD...PROBABLE-PITUITARY GLAND,ADENOMA

---

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 261

**TRT#:** 14

**SEX:** Female

**DAY ON TEST:** 733

**DOSE:** 100PPM/FFUMON-14

**DISP:** Moribund

**HISTO:** 21080100261

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Blood Vessel - Aorta	Brain - Cerebellum	Brain - Cerebrum	Esophagus
Eye	Intestine Large - Cecum	Intestine Large - Colon	Intestine Large - Rectum
Intestine Small - Duodenum	Intestine Small - Ileum	Intestine Small - Jejunum	Lacrimal Gland
Larynx	Lung - Bronchus	Mammary Gland	Ovary
Pancreas	Parathyroid Gland	Peripheral Nerve - Sciatic	Salivary Glands
Skeletal Muscle - Thigh	Skin	Spinal Cord - Thoracic	Stomach - Glandular
Thyroid Gland	Tongue	Trachea	Urinary Bladder
Zymbal's Gland			

**OBSERVATIONS**

Adrenal Gland		Leukemia Mononuclear	
	Cortex	Vacuolization Cytoplasmic	Focal, Minimal
Bone	Femur	Hyperostosis	Mild
	Sternum	Hyperostosis	Mild
Bone Marrow		Leukemia Mononuclear	
Clitoral Gland		Adenoma	
Note: ONLY ONE			
[ Adenoma TGLS = 1-10 ]			
Harderian Gland		Infiltration Cellular	Lymphocytic, Minimal
Heart		Leukemia Mononuclear	
* Kidney		Cyst	Mild
	Bilateral	Leukemia Mononuclear	
	Renal Tubule	Mineralization	Minimal
		Pigmentation	Mild
[ Cyst TGLS = 3-2 ]			
* Liver		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 5,6,7,8-6 + 6.1 + 6.2 ]			
Lung		Leukemia Mononuclear	
Lymph Node	Mandibular	Leukemia Mononuclear	
	Mesenteric	Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 10-11 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 261	<b>TRT#:</b> 14	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 733
	<b>DOSE:</b> 100PPM/FFUMON-14	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100261

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

Nose	Nasolacrim Dct	Inflammation	Acute, Mild
Pituitary Gland [ Cyst TGLS = 9-11 ]	Pars Distalis	Cyst	Moderate
Spleen [ Leukemia Mononuclear TGLS = 2-7 ]		Leukemia Mononuclear	
Stomach	Epithelium, Forestomach	Hyperplasia	Mild
Thymus		Leukemia Mononuclear	
Uterus	Endometrium	Cyst	Mild
Note: TGL#4-NO SECTION TAKEN FLUID			
Vagina	Epithelium	Hyperplasia Leukemia Mononuclear	Mild

---

**PRIMARY CAUSE OF DEATH** - Spleen Leukemia Mononuclear

Animal Note: COD...PROBABLE-LEUKEMIA MONONUCLEAR CELL

---

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 262

**TRT#:** 10

**SEX:** Female

**DAY ON TEST:** 733

**DOSE:** 0PPM/F FUMON-10

**DISP:** Moribund

**HISTO:** 21080100262

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Brain - Cerebellum
* Brain - Cerebrum	* Esophagus	* Intestine Large - Cecum	* Intestine Large - Colon
* Intestine Large - Rectum	* Intestine Small - Duodenum	* Intestine Small - Ileum	* Intestine Small - Jejunum
* Lacrimal Gland	* Lung - Bronchus	* Parathyroid Gland	* Peripheral Nerve - Sciatic
* Salivary Glands	* Skeletal Muscle - Thigh	* Skin	* Spinal Cord - Thoracic
* Stomach - Forestomach	* Stomach - Glandular	* Thyroid Gland	* Tongue
* Trachea	* Zymbal's Gland		

**MISSING**

* Bone Marrow	* Clitoral Gland	* Nose	* Ovary
* Urinary Bladder	* Uterus	* Vagina	

**OBSERVATIONS**

* Adrenal Gland		Leukemia Mononuclear	
	Cortex	Vacuolization Cytoplasmic	Focal, Mild
* Eye	Retina	Atrophy	Minimal
* Harderian Gland		Infiltration Cellular	Lymphocytic, Minimal
* Heart		Cardiomyopathy	Minimal
Note: TGL # 04 - NO MICROSCOPIC CORRELATE			
* Kidney	Bilateral	Mineralization	Mild
	Bilateral	Nephropathy	Minimal
* Lacrimal GI			
Note: TGL # 01 - NO MICROSCOPIC CORRELATE			
* Larynx		Inflammation	Chronic Active, Mild
* Liver	Bile Duct	Hyperplasia	Moderate
		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 5,6-6 ]			
* Lung		Leukemia Mononuclear	
* Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
	Mandibular	Leukemia Mononuclear	
	Mesenteric	Leukemia Mononuclear	
* Mammary Gland		Fibroadenoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 262	<b>TRT#:</b> 10	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 733
	<b>DOSE:</b> 0PPM/F FUMON-10	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100262

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

[ Fibroadenoma TGLS = 2-10 ]			
* Pancreas	Acinar Cell	Atrophy	Focal, Minimal
* Pituitary Gland	Pars Distalis	Cyst	Mild
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 3-7 ]			
* Thymus		Leukemia Mononuclear	

---

**PRIMARY CAUSE OF DEATH** - Spleen Leukemia Mononuclear

---

Animal Note: COD...PROBABLE-LEUKEMIA MONONUCLEAR CELL

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 263      **TRT#:** 10      **SEX:** Female      **DAY ON TEST:** 691  
**DOSE:** 0PPM/F FUMON-10      **DISP:** Moribund      **HISTO:** 21080100263

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Bone Marrow
* Brain - Cerebellum	* Brain - Cerebrum	* Clitoral Gland	* Esophagus
* Harderian Gland	* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum
* Intestine Small - Duodenum	* Intestine Small - Ileum	* Intestine Small - Jejunum	* Larynx
* Lung - Bronchus	* Lymph Node - Mandibular	* Pancreas	* Parathyroid Gland
* Peripheral Nerve - Sciatic	* Pituitary Gland	* Salivary Glands	* Skeletal Muscle - Thigh
* Skin	* Spinal Cord - Thoracic	* Tongue	* Trachea
* Urinary Bladder	* Uterus	* Vagina	

**MISSING**

* Lacrimal Gland	* Thymus	* Zymbal's Gland	
------------------	----------	------------------	--

**OBSERVATIONS**

* Adrenal Gland	Cortex Cortex	Adenoma Hyperplasia	Focal, Mild
[ Adenoma TGLS = 4-11 ]			
* Brain		Hydrocephalus	Mild
Note: TGL#3-NULLIFIED BY TRIMMER			
* Eye	Bilateral, Retina Bilateral, Lens	Atrophy Cataract	Moderate Mild
* Heart		Cardiomyopathy	Minimal
* Kidney	Bilateral Bilateral	Mineralization Nephropathy	Mild Mild
* Liver		Basophilic Focus Vacuolization Cytoplasmic	Marked
* Lymph Node	Hepatocyte Mesenteric	Infiltration Cellular	Histiocytic, Mild
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 2-14 ]			
* Nose	Olfactory Epi Nasolacrim Dct	Cytoplasmic Alteration Inflammation	Minimal Chronic Active, Mild
* Ovary	Periovarn Tiss	Cyst	Moderate
[ Cyst TGLS = 1-10 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 263	<b>TRT#:</b> 10	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 691
	<b>DOSE:</b> 0PPM/F FUMON-10	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100263

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

* Spleen		Hematopoietic Cell Proliferation	Mild
* Stomach	Glandular	Cyst	Minimal
	Epithelium, Forestomach	Hyperplasia	Moderate
	Forestomach	Inflammation	Chronic, Mild
* Thyroid Gland	C Cell	Hyperplasia	Focal, Mild

---

**PRIMARY CAUSE OF DEATH** - Mammary Gland Fibroadenoma

---

Animal Note: COD...PROBABLE-MAMMARY GLAND,FIBROADENOMA

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 264

**TRT#:** 12

**SEX:** Female

**DAY ON TEST:** 736

**DOSE:** 15PPM/F FUMON-12

**DISP:** Moribund

**HISTO:** 21080100264

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Gland	* Blood Vessel - Aorta	* Brain - Cerebellum	* Brain - Cerebrum
* Esophagus	* Eye	* Intestine Large - Cecum	* Intestine Large - Colon
* Intestine Large - Rectum	* Intestine Small - Duodenum	* Intestine Small - Ileum	* Intestine Small - Jejunum
* Larynx	* Lung - Bronchus	* Ovary	* Pancreas
* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Salivary Glands	* Skeletal Muscle - Thigh
* Skin	* Spinal Cord - Thoracic	* Spleen	* Stomach - Glandular
* Thymus	* Thyroid Gland	* Tongue	* Trachea
* Urinary Bladder	* Zymbal's Gland		

**OBSERVATIONS**

* Bone	Femur	Hyperostosis	Mild
	Sternum	Hyperostosis	Mild
* Bone Marrow		Hyperplasia	Mild
* Clitoral Gland		Adenoma	
Note: ONLY ONE			
[ Adenoma TGLS = 1-10 ]			
* Harderian Gland		Atrophy	Focal, Mild
	Bilateral	Infiltration Cellular	Lymphocytic, Minimal
* Heart		Cardiomyopathy	Minimal
* Kidney	Bilateral	Mineralization	Minimal
	Bilateral	Nephropathy	Minimal
* Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Liver		Basophilic Focus	
		Inflammation	Chronic, Moderate
		Mixed Cell Focus	
	Hepatocyte	Vacuolization Cytoplasmic	Moderate
* Lymph Node	Mandibular	Degeneration	Cystic, Minimal
	Mandibular	Hyperplasia	Minimal
	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
* Mammary Gland		Galactocele	Mild
* Nose	Olfactory Epi	Cytoplasmic Alteration	Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 264	<b>TRT#:</b> 12	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 736
	<b>DOSE:</b> 15PPM/F FUMON-12	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100264

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

* Pituitary Gland [ Adenoma TGLS = 2-11 ]	Nasolacrim Dct Pars Distalis	Inflammation Adenoma	Chronic Active, Mild
* Stomach	Epithelium, Forestomach Forestomach	Hyperplasia Inflammation	Mild Chronic, Minimal
* Uterus	Endometrium	Cyst	Mild
* Vagina	Muscularis	Inflammation	Chronic, Mild

---

**PRIMARY CAUSE OF DEATH** - Pituitary Gland Pars Distalis Adenoma

---

Animal Note: COD...PROBABLE-PITUITARY GLAND,ADENOMA

---

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

<b>ANIMAL ID:</b> 266	<b>TRT#:</b> 12	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 715
	<b>DOSE:</b> 15PPM/F FUMON-12	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100266

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Brain - Cerebellum
* Brain - Cerebrum	* Esophagus	* Harderian Gland	* Heart
* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum	* Intestine Small - Duodenum
* Intestine Small - Ileum	* Intestine Small - Jejunum	* Lacrimal Gland	* Larynx
* Lung - Bronchus	* Nose	* Ovary	* Parathyroid Gland
* Peripheral Nerve - Sciatic	* Pituitary Gland	* Salivary Glands	* Skeletal Muscle - Thigh
* Skin	* Spinal Cord - Thoracic	* Stomach - Forestomach	* Stomach - Glandular
* Tongue	* Trachea	* Vagina	

**MISSING**

* Clitoral Gland	* Zymbal's Gland
------------------	------------------

**OBSERVATIONS**

* Adrenal Gland		Leukemia Mononuclear	
	Medulla	Pheochromocytoma Benign	
* Bone Marrow		Leukemia Mononuclear	
* Eye	Bilateral, Retina	Atrophy	Marked
	Bilateral, Lens	Cataract	Marked
	[ Cataract TGLS = 2-13 ]		
* Kidney	Bilateral	Mineralization	Mild
* Liver	Bile Duct	Hyperplasia	Minimal
		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 3-6 ]		
* Lung		Leukemia Mononuclear	
* Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Mild
	Mandibular	Leukemia Mononuclear	
* Mammary Gland		Fibroadenoma	
		Galactocele	Moderate
	[ Fibroadenoma TGLS = 1-14 ]		
* Pancreas		Leukemia Mononuclear	
* Spleen		Leukemia Mononuclear	
* Thymus		Leukemia Mononuclear	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 266	<b>TRT#:</b> 12	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 715
	<b>DOSE:</b> 15PPM/F FUMON-12	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100266

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

* Thyroid Gland	C Cell	Adenoma
* Urinary Bladder		Leukemia Mononuclear
* Uterus	Endometrium	Polyp Stromal

---

PRIMARY CAUSE OF DEATH - Spleen Leukemia Mononuclear

---

Animal Note: COD...PROBABLE-LEUKEMIA MONONUCLEAR CELL

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 287

**TRT#:** 10

**SEX:** Female

**DAY ON TEST:** 740

**DOSE:** 0PPM/F FUMON-10

**DISP:** Terminal Sacrifice

**HISTO:** 21080100287

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Gland	* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum
* Bone Marrow	* Brain - Cerebellum	* Brain - Cerebrum	* Esophagus
* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum	* Intestine Small - Duodenum
* Intestine Small - Ileum	* Intestine Small - Jejunum	* Larynx	* Lung - Bronchus
* Lymph Node - Mandibular	* Pancreas	* Parathyroid Gland	* Peripheral Nerve - Sciatic
* Salivary Glands	* Skeletal Muscle - Thigh	* Skin	* Spinal Cord - Thoracic
* Spleen	* Stomach - Forestomach	* Stomach - Glandular	* Thyroid Gland
* Tongue	* Trachea	* Urinary Bladder	* Uterus
* Vagina	* Zymbal's Gland		

**OBSERVATIONS**

* Clitoral Gland Note: ONLY ONE		Inflammation	Chronic Active, Mild
* Eye	Bilateral, Retina	Atrophy	Mild
* Harderian Gland	Bilateral	Infiltration Cellular	Lymphocytic, Minimal
* Heart		Cardiomyopathy	Minimal
* Kidney	Bilateral	Mineralization	Mild
	Bilateral	Nephropathy	Mild
* Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Liver		Basophilic Focus	
		Clear Cell Focus	
		Eosinophilic Focus	
	Bile Duct	Hyperplasia	Minimal
		Tension Lipidosis	
* Lymph Node	Mesenteric	Degeneration	Cystic, Minimal
	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
* Mammary Gland [ Fibroadenoma TGLS = 1-10.1 ]		Fibroadenoma	
* Nose	Nasolacrim Dct	Inflammation	Chronic, Minimal
* Ovary [ Cyst TGLS = 2-10 ]	Follicle	Cyst	Moderate

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 287	<b>TRT#:</b> 10	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 740
	<b>DOSE:</b> 0PPM/F FUMON-10	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100287

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

* Pituitary Gland [ Adenoma TGLS = 3-11 ]	Pars Distalis	Adenoma	
* Thymus		Cyst	Minimal
* Zymbals GI Note: SAMPLE LIMITED			

---

PRIMARY CAUSE OF DEATH -

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 288

**TRT#:** 10

**SEX:** Female

**DAY ON TEST:** 740

**DOSE:** 0PPM/F FUMON-10

**DISP:** Terminal Sacrifice

**HISTO:** 21080100288

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone Marrow	* Brain - Cerebellum	* Brain - Cerebrum
* Clitoral Gland	* Esophagus	* Heart	* Intestine Large - Cecum
* Intestine Large - Colon	* Intestine Large - Rectum	* Intestine Small - Duodenum	* Intestine Small - Ileum
* Intestine Small - Jejunum	* Larynx	* Lung - Bronchus	* Lymph Node - Mandibular
* Ovary	* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Salivary Glands
* Skeletal Muscle - Thigh	* Skin	* Spinal Cord - Thoracic	* Spleen
* Stomach - Forestomach	* Stomach - Glandular	* Thymus	* Tongue
* Trachea	* Urinary Bladder	* Uterus	* Zymbal's Gland

**OBSERVATIONS**

* Adrenal Gland	Bilateral, Cortex	Angiectasis	Minimal
* Bone	Femur	Hyperostosis	Mild
	Sternum	Hyperostosis	Mild
* Clitoral GI			
Note: ONLY ONE			
* Eye	Retina	Atrophy	Moderate
* Harderian Gland		Infiltration Cellular	Lymphocytic, Minimal
* Kidney	Bilateral	Mineralization	Mild
	Bilateral	Nephropathy	Mild
* Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Mild
		Mixed Cell Focus	
* Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 2-10.1 ]			
* Nose	Olfactory Epi	Cytoplasmic Alteration	Minimal
* Ovary			
Note: TGL # 01 - NO MICROSCOPIC CORRELATE			
* Pancreas	Acinar Cell	Atrophy	Focal, Moderate
* Pituitary Gland	Pars Distalis	Adenoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 288	<b>TRT#:</b> 10 <b>DOSE:</b> 0PPM/F FUMON-10	<b>SEX:</b> Female <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 740 <b>HISTO:</b> 21080100288
<b>ORGAN AND ACCOUNTABLE SITE STATUS</b>			
* Thyroid Gland [ Carcinoma TGLS = 3-4 ]	Pars Distalis C Cell C Cell	Cyst Carcinoma Hyperplasia	Mild Focal, Moderate
* Vagina		Squamous Cell Papilloma	
PRIMARY CAUSE OF DEATH	-		

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 289

**TRT#:** 10

**SEX:** Female

**DAY ON TEST:** 740

**DOSE:** 0PPM/F FUMON-10

**DISP:** Terminal Sacrifice

**HISTO:** 21080100289

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Gland	* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum
* Bone Marrow	* Brain - Cerebellum	* Brain - Cerebrum	* Clitoral Gland
* Esophagus	* Eye	* Harderian Gland	* Intestine Large - Cecum
* Intestine Large - Colon	* Intestine Large - Rectum	* Intestine Small - Duodenum	* Intestine Small - Ileum
* Intestine Small - Jejunum	* Lung - Bronchus	* Nose	* Ovary
* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Salivary Glands	* Skeletal Muscle - Thigh
* Skin	* Spinal Cord - Thoracic	* Stomach - Forestomach	* Thyroid Gland
* Tongue	* Trachea	* Urinary Bladder	* Vagina
* Zymbal's Gland			

**OBSERVATIONS**

* Heart		Cardiomyopathy	Minimal
* Kidney	Bilateral	Mineralization	Mild
	Bilateral	Nephropathy	Minimal
* Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Larynx		Inflammation	Chronic, Mild
* Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Chronic, Mild
		Mixed Cell Focus	
		Tension Lipidosis	
[ Mixed Cell Focus TGLS = 3-6 ]			
* Lymph Node	Mandibular	Hyperplasia	Minimal
	Mesenteric	Infiltration Cellular	Histiocytic, Mild
* Mammary Gland		Adenoma	
[ Adenoma TGLS = 1-10.1 ]			
* Pancreas	Acinar Cell	Atrophy	Focal, Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 2-11 ]			
* Spleen		Pigmentation	Mild
* Stomach	Glandular	Cyst	Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

**ANIMAL ID:** 289

**TRT#:** 10

**SEX:** Female

**DAY ON TEST:** 740

**DOSE:** 0PPM/F FUMON-10

**DISP:** Terminal Sacrifice

**HISTO:** 21080100289

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

\* Thymus

Atrophy

Moderate

\* Uterus

Endometrium

Polyp Stromal

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 290

**TRT#:** 11

**SEX:** Female

**DAY ON TEST:** 740

**DOSE:** 5PPM/F FUMON-11

**DISP:** Terminal Sacrifice

**HISTO:** 21080100290

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Lung - Bronchus

**OBSERVATIONS**

* Kidney	Bilateral	Mineralization	Minimal
	Bilateral	Nephropathy	Minimal
	Bilateral, Renal Tubule	Pigmentation	Minimal
* Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
Note: TGL # 01 - NO MICROSCOPIC CORRELATE			
* Liver		Basophilic Focus	
		Mixed Cell Focus	
		Tension Lipidosis	
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 2-11 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 291

**TRT#:** 11

**SEX:** Female

**DAY ON TEST:** 740

**DOSE:** 5PPM/F FUMON-11

**DISP:** Terminal Sacrifice

**HISTO:** 21080100291

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Lung - Bronchus

**OBSERVATIONS**

* Kidney	Bilateral	Mineralization	Mild
	Bilateral, Renal Tubule	Pigmentation	Mild
* Liver		Clear Cell Focus	
		Mixed Cell Focus	
	Hepatocyte	Vacuolization Cytoplasmic	Minimal

[ Clear Cell Focus TGLS = 1-1 ]

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 292	<b>TRT#:</b> 12	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 740
	<b>DOSE:</b> 15PPM/F FUMON-12	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100292

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Lung - Bronchus

---

**OBSERVATIONS**

* Kidney	Bilateral	Mineralization	Minimal
	Bilateral	Nephropathy	Minimal
	Renal Tubule	Pigmentation	Minimal
* Liver		Basophilic Focus	
		Eosinophilic Focus	
		Inflammation	Chronic, Minimal
	Hepatocyte	Vacuolization Cytoplasmic	Minimal
* Mammary Gland		Fibroadenoma	Multiple
[ Fibroadenoma TGLS = 1,2-14 + 14.1 ]			
Mesentery	Fat	Necrosis	Mild
[ Necrosis TGLS = 3-11 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 4-11 ]			

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92002-03  
Test Type: CHRONIC  
Species/Strain: Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
Test Compound: Fumonisin B1  
CAS Number: 116355-83-0

Date Report Requested: 10/15/2014  
Time Report Requested: 18:08:23  
First Dose M/F: NA / NA  
Lab: NCTR

---

<b>ANIMAL ID:</b> 293	<b>TRT#:</b> 12	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 740
	<b>DOSE:</b> 15PPM/F FUMON-12	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100293

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Lung - Bronchus

---

**OBSERVATIONS**

* Clitoral Gland [ Adenoma TGLS = 1-10 ]	Bilateral	Adenoma	
* Kidney	Bilateral Bilateral Bilateral, Renal Tubule	Mineralization Nephropathy Pigmentation	Minimal Minimal Minimal
* Liver  [ Clear Cell Focus TGLS = 2-1 ]	Bile Duct	Basophilic Focus Clear Cell Focus Hyperplasia Inflammation Mixed Cell Focus Tension Lipidosis	Minimal Chronic, Minimal
* Pituitary Gland  [ Adenoma TGLS = 5-11 ]	Pars Distalis Pars Distalis	Adenoma Cyst	Mild
* Thyroid Gland [ Carcinoma TGLS = 4-4 ]	C Cell	Carcinoma	
* Uterus [ Polyp Stromal TGLS = 3-10 ]	Endometrium	Polyp Stromal	

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 294

**TRT#:** 12

**SEX:** Female

**DAY ON TEST:** 740

**DOSE:** 15PPM/F FUMON-12

**DISP:** Terminal Sacrifice

**HISTO:** 21080100294

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Lung - Bronchus

**OBSERVATIONS**

* Kidney	Bilateral	Mineralization	Minimal
	Bilateral	Nephropathy	Minimal
* Liver		Basophilic Focus	
		Clear Cell Focus	
		Hepatodiaphragmatic Nodule	
	[ Clear Cell Focus TGLS = 3-1.3 ]		
	[ Hepatodiaphragmatic Nodule TGLS = 1-1 ]		
* Lung		Infiltration Cellular	Histiocytic, Minimal
* Spleen		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 2-7 ]		

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 295

**TRT#:** 13

**SEX:** Female

**DAY ON TEST:** 740

**DOSE:** 50PPM/F FUMON-13

**DISP:** Terminal Sacrifice

**HISTO:** 21080100295

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Lung - Bronchus

\* Uterus

**OBSERVATIONS**

\* Kidney

Pelvis

Inflammation

Acute, Minimal

Mineralization

Minimal

Bilateral

Nephropathy

Minimal

\* Liver

Basophilic Focus

Bile Duct

Hyperplasia

Minimal

Inflammation

Chronic, Minimal

Mixed Cell Focus

Mesentery

Fat

Necrosis

Moderate

[ Necrosis TGLS = 1-11 ]

\* Pituitary Gland

Pars Distalis

Adenoma

[ Adenoma TGLS = 2-11 ]

\* Uterus

Note: TGL # 03 - NO MICROSCOPIC CORRELATE

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 296

**TRT#:** 13

**SEX:** Female

**DAY ON TEST:** 740

**DOSE:** 50PPM/F FUMON-13

**DISP:** Terminal Sacrifice

**HISTO:** 21080100296

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Lung - Bronchus

**OBSERVATIONS**

\* Kidney

Bilateral

Leukemia Mononuclear

Mineralization

Minimal

Bilateral, Renal Tubule

Pigmentation

Mild

\* Liver

Bile Duct

Hyperplasia

Mild

Leukemia Mononuclear

[ Leukemia Mononuclear TGLS = 1-1 ]

\* Lung

Leukemia Mononuclear

\* Spleen

Leukemia Mononuclear

[ Leukemia Mononuclear TGLS = 2-7 ]

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 297

**TRT#:** 13

**SEX:** Female

**DAY ON TEST:** 740

**DOSE:** 50PPM/F FUMON-13

**DISP:** Terminal Sacrifice

**HISTO:** 21080100297

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Lung - Bronchus

**OBSERVATIONS**

\* Clitoral Gland

[ Adenoma TGLS = 2-10 ]

Adenoma

\* Kidney

Artery, Bilateral

Inflammation

Chronic, Mild

Pelvis

Inflammation

Chronic, Mild

Bilateral

Mineralization

Minimal

Bilateral

Nephropathy

Minimal

\* Lacrimal Gland

Infiltration Cellular

Lymphocytic, Mild

Note: TGL # 01 - NO MICROSCOPIC CORRELATE

\* Liver

Basophilic Focus

Multiple

Inflammation

Chronic, Minimal

Mixed Cell Focus

[ Basophilic Focus TGLS = 5-6.1 ]

\* Pituitary Gland

Pars Distalis

Cyst

Minimal

Pars Distalis

Inflammation

Chronic, Moderate

[ Inflammation TGLS = 4-11 ]

\* Thyroid Gland

C Cell

Carcinoma

[ Carcinoma TGLS = 3-4 ]

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

**ANIMAL ID:** 298

**TRT#:** 13

**SEX:** Female

**DAY ON TEST:** 740

**DOSE:** 50PPM/F FUMON-13

**DISP:** Terminal Sacrifice

**HISTO:** 21080100298

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Lung - Bronchus

---

**OBSERVATIONS**

* Kidney	Bilateral	Mineralization	Minimal
* Liver		Basophilic Focus	
		Clear Cell Focus	
		Eosinophilic Focus	
* Pituitary Gland	Bile Duct	Hyperplasia	Minimal
[ Adenoma TGLS = 1-11 ]	Pars Distalis	Adenoma	

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 299	<b>TRT#:</b> 13	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 740
	<b>DOSE:</b> 50PPM/F FUMON-13	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100299

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

* Lung - Bronchus	* Ovary
-------------------	---------

---

**OBSERVATIONS**

* Kidney	Bilateral	Mineralization	Minimal
* Liver	Hepatocyte	Basophilic Focus	
		Hyperplasia	Nodular, Focal, Mild
		Inflammation	Chronic, Minimal
	Hepatocyte	Tension Lipidosis	
		Vacuolization Cytoplasmic	Minimal

[ Hyperplasia TGLS = 2-6 ]

\* Ovary

Note: TGL # 01 - NO MICROSCOPIC CORRELATE

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

**ANIMAL ID:** 300

**TRT#:** 13

**SEX:** Female

**DAY ON TEST:** 740

**DOSE:** 50PPM/F FUMON-13

**DISP:** Terminal Sacrifice

**HISTO:** 21080100300

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Lung - Bronchus

---

**OBSERVATIONS**

\* Clitoral Gland

Note: TGL#3-NOTED GROSSLY AS CLITORAL GLAND WAS MAMMARY GLAND

* Kidney	Bilateral	Mineralization	Mild
* Liver		Basophilic Focus	
		Eosinophilic Focus	
		Inflammation	Chronic, Minimal
		Mixed Cell Focus	
		Tension Lipidosis	
* Mammary Gland		Fibroadenoma	Multiple

[ Fibroadenoma TGLS = 1,2,3-10+10.1+10.2 ]

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

<b>ANIMAL ID:</b> 301	<b>TRT#:</b> 14	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 740
	<b>DOSE:</b> 100PPM/FFUMON-14	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100301

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Blood Vessel - Aorta	Bone Marrow	Brain - Cerebellum	Brain - Cerebrum
Clitoral Gland	Esophagus	Eye	Intestine Large - Cecum
Intestine Large - Colon	Intestine Large - Rectum	Intestine Small - Duodenum	Intestine Small - Ileum
Intestine Small - Jejunum	Larynx	Lung - Bronchus	Lymph Node - Mandibular
Mammary Gland	Ovary	Parathyroid Gland	Peripheral Nerve - Sciatic
Salivary Glands	Skeletal Muscle - Thigh	Skin	Spinal Cord - Thoracic
Spleen	Stomach - Forestomach	Stomach - Glandular	Thyroid Gland
Tongue	Trachea	Urinary Bladder	Uterus
Vagina	Zymbal's Gland		

**MISSING**

Thymus

**OBSERVATIONS**

Adrenal Gland	Bilateral, Cortex	Angiectasis	Minimal
Bone	Femur	Hyperostosis	Marked
	Sternum	Hyperostosis	Marked
	Turbinates	Hyperostosis	Mild
Harderian Gland		Infiltration Cellular	Lymphocytic, Minimal
Heart		Cardiomyopathy	Minimal
* Kidney	Bilateral	Mineralization	Minimal
	Bilateral	Nephropathy	Minimal
Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Liver		Basophilic Focus	
		Clear Cell Focus	
		Mixed Cell Focus	
	Hepatocyte	Vacuolization Cytoplasmic	Mild
[ Basophilic Focus TGLS = 2-6 ]			
Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
Nose	Olfactory Epi	Cytoplasmic Alteration	Minimal
Pancreas	Acinar Cell	Atrophy	Focal, Minimal
	Artery	Inflammation	Chronic, Mild

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 301	<b>TRT#:</b> 14	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 740
	<b>DOSE:</b> 100PPM/FFUMON-14	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100301

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

Pituitary Gland	Pars Distalis	Adenoma
Uterus		

Note: TGL # 01 - NO MICROSCOPIC CORRELATE

---

PRIMARY CAUSE OF DEATH

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 302

**TRT#:** 14

**SEX:** Female

**DAY ON TEST:** 740

**DOSE:** 100PPM/FFUMON-14

**DISP:** Terminal Sacrifice

**HISTO:** 21080100302

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Blood Vessel - Aorta	Brain - Cerebellum	Brain - Cerebrum	Esophagus
Intestine Large - Cecum	Intestine Large - Colon	Intestine Large - Rectum	Intestine Small - Duodenum
Intestine Small - Ileum	Intestine Small - Jejunum	Larynx	Lung - Bronchus
Lymph Node - Mandibular	Ovary	Parathyroid Gland	Peripheral Nerve - Sciatic
Salivary Glands	Skin	Spinal Cord - Thoracic	Stomach - Forestomach
Stomach - Glandular	Thymus	Thyroid Gland	Tongue
Trachea	Urinary Bladder	Uterus	Vagina
Zymbal's Gland			

**OBSERVATIONS**

Adrenal Gland	Bilateral, Cortex	Angiectasis	Mild
	Bilateral	Infiltration Cellular	Lymphocytic, Minimal
Bone	Femur	Hyperostosis	Mild
	Sternum	Hyperostosis	Mild
	Turbinates	Hyperostosis	Mild
Bone Marrow		Myelofibrosis	Mild
Clitoral Gland		Cyst	Mild
Eye	Bilateral, Cornea	Inflammation	Chronic, Mild
Harderian Gland	Bilateral	Inflammation	Chronic, Mild
Heart		Cardiomyopathy	Minimal
* Kidney	Bilateral	Mineralization	Minimal
	Bilateral	Nephropathy	Minimal
Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Liver		Basophilic Focus	
		Inflammation	Chronic, Moderate
	Hepatocyte	Vacuolization Cytoplasmic	Minimal
Lung	Alveolar Epith	Hyperplasia	Focal, Mild
Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
Mammary Gland		Cyst	Mild
Mesentery	Fat	Necrosis	Mild

[ Necrosis TGLS = 1-14 ]

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 302	<b>TRT#:</b> 14	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 740
	<b>DOSE:</b> 100PPM/FFUMON-14	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100302

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

Nose	Olfactory Epi	Cytoplasmic Alteration	Minimal
	Nasolacrim Dct	Inflammation	Chronic Active, Minimal
Pancreas	Acinar Cell	Atrophy	Focal, Moderate
Pituitary Gland	Pars Distalis	Adenoma	
Skeletal Muscle	Thigh	Inflammation	Chronic, Mild
Spleen		Pigmentation	Minimal

---

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 303

**TRT#:** 14

**SEX:** Female

**DAY ON TEST:** 740

**DOSE:** 100PPM/FFUMON-14

**DISP:** Terminal Sacrifice

**HISTO:** 21080100303

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Blood Vessel - Aorta	Bone - Femur	Bone - Sternum	Brain - Cerebellum
Brain - Cerebrum	Esophagus	Intestine Large - Cecum	Intestine Large - Colon
Intestine Large - Rectum	Intestine Small - Duodenum	Intestine Small - Ileum	Intestine Small - Jejunum
Lacrimal Gland	Larynx	Lung - Bronchus	Lymph Node - Mandibular
Nose	Ovary	Parathyroid Gland	Peripheral Nerve - Sciatic
Salivary Glands	Skeletal Muscle - Thigh	Skin	Spinal Cord - Thoracic
Spleen	Stomach - Forestomach	Stomach - Glandular	Thymus
Thyroid Gland	Tongue	Trachea	Urinary Bladder
Uterus	Vagina		

**MISSING**

Clitoral Gland	Zymbal's Gland
----------------	----------------

**OBSERVATIONS**

Adrenal Gland	Bilateral, Cortex	Angiectasis	Mild
Bone Marrow		Hyperplasia	Mild
Brain	Hypothalamus	Compression	Minimal
Eye	Bilateral, Retina	Atrophy	Moderate
Harderian Gland		Infiltration Cellular	Lymphocytic, Minimal
Heart		Cardiomyopathy	Mild
* Kidney	Bilateral	Mineralization	Minimal
	Bilateral	Nephropathy	Minimal
* Liver		Basophilic Focus	
		Hepatodiaphragmatic Nodule	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Chronic, Moderate
	[ Hepatodiaphragmatic Nodule TGLS = 1-6 ]		
Lung		Alveolar/Bronchiolar Adenoma	
Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
Mammary Gland		Galactocele	Minimal
Pancreas	Acinar Cell	Atrophy	Focal, Minimal
Pituitary Gland	Pars Distalis	Adenoma	

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 303	<b>TRT#:</b> 14	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 740
	<b>DOSE:</b> 100PPM/FFUMON-14	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100303

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

[ Adenoma TGLS = 2-11 ]

---

PRIMARY CAUSE OF DEATH

---

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 304

**TRT#:** 10

**SEX:** Female

**DAY ON TEST:** 721

**DOSE:** 0PPM/F FUMON-10

**DISP:** Moribund

**HISTO:** 21080100304

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Brain - Cerebellum
* Brain - Cerebrum	* Esophagus	* Eye	* Harderian Gland
* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum	* Intestine Small - Duodenum
* Intestine Small - Ileum	* Intestine Small - Jejunum	* Lung - Bronchus	* Ovary
* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Skeletal Muscle - Thigh	* Skin
* Spinal Cord - Thoracic	* Stomach - Forestomach	* Stomach - Glandular	* Thyroid Gland
* Tongue	* Urinary Bladder	* Vagina	* Zymbal's Gland

**MISSING**

\* Thymus

**OBSERVATIONS**

* Adrenal Gland		Leukemia Mononuclear	
* Bone Marrow		Leukemia Mononuclear	
* Brain	Hypothalamus	Compression	Mild
* Clitoral Gland	Bilateral	Inflammation	Chronic Active, Minimal
* Heart		Cardiomyopathy	Minimal
* Kidney	Bilateral	Mineralization	Mild
	Bilateral	Nephropathy	Mild
* Lacrimal Gland		Leukemia Mononuclear	
Note: TGL # 05 - NO MICROSCOPIC CORRELATE			
* Larynx		Inflammation	Chronic Active, Minimal
* Liver	Bile Duct	Hyperplasia	Moderate
		Leukemia Mononuclear	
* Lung		Leukemia Mononuclear	
* Lymph Node	Mandibular	Leukemia Mononuclear	
	Mesenteric	Leukemia Mononuclear	
* Mammary Gland		Cyst	Mild
* Nose	Olfactory Epi	Cytoplasmic Alteration	Minimal
	Nasolacrim Dct	Inflammation	Acute, Mild
* Pancreas		Leukemia Mononuclear	
* Pituitary Gland	Pars Distalis	Adenoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 304	<b>TRT#:</b> 10 <b>DOSE:</b> 0PPM/F FUMON-10	<b>SEX:</b> Female <b>DISP:</b> Moribund	<b>DAY ON TEST:</b> 721 <b>HISTO:</b> 21080100304
-----------------------	---	---	--

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

[ Adenoma TGLS = 4-11 ]			
* Salivary Glands	Parotid GI	Atrophy	Moderate
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 3-7 ]			
* Trachea		Inflammation	Chronic Active, Minimal
* Uterus		Deciduoma Benign	
[ Deciduoma Benign TGLS = 2-10 ]			
* Vagina			
Note: TGL#1-NO SECTION TAKEN			

---

PRIMARY CAUSE OF DEATH	-
CONTRIBUTORY CAUSE OF DEATH	- Pituitary Gland Pars Distalis Adenoma;Spleen Leukemia Mononuclear

---

Animal Note: COD...CONTRIBUTORY-LEUKEMIA MONONUCLEAR CELL -PITUITARY,ADENOMA

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 308

**TRT#:** 11

**SEX:** Female

**DAY ON TEST:** 708

**DOSE:** 5PPM/F FUMON-11

**DISP:** Moribund

**HISTO:** 21080100308

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Brain - Cerebellum
* Brain - Cerebrum	* Clitoral Gland	* Esophagus	* Heart
* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum	* Intestine Small - Duodenum
* Intestine Small - Ileum	* Intestine Small - Jejunum	* Lung - Bronchus	* Ovary
* Pancreas	* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Salivary Glands
* Skeletal Muscle - Thigh	* Skin	* Spinal Cord - Thoracic	* Stomach - Glandular
* Thymus	* Tongue	* Trachea	* Urinary Bladder
* Uterus	* Vagina	* Zymbal's Gland	

**OBSERVATIONS**

* Adrenal Gland	Cortex	Vacuolization Cytoplasmic	Focal, Minimal
* Bone Marrow		Leukemia Mononuclear	
* Brain	Hypothalamus	Compression	Moderate
* Eye	Bilateral, Retina	Atrophy	Marked
	Bilateral, Lens	Cataract	Marked
	[ Cataract TGLS = 5-13 ]		
* Harderian Gland	Bilateral	Infiltration Cellular	Lymphocytic, Mild
* Kidney	Bilateral	Mineralization	Mild
	Bilateral	Nephropathy	Mild
* Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Larynx		Inflammation	Chronic, Minimal
* Liver		Basophilic Focus	
		Hepatodiaphragmatic Nodule	
	Bile Duct	Hyperplasia	Moderate
		Leukemia Mononuclear	
	[ Hepatodiaphragmatic Nodule TGLS = 3-6 ]		
	[ Leukemia Mononuclear TGLS = 2,4-6 ]		
* Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
	Mandibular	Leukemia Mononuclear	
* Mammary Gland		Cyst	Mild
* Nose	Nasolacrim Dct	Inflammation	Chronic Active, Mild

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 308	<b>TRT#:</b> 11 <b>DOSE:</b> 5PPM/F FUMON-11	<b>SEX:</b> Female <b>DISP:</b> Moribund	<b>DAY ON TEST:</b> 708 <b>HISTO:</b> 21080100308
-----------------------	---	---	--

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

* Pituitary Gland [ Adenoma TGLS = 6-11 ]	Pars Distalis	Adenoma	
* Spleen [ Leukemia Mononuclear TGLS = 1-7 ]		Leukemia Mononuclear	
* Stomach	Epithelium, Forestomach Forestomach	Hyperplasia Inflammation	Moderate Chronic, Mild
* Thyroid Gland	C Cell	Hyperplasia	Focal, Moderate

---

PRIMARY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma

---

Animal Note: COD...PROBABLE-PITUITARY GLAND,ADENOMA

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

<b>ANIMAL ID:</b> 313	<b>TRT#:</b> 13 <b>DOSE:</b> 50PPM/F FUMON-13	<b>SEX:</b> Female <b>DISP:</b> Moribund	<b>DAY ON TEST:</b> 722 <b>HISTO:</b> 21080100313
-----------------------	--	---	--

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Brain - Cerebellum
* Brain - Cerebrum	* Clitoral Gland	* Esophagus	* Intestine Large - Cecum
* Intestine Large - Colon	* Intestine Large - Rectum	* Intestine Small - Duodenum	* Intestine Small - Ileum
* Intestine Small - Jejunum	* Lacrimal Gland	* Larynx	* Lung - Bronchus
* Ovary	* Pancreas	* Parathyroid Gland	* Peripheral Nerve - Sciatic
* Skeletal Muscle - Thigh	* Skin	* Spinal Cord - Thoracic	* Stomach - Glandular
* Thymus	* Thyroid Gland	* Tongue	* Trachea
* Urinary Bladder	* Zymbal's Gland		

**OBSERVATIONS**

* Adrenal Gland	Medulla	Hyperplasia Leukemia Mononuclear	Focal, Mild
* Bone Marrow		Leukemia Mononuclear	
* Brain	Hypothalamus	Compression	Mild
* Eye	Bilateral, Retina	Atrophy	Minimal
* Harderian Gland	Bilateral	Infiltration Cellular	Lymphocytic, Minimal
* Heart		Leukemia Mononuclear	
* Kidney		Leukemia Mononuclear	
* Liver	Bilateral Bile Duct	Nephropathy Hyperplasia	Mild Mild
* Lung		Leukemia Mononuclear	
* Lymph Node	Mesenteric Mandibular Mesenteric	Infiltration Cellular Leukemia Mononuclear Leukemia Mononuclear	Histiocytic, Minimal
* Mammary Gland		Cyst	Mild
* Nose	Nasolacrim Dct	Inflammation	Chronic Active, Mild
* Pituitary Gland	Pars Distalis	Adenoma Leukemia Mononuclear	
[ Adenoma TGLS = 3-11 ]			
* Salivary Glands	Parotid GI	Atrophy	Mild

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 313	<b>TRT#:</b> 13 <b>DOSE:</b> 50PPM/F FUMON-13	<b>SEX:</b> Female <b>DISP:</b> Moribund	<b>DAY ON TEST:</b> 722 <b>HISTO:</b> 21080100313
-----------------------	--	---	--

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

* Spleen [ Leukemia Mononuclear TGLS = 2-7 ]		Leukemia Mononuclear	
* Stomach	Forestomach Epithelium, Forestomach Forestomach	Erosion Hyperplasia Inflammation	Focal, Mild Moderate Chronic, Mild
* Uterus	Endometrium	Cyst	Mild
* Vagina		Leukemia Mononuclear	

Note: TGL#1-NO SECTION TAKEN

---

PRIMARY CAUSE OF DEATH -  
CONTRIBUTORY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma;Spleen Leukemia Mononuclear

---

Animal Note: COD...CONTRIBUTORY-PITUITARY GLAND,ADENOMA -LEUKEMIA MONONUCLEAR CELL

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

<b>ANIMAL ID:</b> 314	<b>TRT#:</b> 14	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 708
	<b>DOSE:</b> 100PPM/FFUMON-14	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100314

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Blood Vessel - Aorta	Bone - Femur	Bone - Sternum	Bone Marrow
Brain - Cerebellum	Brain - Cerebrum	Esophagus	Intestine Large - Cecum
Intestine Large - Colon	Intestine Large - Rectum	Intestine Small - Duodenum	Intestine Small - Ileum
Intestine Small - Jejunum	Larynx	Lung - Bronchus	Lymph Node - Mandibular
Ovary	Pancreas	Parathyroid Gland	Peripheral Nerve - Sciatic
Salivary Glands	Skeletal Muscle - Thigh	Skin	Spinal Cord - Thoracic
Stomach - Forestomach	Stomach - Glandular	Thymus	Thyroid Gland
Tongue	Trachea	Urinary Bladder	Uterus
Vagina	Zymbal's Gland		

**OBSERVATIONS**

Adrenal Gland	Bilateral, Cortex	Angiectasis	Minimal
Clitoral Gland		Adenoma	
Note: ONLY ONE [ Adenoma TGLS = 2-10 ]			
Eye	Bilateral, Retina Bilateral, Lens	Atrophy Cataract	Marked Moderate
Harderian Gland		Infiltration Cellular	Lymphocytic, Minimal
Heart		Cardiomyopathy	Minimal
* Kidney	Bilateral Bilateral	Mineralization Nephropathy	Minimal Minimal
Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Liver		Basophilic Focus Clear Cell Focus Inflammation Mixed Cell Focus	Chronic, Minimal
[ Basophilic Focus TGLS = 4-6.1 ] [ Mixed Cell Focus TGLS = 4-6.1 ]			
Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Mild
Mammary Gland	Epithelium	Fibroadenoma Hyperplasia	Mild

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 314	<b>TRT#:</b> 14	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 708
	<b>DOSE:</b> 100PPM/FFUMON-14	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100314

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

[ Fibroadenoma TGLS = 1-14 ]			
Nose	Nasolacrim Dct	Inflammation	Chronic Active, Minimal
Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 3-11 ]			
Spleen		Pigmentation	Minimal

---

**PRIMARY CAUSE OF DEATH** - Pituitary Gland Pars Distalis Adenoma

---

Animal Note: COD...PROBABLE-PITUITARY,ADENOMA

---

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 315

**TRT#:** 12

**SEX:** Female

**DAY ON TEST:** 708

**DOSE:** 15PPM/F FUMON-12

**DISP:** Moribund

**HISTO:** 21080100315

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Brain - Cerebellum
* Brain - Cerebrum	* Esophagus	* Intestine Large - Cecum	* Intestine Large - Colon
* Intestine Large - Rectum	* Intestine Small - Duodenum	* Intestine Small - Ileum	* Intestine Small - Jejunum
* Lacrimal Gland	* Larynx	* Lung - Bronchus	* Pancreas
* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Salivary Glands	* Skeletal Muscle - Thigh
* Spinal Cord - Thoracic	* Stomach - Forestomach	* Stomach - Glandular	* Thyroid Gland
* Tongue	* Trachea	* Urinary Bladder	* Uterus
* Vagina	* Zymbal's Gland		

**MISSING**

* Clitoral Gland	* Mammary Gland	* Pituitary Gland	* Thymus
------------------	-----------------	-------------------	----------

**OBSERVATIONS**

* Adrenal Gland	Medulla	Hyperplasia	Focal, Moderate
* Bone Marrow		Leukemia Mononuclear	
* Eye	Bilateral, Retina	Atrophy	Moderate
* Harderian Gland		Infiltration Cellular	Lymphocytic, Mild
* Heart		Cardiomyopathy	Minimal
* Kidney	Bilateral	Mineralization	Mild
	Bilateral	Nephropathy	Mild
	Bilateral, Renal Tubule	Pigmentation	Moderate
* Liver	Bile Duct	Hyperplasia	Moderate
		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 2-6 ]		
* Lung		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 3-5 + 5.1 ]		
* Lymph Node	Mandibular	Leukemia Mononuclear	
	Mesenteric	Leukemia Mononuclear	
* Nose	Olfactory Epi	Cytoplasmic Alteration	Moderate
	Nasolacrim Dct	Inflammation	Chronic, Minimal
* Ovary	Rete Ovarii	Hyperplasia	Mild
* Skin		Inflammation	Chronic, Mild

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

**ANIMAL ID:** 315

**TRT#:** 12

**SEX:** Female

**DAY ON TEST:** 708

**DOSE:** 15PPM/F FUMON-12

**DISP:** Moribund

**HISTO:** 21080100315

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

\* Spleen

Leukemia Mononuclear

[ Leukemia Mononuclear TGLS = 1-7 ]

---

PRIMARY CAUSE OF DEATH

- Spleen Leukemia Mononuclear

---

Animal Note: COD...PROBABLE-LEUKEMIA MONONUCLEAR CELL

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 317

**TRT#:** 14

**SEX:** Female

**DAY ON TEST:** 736

**DOSE:** 100PPM/FFUMON-14

**DISP:** Moribund

**HISTO:** 21080100317

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Blood Vessel - Aorta	Brain - Cerebellum	Brain - Cerebrum	Esophagus
Intestine Large - Cecum	Intestine Large - Colon	Intestine Large - Rectum	Intestine Small - Duodenum
Intestine Small - Ileum	Intestine Small - Jejunum	Larynx	Lung - Bronchus
Lymph Node - Mandibular	Ovary	Pancreas	Parathyroid Gland
Peripheral Nerve - Sciatic	Skeletal Muscle - Thigh	Skin	Spinal Cord - Thoracic
Stomach - Forestomach	Thyroid Gland	Tongue	Trachea
Urinary Bladder	Uterus	Vagina	Zymbal's Gland

**OBSERVATIONS**

Adrenal Gland		Leukemia Mononuclear	
Bone	Femur	Hyperostosis	Minimal
	Sternum	Hyperostosis	Minimal
Bone Marrow		Leukemia Mononuclear	
Clitoral Gland		Adenoma	
Eye	Retina	Atrophy	Marked
	Bilateral, Lens	Cataract	Moderate
Harderian Gland	Bilateral	Infiltration Cellular	Lymphocytic, Minimal
Heart		Cardiomyopathy	Mild
* Kidney		Leukemia Mononuclear	
	Bilateral	Mineralization	Minimal
	Bilateral	Nephropathy	Minimal
Lacrimal Gland		Leukemia Mononuclear	
* Liver		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 2-6 ]		
Lung		Leukemia Mononuclear	
Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Mild
Mammary Gland		Galactocele	Moderate
Nose	Olfactory Epi	Cytoplasmic Alteration	Minimal
	Nasolacrim Dct	Inflammation	Chronic Active, Mild
Pituitary Gland	Pars Distalis	Adenoma	
	[ Adenoma TGLS = 3-11 ]		

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 317	<b>TRT#:</b> 14	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 736
	<b>DOSE:</b> 100PPM/FFUMON-14	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100317

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

Salivary Glands	Parotid GI	Atrophy	Moderate
Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 1-7 ]			
Stomach	Glandular	Cyst	Mild
Thymus		Atrophy	Marked

---

**PRIMARY CAUSE OF DEATH** - Spleen Leukemia Mononuclear

---

Animal Note: COD...PROBABLE-LEUKEMIA MONONUCLEAR CELL

---

Experiment Number: 92002-03  
 Test Type: CHRONIC  
 Species/Strain: Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
 Test Compound: Fumonisin B1  
 CAS Number: 116355-83-0

Date Report Requested: 10/15/2014  
 Time Report Requested: 18:08:23  
 First Dose M/F: NA / NA  
 Lab: NCTR

ANIMAL ID: 320

TRT#: 10

SEX: Female

DAY ON TEST: 715

DOSE: 0PPM/F FUMON-10

DISP: Moribund

HISTO: 21080100320

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Gland	* Blood Vessel - Aorta	* Bone Marrow	* Brain - Cerebellum
* Brain - Cerebrum	* Clitoral Gland	* Esophagus	* Harderian Gland
* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum	* Intestine Small - Duodenum
* Intestine Small - Ileum	* Intestine Small - Jejunum	* Lacrimal Gland	* Larynx
* Lung - Bronchus	* Lymph Node - Mandibular	* Nose	* Ovary
* Pancreas	* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Skeletal Muscle - Thigh
* Skin	* Spinal Cord - Thoracic	* Stomach - Glandular	* Thyroid Gland
* Tongue	* Trachea	* Urinary Bladder	* Uterus
* Vagina			

**MISSING**

\* Zymbal's Gland

**OBSERVATIONS**

* Bone	Femur	Hyperostosis	Moderate
	Sternum	Hyperostosis	Moderate
* Brain	Hypothalamus	Compression	Mild
* Eye	Bilateral, Retina	Atrophy	Marked
	Bilateral, Lens	Cataract	Mild
* Heart		Cardiomyopathy	Minimal
* Kidney	Bilateral	Mineralization	Mild
	Bilateral	Nephropathy	Mild
* Liver		Basophilic Focus	
		Inflammation	Chronic, Mild
		Mixed Cell Focus	
	Hepatocyte	Vacuolization Cytoplasmic	Moderate
Note: TGL#4-NULIFIED BY TRIMMER			
[ Vacuolization Cytoplasmic TGLS = 3-6 ]			
* Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
* Mammary Gland		Carcinoma	
[ Carcinoma TGLS = 1-10 ]			
* Pituitary Gland	Pars Distalis	Adenoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 320	<b>TRT#:</b> 10 <b>DOSE:</b> 0PPM/F FUMON-10	<b>SEX:</b> Female <b>DISP:</b> Moribund	<b>DAY ON TEST:</b> 715 <b>HISTO:</b> 21080100320
-----------------------	---	---	--

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

[ Adenoma TGLS = 2-11 ]

* Salivary Glands	Parotid GI	Atrophy	Mild
* Spleen		Hematopoietic Cell Proliferation	Minimal
		Pigmentation	Minimal
* Stomach	Epithelium, Forestomach	Hyperplasia	Mild
* Thymus		Atrophy	Mild

---

**PRIMARY CAUSE OF DEATH** - Pituitary Gland Pars Distalis Adenoma

---

Animal Note: COD...PROBABLE-PITUITARY,ADENOMA

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 335

**TRT#:** 11

**SEX:** Female

**DAY ON TEST:** 739

**DOSE:** 5PPM/F FUMON-11

**DISP:** Terminal Sacrifice

**HISTO:** 21080100335

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Lung - Bronchus

\* Mammary Gland

**OBSERVATIONS**

\* Kidney

Bilateral

Mineralization

Minimal

Bilateral

Nephropathy

Mild

\* Liver

Bile Duct

Hyperplasia

Mild

Leukemia Mononuclear

[ Leukemia Mononuclear TGLS = 1-1 ]

\* Lung

Infiltration Cellular

Histiocytic, Minimal

Leukemia Mononuclear

\* Mammary GI

Note: TGL # 02 - NO MICROSCOPIC CORRELATE

\* Pituitary Gland

Pars Distalis

Adenoma

[ Adenoma TGLS = 4-3.2 ]

\* Spleen

Leukemia Mononuclear

[ Leukemia Mononuclear TGLS = 3-3.1 ]

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE



Experiment Number: 92002-03  
Test Type: CHRONIC  
Species/Strain: Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
Test Compound: Fumonisin B1  
CAS Number: 116355-83-0

Date Report Requested: 10/15/2014  
Time Report Requested: 18:08:23  
First Dose M/F: NA / NA  
Lab: NCTR

ANIMAL ID: 336

TRT#: 11

SEX: Female

DAY ON TEST: 739

DOSE: 5PPM/F FUMON-11

DISP: Terminal Sacrifice

HISTO: 21080100336

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Clitoral Gland \* Lung - Bronchus

**OBSERVATIONS**

* Adrenal Gland	Bilateral, Cortex	Vacuolization Cytoplasmic	Diffuse, Mild
[ Vacuolization Cytoplasmic TGLS = 1-3 ]			
* Clitoral GI			
Note: TGL # 04 - NO MICROSCOPIC CORRELATE			
* Kidney		Cyst	Moderate
	Bilateral	Mineralization	Mild
	Bilateral	Nephropathy	Minimal
	Bilateral, Renal Tubule	Pigmentation	Mild
[ Cyst TGLS = 2-2 ]			
* Liver	Bile Duct	Hyperplasia	Mild
		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 3-1 ]			
* Lung		Leukemia Mononuclear	
* Lymph Node	Mesenteric	Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 7-3.4 ]			
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 5-3.2 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 8-3.5 ]			
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 9-3.6 ]			
* Uterus		Hydrometra	Moderate
[ Hydrometra TGLS = 6-3.3 ]			

PRIMARY CAUSE OF DEATH -

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92002-03  
Test Type: CHRONIC  
Species/Strain: Rat/F 344/NCTR

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
Test Compound: Fumonisin B1  
CAS Number: 116355-83-0

Date Report Requested: 10/15/2014  
Time Report Requested: 18:08:23  
First Dose M/F: NA / NA  
Lab: NCTR

ANIMAL ID: 337

TRT#: 11

SEX: Female

DAY ON TEST: 739

DOSE: 5PPM/F FUMON-11

DISP: Terminal Sacrifice

HISTO: 21080100337

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

\* Adrenal Gland \* Lung - Bronchus

OBSERVATIONS

\* Adrenal Gland

Note: TGL # 01 - NO MICROSCOPIC CORRELATE

\* Clitoral Gland

[ Adenoma TGLS = 3-3 ]

Adenoma

\* Kidney

Bilateral, Renal Tubule

Accumulation, Hyaline Droplet

Mild

Bilateral

Mineralization

Minimal

\* Liver

Basophilic Focus

Eosinophilic Focus

Mixed Cell Focus

Tension Lipidosis

Vacuolization Cytoplasmic

Minimal

[ Eosinophilic Focus TGLS = 2-1 ]

Hepatocyte

\* Pituitary Gland

Pars Distalis

Adenoma

[ Adenoma TGLS = 4-3 ]

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 338	<b>TRT#:</b> 11	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> 5PPM/F FUMON-11	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100338

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Lung - Bronchus

---

**MISSING**

\* Lacrimal Gland

---

**OBSERVATIONS**

* Kidney	Bilateral	Mineralization	Minimal
	Bilateral	Nephropathy	Mild
* Lacrimal GI			
Note: TGL # 02 - NO MICROSCOPIC CORRELATE			
* Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Chronic, Mild
		Mixed Cell Focus	
		Fibroadenoma	
* Mammary Gland			
[ Fibroadenoma TGLS = 1-3 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 3-3 ]			

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 339

**TRT#:** 13

**SEX:** Female

**DAY ON TEST:** 739

**DOSE:** 50PPM/F FUMON-13

**DISP:** Terminal Sacrifice

**HISTO:** 21080100339

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Lung - Bronchus

**OBSERVATIONS**

* Kidney	Bilateral	Nephropathy	Minimal
* Liver	Bile Duct	Basophilic Focus	
		Hyperplasia	Minimal
		Inflammation	Chronic, Minimal
		Mixed Cell Focus	
		Tension Lipidosis	
		Fibroadenoma	
* Mammary Gland [ Fibroadenoma TGLS = 1-3 ]			
* Ovary [ Cyst TGLS = 2-3 ]	Periovarn Tiss	Cyst	Mild
* Pituitary Gland [ Adenoma TGLS = 3-3 ]	Pars Distalis	Adenoma	

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92002-03  
Test Type: CHRONIC  
Species/Strain: Rat/F 344/NCTR

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
Test Compound: Fumonisin B1  
CAS Number: 116355-83-0

Date Report Requested: 10/15/2014  
Time Report Requested: 18:08:23  
First Dose M/F: NA / NA  
Lab: NCTR

---

ANIMAL ID: 340	TRT#: 13	SEX: Female	DAY ON TEST: 739
	DOSE: 50PPM/F FUMON-13	DISP: Terminal Sacrifice	HISTO: 21080100340

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Lung - Bronchus

---

**OBSERVATIONS**

* Kidney	Bilateral	Mineralization	Minimal
* Liver	Bile Duct	Basophilic Focus	
		Hyperplasia	Minimal
		Inflammation	Chronic, Minimal
		Tension Lipidosis	
* Ovary	Periovarn Tiss	Cyst	Moderate
[ Cyst TGLS = 1-3 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 2-3 ]			
* Tongue		Squamous Cell Papilloma	
[ Squamous Cell Papilloma TGLS = 3-13 ]			

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 341	<b>TRT#:</b> 13	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> 50PPM/F FUMON-13	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100341

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Lung - Bronchus

---

**OBSERVATIONS**

* Clitoral Gland		Adenoma	
[ Adenoma TGLS = 1-3 ]			
* Kidney	Bilateral, Renal Tubule Bilateral	Accumulation, Hyaline Droplet Mineralization	Mild Minimal
* Liver		Basophilic Focus Clear Cell Focus Inflammation Mixed Cell Focus	Chronic, Mild
[ Inflammation TGLS = 4-1.3 ]			
[ Mixed Cell Focus TGLS = 2-1 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 3-3 ]			

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

<b>ANIMAL ID:</b> 342	<b>TRT#:</b> 10 <b>DOSE:</b> 0PPM/F FUMON-10	<b>SEX:</b> Female <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 739 <b>HISTO:</b> 21080100342
-----------------------	---	---	--

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Bone Marrow
* Brain - Cerebellum	* Brain - Cerebrum	* Esophagus	* Eye
* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum	* Intestine Small - Duodenum
* Intestine Small - Ileum	* Intestine Small - Jejunum	* Larynx	* Lung - Bronchus
* Lymph Node - Mandibular	* Nose	* Ovary	* Pancreas
* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Salivary Glands	* Skeletal Muscle - Thigh
* Skin	* Spinal Cord - Thoracic	* Stomach - Forestomach	* Thyroid Gland
* Tongue	* Trachea	* Urinary Bladder	* Uterus
* Vagina	* Zymbal's Gland		

**OBSERVATIONS**

* Adrenal Gland	Bilateral, Cortex	Angiectasis	Minimal
* Clitoral Gland		Inflammation	Chronic, Minimal
Note: ONLY ONE			
* Harderian Gland	Bilateral	Infiltration Cellular	Lymphocytic, Mild
* Heart		Cardiomyopathy	Minimal
* Kidney	Bilateral	Mineralization	Minimal
	Bilateral	Nephropathy	Mild
	Bilateral, Renal Tubule	Pigmentation	Mild
* Lacrimal Gland		Infiltration Cellular	Lymphocytic, Mild
* Liver		Basophilic Focus	
		Inflammation	Chronic, Mild
		Tension Lipidosis	
* Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
* Mammary Gland		Cyst	Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 1-11 ]			
* Spleen		Pigmentation	Minimal
* Stomach	Glandular	Cyst	Minimal
* Thymus		Atrophy	Marked

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:23  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 343

**TRT#:** 10

**SEX:** Female

**DAY ON TEST:** 739

**DOSE:** 0PPM/F FUMON-10

**DISP:** Terminal Sacrifice

**HISTO:** 21080100343

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Bone Marrow
* Brain - Cerebellum	* Brain - Cerebrum	* Esophagus	* Eye
* Harderian Gland	* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum
* Intestine Small - Duodenum	* Intestine Small - Ileum	* Intestine Small - Jejunum	* Lung - Bronchus
* Ovary	* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Salivary Glands
* Skeletal Muscle - Thigh	* Skin	* Spinal Cord - Thoracic	* Stomach - Forestomach
* Stomach - Glandular	* Thyroid Gland	* Tongue	* Trachea
* Urinary Bladder	* Uterus	* Vagina	* Zymbal's Gland

**MISSING**

\* Larynx

**OBSERVATIONS**

* Adrenal Gland	Bilateral, Cortex	Angiectasis	Minimal
* Clitoral Gland		Adenoma	
Note: ONLY ONE			
Note: TGL#4-NOTED GROSSLY AS CLITORAL GLAND WAS MAMMARY GLAND			
[ Adenoma TGLS = 5-10.1 ]			
* Heart		Cardiomyopathy	Mild
* Kidney	Bilateral	Mineralization	Minimal
	Bilateral	Nephropathy	Mild
* Lacrimal Gland		Leukemia Mononuclear	
* Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Moderate
		Leukemia Mononuclear	
		Mixed Cell Focus	
[ Leukemia Mononuclear TGLS = 6-6 ]			
* Lymph Node	Mandibular	Leukemia Mononuclear	
	Mesenteric	Leukemia Mononuclear	
		Leukemia Mononuclear	
Note: TGL IS ABDOMINAL LYMPH NODE			
[ Leukemia Mononuclear TGLS = 1-14 ]			

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:24  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 343	<b>TRT#:</b> 10 <b>DOSE:</b> 0PPM/F FUMON-10	<b>SEX:</b> Female <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 739 <b>HISTO:</b> 21080100343
-----------------------	---	---	--

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

* Mammary Gland Note: TGL#5-NOTED GROSSLY AS MAMMARY GLAND WAS CLITORAL GLAND [ Cyst TGLS = 4-10 ]		Cyst	Mild
* Nose	Nasolacrim Dct	Inflammation	Chronic Active, Mild
* Pancreas	Acinar Cell	Atrophy	Focal, Mild
* Pituitary Gland [ Adenoma TGLS = 2-11 ]	Pars Distalis	Adenoma	
* Spleen [ Leukemia Mononuclear TGLS = 3-7 ]		Leukemia Mononuclear	
* Thymus		Atrophy	Minimal

---

PRIMARY CAUSE OF DEATH -

---

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92002-03  
Test Type: CHRONIC  
Species/Strain: Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
Test Compound: Fumonisin B1  
CAS Number: 116355-83-0

Date Report Requested: 10/15/2014  
Time Report Requested: 18:08:24  
First Dose M/F: NA / NA  
Lab: NCTR

---

<b>ANIMAL ID:</b> 344	<b>TRT#:</b> 12	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> 15PPM/F FUMON-12	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100344

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Lung - Bronchus

---

**OBSERVATIONS**

* Kidney	Bilateral	Mineralization	Minimal
	Bilateral	Nephropathy	Minimal
	Bilateral, Renal Tubule	Pigmentation	Mild
* Liver		Basophilic Focus	
		Eosinophilic Focus	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Chronic, Minimal
		Mixed Cell Focus	
		Tension Lipidosis	
	Hepatocyte	Vacuolization Cytoplasmic	Minimal
	[ Basophilic Focus TGLS = 1-1 ]		
	[ Eosinophilic Focus TGLS = 4-1.3 ]		
* Pituitary Gland	Pars Distalis	Adenoma	
	[ Adenoma TGLS = 3-3 ]		
* Skin	Subcut Tiss	Fibroma	
	[ Fibroma TGLS = 2-3 ]		

---

PRIMARY CAUSE OF DEATH -

---

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92002-03  
Test Type: CHRONIC  
Species/Strain: Rat/F 344/NCTR

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
Test Compound: Fumonisin B1  
CAS Number: 116355-83-0

Date Report Requested: 10/15/2014  
Time Report Requested: 18:08:24  
First Dose M/F: NA / NA  
Lab: NCTR

---

ANIMAL ID: 345	TRT#: 12	SEX: Female	DAY ON TEST: 739
	DOSE: 15PPM/F FUMON-12	DISP: Terminal Sacrifice	HISTO: 21080100345

---

ORGAN AND ACCOUNTABLE SITE STATUS

---

NORMAL

\* Lung - Bronchus

---

OBSERVATIONS

* Kidney	Bilateral	Mineralization	Minimal
	Bilateral	Nephropathy	Mild
* Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Mild
		Leukemia Mononuclear	
		Tension Lipidosis	
	[ Tension Lipidosis TGLS = 4-1.3 ]		
* Mammary Gland		Fibroadenoma	
	[ Fibroadenoma TGLS = 1-3 ]		
* Pituitary Gland	Pars Distalis	Adenoma	
	[ Adenoma TGLS = 3-3 ]		
* Spleen		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 2-3 ]		

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:24  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 346

**TRT#:** 14

**SEX:** Female

**DAY ON TEST:** 739

**DOSE:** 100PPM/FFUMON-14

**DISP:** Terminal Sacrifice

**HISTO:** 21080100346

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Blood Vessel - Aorta	Bone - Femur	Bone - Sternum	Bone Marrow
Brain - Cerebellum	Brain - Cerebrum	Esophagus	Eye
Harderian Gland	Intestine Large - Cecum	Intestine Large - Colon	Intestine Large - Rectum
Intestine Small - Duodenum	Intestine Small - Ileum	Intestine Small - Jejunum	Larynx
Lung - Bronchus	Lymph Node - Mandibular	Nose	Pancreas
Parathyroid Gland	Peripheral Nerve - Sciatic	Salivary Glands	Skeletal Muscle - Thigh
Skin	Spinal Cord - Thoracic	Stomach - Forestomach	Stomach - Glandular
Thyroid Gland	Tongue	Trachea	Vagina
Zymbal's Gland			

**MISSING**

Thymus

**OBSERVATIONS**

Adrenal Gland	Bilateral, Cortex Cortex	Angiectasis Hyperplasia Carcinoma	Minimal Focal, Mild
Clitoral Gland			
Note: ONLY ONE			
[ Carcinoma TGLS = 1-3 ]			
Eye			
Note: ONLY ONE			
Harderian GI			
Note: ONLY ONE			
Heart		Cardiomyopathy	Mild
* Kidney	Bilateral	Nephropathy	Minimal
Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
Note: TGL # 02 - NO MICROSCOPIC CORRELATE			
* Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Minimal
		Tension Lipidosis	
Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Mild
Mammary Gland		Galactocele	Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:24  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 346	<b>TRT#:</b> 14	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> 100PPM/FFUMON-14	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100346

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

Ovary Note: ONLY ONE [ Cyst TGLS = 4-3.1 ]	Periovarn Tiss	Cyst	Minimal
Pituitary Gland	Pars Distalis	Cyst	Mild
Spleen		Inflammation	Chronic, Mild
Urinary Bladder		Infiltration Cellular	Lymphocytic, Minimal
Uterus [ Hydrometra TGLS = 3-3.1 ]		Hydrometra	Mild

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:24  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 347

**TRT#:** 10

**SEX:** Female

**DAY ON TEST:** 739

**DOSE:** 0PPM/F FUMON-10

**DISP:** Terminal Sacrifice

**HISTO:** 21080100347

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Brain - Cerebellum
* Brain - Cerebrum	* Esophagus	* Harderian Gland	* Intestine Large - Cecum
* Intestine Large - Colon	* Intestine Large - Rectum	* Intestine Small - Duodenum	* Intestine Small - Ileum
* Intestine Small - Jejunum	* Lacrimal Gland	* Lung - Bronchus	* Parathyroid Gland
* Peripheral Nerve - Sciatic	* Salivary Glands	* Skeletal Muscle - Thigh	* Skin
* Spinal Cord - Thoracic	* Stomach - Glandular	* Tongue	* Trachea

**MISSING**

\* Zymbal's Gland

**OBSERVATIONS**

* Adrenal Gland	Cortex	Vacuolization Cytoplasmic	Focal, Mild
Note: TGL#1-NULLIFIED BY TRIMMER			
* Bone Marrow		Leukemia Mononuclear	
* Clitoral Gland		Leukemia Mononuclear	
* Eye	Bilateral, Retina	Atrophy	Moderate
* Heart		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 11-1 ]			
* Kidney		Leukemia Mononuclear	
	Bilateral	Mineralization	Minimal
	Bilateral	Nephropathy	Minimal
	Bilateral, Renal Tubule	Pigmentation	Mild
[ Leukemia Mononuclear TGLS = 3-2 ]			
* Larynx		Inflammation	Chronic Active, Minimal
* Liver		Hepatodiaphragmatic Nodule	
	Bile Duct	Hyperplasia	Moderate
		Leukemia Mononuclear	
[ Hepatodiaphragmatic Nodule TGLS = 9-6 ]			
[ Leukemia Mononuclear TGLS = 4-6 ]			
* Lung		Leukemia Mononuclear	
* Lymph Node	Mandibular	Leukemia Mononuclear	
	Mesenteric	Leukemia Mononuclear	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:24  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 347	<b>TRT#:</b> 10	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> 0PPM/F FUMON-10	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100347

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

Renal	Leukemia Mononuclear	[ Leukemia Mononuclear TGLS = 6-8 ]	
		[ Leukemia Mononuclear TGLS = 10-11 ]	
		[ Leukemia Mononuclear TGLS = 2,7-14 + 10.1 ]	
* Mammary Gland	Cyst		Mild
	Fibroma		
Note: TGL#7-NOTED GROSSLY AS MAMMARY GLAND WAS LYMPH NODE			
		[ Fibroma TGLS = 8-10.1 ]	
* Nose	Olfactory Epi	Cytoplasmic Alteration	Mild
* Ovary		Leukemia Mononuclear	
* Pancreas	Acinar Cell	Atrophy	Focal, Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
		Leukemia Mononuclear	
		[ Adenoma TGLS = 13-11 ]	
* Spleen		Leukemia Mononuclear	
		[ Leukemia Mononuclear TGLS = 5-7 ]	
* Stomach	Forestomach	Leukemia Mononuclear	
	Forestomach	Ulcer	Mild
* Thymus		Leukemia Mononuclear	
		[ Leukemia Mononuclear TGLS = 12-1.1 ]	
* Thyroid Gland	C Cell	Hyperplasia	Focal, Mild
* Urinary Bladder		Leukemia Mononuclear	
* Uterus		Leukemia Mononuclear	
* Vagina		Leukemia Mononuclear	

---

PRIMARY CAUSE OF DEATH -

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:24  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 348

**TRT#:** 13

**SEX:** Female

**DAY ON TEST:** 739

**DOSE:** 50PPM/F FUMON-13

**DISP:** Terminal Sacrifice

**HISTO:** 21080100348

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Lung - Bronchus

**OBSERVATIONS**

\* Clitoral Gland

[ Inflammation TGLS = 1-3 ]

Inflammation

Chronic Active, Mild

\* Kidney

Bilateral

Leukemia Mononuclear

Mineralization

Minimal

\* Liver

Basophilic Focus

Clear Cell Focus

Leukemia Mononuclear

Tension Lipidosis

Fibroadenoma

Multiple

\* Mammary Gland

[ Fibroadenoma TGLS = 2,3,4-3 + 3.1 + 3.2 ]

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:24  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

**ANIMAL ID:** 349

**TRT#:** 13

**SEX:** Female

**DAY ON TEST:** 739

**DOSE:** 50PPM/F FUMON-13

**DISP:** Terminal Sacrifice

**HISTO:** 21080100349

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Lung - Bronchus

---

**OBSERVATIONS**

* Kidney	Bilateral	Mineralization	Minimal
* Liver		Basophilic Focus	
		Eosinophilic Focus	
		Inflammation	Chronic, Minimal
		Tension Lipidosis	
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 1-3 ]			

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:24  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 350

**TRT#:** 13

**SEX:** Female

**DAY ON TEST:** 720

**DOSE:** 50PPM/F FUMON-13

**DISP:** Moribund

**HISTO:** 21080100350

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Gland	* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum
* Brain - Cerebellum	* Brain - Cerebrum	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum
* Intestine Small - Duodenum	* Intestine Small - Ileum	* Intestine Small - Jejunum	* Lacrimal Gland
* Lung - Bronchus	* Nose	* Ovary	* Pancreas
* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Salivary Glands	* Skeletal Muscle - Thigh
* Spinal Cord - Thoracic	* Stomach - Forestomach	* Stomach - Glandular	* Thymus
* Thyroid Gland	* Tongue	* Trachea	* Urinary Bladder
* Uterus	* Vagina	* Zymbal's Gland	

**OBSERVATIONS**

* Bone Marrow		Depletion	Minimal
* Brain	Hypothalamus	Compression	Moderate
* Eye	Bilateral, Retina	Atrophy	Marked
	Bilateral, Lens	Cataract	Marked
* Harderian Gland		Infiltration Cellular	Lymphocytic, Minimal
* Kidney	Bilateral	Mineralization	Minimal
	Bilateral	Nephropathy	Minimal
* Larynx		Inflammation	Chronic, Minimal
* Liver		Basophilic Focus	
		Eosinophilic Focus	
		Tension Lipidosis	
* Lymph Node	Mandibular	Degeneration	Cystic, Minimal
	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
* Mammary Gland		Galactocele	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
	[ Adenoma TGLS = 1-11 ]		
* Skin		Cyst Epithelial Inclusion	Minimal
* Spleen		Pigmentation	Minimal

**PRIMARY CAUSE OF DEATH** - Pituitary Gland Pars Distalis Adenoma

Animal Note: COD...PROBABLE-PITUITARY,ADENOMA

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:24  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

**ANIMAL ID:** 350

**TRT#:** 13

**SEX:** Female

**DAY ON TEST:** 720

**DOSE:** 50PPM/F FUMON-13

**DISP:** Moribund

**HISTO:** 21080100350

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

---

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92002-03  
Test Type: CHRONIC  
Species/Strain: Rat/F 344/NCTR

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
Test Compound: Fumonisin B1  
CAS Number: 116355-83-0

Date Report Requested: 10/15/2014  
Time Report Requested: 18:08:24  
First Dose M/F: NA / NA  
Lab: NCTR

---

ANIMAL ID: 358	TRT#: 12	SEX: Female	DAY ON TEST: 741
	DOSE: 15PPM/F FUMON-12	DISP: Terminal Sacrifice	HISTO: 21080100358

---

ORGAN AND ACCOUNTABLE SITE STATUS

---

NORMAL

\* Lung - Bronchus

---

OBSERVATIONS

* Clitoral Gland		Inflammation	Chronic Active, Moderate
[ Inflammation TGLS = 1-3 ]			
* Eye	Bilateral, Retina	Atrophy	Marked
	Bilateral, Lens	Cataract	Moderate
[ Cataract TGLS = 4-3.1 ]			
* Kidney	Bilateral	Mineralization	Mild
	Bilateral	Nephropathy	Minimal
* Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Chronic, Mild
		Tension Lipidosis	
	Hepatocyte	Vacuolization Cytoplasmic	Mild
[ Basophilic Focus TGLS = 7-1.3 ]			
[ Vacuolization Cytoplasmic TGLS = 2-1 ]			
* Lung	Interstitial	Inflammation	Chronic, Minimal
* Spleen		Hematopoietic Cell Proliferation	Mild
Note: TGL#3-NULLIFIED BY TRIMMER			
[ Hematopoietic Cell Proliferation TGLS = 5-3 ]			
* Uterus	Endometrium	Polyp Stromal	
[ Polyp Stromal TGLS = 6-10 ]			

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:24  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 359

**TRT#:** 12

**SEX:** Female

**DAY ON TEST:** 741

**DOSE:** 15PPM/F FUMON-12

**DISP:** Terminal Sacrifice

**HISTO:** 21080100359

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Lung - Bronchus

**OBSERVATIONS**

* Eye	Bilateral, Retina	Atrophy	Marked
	Bilateral, Lens	Cataract	Marked
[ Cataract TGLS = 5-3 ]			
* Kidney	Bilateral	Mineralization	Minimal
	Bilateral	Nephropathy	Minimal
* Liver	Bile Duct	Hyperplasia	Minimal
		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 1,2,3,4-1 + 3.1 ]			
* Lung		Infiltration Cellular	Histiocytic, Minimal
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 6-3 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:24  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 360

**TRT#:** 14

**SEX:** Female

**DAY ON TEST:** 741

**DOSE:** 100PPM/FFUMON-14

**DISP:** Terminal Sacrifice

**HISTO:** 21080100360

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Blood Vessel - Aorta	Brain - Cerebellum	Brain - Cerebrum	Esophagus
Harderian Gland	Heart	Intestine Large - Cecum	Intestine Large - Colon
Intestine Large - Rectum	Intestine Small - Duodenum	Intestine Small - Ileum	Intestine Small - Jejunum
Larynx	Lung - Bronchus	Parathyroid Gland	Peripheral Nerve - Sciatic
Salivary Glands	Skeletal Muscle - Thigh	Skin	Spinal Cord - Thoracic
Stomach - Forestomach	Stomach - Glandular	Thymus	Tongue
Trachea	Urinary Bladder	Uterus	Vagina
Zymbal's Gland			

**OBSERVATIONS**

Adrenal Gland	Cortex	Vacuolization Cytoplasmic	Focal, Mild
Bone	Femur	Hyperostosis	Moderate
	Sternum	Hyperostosis	Moderate
Bone Marrow		Hyperplasia	Mild
Clitoral Gland		Cyst	Mild
[ Cyst TGLS = 1-10 ]			
Eye	Bilateral, Retina	Atrophy	Marked
	Bilateral, Lens	Cataract	Moderate
[ Cataract TGLS = 4-13 ]			
* Kidney	Bilateral	Mineralization	Minimal
	Bilateral	Nephropathy	Minimal
Lacrimal Gland		Leukemia Mononuclear	
* Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Mild
		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 2-6 ]			
Lung	Interstitium	Inflammation	Chronic, Minimal
Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
	Mandibular	Leukemia Mononuclear	
Mammary Gland		Cyst	Minimal
Nose	Nasolacrim Dct	Inflammation	Chronic, Mild

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:24  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 360	<b>TRT#:</b> 14	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 741
	<b>DOSE:</b> 100PPM/FFUMON-14	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100360

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

Ovary [ Cyst TGLS = 3-10 ]	Bilateral, Periovarn Tiss	Cyst	Moderate
Pancreas	Acinar Cell	Atrophy	Focal, Mild
Pituitary Gland [ Adenoma TGLS = 5-11 ]	Pars Distalis	Adenoma	
Spleen		Leukemia Mononuclear	
Thyroid Gland	C Cell	Adenoma	

---

PRIMARY CAUSE OF DEATH -

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:24  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

<b>ANIMAL ID:</b> 361	<b>TRT#:</b> 14	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 741
	<b>DOSE:</b> 100PPM/FFUMON-14	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100361

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Blood Vessel - Aorta	Bone Marrow	Brain - Cerebellum	Brain - Cerebrum
Clitoral Gland	Esophagus	Intestine Large - Cecum	Intestine Large - Colon
Intestine Large - Rectum	Intestine Small - Duodenum	Intestine Small - Ileum	Intestine Small - Jejunum
Larynx	Lung - Bronchus	Lymph Node - Mandibular	Mammary Gland
Ovary	Parathyroid Gland	Peripheral Nerve - Sciatic	Salivary Glands
Skeletal Muscle - Thigh	Skin	Spinal Cord - Thoracic	Stomach - Forestomach
Stomach - Glandular	Thymus	Tongue	Trachea
Urinary Bladder	Uterus	Vagina	Zymbal's Gland

**OBSERVATIONS**

Adrenal Gland	Bilateral, Cortex Medulla	Angiectasis Hyperplasia	Minimal Focal, Mild
Bone	Femur Sternum	Hyperostosis Hyperostosis	Mild Mild
Eye	Bilateral, Retina Bilateral, Lens	Atrophy Cataract	Marked Moderate
Harderian Gland	Bilateral	Infiltration Cellular	Lymphocytic, Mild
Heart		Cardiomyopathy	Mild
* Kidney	Bilateral	Mineralization Nephropathy	Minimal Minimal
Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Liver	Bile Duct	Basophilic Focus Hyperplasia Mixed Cell Focus Tension Lipidosis	Minimal
Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
Nose		Inflammation	Chronic, Minimal
Pancreas	Acinar Cell	Atrophy	Focal, Minimal
Pituitary Gland	Pars Distalis	Hypertrophy	Focal, Mild
Spleen		Pigmentation	Minimal
Thyroid Gland	C Cell	Hyperplasia	Focal, Minimal

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:24  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

**ANIMAL ID:** 361

**TRT#:** 14

**SEX:** Female

**DAY ON TEST:** 741

**DOSE:** 100PPM/FFUMON-14

**DISP:** Terminal Sacrifice

**HISTO:** 21080100361

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:24  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 362

**TRT#:** 14

**SEX:** Female

**DAY ON TEST:** 741

**DOSE:** 100PPM/FFUMON-14

**DISP:** Terminal Sacrifice

**HISTO:** 21080100362

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Blood Vessel - Aorta	Bone - Femur	Bone - Sternum	Bone Marrow
Brain - Cerebellum	Brain - Cerebrum	Clitoral Gland	Esophagus
Intestine Large - Cecum	Intestine Large - Colon	Intestine Large - Rectum	Intestine Small - Duodenum
Intestine Small - Ileum	Intestine Small - Jejunum	Lacrimal Gland	Larynx
Lung - Bronchus	Lymph Node - Mandibular	Lymph Node - Mesenteric	Nose
Ovary	Pancreas	Parathyroid Gland	Peripheral Nerve - Sciatic
Pituitary Gland	Salivary Glands	Skeletal Muscle - Thigh	Skin
Spinal Cord - Thoracic	Stomach - Forestomach	Thymus	Thyroid Gland
Tongue	Trachea	Urinary Bladder	Uterus
Vagina	Zymbal's Gland		

**OBSERVATIONS**

Adrenal Gland	Bilateral, Cortex	Vacuolization Cytoplasmic	Focal, Mild
Clitoral Gl			
Note: ONLY ONE			
Eye	Bilateral, Retina	Atrophy	Marked
	Bilateral, Lens	Cataract	Marked
[ Cataract TGLS = 3-13 ]			
Harderian Gland	Bilateral	Infiltration Cellular	Lymphocytic, Minimal
Heart		Cardiomyopathy	Minimal
* Kidney	Renal Tubule	Hyperplasia	Focal, Marked
	Bilateral	Mineralization	Mild
	Bilateral	Nephropathy	Mild
* Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Mild
		Mixed Cell Focus	
		Tension Lipidosis	
[ Mixed Cell Focus TGLS = 2-6 ]			
[ Tension Lipidosis TGLS = 1-6 ]			
Mammary Gland		Cyst	Moderate
Spleen		Pigmentation	Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:24  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 362	<b>TRT#:</b> 14	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 741
	<b>DOSE:</b> 100PPM/FFUMON-14	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100362

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

Stomach	Glandular	Cyst	Mild
---------	-----------	------	------

---

PRIMARY CAUSE OF DEATH	-
------------------------	---

---

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92002-03  
Test Type: CHRONIC  
Species/Strain: Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

Test Compound: Fumonisin B1  
CAS Number: 116355-83-0

Date Report Requested: 10/15/2014  
Time Report Requested: 18:08:24  
First Dose M/F: NA / NA  
Lab: NCTR

ANIMAL ID: 363

TRT#: 11

SEX: Female

DAY ON TEST: 741

DOSE: 5PPM/F FUMON-11

DISP: Terminal Sacrifice

HISTO: 21080100363

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Lung - Bronchus

**OBSERVATIONS**

\* Clitoral Gland

[ Adenoma TGLS = 1-3 ]

Adenoma

\* Eye

Bilateral, Retina

Atrophy

Marked

Bilateral, Lens

Cataract

Mild

[ Cataract TGLS = 3-3.1 ]

\* Kidney

Bilateral

Mineralization

Minimal

Bilateral

Nephropathy

Mild

\* Liver

Basophilic Focus

Inflammation

Chronic, Mild

Mixed Cell Focus

[ Basophilic Focus TGLS = 2-1 ]

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92002-03  
Test Type: CHRONIC  
Species/Strain: Rat/F 344/NCTR

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
Test Compound: Fumonisin B1  
CAS Number: 116355-83-0

Date Report Requested: 10/15/2014  
Time Report Requested: 18:08:24  
First Dose M/F: NA / NA  
Lab: NCTR

ANIMAL ID: 364

TRT#: 11

SEX: Female

DAY ON TEST: 741

DOSE: 5PPM/F FUMON-11

DISP: Terminal Sacrifice

HISTO: 21080100364

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

\* Lung - Bronchus

OBSERVATIONS

* Kidney	Bilateral	Mineralization	Minimal
	Bilateral	Nephropathy	Mild
* Liver		Basophilic Focus	
		Eosinophilic Focus	
		Inflammation	Chronic, Minimal
		Tension Lipidosis	
* Mammary Gland		Fibroadenoma	Multiple
[ Fibroadenoma TGLS = 1,2-3 + 3.1 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 3-3 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:24  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 365

**TRT#:** 11

**SEX:** Female

**DAY ON TEST:** 741

**DOSE:** 5PPM/F FUMON-11

**DISP:** Terminal Sacrifice

**HISTO:** 21080100365

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Lung - Bronchus

**OBSERVATIONS**

* Eye	Bilateral, Retina	Atrophy	Marked
	Bilateral, Lens	Cataract	Moderate
	[ Cataract TGLS = 3-3 ]		
* Kidney	Bilateral	Mineralization	Minimal
	Bilateral	Nephropathy	Minimal
	Renal Tubule	Pigmentation	Minimal
* Liver		Basophilic Focus	
		Eosinophilic Focus	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Chronic, Mild
		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 1-1 ]		
* Mammary Gland		Cyst	Mild
	[ Cyst TGLS = 2-3 ]		

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:24  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 367      **TRT#:** 12      **SEX:** Female      **DAY ON TEST:** 725  
**DOSE:** 15PPM/F FUMON-12      **DISP:** Moribund      **HISTO:** 21080100367

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Brain - Cerebellum
* Brain - Cerebrum	* Clitoral Gland	* Esophagus	* Harderian Gland
* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum	* Intestine Small - Duodenum
* Intestine Small - Ileum	* Intestine Small - Jejunum	* Lacrimal Gland	* Larynx
* Lung - Bronchus	* Lymph Node - Mandibular	* Pancreas	* Parathyroid Gland
* Peripheral Nerve - Sciatic	* Salivary Glands	* Skeletal Muscle - Thigh	* Skin
* Spinal Cord - Thoracic	* Stomach - Glandular	* Tongue	* Trachea
* Urinary Bladder	* Uterus	* Vagina	* Zymbal's Gland

**MISSING**

\* Thymus

**OBSERVATIONS**

* Adrenal Gland		Leukemia Mononuclear	
* Bone Marrow		Leukemia Mononuclear	
* Eye	Bilateral, Retina	Atrophy	Moderate
* Heart		Cardiomyopathy	Minimal
* Kidney	Bilateral	Mineralization	Mild
* Liver		Eosinophilic Focus	
	Bile Duct	Hyperplasia	Moderate
		Leukemia Mononuclear	
	[ Eosinophilic Focus TGLS = 6-1.3 ]		
* Lung	Interstitial	Inflammation	Chronic, Mild
* Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
	Mesenteric	Leukemia Mononuclear	
* Mammary Gland		Cyst	Mild
Mesentery	Fat	Necrosis	Moderate
	[ Necrosis TGLS = 1-11 ]		
* Nose	Olfactory Epi	Cytoplasmic Alteration	Minimal
* Ovary	Follicle	Cyst	Minimal
	[ Cyst TGLS = 3,4-10 ]		
* Pituitary Gland	Pars Distalis	Adenoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:24  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 367	<b>TRT#:</b> 12	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 725
	<b>DOSE:</b> 15PPM/F FUMON-12	<b>DISP:</b> Moribund	<b>HISTO:</b> 21080100367

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

[ Adenoma TGLS = 5-11 ]

* Spleen		Leukemia Mononuclear	
* Stomach	Epithelium, Forestomach	Hyperplasia	Marked
	Forestomach	Inflammation	Chronic, Minimal
* Thyroid Gland	C Cell	Hyperplasia	Focal, Minimal
* Uterus			

Note: TGL # 02 - NO MICROSCOPIC CORRELATE

---

PRIMARY CAUSE OF DEATH - Spleen Leukemia Mononuclear

---

Animal Note: COD...PROBABLE-LEUKEMIA MONONUCLEAR CELL

---

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:24  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 371      **TRT#:** 10      **SEX:** Female      **DAY ON TEST:** 739  
**DOSE:** 0PPM/F FUMON-10      **DISP:** Terminal Sacrifice      **HISTO:** 21080100371

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Bone Marrow
* Brain - Cerebellum	* Brain - Cerebrum	* Esophagus	* Eye
* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum	* Intestine Small - Duodenum
* Intestine Small - Ileum	* Intestine Small - Jejunum	* Larynx	* Lung - Bronchus
* Mammary Gland	* Ovary	* Pancreas	* Peripheral Nerve - Sciatic
* Pituitary Gland	* Salivary Glands	* Skeletal Muscle - Thigh	* Skin
* Spinal Cord - Thoracic	* Stomach - Forestomach	* Stomach - Glandular	* Thyroid Gland
* Tongue	* Trachea	* Urinary Bladder	* Vagina
* Zymbal's Gland			

**MISSING**

\* Parathyroid Gland      \* Thymus

**OBSERVATIONS**

* Adrenal Gland	Bilateral, Cortex	Angiectasis	Mild
* Clitoral Gland	Bilateral	Adenoma	
[ Adenoma TGLS = 3-10 ]			
* Harderian Gland		Infiltration Cellular	Lymphocytic, Minimal
* Heart		Cardiomyopathy	Mild
* Kidney	Bilateral	Mineralization	Mild
	Bilateral	Nephropathy	Mild
* Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Liver		Basophilic Focus	
		Eosinophilic Focus	
		Mixed Cell Focus	
Note: TGL # 01 - NO MICROSCOPIC CORRELATE			
* Lymph Node	Mandibular	Hyperplasia	Mild
	Mesenteric	Infiltration Cellular	Histiocytic, Mild
* Nose		Inflammation	Chronic Active, Minimal
* Spleen		Pigmentation	Minimal
* Uterus	Endometrium	Cyst	Mild

Note: LUMEN IS DILATED

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:24  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

**ANIMAL ID:** 371

**TRT#:** 10

**SEX:** Female

**DAY ON TEST:** 739

**DOSE:** 0PPM/F FUMON-10

**DISP:** Terminal Sacrifice

**HISTO:** 21080100371

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

[ Cyst TGLS = 2-10.1 ]

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:24  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 372

**TRT#:** 10

**SEX:** Female

**DAY ON TEST:** 739

**DOSE:** 0PPM/F FUMON-10

**DISP:** Terminal Sacrifice

**HISTO:** 21080100372

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Brain - Cerebellum
* Brain - Cerebrum	* Esophagus	* Eye	* Intestine Large - Cecum
* Intestine Large - Colon	* Intestine Large - Rectum	* Intestine Small - Duodenum	* Intestine Small - Ileum
* Intestine Small - Jejunum	* Lacrimal Gland	* Larynx	* Lung - Bronchus
* Ovary	* Pancreas	* Parathyroid Gland	* Peripheral Nerve - Sciatic
* Salivary Glands	* Skeletal Muscle - Thigh	* Skin	* Spinal Cord - Thoracic
* Stomach - Forestomach	* Stomach - Glandular	* Tongue	* Trachea
* Urinary Bladder	* Vagina	* Zymbal's Gland	

**OBSERVATIONS**

* Adrenal Gland		Leukemia Mononuclear	
* Bone Marrow		Hyperplasia	Mild
* Brain	Hypothalamus	Compression	Minimal
* Clitoral Gland		Carcinoma	
Note: ONLY ONE			
[ Carcinoma TGLS = 1-10 ]			
* Harderian Gland		Infiltration Cellular	Lymphocytic, Minimal
* Heart		Cardiomyopathy	Minimal
* Kidney	Pelvis, Transit Epithe	Hyperplasia	Focal, Mild
	Bilateral	Mineralization	Mild
	Bilateral	Nephropathy	Mild
* Liver		Basophilic Focus	
		Clear Cell Focus	
		Eosinophilic Focus	
		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 4-6 ]			
* Lung		Leukemia Mononuclear	
* Lymph Node	Mandibular	Leukemia Mononuclear	
	Mesenteric	Leukemia Mononuclear	
* Mammary Gland		Fibroadenoma	Multiple
[ Fibroadenoma TGLS = 2,3-13.1 + 14 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:24  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 372	<b>TRT#:</b> 10 <b>DOSE:</b> 0PPM/F FUMON-10	<b>SEX:</b> Female <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 739 <b>HISTO:</b> 21080100372
-----------------------	---	---	--

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

* Nose	Olfactory Epi Nasolacrim Dct	Cytoplasmic Alteration Inflammation	Mild Chronic Active, Mild
* Pituitary Gland [ Adenoma TGLS = 6-11 ]	Pars Distalis	Adenoma	
* Spleen [ Leukemia Mononuclear TGLS = 5-7 ]		Leukemia Mononuclear	
* Thymus		Atrophy Cyst	Minimal Minimal
* Thyroid Gland	C Cell	Adenoma	
* Uterus [ Polyp Stromal TGLS = 7-10 ]	Endometrium	Polyp Stromal	

---

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:24  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 373	<b>TRT#:</b> 13	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> 50PPM/F FUMON-13	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100373

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Lung - Bronchus

---

**OBSERVATIONS**

* Kidney	Bilateral	Mineralization	Mild
* Liver		Basophilic Focus	
		Hepatodiaphragmatic Nodule	
		Mixed Cell Focus	
		[ Hepatodiaphragmatic Nodule TGLS = 3-1 ]	
		[ Mixed Cell Focus TGLS = 4-1.1 ]	
* Lung	Interstitial	Inflammation	Chronic, Mild
* Mammary Gland		Fibroadenoma	
		[ Fibroadenoma TGLS = 1-3 ]	
* Pituitary Gland	Pars Intermed	Adenoma	
		[ Adenoma TGLS = 5-11 ]	
* Uterus	Bilateral	Hydrometra	Marked
	Endometrium	Polyp Stromal	
		[ Hydrometra TGLS = 2-3 ]	

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92002-03  
Test Type: CHRONIC  
Species/Strain: Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
Test Compound: Fumonisin B1  
CAS Number: 116355-83-0

Date Report Requested: 10/15/2014  
Time Report Requested: 18:08:24  
First Dose M/F: NA / NA  
Lab: NCTR

ANIMAL ID: 374

TRT#: 13

SEX: Female

DAY ON TEST: 739

DOSE: 50PPM/F FUMON-13

DISP: Terminal Sacrifice

HISTO: 21080100374

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Lung - Bronchus

**OBSERVATIONS**

\* Clitoral Gland

Adenoma

[ Adenoma TGLS = 1-3 ]

\* Kidney

Bilateral

Mineralization

Mild

Bilateral

Nephropathy

Minimal

\* Liver

Basophilic Focus

Clear Cell Focus

Inflammation

Mixed Cell Focus

Chronic, Minimal

[ Basophilic Focus TGLS = 3-1 ]

[ Mixed Cell Focus TGLS = 2-1 ]

\* Lung

Alveolar Epith

Hyperplasia

Focal, Mild

\* Mammary Gland

Fibroadenoma

[ Fibroadenoma TGLS = 4-3 ]

Tissue NOS

Note: TGL # 05 - NO MICROSCOPIC CORRELATE

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:24  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 375

**TRT#:** 13

**SEX:** Female

**DAY ON TEST:** 739

**DOSE:** 50PPM/F FUMON-13

**DISP:** Terminal Sacrifice

**HISTO:** 21080100375

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Kidney \* Lung - Bronchus

**OBSERVATIONS**

* Liver	Bile Duct	Basophilic Focus Hyperplasia Mixed Cell Focus Tension Lipidosis	Minimal
[ Mixed Cell Focus TGLS = 1-1 ]			
* Pituitary Gland	Pars Distalis Pars Nervosa	Adenoma Atypical Cells	Moderate
[ Adenoma TGLS = 3-3 ]			
* Skin	Subcut Tiss	Liposarcoma	
[ Liposarcoma TGLS = 2-3 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:24  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 376

**TRT#:** 13

**SEX:** Female

**DAY ON TEST:** 739

**DOSE:** 50PPM/F FUMON-13

**DISP:** Terminal Sacrifice

**HISTO:** 21080100376

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Lung - Bronchus

**OBSERVATIONS**

* Kidney	Bilateral	Mineralization	Minimal
	Bilateral	Nephropathy	Minimal
* Liver		Basophilic Focus	
		Eosinophilic Focus	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Chronic, Mild
		Tension Lipidosis	
* Lung			
Note: EDEMA ?			
Mesentery	Fat	Necrosis	Moderate
[ Necrosis TGLS = 1-3 ]			
* Tongue		Squamous Cell Papilloma	
[ Squamous Cell Papilloma TGLS = 3-3.1 ]			
* Uterus		Fibrosis	Mild
[ Fibrosis TGLS = 2-3.1 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:24  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 389	<b>TRT#:</b> 12	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> 15PPM/F FUMON-12	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100389

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Lung - Bronchus

---

**OBSERVATIONS**

* Eye	Bilateral, Retina	Atrophy	Marked
	Bilateral, Lens	Cataract	Marked
	[ Cataract TGLS = 3-3.1 ]		
* Kidney	Bilateral	Mineralization	Mild
	Bilateral	Nephropathy	Mild
* Liver		Basophilic Focus	
		Eosinophilic Focus	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Chronic, Minimal
		Mixed Cell Focus	
		Tension Lipidosis	
* Mammary Gland		Fibroadenoma	Multiple
	[ Fibroadenoma TGLS = 1,2-3 ]		

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:24  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 390

**TRT#:** 12

**SEX:** Female

**DAY ON TEST:** 739

**DOSE:** 15PPM/F FUMON-12

**DISP:** Terminal Sacrifice

**HISTO:** 21080100390

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Lung - Bronchus

**OBSERVATIONS**

* Kidney	Bilateral	Mineralization	Mild
	Bilateral	Nephropathy	Minimal
* Liver		Basophilic Focus	
		Eosinophilic Focus	
	Bile Duct	Hyperplasia	Minimal
		Necrosis	Mild
		Tension Lipidosis	
[ Basophilic Focus TGLS = 3-1.3 ]			
* Mammary Gland		Fibroadenoma	Multiple
[ Fibroadenoma TGLS = 1,2-3 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:24  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 391	<b>TRT#:</b> 12	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> 15PPM/F FUMON-12	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100391

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Lung - Bronchus

---

**OBSERVATIONS**

* Eye	Bilateral, Retina	Atrophy	Marked
	Bilateral, Lens	Cataract	Moderate
	[ Cataract TGLS = 2-3 ]		
* Kidney	Bilateral, Renal Tubule	Accumulation, Hyaline Droplet	Minimal
	Bilateral	Mineralization	Minimal
	Bilateral	Nephropathy	Minimal
* Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Chronic, Minimal
		Tension Lipidosis	
* Mammary Gland		Fibroadenoma	
	[ Fibroadenoma TGLS = 1-3 ]		

---

PRIMARY CAUSE OF DEATH

---

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:24  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 392      **TRT#:** 14      **SEX:** Female      **DAY ON TEST:** 739  
**DOSE:** 100PPM/FFUMON-14      **DISP:** Terminal Sacrifice      **HISTO:** 21080100392

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Blood Vessel - Aorta	Bone - Femur	Bone - Sternum	Bone Marrow
Brain - Cerebellum	Brain - Cerebrum	Esophagus	Intestine Large - Cecum
Intestine Large - Colon	Intestine Large - Rectum	Intestine Small - Duodenum	Intestine Small - Ileum
Intestine Small - Jejunum	Lung - Bronchus	Nose	Ovary
Parathyroid Gland	Peripheral Nerve - Sciatic	Salivary Glands	Skeletal Muscle - Thigh
Skin	Spinal Cord - Thoracic	Stomach - Forestomach	Stomach - Glandular
Thymus	Tongue	Trachea	Urinary Bladder
Uterus	Vagina	Zymbal's Gland	

**OBSERVATIONS**

Adrenal Gland	Bilateral, Cortex	Angiectasis	Mild
Clitoral Gland		Hyperplasia	Focal, Mild
		Inflammation	Chronic, Minimal
Eye	Bilateral, Retina	Atrophy	Moderate
Harderian Gland		Infiltration Cellular	Lymphocytic, Minimal
Heart		Cardiomyopathy	Mild
* Kidney	Bilateral	Mineralization	Minimal
	Bilateral	Nephropathy	Mild
Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
Larynx		Inflammation	Chronic Active, Mild
* Liver		Basophilic Focus	
		Clear Cell Focus	
	Bile Duct	Hyperplasia	Mild
		Inflammation	Chronic, Mild
		Leukemia Mononuclear	
		Mixed Cell Focus	
		Tension Lipidosis	
[ Basophilic Focus TGLS = 3-6.1 ]			
[ Leukemia Mononuclear TGLS = 3-6.1 ]			
[ Mixed Cell Focus TGLS = 3-6.1 ]			
Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:24  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 392	<b>TRT#:</b> 14	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> 100PPM/FFUMON-14	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100392

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

Mammary Gland [ Fibroadenoma TGLS = 2-3.1 ]	Mandibular	Leukemia Mononuclear Fibroadenoma	
Pancreas Pituitary Gland [ Adenoma TGLS = 1-3 ]	Acinar Cell Pars Distalis	Atrophy Adenoma	Focal, Minimal
Spleen Thyroid Gland	C Cell	Leukemia Mononuclear Hyperplasia	Focal, Mild

---

PRIMARY CAUSE OF DEATH -

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:24  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 393

**TRT#:** 14

**SEX:** Female

**DAY ON TEST:** 739

**DOSE:** 100PPM/FFUMON-14

**DISP:** Terminal Sacrifice

**HISTO:** 21080100393

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Adrenal Gland	Blood Vessel - Aorta	Bone - Femur	Bone - Sternum
Bone Marrow	Brain - Cerebellum	Brain - Cerebrum	Esophagus
Intestine Large - Cecum	Intestine Large - Colon	Intestine Large - Rectum	Intestine Small - Duodenum
Intestine Small - Ileum	Intestine Small - Jejunum	Larynx	Lung - Bronchus
Lymph Node - Mandibular	Nose	Pancreas	Parathyroid Gland
Peripheral Nerve - Sciatic	Salivary Glands	Skeletal Muscle - Thigh	Skin
Spinal Cord - Thoracic	Stomach - Forestomach	Stomach - Glandular	Thymus
Thyroid Gland	Tongue	Trachea	Urinary Bladder
Vagina	Zymbal's Gland		

**MISSING**

Ovary

**OBSERVATIONS**

Clitoral Gland		Hyperplasia	Focal, Mild
Eye	Bilateral, Retina	Atrophy	Moderate
	Lens	Cataract	Minimal
Harderian Gland	Bilateral	Infiltration Cellular	Lymphocytic, Minimal
Heart		Cardiomyopathy	Minimal
* Kidney	Bilateral	Mineralization	Minimal
	Bilateral	Nephropathy	Minimal
Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Mild
		Inflammation	Chronic, Mild
Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Mild
Mammary Gland		Carcinoma	
	[ Carcinoma TGLS = 1-3 ]		
Ovary			
	Note: TGL#2-NOTED GROSSLY AS OVARY WAS UTERUS		
Pituitary Gland	Pars Distalis	Adenoma	
	[ Adenoma TGLS = 3-3.1 ]		

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:24  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 393	<b>TRT#:</b> 14 <b>DOSE:</b> 100PPM/FFUMON-14	<b>SEX:</b> Female <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 739 <b>HISTO:</b> 21080100393
-----------------------	--	---	--

---

<b>ORGAN AND ACCOUNTABLE SITE STATUS</b>			
Spleen		Pigmentation	Minimal
Uterus	Endometrium	Carcinoma	
	Endometrium	Polyp Stromal	
	[ Carcinoma TGLS = 2-3.1 ]		
	[ Polyp Stromal TGLS = 2-3.1 ]		

---

<b>PRIMARY CAUSE OF DEATH</b>	-
-------------------------------	---

---

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92002-03  
Test Type: CHRONIC  
Species/Strain: Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
Test Compound: Fumonisin B1  
CAS Number: 116355-83-0

Date Report Requested: 10/15/2014  
Time Report Requested: 18:08:24  
First Dose M/F: NA / NA  
Lab: NCTR

---

<b>ANIMAL ID:</b> 394	<b>TRT#:</b> 11	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> 5PPM/F FUMON-11	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100394

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Lung - Bronchus

---

**OBSERVATIONS**

* Eye [ Atrophy TGLS = 5,6-3.2 ]	Bilateral, Retina	Atrophy	Marked
* Kidney	Renal Tubule Bilateral	Hyperplasia Mineralization	Focal, Minimal Minimal
* Liver	Bilateral, Renal Tubule Bile Duct	Pigmentation Hyperplasia Leukemia Mononuclear	Minimal Moderate
[ Leukemia Mononuclear TGLS = 1,2-1 + 1.1 ]			
* Lung		Leukemia Mononuclear	
* Spleen [ Leukemia Mononuclear TGLS = 4-3.1 ]		Leukemia Mononuclear	
* Uterus [ Polyp Stromal TGLS = 3-3 ]	Endometrium	Polyp Stromal	

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:24  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 395	<b>TRT#:</b> 11	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> 5PPM/F FUMON-11	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100395

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Lung - Bronchus

---

**OBSERVATIONS**

* Kidney		Cyst	Moderate
	Bilateral	Mineralization	Minimal
	Bilateral, Renal Tubule	Pigmentation	Mild
[ Cyst TGLS = 1-2 ]			
* Liver	Bile Duct	Hyperplasia	Moderate
		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 2-1 ]			
* Lung		Leukemia Mononuclear	
* Pituitary Gland	Pars Distalis	Cyst	Moderate
[ Cyst TGLS = 4-3.1 ]			
* Skin			
Note: TGL#3-NOTED GROSSLY AS SKIN WAS ZYMBALS GLAND			
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 5-7 ]			
* Zymbal's Gland		Carcinoma	
[ Carcinoma TGLS = 3-3 ]			

---

PRIMARY CAUSE OF DEATH -

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:24  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 396

**TRT#:** 10

**SEX:** Female

**DAY ON TEST:** 739

**DOSE:** 0PPM/F FUMON-10

**DISP:** Terminal Sacrifice

**HISTO:** 21080100396

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone Marrow	* Brain - Cerebellum	* Brain - Cerebrum
* Esophagus	* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum
* Intestine Small - Duodenum	* Intestine Small - Ileum	* Intestine Small - Jejunum	* Lacrimal Gland
* Larynx	* Lung - Bronchus	* Lymph Node - Mandibular	* Ovary
* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Salivary Glands	* Skeletal Muscle - Thigh
* Skin	* Spinal Cord - Thoracic	* Stomach - Forestomach	* Stomach - Glandular
* Thymus	* Thyroid Gland	* Tongue	* Trachea
* Urinary Bladder	* Vagina	* Zymbal's Gland	

**MISSING**

\* Clitoral Gland

**OBSERVATIONS**

* Adrenal Gland	Cortex	Angiectasis	Minimal
* Bone	Femur	Hyperostosis	Marked
	Sternum	Hyperostosis	Marked
* Eye	Bilateral, Retina	Atrophy	Moderate
* Harderian Gland		Infiltration Cellular	Lymphocytic, Minimal
* Heart		Cardiomyopathy	Minimal
* Kidney	Bilateral	Mineralization	Mild
	Bilateral	Nephropathy	Mild
* Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Mild
		Mixed Cell Focus	
* Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
* Mammary Gland		Galactoceles	Mild
* Nose	Olfactory Epi	Cytoplasmic Alteration	Minimal
* Pancreas	Acinar Cell	Atrophy	Focal, Mild
* Pituitary Gland	Pars Distalis	Adenoma	
	[ Adenoma TGLS = 1-11 ]		
* Spleen		Leukemia Mononuclear	
* Uterus	Endometrium	Polyp Stromal	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:24  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

**ANIMAL ID:** 396

**TRT#:** 10

**SEX:** Female

**DAY ON TEST:** 739

**DOSE:** 0PPM/F FUMON-10

**DISP:** Terminal Sacrifice

**HISTO:** 21080100396

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:24  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 397

**TRT#:** 10

**SEX:** Female

**DAY ON TEST:** 739

**DOSE:** 0PPM/F FUMON-10

**DISP:** Terminal Sacrifice

**HISTO:** 21080100397

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Brain - Cerebellum
* Brain - Cerebrum	* Clitoral Gland	* Esophagus	* Heart
* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum	* Intestine Small - Duodenum
* Intestine Small - Ileum	* Intestine Small - Jejunum	* Larynx	* Lung - Bronchus
* Lymph Node - Mandibular	* Nose	* Ovary	* Pancreas
* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Salivary Glands	* Skeletal Muscle - Thigh
* Skin	* Spinal Cord - Thoracic	* Stomach - Forestomach	* Thyroid Gland
* Tongue	* Trachea	* Urinary Bladder	* Uterus
* Vagina			

**MISSING**

\* Zymbal's Gland

**OBSERVATIONS**

* Adrenal Gland		Leukemia Mononuclear	
	Medulla	Pheochromocytoma Benign	
* Bone Marrow		Hyperplasia	Mild
		Myelofibrosis	Mild
Note: MYELOFIBROSIS IN FEMUR			
* Clitoral Gland			
Note: ONLY ONE			
* Eye	Bilateral, Retina	Atrophy	Marked
	Lens	Cataract	Minimal
* Harderian Gland	Bilateral	Infiltration Cellular	Lymphocytic, Mild
* Kidney	Bilateral	Mineralization	Minimal
	Bilateral	Nephropathy	Minimal
* Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Liver	Bile Duct	Hyperplasia	Mild
		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 2,3-6 ]			
* Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
* Mammary Gland		Fibroadenoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:24  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 397	<b>TRT#:</b> 10	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> 0PPM/F FUMON-10	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100397

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

[ Fibroadenoma TGLS = 1-10 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 4-11 ]			
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 5-7 ]			
* Stomach	Glandular	Cyst	Minimal
* Thymus		Atrophy	Mild

---

PRIMARY CAUSE OF DEATH

---

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:24  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 398

**TRT#:** 14

**SEX:** Female

**DAY ON TEST:** 739

**DOSE:** 100PPM/FFUMON-14

**DISP:** Terminal Sacrifice

**HISTO:** 21080100398

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Blood Vessel - Aorta	Bone - Femur	Bone - Sternum	Bone Marrow
Brain - Cerebellum	Brain - Cerebrum	Esophagus	Intestine Large - Cecum
Intestine Large - Colon	Intestine Large - Rectum	Intestine Small - Duodenum	Intestine Small - Ileum
Intestine Small - Jejunum	Larynx	Lung - Bronchus	Lymph Node - Mandibular
Ovary	Pancreas	Parathyroid Gland	Peripheral Nerve - Sciatic
Salivary Glands	Skeletal Muscle - Thigh	Skin	Spinal Cord - Thoracic
Stomach - Forestomach	Stomach - Glandular	Thymus	Thyroid Gland
Tongue	Trachea	Urinary Bladder	Vagina
Zymbal's Gland			

**OBSERVATIONS**

Adrenal Gland	Bilateral, Cortex	Angiectasis	Minimal
Clitoral Gland		Inflammation	Chronic, Minimal
Eye	Bilateral, Retina	Atrophy	Moderate
Harderian Gland	Bilateral	Infiltration Cellular	Lymphocytic, Minimal
Heart		Cardiomyopathy	Minimal
* Kidney	Renal Tubule	Hyperplasia	Focal, Moderate
	Bilateral	Mineralization	Minimal
Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Liver		Basophilic Focus	
		Inflammation	Chronic, Mild
Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
Mammary Gland		Cyst	Minimal
Nose	Olfactory Epi	Cytoplasmic Alteration	Minimal
Pituitary Gland	Pars Distalis	Adenoma	
Spleen		Pigmentation	Minimal
Uterus	Endometrium	Polyp Stromal	

[ Polyp Stromal TGLS = 1-3 ]

**PRIMARY CAUSE OF DEATH** -

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:24  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 399      **TRT#:** 14      **SEX:** Female      **DAY ON TEST:** 739  
**DOSE:** 100PPM/FFUMON-14      **DISP:** Terminal Sacrifice      **HISTO:** 21080100399

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Adrenal Gland	Blood Vessel - Aorta	Bone Marrow	Brain - Cerebellum
Brain - Cerebrum	Clitoral Gland	Esophagus	Intestine Large - Cecum
Intestine Large - Colon	Intestine Large - Rectum	Intestine Small - Duodenum	Intestine Small - Ileum
Intestine Small - Jejunum	Larynx	Lung - Bronchus	Lymph Node - Mandibular
Ovary	Pancreas	Peripheral Nerve - Sciatic	Salivary Glands
Skeletal Muscle - Thigh	Skin	Spinal Cord - Thoracic	Stomach - Forestomach
Thymus	Thyroid Gland	Tongue	Trachea
Urinary Bladder	Uterus	Vagina	

**MISSING**

Parathyroid Gland	Zymbal's Gland
-------------------	----------------

**OBSERVATIONS**

Bone	Femur	Hyperostosis	Marked
	Sternum	Hyperostosis	Marked
	Turbinates	Hyperostosis	Mild
Eye	Bilateral, Retina	Atrophy	Moderate
Harderian Gland		Infiltration Cellular	Lymphocytic, Minimal
Heart		Cardiomyopathy	Minimal
* Kidney	Bilateral	Mineralization	Minimal
	Bilateral	Nephropathy	Minimal
Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Liver		Angiectasis	Focal, Mild
		Basophilic Focus	
		Inflammation	Chronic, Minimal
		Mixed Cell Focus	
		Tension Lipidosis	
	Hepatocyte	Vacuolization Cytoplasmic	Minimal
Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Mild
Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 2-3 ]			
Nose	Olfactory Epi	Cytoplasmic Alteration	Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:24  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 399	<b>TRT#:</b> 14 <b>DOSE:</b> 100PPM/FFUMON-14	<b>SEX:</b> Female <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 739 <b>HISTO:</b> 21080100399
<b>ORGAN AND ACCOUNTABLE SITE STATUS</b>			
Pituitary Gland [ Adenoma TGLS = 1-3 ]	Nasolacrim Dct Pars Distalis	Inflammation Adenoma	Chronic Active, Mild
Spleen Stomach	Glandular	Hematopoietic Cell Proliferation Cyst	Minimal Minimal
PRIMARY CAUSE OF DEATH	-		

---

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:24  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 400	<b>TRT#:</b> 11	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> 5PPM/F FUMON-11	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100400

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Lung - Bronchus

---

**OBSERVATIONS**

* Kidney	Bilateral	Mineralization	Minimal
	Bilateral	Nephropathy	Mild
* Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
Note: TGL # 01 - NO MICROSCOPIC CORRELATE			
* Liver		Basophilic Focus	
		Inflammation	Chronic, Minimal
		Mixed Cell Focus	
		Tension Lipidosis	
Note: TGL # 03 - NO MICROSCOPIC CORRELATE [ Tension Lipidosis TGLS = 2-1 ]			
* Lung	Interstitialium	Inflammation	Chronic, Minimal

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92002-03  
Test Type: CHRONIC  
Species/Strain: Rat/F 344/NCTR

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
Test Compound: Fumonisin B1  
CAS Number: 116355-83-0

Date Report Requested: 10/15/2014  
Time Report Requested: 18:08:24  
First Dose M/F: NA / NA  
Lab: NCTR

---

ANIMAL ID: 401	TRT#: 11	SEX: Female	DAY ON TEST: 739
	DOSE: 5PPM/F FUMON-11	DISP: Terminal Sacrifice	HISTO: 21080100401

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Lung - Bronchus

---

**OBSERVATIONS**

* Kidney	Bilateral	Mineralization	Mild
	Bilateral	Nephropathy	Minimal
* Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
Note: TGL # 02 - NO MICROSCOPIC CORRELATE			
* Liver		Clear Cell Focus	
		Inflammation	Chronic, Mild
	Hepatocyte	Vacuolization Cytoplasmic	Mild
[ Clear Cell Focus TGLS = 1-1 ]			

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:24  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 402	<b>TRT#:</b> 12	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> 15PPM/F FUMON-12	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100402

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Lung - Bronchus \* Mammary Gland

**MISSING**

\* Pituitary Gland

**OBSERVATIONS**

* Kidney	Bilateral	Mineralization	Mild
	Bilateral	Nephropathy	Mild
* Liver		Basophilic Focus	
		Clear Cell Focus	
		Eosinophilic Focus	
		Hepatodiaphragmatic Nodule	
		Inflammation	Chronic, Minimal
		Mixed Cell Focus	

Note: TGL#3-NULLIFIED BY TRIMMER  
[ Hepatodiaphragmatic Nodule TGLS = 2-1 ]

\* Mammary GI

Note: TGL # 01 - NO MICROSCOPIC CORRELATE

\* Pituitary GI

Note: TGL # 04 - NO MICROSCOPIC CORRELATE

---

PRIMARY CAUSE OF DEATH -

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:24  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

<b>ANIMAL ID:</b> 423	<b>TRT#:</b> 10 <b>DOSE:</b> 0PPM/F FUMON-10	<b>SEX:</b> Female <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 739 <b>HISTO:</b> 21080100423
-----------------------	---	---	--

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Gland	* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum
* Bone Marrow	* Brain - Cerebellum	* Brain - Cerebrum	* Esophagus
* Heart	* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum
* Intestine Small - Duodenum	* Intestine Small - Ileum	* Intestine Small - Jejunum	* Lung - Bronchus
* Lymph Node - Mandibular	* Ovary	* Pancreas	* Parathyroid Gland
* Skeletal Muscle - Thigh	* Skin	* Spinal Cord - Thoracic	* Spleen
* Stomach - Forestomach	* Stomach - Glandular	* Thymus	* Thyroid Gland
* Tongue	* Trachea	* Urinary Bladder	* Uterus
* Vagina			

**MISSING**

* Larynx	* Mammary Gland	* Peripheral Nerve - Sciatic	* Zymbal's Gland
----------	-----------------	------------------------------	------------------

**OBSERVATIONS**

* Clitoral Gland Note: ONLY ONE [ Adenoma TGLS = 1-10 ]		Adenoma	
* Eye [ Cataract TGLS = 2-13 ]	Bilateral, Retina Bilateral, Lens	Atrophy Cataract	Marked Marked
* Harderian Gland	Bilateral	Infiltration Cellular	Lymphocytic, Minimal
* Kidney	Bilateral Bilateral	Mineralization Nephropathy	Mild Minimal
* Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Liver	Bile Duct	Basophilic Focus Hyperplasia Inflammation	Minimal Chronic, Minimal
* Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Mild
* Nose	Olfactory Epi	Cytoplasmic Alteration	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
* Salivary Glands		Cytoplasmic Alteration	Focal, Mild

PRIMARY CAUSE OF DEATH -

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:24  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

**ANIMAL ID:** 423

**TRT#:** 10

**SEX:** Female

**DAY ON TEST:** 739

**DOSE:** 0PPM/F FUMON-10

**DISP:** Terminal Sacrifice

**HISTO:** 21080100423

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:24  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

<b>ANIMAL ID:</b> 424	<b>TRT#:</b> 10	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> 0PPM/F FUMON-10	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100424

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Bone Marrow
* Brain - Cerebellum	* Brain - Cerebrum	* Clitoral Gland	* Esophagus
* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum	* Intestine Small - Duodenum
* Intestine Small - Ileum	* Intestine Small - Jejunum	* Larynx	* Lung - Bronchus
* Lymph Node - Mesenteric	* Nose	* Ovary	* Pancreas
* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Salivary Glands	* Skeletal Muscle - Thigh
* Skin	* Spinal Cord - Thoracic	* Stomach - Forestomach	* Stomach - Glandular
* Tongue	* Trachea	* Urinary Bladder	* Uterus
* Vagina			

**MISSING**

* Thymus	* Zymbal's Gland
----------	------------------

**OBSERVATIONS**

* Adrenal Gland	Bilateral, Cortex	Angiectasis	Minimal
* Clitoral GI			
Note: ONLY ONE			
Note: TGL # 04 - NO MICROSCOPIC CORRELATE			
* Eye	Bilateral, Retina	Atrophy	Marked
	Bilateral, Lens	Cataract	Moderate
* Harderian Gland		Infiltration Cellular	Lymphocytic, Minimal
* Heart		Cardiomyopathy	Minimal
* Kidney	Bilateral	Mineralization	Minimal
	Bilateral	Nephropathy	Minimal
* Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Liver		Basophilic Focus	
		Clear Cell Focus	
		Mixed Cell Focus	
Note: TGL#1-NULIFIED BY TRIMMER			
[ Mixed Cell Focus TGLS = 2-6 ]			
* Lymph Node	Mandibular	Hyperplasia	Mild
* Mammary Gland		Galactoceles	Mild

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:24  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 424	<b>TRT#:</b> 10	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> 0PPM/F FUMON-10	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100424

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

* Ovary Note: ONLY ONE			
* Pituitary Gland [ Hypertrophy TGLS = 3-11 ]	Pars Distalis	Hypertrophy	Focal, Mild
* Spleen		Pigmentation	Minimal
* Thyroid Gland	C Cell	Hyperplasia	Diffuse, Mild
PRIMARY CAUSE OF DEATH	-		

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:24  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 425      **TRT#:** 10      **SEX:** Female      **DAY ON TEST:** 739  
**DOSE:** 0PPM/F FUMON-10      **DISP:** Terminal Sacrifice      **HISTO:** 21080100425

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone Marrow	* Brain - Cerebellum	* Brain - Cerebrum
* Clitoral Gland	* Esophagus	* Intestine Large - Cecum	* Intestine Large - Colon
* Intestine Large - Rectum	* Intestine Small - Duodenum	* Intestine Small - Ileum	* Intestine Small - Jejunum
* Larynx	* Lung - Bronchus	* Lymph Node - Mandibular	* Nose
* Ovary	* Pancreas	* Parathyroid Gland	* Peripheral Nerve - Sciatic
* Salivary Glands	* Skeletal Muscle - Thigh	* Spinal Cord - Thoracic	* Spleen
* Stomach - Forestomach	* Stomach - Glandular	* Thymus	* Thyroid Gland
* Tongue	* Trachea	* Urinary Bladder	* Vagina
* Zymbal's Gland			

**OBSERVATIONS**

* Adrenal Gland	Bilateral, Cortex	Angiectasis	Mild
* Bone	Femur	Hyperostosis	Marked
	Sternum	Hyperostosis	Marked
	Turbinates	Hyperostosis	Mild
* Eye	Bilateral, Retina	Atrophy	Marked
	Bilateral, Lens	Cataract	Marked
	[ Cataract TGLS = 3-13 ]		
* Harderian Gland		Infiltration Cellular	Lymphocytic, Minimal
* Heart		Cardiomyopathy	Minimal
* Kidney	Bilateral	Mineralization	Minimal
	Bilateral	Nephropathy	Minimal
* Lacrimal Gland		Infiltration Cellular	Lymphocytic, Mild
* Liver		Basophilic Focus	
		Tension Lipidosis	
* Lung		Metaplasia	Osseous, Minimal
* Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
* Mammary Gland		Cyst	Minimal
	Note: TGL#1-NOTED GROSSLY AS MAMMARY GLAND WAS SKIN		
* Pituitary Gland	Pars Distalis	Adenoma	
* Skin	Subcut Tiss	Lipoma	

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:24  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 425	<b>TRT#:</b> 10	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> 0PPM/F FUMON-10	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100425

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

[ Lipoma TGLS = 1-14 ]		
* Uterus	Hemorrhage	Moderate
[ Hemorrhage TGLS = 2-10 ]		
* Vagina		
Note: TGL # 04 - NO MICROSCOPIC CORRELATE		

---

PRIMARY CAUSE OF DEATH

---

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:24  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 426

**TRT#:** 10

**SEX:** Female

**DAY ON TEST:** 739

**DOSE:** 0PPM/F FUMON-10

**DISP:** Terminal Sacrifice

**HISTO:** 21080100426

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Brain - Cerebellum	* Brain - Cerebrum
* Clitoral Gland	* Esophagus	* Harderian Gland	* Intestine Large - Cecum
* Intestine Large - Colon	* Intestine Large - Rectum	* Intestine Small - Duodenum	* Intestine Small - Ileum
* Intestine Small - Jejunum	* Larynx	* Lung - Bronchus	* Lymph Node - Mandibular
* Pancreas	* Peripheral Nerve - Sciatic	* Salivary Glands	* Skeletal Muscle - Thigh
* Skin	* Spinal Cord - Thoracic	* Stomach - Forestomach	* Stomach - Glandular
* Thymus	* Tongue	* Trachea	* Urinary Bladder
* Vagina			

**MISSING**

* Bone - Sternum	* Bone Marrow	* Parathyroid Gland	* Zymbal's Gland
------------------	---------------	---------------------	------------------

**OBSERVATIONS**

* Adrenal Gland	Bilateral, Cortex Cortex	Angiectasis Hyperplasia	Minimal Focal, Minimal
* Eye	Bilateral, Retina Bilateral, Lens	Atrophy Cataract	Marked Marked
	[ Cataract TGLS = 2-13 ]		
* Heart		Cardiomyopathy	Minimal
* Kidney	Bilateral Bilateral Bilateral, Renal Tubule	Mineralization Nephropathy Pigmentation	Minimal Mild Mild
* Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Liver		Inflammation Tension Lipidosis	Chronic, Moderate
	[ Inflammation TGLS = 4-6.1 ]		
* Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Mild
* Mammary Gland		Galactocele	Mild
* Nose	Olfactory Epi Nasolacrim Dct	Cytoplasmic Alteration Inflammation	Minimal Chronic, Mild
* Ovary		Granular Cell Tumor Benign	
	[ Granular Cell Tumor Benign TGLS = 1-10 ]		

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:24  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 426	<b>TRT#:</b> 10	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> 0PPM/F FUMON-10	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100426

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

* Pituitary Gland [ Adenoma TGLS = 3-11 ]	Pars Distalis	Adenoma	
* Spleen		Pigmentation	Minimal
* Thyroid Gland	C Cell	Adenoma	Multiple
* Uterus	Endometrium	Polyp Stromal	

---

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:24  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 427

**TRT#:** 10

**SEX:** Female

**DAY ON TEST:** 739

**DOSE:** 0PPM/F FUMON-10

**DISP:** Terminal Sacrifice

**HISTO:** 21080100427

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Brain - Cerebellum	* Brain - Cerebrum	* Clitoral Gland
* Esophagus	* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum
* Intestine Small - Duodenum	* Intestine Small - Jejunum	* Larynx	* Lung - Bronchus
* Ovary	* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Salivary Glands
* Skeletal Muscle - Thigh	* Skin	* Spinal Cord - Thoracic	* Spleen
* Stomach - Forestomach	* Stomach - Glandular	* Thymus	* Thyroid Gland
* Tongue	* Urinary Bladder	* Uterus	* Vagina
* Zymbal's Gland			

**MISSING**

\* Intestine Small - Ileum

**OBSERVATIONS**

* Adrenal Gland	Bilateral, Cortex	Angiectasis	Minimal
* Bone	Femur	Hyperostosis	Moderate
	Sternum	Hyperostosis	Moderate
* Bone Marrow		Hyperplasia	Mild
* Eye	Bilateral, Retina	Atrophy	Marked
* Harderian Gland		Infiltration Cellular	Lymphocytic, Mild
* Heart		Cardiomyopathy	Moderate
* Kidney	Bilateral	Mineralization	Minimal
	Bilateral	Nephropathy	Mild
* Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Chronic, Mild
		Mixed Cell Focus	
* Lymph Node	Mandibular	Degeneration	Cystic, Mild
	Mandibular	Hyperplasia	Mild
	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
* Mammary Gland		Cyst	Mild
* Nose	Olfactory Epi	Cytoplasmic Alteration	Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:24  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 427	<b>TRT#:</b> 10	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> 0PPM/F FUMON-10	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100427

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

* Pancreas	Nasolacrim Dct	Inflammation	Chronic Active, Mild
* Pituitary Gland	Acinar Cell	Atrophy	Focal, Minimal
[ Adenoma TGLS = 1-11 ]	Pars Distalis	Adenoma	
* Trachea		Inflammation	Chronic, Minimal

---

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:24  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 428

**TRT#:** 10

**SEX:** Female

**DAY ON TEST:** 739

**DOSE:** 0PPM/F FUMON-10

**DISP:** Terminal Sacrifice

**HISTO:** 21080100428

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Brain - Cerebellum
* Esophagus	* Harderian Gland	* Intestine Large - Cecum	* Intestine Large - Colon
* Intestine Large - Rectum	* Intestine Small - Duodenum	* Intestine Small - Ileum	* Intestine Small - Jejunum
* Lacrimal Gland	* Larynx	* Lung - Bronchus	* Ovary
* Pancreas	* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Salivary Glands
* Skeletal Muscle - Thigh	* Skin	* Spinal Cord - Thoracic	* Stomach - Forestomach
* Stomach - Glandular	* Thyroid Gland	* Tongue	* Trachea
* Urinary Bladder	* Vagina		

**MISSING**

* Clitoral Gland	* Zymbal's Gland
------------------	------------------

**OBSERVATIONS**

* Adrenal Gland		Leukemia Mononuclear	
Note: ONLY ONE			
* Bone Marrow		Leukemia Mononuclear	
* Brain	Cerebrum	Astrocytoma Malignant	
* Eye	Bilateral, Retina	Atrophy	Moderate
* Heart		Cardiomyopathy	Mild
		Leukemia Mononuclear	
* Kidney	Bilateral	Mineralization	Minimal
	Bilateral	Nephropathy	Mild
* Liver	Bile Duct	Hyperplasia	Moderate
		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 5,6-6+6.1 ]			
* Lung	Interstitium	Inflammation	Chronic, Minimal
* Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
	Mandibular	Leukemia Mononuclear	
* Mammary Gland		Fibroadenoma	
		Galactocele	Moderate
[ Fibroadenoma TGLS = 3-10.1 ]			
[ Galactocele TGLS = 4-10.1 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:24  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 428	<b>TRT#:</b> 10 <b>DOSE:</b> 0PPM/F FUMON-10	<b>SEX:</b> Female <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 739 <b>HISTO:</b> 21080100428
<b>ORGAN AND ACCOUNTABLE SITE STATUS</b>			
* Nose		Inflammation	Chronic Active, Moderate
* Pituitary Gland [ Adenoma TGLS = 2-11 ]	Pars Distalis	Adenoma	
* Spleen [ Leukemia Mononuclear TGLS = 1-7 ]		Leukemia Mononuclear	
* Thymus		Atrophy	Minimal
* Uterus	Endometrium	Polyp Stromal	
PRIMARY CAUSE OF DEATH	-		

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:24  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 429

**TRT#:** 10

**SEX:** Female

**DAY ON TEST:** 739

**DOSE:** 0PPM/F FUMON-10

**DISP:** Terminal Sacrifice

**HISTO:** 21080100429

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone Marrow	* Brain - Cerebellum	* Brain - Cerebrum
* Esophagus	* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum
* Intestine Small - Duodenum	* Intestine Small - Ileum	* Intestine Small - Jejunum	* Larynx
* Lung - Bronchus	* Lymph Node - Mandibular	* Ovary	* Parathyroid Gland
* Peripheral Nerve - Sciatic	* Salivary Glands	* Skeletal Muscle - Thigh	* Skin
* Spinal Cord - Thoracic	* Stomach - Forestomach	* Stomach - Glandular	* Thymus
* Tongue	* Trachea	* Uterus	* Vagina
* Zymbal's Gland			

**OBSERVATIONS**

* Adrenal Gland	Bilateral, Cortex	Vacuolization Cytoplasmic	Focal, Minimal
* Bone	Femur	Hyperostosis	Moderate
	Sternum	Hyperostosis	Moderate
	Turbinates	Hyperostosis	Moderate
* Clitoral Gland		Inflammation	Chronic, Minimal
* Eye	Bilateral, Retina	Atrophy	Moderate
* Harderian Gland		Infiltration Cellular	Lymphocytic, Minimal
* Heart		Cardiomyopathy	Mild
* Kidney	Bilateral	Mineralization	Minimal
	Bilateral	Nephropathy	Mild
* Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Liver		Basophilic Focus	
		Tension Lipidosis	
* Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
* Mammary Gland		Cyst	Minimal
		Fibroadenoma	
[ Fibroadenoma TGLS = 2-14 ]			
* Nose	Olfactory Epi	Cytoplasmic Alteration	Moderate
* Pancreas	Acinar Cell	Atrophy	Focal, Mild
* Pituitary Gland	Pars Distalis	Adenoma	
	Pars Distalis	Cyst	Minimal

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:24  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

**ANIMAL ID:** 429

**TRT#:** 10

**SEX:** Female

**DAY ON TEST:** 739

**DOSE:** 0PPM/F FUMON-10

**DISP:** Terminal Sacrifice

**HISTO:** 21080100429

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

[ Adenoma TGLS = 1-11 ]

\* Spleen

Hematopoietic Cell Proliferation

Mild

\* Thyroid Gland

C Cell

Adenoma

\* Urinary Bladder

Infiltration Cellular

Lymphocytic, Minimal

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:24  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 430

**TRT#:** 10

**SEX:** Female

**DAY ON TEST:** 739

**DOSE:** 0PPM/F FUMON-10

**DISP:** Terminal Sacrifice

**HISTO:** 21080100430

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone Marrow	* Brain - Cerebellum	* Brain - Cerebrum
* Clitoral Gland	* Esophagus	* Intestine Large - Cecum	* Intestine Large - Colon
* Intestine Large - Rectum	* Intestine Small - Duodenum	* Intestine Small - Ileum	* Intestine Small - Jejunum
* Larynx	* Lung - Bronchus	* Lymph Node - Mandibular	* Ovary
* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Salivary Glands	* Skeletal Muscle - Thigh
* Skin	* Spinal Cord - Thoracic	* Stomach - Forestomach	* Stomach - Glandular
* Thymus	* Thyroid Gland	* Tongue	* Trachea
* Urinary Bladder	* Vagina	* Zymbal's Gland	

**OBSERVATIONS**

* Adrenal Gland	Bilateral, Cortex Medulla	Angiectasis Hyperplasia	Minimal Focal, Moderate
* Bone	Femur Sternum	Hyperostosis Hyperostosis	Mild Mild
* Eye	Bilateral, Retina Bilateral, Lens	Atrophy Cataract	Moderate Mild
* Harderian Gland	Bilateral	Infiltration Cellular	Lymphocytic, Mild
* Heart		Cardiomyopathy	Mild
* Kidney	Bilateral Bilateral	Mineralization Nephropathy	Minimal Minimal
* Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Liver		Basophilic Focus Eosinophilic Focus Inflammation	  Chronic, Mild
* Lymph Node	Mesenteric	Tension Lipidosis Infiltration Cellular	 Histiocytic, Mild
* Mammary Gland		Fibroadenoma Galactocele	 Mild
[ Fibroadenoma TGLS = 1-10 ]			
* Nose	Olfactory Epi	Cytoplasmic Alteration	Minimal
* Pancreas	Acinar Cell	Atrophy	Focal, Mild

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:24  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 430	<b>TRT#:</b> 10	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> 0PPM/F FUMON-10	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100430

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

* Pituitary Gland [ Cyst TGLS = 2-11 ]	Pars Distalis	Cyst	Minimal
* Spleen		Pigmentation	Minimal
* Uterus	Endometrium	Polyp Stromal	

---

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92002-03  
Test Type: CHRONIC  
Species/Strain: Rat/F 344/NCTR

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
Test Compound: Fumonisin B1  
CAS Number: 116355-83-0

Date Report Requested: 10/15/2014  
Time Report Requested: 18:08:24  
First Dose M/F: NA / NA  
Lab: NCTR

---

ANIMAL ID: 431	TRT#: 11	SEX: Female	DAY ON TEST: 739
	DOSE: 5PPM/F FUMON-11	DISP: Terminal Sacrifice	HISTO: 21080100431

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Lung - Bronchus

---

**OBSERVATIONS**

* Kidney	Bilateral Bilateral, Renal Tubule	Nephropathy Pigmentation Infiltration Cellular	Mild Minimal Lymphocytic, Minimal
* Lacrimal Gland			
Note: TGL # 03 - NO MICROSCOPIC CORRELATE			
* Liver	Bile Duct	Basophilic Focus Hepatodiaphragmatic Nodule Hyperplasia Tension Lipidosis	Minimal
	[ Hepatodiaphragmatic Nodule TGLS = 1-1 ]		
* Lung		Alveolar/Bronchiolar Adenoma	
	[ Alveolar/Bronchiolar Adenoma TGLS = 2-5.1 ]		

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:24  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 432	<b>TRT#:</b> 11	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> 5PPM/F FUMON-11	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100432

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Lung - Bronchus

---

**OBSERVATIONS**

* Kidney	Bilateral	Mineralization	Minimal
	Bilateral	Nephropathy	Minimal
* Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Mild
		Mixed Cell Focus	
[ Basophilic Focus TGLS = 1,2-1 ]			
* Lung	Alveolar Epith	Hyperplasia	Focal, Minimal

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92002-03  
Test Type: CHRONIC  
Species/Strain: Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
Test Compound: Fumonisin B1  
CAS Number: 116355-83-0

Date Report Requested: 10/15/2014  
Time Report Requested: 18:08:24  
First Dose M/F: NA / NA  
Lab: NCTR

---

<b>ANIMAL ID:</b> 433	<b>TRT#:</b> 11	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> 5PPM/F FUMON-11	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100433

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Lung - Bronchus

---

**OBSERVATIONS**

* Kidney	Bilateral	Mineralization	Mild
	Bilateral, Renal Tubule	Pigmentation	Mild
* Liver	Bile Duct	Hyperplasia	Marked
		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 3-1 ]		
* Lung		Leukemia Mononuclear	
Mesentery	Fat	Necrosis	Mild
	[ Necrosis TGLS = 4-3 ]		
* Pituitary Gland	Pars Distalis	Adenoma	
	[ Adenoma TGLS = 5-3 ]		
* Spleen		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 1-3 ]		
* Uterus	Cervix, Epithelium	Hyperplasia	Moderate
	[ Hyperplasia TGLS = 2-3 ]		

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92002-03  
Test Type: CHRONIC  
Species/Strain: Rat/F 344/NCTR

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
Test Compound: Fumonisin B1  
CAS Number: 116355-83-0

Date Report Requested: 10/15/2014  
Time Report Requested: 18:08:24  
First Dose M/F: NA / NA  
Lab: NCTR

---

ANIMAL ID: 434	TRT#: 11	SEX: Female	DAY ON TEST: 739
	DOSE: 5PPM/F FUMON-11	DISP: Terminal Sacrifice	HISTO: 21080100434

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Lung - Bronchus

---

**OBSERVATIONS**

* Kidney	Bilateral	Mineralization	Minimal
	Bilateral	Nephropathy	Moderate
	Bilateral, Renal Tubule	Pigmentation	Mild
* Liver	Bile Duct	Hyperplasia	Mild
		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 1-1 ]		
* Lung		Leukemia Mononuclear	
* Lymph Node	Inguinal	Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 4-3 ]		
* Spleen		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 2-3 ]		
* Uterus	Endometrium	Polyp Stromal	
	[ Polyp Stromal TGLS = 3-3 ]		

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92002-03  
Test Type: CHRONIC  
Species/Strain: Rat/F 344/NCTR

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
Test Compound: Fumonisin B1  
CAS Number: 116355-83-0

Date Report Requested: 10/15/2014  
Time Report Requested: 18:08:24  
First Dose M/F: NA / NA  
Lab: NCTR

---

ANIMAL ID: 435	TRT#: 12	SEX: Female	DAY ON TEST: 739
	DOSE: 15PPM/F FUMON-12	DISP: Terminal Sacrifice	HISTO: 21080100435

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Lung - Bronchus

---

**OBSERVATIONS**

* Kidney	Bilateral	Mineralization	Minimal
	Bilateral	Nephropathy	Minimal
* Liver		Basophilic Focus	
		Eosinophilic Focus	
	Bile Duct	Hyperplasia	Minimal
		Tension Lipidosis	
* Skin	Epidermis	Hyperplasia	Mild
		Inflammation	Chronic, Mild

[ Hyperplasia TGLS = 1-3 ]  
[ Inflammation TGLS = 1-3 ]

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:24  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 436

**TRT#:** 12

**SEX:** Female

**DAY ON TEST:** 739

**DOSE:** 15PPM/F FUMON-12

**DISP:** Terminal Sacrifice

**HISTO:** 21080100436

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Lung - Bronchus

**OBSERVATIONS**

* Kidney	Bilateral	Mineralization	Minimal
* Liver		Basophilic Focus	
		Inflammation	Chronic, Mild
		Tension Lipidosis	
* Ovary	Follicle	Cyst	Minimal
	Rete Ovarii	Hyperplasia	Minimal
			[ Cyst TGLS = 2-3 ]
			[ Hyperplasia TGLS = 2-3 ]
* Uterus	Endometrium	Polyp Stromal	
			[ Polyp Stromal TGLS = 1-3 ]

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92002-03  
Test Type: CHRONIC  
Species/Strain: Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
Test Compound: Fumonisin B1  
CAS Number: 116355-83-0

Date Report Requested: 10/15/2014  
Time Report Requested: 18:08:24  
First Dose M/F: NA / NA  
Lab: NCTR

---

<b>ANIMAL ID:</b> 437	<b>TRT#:</b> 12	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> 15PPM/F FUMON-12	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100437

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Lung - Bronchus

---

**OBSERVATIONS**

* Eye [ Atrophy TGLS = 2-3 ]	Bilateral, Retina	Atrophy	Marked
* Kidney	Bilateral Bilateral	Mineralization Nephropathy	Mild Minimal
* Liver		Basophilic Focus Clear Cell Focus Eosinophilic Focus Tension Lipidosis	
Mesentery [ Necrosis TGLS = 1-3 ]	Fat	Necrosis	Moderate

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92002-03  
 Test Type: CHRONIC  
 Species/Strain: Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

Test Compound: Fumonisin B1  
 CAS Number: 116355-83-0

Date Report Requested: 10/15/2014  
 Time Report Requested: 18:08:24  
 First Dose M/F: NA / NA  
 Lab: NCTR

**ANIMAL ID:** 438

**TRT#:** 12

**SEX:** Female

**DAY ON TEST:** 739

**DOSE:** 15PPM/F FUMON-12

**DISP:** Terminal Sacrifice

**HISTO:** 21080100438

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Lung - Bronchus

\* Uterus

**OBSERVATIONS**

\* Clitoral Gland

Adenoma

[ Adenoma TGLS = 1-3.1 ]

\* Kidney

Bilateral

Mineralization

Minimal

\* Liver

Bile Duct

Hepatocellular Adenoma

Hyperplasia

Marked

Leukemia Mononuclear

[ Hepatocellular Adenoma TGLS = 6-6 ]

[ Leukemia Mononuclear TGLS = 2,3-1 ]

\* Lung

Leukemia Mononuclear

\* Spleen

Leukemia Mononuclear

[ Leukemia Mononuclear TGLS = 4-3.2 ]

\* Uterus

Note: TGL # 05 - NO MICROSCOPIC CORRELATE

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:24  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 439	<b>TRT#:</b> 13	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> 50PPM/F FUMON-13	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100439

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Lung - Bronchus

---

**OBSERVATIONS**

* Eye	Bilateral, Retina	Atrophy	Marked
	Bilateral, Lens	Cataract	Marked
	[ Cataract TGLS = 1-3 ]		
* Kidney	Bilateral	Mineralization	Minimal
	Bilateral	Nephropathy	Minimal
* Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Chronic, Minimal
		Mixed Cell Focus	
* Ovary	Follicle	Cyst	Marked
	[ Cyst TGLS = 3-3.1 ]		
* Pituitary Gland	Pars Distalis	Adenoma	
	[ Adenoma TGLS = 2-3 ]		

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92002-03  
Test Type: CHRONIC  
Species/Strain: Rat/F 344/NCTR

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
Test Compound: Fumonisin B1  
CAS Number: 116355-83-0

Date Report Requested: 10/15/2014  
Time Report Requested: 18:08:24  
First Dose M/F: NA / NA  
Lab: NCTR

---

ANIMAL ID: 440	TRT#: 13	SEX: Female	DAY ON TEST: 739
	DOSE: 50PPM/F FUMON-13	DISP: Terminal Sacrifice	HISTO: 21080100440

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Lung - Bronchus

---

**OBSERVATIONS**

* Eye	Bilateral, Retina	Atrophy	Marked
	Bilateral, Lens	Cataract	Marked
	[ Cataract TGLS = 4-3.1 ]		
* Kidney	Bilateral	Mineralization	Minimal
* Liver		Eosinophilic Focus	
	Bile Duct	Hyperplasia	Minimal
		Tension Lipidosis	
	[ Eosinophilic Focus TGLS = 1-1 ]		
* Mammary Gland		Fibroadenoma	
	Note: TGL#3-NOTED GROSSLY AS MAMMARY GLAND WAS SKIN		
	[ Fibroadenoma TGLS = 2-3 ]		
* Skin	Subcut Tiss	Lipoma	
	[ Lipoma TGLS = 3-3 ]		

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:24  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 441	<b>TRT#:</b> 13	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> 50PPM/F FUMON-13	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100441

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Lung - Bronchus

---

**OBSERVATIONS**

* Eye [ Atrophy TGLS = 1-3 ]	Bilateral, Retina	Atrophy	Marked
* Kidney	Bilateral	Mineralization	Minimal
* Liver		Basophilic Focus Clear Cell Focus Inflammation Tension Lipidosis	Chronic, Mild
* Mammary Gland Note: TGL#2-SKIN AND MAMMARY GLAND [ Fibroadenoma TGLS = 2-14.1+14.2 ]	BY EPL ]	Fibroadenoma	Multiple
* Skin Note: TGL#2-SKIN AND MAMMARY GLAND [ Lipoma TGLS = 2-14.1+14.2 ]	Subcut Tiss	Lipoma	

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:24  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 442

**TRT#:** 13

**SEX:** Female

**DAY ON TEST:** 739

**DOSE:** 50PPM/F FUMON-13

**DISP:** Terminal Sacrifice

**HISTO:** 21080100442

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Lung - Bronchus

**OBSERVATIONS**

* Eye	Bilateral, Retina	Atrophy	Marked
	Lens	Cataract	Marked
	[ Cataract TGLS = 3-3 ]		
* Kidney	Bilateral	Mineralization	Minimal
* Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Chronic, Minimal
		Mixed Cell Focus	
* Mammary Gland		Fibroadenoma	
	[ Fibroadenoma TGLS = 1-3.1 ]		
* Uterus	Cervix	Hypertrophy	Mild
	[ Hypertrophy TGLS = 2-3 ]		

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:24  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 443

**TRT#:** 14

**SEX:** Female

**DAY ON TEST:** 739

**DOSE:** 100PPM/FFUMON-14

**DISP:** Terminal Sacrifice

**HISTO:** 21080100443

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Blood Vessel - Aorta	Bone - Femur	Bone - Sternum	Brain - Cerebellum
Brain - Cerebrum	Esophagus	Intestine Large - Cecum	Intestine Large - Colon
Intestine Large - Rectum	Intestine Small - Duodenum	Intestine Small - Ileum	Intestine Small - Jejunum
Larynx	Lung - Bronchus	Lymph Node - Mandibular	Mammary Gland
Ovary	Parathyroid Gland	Peripheral Nerve - Sciatic	Salivary Glands
Skeletal Muscle - Thigh	Skin	Spinal Cord - Thoracic	Stomach - Forestomach
Stomach - Glandular	Thymus	Tongue	Trachea
Urinary Bladder	Uterus	Vagina	

**MISSING**

Clitoral Gland	Zymbal's Gland
----------------	----------------

**OBSERVATIONS**

Adrenal Gland	Cortex	Hyperplasia	Focal, Mild
Bone	Joint	Inflammation	Chronic, Minimal
Bone Marrow		Hyperplasia	Minimal
Eye	Bilateral, Retina	Atrophy	Marked
	Bilateral, Lens	Cataract	Mild
Harderian Gland		Infiltration Cellular	Lymphocytic, Mild
Heart		Cardiomyopathy	Mild
* Kidney	Renal Tubule	Carcinoma	
	Bilateral	Mineralization	Mild
	Bilateral	Nephropathy	Minimal
Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Mild
		Inflammation	Chronic, Minimal
		Tension Lipidosis	
	Hepatocyte	Vacuolization Cytoplasmic	Minimal
Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Mild
Nose	Nasolacrim Dct	Inflammation	Chronic, Minimal
Pancreas	Acinar Cell	Atrophy	Focal, Minimal

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:24  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 443	<b>TRT#:</b> 14	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> 100PPM/FFUMON-14	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100443

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

Pituitary Gland	Pars Distalis	Adenoma	
Spleen		Hematopoietic Cell Proliferation	Minimal
[ Hematopoietic Cell Proliferation TGLS = 1-3 ]			
Thyroid Gland	Follicle	Hyperplasia	Moderate

---

PRIMARY CAUSE OF DEATH -

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:24  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 444

**TRT#:** 14

**SEX:** Female

**DAY ON TEST:** 739

**DOSE:** 100PPM/FFUMON-14

**DISP:** Terminal Sacrifice

**HISTO:** 21080100444

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Adrenal Gland	Blood Vessel - Aorta	Brain - Cerebellum	Brain - Cerebrum
Esophagus	Intestine Large - Cecum	Intestine Large - Colon	Intestine Large - Rectum
Intestine Small - Duodenum	Intestine Small - Ileum	Intestine Small - Jejunum	Lacrimal Gland
Larynx	Lung - Bronchus	Lymph Node - Mandibular	Ovary
Parathyroid Gland	Peripheral Nerve - Sciatic	Salivary Glands	Skeletal Muscle - Thigh
Spinal Cord - Thoracic	Spleen	Stomach - Forestomach	Stomach - Glandular
Thymus	Tongue	Trachea	Urinary Bladder
Uterus	Vagina	Zymbal's Gland	

**OBSERVATIONS**

Adrenal GI			
Note: ONLY ONE			
Bone	Femur	Hyperostosis	Mild
	Sternum	Hyperostosis	Mild
Bone Marrow		Hyperplasia	Mild
Clitoral Gland		Inflammation	Acute, Minimal
Eye	Bilateral, Retina	Atrophy	Marked
Harderian Gland	Bilateral	Infiltration Cellular	Lymphocytic, Minimal
Heart		Cardiomyopathy	Mild
* Kidney		Mineralization	Minimal
* Liver		Basophilic Focus	
		Clear Cell Focus	
		Inflammation	Chronic, Mild
	Hepatocyte	Vacuolization Cytoplasmic	Mild
Lung		Alveolar/Bronchiolar Adenoma	
Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Mild
Mammary Gland		Cyst	Mild
Note: TGL#1-NOTED GROSSLY AS MAMMARY GLAND WAS SKIN			
Nose	Nasolacrim Dct	Inflammation	Chronic Active, Mild
Pancreas	Acinar Cell	Atrophy	Focal, Minimal
Pituitary Gland	Pars Distalis	Cyst	Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:24  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 444	<b>TRT#:</b> 14	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> 100PPM/FFUMON-14	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100444

---

<b>ORGAN AND ACCOUNTABLE SITE STATUS</b>			
[ Hyperplasia TGLS = 2-3 ]	Pars Distalis	Hyperplasia	Focal, Moderate
Skin	Subcut Tiss	Fibroma	
[ Fibroma TGLS = 1-3.1 ]			
Thyroid Gland	C Cell	Hyperplasia	Focal, Minimal

---

<b>PRIMARY CAUSE OF DEATH</b>	-		
-------------------------------	---	--	--

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:24  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

<b>ANIMAL ID:</b> 445	<b>TRT#:</b> 14	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> 100PPM/FFUMON-14	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100445

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Blood Vessel - Aorta	Bone - Femur	Bone - Sternum	Bone Marrow
Brain - Cerebellum	Brain - Cerebrum	Clitoral Gland	Esophagus
Intestine Large - Cecum	Intestine Large - Colon	Intestine Large - Rectum	Intestine Small - Duodenum
Intestine Small - Ileum	Intestine Small - Jejunum	Larynx	Lung - Bronchus
Lymph Node - Mandibular	Ovary	Pancreas	Parathyroid Gland
Peripheral Nerve - Sciatic	Pituitary Gland	Salivary Glands	Skeletal Muscle - Thigh
Skin	Spinal Cord - Thoracic	Stomach - Forestomach	Stomach - Glandular
Thymus	Thyroid Gland	Tongue	Trachea
Urinary Bladder	Uterus	Vagina	Zymbal's Gland

**OBSERVATIONS**

Adrenal Gland	Bilateral, Cortex	Angiectasis	Minimal
Clitoral Gl			
Note: ONLY ONE			
Eye	Bilateral, Retina	Atrophy	Marked
	Bilateral, Lens	Cataract	Marked
Harderian Gland	Bilateral	Inflammation	Chronic, Mild
Heart		Cardiomyopathy	Minimal
* Kidney		Mineralization	Minimal
	Bilateral	Nephropathy	Minimal
Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Liver		Basophilic Focus	
		Eosinophilic Focus	
		Inflammation	Chronic, Mild
		Leukemia Mononuclear	
		Necrosis	Minimal
		Tension Lipidosis	
[ Eosinophilic Focus TGLS = 2,3-6.1+6.2 ]			
[ Inflammation TGLS = 2,3-6.1+6.2 ]			
Lung		Infiltration Cellular	Histiocytic, Mild
Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Mild

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:24  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 445	<b>TRT#:</b> 14	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> 100PPM/FFUMON-14	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100445

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

Mammary Gland	Cyst	Minimal
[ Fibroadenoma TGLS = 1-3 ]	Fibroadenoma	
Nose	Foreign Body	
	Inflammation	Chronic Active, Mild
Spleen	Leukemia Mononuclear	

---

PRIMARY CAUSE OF DEATH -

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:24  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

<b>ANIMAL ID:</b> 446	<b>TRT#:</b> 14	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> 100PPM/FFUMON-14	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100446

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Blood Vessel - Aorta	Bone Marrow	Brain - Cerebellum	Brain - Cerebrum
Clitoral Gland	Esophagus	Intestine Large - Cecum	Intestine Large - Colon
Intestine Large - Rectum	Intestine Small - Duodenum	Intestine Small - Ileum	Intestine Small - Jejunum
Lacrimal Gland	Larynx	Lung - Bronchus	Lymph Node - Mandibular
Ovary	Parathyroid Gland	Peripheral Nerve - Sciatic	Salivary Glands
Skeletal Muscle - Thigh	Skin	Spinal Cord - Thoracic	Stomach - Forestomach
Tongue	Trachea	Uterus	Vagina
Zymbal's Gland			

**MISSING**

Thymus

**OBSERVATIONS**

Adrenal Gland	Bilateral, Cortex	Angiectasis	Minimal
	Cortex	Hyperplasia	Focal, Mild
Bone	Femur	Hyperostosis	Minimal
	Sternum	Hyperostosis	Minimal
Eye	Bilateral, Retina	Atrophy	Moderate
	Bilateral, Lens	Cataract	Marked
	[ Cataract TGLS = 1-3 ]		
Harderian Gland		Infiltration Cellular	Lymphocytic, Minimal
Heart		Cardiomyopathy	Mild
* Kidney	Bilateral	Mineralization	Minimal
* Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Mild
		Inflammation	Chronic, Mild
		Mixed Cell Focus	
		Tension Lipidosis	
	[ Inflammation TGLS = 2-6.1 ]		
Lung	Alveolar Epith	Hyperplasia	Focal, Marked
Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
Mammary Gland		Cyst	Mild

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:24  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 446	<b>TRT#:</b> 14	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> 100PPM/FFUMON-14	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100446

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

Nose	Olfactory Epi	Cytoplasmic Alteration	Minimal
Pancreas	Acinar Cell	Atrophy	Focal, Minimal
Pituitary Gland	Pars Distalis	Cyst	Minimal
Spleen		Pigmentation	Mild
Stomach	Glandular	Cyst	Minimal
Thyroid Gland	C Cell	Carcinoma	
	C Cell	Hyperplasia	Focal, Mild
Urinary Bladder		Infiltration Cellular	Lymphocytic, Minimal

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:24  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 447      **TRT#:** 14      **SEX:** Female      **DAY ON TEST:** 739  
**DOSE:** 100PPM/FFUMON-14      **DISP:** Terminal Sacrifice      **HISTO:** 21080100447

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Blood Vessel - Aorta	Bone - Femur	Bone - Sternum	Bone Marrow
Brain - Cerebellum	Brain - Cerebrum	Esophagus	Harderian Gland
Intestine Large - Cecum	Intestine Large - Colon	Intestine Large - Rectum	Intestine Small - Duodenum
Intestine Small - Ileum	Intestine Small - Jejunum	Lacrimal Gland	Larynx
Lung - Bronchus	Lymph Node - Mandibular	Ovary	Parathyroid Gland
Peripheral Nerve - Sciatic	Skeletal Muscle - Thigh	Spinal Cord - Thoracic	Stomach - Forestomach
Stomach - Glandular	Thymus	Thyroid Gland	Tongue
Trachea	Urinary Bladder	Uterus	Vagina
Zymbal's Gland			

**MISSING**

Adrenal Gland	Clitoral Gland
---------------	----------------

**OBSERVATIONS**

Eye	Bilateral, Retina	Atrophy	Mild
Heart		Cardiomyopathy	Minimal
* Kidney	Bilateral	Mineralization	Minimal
* Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Minimal
Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
Mammary Gland		Carcinoma	
		Fibroadenoma	
[ Fibroadenoma TGLS = 1,2-3.1 ]			
Nose	Olfactory Epi	Cytoplasmic Alteration	Minimal
Pancreas	Acinar Cell	Atrophy	Focal, Minimal
Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 3-3 ]			
Salivary Glands	Parotid GI	Cytoplasmic Alteration	Focal, Mild
Skin	Epidermis	Hyperplasia	Minimal
[ Hyperplasia TGLS = 4-3.1 ]			
Spleen		Pigmentation	Minimal

PRIMARY CAUSE OF DEATH -

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:24  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

**ANIMAL ID:** 447

**TRT#:** 14

**SEX:** Female

**DAY ON TEST:** 739

**DOSE:** 100PPM/FFUMON-14

**DISP:** Terminal Sacrifice

**HISTO:** 21080100447

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

---

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92002-03  
 Test Type: CHRONIC  
 Species/Strain: Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
 Test Compound: Fumonisin B1  
 CAS Number: 116355-83-0

Date Report Requested: 10/15/2014  
 Time Report Requested: 18:08:24  
 First Dose M/F: NA / NA  
 Lab: NCTR

**ANIMAL ID:** 448

**TRT#:** 14

**SEX:** Female

**DAY ON TEST:** 739

**DOSE:** 100PPM/FFUMON-14

**DISP:** Terminal Sacrifice

**HISTO:** 21080100448

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Blood Vessel - Aorta	Bone - Femur	Bone - Sternum	Bone Marrow
Brain - Cerebellum	Brain - Cerebrum	Esophagus	Intestine Large - Cecum
Intestine Large - Colon	Intestine Large - Rectum	Intestine Small - Duodenum	Intestine Small - Ileum
Intestine Small - Jejunum	Lacrimal Gland	Larynx	Lung - Bronchus
Lymph Node - Mandibular	Mammary Gland	Ovary	Peripheral Nerve - Sciatic
Salivary Glands	Skeletal Muscle - Thigh	Skin	Spinal Cord - Thoracic
Stomach - Forestomach	Stomach - Glandular	Thymus	Thyroid Gland
Tongue	Trachea	Urinary Bladder	Uterus
Vagina	Zymbal's Gland		

**MISSING**

Parathyroid Gland

**OBSERVATIONS**

Adrenal Gland	Cortex	Hypertrophy	Focal, Marked
Clitoral Gland	Bilateral	Adenoma	
[ Adenoma TGLS = 1,3-3.1 ]			
Eye	Bilateral, Retina	Atrophy	Marked
	Bilateral, Lens	Cataract	Mild
Harderian Gland	Bilateral	Inflammation	Chronic, Mild
Heart		Cardiomyopathy	Mild
* Kidney	Bilateral	Mineralization	Minimal
* Liver		Basophilic Focus	
		Hepatodiaphragmatic Nodule	
		Inflammation	Chronic, Mild
		Mixed Cell Focus	
	Hepatocyte	Vacuolization Cytoplasmic	Minimal
[ Hepatodiaphragmatic Nodule TGLS = 2-1 ]			
Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Mild
Mammary Gl			
Note: TGL#1-NOTED GROSSLY AS MAMMARY GLAND WAS CLITORAL GLAND			
Nose	Olfactory Epi	Cytoplasmic Alteration	Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:24  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 448	<b>TRT#:</b> 14	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> 100PPM/FFUMON-14	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100448

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

Pancreas	Acinar Cell	Atrophy	Focal, Minimal
Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 5-3 ]			
Spleen		Pigmentation	Mild
Uterus			
Note: TGL # 04 - NO MICROSCOPIC CORRELATE			

---

PRIMARY CAUSE OF DEATH

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:24  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 449

**TRT#:** 10

**SEX:** Female

**DAY ON TEST:** 736

**DOSE:** 0PPM/F FUMON-10

**DISP:** Natural Death

**HISTO:** 21080100449

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Sternum	* Bone Marrow	* Brain - Cerebellum
* Brain - Cerebrum	* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum
* Intestine Small - Duodenum	* Intestine Small - Jejunum	* Larynx	* Lung - Bronchus
* Lymph Node - Mandibular	* Nose	* Ovary	* Pancreas
* Parathyroid Gland	* Peripheral Nerve - Sciatic	* Salivary Glands	* Skin
* Spinal Cord - Thoracic	* Spleen	* Stomach - Forestomach	* Stomach - Glandular
* Thymus	* Tongue	* Trachea	* Urinary Bladder
* Vagina	* Zymbal's Gland		

**AUTO PRECLUDES DIAG.**

\* Intestine Small - Ileum

**OBSERVATIONS**

* Adrenal Gland		Osteosarcoma	Metastatic (Bone)
* Bone	Femur	Osteosarcoma	
Note: MALIGNANT WITH METASTASIS [ Osteosarcoma TGLS = 10-14.1 ]			
* Clitoral Gland		Inflammation	Chronic, Minimal
* Esophagus		Osteosarcoma	Metastatic (Bone)
* Eye	Bilateral, Lens	Cataract	Mild
[ Cataract TGLS = 9-13 ]			
* Harderian Gland		Infiltration Cellular	Lymphocytic, Minimal
* Heart		Cardiomyopathy	Minimal
* Kidney	Bilateral	Mineralization	Mild
* Lacrimal Gland		Atrophy	Focal, Mild
* Liver		Basophilic Focus	
		Mixed Cell Focus	
		Tension Lipidosis	
	Hepatocyte	Vacuolization Cytoplasmic	Mild
[ Vacuolization Cytoplasmic TGLS = 11-6.1 ]			
* Lung		Osteosarcoma	Metastatic (Bone)
[ Osteosarcoma TGLS = 4,5,6,7,8-5 + 5.1 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:24  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 449	<b>TRT#:</b> 10 <b>DOSE:</b> 0PPM/F FUMON-10	<b>SEX:</b> Female <b>DISP:</b> Natural Death	<b>DAY ON TEST:</b> 736 <b>HISTO:</b> 21080100449
-----------------------	---	--	--

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

* Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Mild
* Mammary Gland		Cyst	Mild
* Ovary			
Note: TGL # 1,2- NO MICROSCOPIC CORRELATE			
* Pituitary Gland	Pars Distalis	Adenoma	
* Skeletal Muscle	Thigh	Osteosarcoma	Metastatic (Bone)
Note: TGL#10-NOTED GROSSLY AS SKELETAL MUSCLE WAS BONE			
* Thyroid Gland	Follicle	Cyst	Minimal
* Uterus		Hydrometra	Marked
[ Hydrometra TGLS = 3-10 ]			

---

**PRIMARY CAUSE OF DEATH** - Bone Femur Osteosarcoma

---

Animal Note: COD...PROBABLE-OSTEOSARCOMA

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:24  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

<b>ANIMAL ID:</b> 450	<b>TRT#:</b> 10 <b>DOSE:</b> 0PPM/F FUMON-10	<b>SEX:</b> Female <b>DISP:</b> Moribund	<b>DAY ON TEST:</b> 736 <b>HISTO:</b> 21080100450
-----------------------	---	---	--

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Brain - Cerebellum	* Brain - Cerebrum	* Esophagus
* Harderian Gland	* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum
* Intestine Small - Duodenum	* Intestine Small - Ileum	* Intestine Small - Jejunum	* Lacrimal Gland
* Lung - Bronchus	* Lymph Node - Mandibular	* Ovary	* Parathyroid Gland
* Peripheral Nerve - Sciatic	* Salivary Glands	* Skeletal Muscle - Thigh	* Skin
* Spinal Cord - Thoracic	* Stomach - Forestomach	* Thyroid Gland	* Tongue
* Urinary Bladder	* Vagina	* Zymbal's Gland	

**OBSERVATIONS**

* Adrenal Gland	Cortex	Necrosis	Minimal
* Bone	Femur	Hyperostosis	Minimal
	Sternum	Hyperostosis	Minimal
* Bone Marrow		Hyperplasia	Minimal
* Clitoral Gland		Adenoma	
Note: ONLY ONE [ Adenoma TGLS = 1-10 ]			
* Eye	Bilateral, Retina	Atrophy	Marked
	Bilateral, Lens	Cataract	Moderate
* Heart		Cardiomyopathy	Mild
* Kidney	Pelvis, Transit Epithe	Hyperplasia	Mild
		Infarct	Mild
	Bilateral	Mineralization	Mild
	Bilateral	Nephropathy	Moderate
* Larynx	Epithelium	Hyperplasia	Mild
* Liver		Basophilic Focus	
		Hematopoietic Cell Proliferation	Minimal
		Mixed Cell Focus	
		Tension Lipidosis	
	Hepatocyte	Vacuolization Cytoplasmic	Minimal
[ Vacuolization Cytoplasmic TGLS = 4-6 ]			
* Lung		Foreign Body	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:24  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 450

**TRT#:** 10

**SEX:** Female

**DAY ON TEST:** 736

**DOSE:** 0PPM/F FUMON-10

**DISP:** Moribund

**HISTO:** 21080100450

**ORGAN AND ACCOUNTABLE SITE STATUS**

* Lymph Node	Mesenteric	Inflammation	Granulomatous, Moderate
	Mesenteric	Hemorrhage	Minimal
* Mammary Gland		Infiltration Cellular	Histiocytic, Mild
* Nose	Olfactory Epi	Fibroadenoma	
	Nasolacrim Dct	Cytoplasmic Alteration	Mild
* Pancreas	Acinar Cell	Inflammation	Chronic Active, Mild
* Pituitary Gland	Pars Distalis	Atrophy	Focal, Minimal
	[ Adenoma TGLS = 3-11 ]	Adenoma	
* Spleen		Hematopoietic Cell Proliferation	Mild
* Stomach	Glandular	Cyst	Minimal
* Thymus		Atrophy	Moderate
* Trachea	Epithelium	Hyperplasia	Mild
		Inflammation	Chronic, Minimal
* Uterus		Hemorrhage	Moderate
	[ Hemorrhage TGLS = 2-10 ]		

**PRIMARY CAUSE OF DEATH** - Pituitary Gland Pars Distalis Adenoma

Animal Note: COD...PROBABLE-PITUITARY,ADENOMA

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:24  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 463

**TRT#:** 10

**SEX:** Female

**DAY ON TEST:** 739

**DOSE:** 0PPM/F FUMON-10

**DISP:** Terminal Sacrifice

**HISTO:** 21080100463

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone Marrow	* Brain - Cerebrum	* Clitoral Gland
* Esophagus	* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum
* Intestine Small - Duodenum	* Intestine Small - Ileum	* Intestine Small - Jejunum	* Larynx
* Lung - Bronchus	* Mammary Gland	* Ovary	* Parathyroid Gland
* Peripheral Nerve - Sciatic	* Pituitary Gland	* Salivary Glands	* Skeletal Muscle - Thigh
* Skin	* Spinal Cord - Thoracic	* Stomach - Forestomach	* Stomach - Glandular
* Thymus	* Thyroid Gland	* Tongue	* Trachea
* Urinary Bladder	* Vagina	* Zymbal's Gland	

**MISSING**

\* Brain - Cerebellum

**OBSERVATIONS**

* Adrenal Gland	Medulla	Hyperplasia	Focal, Minimal
* Bone	Femur	Hyperostosis	Minimal
	Sternum	Hyperostosis	Minimal
* Eye	Bilateral, Retina	Atrophy	Marked
	Bilateral, Lens	Cataract	Marked
* Harderian Gland	Bilateral	Infiltration Cellular	Lymphocytic, Minimal
* Heart		Cardiomyopathy	Mild
* Kidney	Bilateral	Mineralization	Mild
	Bilateral	Nephropathy	Minimal
* Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Liver		Basophilic Focus	
		Eosinophilic Focus	
	Bile Duct	Hyperplasia	Minimal
		Tension Lipidosis	
[ Hyperplasia TGLS = 1-6 ]			
* Lymph Node	Mandibular	Degeneration	Cystic, Minimal
	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
* Nose	Olfactory Epi	Cytoplasmic Alteration	Minimal
* Pancreas	Acinar Cell	Hyperplasia	Focal, Moderate

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:24  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

**ANIMAL ID:** 463

**TRT#:** 10

**SEX:** Female

**DAY ON TEST:** 739

**DOSE:** 0PPM/F FUMON-10

**DISP:** Terminal Sacrifice

**HISTO:** 21080100463

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

* Spleen	Hematopoietic Cell Proliferation	Minimal
	Pigmentation	Minimal
* Uterus	Hydrometra	Moderate

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:24  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 464

**TRT#:** 10

**SEX:** Female

**DAY ON TEST:** 739

**DOSE:** 0PPM/F FUMON-10

**DISP:** Terminal Sacrifice

**HISTO:** 21080100464

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Blood Vessel - Aorta	* Bone - Femur	* Bone - Sternum	* Bone Marrow
* Brain - Cerebellum	* Brain - Cerebrum	* Clitoral Gland	* Esophagus
* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum	* Intestine Small - Duodenum
* Intestine Small - Ileum	* Intestine Small - Jejunum	* Larynx	* Lung - Bronchus
* Lymph Node - Mandibular	* Ovary	* Pancreas	* Parathyroid Gland
* Peripheral Nerve - Sciatic	* Skeletal Muscle - Thigh	* Skin	* Spinal Cord - Thoracic
* Stomach - Forestomach	* Stomach - Glandular	* Thymus	* Thyroid Gland
* Tongue	* Trachea	* Urinary Bladder	* Vagina
* Zymbal's Gland			

**OBSERVATIONS**

* Adrenal Gland	Bilateral, Cortex	Angiectasis	Mild
* Brain	Hypothalamus	Compression	Minimal
* Eye	Bilateral, Retina	Atrophy	Marked
	Bilateral, Lens	Cataract	Moderate
Note: TGL#2-NULIFIED BY TRIMMER			
* Harderian Gland	Bilateral	Inflammation	Chronic, Mild
* Heart		Cardiomyopathy	Minimal
* Kidney	Bilateral	Mineralization	Minimal
	Bilateral	Nephropathy	Mild
* Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Liver		Basophilic Focus	
		Inflammation	Chronic, Minimal
		Mixed Cell Focus	
[ Basophilic Focus TGLS = 5-6.1 ]			
* Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Mild
* Mammary Gland		Cyst	Mild
* Nose	Nasolacrim Dct	Inflammation	Chronic Active, Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 3-11 ]			
* Salivary Glands	Parotid GI	Atrophy	Mild

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:24  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 464	<b>TRT#:</b> 10 <b>DOSE:</b> 0PPM/F FUMON-10	<b>SEX:</b> Female <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 739 <b>HISTO:</b> 21080100464
-----------------------	---	---	--

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

* Spleen	Parotid GI	Mineralization	Minimal
* Uterus	Endometrium	Pigmentation	Minimal
[ Cyst TGLS = 1,4-10 + 11 ]		Cyst	Minimal

---

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:24  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 465

**TRT#:** 10

**SEX:** Female

**DAY ON TEST:** 739

**DOSE:** 0PPM/F FUMON-10

**DISP:** Terminal Sacrifice

**HISTO:** 21080100465

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone Marrow	* Brain - Cerebellum	* Brain - Cerebrum	* Esophagus
* Harderian Gland	* Intestine Large - Cecum	* Intestine Large - Colon	* Intestine Large - Rectum
* Intestine Small - Duodenum	* Intestine Small - Ileum	* Intestine Small - Jejunum	* Larynx
* Lung - Bronchus	* Ovary	* Pancreas	* Parathyroid Gland
* Peripheral Nerve - Sciatic	* Salivary Glands	* Skeletal Muscle - Thigh	* Skin
* Spinal Cord - Thoracic	* Stomach - Forestomach	* Thyroid Gland	* Tongue
* Trachea	* Urinary Bladder	* Uterus	* Vagina
* Zymbal's Gland			

**MISSING**

* Blood Vessel - Aorta	* Thymus
------------------------	----------

**OBSERVATIONS**

* Adrenal Gland	Bilateral, Cortex	Angiectasis	Mild
* Bone	Femur	Hyperostosis	Minimal
	Sternum	Hyperostosis	Minimal
* Clitoral Gland		Hyperplasia	Focal, Marked
		Inflammation	Chronic, Minimal
* Eye	Bilateral, Retina	Atrophy	Marked
	Bilateral, Lens	Cataract	Marked
	Cornea	Inflammation	Chronic, Mild
* Heart		Cardiomyopathy	Minimal
* Kidney	Bilateral	Mineralization	Mild
	Bilateral	Nephropathy	Minimal
* Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Liver		Basophilic Focus	
		Eosinophilic Focus	
	Bile Duct	Hyperplasia	Mild
		Inflammation	Chronic, Minimal
		Mixed Cell Focus	
		Tension Lipidosis	

[ Basophilic Focus TGLS = 1-6 ]

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:24  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 465	<b>TRT#:</b> 10	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> 0PPM/F FUMON-10	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100465

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

* Lymph Node	Mandibular	Hyperplasia	Mild
	Mesenteric	Infiltration Cellular	Histiocytic, Minimal
* Mammary Gland		Fibroadenoma	Multiple
		Galactocele	Moderate
[ Fibroadenoma TGLS = 2,3-10 + 10.1 ]			
* Nose		Foreign Body	
		Inflammation	Chronic Active, Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
* Spleen		Hematopoietic Cell Proliferation	Minimal
		Pigmentation	Minimal
* Stomach	Glandular	Cyst	Minimal

---

PRIMARY CAUSE OF DEATH -

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:24  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 466	<b>TRT#:</b> 12	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> 15PPM/F FUMON-12	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100466

---

**OBSERVATIONS**

* Eye	Bilateral, Retina	Atrophy	Marked
	Bilateral, Lens	Cataract	Marked
	[ Cataract TGLS = 4-3 ]		
* Kidney	Bilateral	Mineralization	Minimal
	Bilateral	Nephropathy	Minimal
* Liver	Bile Duct	Hyperplasia	Moderate
		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 3-1 ]		
* Lung	Bronchus	Carcinoma	
	[ Carcinoma TGLS = 6-5 ]		
* Mammary Gland		Fibroadenoma	Multiple
	[ Fibroadenoma TGLS = 1,2-3.1 + 3.2 ]		
* Uterus	Endometrium	Necrosis	Marked
	Note: THE LESION PROBABLY REPRESENTS AN INFARCTED STROMAL POLYP		
	[ Necrosis TGLS = 5-3 ]		

---

PRIMARY CAUSE OF DEATH

---

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92002-03  
Test Type: CHRONIC  
Species/Strain: Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
Test Compound: Fumonisin B1  
CAS Number: 116355-83-0

Date Report Requested: 10/15/2014  
Time Report Requested: 18:08:24  
First Dose M/F: NA / NA  
Lab: NCTR

---

<b>ANIMAL ID:</b> 467	<b>TRT#:</b> 12	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> 15PPM/F FUMON-12	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100467

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Lung - Bronchus

---

**OBSERVATIONS**

* Kidney		Leukemia Mononuclear	
	Bilateral	Mineralization	Mild
	Bilateral	Nephropathy	Minimal
* Lacrimal Gland		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 6-3.2 ]		
* Liver	Bile Duct	Hyperplasia	Mild
	[ Leukemia Mononuclear TGLS = 1-1 ]	Leukemia Mononuclear	
* Lung		Leukemia Mononuclear	
* Lymph Node	Mesenteric	Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 5-3.1 ]		
Mesentery		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 4-3 ]		
* Pituitary Gland	Pars Distalis	Adenoma	
	[ Adenoma TGLS = 9-3.3 ]		
* Salivary Glands	Parotid GI	Atrophy	Moderate
	Note: TGL # 07 - NO MICROSCOPIC CORRELATE		
* Spleen		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 2-3 ]		
* Thymus		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 8-3.3 ]		
* Vagina		Inflammation	Acute, Minimal
	Note: TGL # 03 - NO MICROSCOPIC CORRELATE		

---

PRIMARY CAUSE OF DEATH -

---

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92002-03  
Test Type: CHRONIC  
Species/Strain: Rat/F 344/NCTR

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
Test Compound: Fumonisin B1  
CAS Number: 116355-83-0

Date Report Requested: 10/15/2014  
Time Report Requested: 18:08:24  
First Dose M/F: NA / NA  
Lab: NCTR

---

ANIMAL ID: 468	TRT#: 12	SEX: Female	DAY ON TEST: 739
	DOSE: 15PPM/F FUMON-12	DISP: Terminal Sacrifice	HISTO: 21080100468

---

ORGAN AND ACCOUNTABLE SITE STATUS

---

NORMAL

\* Lung - Bronchus

---

OBSERVATIONS

* Clitoral Gland		Adenoma	
[ Adenoma TGLS = 1-3 ]			
* Eye	Bilateral, Retina	Atrophy	Marked
	Bilateral, Lens	Cataract	Mild
[ Cataract TGLS = 3-3.1 ]			
* Kidney	Renal Tubule	Hyperplasia	Focal, Minimal
	Bilateral	Mineralization	Minimal
	Bilateral	Nephropathy	Minimal
* Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Minimal
		Mixed Cell Focus	
		Tension Lipidosis	
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 2-3.1 ]			

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:24  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 469

**TRT#:** 12

**SEX:** Female

**DAY ON TEST:** 739

**DOSE:** 15PPM/F FUMON-12

**DISP:** Terminal Sacrifice

**HISTO:** 21080100469

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Lung - Bronchus

**OBSERVATIONS**

* Kidney	Artery	Inflammation	Chronic, Minimal
	Bilateral	Mineralization	Mild
	Bilateral	Nephropathy	Minimal
* Liver		Basophilic Focus	
		Clear Cell Focus	
		Inflammation	Chronic, Minimal
		Tension Lipidosis	
* Mammary Gland		Fibroadenoma	
		[ Fibroadenoma TGLS = 1-3 ]	
* Pituitary Gland	Pars Distalis	Adenoma	
		[ Adenoma TGLS = 2-3 ]	

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:24  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 470	<b>TRT#:</b> 12	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> 15PPM/F FUMON-12	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100470

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Lung - Bronchus

---

**OBSERVATIONS**

* Eye	Bilateral, Retina	Atrophy	Marked
	Bilateral, Lens	Cataract	Marked
	[ Cataract TGLS = 3-3.1 ]		
* Kidney	Bilateral	Mineralization	Mild
	Bilateral, Renal Tubule	Pigmentation	Minimal
* Liver		Basophilic Focus	
		Hepatodiaphragmatic Nodule	
		Inflammation	Chronic, Mild
		Mixed Cell Focus	
		Tension Lipidosis	
	[ Hepatodiaphragmatic Nodule TGLS = 1-1 ]		
* Lung		Infiltration Cellular	Histiocytic, Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
	[ Adenoma TGLS = 4-3.1 ]		
* Skin		Keratoacanthoma	
	[ Keratoacanthoma TGLS = 2-3 ]		

---

PRIMARY CAUSE OF DEATH

---

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:24  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 471

**TRT#:** 13

**SEX:** Female

**DAY ON TEST:** 739

**DOSE:** 50PPM/F FUMON-13

**DISP:** Terminal Sacrifice

**HISTO:** 21080100471

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Lung - Bronchus

**OBSERVATIONS**

* Eye	Bilateral, Retina	Atrophy	Marked
	Bilateral, Lens	Cataract	Marked
	[ Cataract TGLS = 3-3 ]		
* Kidney	Bilateral	Mineralization	Minimal
	Bilateral	Nephropathy	Minimal
* Liver		Basophilic Focus	
		Inflammation	Chronic, Mild
		Mixed Cell Focus	
	[ Mixed Cell Focus TGLS = 1-1 ]		
* Pituitary Gland	Pars Distalis	Adenoma	
	[ Adenoma TGLS = 2-3 ]		

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:24  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 472	<b>TRT#:</b> 13	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> 50PPM/F FUMON-13	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100472

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Lung - Bronchus

---

**OBSERVATIONS**

* Kidney	Bilateral	Mineralization	Minimal
* Liver		Basophilic Focus	
		Eosinophilic Focus	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Chronic, Minimal
		Tension Lipidosis	

[ Tension Lipidosis TGLS = 1-1 ]

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92002-03  
Test Type: CHRONIC  
Species/Strain: Rat/F 344/NCTR

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
Test Compound: Fumonisin B1  
CAS Number: 116355-83-0

Date Report Requested: 10/15/2014  
Time Report Requested: 18:08:24  
First Dose M/F: NA / NA  
Lab: NCTR

---

ANIMAL ID: 473	TRT#: 13	SEX: Female	DAY ON TEST: 739
	DOSE: 50PPM/F FUMON-13	DISP: Terminal Sacrifice	HISTO: 21080100473

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Lung - Bronchus

---

**OBSERVATIONS**

* Kidney	Bilateral	Mineralization	Minimal
	Bilateral	Nephropathy	Minimal
* Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Chronic, Mild
	Hepatocyte	Vacuolization Cytoplasmic	Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
	[ Adenoma TGLS = 2-3 ]		
* Spleen		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 1-3 ]		

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:24  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 474

**TRT#:** 13

**SEX:** Female

**DAY ON TEST:** 739

**DOSE:** 50PPM/F FUMON-13

**DISP:** Terminal Sacrifice

**HISTO:** 21080100474

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Lung - Bronchus

**OBSERVATIONS**

* Eye	Bilateral, Retina	Atrophy	Marked
	Bilateral, Lens	Cataract	Marked
	Cornea	Inflammation	Chronic, Moderate
[ Cataract TGLS = 2,3-3 ]			
* Kidney	Bilateral	Mineralization	Mild
	Bilateral	Nephropathy	Minimal
* Liver		Basophilic Focus	
		Eosinophilic Focus	
		Inflammation	Chronic, Minimal
		Mixed Cell Focus	
		Tension Lipidosis	
[ Mixed Cell Focus TGLS = 5-1 ]			
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 1-3 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 4-3 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:24  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 475	<b>TRT#:</b> 13	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> 50PPM/F FUMON-13	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100475

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Lung - Bronchus

---

**OBSERVATIONS**

* Clitoral Gland [ Cyst TGLS = 3-3 ]		Cyst	Mild
* Eye [ Cataract TGLS = 6-13 ]	Bilateral, Retina Bilateral, Lens	Atrophy Cataract	Marked Marked
* Kidney	Bilateral Bilateral	Mineralization Nephropathy	Mild Minimal
* Liver [ Mixed Cell Focus TGLS = 4-1.1 ] [ Tension Lipidosis TGLS = 5-1 ]		Basophilic Focus Inflammation Mixed Cell Focus Tension Lipidosis	Chronic, Minimal
* Mammary Gland [ Fibroadenoma TGLS = 1,2-3 ]		Fibroadenoma	Multiple

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:24  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 476

**TRT#:** 14

**SEX:** Female

**DAY ON TEST:** 739

**DOSE:** 100PPM/FFUMON-14

**DISP:** Terminal Sacrifice

**HISTO:** 21080100476

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Blood Vessel - Aorta	Bone - Femur	Bone - Sternum	Bone Marrow
Brain - Cerebellum	Brain - Cerebrum	Esophagus	Intestine Large - Cecum
Intestine Large - Colon	Intestine Large - Rectum	Intestine Small - Duodenum	Intestine Small - Ileum
Intestine Small - Jejunum	Lacrimal Gland	Larynx	Lung - Bronchus
Ovary	Pancreas	Parathyroid Gland	Peripheral Nerve - Sciatic
Salivary Glands	Skeletal Muscle - Thigh	Skin	Spinal Cord - Thoracic
Stomach - Forestomach	Stomach - Glandular	Thyroid Gland	Tongue
Trachea	Urinary Bladder	Uterus	Vagina
Zymbal's Gland			

**MISSING**

Clitoral Gland	Thymus
----------------	--------

**OBSERVATIONS**

Adrenal Gland	Cortex	Adenoma	
	Cortex	Vacuolization Cytoplasmic	Focal, Mild
Clitoral Gl			
Note: TGL#3-MISSING AT TRIM			
Eye	Bilateral, Retina	Atrophy	Marked
	Bilateral, Lens	Cataract	Marked
[ Cataract TGLS = 4-3.1 ]			
Harderian Gland	Bilateral	Infiltration Cellular	Lymphocytic, Minimal
Heart		Cardiomyopathy	Minimal
* Kidney	Bilateral	Mineralization	Minimal
	Bilateral	Nephropathy	Minimal
* Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Minimal
		Leukemia Mononuclear	
		Mixed Cell Focus	
Lymph Node	Mandibular	Degeneration	Cystic, Minimal
	Mesenteric	Hyperplasia	Mild
Note: LESION IN SLIDE 11			

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:24  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

**ANIMAL ID:** 476

**TRT#:** 14

**SEX:** Female

**DAY ON TEST:** 739

**DOSE:** 100PPM/FFUMON-14

**DISP:** Terminal Sacrifice

**HISTO:** 21080100476

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

[ Hyperplasia TGLS = 2-3 ]

Mammary Gland

Fibroadenoma

[ Fibroadenoma TGLS = 1-3 ]

Nose

Nasolacrim Dct

Inflammation

Chronic, Minimal

Pituitary Gland

Pars Distalis

Hyperplasia

Focal, Mild

Spleen

Leukemia Mononuclear

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:24  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 477

**TRT#:** 14

**SEX:** Female

**DAY ON TEST:** 739

**DOSE:** 100PPM/FFUMON-14

**DISP:** Terminal Sacrifice

**HISTO:** 21080100477

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Blood Vessel - Aorta	Bone - Femur	Bone - Sternum	Bone Marrow
Brain - Cerebellum	Brain - Cerebrum	Clitoral Gland	Esophagus
Intestine Large - Cecum	Intestine Large - Colon	Intestine Large - Rectum	Intestine Small - Duodenum
Intestine Small - Ileum	Intestine Small - Jejunum	Lacrimal Gland	Larynx
Lung - Bronchus	Lymph Node - Mandibular	Ovary	Parathyroid Gland
Peripheral Nerve - Sciatic	Pituitary Gland	Salivary Glands	Skeletal Muscle - Thigh
Skin	Spinal Cord - Thoracic	Stomach - Forestomach	Stomach - Glandular
Thymus	Tongue	Trachea	Urinary Bladder
Uterus	Zymbal's Gland		

**OBSERVATIONS**

Adrenal Gland	Bilateral, Cortex	Angiectasis Infiltration Cellular	Minimal Lymphocytic, Mild
Clitoral Gl Note: ONLY ONE			
Eye	Bilateral, Retina Bilateral, Lens	Atrophy Cataract	Marked Moderate
[ Cataract TGLS = 1-3 ]			
Harderian Gland	Bilateral	Infiltration Cellular	Lymphocytic, Minimal
Heart		Cardiomyopathy	Mild
* Kidney	Bilateral, Renal Tubule Bilateral Bilateral	Hyperplasia Mineralization Nephropathy	Focal, Marked Minimal Minimal
* Liver		Basophilic Focus Inflammation Mixed Cell Focus Tension Lipidosis Vacuolization Cytoplasmic	Chronic, Mild    Mild
[ Mixed Cell Focus TGLS = 4-1 ] [ Vacuolization Cytoplasmic TGLS = 2-1 ]	Hepatocyte		
Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:24  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 477	<b>TRT#:</b> 14	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> 100PPM/FFUMON-14	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100477

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

Mammary Gland Note: ALSO ON 10 [ Fibroadenoma TGLS = 3-3 ]		Fibroadenoma	Multiple
Nose	Olfactory Epi	Cytoplasmic Alteration	Minimal
	Nasolacrim Dct	Inflammation	Chronic, Minimal
Pancreas	Acinar Cell	Atrophy	Focal, Mild
Spleen		Pigmentation	Minimal
Thyroid Gland	C Cell	Adenoma	
Vagina		Fibrosis	Focal, Mild

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92002-03  
 Test Type: CHRONIC  
 Species/Strain: Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
 Test Compound: Fumonisin B1  
 CAS Number: 116355-83-0

Date Report Requested: 10/15/2014  
 Time Report Requested: 18:08:24  
 First Dose M/F: NA / NA  
 Lab: NCTR

ANIMAL ID: 478

TRT#: 14

SEX: Female

DAY ON TEST: 739

DOSE: 100PPM/FFUMON-14

DISP: Terminal Sacrifice

HISTO: 21080100478

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Blood Vessel - Aorta	Brain - Cerebellum	Brain - Cerebrum	Clitoral Gland
Esophagus	Intestine Large - Cecum	Intestine Large - Colon	Intestine Large - Rectum
Intestine Small - Duodenum	Intestine Small - Ileum	Intestine Small - Jejunum	Larynx
Lung - Bronchus	Mammary Gland	Ovary	Parathyroid Gland
Peripheral Nerve - Sciatic	Salivary Glands	Skeletal Muscle - Thigh	Skin
Spinal Cord - Thoracic	Stomach - Forestomach	Stomach - Glandular	Tongue
Trachea	Urinary Bladder	Uterus	Vagina
Zymbal's Gland			

**OBSERVATIONS**

Adrenal Gland		Hematopoietic Cell Proliferation	Minimal
Bone	Femur	Hyperostosis	Moderate
	Sternum	Hyperostosis	Moderate
Bone Marrow		Leukemia Mononuclear	
Eye	Bilateral, Retina	Atrophy	Marked
	Bilateral, Lens	Cataract	Mild
Harderian Gland		Infiltration Cellular	Lymphocytic, Minimal
Heart		Cardiomyopathy	Mild
* Kidney	Bilateral	Mineralization	Minimal
	Bilateral	Nephropathy	Minimal
Lacrimal Gland		Leukemia Mononuclear	
* Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Moderate
		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 2-1 ]			
Lung		Infiltration Cellular	Histiocytic, Minimal
Lymph Node	Mesenteric	Infiltration Cellular	Histiocytic, Mild
	Mandibular	Leukemia Mononuclear	
Nose	Nasolacrim Dct	Inflammation	Chronic, Minimal
Pancreas	Acinar Cell	Atrophy	Focal, Minimal
Pituitary Gland	Pars Distalis	Adenoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:24  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 478	<b>TRT#:</b> 14	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> 100PPM/FFUMON-14	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100478

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

[ Adenoma TGLS = 3-3 ]			
Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 1-3 ]			
Thymus		Leukemia Mononuclear	
Thyroid Gland	C Cell	Hyperplasia	Focal, Moderate

---

<b>PRIMARY CAUSE OF DEATH</b>	-
-------------------------------	---

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:24  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**ANIMAL ID:** 479

**TRT#:** 14

**SEX:** Female

**DAY ON TEST:** 739

**DOSE:** 100PPM/FFUMON-14

**DISP:** Terminal Sacrifice

**HISTO:** 21080100479

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Blood Vessel - Aorta	Bone Marrow	Brain - Cerebellum	Brain - Cerebrum
Clitoral Gland	Esophagus	Intestine Large - Cecum	Intestine Large - Colon
Intestine Large - Rectum	Intestine Small - Duodenum	Intestine Small - Ileum	Intestine Small - Jejunum
Larynx	Lung - Bronchus	Nose	Ovary
Parathyroid Gland	Peripheral Nerve - Sciatic	Salivary Glands	Skeletal Muscle - Thigh
Skin	Spinal Cord - Thoracic	Stomach - Forestomach	Stomach - Glandular
Tongue	Trachea	Urinary Bladder	Uterus
Vagina	Zymbal's Gland		

**OBSERVATIONS**

Adrenal Gland Note: MEDULLA ONLY ONE	Cortex	Vacuolization Cytoplasmic	Focal, Minimal
Bone	Femur	Hyperostosis	Moderate
	Sternum	Hyperostosis	Moderate
	Turbinates	Hyperostosis	Mild
Eye	Bilateral, Retina	Atrophy	Moderate
	Bilateral, Lens	Cataract	Mild
Harderian Gland		Infiltration Cellular	Lymphocytic, Mild
Heart		Cardiomyopathy	Minimal
* Kidney	Bilateral	Mineralization	Minimal
	Bilateral	Nephropathy	Minimal
Lacrimal Gland		Infiltration Cellular	Lymphocytic, Minimal
* Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Chronic, Minimal
		Mixed Cell Focus	
		Tension Lipidosis	
[ Basophilic Focus TGLS = 4-6.1 ]			
[ Inflammation TGLS = 4-6.1 ]			
[ Mixed Cell Focus TGLS = 1-1 ]			
Lymph Node	Mandibular	Hyperplasia	Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:24  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

<b>ANIMAL ID:</b> 479	<b>TRT#:</b> 14	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> 100PPM/FFUMON-14	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 21080100479

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

Mammary Gland [ Fibroadenoma TGLS = 2,3-3 ]	Mesenteric	Infiltration Cellular Fibroadenoma	Histiocytic, Minimal Multiple
Pancreas Pituitary Gland Spleen Thymus	Acinar Cell Pars Distalis	Atrophy Adenoma Hematopoietic Cell Proliferation Cyst Ectopic Parathyroid Gland	Focal, Minimal Minimal Moderate
Thyroid Gland	C Cell	Adenoma	

---

PRIMARY CAUSE OF DEATH -

---

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92002-03  
 Test Type: CHRONIC  
 Species/Strain: Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
 Test Compound: Fumonisin B1  
 CAS Number: 116355-83-0

Date Report Requested: 10/15/2014  
 Time Report Requested: 18:08:24  
 First Dose M/F: NA / NA  
 Lab: NCTR

**ANIMAL ID:** 480

**TRT#:** 14

**SEX:** Female

**DAY ON TEST:** 739

**DOSE:** 100PPM/FFUMON-14

**DISP:** Terminal Sacrifice

**HISTO:** 21080100480

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Blood Vessel - Aorta	Bone - Femur	Bone - Sternum	Bone Marrow
Brain - Cerebellum	Brain - Cerebrum	Esophagus	Intestine Large - Cecum
Intestine Large - Colon	Intestine Large - Rectum	Intestine Small - Duodenum	Intestine Small - Ileum
Intestine Small - Jejunum	Larynx	Lung - Bronchus	Lymph Node - Mandibular
Lymph Node - Mesenteric	Ovary	Pancreas	Parathyroid Gland
Peripheral Nerve - Sciatic	Pituitary Gland	Salivary Glands	Skeletal Muscle - Thigh
Skin	Spinal Cord - Thoracic	Stomach - Glandular	Thyroid Gland
Tongue	Trachea	Urinary Bladder	Vagina
Zymbal's Gland			

**OBSERVATIONS**

Adrenal Gland	Bilateral, Cortex	Angiectasis	Mild
Clitoral Gland		Adenoma	
[ Adenoma TGLS = 1-3 ]			
Eye	Bilateral, Retina	Atrophy	Moderate
Harderian Gland	Bilateral	Infiltration Cellular	Lymphocytic, Minimal
Heart		Cardiomyopathy	Multifocal, Minimal
* Kidney	Bilateral	Mineralization	Minimal
	Bilateral	Nephropathy	Minimal
Lacrimal Gland		Leukemia Mononuclear	
* Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Mild
		Inflammation	Chronic, Minimal
		Leukemia Mononuclear	
Mammary Gland		Cyst	Minimal
Nose	Olfactory Epi	Cytoplasmic Alteration	Mild
Spleen		Leukemia Mononuclear	
Stomach	Epithelium, Forestomach	Hyperplasia	Minimal
Thymus		Leukemia Mononuclear	
Uterus		Sarcoma Stromal	
[ Sarcoma Stromal TGLS = 2-3 ]			

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92002-03  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/NCTR

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Fumonisin B1  
**CAS Number:** 116355-83-0

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 18:08:24  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

---

**ANIMAL ID:** 480

**TRT#:** 14

**SEX:** Female

**DAY ON TEST:** 739

**DOSE:** 100PPM/FFUMON-14

**DISP:** Terminal Sacrifice

**HISTO:** 21080100480

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

PRIMARY CAUSE OF DEATH

-

---

**\*\* END OF REPORT \*\***