**Experiment Number: 92003-02** Test Type: CHRONIC

Species/Strain: Mouse/B6C3F1

P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH Date Report Requested: 10/21/2014 AVERAGE SEVERITY GRADES[b]

Test Compound: NTP 90 diet study

**CAS Number: DIET90** 

Time Report Requested: 21:59:22

First Dose M/F: NA / NA

Lab: NIEHS

C Number: C92003

Lock Date: 04/27/1994

**Cage Range:** ΑII

**Date Range:** ΑII

**Reasons For Removal:** ΑII

**Removal Date Range:** ΑII

**Treatment Groups:** ΑII

**Study Gender:** Both

**PWG Approval Date NONE** 

Species/Strain: Mouse/B6C3F1

Test Type: CHRONIC

# P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH AVERAGE SEVERITY GRADES[b] Date Report Requested: 10/21/2014 Time Report Requested: 21:59:22

Test Compound: NTP 90 diet study

CAS Number: DIET90

Time Report Requested: 21:59:22

First Dose M/F: NA / NA

B6C3F1 Mouse MALE	7M	9M
Disposition Summary		
Animals Initially In Study	70	70
Early Deaths		
Moribund Sacrifice	1	
Natural Death	15	9
Survivors		
Accidentally Killed		1
Moribund Sacrifice		1
Natural Death	16	9
Terminal Sacrifice	38	50
Animals Examined Microscopically	60	65
ALIMENTARY SYSTEM		
Intestine Large, Cecum	(1)	(0)
Hyperplasia, Lymphoid	1 [3.0]	
Intestine Small, Jejunum	(1)	(0)
Liver	(57)	(62)
Angiectasis	2 [3.5]	
Angiectasis, Focal		1 [2.0]
Bile Duct, Cyst		1 [3.0]
Clear Cell Focus	4	17
Clear Cell Focus, Multiple	4	7
Eosinophilic Focus	9	8
Eosinophilic Focus, Multiple	4	2
Hepatocyte, Midzonal, Vacuolization Cytoplasmic	1 [2.0]	1 [3.0]
Hepatocyte, Necrosis	4 [3.3]	2 [3.0]
Midzonal, Vacuolization Cytoplasmic		1 [2.0]
Mixed Cell Focus	2	3
Mixed Cell Focus, Multiple	1	

a - Number of animals examined microscopically at site and number of animals with lesion

b - Average severity grade (1-minimal; 2-mild; 3-moderate; 4-marked)

Species/Strain: Mouse/B6C3F1

Test Type: CHRONIC

# P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH AVERAGE SEVERITY GRADES[b] Date Report Requested: 10/21/2014 Time Report Requested: 21:59:22

Test Compound: NTP 90 diet study

CAS Number: DIET90

Time Report Requested: 21:59:22

First Dose M/F: NA / NA

B6C3F1 Mouse MALE	7M	9М
Mesentery	(1)	(3)
Fat, Necrosis	1 [3.0]	3 [3.7]
Pancreas	(48)	(59)
Acinus, Atrophy	2 [1.0]	1 [1.0]
Acinus, Cyst		1 [2.0]
Acinus, Cytoplasmic Alteration	1 [3.0]	
Acinus, Degeneration	1 [1.0]	
Acinus, Degeneration, Focal		1 [1.0]
Acinus, Hypertrophy	1 [1.0]	
Acinus, Necrosis		1 [4.0]
Acinus, Vacuolization Cytoplasmic	9 [1.4]	3 [1.3]
Stomach, Forestomach	(1)	(0)
Stomach, Glandular	(1)	(0)
CARDIOVASCULAR SYSTEM		
Heart	(57)	(64)
Cardiomyopathy	5 [1.2]	2 [1.5]
Coron Artery, Inflammation		4 [2.8]
Coron Artery, Mineralization		1 [1.0]
Coron Artery, Necrosis		1 [4.0]
Inflammation	1 [1.0]	
Myocardium, Inflammation		1 [2.0]
Myocardium, Mineralization	1 [1.0]	
Valve, Inflammation, Acute	1 [2.0]	
NDOCRINE SYSTEM		
Adrenal Cortex	(45)	(46)
Capsule, Hyperplasia	40 [2.3]	38 [2.3]
Hypertrophy	22 [1.7]	25 [1.9]
Infiltration Cellular, Histiocyte	1 [2.0]	- <b>-</b>

a - Number of animals examined microscopically at site and number of animals with lesion

b - Average severity grade (1-minimal; 2-mild; 3-moderate; 4-marked)

Species/Strain: Mouse/B6C3F1

Test Type: CHRONIC

# P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH AVERAGE SEVERITY GRADES[b] Date Report Requested: 10/21/2014 Time Report Requested: 21:59:22

Test Compound: NTP 90 diet study

CAS Number: DIET90

Time Report Requested: 21:59:22

First Dose M/F: NA / NA

B6C3F1 Mouse MALE	7M	9M
Adrenal Medulla	(39)	(43)
Hypertrophy		1 [2.0]
Islets, Pancreatic	(51)	(60)
Hyperplasia	49 [3.6]	53 [3.0]
Necrosis		1 [4.0]
Pituitary Gland	(42)	(48)
Cyst		1 [1.0]
Pars Distalis, Cyst	1 [1.0]	
Thyroid Gland	(49)	(56)
Follicle, Cyst	13 [2.0]	27 [1.9]
Follicular Cel, Hyperplasia	16 [1.1]	25 [1.6]
Inflammation, Acute	1 [1.0]	
GENERAL BODY SYSTEM		
Tissue NOS	(1)	(0)
GENITAL SYSTEM		
Preputial Gland	(1)	(0)
Hypertrophy	1 [3.0]	
Seminal Vesicle	(39)	(26)
Hypertrophy	38 [3.8]	26 [3.7]
Infiltration Cellular, Megakaryocyte	1 [2.0]	
Testes	(57)	(62)
Degeneration	2 [2.0]	3 [2.0]
Mineralization	1 [2.0]	1 [1.0]
HEMATOPOIETIC SYSTEM		
Lymph Node, Mandibular	(44)	(56)
Hyperplasia, Plasma Cell		1 [4.0]
	2 [2.0]	
Infiltration Cellular, Histiocyte	[۷.0]	

a - Number of animals examined microscopically at site and number of animals with lesion

b - Average severity grade (1-minimal; 2-mild; 3-moderate; 4-marked)

Species/Strain: Mouse/B6C3F1

Test Type: CHRONIC

# P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH AVERAGE SEVERITY GRADES[b] Date Report Requested: 10/21/2014 Time Report Requested: 21:59:22

Test Compound: NTP 90 diet study

**CAS Number: DIET90** 

Time Report Requested: 21:59:22

First Dose M/F: NA / NA

Lab: NIEHS

B6C3F1 Mouse MALE	7M	9М
Infiltration Cellular, Polymorphnuclr	1 [3.0]	
Pigmentation	2 [2.0]	
Lymph Node, Mesenteric	(45)	(53)
Ectasia	1 [2.0]	
Erythrophagocytosis	18 [2.1]	11 [2.3]
Hemorrhage		1 [3.0]
Infiltration Cellular, Histiocyte	32 [1.5]	32 [1.5]
Infiltration Cellular, Megakaryocyte	3 [1.7]	1 [2.0]
Inflammation, Granulomatous	1 [3.0]	
Spleen	(49)	(55)
Angiectasis		1 [2.0]
Hematopoietic Cell Proliferation	5 [3.0]	3 [2.3]
Hyperplasia, Lymphoid	3 [2.0]	1 [3.0]
Infiltration Cellular, Histiocyte	1 [2.0]	
Thrombosis		1 [1.0]
Thymus	(11)	(13)
Atrophy		1 [2.0]
Epithel Cell, Hyperplasia		1 [3.0]
INTEGUMENTARY SYSTEM		
Mammary Gland	(0)	(1)
Skin	(2)	(3)
Atrophy	1 [3.0]	
Dermis, Atrophy	1 [2.0]	
Inflammation, Chronic Active		1 [4.0]
Subcut Tiss, Inflammation, Acute		1 [4.0]
MUSCULOSKELETAL SYSTEM		
None		

**NERVOUS SYSTEM** 

a - Number of animals examined microscopically at site and number of animals with lesion

b - Average severity grade (1-minimal; 2-mild; 3-moderate; 4-marked)

Species/Strain: Mouse/B6C3F1

Test Type: CHRONIC

# P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH AVERAGE SEVERITY GRADES[b] Date Report Requested: 10/21/2014 Time Report Requested: 21:59:22

Test Compound: NTP 90 diet study

CAS Number: DIET90

Time Report Requested: 21:59:22

First Dose M/F: NA / NA

B6C3F1 Mouse MALE	7M	9М
Brain	(0)	(1)
RESPIRATORY SYSTEM		
Lung	(58)	(63)
Alveolar Epith, Hyperplasia	1 [3.0]	
Alveolus, Infiltration Cellular, Histiocyte	3 [3.3]	4 [3.3]
Congestion	1 [3.0]	
Inflammation, Granulomatous	1 [1.0]	
Pleura	(1)	(0)
SPECIAL SENSES SYSTEM		
Eye	(0)	(1)
Degeneration	. ,	1 [3.0]
Harderian Gland	(0)	(3)
Zymbal's Gland	(1)	(0)
URINARY SYSTEM		
Kidney	(53)	(61)
Cortex, Mineralization	2 [1.5]	,
Cyst, Focal		1 [2.0]
Fibrosis	1 [2.0]	
Inflammation, Acute	1 [3.0]	
Metaplasia, Osseous	1 [1.0]	
Nephropathy	22 [1.6]	32 [1.5]
Pelvis, Hydronephrosis	2 [3.0]	
Pelvis, Inflammation		1 [3.0]
Renal Tubule, Cyst	3 [2.7]	2 [2.5]
Renal Tubule, Degeneration	1 [2.0]	
Renal Tubule, Dilatation	16 [1.9]	14 [1.8]
Urinary Bladder	(50)	(59)
Inflammation, Chronic		1 [4.0]

a - Number of animals examined microscopically at site and number of animals with lesion

b - Average severity grade (1-minimal; 2-mild; 3-moderate; 4-marked)

Species/Strain: Mouse/B6C3F1

Test Type: CHRONIC

P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH AVERAGE SEVERITY GRADES[b]

Date Report Requested: 10/21/2014
Time Report Requested: 21:59:22

Test Compound: NTP 90 diet study

CAS Number: DIET90

Time Report Requested: 21:59:22

First Dose M/F: NA / NA

Lab: NIEHS

**B6C3F1 Mouse MALE** 7M 9M

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

a - Number of animals examined microscopically at site and number of animals with lesion

b - Average severity grade (1-minimal; 2-mild; 3-moderate; 4-marked)

Species/Strain: Mouse/B6C3F1

Test Type: CHRONIC

# P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH AVERAGE SEVERITY GRADES[b] Date Report Requested: 10/21/2014 Time Report Requested: 21:59:22

Test Compound: NTP 90 diet study

CAS Number: DIET90

Time Report Requested: 21:59:22

First Dose M/F: NA / NA

B6C3F1 Mouse FEMALE	7F	9F
Disposition Summary		
Animals Initially In Study	70	70
Early Deaths		
Natural Death	14	7
Survivors		
Moribund Sacrifice	2	
Natural Death	5	9
Terminal Sacrifice	49	54
Animals Examined Microscopically	62	67
ALIMENTARY SYSTEM		
Intestine Small, Jejunum	(1)	(0)
Liver	(60)	(62)
Angiectasis		1 [2.0]
Basophilic Focus	1	1
Clear Cell Focus	4	3
Clear Cell Focus, Multiple	3	1
Eosinophilic Focus	14	7
Eosinophilic Focus, Multiple	7	8
Hematopoietic Cell Proliferation	1 [2.0]	
Hepatocyte, Necrosis	2 [2.0]	2 [3.0]
Hepatocyte, Vacuolization Cytoplasmic		1 [2.0]
Infiltration Cellular, Lymphocyte		1 [2.0]
Infiltration Cellular, Mast Cell, Diffuse	1 [2.0]	
Inflammation, Focal	2 [2.5]	
Mixed Cell Focus		1
Mixed Cell Focus, Multiple	3	1
Periportal, Infiltration Cellular, Lymphocyte	1 [2.0]	
Mesentery	(15)	(12)

a - Number of animals examined microscopically at site and number of animals with lesion

b - Average severity grade (1-minimal; 2-mild; 3-moderate; 4-marked)

Species/Strain: Mouse/B6C3F1

Test Type: CHRONIC

# P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH AVERAGE SEVERITY GRADES[b] Date Report Requested: 10/21/2014 Time Report Requested: 21:59:22

Test Compound: NTP 90 diet study

CAS Number: DIET90

Time Report Requested: 21:59:22

First Dose M/F: NA / NA

B6C3F1 Mouse FEMALE	7 <b>F</b>	9F
Fat, Inflammation		1 [1.0]
Fat, Necrosis	15 [3.5]	11 [3.6]
Pancreas	(54)	(57)
Acinus, Degeneration	3 [1.7]	2 [1.0]
Acinus, Hypertrophy		2 [1.0]
Acinus, Inflammation	5 [2.0]	
Acinus, Vacuolization Cytoplasmic	1 [2.0]	3 [1.3]
CARDIOVASCULAR SYSTEM		
Heart	(62)	(64)
ENDOCRINE SYSTEM		
Adrenal Cortex	(52)	(52)
Capsule, Hyperplasia	52 [2.4]	50 [2.5]
Zona Reticul, Vacuolization Cytoplasmic		1 [4.0]
Adrenal Medulla	(45)	(45)
Islets, Pancreatic	(53)	(58)
Hyperplasia	27 [1.6]	22 [1.7]
Pituitary Gland	(47)	(52)
Pars Distalis, Hyperplasia		5 [2.0]
Thyroid Gland	(54)	(60)
Cyst	1 [1.0]	
Follicle, Cyst	36 [1.5]	44 [1.4]
Follicular Cel, Hyperplasia	20 [1.4]	42 [1.7]
Inflammation	1 [1.0]	
GENERAL BODY SYSTEM		
Tissue NOS	(3)	(2)
GENITAL SYSTEM		
Ovary	(52)	(59)

a - Number of animals examined microscopically at site and number of animals with lesion

b - Average severity grade (1-minimal; 2-mild; 3-moderate; 4-marked)

Species/Strain: Mouse/B6C3F1

Test Type: CHRONIC

# P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH AVERAGE SEVERITY GRADES[b] Date Report Requested: 10/21/2014 Time Report Requested: 21:59:22

Test Compound: NTP 90 diet study

CAS Number: DIET90

Time Report Requested: 21:59:22

First Dose M/F: NA / NA

B6C3F1 Mouse FEMALE	7F	9F
Bilateral, Cyst	1 [1.0]	1 [3.0]
Bilateral, Infiltration Cellular, Histiocyte	1 [3.0]	
Cyst	14 [2.1]	21 [2.3]
Hemorrhage		1 [3.0]
Infiltration Cellular, Lymphocyte		1 [3.0]
Uterus	(58)	(63)
Bilateral, Cyst	47 [3.2]	42 [3.2]
Cyst	9 [2.4]	12 [3.2]
Inflammation, Acute		1 [2.0]
Vagina	(1)	(0)
HEMATOPOIETIC SYSTEM		
Lymph Node, Mandibular	(49)	(54)
Erythrophagocytosis		3 [2.0]
Hemorrhage	1 [2.0]	1 [1.0]
Infiltration Cellular, Mast Cell	1 [3.0]	
Lymph Node, Mesenteric	(43)	(51)
Atrophy		1 [3.0]
Erythrophagocytosis	3 [1.7]	1 [2.0]
Hyperplasia, Lymphoid	1 [3.0]	1 [2.0]
Infiltration Cellular, Histiocyte	26 [1.6]	26 [1.4]
Infiltration Cellular, Plasma Cell		1 [3.0]
Spleen	(55)	(61)
Hematopoietic Cell Proliferation	14 [2.6]	21 [2.6]
Hyperplasia, Lymphoid	1 [3.0]	3 [2.7]
Infiltration Cellular, Mast Cell	1 [3.0]	
Thymus	(20)	(25)
Angiectasis		1 [2.0]
Epithel Cell, Hyperplasia	5 [2.0]	6 [2.2]

a - Number of animals examined microscopically at site and number of animals with lesion

b - Average severity grade (1-minimal; 2-mild; 3-moderate; 4-marked)

Species/Strain: Mouse/B6C3F1

Test Type: CHRONIC

# P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH AVERAGE SEVERITY GRADES[b] Date Report Requested: 10/21/2014 Time Report Requested: 21:59:22

Test Compound: NTP 90 diet study

CAS Number: DIET90

Time Report Requested: 21:59:22

First Dose M/F: NA / NA

B6C3F1 Mouse FEMALE	7 <b>F</b>	9F
INTEGUMENTARY SYSTEM		
Mammary Gland	(0)	(1)
Skin	(4)	(7)
Hair Follicle, Atrophy		2 [2.5]
Hair Follicle, Cyst		1 [3.0]
MUSCULOSKELETAL SYSTEM		
None		
NERVOUS SYSTEM		
None		
RESPIRATORY SYSTEM		
Lung	(60)	(64)
Alveolar Epith, Hyperplasia	3 [2.0]	
Alveolus, Infiltration Cellular, Histiocyte	1 [2.0]	2 [2.5]
Hemorrhage	1 [1.0]	1 [2.0]
Infiltration Cellular, Lymphocyte	1 [3.0]	
Mediastinum, Hemorrhage		1 [4.0]
Mediastinum, Inflammation, Granulomatous		1 [2.0]
Pigmentation		2 [3.0]
SPECIAL SENSES SYSTEM		
Eye	(1)	(0)
Harderian Gland	(1)	(4)
URINARY SYSTEM		
Kidney	(56)	(62)
Bilateral, Nephropathy	,	2 [1.5]
Metaplasia, Osseous	2 [1.0]	
Nephropathy	13 [1.3]	17 [1.6]
Urinary Bladder	(51)	(54)

a - Number of animals examined microscopically at site and number of animals with lesion

b - Average severity grade (1-minimal; 2-mild; 3-moderate; 4-marked)

Species/Strain: Mouse/B6C3F1

Test Type: CHRONIC

P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH AVERAGE SEVERITY GRADES[b]

Date Report Requested: 10/21/2014
Time Report Requested: 21:59:22

Test Compound: NTP 90 diet study

**CAS Number: DIET90** 

Time Report Requested: 21:59:22

First Dose M/F: NA / NA

Lab: NIEHS

B6C3F1 Mouse FEMALE	7 <b>F</b>	9F
Urinary Bladder	(51)	(54)
Inflammation, Acute	1 [4.0]	

\*\* END OF REPORT \*\*

a - Number of animals examined microscopically at site and number of animals with lesion

b - Average severity grade (1-minimal; 2-mild; 3-moderate; 4-marked)