

Experiment Number: 96013-04
Test Type: 90-DAY
Route: GAVAGE
Species/Strain: Rat/LONG-EVANS

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

Test Compound: Melatonin
CAS Number: 73-31-4

Date Report Requested: 10/21/2014
Time Report Requested: 08:47:32
First Dose M/F: NA / NA
Lab: BAT

C Number:	C96013
Lock Date:	02/28/2003
Cage Range:	All
Date Range:	All
Reasons For Removal:	All
Removal Date Range:	All
Treatment Groups:	All
Study Gender:	Both
PWG Approval Date	NONE

Experiment Number: 96013-04

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/LONG-EVANS

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

Test Compound: Melatonin

CAS Number: 73-31-4

Date Report Requested: 10/21/2014

Time Report Requested: 08:47:32

First Dose M/F: NA / NA

Lab: BAT

LONG-EVANS Rat MALE	0 UG/KG	5 UG/KG	50 UG/KG	5000 UG/KG	50,000 UG/KG	200,000 UG/KG
Disposition Summary						
Animals Initially In Study	10	10	10	10	10	10
Early Deaths						
Survivors						
Terminal Sacrifice	10	10	10	10	10	10
Animals Examined Microscopically	10	10	10	10	10	10
ALIMENTARY SYSTEM						
Esophagus	(10)	(0)	(0)	(0)	(0)	(10)
Intestine Large, Cecum	(10)	(0)	(0)	(0)	(0)	(10)
Intestine Large, Colon	(10)	(0)	(0)	(0)	(0)	(10)
Intestine Large, Rectum	(10)	(0)	(0)	(0)	(0)	(10)
Intestine Small, Duodenum	(10)	(0)	(0)	(0)	(0)	(10)
Intestine Small, Ileum	(10)	(0)	(0)	(0)	(0)	(10)
Intestine Small, Jejunum	(10)	(0)	(0)	(0)	(0)	(10)
Liver	(10)	(0)	(0)	(0)	(0)	(10)
Inflammation, Chronic	5 [1.0]					6 [1.0]
Vacuolization Cytoplasmic, Focal						1 [1.0]
Pancreas	(10)	(0)	(0)	(0)	(0)	(10)
Acinus, Atrophy	1 [1.0]					1 [1.0]
Salivary Glands	(10)	(0)	(0)	(0)	(0)	(10)
Stomach, Forestomach	(10)	(0)	(0)	(0)	(0)	(10)
Stomach, Glandular	(10)	(0)	(0)	(1)	(0)	(10)
Hyperplasia, Focal				1 [2.0]		
Tooth	(6)	(0)	(0)	(0)	(0)	(3)
Pulp, Malformation	6 [1.0]					3 [1.0]
CARDIOVASCULAR SYSTEM						
Blood Vessel	(10)	(0)	(0)	(0)	(0)	(10)
Heart	(10)	(0)	(0)	(0)	(0)	(10)

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)

Experiment Number: 96013-04

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/LONG-EVANS

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

Test Compound: Melatonin

CAS Number: 73-31-4

Date Report Requested: 10/21/2014

Time Report Requested: 08:47:32

First Dose M/F: NA / NA

Lab: BAT

LONG-EVANS Rat MALE	0 UG/KG	5 UG/KG	50 UG/KG	5000 UG/KG	50,000 UG/KG	200,000 UG/KG
Cardiomyopathy						2 [1.0]
Myocardium, Infiltration Cellular, Mononuclear CI	5 [1.0]					1 [1.0]
ENDOCRINE SYSTEM						
Adrenal Cortex	(10)	(0)	(0)	(0)	(0)	(10)
Adrenal Medulla	(10)	(0)	(0)	(0)	(0)	(10)
Islets, Pancreatic	(10)	(0)	(0)	(0)	(0)	(10)
Parathyroid Gland	(8)	(0)	(0)	(0)	(0)	(10)
Pituitary Gland	(10)	(0)	(0)	(0)	(0)	(10)
Thyroid Gland	(10)	(10)	(10)	(10)	(10)	(10)
GENERAL BODY SYSTEM						
None						
GENITAL SYSTEM						
Epididymis	(10)	(0)	(1)	(0)	(0)	(10)
Atrophy			1 [4.0]			
Preputial Gland	(10)	(0)	(0)	(0)	(0)	(10)
Cyst	1					
Inflammation, Granulomatous						1 [1.0]
Prostate	(10)	(0)	(0)	(0)	(0)	(10)
Inflammation, Chronic Active						1 [2.0]
Seminal Vesicle	(10)	(0)	(0)	(0)	(0)	(10)
Testes	(10)	(0)	(2)	(0)	(0)	(10)
Bilateral, Germinal Epith, Degeneration			1 [4.0]			
Germinal Epith, Degeneration			1 [4.0]			1 [1.0]
HEMATOPOIETIC SYSTEM						
Bone Marrow	(10)	(0)	(0)	(0)	(0)	(10)
Lymph Node	(0)	(0)	(0)	(0)	(0)	(1)
Inguinal, Inflammation, Granulomatous						1 [1.0]

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)

Experiment Number: 96013-04

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/LONG-EVANS

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

Test Compound: Melatonin

CAS Number: 73-31-4

Date Report Requested: 10/21/2014

Time Report Requested: 08:47:32

First Dose M/F: NA / NA

Lab: BAT

LONG-EVANS Rat MALE	0 UG/KG	5 UG/KG	50 UG/KG	5000 UG/KG	50,000 UG/KG	200,000 UG/KG
Lymph Node, Mandibular Congestion	(10)	(0)	(0)	(0)	(0)	(10)
Hyperplasia, Lymphoid						2 [2.0]
Lymph Node, Mesenteric	(10)	(0)	(0)	(0)	(0)	(10)
Spleen	(10)	(0)	(0)	(0)	(0)	(10)
Thymus	(10)	(0)	(0)	(0)	(0)	(10)
INTEGUMENTARY SYSTEM						
Mammary Gland	(10)	(0)	(0)	(0)	(0)	(9)
Skin	(10)	(0)	(0)	(0)	(0)	(10)
MUSCULOSKELETAL SYSTEM						
Bone	(10)	(0)	(0)	(0)	(0)	(10)
Skeletal Muscle	(0)	(0)	(1)	(0)	(0)	(0)
NERVOUS SYSTEM						
Brain	(10)	(0)	(0)	(0)	(0)	(10)
Cranial Nerve, Degeneration	2 [2.5]					
Cranial Nerve, Gliosis	3 [1.0]					1 [1.0]
RESPIRATORY SYSTEM						
Lung	(10)	(0)	(0)	(0)	(0)	(10)
Foreign Body						1
Inflammation, Chronic	3 [1.0]					2 [1.0]
Inflammation, Granulomatous	1 [1.0]					
Metaplasia, Osseous	2 [1.0]					1 [1.0]
Nose	(10)	(0)	(0)	(0)	(0)	(10)
Inflammation, Chronic						3 [1.0]
Trachea	(10)	(0)	(0)	(0)	(0)	(10)
SPECIAL SENSES SYSTEM						
Eye	(10)	(10)	(10)	(10)	(10)	(10)

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)

Experiment Number: 96013-04
Test Type: 90-DAY
Route: GAVAGE
Species/Strain: Rat/LONG-EVANS

**P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH
 AVERAGE SEVERITY GRADES[b]**
Test Compound: Melatonin
CAS Number: 73-31-4

Date Report Requested: 10/21/2014
Time Report Requested: 08:47:32
First Dose M/F: NA / NA
Lab: BAT

LONG-EVANS Rat MALE	0 UG/KG	5 UG/KG	50 UG/KG	5000 UG/KG	50,000 UG/KG	200,000 UG/KG
Harderian Gland	(10)	(10)	(10)	(8)	(10)	(10)
Infiltration Cellular, Lymphoid		1 [2.0]				
Inflammation, Chronic		2 [1.5]		2 [1.0]		
Pigmentation		6 [2.0]	5 [2.0]	5 [2.0]	4 [2.0]	6 [2.0]
URINARY SYSTEM						
Kidney	(10)	(0)	(0)	(0)	(0)	(10)
Mineralization	5 [1.2]					5 [1.0]
Nephropathy	3 [1.0]					5 [1.0]
Urinary Bladder	(10)	(0)	(0)	(0)	(0)	(10)

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)

Experiment Number: 96013-04

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/LONG-EVANS

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

Test Compound: Melatonin

CAS Number: 73-31-4

Date Report Requested: 10/21/2014

Time Report Requested: 08:47:32

First Dose M/F: NA / NA

Lab: BAT

LONG-EVANS Rat FEMALE	0 UG/KG	5 UG/KG	50 UG/KG	5000 UG/KG	50,000 UG/KG	200,000 UG/KG
Disposition Summary						
Animals Initially In Study	10	10	10	10	10	10
Early Deaths						
Natural Death			1			
Survivors						
Terminal Sacrifice	10	10	9	10	10	10
Animals Examined Microscopically	10	10	10	10	10	10
ALIMENTARY SYSTEM						
Esophagus	(10)	(0)	(0)	(0)	(0)	(10)
Inflammation, Chronic						1 [2.0]
Intestine Large, Cecum	(10)	(0)	(1)	(0)	(0)	(10)
Intestine Large, Colon	(10)	(0)	(1)	(0)	(0)	(10)
Intestine Large, Rectum	(10)	(0)	(1)	(0)	(0)	(10)
Intestine Small, Duodenum	(10)	(0)	(1)	(0)	(0)	(10)
Intestine Small, Ileum	(10)	(0)	(1)	(0)	(0)	(10)
Intestine Small, Jejunum	(10)	(0)	(1)	(0)	(0)	(10)
Liver	(10)	(0)	(0)	(0)	(0)	(10)
Clear Cell Focus	1					
Inflammation, Chronic	5 [1.0]					5 [1.0]
Pancreas	(10)	(0)	(0)	(0)	(0)	(10)
Acinus, Atrophy						1 [1.0]
Salivary Glands	(10)	(0)	(0)	(0)	(0)	(10)
Stomach, Forestomach	(10)	(0)	(0)	(0)	(0)	(10)
Stomach, Glandular	(10)	(0)	(0)	(0)	(0)	(10)
Tooth	(4)	(0)	(0)	(0)	(0)	(4)
Pulp, Malformation	4 [1.0]					4 [1.0]
CARDIOVASCULAR SYSTEM						
Blood Vessel	(10)	(0)	(0)	(0)	(0)	(10)

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)

Experiment Number: 96013-04

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/LONG-EVANS

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

Test Compound: Melatonin

CAS Number: 73-31-4

Date Report Requested: 10/21/2014

Time Report Requested: 08:47:32

First Dose M/F: NA / NA

Lab: BAT

LONG-EVANS Rat FEMALE	0 UG/KG	5 UG/KG	50 UG/KG	5000 UG/KG	50,000 UG/KG	200,000 UG/KG
Heart	(10)	(0)	(0)	(0)	(0)	(10)
ENDOCRINE SYSTEM						
Adrenal Cortex	(10)	(0)	(0)	(0)	(0)	(10)
Adrenal Medulla	(10)	(0)	(0)	(0)	(0)	(10)
Islets, Pancreatic	(10)	(0)	(0)	(0)	(0)	(10)
Parathyroid Gland	(10)	(0)	(0)	(0)	(0)	(10)
Pituitary Gland	(10)	(0)	(0)	(0)	(0)	(10)
Thyroid Gland	(10)	(10)	(9)	(10)	(10)	(10)
GENERAL BODY SYSTEM						
None						
GENITAL SYSTEM						
Clitoral Gland	(10)	(0)	(1)	(0)	(0)	(10)
Ovary	(10)	(10)	(10)	(10)	(10)	(10)
Angiectasis		1 [3.0]	1 [3.0]			
Cyst	2	4	4	4	6	4
Mineralization						1 [1.0]
Uterus	(10)	(10)	(10)	(10)	(10)	(10)
Dilatation	2 [2.0]	5 [1.8]	3 [1.3]	5 [1.6]	8 [1.5]	8 [1.8]
Metaplasia, Squamous		1 [1.0]			1 [1.0]	
Vagina	(0)	(0)	(1)	(0)	(0)	(0)
Cyst			1			
HEMATOPOIETIC SYSTEM						
Bone Marrow	(10)	(0)	(1)	(0)	(0)	(10)
Myeloid Cell, Hyperplasia			1 [4.0]			
Lymph Node	(0)	(0)	(1)	(0)	(0)	(0)
Lumbar, Hyperplasia, Plasma Cell			1 [3.0]			
Lymph Node, Mandibular	(10)	(1)	(0)	(0)	(0)	(10)

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)

Experiment Number: 96013-04

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/LONG-EVANS

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

Test Compound: Melatonin

CAS Number: 73-31-4

Date Report Requested: 10/21/2014

Time Report Requested: 08:47:32

First Dose M/F: NA / NA

Lab: BAT

LONG-EVANS Rat FEMALE	0 UG/KG	5 UG/KG	50 UG/KG	5000 UG/KG	50,000 UG/KG	200,000 UG/KG
Hyperplasia, Lymphoid		1 [1.0]				
Lymph Node, Mesenteric	(10)	(0)	(1)	(0)	(0)	(10)
Spleen	(10)	(0)	(0)	(0)	(0)	(10)
Thymus	(10)	(0)	(0)	(0)	(0)	(10)
INTEGUMENTARY SYSTEM						
Mammary Gland	(10)	(0)	(1)	(0)	(0)	(10)
Skin	(10)	(0)	(1)	(0)	(0)	(10)
MUSCULOSKELETAL SYSTEM						
Bone	(10)	(0)	(1)	(0)	(0)	(10)
NERVOUS SYSTEM						
Brain	(10)	(0)	(0)	(0)	(0)	(10)
Cranial Nerve, Degeneration	2 [2.0]					1 [1.0]
Pineal Gland, Inflammation	1 [1.0]					
RESPIRATORY SYSTEM						
Lung	(10)	(0)	(0)	(0)	(0)	(10)
Alveolar Epith, Hyperplasia	1 [1.0]					
Inflammation, Chronic	3 [1.0]					
Metaplasia, Osseous	2 [1.0]					1 [1.0]
Nose	(10)	(0)	(1)	(0)	(0)	(10)
Trachea	(10)	(0)	(0)	(0)	(0)	(10)
SPECIAL SENSES SYSTEM						
Eye	(10)	(10)	(9)	(10)	(10)	(10)
Cornea, Inflammation, Chronic				1 [2.0]		
Iris, Synechia				1 [3.0]		
Retina, Dysplasia		1 [1.0]				
Harderian Gland	(10)	(10)	(9)	(10)	(10)	(10)
Pigmentation	3 [2.0]	4 [2.0]	1 [2.0]	4 [2.0]	8 [2.0]	6 [2.0]

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)

Experiment Number: 96013-04
Test Type: 90-DAY
Route: GAVAGE
Species/Strain: Rat/LONG-EVANS

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

Test Compound: Melatonin
CAS Number: 73-31-4

Date Report Requested: 10/21/2014
Time Report Requested: 08:47:32
First Dose M/F: NA / NA
Lab: BAT

LONG-EVANS Rat FEMALE	0 UG/KG	5 UG/KG	50 UG/KG	5000 UG/KG	50,000 UG/KG	200,000 UG/KG
URINARY SYSTEM						
Kidney	(10)	(0)	(0)	(0)	(0)	(10)
Mineralization	6 [1.0]					6 [1.0]
Nephropathy	5 [1.2]					8 [1.0]
Renal Tubule, Hyperplasia						1 [1.0]
Urinary Bladder	(10)	(0)	(1)	(0)	(0)	(10)

**** 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)