

**Experiment Number:** 20005-03  
**Test Type:** 90-DAY  
**Route:** GAVAGE  
**Species/Strain:** Rat/F 344/N

**P03: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a)**

**Test Compound:** Ginseng  
**CAS Number:** 50647-08-0

**Date Report Requested:** 10/17/2014  
**Time Report Requested:** 13:01:15  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**C Number:** C20005  
**Lock Date:** 10/28/2003  
**Cage Range:** All  
**Date Range:** All  
**Reasons For Removal:** All  
**Removal Date Range:** All  
**Treatment Groups:** All  
**Study Gender:** Both  
**PWG Approval Date:** NONE

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Species/Strain: Rat/F 344/N

Lab: BAT

F 344/N Rat MALE	0	MG/KG	1000	MG/KG	2000	MG/KG	3000	MG/KG	4000	MG/KG	5000	MG/KG
<b>Disposition Summary</b>												
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		1						2		10	
<b>ALIMENTARY SYSTEM</b>												
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)		(1)		(0)		(0)		(2)		(10)	
Bile Duct, Hyperplasia	1 (10%)											
Hematopoietic Cell Proliferation	1 (10%)								1 (50%)		2 (20%)	
Hepatodiaphragmatic Nodule	1 (10%)		1 (100%)						2 (100%)			
Inflammation, Chronic Active	9 (90%)		1 (100%)								8 (80%)	
Inflammation, Chronic Active, Focal	1 (10%)											
Pancreas	(10)		(0)		(0)		(0)		(0)		(10)	
Atrophy	1 (10%)											
Infiltration Cellular, Mononuclear CI	4 (40%)										5 (50%)	
Inflammation	1 (10%)										1 (10%)	
Salivary Glands	(10)		(0)		(0)		(0)		(0)		(10)	
Stomach, Forestomach	(10)		(0)		(0)		(0)		(0)		(10)	
Stomach, Glandular	(10)		(0)		(0)		(0)		(0)		(10)	
Glands, Ectasia	2 (20%)										3 (30%)	
Infiltration Cellular, Mononuclear CI	6 (60%)										7 (70%)	

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

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Lab: BAT

F 344/N Rat MALE	0	MG/KG	1000	MG/KG	2000	MG/KG	3000	MG/KG	4000	MG/KG	5000	MG/KG
Inflammation											1 (10%)	
CARDIOVASCULAR SYSTEM												
Blood Vessel		(10)		(0)		(0)		(0)		(0)		(10)
Inflammation											1 (10%)	
Heart		(10)		(0)		(0)		(0)		(0)		(10)
Cardiomyopathy		10 (100%)										10 (100%)
ENDOCRINE SYSTEM												
Adrenal Cortex		(10)		(0)		(0)		(0)		(0)		(10)
Adrenal Medulla		(10)		(0)		(0)		(0)		(0)		(10)
Parathyroid Gland		(8)		(0)		(0)		(0)		(0)		(9)
Pituitary Gland		(10)		(0)		(0)		(0)		(0)		(10)
Thyroid Gland		(10)		(0)		(0)		(0)		(0)		(10)
GENERAL BODY SYSTEM												
None												
GENITAL SYSTEM												
Epididymis		(10)		(0)		(0)		(0)		(0)		(10)
Atrophy												1 (10%)
Inflammation												1 (10%)
Preputial Gland		(10)		(0)		(0)		(0)		(0)		(10)
Prostate		(10)		(0)		(0)		(0)		(0)		(10)
Atrophy												1 (10%)
Inflammation		1 (10%)										
Seminal Vesicle		(10)		(0)		(0)		(0)		(0)		(10)
Atrophy												1 (10%)
Testes		(10)		(0)		(0)		(0)		(0)		(10)
Germinal Epith, Degeneration												1 (10%)
Inflammation		1 (10%)										
HEMATOPOIETIC SYSTEM												

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First Dose M/F: NA / NA

Lab: BAT

F 344/N Rat MALE	0 MG/KG	1000 MG/KG	2000 MG/KG	3000 MG/KG	4000 MG/KG	5000 MG/KG
Bone Marrow	(10)	(0)	(0)	(0)	(0)	(10)
Lymph Node, Mesenteric	(10)	(0)	(0)	(0)	(0)	(10)
Spleen	(10)	(0)	(0)	(0)	(0)	(10)
Hematopoietic Cell Proliferation	10 (100%)					10 (100%)
Pigmentation, Hemosiderin	2 (20%)					2 (20%)
Thymus	(10)	(0)	(0)	(0)	(0)	(10)
<b>INTEGUMENTARY SYSTEM</b>						
Mammary Gland	(10)	(0)	(0)	(0)	(0)	(10)
Skin	(10)	(0)	(0)	(0)	(0)	(10)
<b>MUSCULOSKELETAL SYSTEM</b>						
Bone	(10)	(0)	(0)	(0)	(0)	(10)
<b>NERVOUS SYSTEM</b>						
Brain	(10)	(0)	(0)	(0)	(0)	(10)
<b>RESPIRATORY SYSTEM</b>						
Lung	(10)	(0)	(0)	(0)	(0)	(10)
Inflammation, Chronic Active	8 (80%)					10 (100%)
Nose	(10)	(0)	(0)	(0)	(0)	(10)
Respirat Epith, Inflammation						1 (10%)
Trachea	(10)	(0)	(0)	(0)	(0)	(10)
<b>SPECIAL SENSES SYSTEM</b>						
Eye	(10)	(0)	(0)	(0)	(0)	(10)
Harderian Gland	(10)	(0)	(0)	(0)	(0)	(10)
Infiltration Cellular, Mononuclear CI						1 (10%)
Inflammation, Suppurative	6 (60%)					3 (30%)
<b>URINARY SYSTEM</b>						
Kidney	(10)	(0)	(0)	(0)	(0)	(10)
Mineralization	5 (50%)					7 (70%)

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First Dose M/F: NA / NA

Lab: BAT

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<b>F 344/N Rat MALE</b>	<b>0 MG/KG</b>	<b>1000 MG/KG</b>	<b>2000 MG/KG</b>	<b>3000 MG/KG</b>	<b>4000 MG/KG</b>	<b>5000 MG/KG</b>
Nephropathy	8 (80%)					9 (90%)
Urinary Bladder	(10)	(0)	(0)	(0)	(0)	(10)

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

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Species/Strain: Rat/F 344/N

Lab: BAT

F 344/N Rat FEMALE	0	MG/KG	1000	MG/KG	2000	MG/KG	3000	MG/KG	4000	MG/KG	5000	MG/KG
<b>Disposition Summary</b>												
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		3		1		3		2		10	
<b>ALIMENTARY SYSTEM</b>												
Esophagus	(10)		(0)		(0)		(1)		(0)		(10)	
Periesoph Tiss, Hemorrhage							1 (100%)					
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)		(1)		(1)		(2)		(1)		(10)	
Fibrosis, Focal			1 (100%)									
Hepatodiaphragmatic Nodule	1 (10%)		1 (100%)		1 (100%)		2 (100%)		1 (100%)		1 (10%)	
Inflammation, Chronic Active	7 (70%)								1 (100%)		10 (100%)	
Inflammation, Granulomatous											1 (10%)	
Necrosis, Focal			1 (100%)									
Pancreas	(10)		(0)		(0)		(0)		(0)		(10)	
Atrophy	1 (10%)											
Infiltration Cellular, Mononuclear CI	5 (50%)										4 (40%)	
Inflammation	1 (10%)											
Salivary Glands	(10)		(0)		(0)		(0)		(0)		(10)	
Stomach, Forestomach	(10)		(0)		(0)		(0)		(0)		(10)	
Epithelium, Hyperplasia, Squamous											1 (10%)	
Stomach, Glandular	(10)		(0)		(0)		(0)		(0)		(10)	

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Epithelium, Inflammation, Granulomatous Infiltration Cellular, Mononuclear CI	6 (60%)										1 (10%)	2 (20%)
<b>CARDIOVASCULAR SYSTEM</b>												
Blood Vessel	(10)		(0)		(0)		(0)		(0)		(10)	
Adventitia, Pigmentation, Hemosiderin Inflammation, Chronic	1 (10%)											
Heart	(10)		(0)		(0)		(0)		(0)		(10)	
Cardiomyopathy	7 (70%)										7 (70%)	
<b>ENDOCRINE SYSTEM</b>												
Adrenal Cortex	(10)		(0)		(0)		(0)		(0)		(10)	
Adrenal Medulla	(10)		(0)		(0)		(0)		(0)		(10)	
Parathyroid Gland	(9)		(0)		(0)		(0)		(0)		(9)	
Pituitary Gland	(10)		(0)		(0)		(0)		(0)		(10)	
Thyroid Gland	(10)		(0)		(0)		(0)		(0)		(10)	
Degeneration	1 (10%)											
Inflammation, Chronic Active	1 (10%)											
Pigmentation, Hemosiderin	1 (10%)											
<b>GENERAL BODY SYSTEM</b>												
None												
<b>GENITAL SYSTEM</b>												
Clitoral Gland	(10)		(0)		(0)		(0)		(0)		(10)	
Ovary	(10)		(2)		(0)		(1)		(1)		(10)	
Cyst							1 (100%)					
Uterus	(10)		(0)		(0)		(1)		(0)		(10)	
Endometrium, Hyperplasia, Cystic							1 (100%)				2 (20%)	
<b>HEMATOPOIETIC SYSTEM</b>												
Bone Marrow	(10)		(0)		(0)		(0)		(0)		(10)	
Lymph Node	(0)		(0)		(0)		(0)		(0)		(1)	

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F 344/N Rat FEMALE	0	MG/KG	1000	MG/KG	2000	MG/KG	3000	MG/KG	4000	MG/KG	5000	MG/KG
Deep Cervical, Hyperplasia, Lymphoid											1 (100%)	
Lymph Node, Mesenteric	(10)		(0)		(0)		(0)		(0)		(10)	
Pigmentation, Hemosiderin	1 (10%)										1 (10%)	
Spleen	(10)		(0)		(0)		(0)		(0)		(10)	
Hematopoietic Cell Proliferation	9 (90%)										9 (90%)	
Pigmentation, Hemosiderin	9 (90%)										9 (90%)	
Thymus	(10)		(0)		(0)		(0)		(0)		(10)	
Atrophy											1 (10%)	
INTEGUMENTARY SYSTEM												
Mammary Gland	(10)		(0)		(0)		(0)		(0)		(10)	
Skin	(10)		(0)		(0)		(0)		(0)		(10)	
MUSCULOSKELETAL SYSTEM												
Bone	(10)		(0)		(0)		(0)		(0)		(10)	
NERVOUS SYSTEM												
Brain	(10)		(0)		(0)		(0)		(0)		(10)	
RESPIRATORY SYSTEM												
Lung	(10)		(0)		(0)		(0)		(0)		(10)	
Bronchiole, Hyperplasia											1 (10%)	
Inflammation, Chronic Active	8 (80%)										8 (80%)	
Nose	(10)		(0)		(0)		(0)		(0)		(10)	
Cyst											1 (10%)	
Olfactory Epi, Inflammation	1 (10%)											
Trachea	(10)		(0)		(0)		(0)		(0)		(10)	
SPECIAL SENSES SYSTEM												
Eye	(10)		(0)		(0)		(0)		(0)		(10)	
Sclera, Inflammation, Chronic Active											1 (10%)	
Harderian Gland	(10)		(0)		(0)		(0)		(0)		(10)	
Infiltration Cellular, Mononuclear CI	1 (10%)										1 (10%)	

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<b>F 344/N Rat FEMALE</b>	<b>0</b>	<b>MG/KG</b>	<b>1000</b>	<b>MG/KG</b>	<b>2000</b>	<b>MG/KG</b>	<b>3000</b>	<b>MG/KG</b>	<b>4000</b>	<b>MG/KG</b>	<b>5000</b>	<b>MG/KG</b>	
Inflammation, Suppurative	3	(30%)									7	(70%)	
URINARY SYSTEM													
Kidney		(10)		(0)		(0)		(0)		(0)		(10)	
Mineralization		7		(70%)								9	(90%)
Nephropathy		2		(20%)								3	(30%)
Urinary Bladder		(10)		(0)		(0)		(0)		(0)		(10)	

**\*\* END OF REPORT \*\***

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