

Experiment Number: 20212-01
Test Type: 18-33 DAYS
Route: INTRADUCTAL CANNULATION
Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
Test Compound: Adenoviral vector (hGH)
CAS Number: HGH

Date Report Requested: 10/23/2014
Time Report Requested: 07:22:16
First Dose M/F: NA / NA
Lab: MBA

C Number:	C20212
Lock Date:	06/16/2004
Cage Range:	All
Date Range:	All
Reasons For Removal:	All
Removal Date Range:	All
Treatment Groups:	All
Study Gender:	Male
PWG Approval Date	NONE

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**F 344/N Rat Male
 VEHICLE SALINE**

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	2	2	2	2	2	2	2	2
	3	3	3	3	9	9	9	9	9	9	9	9
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	3	3	3	3
	0	0	0	0	0	0	1	1	1	0	0	0
	1	5	6	7	8	9	0	1	2	2	3	4
	*TOTALS											

Alimentary System

Esophagus	+	+	+	+	+	+	+	+	+	+	+	+	12
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	+	+	12
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	+	+	12
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	+	+	12
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	+	+	12
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	+	+	12
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	+	+	12
Liver	+	+	+	+	+	+	+	+	+	+	+	+	12
Pancreas	+	+	+	+	+	+	+	+	+	+	+	+	12
Atrophy, Focal			1										1 1.0
Salivary Glands	+	+	+	+	+	+	+	+	+	+	+	+	12
Left, Sublingul GI, Degeneration, Diffuse	1												1 1.0
Left, Sublingul GI, Inflammation, Diffuse	1												1 1.0
Parotid GI, Right, Degeneration, Focal			1	1	1								3 1.0
Right, Submandibul GI, Degeneration, Diffuse				1									1 1.0
Right, Submandibul GI, Inflammation, Diffuse					1								1 1.0
Right, Submandibul GI, Necrosis, Diffuse						1							1 1.0
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	+	+	12
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	+	+	12

Cardiovascular System

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

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Time Report Requested: 07:22:17

First Dose M/F: NA / NA

Lab: MBA

F 344/N Rat Male
VEHICLE SALINE

DAY ON TEST	ANIMAL ID												*TOTALS
	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	2	2	2	2	2	2	2	2	
	3	3	3	3	9	9	9	9	9	9	9	9	
	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	3	3	3	3	
	0	0	0	0	0	0	1	1	1	0	0	0	
	1	5	6	7	8	9	0	1	2	3	4		
Blood Vessel	+	+	+	+	+	+	+	+	+	+	+	+	12
Heart	+	+	+	+	+	+	+	+	+	+	+	+	12
Cardiomyopathy							1	1					2 1.0
Endocrine System													
Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	+	+	12
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	+	+	12
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	+	+	12
Parathyroid Gland	+	+	+	+	+	M	+	+	+	+	+	+	11
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	+	+	12
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	12
General Body System													
NONE													
Genital System													
Epididymis	+	+	+	+	+	+	+	+	+	+	+	+	12
Preputial Gland	+	+	+	M	+	M	+	+	+	+	+	+	10
Prostate	+	+	+	+	+	+	+	+	+	+	+	+	12
Seminal Vesicle	+	+	+	+	+	+	+	+	+	+	+	+	12
Testes	+	+	+	+	+	+	+	+	+	+	+	+	12
Hematopoietic System													
Bone Marrow	+	+	+	+	+	+	+	+	+	+	+	+	12
Lymph Node, Mandibular	M	M	M	M	M	M	M	M	M	M	M	M	0

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

X ..Lesion present

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M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

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 CAS Number: HGH

Date Report Requested: 10/23/2014
 Time Report Requested: 07:22:17
 First Dose M/F: NA / NA
 Lab: MBA

F 344/N Rat Male
VEHICLE SALINE

	DAY ON TEST													
	0	0	0	0	0	0	0	0	0	0	0	0		
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	*TOTALS	
	3	3	3	3	9	9	9	9	9	9	9			
Lymph Node, Mandibular	M	M	M	M	M	M	M	M	M	M	M	M	0	
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	+	+	12	
Spleen	+	+	+	+	+	+	+	+	+	+	+	+	12	
Thymus	+	+	+	+	+	+	+	+	+	+	+	+	12	
Depletion Lymphoid				1		1	2	1	1	2	1	1	8	1.3
Integumentary System														
Mammary Gland	+	M	+	+	+	+	+	+	+	+	+	+	11	
Skin	+	+	+	+	+	+	+	+	+	+	+	+	12	
Musculoskeletal System														
Bone	+	+	+	+	+	+	+	+	+	+	+	+	12	
Nervous System														
Brain	+	+	+	+	+	+	+	+	+	+	+	+	12	
Respiratory System														
Lung	+	+	+	+	+	+	+	+	+	+	+	+	12	
Nose	+	+	+	+	+	+	+	+	+	+	+	+	12	
Trachea	+	+	+	+	+	+	+	+	+	+	+	+	12	
Special Senses System														
Eye	+	I	+	+	+	+	+	+	+	+	+	+	11	
Cornea, Degeneration										2		3	2	2.5
Sclera, Foreign Body				X									1	

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 First Dose M/F: NA / NA
 Lab: MBA

F 344/N Rat Male
VEHICLE SALINE

	DAY ON TEST												
	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	2	2	2	2	2	2	2	2	
	3	3	3	3	9	9	9	9	9	9	9	9	
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	3	3	3	
	0	0	0	0	0	0	1	1	1	0	0	0	
	1	5	6	7	8	9	0	1	2	2	3	4	*TOTALS
Harderian Gland	+	+	+	+	+	+	+	+	+	+	+	+	12
Infiltration Cellular, Mononuclear CI, Focal													2
													1 2.0
Urinary System													
Kidney	+	+	+	+	+	+	+	+	+	+	+	+	12
Urinary Bladder	+	+	+	+	+	+	+	+	+	+	+	+	12

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 Test Compound: Adenoviral vector (hGH)
 CAS Number: HGH

Date Report Requested: 10/23/2014
 Time Report Requested: 07:22:17
 First Dose M/F: NA / NA
 Lab: MBA

F 344/N Rat Male
VEHICLE HCQ

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	2	2	0	0	2	2	2	2	2	2
	3	3	9	9	3	3	9	9	9	9	9	9
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	3
	1	1	1	1	1	1	2	2	2	2	2	1
	3	4	6	7	8	9	0	1	2	3	4	5

***TOTALS**

Alimentary System

Esophagus	+	+	+	+	+	+	+	+	+	+	+	+	12	
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	+	+	12	
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	+	+	12	
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	+	+	12	
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	+	+	12	
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	+	+	12	
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	+	+	12	
Liver	+	+	+	+	+	+	+	+	+	+	+	+	12	
Pancreas	+	+	+	+	+	+	+	+	+	+	+	+	12	
Salivary Glands	+	+	+	+	+	+	+	+	+	+	+	+	12	
Parotid Gl, Right, Degeneration, Diffuse											3		1	3.0
Parotid Gl, Right, Degeneration, Focal					2								1	2.0
Right, Submandibul Gl, Degeneration, Diffuse	2	1			3	1					3		5	2.0
Right, Submandibul Gl, Degeneration, Multifocal										1			1	1.0
Right, Submandibul Gl, Inflammation, Diffuse	2	1			1	1					4		5	1.8
Right, Submandibul Gl, Inflammation, Multifocal										1			1	1.0
Right, Submandibul Gl, Necrosis, Diffuse	2	1			1	1					3		5	1.6
Right, Submandibul Gl, Necrosis, Multifocal										1			1	1.0

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

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I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

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Test Type: 18-33 DAYS

Route: INTRADUCTAL CANNULATION

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Adenoviral vector (hGH)

CAS Number: HGH

Date Report Requested: 10/23/2014

Time Report Requested: 07:22:17

First Dose M/F: NA / NA

Lab: MBA

F 344/N Rat Male
VEHICLE HCQ

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	0			
	0	0	0	0	0	0	0	0	0	0	0	0			
	0	0	2	2	0	0	2	2	2	2	2	2			
	3	3	9	9	3	3	9	9	9	9	9	9			
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0			
	0	0	0	0	0	0	0	0	0	0	0	0			
	0	0	0	0	0	0	0	0	0	0	0	3			
	1	1	1	1	1	1	1	2	2	2	2	1			
	3	4	6	7	8	9	0	1	2	3	4	5	*TOTALS		
Right, Submandibul GI, Regeneration, Diffuse													2	1	2.0
Right, Submandibul GI, Regeneration, Multifocal													3	1	3.0
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	+	+	12		
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	+	+	12		
Cardiovascular System															
Blood Vessel	+	+	+	+	+	+	+	+	+	+	+	+	12		
Heart	+	+	+	+	+	+	+	+	+	+	+	+	12		
Cardiomyopathy	1	1								1			3	1.0	
Endocrine System															
Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	+	+	12		
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	+	+	12		
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	+	+	12		
Parathyroid Gland	+	+	+	+	+	+	M	M	+	M	M	M	7		
Pituitary Gland	+	+	+	+	+	+	+	+	I	+	+	+	11		
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	12		
General Body System															
NONE															
Genital System															
Epididymis	+	+	+	+	+	+	+	+	+	+	+	+	12		

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

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X ..Lesion present

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1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20212-01

Test Type: 18-33 DAYS

Route: INTRADUCTAL CANNULATION

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Adenoviral vector (hGH)

CAS Number: HGH

Date Report Requested: 10/23/2014

Time Report Requested: 07:22:17

First Dose M/F: NA / NA

Lab: MBA

F 344/N Rat Male
VEHICLE HCQ

DAY ON TEST	0												*TOTALS	
	0													
ANIMAL ID	3												1	3.0
	3													
Granuloma Sperm, Focal	3												1	3.0
Preputial Gland	+	+	+	M	+	M	+	+	+	+	+	+	10	
Prostate	+	+	+	+	+	+	+	+	+	+	+	+	12	
Seminal Vesicle	+	+	+	+	+	+	+	+	+	+	+	+	12	
Testes	+	+	+	+	+	+	+	+	+	+	+	+	12	
Hematopoietic System														
Bone Marrow	+	+	+	+	+	+	+	+	+	+	+	+	12	
Lymph Node, Mandibular	M	M	M	M	M	M	M	M	M	M	M	M	0	
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	+	+	12	
Spleen	+	+	+	+	+	+	+	+	+	+	+	+	12	
Thymus	+	+	+	+	+	+	+	+	+	+	+	+	12	
Depletion Lymphoid	1	1			2			1	2	2	1	1	8	1.4
Integumentary System														
Mammary Gland	+	+	+	+	+	+	M	+	+	+	+	I	10	
Skin	+	+	+	+	+	+	+	+	+	+	+	+	12	
Musculoskeletal System														
Bone	+	+	+	+	+	+	+	+	+	+	+	+	12	
Nervous System														
Brain	+	+	+	+	+	+	+	+	+	+	+	+	12	
Respiratory System														

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F 344/N Rat Male VEHICLE HCQ	DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	ANIMAL ID	*TOTALS	
		0	0	2	2	0	0	2	2	2	2	2			
		3	3	9	9	3	3	9	9	9	9	9			
		0	0	0	0	0	0	0	0	0	0	0			
		0	0	0	0	0	0	0	0	0	0	0			
		0	0	0	0	0	0	0	0	0	0	3			
		1	1	1	1	1	1	2	2	2	2	1			
		3	4	6	7	8	9	2	1	2	3	4	5		
Lung		+	+	+	+	+	+	+	+	+	+	+		12	
Nose		+	+	+	+	+	+	+	+	+	+	+		12	
Trachea		+	+	+	+	+	+	+	+	+	+	+		12	
Special Senses System															
Eye		+	I	I	+	+	+	+	+	+	+	+		10	
Harderian Gland		+	+	+	+	+	+	+	+	+	+	+		12	
Urinary System															
Kidney		+	+	+	+	+	+	+	+	+	+	+		12	
Urinary Bladder		+	+	+	+	+	+	+	+	+	+	+		12	

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X ..Lesion present

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 Test Compound: Adenoviral vector (hGH)
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Date Report Requested: 10/23/2014
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 First Dose M/F: NA / NA
 Lab: MBA

F 344/N Rat Male
6.0 E9 SALINE

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	2	2	2	2	2	2	2	2
	3	3	3	3	9	9	9	9	9	9	9	9
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	3	3	3
	2	2	3	3	3	3	3	3	3	2	2	2
	8	9	0	1	2	3	4	5	6	5	6	7
	*TOTALS											

Alimentary System

Esophagus	+	+	+	+	+	+	+	+	+	+	+	+	12
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	+	+	12
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	+	+	12
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	+	+	12
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	+	+	12
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	+	+	12
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	+	+	12
Liver	+	+	+	+	+	+	+	+	+	+	+	+	12
Pancreas	+	+	+	+	+	+	+	+	+	+	+	+	12
Salivary Glands	+	+	+	+	+	+	+	+	+	+	+	+	12
Left, Parotid GI, Degeneration, Focal	1		2	1									3 1.3
Left, Submandibul GI, Degeneration, Multifocal								1					1 1.0
Left, Submandibul GI, Inflammation, Multifocal								2					1 2.0
Left, Submandibul GI, Necrosis, Multifocal								1					1 1.0
Left, Submandibul GI, Regeneration, Multifocal								3					1 3.0
Parotid GI, Right, Degeneration, Diffuse			2	3									2 2.5
Right, Submandibul GI, Degeneration, Diffuse	4	3	3	3									4 3.3
Right, Submandibul GI, Degeneration, Multifocal					1	1	1		1	1		1	6 1.0

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + ..Tissue examined microscopically
 X ..Lesion present
 I ..Insufficient tissue
 M ..Missing tissue
 A ..Autolysis precludes evaluation
 BLANK ..Not examined microscopically
 1-4 ..Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

Experiment Number: 20212-01
 Test Type: 18-33 DAYS
 Route: INTRADUCTAL CANNULATION
 Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 Test Compound: Adenoviral vector (hGH)
 CAS Number: HGH

Date Report Requested: 10/23/2014
 Time Report Requested: 07:22:17
 First Dose M/F: NA / NA
 Lab: MBA

F 344/N Rat Male
6.0 E9 SALINE

	DAY ON TEST													
	0	0	0	0	0	0	0	0	0	0	0	0		
	0	0	0	0	0	0	0	0	0	0	0	0		
	0	0	0	0	2	2	2	2	2	2	2	2		
	3	3	3	3	9	9	9	9	9	9	9	9		
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0		
	0	0	0	0	0	0	0	0	0	0	0	0		
	0	0	0	0	0	0	0	0	0	3	3	3		
	2	2	3	3	3	3	3	3	3	2	2	2		
	8	9	0	1	2	3	4	5	6	5	6	7	*TOTALS	
Right, Submandibul GI, Inflammation, Diffuse	3	2	2	2									4	2.3
Right, Submandibul GI, Inflammation, Multifocal					2	2	2		2	2		3	6	2.2
Right, Submandibul GI, Necrosis, Diffuse	4	3	3	3									4	3.3
Right, Submandibul GI, Necrosis, Multifocal					1	1	1		1	1		1	6	1.0
Right, Submandibul GI, Regeneration, Multifocal					3	3	3		3	1		3	6	2.7
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	+	+	12	
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	+	+	12	
Cardiovascular System														
Blood Vessel	+	+	+	+	+	+	+	+	+	+	+	+	12	
Heart	+	+	+	+	+	+	+	+	+	+	+	+	12	
Cardiomyopathy					1		2		1				3	1.3
Endocrine System														
Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	+	+	12	
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	+	+	12	
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	+	+	12	
Parathyroid Gland	+	+	+	+	+	+	M	M	+	+	M	M	8	
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	I	+	11	
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	12	
General Body System														
NONE														

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20212-01
 Test Type: 18-33 DAYS
 Route: INTRADUCTAL CANNULATION
 Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 Test Compound: Adenoviral vector (hGH)
 CAS Number: HGH

Date Report Requested: 10/23/2014
 Time Report Requested: 07:22:17
 First Dose M/F: NA / NA
 Lab: MBA

F 344/N Rat Male
6.0 E9 SALINE

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	2	2	2	2	2	2	2	2
	3	3	3	3	9	9	9	9	9	9	9	9
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	3	3	3
	2	2	3	3	3	3	3	3	3	2	2	2
	8	9	0	1	2	3	4	5	6	5	6	7

***TOTALS**

Genital System

Epididymis	+	+	+	+	+	+	+	+	+	+	+	+	12
Preputial Gland	+	M	+	+	+	+	+	+	+	+	+	+	11
Prostate	+	+	+	+	+	+	+	+	+	+	+	+	12
Seminal Vesicle	+	+	+	+	+	+	+	+	+	+	+	+	12
Testes	+	+	+	+	+	+	+	+	+	+	+	+	12

Hematopoietic System

Bone Marrow	+	+	+	+	+	+	+	+	+	+	+	+	12
Lymph Node, Mandibular	M	M	M	M	M	M	M	M	M	M	M	M	0
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	+	+	12
Spleen	+	+	+	+	+	+	+	+	+	+	+	+	12
Thymus	+	+	+	+	+	+	+	+	+	+	+	+	12
Depletion Lymphoid		1		1	1	1	2	1	1	1	1	2	10 1.2

Integumentary System

Mammary Gland	+	+	+	+	I	+	+	+	+	+	+	+	11
Skin	+	+	+	+	+	+	+	+	+	+	+	+	12

Musculoskeletal System

Bone	+	+	+	+	+	+	+	+	+	+	+	+	12
------	---	---	---	---	---	---	---	---	---	---	---	---	----

Nervous System

Brain	+	+	+	+	+	+	+	+	+	+	+	+	12
-------	---	---	---	---	---	---	---	---	---	---	---	---	----

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20212-01

Test Type: 18-33 DAYS

Route: INTRADUCTAL CANNULATION

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Adenoviral vector (hGH)

CAS Number: HGH

Date Report Requested: 10/23/2014

Time Report Requested: 07:22:17

First Dose M/F: NA / NA

Lab: MBA

F 344/N Rat Male
6.0 E9 SALINE

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	2	2	2	2	2	2	2	2
	3	3	3	3	9	9	9	9	9	9	9	9
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	3	3	3
	2	2	3	3	3	3	3	3	3	2	2	2
	8	9	0	1	2	3	4	5	6	5	6	7
	*TOTALS											

Respiratory System

Lung	+	+	+	+	+	+	+	+	+	+	+	+	12
Nose	+	+	+	+	+	+	+	+	+	+	+	+	12
Trachea	+	+	+	+	+	+	+	+	+	+	+	+	12

Special Senses System

Eye	+	I	+	+	+	+	+	+	+	+	+	+	11
Cornea, Ulcer							2						1 2.0
Harderian Gland	+	+	+	+	+	+	+	+	+	+	+	+	12
Artery, Polyarteritis					1								1 1.0

Urinary System

Kidney	+	+	+	+	+	+	+	+	+	+	+	+	12
Urinary Bladder	+	+	+	+	+	+	+	+	+	+	+	+	12

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

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1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20212-01

Test Type: 18-33 DAYS

Route: INTRADUCTAL CANNULATION

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Adenoviral vector (hGH)

CAS Number: HGH

Date Report Requested: 10/23/2014

Time Report Requested: 07:22:17

First Dose M/F: NA / NA

Lab: MBA

F 344/N Rat Male
1.5 E11 HCQ

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	2	2	2	0	0	2	2	2	2	2
	3	3	9	9	9	3	3	9	9	9	9	9
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0
	3	3	3	4	4	4	4	4	4	4	4	4
	7	8	9	0	1	2	3	4	5	6	7	8

*TOTALS

Alimentary System

Esophagus	+	+	+	+	+	+	+	+	+	+	+	+	12
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	+	+	12
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	+	+	12
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	+	+	12
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	+	+	12
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	+	+	12
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	+	+	12
Liver	+	+	+	+	+	+	+	+	+	+	+	+	12
Pancreas	+	+	+	+	+	+	+	+	+	+	+	+	12
Duct, Concretion								X					1
Infiltration Cellular, Mononuclear Cl, Focal								1					1 1.0
Salivary Glands	+	+	+	+	+	+	+	+	+	+	+	+	12
Parotid GI, Right, Degeneration, Diffuse	3	2				2							3 2.3
Right, Submandibul GI, Degeneration, Diffuse	4	4				4	2						4 3.5
Right, Submandibul GI, Degeneration, Multifocal				1	1	2			1		1		5 1.2
Right, Submandibul GI, Inflammation, Diffuse	4	4					4	2					4 3.5
Right, Submandibul GI, Inflammation, Multifocal				1	2	3			2		2		5 2.0
Right, Submandibul GI, Necrosis, Diffuse	4	4					4	2					4 3.5
Right, Submandibul GI, Necrosis, Multifocal				1	1	2			1		1		5 1.2

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20212-01

Test Type: 18-33 DAYS

Route: INTRADUCTAL CANNULATION

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Adenoviral vector (hGH)

CAS Number: HGH

Date Report Requested: 10/23/2014

Time Report Requested: 07:22:18

First Dose M/F: NA / NA

Lab: MBA

F 344/N Rat Male
1.5 E11 HCQ

DAY ON TEST	ANIMAL ID												*TOTALS				
	0	0	0	0	0	0	0	0	0	0	0	0			0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	2	2	2	0	0	2	2	2	2	2	2	2	2	2	2
	3	3	9	9	9	3	3	9	9	9	9	9	9	9	9	9	9
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3	3	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	7	8	9	0	1	2	3	4	5	6	7	8					
Right, Submandibul GI, Regeneration, Multifocal			2	3	4			2	3				5	2.8			
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	+	+					12
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	+	+					12
Cardiovascular System																	
Blood Vessel	+	+	+	+	+	+	+	+	+	+	+	+					12
Heart	+	+	+	+	+	+	+	+	+	+	+	+					12
Cardiomyopathy			1				2			1		1		4	1.3		
Endocrine System																	
Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	+	+					12
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	+	+					12
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	+	+					12
Parathyroid Gland	+	+	+	+	+	+	M	+	+	+	+	+					11
Pituitary Gland	+	+	+	+	+	+	+	+	I	+	+	+					11
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+					12
General Body System																	
NONE																	
Genital System																	
Epididymis	+	+	+	+	+	+	+	+	+	+	+	+					12
Granuloma Sperm, Focal					2									1	2.0		
Preputial Gland	+	+	M	+	M	M	+	+	+	+	+	+					9

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20212-01

Test Type: 18-33 DAYS

Route: INTRADUCTAL CANNULATION

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Adenoviral vector (hGH)

CAS Number: HGH

Date Report Requested: 10/23/2014

Time Report Requested: 07:22:18

First Dose M/F: NA / NA

Lab: MBA

F 344/N Rat Male
1.5 E11 HCQ

DAY ON TEST	ANIMAL ID												*TOTALS				
	0	0	0	0	0	0	0	0	0	0	0	0			0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	2	2	2	0	0	2	2	2	2	2	2	2	2	2	2
	3	3	9	9	9	3	3	9	9	9	9	9	9	9	9	9	9
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3	3	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	7	8	9	0	1	2	3	4	5	6	7	8					
Prostate	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	12
Seminal Vesicle	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	12
Testes	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	12
Hematopoietic System																	
Bone Marrow	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	12
Lymph Node, Mandibular	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	0
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	12
Spleen	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	12
Thymus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	12
Depletion Lymphoid	1		1	2	1	1	1	1	1	1	2	2					11 1.3
Integumentary System																	
Mammary Gland	+	+	M	+	+	+	+	+	+	+	+	+	+	+	+	+	11
Skin	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	12
Musculoskeletal System																	
Bone	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	12
Nervous System																	
Brain	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	12
Respiratory System																	
Lung	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	12
Nose	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	12

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

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1-4 ..Lesion qualified as:

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2) Mild 4) Marked

Experiment Number: 20212-01

Test Type: 18-33 DAYS

Route: INTRADUCTAL CANNULATION

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Adenoviral vector (hGH)

CAS Number: HGH

Date Report Requested: 10/23/2014

Time Report Requested: 07:22:18

First Dose M/F: NA / NA

Lab: MBA

F 344/N Rat Male
1.5 E11 HCQ

	DAY ON TEST												
	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	2	2	2	0	0	2	2	2	2	2	
	3	3	9	9	9	3	3	9	9	9	9	9	
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	
	3	3	3	4	4	4	4	4	4	4	4	4	
	7	8	9	0	1	2	3	4	5	6	7	8	*TOTALS
Trachea	+	+	+	+	+	+	+	+	+	+	+	+	12
Special Senses System													
Eye	I	+	+	+	+	+	+	+	+	+	+	+	11
Cornea, Degeneration			2								1		2 1.5
Sclera, Edema							1		2				2 1.5
Harderian Gland	+	+	+	+	+	+	+	+	+	+	+	+	12
Infiltration Cellular, Mononuclear CI, Focal								3					1 3.0
Urinary System													
Kidney	+	+	+	+	+	+	+	+	+	+	+	+	12
Urinary Bladder	+	+	+	+	+	+	+	+	+	+	+	+	12

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

X ..Lesion present

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1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20212-01

Test Type: 18-33 DAYS

Route: INTRADUCTAL CANNULATION

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Adenoviral vector (hGH)

CAS Number: HGH

Date Report Requested: 10/23/2014

Time Report Requested: 07:22:18

First Dose M/F: NA / NA

Lab: MBA

F 344/N Rat Male
6.0 E9 HCQ

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	2	2	2	0	0	2	2	2	2	2	
	3	3	9	9	9	3	3	9	9	9	9	9	
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	
	4	5	5	5	5	5	5	5	5	5	5	6	
	9	0	1	2	3	4	5	6	7	8	9	0	*TOTALS

Alimentary System

Esophagus	+	+	+	+	+	+	+	+	+	+	+	+	12
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	+	+	12
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	+	+	12
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	+	+	12
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	+	+	12
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	+	+	12
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	+	+	12
Liver	+	+	+	+	+	+	+	+	+	+	+	+	12
Pancreas	+	+	+	+	+	+	+	+	+	+	+	+	12
Salivary Glands	+	+	+	+	+	+	+	+	+	+	+	+	12
Left, Parotid Gl, Degeneration, Diffuse	2												1 2.0
Left, Parotid Gl, Degeneration, Focal		1											1 1.0
Left, Submandibul Gl, Degeneration, Diffuse		3											1 3.0
Left, Submandibul Gl, Inflammation, Diffuse		3											1 3.0
Left, Submandibul Gl, Necrosis, Diffuse		3											1 3.0
Parotid Gl, Right, Degeneration, Diffuse	3	3											2 3.0
Parotid Gl, Right, Degeneration, Focal					3	1							2 2.0
Right, Sublingul Gl, Degeneration, Diffuse						3							1 3.0
Right, Sublingul Gl, Inflammation, Diffuse						3							1 3.0
Right, Sublingul Gl, Necrosis, Diffuse						1							1 1.0

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20212-01
 Test Type: 18-33 DAYS
 Route: INTRADUCTAL CANNULATION
 Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 Test Compound: Adenoviral vector (hGH)
 CAS Number: HGH

Date Report Requested: 10/23/2014
 Time Report Requested: 07:22:18
 First Dose M/F: NA / NA
 Lab: MBA

F 344/N Rat Male
6.0 E9 HCQ

	DAY ON TEST													
	0	0	0	0	0	0	0	0	0	0	0	0		
	0	0	0	0	0	0	0	0	0	0	0	0		
	0	0	2	2	2	0	0	2	2	2	2	2		
	3	3	9	9	9	3	3	9	9	9	9	9		
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0		
	0	0	0	0	0	0	0	0	0	0	0	0		
	0	0	0	0	0	0	0	0	0	0	0	0		
	4	5	5	5	5	5	5	5	5	5	5	6		
	9	0	1	2	3	4	5	6	7	8	9	0	*TOTALS	
Right, Submandibul GI, Degeneration, Diffuse	3					3							2	3.0
Right, Submandibul GI, Degeneration, Multifocal		1	1	1				1	1	1	1		7	1.0
Right, Submandibul GI, Inflammation, Diffuse	2					3							2	2.5
Right, Submandibul GI, Inflammation, Multifocal			2	2				1	1	2	1		6	1.5
Right, Submandibul GI, Necrosis, Diffuse	2					3							2	2.5
Right, Submandibul GI, Necrosis, Multifocal		1	1	1				1	1	1	1		7	1.0
Right, Submandibul GI, Regeneration, Multifocal			3	4					1	1	3		5	2.4
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	+	+	12	
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	+	+	12	
Cardiovascular System														
Blood Vessel	+	+	+	+	+	+	+	+	+	+	+	+	12	
Heart	+	+	+	+	+	+	+	+	+	+	+	+	12	
Cardiomyopathy					1								1	1.0
Endocrine System														
Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	+	+	12	
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	+	+	12	
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	+	+	12	
Parathyroid Gland	+	I	M	+	+	+	+	+	+	+	+	+	10	
Pituitary Gland	I	+	+	+	+	+	+	+	+	+	+	+	11	

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20212-01
 Test Type: 18-33 DAYS
 Route: INTRADUCTAL CANNULATION
 Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 Test Compound: Adenoviral vector (hGH)
 CAS Number: HGH

Date Report Requested: 10/23/2014
 Time Report Requested: 07:22:18
 First Dose M/F: NA / NA
 Lab: MBA

F 344/N Rat Male
6.0 E9 HCQ

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	2	2	2	0	0	2	2	2	2	2	
	3	3	9	9	9	3	3	9	9	9	9	9	
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	
	4	5	5	5	5	5	5	5	5	5	5	6	
	9	0	1	2	3	4	5	6	7	8	9	0	*TOTALS
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	12
General Body System													
NONE													
Genital System													
Epididymis	+	+	+	+	+	+	+	+	+	+	+	+	12
Preputial Gland	+	M	+	M	+	M	+	+	+	+	+	+	9
Prostate	+	+	+	+	+	+	+	+	+	+	+	+	12
Seminal Vesicle	+	+	+	+	+	+	+	+	+	+	+	+	12
Testes	+	+	+	+	+	+	+	+	+	+	+	+	12
Hematopoietic System													
Bone Marrow	+	+	+	+	+	+	+	+	+	+	+	+	12
Lymph Node, Mandibular	M	M	M	M	M	M	M	M	M	M	M	M	0
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	+	+	12
Spleen	+	+	+	+	+	+	+	+	+	+	+	+	12
Thymus	+	+	+	+	+	+	+	+	+	+	+	+	12
Depletion Lymphoid	1		1	1	2				1	2	2	2	8 1.5
Integumentary System													
Mammary Gland	+	+	+	+	+	+	+	+	+	+	+	+	12
Skin	+	+	+	+	+	+	+	+	+	+	+	+	12
Musculoskeletal System													

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + ..Tissue examined microscopically
 X ..Lesion present
 I ..Insufficient tissue
 M ..Missing tissue
 A ..Autolysis precludes evaluation
 BLANK ..Not examined microscopically
 1-4 ..Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

Experiment Number: 20212-01

Test Type: 18-33 DAYS

Route: INTRADUCTAL CANNULATION

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Adenoviral vector (hGH)

CAS Number: HGH

Date Report Requested: 10/23/2014

Time Report Requested: 07:22:18

First Dose M/F: NA / NA

Lab: MBA

F 344/N Rat Male
6.0 E9 HCQ

	DAY ON TEST												
	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	2	2	2	0	0	2	2	2	2	2	
	3	3	9	9	9	3	3	9	9	9	9	9	
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	
	4	5	5	5	5	5	5	5	5	5	5	6	
	9	0	1	2	3	4	5	6	7	8	9	0	
													*TOTALS
Bone	+	+	+	+	+	+	+	+	+	+	+	+	12
Nervous System													
Brain	+	+	+	+	+	+	+	+	+	+	+	+	12
Respiratory System													
Lung	+	+	+	+	+	+	+	+	+	+	+	+	12
Nose	+	+	+	+	+	+	+	+	+	+	+	+	12
Trachea	+	+	+	+	+	+	+	+	+	+	+	+	12
Special Senses System													
Eye	I	I	+	+	+	+	+	+	+	I	+	+	9
Cornea, Degeneration											2	2	2 2.0
Harderian Gland	+	+	+	+	+	+	+	+	+	+	+	+	12
Necrosis	1											2	2 1.5
Urinary System													
Kidney	+	+	+	+	+	+	+	+	+	+	+	+	12
Mineralization, Focal	1												1 1.0
Renal Tubule, Dilatation		1											1 1.0
Urinary Bladder	+	+	+	+	+	+	+	+	+	+	+	+	12

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

X ..Lesion present

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M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20212-01
 Test Type: 18-33 DAYS
 Route: INTRADUCTAL CANNULATION
 Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 Test Compound: Adenoviral vector (hGH)
 CAS Number: HGH

Date Report Requested: 10/23/2014
 Time Report Requested: 07:22:18
 First Dose M/F: NA / NA
 Lab: MBA

F 344/N Rat Male
2.4 E8 HCQ

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	2	2	2	2	2	2	2	2
	3	3	2	3	9	9	9	9	9	9	9	9
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	3	3	3	3
	6	6	6	6	6	6	7	7	7	6	6	6
	1	5	6	7	8	9	0	1	2	2	3	4

***TOTALS**

Alimentary System

Esophagus	+	+	+	+	+	+	+	+	+	+	+	+	12
Intestine Large, Cecum	+	+	+	+	+	+	+	A	+	+	+	+	11
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	+	+	12
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	+	+	12
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	+	+	12
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	+	+	12
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	+	+	12
Liver	+	+	+	+	+	+	+	+	+	+	+	+	12
Pancreas	+	+	+	+	+	+	+	+	+	+	+	+	12
Salivary Glands	+	+	+	+	+	+	+	+	+	+	+	+	12
Left, Parotid GI, Degeneration, Focal		1	1										2 1.0
Parotid GI, Right, Degeneration, Diffuse		3		2									2 2.5
Parotid GI, Right, Degeneration, Focal	3		1										2 2.0
Right, Submandibul GI, Degeneration, Diffuse	3	3	3	3									4 3.0
Right, Submandibul GI, Degeneration, Multifocal					1	1	1	1	1	1	1	1	8 1.0
Right, Submandibul GI, Inflammation, Diffuse	3	2	2	2									4 2.3
Right, Submandibul GI, Inflammation, Multifocal					1	1	1	1	1	1	1	1	8 1.0
Right, Submandibul GI, Necrosis, Diffuse	3	3	3	3									4 3.0
Right, Submandibul GI, Necrosis, Multifocal					1	1	1	1	1	1	1	1	8 1.0

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20212-01

Test Type: 18-33 DAYS

Route: INTRADUCTAL CANNULATION

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Adenoviral vector (hGH)

CAS Number: HGH

Date Report Requested: 10/23/2014

Time Report Requested: 07:22:18

First Dose M/F: NA / NA

Lab: MBA

F 344/N Rat Male
2.4 E8 HCQ

DAY ON TEST	ANIMAL ID												*TOTALS				
	0	0	0	0	0	0	0	0	0	0	0	0			0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2	2
	3	3	2	3	9	9	9	9	9	9	9	9	9	9	9	9	9
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	3	3	3	3	3	3	3
	6	6	6	6	6	6	6	7	7	7	6	6	6	6	6	6	6
	1	5	6	7	8	9	0	1	2	2	2	3	3	4			
Right, Submandibul GI, Regeneration, Multifocal					3	1	1	2	2	1	1	1				8	1.5
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	+	+				12	
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	+	+				12	
Cardiovascular System																	
Blood Vessel	+	+	+	+	+	+	+	+	+	+	+	+				12	
Heart	+	+	+	+	+	+	+	+	+	+	+	+				12	
Cardiomyopathy				1			1					1				3	1.0
Endocrine System																	
Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	+	+				12	
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	+	+				12	
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	+	+				12	
Parathyroid Gland	+	+	M	+	+	+	M	+	M	M	M	M				6	
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	+	+				12	
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+				12	
General Body System																	
NONE																	
Genital System																	
Epididymis	+	+	+	+	+	+	+	+	+	+	+	+				12	
Preputial Gland	+	M	+	+	+	+	+	+	+	+	+	+				11	
Prostate	+	+	+	+	+	+	+	+	+	+	+	+				12	

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20212-01

Test Type: 18-33 DAYS

Route: INTRADUCTAL CANNULATION

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Adenoviral vector (hGH)

CAS Number: HGH

Date Report Requested: 10/23/2014

Time Report Requested: 07:22:18

First Dose M/F: NA / NA

Lab: MBA

F 344/N Rat Male
2.4 E8 HCQ

	DAY ON TEST														
	0	0	0	0	0	0	0	0	0	0	0	0			
	0	0	0	0	0	0	0	0	0	0	0	0			
	0	0	0	0	2	2	2	2	2	2	2	2			
	3	3	2	3	9	9	9	9	9	9	9	9			
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0			
	0	0	0	0	0	0	0	0	0	0	0	0			
	0	0	0	0	0	0	0	0	0	3	3	3			
	6	6	6	6	6	6	7	7	7	6	6	6			
	1	5	6	7	8	9	0	1	2	2	3	4			
													*TOTALS		
Seminal Vesicle	+	+	+	+	+	+	+	+	+	+	+	+			12
Testes	+	+	+	+	+	+	+	+	+	+	+	+			12
Hematopoietic System															
Bone Marrow	+	+	+	+	+	+	+	+	+	+	+	+			12
Lymph Node, Mandibular	M	M	M	M	M	M	M	M	M	M	M	M			0
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	+	+			12
Spleen	+	+	+	+	+	+	+	+	+	+	+	+			12
Thymus	+	+	+	+	+	+	+	+	+	+	+	+			12
Depletion Lymphoid	1				1	1	1	1	1		1	1		8	1.0
Integumentary System															
Mammary Gland	+	+	+	+	+	+	+	+	M	+	+	+			11
Skin	+	+	+	+	+	+	+	+	+	+	+	+			12
Musculoskeletal System															
Bone	+	+	+	+	+	+	+	+	+	+	+	+			12
Nervous System															
Brain	+	+	+	+	+	+	+	+	+	+	+	+			12
Respiratory System															
Lung	+	+	+	+	+	+	+	+	+	+	+	+			12
Nose	+	+	+	+	+	+	+	+	+	+	+	+			12
Trachea	+	+	+	+	+	+	+	+	+	+	+	+			12

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

X ..Lesion present

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M ..Missing tissue

A ..Autolysis precludes evaluation

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1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20212-01
 Test Type: 18-33 DAYS
 Route: INTRADUCTAL CANNULATION
 Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 Test Compound: Adenoviral vector (hGH)
 CAS Number: HGH

Date Report Requested: 10/23/2014
 Time Report Requested: 07:22:19
 First Dose M/F: NA / NA
 Lab: MBA

F 344/N Rat Male
2.4 E8 HCQ

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	2	2	2	2	2	2	2	2
	3	3	2	3	9	9	9	9	9	9	9	9
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	3	3	3
	6	6	6	6	6	6	7	7	7	6	6	6
	1	5	6	7	8	9	0	1	2	2	3	4
	*TOTALS											

Special Senses System

Ear													1
Eye	I	+	I	I	+	+	+	+	+	+	I	+	8
Harderian Gland	+	+	+	+	+	+	+	+	+	+	+	+	12

Urinary System

Kidney	+	+	+	+	+	+	+	+	+	+	+	+	12
Urinary Bladder	+	+	+	+	+	+	+	+	+	+	+	+	12

END OF MALE DATA

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

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2) Mild 4) Marked

Experiment Number: 20212-01
Test Type: 18-33 DAYS
Route: INTRADUCTAL CANNULATION
Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
Test Compound: Adenoviral vector (hGH)
CAS Number: HGH

Date Report Requested: 10/23/2014
Time Report Requested: 07:22:19
First Dose M/F: NA / NA
Lab: MBA

**** END OF REPORT ****

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

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