

**Experiment Number:** 20212-02  
**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:** 10/16/2014  
**Time Report Requested:** 17:35:51  
**First Dose M/F:** NA / NA  
**Lab:** MBA

<b>C Number:</b>	C20212
<b>Lock Date:</b>	06/16/2004
<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>	Female
<b>PWG Approval Date</b>	NONE

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First Dose M/F: NA / NA

Lab: MBA

F 344/N Rat Female VEHICLE SALINE	DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	*TOTALS
	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	
	7	7	7	7	7	7	7	8	8	8	8	8	
	3	4	5	6	7	8	9	0	1	2	3	4	

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, Submandibul GI, Degeneration, Diffuse			2										1 2.0
Left, Submandibul GI, Inflammation, Diffuse			1										1 1.0
Left, Submandibul GI, Necrosis, Diffuse			1										1 1.0
Right, Submandibul GI, Degeneration, Diffuse						2	3						2 2.5
Right, Submandibul GI, Degeneration, Multifocal			1										1 1.0
Right, Submandibul GI, Inflammation, Diffuse						1	3						2 2.0
Right, Submandibul GI, Necrosis, Diffuse						1	2						2 1.5
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	+	+	12
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	+	+	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

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 Lab: MBA

**F 344/N Rat Female  
 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	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	
	7	7	7	7	7	7	7	8	8	8	8	8	
	3	4	5	6	7	8	9	0	1	2	3	4	<b>*TOTALS</b>

**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	+	+	I	+	+	+	M	+	8
Pituitary Gland	+	+	+	+	+	+	I	+	+	+	+	+	11
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	12

**General Body System**

NONE

**Genital System**

Clitoral Gland	+	+	+	+	+	+	+	+	+	+	+	+	12
Ovary	+	+	+	+	+	+	+	+	+	+	+	+	12
Uterus	+	+	+	+	+	+	+	+	+	+	+	+	12

**Hematopoietic System**

Bone Marrow	+	+	+	+	+	+	+	+	+	+	+	+	12
Lymph Node, Mandibular	M	M	M	M	M	M	M	M	M	M	M	M	0

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 Species/Strain: Rat/F 344/N

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**  
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 CAS Number: HGH

Date Report Requested: 10/16/2014  
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 First Dose M/F: NA / NA  
 Lab: MBA

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

	DAY ON TEST													
	0	0	0	0	0	0	0	0	0	0	0	0		
ANIMAL ID	0	0	2	2	2	0	0	2	2	2	2	2	*TOTALS	
	3	3	9	9	9	3	3	9	9	9	9			
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	+	+	12	
Spleen	+	+	+	+	+	+	+	+	+	+	+	+	12	
Thymus	+	+	+	+	+	+	+	+	+	+	+	+	12	
Depletion Lymphoid	2	1	1	1	1	1	1			1	1	1	10	1.1
<b>Integumentary System</b>														
Mammary Gland	+	+	+	+	+	+	+	+	+	+	+	+	12	
Skin	+	+	+	+	+	+	+	+	+	+	+	+	12	
<b>Musculoskeletal System</b>														
Bone	+	+	+	+	+	+	+	+	+	+	+	+	12	
<b>Nervous System</b>														
Brain	+	+	+	+	+	+	+	+	+	+	+	+	12	
<b>Respiratory System</b>														
Lung	+	+	+	+	+	+	+	+	+	+	+	+	12	
Nose	+	+	+	+	+	+	+	+	+	+	+	+	12	
Trachea	+	+	+	+	+	+	+	+	+	+	+	+	12	
<b>Special Senses System</b>														
Eye	+	+	+	+	+	+	+	+	+	+	+	+	12	
Cornea, Degeneration									3				1	3.0
Cornea, Inflammation, Focal												2	1	2.0
Cornea, Ulcer			3									2	2	2.5

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Lab: MBA

F 344/N Rat Female  
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	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			
	7	7	7	7	7	7	7	8	8	8	8	8			
	3	4	5	6	7	8	9	0	1	2	3	4	<b>*TOTALS</b>		
Sclera, Edema													3	1	3.0
Harderian Gland	+	+	+	+	+	+	+	+	+	+	+	+	12		
<b>Urinary System</b>															
Kidney	+	+	+	+	+	+	+	+	+	+	+	+	12		
Mineralization, Focal	1	1	1	1	1	1	1	1	1	1	1	1	12	1.0	
Urinary Bladder	+	+	+	+	+	+	+	+	+	+	+	+	12		

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 Lab: MBA

**F 344/N Rat Female  
 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	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
	8	8	8	8	8	9	9	9	9	9	9	9
	5	6	7	8	8	9	0	1	2	3	4	5
	<b>*TOTALS</b>											

**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
Hepatodiaphragmatic Nodule	X												1
Mesentery			+										1
Fat, Inflammation, Chronic Active, Focal			2										1 2.0
Pancreas	+	+	+	+	+	+	+	+	+	+	+	+	12
Infiltration Cellular, Mononuclear CI, Focal		1											1 1.0
Salivary Glands	+	+	+	+	+	+	+	+	+	+	+	+	12
Left, Parotid GI, Degeneration, Focal	1								1				2 1.0
Left, Parotid GI, Inflammation, Focal									1				1 1.0
Parotid GI, Right, Degeneration, Focal	1	1											2 1.0
Right, Submandibul GI, Degeneration, Diffuse	2	2				1							3 1.7
Right, Submandibul GI, Degeneration, Focal							1						1 1.0
Right, Submandibul GI, Inflammation, Diffuse	1	1											2 1.0

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 + ..Tissue examined microscopically  
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 Species/Strain: Rat/F 344/N

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**  
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 First Dose M/F: NA / NA  
 Lab: MBA

F 344/N Rat Female VEHICLE HCQ	DAY ON TEST												*TOTALS	
	0	0	0	0	0	0	0	0	0	0	0	0		
	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		
	8	8	8	8	8	9	9	9	9	9	9	9		
	5	6	7	8	9	0	1	2	3	4	5	6		
Ovary	+	+	+	+	+	+	+	+	+	+	+	+	12	
Uterus	+	+	+	+	+	+	+	+	+	+	+	+	12	
<b>Hematopoietic System</b>														
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	2	1	1	1	1	2	2	1	1	1	1	1	12	1.3
<b>Integumentary System</b>														
Mammary Gland	+	+	+	+	+	+	+	+	+	+	+	+	12	
Skin	+	+	+	+	+	+	+	+	+	+	+	+	12	
<b>Musculoskeletal System</b>														
Bone	+	+	+	+	+	+	+	+	+	+	+	+	12	
<b>Nervous System</b>														
Brain	+	+	+	+	+	+	+	+	+	+	+	+	12	
<b>Respiratory System</b>														
Lung	+	+	+	+	+	+	+	+	+	+	+	+	12	
Nose	+	+	+	+	+	+	+	+	+	+	+	+	12	
Trachea	+	+	+	+	+	+	+	+	+	+	+	+	12	

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**F 344/N Rat Female  
 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	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
	8	8	8	8	8	9	9	9	9	9	9	9
	5	6	7	8	8	9	0	1	2	3	4	5
	<b>*TOTALS</b>											

**Special Senses System**

Eye	+	+	+	+	+	+	+	+	+	+	+	+	12
Cornea, Degeneration			1								2		2 1.5
Harderian Gland	+	+	+	+	+	+	+	+	+	+	+	+	12
Foreign Body	X												1

**Urinary System**

Kidney	+	+	+	+	+	+	+	+	+	+	+	+	12
Mineralization, Focal	1	1	1	1	1	1	1	1	1	1	1	1	12 1.0
Urinary Bladder	+	+	+	+	+	+	+	+	+	+	+	+	12

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Lab: MBA

F 344/N Rat Female  
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	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	1	1	1	1	1	1	1	1	4
	9	9	9	0	0	0	0	0	0	0	0	0
	7	8	9	0	1	2	3	5	6	7	8	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
Hepatodiaphragmatic Nodule						X							1
Pancreas	+	+	+	+	+	+	+	+	+	+	+	+	12
Salivary Glands	+	+	+	+	+	+	+	+	+	+	+	+	12
Left, Parotid Gl, Concretion				X									1
Left, Parotid Gl, Degeneration, Focal	2						1						2 1.5
Left, Parotid Gl, Inflammation, Focal	1												1 1.0
Left, Sublingul Gl, Degeneration, Diffuse	2												1 2.0
Left, Sublingul Gl, Inflammation, Diffuse	2												1 2.0
Parotid Gl, Right, Degeneration, Diffuse							2						1 2.0
Parotid Gl, Right, Degeneration, Focal	1					2							2 1.5
Parotid Gl, Right, Inflammation, Focal						1							1 1.0
Right, Submandibul Gl, Degeneration, Diffuse	2					3	3						3 2.7

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**F 344/N Rat Female**  
**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	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	1	1	1	1	1	1	1	1	4			
	9	9	9	0	0	0	0	0	0	0	0	0			
	7	8	9	0	1	2	3	5	6	7	8	4	<b>*TOTALS</b>		
Right, Submandibul GI, Degeneration, Multifocal				1	1	1			1	1		1	1	7	1.0
Right, Submandibul GI, Infarct								3						1	3.0
Right, Submandibul GI, Inflammation, Diffuse	1						3	3						3	2.3
Right, Submandibul GI, Inflammation, Multifocal				1	2	2			1	2		2	2	7	1.7
Right, Submandibul GI, Necrosis, Diffuse	1						3	3						3	2.3
Right, Submandibul GI, Necrosis, Multifocal				1	1	1			1	1		1	1	7	1.0
Right, Submandibul GI, Regeneration, Multifocal				3	3	3			2	2		1	1	7	2.1
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	+	+	+	12	
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	+	+	+	12	
<b>Cardiovascular System</b>															
Blood Vessel	+	+	+	+	+	+	+	+	+	+	+	+	+	12	
Heart	+	+	+	+	+	+	+	+	+	+	+	+	+	12	
<b>Endocrine System</b>															
Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	+	+	+	12	
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	+	+	+	12	
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	+	+	+	12	
Parathyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	12	
Pituitary Gland	+	+	I	+	+	I	I	+	+	+	I	+	8		
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	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: 20212-02  
 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: 10/16/2014  
 Time Report Requested: 17:35:52  
 First Dose M/F: NA / NA  
 Lab: MBA

**F 344/N Rat Female**  
**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	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	1	1	1	1	1	1	1	1	4
	9	9	9	0	0	0	0	0	0	0	0	0
	7	8	9	0	1	2	3	5	6	7	8	4
	<b>*TOTALS</b>											

**General Body System**

NONE

**Genital System**

Clitoral Gland	+	+	+	+	+	+	+	+	+	+	+	+	12
Ovary	+	+	+	+	+	+	+	+	+	+	+	+	12
Uterus	+	+	+	+	+	+	+	+	+	+	+	+	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	1	1		1	1	10 1.2

**Integumentary System**

Mammary Gland	+	+	+	+	+	+	+	+	+	+	+	+	12
Skin	+	+	+	+	+	+	+	+	+	+	+	+	12

**Musculoskeletal System**

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

**Nervous 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: 20212-02  
 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: 10/16/2014  
 Time Report Requested: 17:35:52  
 First Dose M/F: NA / NA  
 Lab: MBA

**F 344/N Rat Female**  
**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	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	1	1	1	1	1	1	1	1	4			
	9	9	9	0	0	0	0	0	0	0	0	0			
	7	8	9	0	1	2	3	5	6	7	8	4	<b>*TOTALS</b>		
Brain	+	+	+	+	+	+	+	+	+	+	+	+	12		
<b>Respiratory System</b>															
Lung	+	+	+	+	+	+	+	+	+	+	+	+	12		
Nose	+	+	+	+	+	+	+	+	+	+	+	+	12		
Trachea	+	+	+	+	+	+	+	+	+	+	+	+	12		
<b>Special Senses System</b>															
Eye	+	+	+	+	+	+	+	+	+	I	I	I	9		
Cornea, Degeneration				3				3					2	3.0	
Cornea, Inflammation, Focal					2								1	2.0	
Harderian Gland	+	+	+	+	+	+	+	+	+	+	+	+	12		
Infiltration Cellular, Mononuclear CI									1				1	1.0	
<b>Urinary System</b>															
Kidney	+	+	+	+	+	+	+	+	+	+	+	+	12		
Mineralization, Focal	1	1	1	1	1	1	1	1	1	1	1	1	12	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

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: 20212-02

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: 10/16/2014

Time Report Requested: 17:35:52

First Dose M/F: NA / NA

Lab: MBA

F 344/N Rat Female  
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
	1	1	1	1	1	1	1	1	1	1	1	1
	0	1	1	1	1	1	1	1	1	1	1	2
	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	A	+	+	+	+	+	+	+	+	+	+	+	11
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	A	+	+	+	11
Liver	+	+	+	+	+	+	+	+	+	+	+	+	12
Pancreas	+	+	+	+	+	+	+	+	+	+	+	+	12
Artery, Polyarteritis	2												1 2.0
Salivary Glands	+	+	+	+	+	+	+	+	+	+	+	+	12
Left, Parotid GI, Degeneration, Focal		1				1	1						3 1.0
Left, Submandibul GI, Degeneration, Multifocal										1			1 1.0
Left, Submandibul GI, Inflammation, Multifocal										3			1 3.0
Left, Submandibul GI, Necrosis, Multifocal										1			1 1.0
Left, Submandibul GI, Regeneration, Multifocal										2			1 2.0
Parotid GI, Right, Degeneration, Diffuse		2											1 2.0
Parotid GI, Right, Degeneration, Focal						2							1 2.0

\* ..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: 20212-02  
 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: 10/16/2014  
 Time Report Requested: 17:35:53  
 First Dose M/F: NA / NA  
 Lab: MBA

F 344/N Rat Female 1.5 E11 HCQ	DAY ON TEST													
	0	0	0	0	0	0	0	0	0	0	0	0		
ANIMAL ID	0	0	2	2	2	0	0	2	2	2	2	2	*TOTALS	
	3	3	9	9	9	3	3	9	9	9	9	9		
Right, Submandibul GI, Degeneration, Diffuse	4	3				4	4						4	3.8
Right, Submandibul GI, Degeneration, Multifocal			1	1	1			1	1	1		1	7	1.0
Right, Submandibul GI, Infarct	3												1	3.0
Right, Submandibul GI, Inflammation, Diffuse	4	3				4	4						4	3.8
Right, Submandibul GI, Inflammation, Multifocal			2	2	3			1	2	2		2	7	2.0
Right, Submandibul GI, Necrosis, Diffuse	4	3				4	4						4	3.8
Right, Submandibul GI, Necrosis, Multifocal			1	1	1			1	1	1		1	7	1.0
Right, Submandibul GI, Regeneration, Multifocal			2	1	1			1	1	2		1	7	1.3
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	+	+	12	
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	+	+	12	
<b>Cardiovascular System</b>														
Blood Vessel	+	+	+	+	+	+	+	+	+	+	+	+	12	
Heart	+	+	+	+	+	+	+	+	+	+	+	+	12	
Cardiomyopathy						1							1	1.0
<b>Endocrine System</b>														
Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	+	+	12	
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	+	+	12	
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	+	+	12	
Parathyroid 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: 20212-02  
 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: 10/16/2014  
 Time Report Requested: 17:35:53  
 First Dose M/F: NA / NA  
 Lab: MBA

**F 344/N Rat Female**  
**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	
	1	1	1	1	1	1	1	1	1	1	1	1	
	0	1	1	1	1	1	1	1	1	1	1	2	
	9	0	1	2	3	4	5	6	7	8	9	0	<b>*TOTALS</b>
Pituitary Gland	+	I	+	+	+	+	+	+	+	+	+	I	10
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	12
<b>General Body System</b>													
NONE													
<b>Genital System</b>													
Clitoral Gland	+	+	+	+	+	+	+	+	+	+	+	+	12
Ovary	+	+	+	+	+	+	+	+	+	+	+	+	12
Uterus	+	+	+	+	+	+	+	+	+	+	+	+	12
<b>Hematopoietic System</b>													
Bone Marrow	+	+	+	+	+	+	+	+	+	+	+	+	12
Lymph Node	+												1
Mediastinal, Hyperplasia, Lymphoid	2												1 2.0
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	2	2	1	1	1	2	2	2	2	2	2	1	12 1.7
<b>Integumentary System</b>													
Mammary Gland	+	+	+	+	+	+	+	+	+	+	+	+	12
Arteriole, Necrosis								3					1 3.0
Venule, Necrosis								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: 20212-02  
 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: 10/16/2014  
 Time Report Requested: 17:35:53  
 First Dose M/F: NA / NA  
 Lab: MBA

**F 344/N Rat Female**  
**1.5 E11 HCQ**

	DAY ON TEST													
	0	0	0	0	0	0	0	0	0	0	0	0		
ANIMAL ID	0	0	2	2	2	0	0	2	2	2	2	2	*TOTALS	
	3	3	9	9	9	3	3	9	9	9	9			
Skin	0	0	0	0	0	0	0	0	0	0	0	0	12	
Dermis, Fibrosis	0	0	0	0	0	0	0	0	0	0	0	0	2	1 2.0
<b>Musculoskeletal System</b>														
Bone	3	3	9	9	9	3	3	9	9	9	9	9	12	
<b>Nervous System</b>														
Brain	0	0	0	0	0	0	0	0	0	0	0	0	12	
<b>Respiratory System</b>														
Lung	1	1	1	1	1	1	1	1	1	1	1	1	12	
Nose	0	0	0	0	0	0	0	0	0	0	0	0	12	
Trachea	0	0	0	0	0	0	0	0	0	0	0	0	12	
<b>Special Senses System</b>														
Eye	0	0	1	1	1	1	1	1	1	1	1	1	11	
Cornea, Degeneration				1				3				3	3	2.3
Cornea, Ulcer, Focal										2			1	2.0
Harderian Gland	0	0	0	0	0	0	0	0	0	0	0	0	12	
<b>Urinary System</b>														
Kidney	0	0	0	0	0	0	0	0	0	0	0	0	12	
Mineralization, Focal	1		1	1	1	1	1	1	1	1	1	1	11	1.0
Urinary Bladder	0	0	0	0	0	0	0	0	0	0	0	0	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: 20212-02

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: 10/16/2014

Time Report Requested: 17:35:53

First Dose M/F: NA / NA

Lab: MBA

F 344/N Rat Female  
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
	1	1	1	1	1	1	1	1	1	1	1	1
	2	2	2	2	2	2	2	2	2	3	3	3
	1	2	3	4	5	6	7	8	9	0	1	2
	*TOTALS											

Alimentary System

Esophagus	+	+	+	+	+	+	+	+	+	+	+	+	12
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	+	+	12
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	+	+	12
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	+	+	12
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	+	+	12
Intestine Small, Ileum	+	A	+	+	+	+	+	+	+	+	+	+	11
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	A	+	+	11
Liver	+	+	+	+	+	+	+	+	+	+	+	+	12
Hepatodiaphragmatic Nodule			X		X								2
Pancreas	+	+	+	+	+	+	+	+	+	+	+	+	12
Salivary Glands	+	+	+	+	+	+	+	+	+	+	+	+	12
Left, Parotid GI, Degeneration, Focal	1							1					2 1.0
Parotid GI, Right, Degeneration, Focal		2						2					2 2.0
Right, Submandibul GI, Degeneration, Diffuse	2	3					3	3					4 2.8
Right, Submandibul GI, Degeneration, Multifocal			1	1	1			1	1	1	1	1	8 1.0
Right, Submandibul GI, Inflammation, Diffuse	2	2					3	2					4 2.3
Right, Submandibul GI, Inflammation, Multifocal			2	2	2			2	1	2	2	1	8 1.8
Right, Submandibul GI, Necrosis, Diffuse	2	3					3	3					4 2.8
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: 20212-02  
 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: 10/16/2014  
 Time Report Requested: 17:35:53  
 First Dose M/F: NA / NA  
 Lab: MBA

**F 344/N Rat Female**  
**6.0 E9 HCQ**

	DAY ON TEST													
	0	0	0	0	0	0	0	0	0	0	0	0		
ANIMAL ID	0	0	2	2	2	0	0	2	2	2	2	2	*TOTALS	
	3	3	9	9	9	3	3	9	9	9	9			
Right, Submandibul GI, Regeneration, Multifocal	0	0	0	0	0	0	0	0	0	0	0	0	8	1.9
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	+	+	12	
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	+	+	12	
<b>Cardiovascular System</b>														
Blood Vessel	+	+	+	+	+	+	+	+	+	+	+	+	12	
Heart	+	+	+	+	+	+	+	+	+	+	+	+	12	
<b>Endocrine System</b>														
Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	+	+	12	
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	+	+	12	
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	+	+	12	
Parathyroid Gland	+	+	+	+	+	+	+	+	+	M	+	+	11	
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	+	+	12	
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	12	
<b>General Body System</b>														
NONE														
<b>Genital System</b>														
Clitoral Gland	+	+	+	+	+	+	+	+	+	+	+	+	12	
Ovary	+	+	+	+	+	+	+	+	+	+	+	+	12	
Uterus	+	+	+	+	+	+	+	+	+	+	+	+	12	
Bilateral, Hydrometra					2								1	2.0

\* ..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: 20212-02  
 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: 10/16/2014  
 Time Report Requested: 17:35:53  
 First Dose M/F: NA / NA  
 Lab: MBA

**F 344/N Rat Female**  
**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	
	1	1	1	1	1	1	1	1	1	1	1	1	
	2	2	2	2	2	2	2	2	2	3	3	3	
	1	2	3	4	5	6	7	8	9	0	1	2	<b>*TOTALS</b>

**Hematopoietic System**

Bone Marrow	+	+	+	+	+	+	+	+	+	+	+	+	12	
Lymph Node, Mandibular	M	M	M	M	M	+	M	M	M	M	M	M	1	
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	+	+	12	
Spleen	+	+	+	+	+	+	+	+	+	+	+	+	12	
Thymus	+	+	+	+	+	+	+	+	+	+	+	+	12	
Depletion Lymphoid	2	2	1	1	1	2	1	2	2	1	1	2	12	1.5

**Integumentary System**

Mammary Gland	+	+	+	+	+	+	+	+	+	+	+	+	12	
Arteriole, Necrosis						2							1	2.0
Arteriole, Thrombosis						1							1	1.0
Skin	+	+	+	+	+	+	+	+	+	+	+	+	12	
Ulcer, Focal			4										1	4.0

**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

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20212-02  
 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: 10/16/2014  
 Time Report Requested: 17:35:53  
 First Dose M/F: NA / NA  
 Lab: MBA

**F 344/N Rat Female**  
**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			
	1	1	1	1	1	1	1	1	1	1	1	1			
	2	2	2	2	2	2	2	2	2	3	3	3			
	1	2	3	4	5	6	7	8	9	0	1	2			
													<b>*TOTALS</b>		
Trachea	+	+	+	+	+	+	+	+	+	+	+	+			12
<b>Special Senses System</b>															
Eye	+	+	+	+	+	+	+	I	+	I	+	I			9
Cornea, Degeneration									3		2			2	2.5
Cornea, Degeneration, Focal				2										1	2.0
Harderian Gland	+	+	+	+	+	+	+	+	+	+	+	+			12
<b>Urinary System</b>															
Kidney	+	+	+	+	+	+	+	+	+	+	+	+			12
Mineralization, Focal	1	1	1		1	1	1	1	1	1	1	1		11	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

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BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20212-02  
 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: 10/16/2014  
 Time Report Requested: 17:35:53  
 First Dose M/F: NA / NA  
 Lab: MBA

**F 344/N Rat Female**  
**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	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
	1	1	1	1	1	1	1	1	1	1	1	1
	3	3	3	3	3	3	3	4	4	4	4	4
	3	4	5	6	7	8	9	0	1	2	3	4
	<b>*TOTALS</b>											

**Alimentary System**

Esophagus	+	+	+	+	+	+	+	+	+	+	+	+	12
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	+	+	12
Hemorrhage, Focal							2						1 2.0
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	+	+	12
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	+	+	12
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	+	+	12
Intestine Small, Ileum	+	A	+	+	+	+	+	+	+	+	+	+	11
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	+	+	12
Liver	+	+	+	+	+	+	+	+	+	+	+	+	12
Pancreas	+	+	+	+	+	+	+	+	+	+	+	+	12
Salivary Glands	+	+	+	+	+	+	+	+	+	+	+	+	12
Left, Parotid GI, Degeneration, Focal							1						1 1.0
Parotid GI, Right, Degeneration, Focal	2						1						2 1.5
Right, Submandibul GI, Degeneration, Diffuse	3	3				2	3						4 2.8
Right, Submandibul GI, Degeneration, Focal					1								1 1.0
Right, Submandibul GI, Degeneration, Multifocal			1	1				1	1	1	1	1	7 1.0
Right, Submandibul GI, Inflammation, Diffuse	2	2				1	3						4 2.0
Right, Submandibul GI, Inflammation, Focal					1								1 1.0
Right, Submandibul GI, Inflammation, Multifocal			1	1				1	1	1	1	1	7 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: 20212-02

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: 10/16/2014

Time Report Requested: 17:35:53

First Dose M/F: NA / NA

Lab: MBA

F 344/N Rat Female 2.4 E8 HCQ	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	
Right, Submandibul GI, Necrosis, Diffuse	2	3				2	3						4	2.5
Right, Submandibul GI, Necrosis, Focal					1								1	1.0
Right, Submandibul GI, Necrosis, Multifocal			1	1				1	1	1	1	1	7	1.0
Right, Submandibul GI, Regeneration, Focal					1								1	1.0
Right, Submandibul GI, Regeneration, Multifocal			1	1				1	1	2	1	2	7	1.3
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	+	+	12	
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	+	+	12	
<b>Cardiovascular System</b>														
Blood Vessel	+	+	+	+	+	+	+	+	+	+	+	+	12	
Heart	+	+	+	+	+	+	+	+	+	+	+	+	12	
Cardiomyopathy								1					1	1.0
<b>Endocrine System</b>														
Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	+	+	12	
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	+	+	12	
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	+	+	12	
Parathyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	12	
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	+	+	12	
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	12	
<b>General Body System</b>														
NONE														

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Experiment Number: 20212-02  
 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: 10/16/2014  
 Time Report Requested: 17:35:53  
 First Dose M/F: NA / NA  
 Lab: MBA

**F 344/N Rat Female**  
**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	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	
	1	1	1	1	1	1	1	1	1	1	1	1	
	3	3	3	3	3	3	3	4	4	4	4	4	
	3	4	5	6	7	8	9	0	1	2	3	4	<b>*TOTALS</b>

**Genital System**

Clitoral Gland	+	+	+	+	+	+	+	+	+	+	+	+	12	
Ovary	+	+	+	+	+	+	+	+	+	+	+	+	12	
Uterus	+	+	+	+	+	+	+	+	+	+	+	+	12	
Bilateral, Hydrometra					1								1	1.0

**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	2		1	1	2	2	2	1	1	1	1	1	11	1.4

**Integumentary System**

Mammary Gland	+	+	+	+	+	+	+	+	+	+	+	+	12	
Arteriole, Necrosis						3							1	3.0
Arteriole, Thrombosis						3							1	3.0
Skin	+	+	+	+	+	+	+	+	+	+	+	+	12	
Dermis, Fibrosis								3					1	3.0
Epidermis, Hyperplasia, Focal								2					1	2.0

**Musculoskeletal System**

Bone	+	+	+	+	+	+	+	+	+	+	+	+	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: 20212-02  
 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: 10/16/2014  
 Time Report Requested: 17:35:53  
 First Dose M/F: NA / NA  
 Lab: MBA

**F 344/N Rat Female**  
**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	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	
	1	1	1	1	1	1	1	1	1	1	1	1	
	3	3	3	3	3	3	3	4	4	4	4	4	
	3	4	5	6	7	8	9	0	1	2	3	4	<b>*TOTALS</b>

**Nervous System**

Brain + + + + + + + + + + + 12

**Respiratory System**

Lung + + + + + + + + + + + 12

Nose + + + + + + + + + + + 12

Trachea + + + + + + + + + + + 12

**Special Senses System**

Eye + + + + + + + + + + + 12

Cornea, Degeneration 3 3 2 3 2 3 6 2.7

Cornea, Ulcer 2 1 2.0

Harderian Gland + + + + + + + + + + + 12

Infiltration Cellular, Mononuclear CI 2 1 2.0

**Urinary System**

Kidney + + + + + + + + + + + 12

Mineralization, Focal 1 1 1 1 1 1 1 1 1 1 1 12 1.0

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

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

\* ..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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