

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Adenoviral vector (hGH)  
**CAS Number:** HGH

**Date Report Requested:** 10/23/2014  
**Time Report Requested:** 07:20:39  
**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>	Male
<b>PWG Approval Date</b>	NONE

**Experiment Number:** 20212-01  
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**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Adenoviral vector (hGH)  
**CAS Number:** HGH

**Date Report Requested:** 10/23/2014  
**Time Report Requested:** 07:20:39  
**First Dose M/F:** NA / NA  
**Lab:** MBA

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<b>ANIMAL ID:</b> 1	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 3
	<b>DOSE:</b> VEHICLE SALINE	<b>DISP:</b> Scheduled Sacrifice	<b>HISTO:</b> MB474M-1

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Eye	* Harderian Gland	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Kidney	* Liver
* Lung	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Preputial Gland
* Prostate	* Seminal Vesicle	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Testes	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

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**MISSING**

\* Lymph Node, Mandibular

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**OBSERVATIONS**

* Eye			
Note: no optic nerve in sections			
* Salivary Glands	Left, Sublingual GI	Degeneration	Diffuse, Minimal
	Left, Sublingual GI	Inflammation	Diffuse, Minimal
Note: RIGHT SUBLINGUAL GLAND MISSING.			
Note: RIGHT SUBMANDIBULAR GLAND NORMAL.			

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Adenoviral vector (hGH)  
**CAS Number:** HGH

**Date Report Requested:** 10/23/2014  
**Time Report Requested:** 07:20:39  
**First Dose M/F:** NA / NA  
**Lab:** MBA

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<b>ANIMAL ID:</b> 5	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 3
	<b>DOSE:</b> VEHICLE SALINE	<b>DISP:</b> Scheduled Sacrifice	<b>HISTO:</b> MB474M-5

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Harderian Gland	* Heart	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Kidney	* Liver	* Lung
* Lymph Node, Mesenteric	* Nose	* Parathyroid Gland	* Pituitary Gland
* Preputial Gland	* Prostate	* Seminal Vesicle	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Testes
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

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**MISSING**

* Lymph Node, Mandibular	* Mammary Gland
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**INSUFFICIENT TISSUE**

\* Eye

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**OBSERVATIONS**

* Pancreas		Atrophy	Focal, Minimal
* Salivary Glands	Parotid Gland, Right	Degeneration	Focal, Minimal

Note: LEFT AND RIGHT SUBMANDIBULAR GLAND NORMAL.  
Note: LEFT PAROTID GLAND NORMAL.  
Note: LEFT AND RIGHT SUBLINGUAL GLAND NORMAL.

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Adenoviral vector (hGH)  
**CAS Number:** HGH

**Date Report Requested:** 10/23/2014  
**Time Report Requested:** 07:20:39  
**First Dose M/F:** NA / NA  
**Lab:** MBA

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<b>ANIMAL ID:</b> 6	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 3
	<b>DOSE:</b> VEHICLE SALINE	<b>DISP:</b> Scheduled Sacrifice	<b>HISTO:</b> MB474M-6

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Eye	* Harderian Gland	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Kidney	* Liver
* Lung	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Preputial Gland
* Prostate	* Seminal Vesicle	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Testes	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

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**MISSING**

\* Lymph Node, Mandibular

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**OBSERVATIONS**

* Salivary Glands	Parotid GI, Right	Degeneration	Focal, Minimal
	Right, Submandibul GI	Degeneration	Diffuse, Minimal
	Right, Submandibul GI	Inflammation	Diffuse, Minimal
	Right, Submandibul GI	Necrosis	Diffuse, Minimal

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Adenoviral vector (hGH)  
**CAS Number:** HGH

**Date Report Requested:** 10/23/2014  
**Time Report Requested:** 07:20:39  
**First Dose M/F:** NA / NA  
**Lab:** MBA

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<b>ANIMAL ID:</b> 7	<b>TRT#:</b> 1 <b>DOSE:</b> VEHICLE SALINE	<b>SEX:</b> Male <b>DISP:</b> Scheduled Sacrifice	<b>DAY ON TEST:</b> 3 <b>HISTO:</b> MB474M-7
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Harderian Gland	* Heart	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Kidney	* Liver	* Lung
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Pancreas
* Parathyroid Gland	* Pituitary Gland	* Prostate	* Seminal Vesicle
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Testes	* Thyroid Gland	* Trachea	* Urinary Bladder

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**MISSING**

* Lymph Node, Mandibular	* Preputial Gland
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**OBSERVATIONS**

* Eye Note: LEFT EYE - FOREIGN BODY = HAIR	Sclera	Foreign Body	
* Salivary Glands Note: LEFT AND RIGHT SUBLINGUAL GLANDS NORMAL Note: LEFT PAROTID GLAND NORMAL Note: LEFT AND RIGHT SUBMANDIBULAR GLANDS NORMAL	Parotid GI, Right	Degeneration	Focal, Minimal
* Thymus		Depletion Lymphoid	Minimal

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Adenoviral vector (hGH)  
**CAS Number:** HGH

**Date Report Requested:** 10/23/2014  
**Time Report Requested:** 07:20:39  
**First Dose M/F:** NA / NA  
**Lab:** MBA

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<b>ANIMAL ID:</b> 8	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 29
	<b>DOSE:</b> VEHICLE SALINE	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> MB474M-8

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Eye	* Harderian Gland	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Kidney	* Liver
* Lung	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Preputial Gland
* Prostate	* Salivary Glands	* Seminal Vesicle	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Testes
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

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**MISSING**

\* Lymph Node, Mandibular

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Adenoviral vector (hGH)  
**CAS Number:** HGH

**Date Report Requested:** 10/23/2014  
**Time Report Requested:** 07:20:39  
**First Dose M/F:** NA / NA  
**Lab:** MBA

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<b>ANIMAL ID:</b> 9	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 29
	<b>DOSE:</b> VEHICLE SALINE	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> MB474M-9

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Eye	* Harderian Gland	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Kidney	* Liver
* Lung	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Pancreas	* Pituitary Gland	* Prostate	* Salivary Glands
* Seminal Vesicle	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Testes	* Thyroid Gland	* Trachea
* Urinary Bladder			

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**MISSING**

* Lymph Node, Mandibular	* Parathyroid Gland	* Preputial Gland
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**OBSERVATIONS**

* Thymus	Depletion Lymphoid	Minimal
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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Adenoviral vector (hGH)  
**CAS Number:** HGH

**Date Report Requested:** 10/23/2014  
**Time Report Requested:** 07:20:39  
**First Dose M/F:** NA / NA  
**Lab:** MBA

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<b>ANIMAL ID:</b> 10	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 29
	<b>DOSE:</b> VEHICLE SALINE	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> MB474M-10

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Eye	* Harderian Gland	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Kidney	* Liver	* Lung
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Pancreas
* Parathyroid Gland	* Pituitary Gland	* Preputial Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Testes	* Thyroid Gland
* Trachea	* Urinary Bladder		

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**MISSING**

\* Lymph Node, Mandibular

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**OBSERVATIONS**

* Heart	Cardiomyopathy	Minimal
* Thymus	Depletion Lymphoid	Mild

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**PRIMARY CAUSE OF DEATH** -

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\* PROTOCOL REQUIRED TISSUE



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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Adenoviral vector (hGH)  
**CAS Number:** HGH

**Date Report Requested:** 10/23/2014  
**Time Report Requested:** 07:20:39  
**First Dose M/F:** NA / NA  
**Lab:** MBA

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<b>ANIMAL ID:</b> 11	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 29
	<b>DOSE:</b> VEHICLE SALINE	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> MB474M-11

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Eye	* Harderian Gland	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Kidney	* Liver	* Lung
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Pancreas
* Parathyroid Gland	* Pituitary Gland	* Preputial Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Testes	* Thyroid Gland
* Trachea	* Urinary Bladder		

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**MISSING**

\* Lymph Node, Mandibular

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**OBSERVATIONS**

* Heart	Cardiomyopathy	Minimal
* Thymus	Depletion Lymphoid	Minimal

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Adenoviral vector (hGH)  
**CAS Number:** HGH

**Date Report Requested:** 10/23/2014  
**Time Report Requested:** 07:20:39  
**First Dose M/F:** NA / NA  
**Lab:** MBA

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<b>ANIMAL ID:</b> 12	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 29
	<b>DOSE:</b> VEHICLE SALINE	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> MB474M-12

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Eye	* Harderian Gland	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Kidney	* Liver
* Lung	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Preputial Gland
* Prostate	* Salivary Glands	* Seminal Vesicle	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Testes
* Thyroid Gland	* Trachea	* Urinary Bladder	

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**MISSING**

\* Lymph Node, Mandibular

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**OBSERVATIONS**

* Thymus	Depletion Lymphoid	Minimal
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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Adenoviral vector (hGH)  
**CAS Number:** HGH

**Date Report Requested:** 10/23/2014  
**Time Report Requested:** 07:20:39  
**First Dose M/F:** NA / NA  
**Lab:** MBA

**ANIMAL ID:** 13

**TRT#:** 2

**SEX:** Male

**DAY ON TEST:** 3

**DOSE:** VEHICLE HCQ

**DISP:** Scheduled Sacrifice

**HISTO:** MB474M-13

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Eye	* Harderian Gland	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Kidney	* Liver	* Lung
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Pancreas
* Parathyroid Gland	* Pituitary Gland	* Preputial Gland	* Prostate
* Seminal Vesicle	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Testes	* Thyroid Gland	* Trachea
* Urinary Bladder			

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Heart		Cardiomyopathy	Minimal
* Salivary Glands	Right, Submandibul GI	Degeneration	Diffuse, Mild
	Right, Submandibul GI	Inflammation	Diffuse, Mild
	Right, Submandibul GI	Necrosis	Diffuse, Mild
Note: RIGHT AND LEFT SUBLINGUAL GLANDS MISSING.			
Note: RIGHT AND LEFT PAROTID GLANDS NORMAL.			
* Thymus		Depletion Lymphoid	Minimal
Note: increased tingible bodies			

**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Adenoviral vector (hGH)  
**CAS Number:** HGH

**Date Report Requested:** 10/23/2014  
**Time Report Requested:** 07:20:39  
**First Dose M/F:** NA / NA  
**Lab:** MBA

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<b>ANIMAL ID:</b> 14	<b>TRT#:</b> 2	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 3
	<b>DOSE:</b> VEHICLE HCQ	<b>DISP:</b> Scheduled Sacrifice	<b>HISTO:</b> MB474M-14

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Harderian Gland	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Kidney	* Liver	* Lung	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Pancreas	* Parathyroid Gland
* Pituitary Gland	* Preputial Gland	* Prostate	* Seminal Vesicle
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Testes	* Thyroid Gland	* Trachea	* Urinary Bladder

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**MISSING**

\* Lymph Node, Mandibular

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**INSUFFICIENT TISSUE**

\* Eye

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**OBSERVATIONS**

* Heart		Cardiomyopathy	Minimal
* Salivary Glands	Right, Submandibul GI	Degeneration	Diffuse, Minimal
	Right, Submandibul GI	Inflammation	Diffuse, Minimal
	Right, Submandibul GI	Necrosis	Diffuse, Minimal
* Thymus		Depletion Lymphoid	Minimal
Note: increased tingible bodies			
Note: TGL1 - NCL			

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**PRIMARY CAUSE OF DEATH** -

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\* PROTOCOL REQUIRED TISSUE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Adenoviral vector (hGH)  
**CAS Number:** HGH

**Date Report Requested:** 10/23/2014  
**Time Report Requested:** 07:20:39  
**First Dose M/F:** NA / NA  
**Lab:** MBA

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<b>ANIMAL ID:</b> 16	<b>TRT#:</b> 2	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 29
	<b>DOSE:</b> VEHICLE HCQ	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> MB474M-16

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Esophagus	* Harderian Gland
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Kidney	* Liver	* Lung	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Pancreas	* Parathyroid Gland
* Pituitary Gland	* Preputial Gland	* Prostate	* Salivary Glands
* Seminal Vesicle	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Testes	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

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**MISSING**

\* Lymph Node, Mandibular

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**INSUFFICIENT TISSUE**

\* Eye

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**OBSERVATIONS**

* Epididymis	Granuloma Sperm	Focal, Moderate
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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Adenoviral vector (hGH)  
**CAS Number:** HGH

**Date Report Requested:** 10/23/2014  
**Time Report Requested:** 07:20:39  
**First Dose M/F:** NA / NA  
**Lab:** MBA

**ANIMAL ID:** 17

**TRT#:** 2

**SEX:** Male

**DAY ON TEST:** 29

**DOSE:** VEHICLE HCQ

**DISP:** Terminal Sacrifice

**HISTO:** MB474M-17

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Eye	* Harderian Gland	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Kidney	* Liver
* Lung	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Testes	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

**MISSING**

* Lymph Node, Mandibular	* Preputial Gland
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**OBSERVATIONS**

\* Saliv Glands  
Note: SLIDE 6 RIGHT PAROTID AND SUBLINGUAL GLANDS MISSING

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Adenoviral vector (hGH)  
**CAS Number:** HGH

**Date Report Requested:** 10/23/2014  
**Time Report Requested:** 07:20:39  
**First Dose M/F:** NA / NA  
**Lab:** MBA

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<b>ANIMAL ID:</b> 18	<b>TRT#:</b> 2	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 3
	<b>DOSE:</b> VEHICLE HCQ	<b>DISP:</b> Scheduled Sacrifice	<b>HISTO:</b> MB474M-18

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Eye	* Harderian Gland	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Kidney	* Liver
* Lung	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Preputial Gland
* Prostate	* Seminal Vesicle	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Testes	* Thyroid Gland
* Trachea	* Urinary Bladder		

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**MISSING**

\* Lymph Node, Mandibular

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**OBSERVATIONS**

* Salivary Glands	Parotid GI, Right	Degeneration	Focal, Mild
	Right, Submandibul GI	Degeneration	Diffuse, Moderate
	Right, Submandibul GI	Inflammation	Diffuse, Minimal
	Right, Submandibul GI	Necrosis	Diffuse, Minimal
* Thymus		Depletion Lymphoid	Mild

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Note: increased tingible bodies

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Adenoviral vector (hGH)  
**CAS Number:** HGH

**Date Report Requested:** 10/23/2014  
**Time Report Requested:** 07:20:39  
**First Dose M/F:** NA / NA  
**Lab:** MBA

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<b>ANIMAL ID:</b> 19	<b>TRT#:</b> 2	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 3
	<b>DOSE:</b> VEHICLE HCQ	<b>DISP:</b> Scheduled Sacrifice	<b>HISTO:</b> MB474M-19

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Eye	* Harderian Gland	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Kidney	* Liver
* Lung	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Prostate
* Seminal Vesicle	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Testes	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

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**MISSING**

* Lymph Node, Mandibular	* Preputial Gland
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**OBSERVATIONS**

* Eye			
Note: no optic nerve in sections			
* Salivary Glands	Right, Submandibul GI	Degeneration	Diffuse, Minimal
	Right, Submandibul GI	Inflammation	Diffuse, Minimal
	Right, Submandibul GI	Necrosis	Diffuse, Minimal
Note: no sublingual salivary gland in sections			
Note: BOTH SUBLINGUAL GLANDS MISSING			
* Thymus			
Note: TGL1 - NCL			

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**PRIMARY CAUSE OF DEATH** -

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\* PROTOCOL REQUIRED TISSUE



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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Adenoviral vector (hGH)  
**CAS Number:** HGH

**Date Report Requested:** 10/23/2014  
**Time Report Requested:** 07:20:39  
**First Dose M/F:** NA / NA  
**Lab:** MBA

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<b>ANIMAL ID:</b> 20	<b>TRT#:</b> 2	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 29
	<b>DOSE:</b> VEHICLE HCQ	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> MB474M-20

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Eye	* Harderian Gland	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Kidney	* Liver
* Lung	* Lymph Node, Mesenteric	* Nose	* Pancreas
* Pituitary Gland	* Preputial Gland	* Prostate	* Salivary Glands
* Seminal Vesicle	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Testes	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

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**MISSING**

* Lymph Node, Mandibular	* Mammary Gland	* Parathyroid Gland
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**OBSERVATIONS**

\* Saliv Glands  
Note: RIGHT SUBLINGUAL GLAND MISSING

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PRIMARY CAUSE OF DEATH -

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\* PROTOCOL REQUIRED TISSUE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Adenoviral vector (hGH)  
**CAS Number:** HGH

**Date Report Requested:** 10/23/2014  
**Time Report Requested:** 07:20:39  
**First Dose M/F:** NA / NA  
**Lab:** MBA

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<b>ANIMAL ID:</b> 21	<b>TRT#:</b> 2	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 29
	<b>DOSE:</b> VEHICLE HCQ	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> MB474M-21

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Eye	* Harderian Gland	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Kidney	* Liver
* Lung	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Pancreas	* Pituitary Gland	* Preputial Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Testes	* Thyroid Gland
* Trachea	* Urinary Bladder		

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**MISSING**

* Lymph Node, Mandibular	* Parathyroid Gland
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**OBSERVATIONS**

* Thymus	Depletion Lymphoid	Minimal
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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Adenoviral vector (hGH)  
**CAS Number:** HGH

**Date Report Requested:** 10/23/2014  
**Time Report Requested:** 07:20:39  
**First Dose M/F:** NA / NA  
**Lab:** MBA

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<b>ANIMAL ID:</b> 22	<b>TRT#:</b> 2	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 29
	<b>DOSE:</b> VEHICLE HCQ	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> MB474M-22

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Eye	* Harderian Gland	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Kidney	* Liver
* Lung	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Pancreas	* Parathyroid Gland	* Preputial Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Testes	* Thyroid Gland
* Trachea	* Urinary Bladder		

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**MISSING**

\* Lymph Node, Mandibular

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**INSUFFICIENT TISSUE**

\* Pituitary Gland

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**OBSERVATIONS**

\* Saliv Glands

Note: RIGHT PAROTID GLAND - INSUFFICIENT TISSUE

* Thymus	Depletion Lymphoid	Mild
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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Adenoviral vector (hGH)  
**CAS Number:** HGH

**Date Report Requested:** 10/23/2014  
**Time Report Requested:** 07:20:39  
**First Dose M/F:** NA / NA  
**Lab:** MBA

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<b>ANIMAL ID:</b> 23	<b>TRT#:</b> 2	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 29
	<b>DOSE:</b> VEHICLE HCQ	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> MB474M-23

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Eye	* Harderian Gland	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Kidney	* Liver	* Lung
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Pancreas
* Pituitary Gland	* Preputial Gland	* Prostate	* Seminal Vesicle
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Testes	* Thyroid Gland	* Trachea	* Urinary Bladder

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**MISSING**

* Lymph Node, Mandibular	* Parathyroid Gland
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**OBSERVATIONS**

* Heart		Cardiomyopathy	Minimal
* Salivary Glands	Right, Submandibul GI	Degeneration	Multifocal, Minimal
	Right, Submandibul GI	Inflammation	Multifocal, Minimal
	Right, Submandibul GI	Necrosis	Multifocal, Minimal
	Right, Submandibul GI	Regeneration	Multifocal, Moderate
* Thymus		Depletion Lymphoid	Mild

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Note: increased tingible bodies

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**PRIMARY CAUSE OF DEATH** -

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\* PROTOCOL REQUIRED TISSUE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Adenoviral vector (hGH)  
**CAS Number:** HGH

**Date Report Requested:** 10/23/2014  
**Time Report Requested:** 07:20:39  
**First Dose M/F:** NA / NA  
**Lab:** MBA

**ANIMAL ID:** 24

**TRT#:** 2

**SEX:** Male

**DAY ON TEST:** 29

**DOSE:** VEHICLE HCQ

**DISP:** Terminal Sacrifice

**HISTO:** MB474M-24

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Eye	* Harderian Gland	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Kidney	* Liver
* Lung	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Pancreas	* Pituitary Gland	* Preputial Gland	* Prostate
* Seminal Vesicle	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Testes	* Thyroid Gland	* Trachea
* Urinary Bladder			

**MISSING**

* Lymph Node, Mandibular	* Parathyroid Gland
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**OBSERVATIONS**

* Salivary Glands	Parotid GI, Right	Degeneration	Diffuse, Moderate
	Right, Submandibul GI	Degeneration	Diffuse, Moderate
	Right, Submandibul GI	Inflammation	Diffuse, Marked
	Right, Submandibul GI	Necrosis	Diffuse, Moderate
	Right, Submandibul GI	Regeneration	Diffuse, Mild

Note: RIGHT SUBLINGUAL GLAND MISSING

Note: degeneration and inflammation are in right glands

[ Inflammation TGLS = TGL = 1-6 ]

* Thymus	Depletion Lymphoid	Minimal
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**PRIMARY CAUSE OF DEATH** -

\* PROTOCOL REQUIRED TISSUE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Adenoviral vector (hGH)  
**CAS Number:** HGH

**Date Report Requested:** 10/23/2014  
**Time Report Requested:** 07:20:39  
**First Dose M/F:** NA / NA  
**Lab:** MBA

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<b>ANIMAL ID:</b> 28	<b>TRT#:</b> 3	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 3
	<b>DOSE:</b> 6.0 E9 SALINE	<b>DISP:</b> Scheduled Sacrifice	<b>HISTO:</b> MB474M-28

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Eye	* Harderian Gland	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Kidney	* Liver
* Lung	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Preputial Gland
* Prostate	* Seminal Vesicle	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Testes	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

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**MISSING**

\* Lymph Node, Mandibular

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**OBSERVATIONS**

* Salivary Glands	Left, Parotid GI	Degeneration	Focal, Minimal
	Right, Submandibul GI	Degeneration	Diffuse, Marked
	Right, Submandibul GI	Inflammation	Diffuse, Moderate
	Right, Submandibul GI	Necrosis	Diffuse, Marked

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Note: PAROTID GLAND MISSING

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Adenoviral vector (hGH)  
**CAS Number:** HGH

**Date Report Requested:** 10/23/2014  
**Time Report Requested:** 07:20:39  
**First Dose M/F:** NA / NA  
**Lab:** MBA

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<b>ANIMAL ID:</b> 29	<b>TRT#:</b> 3	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 3
	<b>DOSE:</b> 6.0 E9 SALINE	<b>DISP:</b> Scheduled Sacrifice	<b>HISTO:</b> MB474M-29

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Harderian Gland	* Heart	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Kidney	* Liver	* Lung
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Pancreas
* Parathyroid Gland	* Pituitary Gland	* Prostate	* Seminal Vesicle
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Testes	* Thyroid Gland	* Trachea	* Urinary Bladder

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**MISSING**

* Lymph Node, Mandibular	* Preputial Gland
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**INSUFFICIENT TISSUE**

\* Eye

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**OBSERVATIONS**

* Salivary Glands	Right, Submandibul GI	Degeneration	Diffuse, Moderate
	Right, Submandibul GI	Inflammation	Diffuse, Mild
	Right, Submandibul GI	Necrosis	Diffuse, Moderate

Note: SLIDE 6 - RIGHT PAROTID GLAND MISSING

Note: RIGHT SUBLINGUAL GLAND MISSING

* Thymus		Depletion Lymphoid	Minimal
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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Adenoviral vector (hGH)  
**CAS Number:** HGH

**Date Report Requested:** 10/23/2014  
**Time Report Requested:** 07:20:39  
**First Dose M/F:** NA / NA  
**Lab:** MBA

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<b>ANIMAL ID:</b> 30	<b>TRT#:</b> 3	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 3
	<b>DOSE:</b> 6.0 E9 SALINE	<b>DISP:</b> Scheduled Sacrifice	<b>HISTO:</b> MB474M-30

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Eye	* Harderian Gland	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Kidney	* Liver
* Lung	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Preputial Gland
* Prostate	* Seminal Vesicle	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Testes	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

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**MISSING**

\* Lymph Node, Mandibular

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**OBSERVATIONS**

* Salivary Glands	Left, Parotid GI	Degeneration	Focal, Mild
	Parotid GI, Right	Degeneration	Diffuse, Mild
	Right, Submandibul GI	Degeneration	Diffuse, Moderate
	Right, Submandibul GI	Inflammation	Diffuse, Mild
	Right, Submandibul GI	Necrosis	Diffuse, Moderate

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Note: degeneration and inflammation are in right submandibular and parotid glands

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE



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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Adenoviral vector (hGH)  
**CAS Number:** HGH

**Date Report Requested:** 10/23/2014  
**Time Report Requested:** 07:20:39  
**First Dose M/F:** NA / NA  
**Lab:** MBA

**ANIMAL ID:** 31

**TRT#:** 3  
**DOSE:** 6.0 E9 SALINE

**SEX:** Male  
**DISP:** Scheduled Sacrifice

**DAY ON TEST:** 3  
**HISTO:** MB474M-31

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Eye	* Harderian Gland	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Kidney	* Liver
* Lung	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Preputial Gland
* Prostate	* Seminal Vesicle	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Testes	* Thyroid Gland
* Trachea	* Urinary Bladder		

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Salivary Glands	Left, Parotid GI	Degeneration	Focal, Minimal
	Parotid GI, Right	Degeneration	Diffuse, Moderate
	Right, Submandibul GI	Degeneration	Diffuse, Moderate
	Right, Submandibul GI	Inflammation	Diffuse, Mild
	Right, Submandibul GI	Necrosis	Diffuse, Moderate
Note: degeneration and inflammation are in right submandibular and parotid glands			
* Thymus		Depletion Lymphoid	Minimal

**PRIMARY CAUSE OF DEATH** -

\* PROTOCOL REQUIRED TISSUE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Adenoviral vector (hGH)  
**CAS Number:** HGH

**Date Report Requested:** 10/23/2014  
**Time Report Requested:** 07:20:39  
**First Dose M/F:** NA / NA  
**Lab:** MBA

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<b>ANIMAL ID:</b> 32	<b>TRT#:</b> 3	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 29
	<b>DOSE:</b> 6.0 E9 SALINE	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> MB474M-32

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Eye	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Kidney	* Liver	* Lung	* Lymph Node, Mesenteric
* Nose	* Pancreas	* Parathyroid Gland	* Pituitary Gland
* Preputial Gland	* Prostate	* Seminal Vesicle	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Testes
* Thyroid Gland	* Trachea	* Urinary Bladder	

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**MISSING**

\* Lymph Node, Mandibular

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**INSUFFICIENT TISSUE**

\* Mammary Gland

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**OBSERVATIONS**

* Harderian Gland	Artery	Polyarteritis	Minimal
* Heart		Cardiomyopathy	Minimal
* Salivary Glands	Right, Submandibul GI	Degeneration	Multifocal, Minimal
	Right, Submandibul GI	Inflammation	Multifocal, Mild
	Right, Submandibul GI	Necrosis	Multifocal, Minimal
	Right, Submandibul GI	Regeneration	Multifocal, Moderate
* Thymus		Depletion Lymphoid	Minimal

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**PRIMARY CAUSE OF DEATH** -

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\* PROTOCOL REQUIRED TISSUE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Adenoviral vector (hGH)  
**CAS Number:** HGH

**Date Report Requested:** 10/23/2014  
**Time Report Requested:** 07:20:39  
**First Dose M/F:** NA / NA  
**Lab:** MBA

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<b>ANIMAL ID:</b> 33	<b>TRT#:</b> 3	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 29
	<b>DOSE:</b> 6.0 E9 SALINE	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> MB474M-33

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Harderian Gland	* Heart	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Kidney	* Liver	* Lung
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Pancreas
* Parathyroid Gland	* Pituitary Gland	* Preputial Gland	* Prostate
* Seminal Vesicle	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Testes	* Thyroid Gland	* Trachea
* Urinary Bladder			

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**MISSING**

\* Lymph Node, Mandibular

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**OBSERVATIONS**

* Eye	Cornea	Ulcer	Mild
* Salivary Glands	Right, Submandibul GI	Degeneration	Multifocal, Minimal
	Right, Submandibul GI	Inflammation	Multifocal, Mild
	Right, Submandibul GI	Necrosis	Multifocal, Minimal
	Right, Submandibul GI	Regeneration	Multifocal, Moderate
Note: RIGHT SUBLINGUAL GLAND MISSING			
* Thymus		Depletion Lymphoid	Minimal

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Adenoviral vector (hGH)  
**CAS Number:** HGH

**Date Report Requested:** 10/23/2014  
**Time Report Requested:** 07:20:39  
**First Dose M/F:** NA / NA  
**Lab:** MBA

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<b>ANIMAL ID:</b> 34	<b>TRT#:</b> 3	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 29
	<b>DOSE:</b> 6.0 E9 SALINE	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> MB474M-34

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Eye	* Harderian Gland	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Kidney	* Liver	* Lung
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Pancreas
* Pituitary Gland	* Preputial Gland	* Prostate	* Seminal Vesicle
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Testes	* Thyroid Gland	* Trachea	* Urinary Bladder

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**MISSING**

* Lymph Node, Mandibular	* Parathyroid Gland
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**OBSERVATIONS**

* Heart		Cardiomyopathy	Mild
* Salivary Glands	Right, Submandibul GI	Degeneration	Multifocal, Minimal
	Right, Submandibul GI	Inflammation	Multifocal, Mild
	Right, Submandibul GI	Necrosis	Multifocal, Minimal
	Right, Submandibul GI	Regeneration	Multifocal, Moderate
* Thymus		Depletion Lymphoid	Mild

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Adenoviral vector (hGH)  
**CAS Number:** HGH

**Date Report Requested:** 10/23/2014  
**Time Report Requested:** 07:20:39  
**First Dose M/F:** NA / NA  
**Lab:** MBA

**ANIMAL ID:** 35

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 29

**DOSE:** 6.0 E9 SALINE

**DISP:** Terminal Sacrifice

**HISTO:** MB474M-35

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Eye	* Harderian Gland	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Kidney	* Liver
* Lung	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Pancreas	* Pituitary Gland	* Preputial Gland	* Prostate
* Seminal Vesicle	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Testes	* Thyroid Gland	* Trachea
* Urinary Bladder			

**MISSING**

* Lymph Node, Mandibular	* Parathyroid Gland
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**OBSERVATIONS**

* Salivary Glands	Left, Submandibul GI	Degeneration	Multifocal, Minimal
	Left, Submandibul GI	Inflammation	Multifocal, Mild
	Left, Submandibul GI	Necrosis	Multifocal, Minimal
	Left, Submandibul GI	Regeneration	Multifocal, Moderate
Note: LEFT SUBLINGUAL GLAND MISSING			
Note: RIGHT SUBMANDIBULAR GLAND NORMAL			
* Thymus		Depletion Lymphoid	Minimal

**PRIMARY CAUSE OF DEATH** -

\* PROTOCOL REQUIRED TISSUE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Adenoviral vector (hGH)  
**CAS Number:** HGH

**Date Report Requested:** 10/23/2014  
**Time Report Requested:** 07:20:39  
**First Dose M/F:** NA / NA  
**Lab:** MBA

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<b>ANIMAL ID:</b> 36	<b>TRT#:</b> 3	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 29
	<b>DOSE:</b> 6.0 E9 SALINE	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> MB474M-36

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Eye	* Harderian Gland	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Kidney	* Liver	* Lung
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Pancreas
* Parathyroid Gland	* Pituitary Gland	* Preputial Gland	* Prostate
* Seminal Vesicle	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Testes	* Thyroid Gland	* Trachea
* Urinary Bladder			

---

**MISSING**

\* Lymph Node, Mandibular

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**OBSERVATIONS**

* Heart		Cardiomyopathy	Minimal
* Salivary Glands	Right, Submandibul GI	Degeneration	Multifocal, Minimal
	Right, Submandibul GI	Inflammation	Multifocal, Mild
	Right, Submandibul GI	Necrosis	Multifocal, Minimal
	Right, Submandibul GI	Regeneration	Multifocal, Moderate
Note: RIGHT SUBLINGUAL GLAND MISSING			
* Thymus		Depletion Lymphoid	Minimal
Note: increased tingible bodies			

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**PRIMARY CAUSE OF DEATH** -

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\* PROTOCOL REQUIRED TISSUE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Adenoviral vector (hGH)  
**CAS Number:** HGH

**Date Report Requested:** 10/23/2014  
**Time Report Requested:** 07:20:39  
**First Dose M/F:** NA / NA  
**Lab:** MBA

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<b>ANIMAL ID:</b> 37	<b>TRT#:</b> 4	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 3
	<b>DOSE:</b> 1.5 E11 HCQ	<b>DISP:</b> Scheduled Sacrifice	<b>HISTO:</b> MB474M-37

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Harderian Gland	* Heart	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Kidney	* Liver	* Lung
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Pancreas
* Parathyroid Gland	* Pituitary Gland	* Preputial Gland	* Prostate
* Seminal Vesicle	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Testes	* Thyroid Gland	* Trachea
* Urinary Bladder			

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**MISSING**

\* Lymph Node, Mandibular

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**INSUFFICIENT TISSUE**

\* Eye

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**OBSERVATIONS**

* Salivary Glands	Parotid GI, Right	Degeneration	Diffuse, Moderate
	Right, Submandibul GI	Degeneration	Diffuse, Marked
	Right, Submandibul GI	Inflammation	Diffuse, Marked
	Right, Submandibul GI	Necrosis	Diffuse, Marked
Note: degeneration and inflammation are in the right parotid and submandibular glands			
* Thymus		Depletion Lymphoid	Minimal

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**PRIMARY CAUSE OF DEATH** -

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\* PROTOCOL REQUIRED TISSUE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Adenoviral vector (hGH)  
**CAS Number:** HGH

**Date Report Requested:** 10/23/2014  
**Time Report Requested:** 07:20:39  
**First Dose M/F:** NA / NA  
**Lab:** MBA

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<b>ANIMAL ID:</b> 38	<b>TRT#:</b> 4	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 3
	<b>DOSE:</b> 1.5 E11 HCQ	<b>DISP:</b> Scheduled Sacrifice	<b>HISTO:</b> MB474M-38

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Eye	* Harderian Gland	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Kidney	* Liver
* Lung	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Preputial Gland
* Prostate	* Seminal Vesicle	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Testes	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

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**MISSING**

\* Lymph Node, Mandibular

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**OBSERVATIONS**

* Salivary Glands	Parotid GI, Right	Degeneration	Diffuse, Mild
	Right, Submandibul GI	Degeneration	Diffuse, Marked
	Right, Submandibul GI	Inflammation	Diffuse, Marked
	Right, Submandibul GI	Necrosis	Diffuse, Marked

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE



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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Adenoviral vector (hGH)  
**CAS Number:** HGH

**Date Report Requested:** 10/23/2014  
**Time Report Requested:** 07:20:39  
**First Dose M/F:** NA / NA  
**Lab:** MBA

**ANIMAL ID:** 39

**TRT#:** 4

**SEX:** Male

**DAY ON TEST:** 29

**DOSE:** 1.5 E11 HCQ

**DISP:** Terminal Sacrifice

**HISTO:** MB474M-39

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Harderian Gland	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Kidney	* Liver	* Lung	* Lymph Node, Mesenteric
* Nose	* Pancreas	* Parathyroid Gland	* Pituitary Gland
* Prostate	* Seminal Vesicle	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Testes	* Thyroid Gland
* Trachea	* Urinary Bladder		

**MISSING**

* Lymph Node, Mandibular	* Mammary Gland	* Preputial Gland
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**OBSERVATIONS**

* Eye Note: SLIDE 10A - INSUFFICIENT TISSUE	Cornea	Degeneration	Mild
* Heart		Cardiomyopathy	Minimal
* Salivary Glands	Right, Submandibul GI	Degeneration	Multifocal, Minimal
	Right, Submandibul GI	Inflammation	Multifocal, Minimal
	Right, Submandibul GI	Necrosis	Multifocal, Minimal
	Right, Submandibul GI	Regeneration	Multifocal, Mild
Note: LEFT PAROTID GLAND MISSING Note: LEFT AND RIGHT SUBLINGUAL GLAND MISSING			
* Thymus		Depletion Lymphoid	Minimal

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Adenoviral vector (hGH)  
**CAS Number:** HGH

**Date Report Requested:** 10/23/2014  
**Time Report Requested:** 07:20:39  
**First Dose M/F:** NA / NA  
**Lab:** MBA

**ANIMAL ID:** 40

**TRT#:** 4

**SEX:** Male

**DAY ON TEST:** 29

**DOSE:** 1.5 E11 HCQ

**DISP:** Terminal Sacrifice

**HISTO:** MB474M-40

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Eye	* Harderian Gland	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Kidney	* Liver
* Lung	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Preputial Gland
* Prostate	* Seminal Vesicle	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Testes	* Thyroid Gland
* Trachea	* Urinary Bladder		

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Salivary Glands	Right, Submandibul GI	Degeneration	Multifocal, Minimal
	Right, Submandibul GI	Inflammation	Multifocal, Mild
	Right, Submandibul GI	Necrosis	Multifocal, Minimal
	Right, Submandibul GI	Regeneration	Multifocal, Moderate
* Thymus		Depletion Lymphoid	Mild

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Adenoviral vector (hGH)  
**CAS Number:** HGH

**Date Report Requested:** 10/23/2014  
**Time Report Requested:** 07:20:39  
**First Dose M/F:** NA / NA  
**Lab:** MBA

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<b>ANIMAL ID:</b> 41	<b>TRT#:</b> 4	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 29
	<b>DOSE:</b> 1.5 E11 HCQ	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> MB474M-41

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Esophagus	* Eye
* Harderian Gland	* Heart	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Kidney	* Liver	* Lung
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Pancreas
* Parathyroid Gland	* Pituitary Gland	* Prostate	* Seminal Vesicle
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Testes	* Thyroid Gland	* Trachea	* Urinary Bladder

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**MISSING**

* Lymph Node, Mandibular	* Preputial Gland
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**OBSERVATIONS**

* Epididymis		Granuloma Sperm	Focal, Mild
* Salivary Glands	Right, Submandibul GI	Degeneration	Multifocal, Mild
	Right, Submandibul GI	Inflammation	Multifocal, Moderate
	Right, Submandibul GI	Necrosis	Multifocal, Mild
	Right, Submandibul GI	Regeneration	Multifocal, Marked
Note: RIGHT SUBLINGUAL GLAND MISSING			
* Thymus		Depletion Lymphoid	Minimal

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**PRIMARY CAUSE OF DEATH** -

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\* PROTOCOL REQUIRED TISSUE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Adenoviral vector (hGH)  
**CAS Number:** HGH

**Date Report Requested:** 10/23/2014  
**Time Report Requested:** 07:20:39  
**First Dose M/F:** NA / NA  
**Lab:** MBA

**ANIMAL ID:** 42

**TRT#:** 4

**SEX:** Male

**DAY ON TEST:** 3

**DOSE:** 1.5 E11 HCQ

**DISP:** Scheduled Sacrifice

**HISTO:** MB474M-42

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Eye	* Harderian Gland	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Kidney	* Liver
* Lung	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Prostate
* Seminal Vesicle	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Testes	* Thyroid Gland	* Trachea
* Urinary Bladder			

**MISSING**

* Lymph Node, Mandibular	* Preputial Gland
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**OBSERVATIONS**

* Salivary Glands	Parotid GI, Right	Degeneration	Diffuse, Mild
	Right, Submandibul GI	Degeneration	Diffuse, Marked
	Right, Submandibul GI	Inflammation	Diffuse, Marked
	Right, Submandibul GI	Necrosis	Diffuse, Marked
[ Degeneration TGLS = 1-6 ]			
[ Inflammation TGLS = 1-6 ]			
* Thymus		Depletion Lymphoid	Minimal

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Adenoviral vector (hGH)  
**CAS Number:** HGH

**Date Report Requested:** 10/23/2014  
**Time Report Requested:** 07:20:39  
**First Dose M/F:** NA / NA  
**Lab:** MBA

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<b>ANIMAL ID:</b> 43	<b>TRT#:</b> 4	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 3
	<b>DOSE:</b> 1.5 E11 HCQ	<b>DISP:</b> Scheduled Sacrifice	<b>HISTO:</b> MB474M-43

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Eye	* Harderian Gland	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Kidney	* Liver	* Lung
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Pancreas
* Pituitary Gland	* Preputial Gland	* Prostate	* Seminal Vesicle
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Testes	* Thyroid Gland	* Trachea	* Urinary Bladder

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**MISSING**

* Lymph Node, Mandibular	* Parathyroid Gland
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**OBSERVATIONS**

* Eye			
Note: no optic nerve in sections			
* Heart		Cardiomyopathy	Mild
* Salivary Glands	Right, Submandibul GI	Degeneration	Diffuse, Mild
	Right, Submandibul GI	Inflammation	Diffuse, Mild
	Right, Submandibul GI	Necrosis	Diffuse, Mild
* Thymus		Depletion Lymphoid	Minimal

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Adenoviral vector (hGH)  
**CAS Number:** HGH

**Date Report Requested:** 10/23/2014  
**Time Report Requested:** 07:20:39  
**First Dose M/F:** NA / NA  
**Lab:** MBA

**ANIMAL ID:** 44

**TRT#:** 4

**SEX:** Male

**DAY ON TEST:** 29

**DOSE:** 1.5 E11 HCQ

**DISP:** Terminal Sacrifice

**HISTO:** MB474M-44

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Harderian Gland	* Heart	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Kidney	* Liver	* Lung
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Parathyroid Gland
* Pituitary Gland	* Preputial Gland	* Prostate	* Seminal Vesicle
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Testes	* Thyroid Gland	* Trachea	* Urinary Bladder

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Eye	Sclera	Edema	Minimal
* Pancreas	Duct	Concretion	
		Infiltration Cellular	Mononuclear CI, Focal, Minimal
* Salivary Glands	Right, Submandibul GI	Degeneration	Multifocal, Minimal
	Right, Submandibul GI	Inflammation	Multifocal, Mild
	Right, Submandibul GI	Necrosis	Multifocal, Minimal
	Right, Submandibul GI	Regeneration	Multifocal, Mild
* Thymus		Depletion Lymphoid	Minimal

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Adenoviral vector (hGH)  
**CAS Number:** HGH

**Date Report Requested:** 10/23/2014  
**Time Report Requested:** 07:20:39  
**First Dose M/F:** NA / NA  
**Lab:** MBA

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<b>ANIMAL ID:</b> 45	<b>TRT#:</b> 4	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 29
	<b>DOSE:</b> 1.5 E11 HCQ	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> MB474M-45

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Eye	* Heart	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Kidney	* Liver	* Lung
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Pancreas
* Parathyroid Gland	* Preputial Gland	* Prostate	* Salivary Glands
* Seminal Vesicle	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Testes	* Thyroid Gland	* Trachea
* Urinary Bladder			

---

**MISSING**

\* Lymph Node, Mandibular

---

**INSUFFICIENT TISSUE**

\* Pituitary Gland

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**OBSERVATIONS**

* Harderian Gland	Infiltration Cellular	Mononuclear CI, Focal, Moderate
* Thymus	Depletion Lymphoid	Minimal

Note: increased tingible bodies

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**PRIMARY CAUSE OF DEATH** -

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\* PROTOCOL REQUIRED TISSUE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Adenoviral vector (hGH)  
**CAS Number:** HGH

**Date Report Requested:** 10/23/2014  
**Time Report Requested:** 07:20:39  
**First Dose M/F:** NA / NA  
**Lab:** MBA

---

<b>ANIMAL ID:</b> 46	<b>TRT#:</b> 4	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 29
	<b>DOSE:</b> 1.5 E11 HCQ	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> MB474M-46

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Harderian Gland	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Kidney	* Liver	* Lung	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Pancreas	* Parathyroid Gland
* Pituitary Gland	* Preputial Gland	* Prostate	* Seminal Vesicle
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Testes	* Thyroid Gland	* Trachea	* Urinary Bladder

---

**MISSING**

\* Lymph Node, Mandibular

---

**OBSERVATIONS**

* Eye	Sclera	Edema	Mild
* Heart		Cardiomyopathy	Minimal
* Salivary Glands	Right, Submandibul GI	Degeneration	Multifocal, Minimal
	Right, Submandibul GI	Inflammation	Multifocal, Mild
	Right, Submandibul GI	Necrosis	Multifocal, Minimal
	Right, Submandibul GI	Regeneration	Multifocal, Moderate
* Thymus		Depletion Lymphoid	Minimal

---

**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE



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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Adenoviral vector (hGH)  
**CAS Number:** HGH

**Date Report Requested:** 10/23/2014  
**Time Report Requested:** 07:20:39  
**First Dose M/F:** NA / NA  
**Lab:** MBA

---

<b>ANIMAL ID:</b> 47	<b>TRT#:</b> 4	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 29
	<b>DOSE:</b> 1.5 E11 HCQ	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> MB474M-47

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Harderian Gland	* Heart	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Kidney	* Liver	* Lung
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Pancreas
* Parathyroid Gland	* Pituitary Gland	* Preputial Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Testes	* Thyroid Gland
* Trachea	* Urinary Bladder		

---

**MISSING**

\* Lymph Node, Mandibular

---

**OBSERVATIONS**

* Eye	Cornea	Degeneration	Minimal
* Saliv Glands			
Note: SLIDE 6 - RIGHT SUBMANDIBULAR GLAND MISSING			
* Thymus		Depletion Lymphoid	Mild
Note: increased tingible bodies			

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Adenoviral vector (hGH)  
**CAS Number:** HGH

**Date Report Requested:** 10/23/2014  
**Time Report Requested:** 07:20:39  
**First Dose M/F:** NA / NA  
**Lab:** MBA

---

<b>ANIMAL ID:</b> 48	<b>TRT#:</b> 4	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 29
	<b>DOSE:</b> 1.5 E11 HCQ	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> MB474M-48

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**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Eye	* Harderian Gland	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Kidney	* Liver	* Lung
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Pancreas
* Parathyroid Gland	* Pituitary Gland	* Preputial Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Testes	* Thyroid Gland
* Trachea	* Urinary Bladder		

---

**MISSING**

\* Lymph Node, Mandibular

---

**OBSERVATIONS**

* Heart	Cardiomyopathy	Minimal
* Thymus	Depletion Lymphoid	Mild

Note: increased tingible bodies

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**PRIMARY CAUSE OF DEATH** -

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\* PROTOCOL REQUIRED TISSUE



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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Adenoviral vector (hGH)  
**CAS Number:** HGH

**Date Report Requested:** 10/23/2014  
**Time Report Requested:** 07:20:39  
**First Dose M/F:** NA / NA  
**Lab:** MBA

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<b>ANIMAL ID:</b> 50	<b>TRT#:</b> 5	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 3
	<b>DOSE:</b> 6.0 E9 HCQ	<b>DISP:</b> Scheduled Sacrifice	<b>HISTO:</b> MB474M-50

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Harderian Gland	* Heart	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Liver	* Lung	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Pancreas	* Pituitary Gland
* Prostate	* Seminal Vesicle	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Testes	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

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**MISSING**

* Lymph Node, Mandibular	* Preputial Gland
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**INSUFFICIENT TISSUE**

* Eye	* Parathyroid Gland
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**OBSERVATIONS**

* Kidney	Renal Tubule	Dilatation	Minimal
* Salivary Glands	Left, Parotid GI	Degeneration	Focal, Minimal
	Left, Submandibul GI	Degeneration	Diffuse, Moderate
	Parotid GI, Right	Degeneration	Diffuse, Moderate
	Right, Submandibul GI	Degeneration	Multifocal, Minimal
	Left, Submandibul GI	Inflammation	Diffuse, Moderate
	Left, Submandibul GI	Necrosis	Diffuse, Moderate
	Right, Submandibul GI	Necrosis	Multifocal, Minimal

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Note: inflammation and degeneration are in the right parotid and the left submandibular glands; possible embedding error switching right and left submandibular?

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Adenoviral vector (hGH)  
**CAS Number:** HGH

**Date Report Requested:** 10/23/2014  
**Time Report Requested:** 07:20:39  
**First Dose M/F:** NA / NA  
**Lab:** MBA

---

<b>ANIMAL ID:</b> 51	<b>TRT#:</b> 5	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 29
	<b>DOSE:</b> 6.0 E9 HCQ	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> MB474M-51

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Eye	* Harderian Gland	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Kidney	* Liver
* Lung	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Pancreas	* Pituitary Gland	* Preputial Gland	* Prostate
* Seminal Vesicle	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Testes	* Thyroid Gland	* Trachea
* Urinary Bladder			

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**MISSING**

* Lymph Node, Mandibular	* Parathyroid Gland
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**OBSERVATIONS**

* Salivary Glands	Right, Submandibul GI	Degeneration	Multifocal, Minimal
	Right, Submandibul GI	Inflammation	Multifocal, Mild
	Right, Submandibul GI	Necrosis	Multifocal, Minimal
	Right, Submandibul GI	Regeneration	Multifocal, Moderate
* Thymus		Depletion Lymphoid	Minimal

---

Note: increased tingible bodies

**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Adenoviral vector (hGH)  
**CAS Number:** HGH

**Date Report Requested:** 10/23/2014  
**Time Report Requested:** 07:20:39  
**First Dose M/F:** NA / NA  
**Lab:** MBA

**ANIMAL ID:** 52

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 29

**DOSE:** 6.0 E9 HCQ

**DISP:** Terminal Sacrifice

**HISTO:** MB474M-52

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Eye	* Harderian Gland	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Kidney	* Liver
* Lung	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Prostate
* Seminal Vesicle	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Testes	* Thyroid Gland	* Trachea
* Urinary Bladder			

**MISSING**

* Lymph Node, Mandibular	* Preputial Gland
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**OBSERVATIONS**

* Salivary Glands	Right, Submandibul GI	Degeneration	Multifocal, Minimal
	Right, Submandibul GI	Inflammation	Multifocal, Mild
	Right, Submandibul GI	Necrosis	Multifocal, Minimal
	Right, Submandibul GI	Regeneration	Multifocal, Marked
* Thymus		Depletion Lymphoid	Minimal

Note: increased tingible bodies

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Adenoviral vector (hGH)  
**CAS Number:** HGH

**Date Report Requested:** 10/23/2014  
**Time Report Requested:** 07:20:39  
**First Dose M/F:** NA / NA  
**Lab:** MBA

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<b>ANIMAL ID:</b> 53	<b>TRT#:</b> 5	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 29
	<b>DOSE:</b> 6.0 E9 HCQ	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> MB474M-53

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Eye	* Harderian Gland	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Kidney	* Liver	* Lung
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Pancreas
* Parathyroid Gland	* Pituitary Gland	* Preputial Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Testes	* Thyroid Gland
* Trachea	* Urinary Bladder		

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**MISSING**

\* Lymph Node, Mandibular

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**OBSERVATIONS**

* Heart	Cardiomyopathy	Minimal
* Thymus	Depletion Lymphoid	Mild

Note: increased tingible bodies

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**PRIMARY CAUSE OF DEATH** -

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\* PROTOCOL REQUIRED TISSUE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Adenoviral vector (hGH)  
**CAS Number:** HGH

**Date Report Requested:** 10/23/2014  
**Time Report Requested:** 07:20:39  
**First Dose M/F:** NA / NA  
**Lab:** MBA

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<b>ANIMAL ID:</b> 54	<b>TRT#:</b> 5	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 3
	<b>DOSE:</b> 6.0 E9 HCQ	<b>DISP:</b> Scheduled Sacrifice	<b>HISTO:</b> MB474M-54

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Eye	* Harderian Gland	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Kidney	* Liver
* Lung	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Prostate
* Seminal Vesicle	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Testes	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

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**MISSING**

* Lymph Node, Mandibular	* Preputial Gland
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**OBSERVATIONS**

* Salivary Glands	Parotid GI, Right	Degeneration	Focal, Moderate
	Right, Submandibul GI	Degeneration	Diffuse, Moderate
	Right, Submandibul GI	Inflammation	Diffuse, Moderate
	Right, Submandibul GI	Necrosis	Diffuse, Moderate

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE



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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Adenoviral vector (hGH)  
**CAS Number:** HGH

**Date Report Requested:** 10/23/2014  
**Time Report Requested:** 07:20:39  
**First Dose M/F:** NA / NA  
**Lab:** MBA

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<b>ANIMAL ID:</b> 55	<b>TRT#:</b> 5	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 3
	<b>DOSE:</b> 6.0 E9 HCQ	<b>DISP:</b> Scheduled Sacrifice	<b>HISTO:</b> MB474M-55

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Eye	* Harderian Gland	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Kidney	* Liver
* Lung	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Preputial Gland
* Prostate	* Seminal Vesicle	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Testes	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

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**MISSING**

\* Lymph Node, Mandibular

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**OBSERVATIONS**

* Salivary Glands	Parotid GI, Right	Degeneration	Focal, Minimal
	Right, Sublingul GI	Degeneration	Diffuse, Moderate
	Right, Sublingul GI	Inflammation	Diffuse, Moderate
	Right, Sublingul GI	Necrosis	Diffuse, Minimal

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Adenoviral vector (hGH)  
**CAS Number:** HGH

**Date Report Requested:** 10/23/2014  
**Time Report Requested:** 07:20:39  
**First Dose M/F:** NA / NA  
**Lab:** MBA

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<b>ANIMAL ID:</b> 56	<b>TRT#:</b> 5	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 29
	<b>DOSE:</b> 6.0 E9 HCQ	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> MB474M-56

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Eye	* Harderian Gland	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Kidney	* Liver
* Lung	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Preputial Gland
* Prostate	* Seminal Vesicle	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Testes	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

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**MISSING**

\* Lymph Node, Mandibular

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**OBSERVATIONS**

* Salivary Glands	Right, Submandibul GI	Degeneration	Multifocal, Minimal
	Right, Submandibul GI	Inflammation	Multifocal, Minimal
	Right, Submandibul GI	Necrosis	Multifocal, Minimal

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Adenoviral vector (hGH)  
**CAS Number:** HGH

**Date Report Requested:** 10/23/2014  
**Time Report Requested:** 07:20:39  
**First Dose M/F:** NA / NA  
**Lab:** MBA

**ANIMAL ID:** 57

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 29

**DOSE:** 6.0 E9 HCQ

**DISP:** Terminal Sacrifice

**HISTO:** MB474M-57

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Eye	* Harderian Gland	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Kidney	* Liver
* Lung	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Preputial Gland
* Prostate	* Seminal Vesicle	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Testes	* Thyroid Gland
* Trachea	* Urinary Bladder		

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Salivary Glands	Right, Submandibul GI	Degeneration	Multifocal, Minimal
	Right, Submandibul GI	Inflammation	Multifocal, Minimal
	Right, Submandibul GI	Necrosis	Multifocal, Minimal
	Right, Submandibul GI	Regeneration	Multifocal, Minimal
* Thymus		Depletion Lymphoid	Minimal

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Adenoviral vector (hGH)  
**CAS Number:** HGH

**Date Report Requested:** 10/23/2014  
**Time Report Requested:** 07:20:39  
**First Dose M/F:** NA / NA  
**Lab:** MBA

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<b>ANIMAL ID:</b> 58	<b>TRT#:</b> 5	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 29
	<b>DOSE:</b> 6.0 E9 HCQ	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> MB474M-58

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Harderian Gland	* Heart	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Kidney	* Liver	* Lung
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Pancreas
* Parathyroid Gland	* Pituitary Gland	* Preputial Gland	* Prostate
* Seminal Vesicle	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Testes	* Thyroid Gland	* Trachea
* Urinary Bladder			

---

**MISSING**

\* Lymph Node, Mandibular

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**INSUFFICIENT TISSUE**

\* Eye

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**OBSERVATIONS**

* Salivary Glands	Right, Submandibul GI	Degeneration	Multifocal, Minimal
	Right, Submandibul GI	Inflammation	Multifocal, Mild
	Right, Submandibul GI	Necrosis	Multifocal, Minimal
	Right, Submandibul GI	Regeneration	Multifocal, Minimal
* Thymus		Depletion Lymphoid	Mild

---

**PRIMARY CAUSE OF DEATH** -

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\* PROTOCOL REQUIRED TISSUE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Adenoviral vector (hGH)  
**CAS Number:** HGH

**Date Report Requested:** 10/23/2014  
**Time Report Requested:** 07:20:39  
**First Dose M/F:** NA / NA  
**Lab:** MBA

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<b>ANIMAL ID:</b> 59	<b>TRT#:</b> 5	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 29
	<b>DOSE:</b> 6.0 E9 HCQ	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> MB474M-59

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Harderian Gland	* Heart	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Kidney	* Liver	* Lung
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Pancreas
* Parathyroid Gland	* Pituitary Gland	* Preputial Gland	* Prostate
* Seminal Vesicle	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Testes	* Thyroid Gland	* Trachea
* Urinary Bladder			

---

**MISSING**

\* Lymph Node, Mandibular

---

**OBSERVATIONS**

* Eye	Cornea	Degeneration	Mild
* Salivary Glands	Right, Submandibul GI	Degeneration	Multifocal, Minimal
	Right, Submandibul GI	Inflammation	Multifocal, Minimal
	Right, Submandibul GI	Necrosis	Multifocal, Minimal
	Right, Submandibul GI	Regeneration	Multifocal, Moderate
* Thymus		Depletion Lymphoid	Mild

Note: increased tingible bodies

---

**PRIMARY CAUSE OF DEATH** -

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\* PROTOCOL REQUIRED TISSUE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Adenoviral vector (hGH)  
**CAS Number:** HGH

**Date Report Requested:** 10/23/2014  
**Time Report Requested:** 07:20:39  
**First Dose M/F:** NA / NA  
**Lab:** MBA

---

<b>ANIMAL ID:</b> 60	<b>TRT#:</b> 5	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 29
	<b>DOSE:</b> 6.0 E9 HCQ	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> MB474M-60

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Kidney	* Liver	* Lung	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Pancreas	* Parathyroid Gland
* Pituitary Gland	* Preputial Gland	* Prostate	* Salivary Glands
* Seminal Vesicle	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Testes	* Thyroid Gland	* Trachea
* Urinary Bladder			

---

**MISSING**

\* Lymph Node, Mandibular

---

**OBSERVATIONS**

* Eye	Cornea	Degeneration	Mild
* Harderian Gland		Necrosis	Mild
* Thymus		Depletion Lymphoid	Mild

Note: increased tingible bodies

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Adenoviral vector (hGH)  
**CAS Number:** HGH

**Date Report Requested:** 10/23/2014  
**Time Report Requested:** 07:20:39  
**First Dose M/F:** NA / NA  
**Lab:** MBA

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<b>ANIMAL ID:</b> 61	<b>TRT#:</b> 6	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 3
	<b>DOSE:</b> 2.4 E8 HCQ	<b>DISP:</b> Scheduled Sacrifice	<b>HISTO:</b> MB474M-61

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Harderian Gland	* Heart	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Kidney	* Liver	* Lung
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Pancreas
* Parathyroid Gland	* Pituitary Gland	* Preputial Gland	* Prostate
* Seminal Vesicle	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Testes	* Thyroid Gland	* Trachea
* Urinary Bladder			

---

**MISSING**

\* Lymph Node, Mandibular

---

**INSUFFICIENT TISSUE**

\* Eye

---

**OBSERVATIONS**

* Salivary Glands	Parotid GI, Right	Degeneration	Focal, Moderate
	Right, Submandibul GI	Degeneration	Diffuse, Moderate
	Right, Submandibul GI	Inflammation	Diffuse, Moderate
	Right, Submandibul GI	Necrosis	Diffuse, Moderate
Note: RIGHT SUBLINGUAL GLAND MISSING			
* Thymus		Depletion Lymphoid	Minimal

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**PRIMARY CAUSE OF DEATH** -

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\* PROTOCOL REQUIRED TISSUE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Adenoviral vector (hGH)  
**CAS Number:** HGH

**Date Report Requested:** 10/23/2014  
**Time Report Requested:** 07:20:39  
**First Dose M/F:** NA / NA  
**Lab:** MBA

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<b>ANIMAL ID:</b> 65	<b>TRT#:</b> 6	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 3
	<b>DOSE:</b> 2.4 E8 HCQ	<b>DISP:</b> Scheduled Sacrifice	<b>HISTO:</b> MB474M-65

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Eye	* Harderian Gland	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Kidney	* Liver
* Lung	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Prostate
* Seminal Vesicle	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Testes	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

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**MISSING**

* Lymph Node, Mandibular	* Preputial Gland
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**OBSERVATIONS**

* Salivary Glands	Left, Parotid GI	Degeneration	Focal, Minimal
	Parotid GI, Right	Degeneration	Diffuse, Moderate
	Right, Submandibul GI	Degeneration	Diffuse, Moderate
	Right, Submandibul GI	Inflammation	Diffuse, Mild
	Right, Submandibul GI	Necrosis	Diffuse, Moderate

\* Thymus

Note: NO CORRESPONDING LESION FOR TGL 1.

Note: increased tingible bodies

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE



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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Adenoviral vector (hGH)  
**CAS Number:** HGH

**Date Report Requested:** 10/23/2014  
**Time Report Requested:** 07:20:39  
**First Dose M/F:** NA / NA  
**Lab:** MBA

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<b>ANIMAL ID:</b> 66	<b>TRT#:</b> 6	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 2
	<b>DOSE:</b> 2.4 E8 HCQ	<b>DISP:</b> Scheduled Sacrifice	<b>HISTO:</b> MB474M-66

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Harderian Gland	* Heart	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Kidney	* Liver	* Lung
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Pancreas
* Pituitary Gland	* Preputial Gland	* Prostate	* Seminal Vesicle
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Testes	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			

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**MISSING**

* Lymph Node, Mandibular	* Parathyroid Gland
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**INSUFFICIENT TISSUE**

\* Eye

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**OBSERVATIONS**

* Salivary Glands	Left, Parotid GI	Degeneration	Focal, Minimal
	Parotid GI, Right	Degeneration	Focal, Minimal
	Right, Submandibul GI	Degeneration	Diffuse, Moderate
	Right, Submandibul GI	Inflammation	Diffuse, Mild
	Right, Submandibul GI	Necrosis	Diffuse, Moderate

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Adenoviral vector (hGH)  
**CAS Number:** HGH

**Date Report Requested:** 10/23/2014  
**Time Report Requested:** 07:20:39  
**First Dose M/F:** NA / NA  
**Lab:** MBA

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<b>ANIMAL ID:</b> 67	<b>TRT#:</b> 6	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 3
	<b>DOSE:</b> 2.4 E8 HCQ	<b>DISP:</b> Scheduled Sacrifice	<b>HISTO:</b> MB474M-67

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	Ear	* Epididymis
* Esophagus	* Harderian Gland	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Kidney	* Liver	* Lung
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Pancreas
* Parathyroid Gland	* Pituitary Gland	* Preputial Gland	* Prostate
* Seminal Vesicle	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Testes	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

---

**MISSING**

\* Lymph Node, Mandibular

---

**INSUFFICIENT TISSUE**

\* Eye

---

**OBSERVATIONS**

* Heart		Cardiomyopathy	Minimal
* Salivary Glands	Parotid GI, Right	Degeneration	Diffuse, Mild
	Right, Submandibul GI	Degeneration	Diffuse, Moderate
	Right, Submandibul GI	Inflammation	Diffuse, Mild
	Right, Submandibul GI	Necrosis	Diffuse, Moderate

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Note: RIGHT SUBLINGUAL GLAND MISSING

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Adenoviral vector (hGH)  
**CAS Number:** HGH

**Date Report Requested:** 10/23/2014  
**Time Report Requested:** 07:20:39  
**First Dose M/F:** NA / NA  
**Lab:** MBA

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<b>ANIMAL ID:</b> 68	<b>TRT#:</b> 6	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 29
	<b>DOSE:</b> 2.4 E8 HCQ	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> MB474M-68

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Eye	* Harderian Gland	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Kidney	* Liver
* Lung	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Preputial Gland
* Prostate	* Seminal Vesicle	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Testes	* Thyroid Gland
* Trachea	* Urinary Bladder		

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**MISSING**

\* Lymph Node, Mandibular

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**OBSERVATIONS**

* Salivary Glands	Right, Submandibul GI	Degeneration	Multifocal, Minimal
	Right, Submandibul GI	Inflammation	Multifocal, Minimal
	Right, Submandibul GI	Necrosis	Multifocal, Minimal
	Right, Submandibul GI	Regeneration	Multifocal, Moderate
* Thymus		Depletion Lymphoid	Minimal

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Adenoviral vector (hGH)  
**CAS Number:** HGH

**Date Report Requested:** 10/23/2014  
**Time Report Requested:** 07:20:39  
**First Dose M/F:** NA / NA  
**Lab:** MBA

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<b>ANIMAL ID:</b> 69	<b>TRT#:</b> 6	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 29
	<b>DOSE:</b> 2.4 E8 HCQ	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> MB474M-69

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Eye	* Harderian Gland	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Kidney	* Liver
* Lung	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Preputial Gland
* Prostate	* Seminal Vesicle	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Testes	* Thyroid Gland
* Trachea	* Urinary Bladder		

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**MISSING**

\* Lymph Node, Mandibular

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**OBSERVATIONS**

* Salivary Glands	Right, Submandibul GI	Degeneration	Multifocal, Minimal
	Right, Submandibul GI	Inflammation	Multifocal, Minimal
	Right, Submandibul GI	Necrosis	Multifocal, Minimal
	Right, Submandibul GI	Regeneration	Multifocal, Minimal
* Thymus		Depletion Lymphoid	Minimal

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Adenoviral vector (hGH)  
**CAS Number:** HGH

**Date Report Requested:** 10/23/2014  
**Time Report Requested:** 07:20:39  
**First Dose M/F:** NA / NA  
**Lab:** MBA

**ANIMAL ID:** 70                      **TRT#:** 6                      **SEX:** Male                      **DAY ON TEST:** 29  
**DOSE:** 2.4 E8 HCQ                      **DISP:** Terminal Sacrifice                      **HISTO:** MB474M-70

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Eye	* Harderian Gland	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Kidney	* Liver	* Lung
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Pancreas
* Pituitary Gland	* Preputial Gland	* Prostate	* Seminal Vesicle
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Testes	* Thyroid Gland	* Trachea	* Urinary Bladder

**MISSING**

* Lymph Node, Mandibular	* Parathyroid Gland
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**OBSERVATIONS**

* Heart		Cardiomyopathy	Minimal
* Salivary Glands	Right, Submandibul GI	Degeneration	Multifocal, Minimal
	Right, Submandibul GI	Inflammation	Multifocal, Minimal
	Right, Submandibul GI	Necrosis	Multifocal, Minimal
	Right, Submandibul GI	Regeneration	Multifocal, Minimal
* Thymus		Depletion Lymphoid	Minimal

**PRIMARY CAUSE OF DEATH**                      -

\* PROTOCOL REQUIRED TISSUE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Adenoviral vector (hGH)  
**CAS Number:** HGH

**Date Report Requested:** 10/23/2014  
**Time Report Requested:** 07:20:39  
**First Dose M/F:** NA / NA  
**Lab:** MBA

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<b>ANIMAL ID:</b> 71	<b>TRT#:</b> 6	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 29
	<b>DOSE:</b> 2.4 E8 HCQ	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> MB474M-71

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Eye	* Harderian Gland	* Heart	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Kidney	* Liver	* Lung
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Pancreas
* Parathyroid Gland	* Pituitary Gland	* Preputial Gland	* Prostate
* Seminal Vesicle	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Testes	* Thyroid Gland	* Trachea
* Urinary Bladder			

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**MISSING**

\* Lymph Node, Mandibular

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**AUTO PRECLUDES DIAG.**

\* Intestine Large, Cecum

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**OBSERVATIONS**

* Salivary Glands	Right, Submandibul GI	Degeneration	Multifocal, Minimal
	Right, Submandibul GI	Inflammation	Multifocal, Minimal
	Right, Submandibul GI	Necrosis	Multifocal, Minimal
	Right, Submandibul GI	Regeneration	Multifocal, Mild
* Thymus		Depletion Lymphoid	Minimal

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Adenoviral vector (hGH)  
**CAS Number:** HGH

**Date Report Requested:** 10/23/2014  
**Time Report Requested:** 07:20:39  
**First Dose M/F:** NA / NA  
**Lab:** MBA

**ANIMAL ID:** 72

**TRT#:** 6

**SEX:** Male

**DAY ON TEST:** 29

**DOSE:** 2.4 E8 HCQ

**DISP:** Terminal Sacrifice

**HISTO:** MB474M-72

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Eye	* Harderian Gland	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Kidney	* Liver
* Lung	* Lymph Node, Mesenteric	* Nose	* Pancreas
* Pituitary Gland	* Preputial Gland	* Prostate	* Seminal Vesicle
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Testes	* Thyroid Gland	* Trachea	* Urinary Bladder

**MISSING**

* Lymph Node, Mandibular	* Mammary Gland	* Parathyroid Gland
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**OBSERVATIONS**

* Salivary Glands	Right, Submandibul GI	Degeneration	Multifocal, Minimal
	Right, Submandibul GI	Inflammation	Multifocal, Minimal
	Right, Submandibul GI	Necrosis	Multifocal, Minimal
	Right, Submandibul GI	Regeneration	Multifocal, Mild
* Thymus		Depletion Lymphoid	Minimal

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Adenoviral vector (hGH)  
**CAS Number:** HGH

**Date Report Requested:** 10/23/2014  
**Time Report Requested:** 07:20:39  
**First Dose M/F:** NA / NA  
**Lab:** MBA

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<b>ANIMAL ID:</b> 302	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 29
	<b>DOSE:</b> VEHICLE SALINE	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> MB474M-302

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Harderian Gland	* Heart	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Kidney	* Liver	* Lung
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Pancreas
* Parathyroid Gland	* Pituitary Gland	* Preputial Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Testes	* Thyroid Gland
* Trachea	* Urinary Bladder		

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**MISSING**

\* Lymph Node, Mandibular

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**OBSERVATIONS**

* Eye	Cornea	Degeneration	Mild
* Thymus		Depletion Lymphoid	Mild

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE



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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Adenoviral vector (hGH)  
**CAS Number:** HGH

**Date Report Requested:** 10/23/2014  
**Time Report Requested:** 07:20:39  
**First Dose M/F:** NA / NA  
**Lab:** MBA

**ANIMAL ID:** 303

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 29

**DOSE:** VEHICLE SALINE

**DISP:** Terminal Sacrifice

**HISTO:** MB474M-303

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Eye	* Harderian Gland	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Kidney	* Liver
* Lung	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Preputial Gland
* Prostate	* Salivary Glands	* Seminal Vesicle	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Testes
* Thyroid Gland	* Trachea	* Urinary Bladder	

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

\* Saliv Glands

Note: RIGHT SUBLINGUAL GLAND MISSING.

\* Thymus

Depletion Lymphoid

Minimal

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Adenoviral vector (hGH)  
**CAS Number:** HGH

**Date Report Requested:** 10/23/2014  
**Time Report Requested:** 07:20:39  
**First Dose M/F:** NA / NA  
**Lab:** MBA

**ANIMAL ID:** 304

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 29

**DOSE:** VEHICLE SALINE

**DISP:** Terminal Sacrifice

**HISTO:** MB474M-304

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Kidney	* Liver	* Lung	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Pancreas	* Parathyroid Gland
* Pituitary Gland	* Preputial Gland	* Prostate	* Salivary Glands
* Seminal Vesicle	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Testes	* Thyroid Gland	* Trachea
* Urinary Bladder			

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Eye	Cornea	Degeneration	Moderate
* Harderian Gland		Infiltration Cellular	Mononuclear CI, Focal, Mild
* Thymus		Depletion Lymphoid	Minimal

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Adenoviral vector (hGH)  
**CAS Number:** HGH

**Date Report Requested:** 10/23/2014  
**Time Report Requested:** 07:20:39  
**First Dose M/F:** NA / NA  
**Lab:** MBA

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<b>ANIMAL ID:</b> 315	<b>TRT#:</b> 2	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 29
	<b>DOSE:</b> VEHICLE HCQ	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> MB474M-315

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Eye	* Harderian Gland	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Kidney	* Liver
* Lung	* Lymph Node, Mesenteric	* Nose	* Pancreas
* Pituitary Gland	* Preputial Gland	* Prostate	* Salivary Glands
* Seminal Vesicle	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Testes	* Thyroid Gland	* Trachea
* Urinary Bladder			

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**MISSING**

* Lymph Node, Mandibular	* Parathyroid Gland
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**INSUFFICIENT TISSUE**

* Mammary Gland
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**OBSERVATIONS**

* Thymus	Depletion Lymphoid	Minimal
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**PRIMARY CAUSE OF DEATH** -

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\* PROTOCOL REQUIRED TISSUE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Adenoviral vector (hGH)  
**CAS Number:** HGH

**Date Report Requested:** 10/23/2014  
**Time Report Requested:** 07:20:39  
**First Dose M/F:** NA / NA  
**Lab:** MBA

**ANIMAL ID:** 325

**TRT#:** 3  
**DOSE:** 6.0 E9 SALINE

**SEX:** Male  
**DISP:** Terminal Sacrifice

**DAY ON TEST:** 29  
**HISTO:** MB474M-325

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Eye	* Harderian Gland	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Kidney	* Liver
* Lung	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Preputial Gland
* Prostate	* Seminal Vesicle	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Testes	* Thyroid Gland
* Trachea	* Urinary Bladder		

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Salivary Glands	Right, Submandibul GI	Degeneration	Multifocal, Minimal
	Right, Submandibul GI	Inflammation	Multifocal, Mild
	Right, Submandibul GI	Necrosis	Multifocal, Minimal
	Right, Submandibul GI	Regeneration	Multifocal, Minimal
* Thymus		Depletion Lymphoid	Minimal

**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Adenoviral vector (hGH)  
**CAS Number:** HGH

**Date Report Requested:** 10/23/2014  
**Time Report Requested:** 07:20:39  
**First Dose M/F:** NA / NA  
**Lab:** MBA

**ANIMAL ID:** 326

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 29

**DOSE:** 6.0 E9 SALINE

**DISP:** Terminal Sacrifice

**HISTO:** MB474M-326

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Eye	* Harderian Gland	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Kidney	* Liver
* Lung	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Pancreas	* Preputial Gland	* Prostate	* Salivary Glands
* Seminal Vesicle	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Testes	* Thyroid Gland	* Trachea
* Urinary Bladder			

**MISSING**

* Lymph Node, Mandibular	* Parathyroid Gland
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**INSUFFICIENT TISSUE**

\* Pituitary Gland

**OBSERVATIONS**

\* Saliv Glands

Note: LEFT SUBLINGUAL GLAND MISSING

\* Thymus

Depletion Lymphoid

Minimal

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Adenoviral vector (hGH)  
**CAS Number:** HGH

**Date Report Requested:** 10/23/2014  
**Time Report Requested:** 07:20:39  
**First Dose M/F:** NA / NA  
**Lab:** MBA

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<b>ANIMAL ID:</b> 327	<b>TRT#:</b> 3	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 29
	<b>DOSE:</b> 6.0 E9 SALINE	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> MB474M-327

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Eye	* Harderian Gland	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Kidney	* Liver
* Lung	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Pancreas	* Pituitary Gland	* Preputial Gland	* Prostate
* Seminal Vesicle	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Testes	* Thyroid Gland	* Trachea
* Urinary Bladder			

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**MISSING**

* Lymph Node, Mandibular	* Parathyroid Gland
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**OBSERVATIONS**

* Salivary Glands	Right, Submandibul GI	Degeneration	Multifocal, Minimal
	Right, Submandibul GI	Inflammation	Multifocal, Moderate
	Right, Submandibul GI	Necrosis	Multifocal, Minimal
	Right, Submandibul GI	Regeneration	Multifocal, Moderate
* Thymus		Depletion Lymphoid	Mild

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Adenoviral vector (hGH)  
**CAS Number:** HGH

**Date Report Requested:** 10/23/2014  
**Time Report Requested:** 07:20:39  
**First Dose M/F:** NA / NA  
**Lab:** MBA

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<b>ANIMAL ID:</b> 362	<b>TRT#:</b> 6	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 29
	<b>DOSE:</b> 2.4 E8 HCQ	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> MB474M-362

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Eye	* Harderian Gland	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Kidney	* Liver
* Lung	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Pancreas	* Pituitary Gland	* Preputial Gland	* Prostate
* Seminal Vesicle	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Testes	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

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**MISSING**

* Lymph Node, Mandibular	* Parathyroid Gland
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**OBSERVATIONS**

* Salivary Glands	Right, Submandibul GI	Degeneration	Multifocal, Minimal
	Right, Submandibul GI	Inflammation	Multifocal, Minimal
	Right, Submandibul GI	Necrosis	Multifocal, Minimal
	Right, Submandibul GI	Regeneration	Multifocal, Minimal

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Adenoviral vector (hGH)  
**CAS Number:** HGH

**Date Report Requested:** 10/23/2014  
**Time Report Requested:** 07:20:39  
**First Dose M/F:** NA / NA  
**Lab:** MBA

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<b>ANIMAL ID:</b> 363	<b>TRT#:</b> 6	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 29
	<b>DOSE:</b> 2.4 E8 HCQ	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> MB474M-363

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Harderian Gland	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Kidney	* Liver	* Lung	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Pancreas	* Pituitary Gland
* Preputial Gland	* Prostate	* Seminal Vesicle	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Testes
* Thyroid Gland	* Trachea	* Urinary Bladder	

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**MISSING**

* Lymph Node, Mandibular	* Parathyroid Gland
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**INSUFFICIENT TISSUE**

\* Eye

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**OBSERVATIONS**

* Heart		Cardiomyopathy	Minimal
* Salivary Glands	Right, Submandibul GI	Degeneration	Multifocal, Minimal
	Right, Submandibul GI	Inflammation	Multifocal, Minimal
	Right, Submandibul GI	Necrosis	Multifocal, Minimal
	Right, Submandibul GI	Regeneration	Multifocal, Minimal
Note: RIGHT SUBLINGUAL GLAND MISSING			
* Thymus		Depletion Lymphoid	Minimal

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**PRIMARY CAUSE OF DEATH** -

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\* PROTOCOL REQUIRED TISSUE



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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Adenoviral vector (hGH)  
**CAS Number:** HGH

**Date Report Requested:** 10/23/2014  
**Time Report Requested:** 07:20:39  
**First Dose M/F:** NA / NA  
**Lab:** MBA

**ANIMAL ID:** 364

**TRT#:** 6

**SEX:** Male

**DAY ON TEST:** 29

**DOSE:** 2.4 E8 HCQ

**DISP:** Terminal Sacrifice

**HISTO:** MB474M-364

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Eye	* Harderian Gland	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Kidney	* Liver
* Lung	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Pancreas	* Pituitary Gland	* Preputial Gland	* Prostate
* Seminal Vesicle	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Testes	* Thyroid Gland	* Trachea
* Urinary Bladder			

**MISSING**

* Lymph Node, Mandibular	* Parathyroid Gland
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**OBSERVATIONS**

* Salivary Glands	Right, Submandibul GI	Degeneration	Multifocal, Minimal
	Right, Submandibul GI	Inflammation	Multifocal, Minimal
	Right, Submandibul GI	Necrosis	Multifocal, Minimal
	Right, Submandibul GI	Regeneration	Multifocal, Minimal
* Thymus		Depletion Lymphoid	Minimal

**PRIMARY CAUSE OF DEATH**

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

\* PROTOCOL REQUIRED TISSUE