

**Experiment Number:** 97011-25  
**Test Type:** 26-WEEK  
**Route:** GAVAGE  
**Species/Strain:** Mouse/FVB/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Transgenic model evaluation (Melphalan)  
**CAS Number:** 148-82-3

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 04:56:01  
**First Dose M/F:** NA / NA  
**Lab:** MBA

<b>C Number:</b>	C97011D
<b>Lock Date:</b>	07/21/2000
<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>	Both
<b>PWG Approval Date</b>	NONE

**Experiment Number:** 97011-25  
**Test Type:** 26-WEEK  
**Route:** GAVAGE  
**Species/Strain:** Mouse/FVB/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Transgenic model evaluation (Melphalan)  
**CAS Number:** 148-82-3

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 04:56:01  
**First Dose M/F:** NA / NA  
**Lab:** MBA

**ANIMAL ID:** 331

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 187

**DOSE:** VEHICLE CONTROL

**DISP:** Terminal Sacrifice

**HISTO:** MB382M-331

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone Marrow	* Epididymis	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Liver	* Lung
* Lymph Node, Mandibular	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Pituitary Gland
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Testes
* Thymus	* Thyroid Gland		

**MISSING**

\* Mammary Gland

**OBSERVATIONS**

* Adrenal Cortex		Atrophy	Moderate
		Hypertrophy	Focal, Minimal
* Kidney	Renal Tubule	Dilatation	Focal, Mild
* Spleen		Hematopoietic Cell Proliferation	Mild
		Pigmentation	Minimal

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 97011-25  
**Test Type:** 26-WEEK  
**Route:** GAVAGE  
**Species/Strain:** Mouse/FVB/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Transgenic model evaluation (Melphalan)  
**CAS Number:** 148-82-3

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 04:56:01  
**First Dose M/F:** NA / NA  
**Lab:** MBA

**ANIMAL ID:** 332

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 187

**DOSE:** VEHICLE CONTROL

**DISP:** Terminal Sacrifice

**HISTO:** MB382M-332

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone Marrow	* Epididymis	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Liver	* Lymph Node, Mandibular
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Pituitary Gland	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Testes	* Thymus
* Thyroid Gland			

**MISSING**

\* Mammary Gland

**OBSERVATIONS**

* Adrenal Cortex		Atrophy	Moderate
		Hypertrophy	Focal, Minimal
* Kidney	Renal Tubule	Dilatation	Focal, Minimal
* Lung	Perivascular	Inflammation	Minimal
* Spleen		Hematopoietic Cell Proliferation	Minimal
		Pigmentation	Minimal

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 97011-25  
**Test Type:** 26-WEEK  
**Route:** GAVAGE  
**Species/Strain:** Mouse/FVB/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Transgenic model evaluation (Melphalan)  
**CAS Number:** 148-82-3

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 04:56:01  
**First Dose M/F:** NA / NA  
**Lab:** MBA

**ANIMAL ID:** 333

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 187

**DOSE:** VEHICLE CONTROL

**DISP:** Terminal Sacrifice

**HISTO:** MB382M-333

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone Marrow	* Epididymis	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Kidney	* Liver
* Lung	* Lymph Node, Mandibular	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Pituitary Gland	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Testes	* Thymus	* Thyroid Gland	

**MISSING**

\* Mammary Gland

**OBSERVATIONS**

* Adrenal Cortex	Atrophy	Mild
* Spleen	Hematopoietic Cell Proliferation	Mild
	Pigmentation	Minimal

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 97011-25  
**Test Type:** 26-WEEK  
**Route:** GAVAGE  
**Species/Strain:** Mouse/FVB/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Transgenic model evaluation (Melphalan)  
**CAS Number:** 148-82-3

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 04:56:01  
**First Dose M/F:** NA / NA  
**Lab:** MBA

**ANIMAL ID:** 334

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 187

**DOSE:** VEHICLE CONTROL

**DISP:** Terminal Sacrifice

**HISTO:** MB382M-334

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone Marrow	* Epididymis	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Kidney	* Liver
* Lung	* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Pituitary Gland
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Testes
* Thymus	* Thyroid Gland		

**MISSING**

* Lymph Node, Mediastinal	* Mammary Gland
---------------------------	-----------------

**OBSERVATIONS**

* Adrenal Cortex	Atrophy	Mild
* Spleen	Hematopoietic Cell Proliferation	Mild
	Pigmentation	Minimal

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 97011-25  
**Test Type:** 26-WEEK  
**Route:** GAVAGE  
**Species/Strain:** Mouse/FVB/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Transgenic model evaluation (Melphalan)  
**CAS Number:** 148-82-3

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 04:56:01  
**First Dose M/F:** NA / NA  
**Lab:** MBA

---

<b>ANIMAL ID:</b> 335	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 187
	<b>DOSE:</b> VEHICLE CONTROL	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> MB382M-335

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

* Adrenal Medulla	* Bone Marrow	* Epididymis	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Liver	* Lymph Node, Mandibular
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland	* Pituitary Gland
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Testes
* Thymus	* Thyroid Gland		

---

**OBSERVATIONS**

* Adrenal Cortex		Atrophy	Moderate
		Hypertrophy	Focal, Minimal
	Zona Reticul	Vacuolization Cytoplasmic	Focal, Minimal
* Kidney	Renal Tubule	Dilatation	Diffuse, Mild
* Lung		Alveolar/Bronchiolar Adenoma	
* Lym Node Media			
Note: slide 1			
* Spleen		Hematopoietic Cell Proliferation	Mild
		Pigmentation	Minimal

---

**PRIMARY CAUSE OF DEATH** -

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 97011-25  
**Test Type:** 26-WEEK  
**Route:** GAVAGE  
**Species/Strain:** Mouse/FVB/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Transgenic model evaluation (Melfhalan)  
**CAS Number:** 148-82-3

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 04:56:01  
**First Dose M/F:** NA / NA  
**Lab:** MBA

**ANIMAL ID:** 336

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 187

**DOSE:** VEHICLE CONTROL

**DISP:** Terminal Sacrifice

**HISTO:** MB382M-336

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone Marrow	* Epididymis	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Kidney	* Liver
* Lung	* Lymph Node, Mandibular	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Pituitary Gland	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Testes	* Thymus	* Thyroid Gland	

**MISSING**

\* Mammary Gland

**OBSERVATIONS**

* Adrenal Cortex		Atrophy	Mild
	Zona Reticul	Vacuolization Cytoplasmic	Focal, Minimal
* Lym Node Media			
Note: slide 1			
* Spleen		Hematopoietic Cell Proliferation	Minimal
		Pigmentation	Minimal

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 97011-25  
**Test Type:** 26-WEEK  
**Route:** GAVAGE  
**Species/Strain:** Mouse/FVB/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Transgenic model evaluation (Melphalan)  
**CAS Number:** 148-82-3

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 04:56:01  
**First Dose M/F:** NA / NA  
**Lab:** MBA

**ANIMAL ID:** 337

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 187

**DOSE:** VEHICLE CONTROL

**DISP:** Terminal Sacrifice

**HISTO:** MB382M-337

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone Marrow	* Epididymis	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Kidney	* Liver
* Lymph Node, Mandibular	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Pituitary Gland
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Testes
* Thymus	* Thyroid Gland		

**MISSING**

\* Mammary Gland

**OBSERVATIONS**

* Adrenal Cortex		Atrophy	Mild
		Hypertrophy	Focal, Minimal
* Lung	Perivascular	Inflammation	Minimal
* Spleen		Hematopoietic Cell Proliferation	Minimal
		Hyperplasia	Lymphoid, Mild
		Pigmentation	Minimal

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 97011-25  
**Test Type:** 26-WEEK  
**Route:** GAVAGE  
**Species/Strain:** Mouse/FVB/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Transgenic model evaluation (Melphalan)  
**CAS Number:** 148-82-3

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 04:56:01  
**First Dose M/F:** NA / NA  
**Lab:** MBA

**ANIMAL ID:** 338

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 187

**DOSE:** VEHICLE CONTROL

**DISP:** Terminal Sacrifice

**HISTO:** MB382M-338

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone Marrow	* Epididymis	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Liver	* Lung
* Lymph Node, Mandibular	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Pituitary Gland
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Testes
* Thymus	* Thyroid Gland		

**MISSING**

\* Mammary Gland

**OBSERVATIONS**

* Adrenal Cortex		Atrophy	Mild
* Kidney	Renal Tubule	Dilatation	Focal, Minimal
* Spleen		Hematopoietic Cell Proliferation	Mild
		Pigmentation	Minimal

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 97011-25  
**Test Type:** 26-WEEK  
**Route:** GAVAGE  
**Species/Strain:** Mouse/FVB/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Transgenic model evaluation (Melphalan)  
**CAS Number:** 148-82-3

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 04:56:01  
**First Dose M/F:** NA / NA  
**Lab:** MBA

**ANIMAL ID:** 339

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 187

**DOSE:** VEHICLE CONTROL

**DISP:** Terminal Sacrifice

**HISTO:** MB382M-339

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone Marrow	* Epididymis	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Kidney	* Liver
* Lung	* Lymph Node, Mandibular	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Pituitary Gland	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Testes	* Thymus	* Thyroid Gland	

**MISSING**

\* Mammary Gland

**OBSERVATIONS**

* Adrenal Cortex	Atrophy	Moderate
	Hypertrophy	Focal, Minimal
* Spleen	Hematopoietic Cell Proliferation	Mild
	Pigmentation	Minimal

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 97011-25  
**Test Type:** 26-WEEK  
**Route:** GAVAGE  
**Species/Strain:** Mouse/FVB/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Transgenic model evaluation (Melphalan)  
**CAS Number:** 148-82-3

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 04:56:01  
**First Dose M/F:** NA / NA  
**Lab:** MBA

**ANIMAL ID:** 340

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 187

**DOSE:** VEHICLE CONTROL

**DISP:** Terminal Sacrifice

**HISTO:** MB382M-340

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone Marrow	* Epididymis	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Kidney	* Liver
* Lung	* Lymph Node, Mandibular	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Pituitary Gland	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland		

**MISSING**

\* Mammary Gland

**OBSERVATIONS**

* Adrenal Cortex	Atrophy	Moderate
	Hypertrophy	Focal, Minimal
	Metaplasia	Osseous, Minimal
* Spleen	Hematopoietic Cell Proliferation	Minimal
* Testes	Cyst	Moderate

Note: unilateral

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 97011-25  
**Test Type:** 26-WEEK  
**Route:** GAVAGE  
**Species/Strain:** Mouse/FVB/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Transgenic model evaluation (Melphalan)  
**CAS Number:** 148-82-3

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 04:56:01  
**First Dose M/F:** NA / NA  
**Lab:** MBA

**ANIMAL ID:** 341

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 187

**DOSE:** VEHICLE CONTROL

**DISP:** Terminal Sacrifice

**HISTO:** MB382M-341

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone Marrow	* Epididymis	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Kidney	* Liver
* Lung	* Lymph Node, Mandibular	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Pituitary Gland	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Testes	* Thymus	* Thyroid Gland	

**MISSING**

\* Mammary Gland

**OBSERVATIONS**

* Adrenal Cortex	Atrophy	Mild
	Hypertrophy	Focal, Minimal
* Spleen	Hematopoietic Cell Proliferation	Mild
	Pigmentation	Minimal

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 97011-25  
**Test Type:** 26-WEEK  
**Route:** GAVAGE  
**Species/Strain:** Mouse/FVB/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Transgenic model evaluation (Melphalan)  
**CAS Number:** 148-82-3

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 04:56:01  
**First Dose M/F:** NA / NA  
**Lab:** MBA

**ANIMAL ID:** 342

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 187

**DOSE:** VEHICLE CONTROL

**DISP:** Terminal Sacrifice

**HISTO:** MB382M-342

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone Marrow	* Epididymis	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Kidney	* Liver
* Lung	* Lymph Node, Mandibular	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Testes
* Thymus	* Thyroid Gland		

**MISSING**

\* Mammary Gland

**INSUFFICIENT TISSUE**

\* Pituitary Gland

**OBSERVATIONS**

* Adrenal Cortex	Atrophy	Mild
* Spleen	Hematopoietic Cell Proliferation	Mild
	Pigmentation	Minimal

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 97011-25  
**Test Type:** 26-WEEK  
**Route:** GAVAGE  
**Species/Strain:** Mouse/FVB/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Transgenic model evaluation (Melphalan)  
**CAS Number:** 148-82-3

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 04:56:01  
**First Dose M/F:** NA / NA  
**Lab:** MBA

**ANIMAL ID:** 343

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 187

**DOSE:** VEHICLE CONTROL

**DISP:** Terminal Sacrifice

**HISTO:** MB382M-343

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone Marrow	* Epididymis	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Kidney	* Liver
* Lung	* Lymph Node, Mandibular	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Pituitary Gland	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Testes	* Thymus	* Thyroid Gland	

**MISSING**

\* Mammary Gland

**OBSERVATIONS**

* Adrenal Cortex		Atrophy	Moderate
	Zona Reticul	Vacuolization Cytoplasmic	Focal, Minimal
* Spleen		Hematopoietic Cell Proliferation	Minimal

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 97011-25  
**Test Type:** 26-WEEK  
**Route:** GAVAGE  
**Species/Strain:** Mouse/FVB/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Transgenic model evaluation (Melphalan)  
**CAS Number:** 148-82-3

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 04:56:01  
**First Dose M/F:** NA / NA  
**Lab:** MBA

**ANIMAL ID:** 344

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 187

**DOSE:** VEHICLE CONTROL

**DISP:** Terminal Sacrifice

**HISTO:** MB382M-344

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone Marrow	* Epididymis	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Liver	* Lung
* Lymph Node, Mandibular	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Pituitary Gland
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Testes
* Thymus	* Thyroid Gland		

**MISSING**

\* Mammary Gland

**OBSERVATIONS**

* Adrenal Cortex		Atrophy	Mild
* Kidney	Renal Tubule	Dilatation	Focal, Minimal
* Spleen		Hematopoietic Cell Proliferation	Minimal
		Pigmentation	Minimal

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 97011-25  
**Test Type:** 26-WEEK  
**Route:** GAVAGE  
**Species/Strain:** Mouse/FVB/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Transgenic model evaluation (Melphalan)  
**CAS Number:** 148-82-3

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 04:56:01  
**First Dose M/F:** NA / NA  
**Lab:** MBA

**ANIMAL ID:** 345

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 169

**DOSE:** VEHICLE CONTROL

**DISP:** Natural Death

**HISTO:** MB382M-345

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone Marrow	* Epididymis	* Heart	* Intestine Large, Colon
* Intestine Small, Jejunum	* Kidney	* Lung	* Lymph Node, Mandibular
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Pituitary Gland	* Skin
* Stomach, Forestomach	* Testes	* Thyroid Gland	

**MISSING**

\* Mammary Gland

**AUTO PRECLUDES DIAG.**

* Adrenal Cortex	* Adrenal Medulla	* Intestine Large, Cecum	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Stomach, Glandular	* Thymus

**OBSERVATIONS**

* Liver	Hepatocyte	Vacuolization Cytoplasmic	Focal, Mild
* Spleen		Hematopoietic Cell Proliferation	Minimal

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 97011-25  
**Test Type:** 26-WEEK  
**Route:** GAVAGE  
**Species/Strain:** Mouse/FVB/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Transgenic model evaluation (Melphalan)  
**CAS Number:** 148-82-3

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 04:56:01  
**First Dose M/F:** NA / NA  
**Lab:** MBA

**ANIMAL ID:** 346

**TRT#:** 2  
**DOSE:** 4.0 MG/KG

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

**DAY ON TEST:** 187  
**HISTO:** MB382M-346

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone Marrow	* Epididymis	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Kidney
* Liver	* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Pituitary Gland
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland			

**MISSING**

* Lymph Node, Mediastinal	* Mammary Gland
---------------------------	-----------------

**OBSERVATIONS**

* Adrenal Cortex		Atrophy	Moderate
		Hypertrophy	Focal, Minimal
* Intestine Small, Duodenum	Epithelium	Necrosis	Mild
* Intestine Small, Ileum	Epithelium	Necrosis	Mild
* Intestine Small, Jejunum	Epithelium	Necrosis	Mild
* Lung		Alveolar/Bronchiolar Adenoma	
* Spleen		Hematopoietic Cell Proliferation	Mild
		Pigmentation	Minimal
* Testes	Germinal Epith	Degeneration	Diffuse, Marked

[ Degeneration TGLS = 1-9 ]

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 97011-25  
**Test Type:** 26-WEEK  
**Route:** GAVAGE  
**Species/Strain:** Mouse/FVB/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Transgenic model evaluation (Melphalan)  
**CAS Number:** 148-82-3

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 04:56:01  
**First Dose M/F:** NA / NA  
**Lab:** MBA

**ANIMAL ID:** 347

**TRT#:** 2  
**DOSE:** 4.0 MG/KG

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

**DAY ON TEST:** 187  
**HISTO:** MB382M-347

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone Marrow	* Epididymis	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Kidney	* Liver
* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Pituitary Gland	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland

**MISSING**

* Lymph Node, Mediastinal	* Mammary Gland
---------------------------	-----------------

**OBSERVATIONS**

* Adrenal Cortex		Atrophy	Marked
* Adrenal Medulla		Atrophy	Moderate
* Intestine Small, Duodenum	Epithelium	Necrosis	Moderate
* Intestine Small, Ileum	Epithelium	Necrosis	Moderate
* Intestine Small, Jejunum	Epithelium	Necrosis	Moderate
* Lung	Alveolar Epith	Hyperplasia	Focal, Minimal
* Spleen		Hematopoietic Cell Proliferation	Mild
		Pigmentation	Minimal
* Testes	Germinal Epith	Degeneration	Diffuse, Marked

[ Degeneration TGLS = 1-9 ]

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 97011-25

Test Type: 26-WEEK

Route: GAVAGE

Species/Strain: Mouse/FVB/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

Test Compound: Transgenic model evaluation (Melphalan)

CAS Number: 148-82-3

Date Report Requested: 10/20/2014

Time Report Requested: 04:56:01

First Dose M/F: NA / NA

Lab: MBA

ANIMAL ID: 348

TRT#: 2

SEX: Male

DAY ON TEST: 187

DOSE: 4.0 MG/KG

DISP: Terminal Sacrifice

HISTO: MB382M-348

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone Marrow	* Epididymis	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Kidney
* Liver	* Lymph Node, Mandibular	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Pituitary Gland	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland		

**MISSING**

\* Mammary Gland

**OBSERVATIONS**

* Adrenal Cortex		Atrophy	Moderate
		Hypertrophy	Focal, Minimal
* Intestine Small, Duodenum	Epithelium	Necrosis	Mild
* Intestine Small, Ileum	Epithelium	Necrosis	Mild
* Intestine Small, Jejunum	Epithelium	Necrosis	Mild
* Lung		Alveolar/Bronchiolar Adenoma	
		Fibrosis	Focal, Minimal
	Alveolar Epith	Hyperplasia	Focal, Minimal
	[ Alveolar/Bronchiolar Adenoma TGLS = 2-1 ]		
* Spleen		Hematopoietic Cell Proliferation	Mild
		Pigmentation	Minimal
* Testes	Germinal Epith	Degeneration	Diffuse, Marked
	[ Degeneration TGLS = 1-9 ]		

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 97011-25

Test Type: 26-WEEK

Route: GAVAGE

Species/Strain: Mouse/FVB/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
Test Compound: Transgenic model evaluation (Melphalan)  
CAS Number: 148-82-3

Date Report Requested: 10/20/2014

Time Report Requested: 04:56:01

First Dose M/F: NA / NA

Lab: MBA

ANIMAL ID: 349

TRT#: 2

DOSE: 4.0 MG/KG

SEX: Male

DISP: Terminal Sacrifice

DAY ON TEST: 187

HISTO: MB382M-349

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Bone Marrow	* Epididymis	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Liver
* Lymph Node, Mandibular	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Pituitary Gland
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland			

MISSING

\* Mammary Gland

OBSERVATIONS

* Adrenal Cortex		Atrophy	Moderate
		Hypertrophy	Focal, Minimal
* Intestine Small, Duodenum	Epithelium	Necrosis	Mild
* Intestine Small, Ileum	Epithelium	Necrosis	Mild
* Intestine Small, Jejunum	Epithelium	Necrosis	Mild
* Kidney	Renal Tubule	Dilatation	Diffuse, Minimal
* Lung		Alveolar/Bronchiolar Adenoma	
	[ Alveolar/Bronchiolar Adenoma TGLS = 2-1 ]		
* Lym Node Media			
	Note: slide 1		
* Spleen		Hematopoietic Cell Proliferation	Mild
		Pigmentation	Minimal
* Testes	Germinal Epith	Degeneration	Diffuse, Marked
	[ Degeneration TGLS = 1-9 ]		

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 97011-25

Test Type: 26-WEEK

Route: GAVAGE

Species/Strain: Mouse/FVB/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
Test Compound: Transgenic model evaluation (Melphalan)  
CAS Number: 148-82-3

Date Report Requested: 10/20/2014

Time Report Requested: 04:56:01

First Dose M/F: NA / NA

Lab: MBA

ANIMAL ID: 350

TRT#: 2

DOSE: 4.0 MG/KG

SEX: Male

DISP: Terminal Sacrifice

DAY ON TEST: 187

HISTO: MB382M-350

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Bone Marrow	* Epididymis	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Liver
* Lymph Node, Mandibular	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Pituitary Gland
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland			

MISSING

\* Mammary Gland

OBSERVATIONS

* Adrenal Cortex		Atrophy	Marked
		Hypertrophy	Focal, Minimal
* Intestine Small, Duodenum	Epithelium	Necrosis	Mild
* Intestine Small, Ileum	Epithelium	Necrosis	Mild
* Intestine Small, Jejunum	Epithelium	Necrosis	Mild
* Kidney	Renal Tubule	Dilatation	Diffuse, Mild
* Lung	Alveolar Epith	Hyperplasia	Focal, Minimal
* Spleen		Hematopoietic Cell Proliferation	Moderate
		Pigmentation	Minimal
* Testes	Germinal Epith	Degeneration	Diffuse, Marked

[ Degeneration TGLS = 1-9 ]

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 97011-25  
**Test Type:** 26-WEEK  
**Route:** GAVAGE  
**Species/Strain:** Mouse/FVB/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Transgenic model evaluation (Melphalan)  
**CAS Number:** 148-82-3

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 04:56:01  
**First Dose M/F:** NA / NA  
**Lab:** MBA

---

<b>ANIMAL ID:</b> 351	<b>TRT#:</b> 2	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 187
	<b>DOSE:</b> 4.0 MG/KG	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> MB382M-351

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

* Adrenal Medulla	* Bone Marrow	* Epididymis	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Kidney
* Liver	* Lymph Node, Mandibular	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Pituitary Gland	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland		

---

**MISSING**

\* Mammary Gland

---

**OBSERVATIONS**

* Adrenal Cortex		Atrophy	Marked
		Hypertrophy	Focal, Minimal
* Intestine Small, Duodenum	Epithelium	Necrosis	Moderate
* Intestine Small, Ileum	Epithelium	Necrosis	Moderate
* Intestine Small, Jejunum	Epithelium	Necrosis	Moderate
* Lung		Alveolar/Bronchiolar Adenoma	
* Spleen		Hematopoietic Cell Proliferation	Mild
		Pigmentation	Minimal
* Testes	Germinal Epith	Degeneration	Diffuse, Marked

[ Degeneration TGLS = 1-9 ]

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 97011-25  
**Test Type:** 26-WEEK  
**Route:** GAVAGE  
**Species/Strain:** Mouse/FVB/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Transgenic model evaluation (Melphalan)  
**CAS Number:** 148-82-3

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 04:56:01  
**First Dose M/F:** NA / NA  
**Lab:** MBA

---

<b>ANIMAL ID:</b> 352	<b>TRT#:</b> 2	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 187
	<b>DOSE:</b> 4.0 MG/KG	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> MB382M-352

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

* Adrenal Medulla	* Bone Marrow	* Epididymis	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Kidney
* Lymph Node, Mandibular	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Pituitary Gland
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland			

---

**MISSING**

\* Mammary Gland

---

**OBSERVATIONS**

* Adrenal Cortex		Atrophy	Marked
		Hypertrophy	Focal, Minimal
* Intestine Small, Duodenum	Epithelium	Necrosis	Moderate
* Intestine Small, Ileum	Epithelium	Necrosis	Moderate
* Intestine Small, Jejunum	Epithelium	Necrosis	Moderate
* Liver	Hepatocyte	Necrosis	Focal, Minimal
* Lung	Alveolar Epith	Hyperplasia	Focal, Minimal
* Spleen		Hematopoietic Cell Proliferation	Mild
		Pigmentation	Minimal
* Testes	Germinal Epith	Degeneration	Diffuse, Marked

---

[ Degeneration TGLS = 1-9 ]

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 97011-25  
**Test Type:** 26-WEEK  
**Route:** GAVAGE  
**Species/Strain:** Mouse/FVB/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Transgenic model evaluation (Melphalan)  
**CAS Number:** 148-82-3

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 04:56:01  
**First Dose M/F:** NA / NA  
**Lab:** MBA

**ANIMAL ID:** 353

**TRT#:** 2  
**DOSE:** 4.0 MG/KG

**SEX:** Male  
**DISP:** Moribund Sacrifice

**DAY ON TEST:** 148  
**HISTO:** MB382M-353

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone Marrow	* Epididymis	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Kidney
* Liver	* Lung	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
* Lymph Node, Mesenteric	* Pituitary Gland	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Thyroid Gland		

**MISSING**

\* Mammary Gland

**INSUFFICIENT TISSUE**

\* Intestine Small, Ileum                      \* Intestine Small, Jejunum

**OBSERVATIONS**

* Adrenal Cortex		Atrophy	Marked
		Hypertrophy	Focal, Minimal
* Intestine Small, Duodenum	Epithelium	Necrosis	Mild
* Spleen		Hematopoietic Cell Proliferation	Mild
* Testes	Germinal Epith	Degeneration	Diffuse, Marked
[ Degeneration TGLS = 2-9 ]			
* Thymus		Atrophy	Diffuse, Moderate

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 97011-25  
**Test Type:** 26-WEEK  
**Route:** GAVAGE  
**Species/Strain:** Mouse/FVB/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Transgenic model evaluation (Melphalan)  
**CAS Number:** 148-82-3

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 04:56:01  
**First Dose M/F:** NA / NA  
**Lab:** MBA

**ANIMAL ID:** 354

**TRT#:** 2

**SEX:** Male

**DAY ON TEST:** 187

**DOSE:** 4.0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:** MB382M-354

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone Marrow	* Epididymis	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Kidney
* Liver	* Lymph Node, Mandibular	* Lymph Node, Mediastinal	* Pituitary Gland
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland			

**MISSING**

* Lymph Node, Mesenteric	* Mammary Gland
--------------------------	-----------------

**OBSERVATIONS**

* Adrenal Cortex		Atrophy	Marked
		Hypertrophy	Focal, Minimal
* Intestine Small, Duodenum	Epithelium	Necrosis	Mild
* Intestine Small, Ileum	Epithelium	Necrosis	Mild
* Intestine Small, Jejunum	Epithelium	Necrosis	Mild
* Lung	Alveolar Epith	Hyperplasia	Focal, Minimal
* Spleen		Hematopoietic Cell Proliferation	Mild
		Pigmentation	Minimal
* Testes	Germinal Epith	Degeneration	Diffuse, Marked

[ Degeneration TGLS = 1-9 ]

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 97011-25  
**Test Type:** 26-WEEK  
**Route:** GAVAGE  
**Species/Strain:** Mouse/FVB/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Transgenic model evaluation (Melphalan)  
**CAS Number:** 148-82-3

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 04:56:01  
**First Dose M/F:** NA / NA  
**Lab:** MBA

---

<b>ANIMAL ID:</b> 355	<b>TRT#:</b> 2	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 187
	<b>DOSE:</b> 4.0 MG/KG	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> MB382M-355

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

* Adrenal Medulla	* Bone Marrow	* Epididymis	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Kidney
* Liver	* Lung	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
* Lymph Node, Mesenteric	* Pituitary Gland	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	

---

**MISSING**

\* Mammary Gland

---

**OBSERVATIONS**

* Adrenal Cortex		Atrophy	Marked
		Hypertrophy	Focal, Minimal
* Intestine Small, Duodenum	Epithelium	Necrosis	Mild
* Intestine Small, Ileum	Epithelium	Necrosis	Mild
* Intestine Small, Jejunum	Epithelium	Necrosis	Mild
* Spleen		Hematopoietic Cell Proliferation	Moderate
		Pigmentation	Minimal
* Testes	Germinal Epith	Degeneration	Diffuse, Marked

---

[ Degeneration TGLS = 1-9 ]

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 97011-25  
**Test Type:** 26-WEEK  
**Route:** GAVAGE  
**Species/Strain:** Mouse/FVB/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Transgenic model evaluation (Melphalan)  
**CAS Number:** 148-82-3

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 04:56:01  
**First Dose M/F:** NA / NA  
**Lab:** MBA

---

<b>ANIMAL ID:</b> 356	<b>TRT#:</b> 2	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 187
	<b>DOSE:</b> 4.0 MG/KG	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> MB382M-356

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

* Adrenal Medulla	* Epididymis	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Kidney	* Liver
* Lymph Node, Mandibular	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Pituitary Gland
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland			

---

**MISSING**

\* Mammary Gland

---

**OBSERVATIONS**

* Adrenal Cortex		Atrophy	Moderate
		Hypertrophy	Focal, Minimal
* Bone Marrow		Hyperplasia	Mild
* Intestine Small, Duodenum	Epithelium	Necrosis	Moderate
* Intestine Small, Ileum	Epithelium	Necrosis	Moderate
* Intestine Small, Jejunum	Epithelium	Necrosis	Moderate
* Lung	Alveolar Epith	Hyperplasia	Focal, Mild
* Spleen		Hematopoietic Cell Proliferation	Moderate
		Pigmentation	Minimal
* Testes	Germinal Epith	Degeneration	Diffuse, Marked

---

[ Degeneration TGLS = 1-9 ]

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 97011-25  
**Test Type:** 26-WEEK  
**Route:** GAVAGE  
**Species/Strain:** Mouse/FVB/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Transgenic model evaluation (Melphalan)  
**CAS Number:** 148-82-3

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 04:56:01  
**First Dose M/F:** NA / NA  
**Lab:** MBA

---

<b>ANIMAL ID:</b> 357	<b>TRT#:</b> 2	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 187
	<b>DOSE:</b> 4.0 MG/KG	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> MB382M-357

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

* Adrenal Medulla	* Bone Marrow	* Epididymis	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Kidney
* Liver	* Lymph Node, Mandibular	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Pituitary Gland	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland		

---

**MISSING**

\* Mammary Gland

---

**OBSERVATIONS**

* Adrenal Cortex		Atrophy	Moderate
		Hypertrophy	Focal, Minimal
* Intestine Small, Duodenum	Epithelium	Necrosis	Moderate
* Intestine Small, Ileum	Epithelium	Necrosis	Moderate
* Intestine Small, Jejunum	Epithelium	Necrosis	Moderate
* Lung	Alveolar Epith	Hyperplasia	Focal, Minimal
* Lym Node Media			
Note: slide 1			
* Spleen		Hematopoietic Cell Proliferation	Moderate
		Pigmentation	Minimal
* Testes	Germinal Epith	Degeneration	Diffuse, Marked
[ Degeneration TGLS = 1-9 ]			

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 97011-25

**Test Type:** 26-WEEK

**Route:** GAVAGE

**Species/Strain:** Mouse/FVB/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Transgenic model evaluation (Melphalan)

**CAS Number:** 148-82-3

**Date Report Requested:** 10/20/2014

**Time Report Requested:** 04:56:01

**First Dose M/F:** NA / NA

**Lab:** MBA

**ANIMAL ID:** 358

**TRT#:** 2

**DOSE:** 4.0 MG/KG

**SEX:** Male

**DISP:** Terminal Sacrifice

**DAY ON TEST:** 187

**HISTO:** MB382M-358

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone Marrow	* Epididymis	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Kidney
* Liver	* Lymph Node, Mandibular	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Pituitary Gland	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland		

**MISSING**

\* Mammary Gland

**OBSERVATIONS**

* Adrenal Cortex		Atrophy	Moderate
		Hypertrophy	Focal, Minimal
* Intestine Small, Duodenum	Epithelium	Necrosis	Moderate
* Intestine Small, Ileum	Epithelium	Necrosis	Moderate
* Intestine Small, Jejunum	Epithelium	Necrosis	Moderate
* Lung	Alveolar Epith	Hyperplasia	Focal, Minimal
* Spleen		Hematopoietic Cell Proliferation	Mild
		Pigmentation	Minimal
* Testes	Germinal Epith	Degeneration	Diffuse, Marked

[ Degeneration TGLS = 1-9 ]

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 97011-25

**Test Type:** 26-WEEK

**Route:** GAVAGE

**Species/Strain:** Mouse/FVB/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Transgenic model evaluation (Melphalan)

**CAS Number:** 148-82-3

**Date Report Requested:** 10/20/2014

**Time Report Requested:** 04:56:01

**First Dose M/F:** NA / NA

**Lab:** MBA

**ANIMAL ID:** 359

**TRT#:** 2

**SEX:** Male

**DAY ON TEST:** 187

**DOSE:** 4.0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:** MB382M-359

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone Marrow	* Epididymis	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Kidney
* Liver	* Lung	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
* Lymph Node, Mesenteric	* Pituitary Gland	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	

**MISSING**

\* Mammary Gland

**OBSERVATIONS**

* Adrenal Cortex		Atrophy	Moderate
		Hypertrophy	Focal, Minimal
* Intestine Small, Duodenum	Epithelium	Necrosis	Moderate
* Intestine Small, Ileum	Epithelium	Necrosis	Moderate
* Intestine Small, Jejunum	Epithelium	Necrosis	Moderate
* Spleen		Hematopoietic Cell Proliferation	Mild
		Pigmentation	Minimal
* Testes	Germinal Epith	Degeneration	Diffuse, Marked

[ Degeneration TGLS = 1-9 ]

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 97011-25

Test Type: 26-WEEK

Route: GAVAGE

Species/Strain: Mouse/FVB/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
Test Compound: Transgenic model evaluation (Melphalan)  
CAS Number: 148-82-3

Date Report Requested: 10/20/2014

Time Report Requested: 04:56:01

First Dose M/F: NA / NA

Lab: MBA

ANIMAL ID: 360

TRT#: 2

SEX: Male

DAY ON TEST: 187

DOSE: 4.0 MG/KG

DISP: Terminal Sacrifice

HISTO: MB382M-360

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Bone Marrow	* Epididymis	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Kidney
* Lung	* Lymph Node, Mandibular	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Pituitary Gland	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland		

MISSING

\* Mammary Gland

OBSERVATIONS

* Adrenal Cortex		Atrophy	Moderate
* Intestine Small, Duodenum	Epithelium	Necrosis	Mild
* Intestine Small, Ileum	Epithelium	Necrosis	Mild
* Intestine Small, Jejunum	Epithelium	Necrosis	Mild
* Liver	Hepatocyte	Necrosis	Focal, Minimal
* Spleen		Hematopoietic Cell Proliferation	Minimal
		Pigmentation	Minimal
* Testes	Germinal Epith	Degeneration	Diffuse, Marked

[ Degeneration TGLS = 1-9 ]

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 97011-25  
**Test Type:** 26-WEEK  
**Route:** GAVAGE  
**Species/Strain:** Mouse/FVB/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Transgenic model evaluation (Melphalan)  
**CAS Number:** 148-82-3

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 04:56:01  
**First Dose M/F:** NA / NA  
**Lab:** MBA

**ANIMAL ID:** 361

**TRT#:** 3

**SEX:** Female

**DAY ON TEST:** 186

**DOSE:** VEHICLE CONTROL

**DISP:** Terminal Sacrifice

**HISTO:** MB382M-361

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone Marrow	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Kidney	* Lung	* Lymph Node, Mandibular
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland	* Ovary
* Pituitary Gland	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Uterus	

**OBSERVATIONS**

* Adrenal Cortex	Zona Reticul	Vacuolization Cytoplasmic	Focal, Mild
* Liver	Hepatocyte	Necrosis	Focal, Minimal
	Hepatocyte	Vacuolization Cytoplasmic	Focal, Minimal
* Skin			
Note: no vulva in section			
* Spleen		Hematopoietic Cell Proliferation	Mild
		Pigmentation	Minimal

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 97011-25  
**Test Type:** 26-WEEK  
**Route:** GAVAGE  
**Species/Strain:** Mouse/FVB/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Transgenic model evaluation (Melphalan)  
**CAS Number:** 148-82-3

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 04:56:01  
**First Dose M/F:** NA / NA  
**Lab:** MBA

---

<b>ANIMAL ID:</b> 362	<b>TRT#:</b> 3	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 186
	<b>DOSE:</b> VEHICLE CONTROL	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> MB382M-362

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

* Adrenal Medulla	* Bone Marrow	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Kidney	* Liver	* Lung
* Lymph Node, Mandibular	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Ovary	* Pituitary Gland	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	

---

**OBSERVATIONS**

* Adrenal Cortex	Subcapsular Zona Reticul	Hyperplasia Vacuolization Cytoplasmic	Focal, Minimal Diffuse, Mild
* Skin Note: vulva normal			
* Spleen		Hematopoietic Cell Proliferation Pigmentation	Minimal Minimal
* Uterus	Endometrium	Hyperplasia	Cystic, Minimal

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 97011-25  
**Test Type:** 26-WEEK  
**Route:** GAVAGE  
**Species/Strain:** Mouse/FVB/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Transgenic model evaluation (Melphalan)  
**CAS Number:** 148-82-3

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 04:56:01  
**First Dose M/F:** NA / NA  
**Lab:** MBA

**ANIMAL ID:** 363

**TRT#:** 3

**SEX:** Female

**DAY ON TEST:** 186

**DOSE:** VEHICLE CONTROL

**DISP:** Terminal Sacrifice

**HISTO:** MB382M-363

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Adrenal Medulla  
\* Intestine Large, Colon  
\* Intestine Small, Jejunum  
\* Lymph Node, Mediastinal  
\* Skin  
\* Thyroid Gland

\* Bone Marrow  
\* Intestine Large, Rectum  
\* Kidney  
\* Lymph Node, Mesenteric  
\* Stomach, Forestomach

\* Heart  
\* Intestine Small, Duodenum  
\* Lung  
\* Mammary Gland  
\* Stomach, Glandular

\* Intestine Large, Cecum  
\* Intestine Small, Ileum  
\* Lymph Node, Mandibular  
\* Pituitary Gland  
\* Thymus

**OBSERVATIONS**

\* Adrenal Cortex  
  
\* Liver  
\* Ovary  
\* Spleen  
  
\* Uterus

Subcapsular  
Zona Reticul  
Hepatocyte  
  
  
Endometrium

Hyperplasia  
Vacuolization Cytoplasmic  
Necrosis  
Atrophy  
Hematopoietic Cell Proliferation  
Pigmentation  
Hyperplasia

Focal, Minimal  
Focal, Mild  
Focal, Minimal  
Minimal  
Mild  
Minimal  
Cystic, Minimal

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 97011-25  
**Test Type:** 26-WEEK  
**Route:** GAVAGE  
**Species/Strain:** Mouse/FVB/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Transgenic model evaluation (Melphalan)  
**CAS Number:** 148-82-3

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 04:56:01  
**First Dose M/F:** NA / NA  
**Lab:** MBA

**ANIMAL ID:** 364

**TRT#:** 3

**SEX:** Female

**DAY ON TEST:** 186

**DOSE:** VEHICLE CONTROL

**DISP:** Terminal Sacrifice

**HISTO:** MB382M-364

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone Marrow	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Kidney	* Liver	* Lung
* Lymph Node, Mandibular	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Ovary	* Pituitary Gland	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	

**OBSERVATIONS**

* Adrenal Cortex	Subcapsular Zona Reticul	Hyperplasia Vacuolization Cytoplasmic Hematopoietic Cell Proliferation Pigmentation	Focal, Minimal Diffuse, Mild Minimal Minimal
* Uterus	Endometrium	Hyperplasia	Cystic, Minimal

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 97011-25  
**Test Type:** 26-WEEK  
**Route:** GAVAGE  
**Species/Strain:** Mouse/FVB/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Transgenic model evaluation (Melphalan)  
**CAS Number:** 148-82-3

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 04:56:01  
**First Dose M/F:** NA / NA  
**Lab:** MBA

---

<b>ANIMAL ID:</b> 365	<b>TRT#:</b> 3	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 186
	<b>DOSE:</b> VEHICLE CONTROL	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> MB382M-365

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

* Adrenal Medulla	* Bone Marrow	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Kidney	* Lung	* Lymph Node, Mandibular
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland	* Ovary
* Pituitary Gland	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland		

---

**OBSERVATIONS**

* Adrenal Cortex	Zona Reticul	Vacuolization Cytoplasmic	Focal, Minimal
* Liver	Hepatocyte	Necrosis	Focal, Minimal
* Pituitary Gl			
Note: TGL1 - no corresponding lesion			
* Spleen		Hematopoietic Cell Proliferation	Mild
		Pigmentation	Minimal
* Uterus	Endometrium	Hyperplasia	Cystic, Minimal

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 97011-25  
**Test Type:** 26-WEEK  
**Route:** GAVAGE  
**Species/Strain:** Mouse/FVB/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Transgenic model evaluation (Melphalan)  
**CAS Number:** 148-82-3

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 04:56:01  
**First Dose M/F:** NA / NA  
**Lab:** MBA

---

<b>ANIMAL ID:</b> 366	<b>TRT#:</b> 3	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 186
	<b>DOSE:</b> VEHICLE CONTROL	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> MB382M-366

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

* Adrenal Medulla	* Bone Marrow	Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Kidney	* Lung
* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Mammary Gland	* Pituitary Gland
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland			

---

**INSUFFICIENT TISSUE**

\* Lymph Node, Mediastinal

---

**OBSERVATIONS**

* Adrenal Cortex	Zona Reticul	Vacuolization Cytoplasmic	Focal, Minimal
Esophagus			
Note: TGL1 - no corresponding lesion			
* Liver	Hepatocyte	Necrosis	Focal, Minimal
* Ovary		Inflammation	Minimal
* Spleen		Hematopoietic Cell Proliferation	Minimal
		Pigmentation	Minimal
* Uterus	Endometrium	Hyperplasia	Cystic, Mild

---

PRIMARY CAUSE OF DEATH

---

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 97011-25

**Test Type:** 26-WEEK

**Route:** GAVAGE

**Species/Strain:** Mouse/FVB/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Transgenic model evaluation (Melphalan)

**CAS Number:** 148-82-3

**Date Report Requested:** 10/20/2014

**Time Report Requested:** 04:56:01

**First Dose M/F:** NA / NA

**Lab:** MBA

**ANIMAL ID:** 367

**TRT#:** 3

**SEX:** Female

**DAY ON TEST:** 186

**DOSE:** VEHICLE CONTROL

**DISP:** Terminal Sacrifice

**HISTO:** MB382M-367

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone Marrow	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Liver	* Lung	* Lymph Node, Mandibular
* Lymph Node, Mesenteric	* Mammary Gland	* Ovary	* Pituitary Gland
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thymus

**MISSING**

\* Lymph Node, Mediastinal

**OBSERVATIONS**

* Adrenal Cortex	Subcapsular Zona Reticul	Hyperplasia Vacuolization Cytoplasmic	Focal, Minimal Focal, Minimal
* Kidney	Renal Tubule	Dilatation	Focal, Minimal
* Spleen		Hematopoietic Cell Proliferation Pigmentation	Mild Minimal
* Thyroid Gland		Cyst	Minimal
* Uterus	Endometrium	Hyperplasia	Cystic, Moderate

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 97011-25

**Test Type:** 26-WEEK

**Route:** GAVAGE

**Species/Strain:** Mouse/FVB/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Transgenic model evaluation (Melphalan)

**CAS Number:** 148-82-3

**Date Report Requested:** 10/20/2014

**Time Report Requested:** 04:56:01

**First Dose M/F:** NA / NA

**Lab:** MBA

**ANIMAL ID:** 368

**TRT#:** 3

**SEX:** Female

**DAY ON TEST:** 186

**DOSE:** VEHICLE CONTROL

**DISP:** Terminal Sacrifice

**HISTO:** MB382M-368

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone Marrow	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Kidney	* Lung	* Lymph Node, Mandibular
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland	* Ovary
* Pituitary Gland	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland		

**OBSERVATIONS**

* Adrenal Cortex	Subcapsular	Hyperplasia Hypertrophy	Focal, Minimal Focal, Minimal
* Liver	Hepatocyte	Necrosis	Focal, Minimal
* Spleen		Hematopoietic Cell Proliferation Pigmentation	Mild Minimal
* Uterus	Endometrium	Hyperplasia	Cystic, Minimal

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 97011-25  
**Test Type:** 26-WEEK  
**Route:** GAVAGE  
**Species/Strain:** Mouse/FVB/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Transgenic model evaluation (Melphalan)  
**CAS Number:** 148-82-3

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 04:56:01  
**First Dose M/F:** NA / NA  
**Lab:** MBA

**ANIMAL ID:** 369

**TRT#:** 3

**SEX:** Female

**DAY ON TEST:** 186

**DOSE:** VEHICLE CONTROL

**DISP:** Terminal Sacrifice

**HISTO:** MB382M-369

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone Marrow	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Kidney	* Liver	* Lung
* Lymph Node, Mandibular	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Ovary	* Pituitary Gland	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	

**OBSERVATIONS**

* Adrenal Cortex	Subcapsular Zona Reticul	Hyperplasia Vacuolization Cytoplasmic Hematopoietic Cell Proliferation Pigmentation	Focal, Minimal Diffuse, Mild Moderate Minimal
* Uterus	Endometrium	Hyperplasia	Cystic, Mild

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 97011-25  
**Test Type:** 26-WEEK  
**Route:** GAVAGE  
**Species/Strain:** Mouse/FVB/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Transgenic model evaluation (Melphalan)  
**CAS Number:** 148-82-3

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 04:56:01  
**First Dose M/F:** NA / NA  
**Lab:** MBA

**ANIMAL ID:** 370

**TRT#:** 3

**SEX:** Female

**DAY ON TEST:** 186

**DOSE:** VEHICLE CONTROL

**DISP:** Terminal Sacrifice

**HISTO:** MB382M-370

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone Marrow	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Kidney	* Lung	* Lymph Node, Mandibular
* Lymph Node, Mesenteric	* Mammary Gland	* Ovary	* Pituitary Gland
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland			

**MISSING**

\* Lymph Node, Mediastinal

**OBSERVATIONS**

* Adrenal Cortex		Atrophy	Minimal
	Zona Reticul	Vacuolization Cytoplasmic	Focal, Mild
* Liver	Hepatocyte	Necrosis	Focal, Minimal
* Spleen		Hematopoietic Cell Proliferation	Mild
		Pigmentation	Minimal
* Uterus	Endometrium	Hyperplasia	Cystic, Moderate

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 97011-25  
**Test Type:** 26-WEEK  
**Route:** GAVAGE  
**Species/Strain:** Mouse/FVB/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Transgenic model evaluation (Melphalan)  
**CAS Number:** 148-82-3

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 04:56:01  
**First Dose M/F:** NA / NA  
**Lab:** MBA

**ANIMAL ID:** 371

**TRT#:** 3

**SEX:** Female

**DAY ON TEST:** 186

**DOSE:** VEHICLE CONTROL

**DISP:** Terminal Sacrifice

**HISTO:** MB382M-371

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone Marrow	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Kidney	* Lung	* Lymph Node, Mandibular
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland	* Pituitary Gland
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland			

**OBSERVATIONS**

* Adrenal Cortex		Atrophy	Minimal
* Liver	Hepatocyte	Necrosis	Focal, Minimal
* Ovary		Cyst	Minimal
* Spleen		Hematopoietic Cell Proliferation	Mild
		Pigmentation	Minimal
* Uterus	Endometrium	Hyperplasia	Cystic, Minimal

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 97011-25  
**Test Type:** 26-WEEK  
**Route:** GAVAGE  
**Species/Strain:** Mouse/FVB/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Transgenic model evaluation (Melphalan)  
**CAS Number:** 148-82-3

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 04:56:01  
**First Dose M/F:** NA / NA  
**Lab:** MBA

**ANIMAL ID:** 372

**TRT#:** 3

**SEX:** Female

**DAY ON TEST:** 186

**DOSE:** VEHICLE CONTROL

**DISP:** Terminal Sacrifice

**HISTO:** MB382M-372

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone Marrow	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Kidney	* Liver	* Lung
* Lymph Node, Mandibular	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Ovary	* Pituitary Gland	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	

**OBSERVATIONS**

* Adrenal Cortex	Zona Reticul	Vacuolization Cytoplasmic	Focal, Minimal
* Skin			
Note: vulva normal			
Note: vulva normal			
* Spleen		Hematopoietic Cell Proliferation	Mild
		Pigmentation	Minimal
* Uterus	Endometrium	Hyperplasia	Cystic, Minimal

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 97011-25  
**Test Type:** 26-WEEK  
**Route:** GAVAGE  
**Species/Strain:** Mouse/FVB/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Transgenic model evaluation (Melphalan)  
**CAS Number:** 148-82-3

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 04:56:01  
**First Dose M/F:** NA / NA  
**Lab:** MBA

**ANIMAL ID:** 373

**TRT#:** 3

**SEX:** Female

**DAY ON TEST:** 186

**DOSE:** VEHICLE CONTROL

**DISP:** Terminal Sacrifice

**HISTO:** MB382M-373

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone Marrow	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Kidney	* Liver	* Lung
* Lymph Node, Mandibular	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Ovary	* Pituitary Gland	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	

**OBSERVATIONS**

* Adrenal Cortex	Zona Reticul	Vacuolization Cytoplasmic	Focal, Minimal
* Lym Node Media Note: slide 1			
* Spleen		Hematopoietic Cell Proliferation Pigmentation	Mild Minimal
* Uterus	Endometrium	Hyperplasia	Cystic, Minimal

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 97011-25  
**Test Type:** 26-WEEK  
**Route:** GAVAGE  
**Species/Strain:** Mouse/FVB/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Transgenic model evaluation (Melphalan)  
**CAS Number:** 148-82-3

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 04:56:01  
**First Dose M/F:** NA / NA  
**Lab:** MBA

---

<b>ANIMAL ID:</b> 374	<b>TRT#:</b> 3	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 186
	<b>DOSE:</b> VEHICLE CONTROL	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> MB382M-374

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

* Adrenal Medulla	* Bone Marrow	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Kidney	* Lung	* Lymph Node, Mandibular
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland	* Ovary
* Pituitary Gland	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland		

---

**OBSERVATIONS**

* Adrenal Cortex	Zona Reticul	Vacuolization Cytoplasmic	Focal, Minimal
* Liver	Hepatocyte	Necrosis	Focal, Minimal
* Skin			
Note: vulva normal			
* Spleen		Hematopoietic Cell Proliferation	Mild
		Pigmentation	Minimal
* Uterus	Endometrium	Hyperplasia	Cystic, Minimal

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 97011-25  
**Test Type:** 26-WEEK  
**Route:** GAVAGE  
**Species/Strain:** Mouse/FVB/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Transgenic model evaluation (Melphalan)  
**CAS Number:** 148-82-3

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 04:56:01  
**First Dose M/F:** NA / NA  
**Lab:** MBA

**ANIMAL ID:** 375

**TRT#:** 3

**SEX:** Female

**DAY ON TEST:** 186

**DOSE:** VEHICLE CONTROL

**DISP:** Terminal Sacrifice

**HISTO:** MB382M-375

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone Marrow	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Kidney	* Liver	* Lymph Node, Mandibular
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland	* Ovary
* Pituitary Gland	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland		

**OBSERVATIONS**

* Adrenal Cortex	Subcapsular Zona Reticul	Hyperplasia Vacuolization Cytoplasmic Alveolar/Bronchiolar Adenoma	Focal, Minimal Focal, Minimal
* Lung	[ Alveolar/Bronchiolar Adenoma TGLS = 1-1 ]		
* Lym Node Media			
Note: slide 1			
* Skin			
Note: vulva normal			
* Spleen		Hematopoietic Cell Proliferation Pigmentation	Minimal Minimal
* Uterus	Endometrium	Hyperplasia	Cystic, Mild

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 97011-25  
**Test Type:** 26-WEEK  
**Route:** GAVAGE  
**Species/Strain:** Mouse/FVB/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Transgenic model evaluation (Melphalan)  
**CAS Number:** 148-82-3

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 04:56:01  
**First Dose M/F:** NA / NA  
**Lab:** MBA

**ANIMAL ID:** 376

**TRT#:** 4  
**DOSE:** 4.0 MG/KG

**SEX:** Female  
**DISP:** Terminal Sacrifice

**DAY ON TEST:** 186  
**HISTO:** MB382M-376

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone Marrow	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Kidney	* Liver
* Lymph Node, Mandibular	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Pituitary Gland	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland		

**OBSERVATIONS**

* Adrenal Cortex	Subcapsular Zona Reticul	Hyperplasia Vacuolization Cytoplasmic	Focal, Minimal Focal, Minimal
* Intestine Small, Duodenum	Epithelium	Necrosis	Moderate
* Intestine Small, Ileum	Epithelium	Necrosis	Moderate
* Intestine Small, Jejunum	Epithelium	Necrosis	Moderate
* Lung	Alveolus	Hyperplasia	Histiocytic, Focal, Mild
Note: hyperplasia of alveolar macrophages [ Hyperplasia TGLS = 1-1.1 ]			
* Ovary		Atrophy	Marked
* Spleen		Hematopoietic Cell Proliferation Pigmentation	Mild Minimal
* Uterus	Endometrium	Hyperplasia	Cystic, Mild

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 97011-25  
**Test Type:** 26-WEEK  
**Route:** GAVAGE  
**Species/Strain:** Mouse/FVB/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Transgenic model evaluation (Melphalan)  
**CAS Number:** 148-82-3

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 04:56:01  
**First Dose M/F:** NA / NA  
**Lab:** MBA

**ANIMAL ID:** 377

**TRT#:** 4  
**DOSE:** 4.0 MG/KG

**SEX:** Female  
**DISP:** Terminal Sacrifice

**DAY ON TEST:** 186  
**HISTO:** MB382M-377

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone Marrow	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Kidney	* Lung
* Lymph Node, Mandibular	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Pituitary Gland	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland		

**OBSERVATIONS**

* Adrenal Cortex	Zona Reticul	Vacuolization Cytoplasmic	Focal, Minimal
* Intestine Small, Duodenum	Epithelium	Necrosis	Mild
* Intestine Small, Ileum	Epithelium	Necrosis	Mild
* Intestine Small, Jejunum	Epithelium	Necrosis	Mild
* Liver	Hepatocyte	Vacuolization Cytoplasmic	Focal, Minimal
* Ovary		Atrophy	Marked
* Spleen		Hematopoietic Cell Proliferation	Mild
		Pigmentation	Minimal
* Uterus	Endometrium	Hyperplasia	Cystic, Moderate

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 97011-25  
**Test Type:** 26-WEEK  
**Route:** GAVAGE  
**Species/Strain:** Mouse/FVB/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Transgenic model evaluation (Melphalan)  
**CAS Number:** 148-82-3

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 04:56:01  
**First Dose M/F:** NA / NA  
**Lab:** MBA

**ANIMAL ID:** 378

**TRT#:** 4  
**DOSE:** 4.0 MG/KG

**SEX:** Female  
**DISP:** Terminal Sacrifice

**DAY ON TEST:** 186  
**HISTO:** MB382M-378

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone Marrow	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Kidney	* Liver
* Lymph Node, Mandibular	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Pituitary Gland	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland		

**OBSERVATIONS**

* Adrenal Cortex		Atrophy	Mild
	Subcapsular	Hyperplasia	Focal, Minimal
	Zona Reticul	Vacuolization Cytoplasmic	Focal, Mild
* Intestine Small, Duodenum	Epithelium	Necrosis	Mild
* Intestine Small, Ileum	Epithelium	Necrosis	Mild
* Intestine Small, Jejunum	Epithelium	Necrosis	Mild
* Lung		Alveolar/Bronchiolar Adenoma	
* Ovary		Atrophy	Marked
Note: TGL1 - no corresponding lesion			
* Skin			
Note: vulva not present in sections			
* Spleen		Hematopoietic Cell Proliferation	Moderate
		Pigmentation	Minimal
* Uterus	Endometrium	Hyperplasia	Cystic, Minimal

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 97011-25  
**Test Type:** 26-WEEK  
**Route:** GAVAGE  
**Species/Strain:** Mouse/FVB/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Transgenic model evaluation (Melphalan)  
**CAS Number:** 148-82-3

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 04:56:01  
**First Dose M/F:** NA / NA  
**Lab:** MBA

---

<b>ANIMAL ID:</b> 379	<b>TRT#:</b> 4	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 186
	<b>DOSE:</b> 4.0 MG/KG	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> MB382M-379

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

* Adrenal Medulla	* Bone Marrow	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Kidney	* Liver
* Lung	* Lymph Node, Mandibular	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Mammary Gland	* Pituitary Gland	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	

---

**OBSERVATIONS**

* Adrenal Cortex	Subcapsular	Hyperplasia	Focal, Minimal
	Zona Reticul	Vacuolization Cytoplasmic	Diffuse, Mild
* Intestine Small, Duodenum	Epithelium	Necrosis	Mild
* Intestine Small, Ileum	Epithelium	Necrosis	Mild
* Intestine Small, Jejunum	Epithelium	Necrosis	Mild
* Ovary		Atrophy	Marked
* Spleen		Hematopoietic Cell Proliferation	Mild
		Pigmentation	Minimal
* Uterus	Endometrium	Hyperplasia	Cystic, Mild

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 97011-25  
**Test Type:** 26-WEEK  
**Route:** GAVAGE  
**Species/Strain:** Mouse/FVB/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Transgenic model evaluation (Melphalan)  
**CAS Number:** 148-82-3

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 04:56:01  
**First Dose M/F:** NA / NA  
**Lab:** MBA

**ANIMAL ID:** 380

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 186

**DOSE:** 4.0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:** MB382M-380

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone Marrow	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Kidney	* Liver
* Lymph Node, Mandibular	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Pituitary Gland	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland		

**OBSERVATIONS**

* Adrenal Cortex	Zona Reticul	Vacuolization Cytoplasmic	Focal, Mild
* Intestine Small, Duodenum	Epithelium	Necrosis	Mild
* Intestine Small, Ileum	Epithelium	Necrosis	Mild
* Intestine Small, Jejunum	Epithelium	Necrosis	Mild
* Lung		Alveolar/Bronchiolar Adenoma	
* Ovary		Atrophy	Moderate
* Skin			
Note: vulva not present in section			
* Spleen		Hematopoietic Cell Proliferation	Mild
		Pigmentation	Minimal
* Uterus	Endometrium	Hyperplasia	Cystic, Moderate

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 97011-25  
**Test Type:** 26-WEEK  
**Route:** GAVAGE  
**Species/Strain:** Mouse/FVB/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Transgenic model evaluation (Melphalan)  
**CAS Number:** 148-82-3

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 04:56:01  
**First Dose M/F:** NA / NA  
**Lab:** MBA

**ANIMAL ID:** 381

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 186

**DOSE:** 4.0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:** MB382M-381

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone Marrow	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Kidney	* Liver
* Lymph Node, Mandibular	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Pituitary Gland	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland		

**OBSERVATIONS**

* Adrenal Cortex	Zona Reticul	Vacuolization Cytoplasmic	Focal, Mild
* Intestine Small, Duodenum	Epithelium	Necrosis	Mild
* Intestine Small, Ileum	Epithelium	Necrosis	Mild
* Intestine Small, Jejunum	Epithelium	Necrosis	Mild
* Lung	Alveolar Epith	Hyperplasia	Focal, Minimal
* Ovary		Atrophy	Marked
* Skin			
Note: vulva normal			
* Spleen		Hematopoietic Cell Proliferation	Moderate
		Pigmentation	Minimal
* Uterus	Endometrium	Hyperplasia	Cystic, Mild

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 97011-25  
**Test Type:** 26-WEEK  
**Route:** GAVAGE  
**Species/Strain:** Mouse/FVB/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Transgenic model evaluation (Melphalan)  
**CAS Number:** 148-82-3

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 04:56:01  
**First Dose M/F:** NA / NA  
**Lab:** MBA

**ANIMAL ID:** 382

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 186

**DOSE:** 4.0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:** MB382M-382

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone Marrow	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Kidney	* Liver
* Lung	* Lymph Node, Mandibular	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Mammary Gland	* Pituitary Gland	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	

**OBSERVATIONS**

* Adrenal Cortex	Zona Reticul	Vacuolization Cytoplasmic	Diffuse, Mild
* Intestine Small, Duodenum	Epithelium	Necrosis	Mild
* Intestine Small, Ileum	Epithelium	Necrosis	Mild
* Intestine Small, Jejunum	Epithelium	Necrosis	Mild
* Ovary		Atrophy	Marked
* Spleen		Hematopoietic Cell Proliferation	Moderate
		Pigmentation	Minimal
* Uterus	Endometrium	Hyperplasia	Cystic, Mild

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 97011-25  
**Test Type:** 26-WEEK  
**Route:** GAVAGE  
**Species/Strain:** Mouse/FVB/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Transgenic model evaluation (Melphalan)  
**CAS Number:** 148-82-3

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 04:56:01  
**First Dose M/F:** NA / NA  
**Lab:** MBA

**ANIMAL ID:** 383

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 186

**DOSE:** 4.0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:** MB382M-383

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone Marrow	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Kidney	* Lymph Node, Mandibular
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland	* Pituitary Gland
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland			

**OBSERVATIONS**

* Adrenal Cortex	Zona Reticul	Vacuolization Cytoplasmic	Diffuse, Moderate
* Intestine Small, Duodenum	Epithelium	Necrosis	Mild
* Intestine Small, Ileum	Epithelium	Necrosis	Mild
* Intestine Small, Jejunum	Epithelium	Necrosis	Mild
* Liver	Hepatocyte	Vacuolization Cytoplasmic	Focal, Minimal
* Lung	Alveolar Epith	Hyperplasia	Focal, Minimal
	Perivascular	Infiltration Cellular	Lymphocyte, Mild
* Ovary		Atrophy	Marked
* Spleen		Hematopoietic Cell Proliferation	Mild
		Pigmentation	Minimal
* Uterus	Endometrium	Hyperplasia	Cystic, Moderate

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 97011-25  
**Test Type:** 26-WEEK  
**Route:** GAVAGE  
**Species/Strain:** Mouse/FVB/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Transgenic model evaluation (Melphalan)  
**CAS Number:** 148-82-3

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 04:56:01  
**First Dose M/F:** NA / NA  
**Lab:** MBA

---

<b>ANIMAL ID:</b> 384	<b>TRT#:</b> 4	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 186
	<b>DOSE:</b> 4.0 MG/KG	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> MB382M-384

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

* Adrenal Medulla	* Bone Marrow	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Liver	* Lung
* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Mammary Gland	* Pituitary Gland
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland			

---

**MISSING**

\* Lymph Node, Mediastinal

---

**OBSERVATIONS**

* Adrenal Cortex	Subcapsular	Hyperplasia	Focal, Minimal
	Zona Reticul	Vacuolization Cytoplasmic	Focal, Minimal
* Intestine Small, Duodenum	Epithelium	Necrosis	Mild
* Intestine Small, Ileum	Epithelium	Necrosis	Mild
* Intestine Small, Jejunum	Epithelium	Necrosis	Mild
* Kidney	Renal Tubule	Dilatation	Focal, Minimal
* Ovary		Atrophy	Moderate
* Spleen		Hematopoietic Cell Proliferation	Moderate
		Pigmentation	Minimal
* Uterus	Endometrium	Hyperplasia	Cystic, Mild

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 97011-25  
**Test Type:** 26-WEEK  
**Route:** GAVAGE  
**Species/Strain:** Mouse/FVB/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Transgenic model evaluation (Melphalan)  
**CAS Number:** 148-82-3

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 04:56:01  
**First Dose M/F:** NA / NA  
**Lab:** MBA

---

<b>ANIMAL ID:</b> 385	<b>TRT#:</b> 4	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 186
	<b>DOSE:</b> 4.0 MG/KG	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> MB382M-385

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

* Adrenal Medulla	* Bone Marrow	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Kidney	* Lung
* Lymph Node, Mandibular	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Pituitary Gland	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland		

---

**OBSERVATIONS**

* Adrenal Cortex	Zona Reticul	Vacuolization Cytoplasmic	Focal, Mild
* Intestine Small, Duodenum	Epithelium	Necrosis	Mild
* Intestine Small, Ileum	Epithelium	Necrosis	Mild
* Intestine Small, Jejunum	Epithelium	Necrosis	Mild
* Liver	Hepatocyte	Necrosis	Focal, Minimal
* Ovary		Atrophy	Marked
* Spleen		Hematopoietic Cell Proliferation	Moderate
		Pigmentation	Minimal
* Uterus	Endometrium	Hyperplasia	Cystic, Mild

---

**PRIMARY CAUSE OF DEATH** -

---

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 97011-25  
**Test Type:** 26-WEEK  
**Route:** GAVAGE  
**Species/Strain:** Mouse/FVB/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Transgenic model evaluation (Melphalan)  
**CAS Number:** 148-82-3

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 04:56:01  
**First Dose M/F:** NA / NA  
**Lab:** MBA

**ANIMAL ID:** 386

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 186

**DOSE:** 4.0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:** MB382M-386

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone Marrow	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Kidney	* Lung
* Lymph Node, Mandibular	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Pituitary Gland	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland		

**OBSERVATIONS**

* Adrenal Cortex	Subcapsular	Hyperplasia	Focal, Minimal
	Zona Reticul	Vacuolization Cytoplasmic	Focal, Mild
* Intestine Small, Duodenum	Epithelium	Necrosis	Moderate
* Intestine Small, Ileum	Epithelium	Necrosis	Moderate
* Intestine Small, Jejunum	Epithelium	Necrosis	Moderate
* Liver	Hepatocyte	Necrosis	Focal, Minimal
* Ovary		Atrophy	Marked
* Skin			
Note: vulva not present in section			
* Spleen		Hematopoietic Cell Proliferation	Mild
		Pigmentation	Minimal
* Uterus	Endometrium	Hyperplasia	Cystic, Mild

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 97011-25  
**Test Type:** 26-WEEK  
**Route:** GAVAGE  
**Species/Strain:** Mouse/FVB/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Transgenic model evaluation (Melphalan)  
**CAS Number:** 148-82-3

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 04:56:01  
**First Dose M/F:** NA / NA  
**Lab:** MBA

**ANIMAL ID:** 387

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 186

**DOSE:** 4.0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:** MB382M-387

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone Marrow	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Liver	* Lung
* Lymph Node, Mandibular	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Pituitary Gland	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland		

**OBSERVATIONS**

* Adrenal Cortex	Zona Reticul	Vacuolization Cytoplasmic	Focal, Mild
* Intestine Small, Duodenum	Epithelium	Necrosis	Mild
* Intestine Small, Ileum	Epithelium	Necrosis	Mild
* Intestine Small, Jejunum	Epithelium	Necrosis	Mild
* Kidney	Renal Tubule	Dilatation	Focal, Minimal
* Ovary		Atrophy	Moderate
* Spleen		Hematopoietic Cell Proliferation	Moderate
		Pigmentation	Minimal
* Uterus	Endometrium	Hyperplasia	Cystic, Moderate

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 97011-25  
**Test Type:** 26-WEEK  
**Route:** GAVAGE  
**Species/Strain:** Mouse/FVB/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Transgenic model evaluation (Melphalan)  
**CAS Number:** 148-82-3

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 04:56:01  
**First Dose M/F:** NA / NA  
**Lab:** MBA

**ANIMAL ID:** 388

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 186

**DOSE:** 4.0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:** MB382M-388

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone Marrow	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Kidney	* Liver
* Lung	* Lymph Node, Mandibular	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Mammary Gland	* Pituitary Gland	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	

**OBSERVATIONS**

* Adrenal Cortex	Zona Reticul	Vacuolization Cytoplasmic	Diffuse, Mild
* Intestine Small, Duodenum	Epithelium	Necrosis	Mild
* Intestine Small, Ileum	Epithelium	Necrosis	Mild
* Intestine Small, Jejunum	Epithelium	Necrosis	Mild
* Ovary		Atrophy	Marked
* Skin			
Note: vulva not present in section			
* Spleen		Hematopoietic Cell Proliferation	Moderate
		Pigmentation	Minimal
* Uterus	Endometrium	Hyperplasia	Cystic, Moderate

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 97011-25  
**Test Type:** 26-WEEK  
**Route:** GAVAGE  
**Species/Strain:** Mouse/FVB/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Transgenic model evaluation (Melphalan)  
**CAS Number:** 148-82-3

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 04:56:01  
**First Dose M/F:** NA / NA  
**Lab:** MBA

**ANIMAL ID:** 389

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 84

**DOSE:** 4.0 MG/KG

**DISP:** Natural Death

**HISTO:** MB382M-389

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Adrenal Cortex  
\* Lymph Node, Mandibular

\* Adrenal Medulla  
\* Lymph Node, Mediastinal

\* Heart  
\* Skin

\* Lung  
\* Thyroid Gland

**MISSING**

\* Pituitary Gland

**AUTO PRECLUDES DIAG.**

\* Bone Marrow  
\* Intestine Small, Duodenum  
\* Liver  
\* Stomach, Forestomach

\* Intestine Large, Cecum  
\* Intestine Small, Ileum  
\* Lymph Node, Mesenteric  
\* Stomach, Glandular

\* Intestine Large, Colon  
\* Intestine Small, Jejunum  
\* Mammary Gland  
\* Thymus

\* Intestine Large, Rectum  
\* Kidney  
\* Spleen  
\* Uterus

**OBSERVATIONS**

\* Ovary

Atrophy

Moderate

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 97011-25  
**Test Type:** 26-WEEK  
**Route:** GAVAGE  
**Species/Strain:** Mouse/FVB/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Transgenic model evaluation (Melphalan)  
**CAS Number:** 148-82-3

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 04:56:01  
**First Dose M/F:** NA / NA  
**Lab:** MBA

**ANIMAL ID:** 390

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 186

**DOSE:** 4.0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:** MB382M-390

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone Marrow	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Liver	* Lymph Node, Mandibular
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland	* Pituitary Gland
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland			

**OBSERVATIONS**

* Adrenal Cortex	Zona Reticul	Vacuolization Cytoplasmic	Focal, Minimal
* Intestine Small, Duodenum	Epithelium	Necrosis	Mild
* Intestine Small, Ileum	Epithelium	Necrosis	Mild
* Intestine Small, Jejunum	Epithelium	Necrosis	Mild
* Kidney	Renal Tubule	Dilatation	Focal, Minimal
* Lung	Alveolar Epith	Hyperplasia	Focal, Minimal
* Ovary		Atrophy	Marked
* Spleen		Hematopoietic Cell Proliferation	Mild
		Pigmentation	Minimal
* Uterus	Endometrium	Hyperplasia	Cystic, Mild

**PRIMARY CAUSE OF DEATH**

-

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

\* PROTOCOL REQUIRED TISSUE