

**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:48

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

**Lab:** NA

**C Number:** C03930

**Cage Range:** All

**Date Range:** All

**Reasons For Removal:** All

**Removal Date Range:** All

**Treatment Groups:** All

**Study Gender:** Female

**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:48

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

**Lab:** NA

---

**ANIMAL ID:** 1\_051

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 1250 PPM

**DISP:** Scheduled Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Pituitary gland

Chromophobe Adenoma

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:48

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

**Lab:** NA

---

**ANIMAL ID:** 1\_052

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 1250 PPM

**DISP:** Scheduled Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Kidney  
Lung  
Pituitary gland

Inflammation, Chronic  
Pneumonia, Chronic Murine  
Chromophobe Adenoma

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:48

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

**Lab:** NA

---

**ANIMAL ID:** 1\_053

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 1250 PPM

**DISP:** Scheduled Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Adrenal gland

Heart

Liver

Lung

Pancreas

Pituitary gland

Myocardium Nos

Pheochromocytoma

Fibrosis

Hyperplasia, Focal

Pneumonia, Chronic Murine

Atrophy, Focal

Chromophobe Adenoma

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:48

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

**Lab:** NA

---

**ANIMAL ID:** 1\_054

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 1250 PPM

**DISP:** Scheduled Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Heart  
Kidney  
Lung  
Pituitary gland

Myocardium Nos

Fibrosis  
Inflammation, Chronic  
Pneumonia, Chronic Murine  
Chromophobe Adenoma

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:48

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

**Lab:** NA

---

**ANIMAL ID:** 1\_055

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 1250 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Kidney

Inflammation, Chronic

Lung

Pneumonia, Chronic Murine

Pituitary gland

Chromophobe Adenoma

Unspecified

Multiple Organs Nos

Leukemia, Nos

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:48

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

**Lab:** NA

---

**ANIMAL ID:** 1\_057

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 1250 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Adrenal gland

Lung

Mammary gland

Thyroid

Unspecified

Uterus

Follicle

Multiple Organs Nos

Endometrium

Cytoplasmic Vacuolization

Pneumonia, Chronic Murine

Fibroadenoma

Hyperplasia, Cystic

Leukemia, Nos

Hyperplasia, Cystic

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:48

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

**Lab:** NA

---

**ANIMAL ID:** 1\_058

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 1250 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Heart	Myocardium Nos	Fibrosis
Kidney		Inflammation, Chronic
Liver		Degeneration, Nos
Lung		Pneumonia, Chronic Murine
Pituitary gland		Chromophobe Adenoma
Stomach		Edema, Nos
		Inflammation, Acute
Uterus		Endometrial Stromal Polyp

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:48

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

**Lab:** NA

---

**ANIMAL ID:** 1\_059

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 1250 PPM

**DISP:** Scheduled Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Kidney

Inflammation, Chronic

Lung

Pneumonia, Chronic Murine

Pituitary gland

Chromophobe Adenoma

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:48

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

**Lab:** NA

---

**ANIMAL ID:** 1\_060

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 1250 PPM

**DISP:** Scheduled Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Mammary gland

Fibroadenoma

Pituitary gland

Chromophobe Adenoma

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:48

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

**Lab:** NA

---

**ANIMAL ID:** 1\_061

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 1250 PPM

**DISP:** Scheduled Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Heart  
Kidney  
Pituitary gland  
Uterus

Myocardium Nos

Inflammation, Chronic Focal  
Nephropathy, Toxic  
Cyst, Nos  
Endometrial Stromal Polyp

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:48

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

**Lab:** NA

---

**ANIMAL ID:** 1\_062

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 1250 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Heart

Atrium

Thrombosis, Nos

Uterus

Cervix Uteri

Squamous Cell Carcinoma

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:48

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

**Lab:** NA

---

**ANIMAL ID:** 1\_063

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 1250 PPM

**DISP:** Natural Death

**HISTO:**

---

**OBSERVATIONS**

Uterus

Abscess, Nos

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:48

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

**Lab:** NA

---

**ANIMAL ID:** 1\_064

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 1250 PPM

**DISP:** Scheduled Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Liver

Bile Duct

Hyperplasia, Nos

Pituitary gland

Centrilobular

Metamorphosis, Fatty

Chromophobe Adenoma

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:48

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

**Lab:** NA

---

**ANIMAL ID:** 1\_065

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 1250 PPM

**DISP:** Scheduled Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Pituitary gland

Thyroid

Cyst, Nos

Cystic Follicles

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:48

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

**Lab:** NA

---

**ANIMAL ID:** 1\_067

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 1250 PPM

**DISP:** Scheduled Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Heart  
Kidney  
Lung  
Pituitary gland

Myocardium Nos

Fibrosis  
Inflammation, Chronic  
Pneumonia, Chronic Murine  
Chromophobe Adenoma  
Hemorrhage

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:48

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

**Lab:** NA

---

**ANIMAL ID:** 1\_068

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 1250 PPM

**DISP:** Scheduled Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Heart	Myocardium Nos	Fibrosis
Kidney		Inflammation, Chronic
Liver		Hyperplasia, Focal
Lung		Pneumonia, Chronic Murine
Pancreas	Islets	Islet-Cell Adenoma
Pituitary gland		Chromophobe Adenoma
Salivary gland		Hyperplasia, Epithelial

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:48

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

**Lab:** NA

---

**ANIMAL ID:** 1\_069

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 1250 PPM

**DISP:** Scheduled Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Lung	Hyperplasia, Adenomatous
Pituitary gland	Chromophobe Adenoma

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:48

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

**Lab:** NA

---

**ANIMAL ID:** 1\_071

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 1250 PPM

**DISP:** Scheduled Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Heart  
Intestine Large  
Kidney  
Lung  
Pancreas  
Pituitary gland

Myocardium Nos  
Colon

Fibrosis  
Parasitism  
Inflammation, Chronic  
Pneumonia, Chronic Murine  
Atrophy, Focal  
Chromophobe Adenoma

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:48

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

**Lab:** NA

---

**ANIMAL ID:** 1\_072

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 1250 PPM

**DISP:** Scheduled Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Kidney

Nephropathy, Toxic

Liver

Bile Duct

Hyperplasia, Nos

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:48

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

**Lab:** NA

---

**ANIMAL ID:** 1\_073

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 1250 PPM

**DISP:** Scheduled Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Adrenal gland

Bone marrow

Liver

Spleen

Unspecified

Bile Duct

Multiple Organs Nos

Cortical Adenoma

Fibrosis, Myelo

Hyperplasia, Focal

Hyperplasia, Nos

Hematopoiesis

Leukemia, Nos

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:48

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

**Lab:** NA

---

**ANIMAL ID:** 1\_074

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 1250 PPM

**DISP:** Scheduled Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Heart  
Kidney  
Liver  
Lung  
Pituitary gland

Myocardium Nos

Fibrosis  
Inflammation, Chronic  
Hyperplasia, Focal  
Pneumonia, Chronic Murine  
Chromophobe Adenoma

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:48

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

**Lab:** NA

---

**ANIMAL ID:** 1\_076

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 1250 PPM

**DISP:** Scheduled Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Uterus

Endometrial Stromal Polyp

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:48

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

**Lab:** NA

---

**ANIMAL ID:** 1\_078

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 1250 PPM

**DISP:** Scheduled Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Heart	Myocardium Nos	Fibrosis
	Myocardium Nos	Inflammation, Focal
Kidney		Inflammation, Chronic
Liver		Degeneration, Nos
		Hyperplasia, Focal
Lung		Hyperplasia, Adenomatous
		Pneumonia, Chronic Murine
Pancreas		Atrophy, Nos
Pituitary gland		Chromophobe Adenoma

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:48

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

**Lab:** NA

---

**ANIMAL ID:** 1\_080

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 1250 PPM

**DISP:** Scheduled Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Heart	Myocardium Nos	Fibrosis
	Myocardium Nos	Inflammation, Focal
Kidney		Inflammation, Chronic
Liver		Hyperplasia, Focal
Lung		Pneumonia, Chronic Murine

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:48

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

**Lab:** NA

---

**ANIMAL ID:** 1\_081

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 1250 PPM

**DISP:** Scheduled Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Lung		Alveolar/Bronchiolar Adenoma
Pituitary gland		Cyst, Nos
Uterus	Endometrium	Fibrosis

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:48

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

**Lab:** NA

---

**ANIMAL ID:** 1\_082

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 1250 PPM

**DISP:** Scheduled Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Kidney

Lung

Nephropathy, Toxic

Alveolar/Bronchiolar Adenoma

Pneumonia, Chronic Murine

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:48

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

**Lab:** NA

---

**ANIMAL ID:** 1\_083

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 1250 PPM

**DISP:** Scheduled Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Heart	Myocardium Nos	Fibrosis
Kidney		Inflammation, Chronic
Liver		Hyperplasia, Focal
Lung		Pneumonia, Chronic Murine
Salivary gland		Hyperplasia, Nos
Uterus	Endometrium	Hyperplasia, Nos

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:48

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

**Lab:** NA

---

**ANIMAL ID:** 1\_084

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 1250 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Intestine Large

Colon

Parasitism

Mammary gland

Mammary Duct

Adenocarcinoma, Nos

Pituitary gland

Chromophobe Adenoma

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:48

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

**Lab:** NA

---

**ANIMAL ID:** 1\_085

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 1250 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Heart	Myocardium Nos	Inflammation, Focal
Kidney		Inflammation, Chronic
Liver		Metamorphosis, Fatty
Lung	Bronchus	Inflammation, Acute
Pituitary gland		Chromophobe Adenoma

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:48

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

**Lab:** NA

---

**ANIMAL ID:** 1\_086

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 1250 PPM

**DISP:** Scheduled Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Heart  
Kidney  
Lung  
Pituitary gland  
Uterus

Myocardium Nos

Fibrosis  
Inflammation, Chronic  
Pneumonia, Chronic Murine  
Chromophobe Adenoma  
Endometrial Stromal Polyp

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:48

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

**Lab:** NA

---

**ANIMAL ID:** 1\_087

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 1250 PPM

**DISP:** Scheduled Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Heart	Myocardium Nos	Fibrosis
Kidney		Inflammation, Chronic
Liver		Hyperplasia, Focal
Lung		Pneumonia, Chronic Murine
Unspecified	Multiple Organs Nos	Leukemia, Nos

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:48

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

**Lab:** NA

---

**ANIMAL ID:** 1\_088

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 1250 PPM

**DISP:** Scheduled Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Lung		Alveolar/Bronchiolar Adenoma
Ovary		Cyst, Nos
Uterus	Endometrium	Hyperplasia, Cystic

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:48

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

**Lab:** NA

---

**ANIMAL ID:** 1\_090

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 1250 PPM

**DISP:** Scheduled Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Ovary		Cyst, Nos
Peritoneum		Inflammation, Nos
Stomach		Hyperkeratosis
Unspecified	Multiple Organs Nos	Leukemia, Nos
Urinary bladder		Transitional-Cell Papilloma

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:48

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

**Lab:** NA

---

**ANIMAL ID:** 1\_091

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 1250 PPM

**DISP:** Scheduled Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Heart

Myocardium Nos

Inflammation, Chronic Focal

Pituitary gland

Chromophobe Adenoma

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:48

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

**Lab:** NA

---

**ANIMAL ID:** 1\_092

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 1250 PPM

**DISP:** Scheduled Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Heart	Myocardium Nos	Inflammation, Chronic Focal
Kidney		Nephropathy, Toxic
Pancreas	Acinus	Atrophy, Focal
Pituitary gland		Chromophobe Adenoma

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:48

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

**Lab:** NA

---

**ANIMAL ID:** 1\_093

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 1250 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Adrenal gland

Brain

Heart

Kidney

Liver

Lung

Pituitary gland

Salivary gland

Uterus

Myocardium Nos

Endometrium

Cortical Carcinoma

Chromophobe Carcinoma, Invasive

Fibrosis

Inflammation, Chronic

Metamorphosis, Fatty

Pneumonia, Chronic Murine

Chromophobe Carcinoma

Atrophy, Diffuse

Hyperplasia, Cystic

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:48

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

**Lab:** NA

---

**ANIMAL ID:** 1\_094

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 1250 PPM

**DISP:** Scheduled Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Kidney

Liver

Lung

Pancreas

Pituitary gland

Uterus

Bile Duct

Endometrium

Inflammation, Chronic

Degeneration, Nos

Hyperplasia, Focal

Hyperplasia, Nos

Pneumonia, Chronic Murine

Atrophy, Focal

Chromophobe Adenoma

Hyperplasia, Cystic

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:48

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

**Lab:** NA

---

**ANIMAL ID:** 1\_095

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 1250 PPM

**DISP:** Scheduled Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Heart	Myocardium Nos	Fibrosis
Kidney		Inflammation, Chronic
Liver		Hyperplasia, Focal
	Bile Duct	Hyperplasia, Nos
Lung		Pneumonia, Chronic Murine
Pituitary gland		Chromophobe Adenoma

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:48

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

**Lab:** NA

---

**ANIMAL ID:** 1\_096

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 1250 PPM

**DISP:** Scheduled Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Heart	Myocardium Nos	Fibrosis
Kidney		Inflammation, Chronic
Liver		Hyperplasia, Focal
	Bile Duct	Hyperplasia, Nos
Lung		Pneumonia, Chronic Murine
Pancreas		Atrophy, Focal

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:48

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

**Lab:** NA

---

**ANIMAL ID:** 1\_097

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 1250 PPM

**DISP:** Scheduled Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Kidney

Nephropathy, Toxic

Lung

Alveolar/Bronchiolar Carcinoma

Mammary gland

Fibroadenoma

Pituitary gland

Chromophobe Adenoma

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:48

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

**Lab:** NA

---

**ANIMAL ID:** 1\_098

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 1250 PPM

**DISP:** Scheduled Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Heart	Myocardium Nos	Fibrosis
Kidney		Inflammation, Chronic
Lung		Pneumonia, Chronic Murine
Pancreas		Atrophy, Focal
Unspecified	Multiple Organs Nos	Leukemia, Nos

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:48

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

**Lab:** NA

---

**ANIMAL ID:** 1\_099

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 1250 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Heart	Myocardium Nos	Fibrosis
Kidney		Inflammation, Chronic
Liver		Metamorphosis, Fatty
Pituitary gland		Chromophobe Adenoma
Unspecified	Multiple Organs Nos	Leukemia, Nos

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:48

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

**Lab:** NA

---

**ANIMAL ID:** 1\_100

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 1250 PPM

**DISP:** Scheduled Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Heart

Myocardium Nos

Inflammation, Chronic Focal

Kidney

Nephropathy, Toxic

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:48

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

**Lab:** NA

---

**ANIMAL ID:** 2\_151

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 625 PPM

**DISP:** Scheduled Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Kidney

Nephropathy, Toxic

Pituitary gland

Chromophobe Adenoma

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:48

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

**Lab:** NA

---

**ANIMAL ID:** 2\_152

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 625 PPM

**DISP:** Scheduled Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Heart	Myocardium Nos	Fibrosis
Kidney		Inflammation, Chronic
Liver		Cytoplasmic Change, Basophilic
Ovary		Cyst, Follicular Nos
Unspecified	Multiple Organs Nos	Leukemia, Nos

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:48

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

**Lab:** NA

---

**ANIMAL ID:** 2\_153

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 625 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Kidney

Inflammation, Chronic

Liver

Cytoplasmic Change, Basophilic

Bile Duct

Hyperplasia, Nos

Lung

Hyperplasia, Adenomatous

Mammary gland

Pneumonia, Chronic Murine

Fibroadenoma

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:48

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

**Lab:** NA

---

**ANIMAL ID:** 2\_154

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 625 PPM

**DISP:** Scheduled Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Kidney

Inflammation, Chronic

Liver

Hyperplasia, Focal

Lung

Pneumonia, Chronic Murine

Mammary gland

Fibroadenoma

Pituitary gland

Chromophobe Adenoma

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:48

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

**Lab:** NA

---

**ANIMAL ID:** 2\_155

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 625 PPM

**DISP:** Scheduled Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Heart	Myocardium Nos	Fibrosis
Kidney		Inflammation, Chronic
Lung		Pneumonia, Chronic Murine
Mammary gland		Dilatation, Ducts
Pituitary gland		Cyst, Nos
Unspecified	Multiple Organs Nos	Leukemia, Nos

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:48

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

**Lab:** NA

---

**ANIMAL ID:** 2\_156

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 625 PPM

**DISP:** Scheduled Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Heart  
Intestine Large  
Kidney  
Liver  
Lung  
Pituitary gland

Myocardium Nos  
Colon

Fibrosis  
Parasitism  
Inflammation, Chronic  
Hyperplasia, Focal  
Pneumonia, Chronic Murine  
Chromophobe Adenoma

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:48

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

**Lab:** NA

---

**ANIMAL ID:** 2\_157

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 625 PPM

**DISP:** Scheduled Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Heart  
Intestine Large  
Kidney  
Liver

Myocardium Nos  
Colon

Fibrosis  
Parasitism  
Inflammation, Chronic  
Degeneration, Nos  
Hyperplasia, Focal  
Pneumonia, Chronic Murine

Lung

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:48

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

**Lab:** NA

---

**ANIMAL ID:** 2\_158

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 625 PPM

**DISP:** Scheduled Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Heart	Myocardium Nos	Fibrosis
Kidney		Inflammation, Chronic
Liver	Bile Duct	Hyperplasia, Nos
Lung		Pneumonia, Chronic Murine
Unspecified	Multiple Organs Nos	Leukemia, Nos

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:48

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

**Lab:** NA

---

**ANIMAL ID:** 2\_159

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 625 PPM

**DISP:** Scheduled Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Heart  
Intestine Large  
Kidney  
Liver

Myocardium Nos  
Colon

Fibrosis  
Parasitism  
Inflammation, Chronic  
Granuloma, Nos  
Hyperplasia, Focal  
Hyperplasia, Nos  
Pneumonia, Chronic Murine  
Chromophobe Adenoma

Bile Duct

Lung  
Pituitary gland

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:48

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

**Lab:** NA

---

**ANIMAL ID:** 2\_160

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 625 PPM

**DISP:** Scheduled Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Intestine Large  
Kidney  
Liver

Colon

Parasitism  
Inflammation, Chronic  
Hyperplasia, Focal

Lung  
Pancreas  
Uterus

Bile Duct

Hyperplasia, Nos  
Pneumonia, Chronic Murine  
Atrophy, Focal  
Hyperplasia, Nos

Endometrium

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:48

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

**Lab:** NA

---

**ANIMAL ID:** 2\_161

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 625 PPM

**DISP:** Scheduled Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Heart	Myocardium Nos	Fibrosis
Kidney		Inflammation, Chronic
Lung		Congestion, Nos
		Pneumonia, Chronic Murine
Pituitary gland		Chromophobe Adenoma
Unspecified	Multiple Organs Nos	Leukemia, Nos

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:48

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

**Lab:** NA

---

**ANIMAL ID:** 2\_162

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 625 PPM

**DISP:** Natural Death

**HISTO:**

---

**OBSERVATIONS**

Liver

Metamorphosis, Fatty

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:48

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

**Lab:** NA

---

**ANIMAL ID:** 2\_163

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 625 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Intestine Small

Peyers Patch

Hyperplasia, Lymphoid

Lung

Pneumonia, Chronic Murine

Pituitary gland

Chromophobe Adenoma

Spleen

Hemosiderosis

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:48

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

**Lab:** NA

---

**ANIMAL ID:** 2\_164

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 625 PPM

**DISP:** Scheduled Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Kidney		Inflammation, Chronic
Liver		Hyperplasia, Focal
Pituitary gland		Cyst, Nos
Thyroid		Hyperplasia, C Cell
Unspecified	Multiple Organs Nos	Leukemia, Nos
Uterus		Endometrial Stromal Polyp
	Endometrium	Hyperplasia, Cystic

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:48

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

**Lab:** NA

---

**ANIMAL ID:** 2\_165

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 625 PPM

**DISP:** Natural Death

**HISTO:**

---

**OBSERVATIONS**

Unspecified

Multiple Organs Nos

Leukemia, Nos

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:48

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

**Lab:** NA

---

**ANIMAL ID:** 2\_166

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 625 PPM

**DISP:** Scheduled Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Liver

Cytoplasmic Change, Basophilic

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:48

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

**Lab:** NA

---

**ANIMAL ID:** 2\_167

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 625 PPM

**DISP:** Scheduled Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Intestine Large

Colon

Parasitism

Kidney

Inflammation, Focal

Lung

Pneumonia, Chronic Murine

Pancreas

Atrophy, Focal

Pituitary gland

Chromophobe Adenoma

Thyroid

Hyperplasia, C Cell

Unspecified

Multiple Organs Nos

Leukemia, Nos

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:48

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

**Lab:** NA

---

**ANIMAL ID:** 2\_168

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 625 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Adrenal gland

Bone marrow

Kidney

Lung

Pheochromocytoma

Hyperplasia, Hematopoietic

Inflammation, Chronic

Edema, Nos

Fibrosis

Hyperplasia, Adenomatous

Unspecified

Multiple Organs Nos

Leukemia, Nos

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:48

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

**Lab:** NA

---

**ANIMAL ID:** 2\_169

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 625 PPM

**DISP:** Scheduled Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Mammary gland

Fibroadenoma

Pancreas

Islets

Islet-Cell Adenoma

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:48

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

**Lab:** NA

---

**ANIMAL ID:** 2\_170

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 625 PPM

**DISP:** Scheduled Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Heart	Myocardium Nos	Fibrosis
Kidney		Inflammation, Chronic
Lung		Pneumonia, Chronic Murine
Ovary		Cyst, Follicular Nos
Pituitary gland		Cyst, Hemorrhagic
Salivary gland		Hyperplasia, Epithelial
		Metaplasia, Squamous
Unspecified	Multiple Organs Nos	Leukemia, Nos

---

**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:48

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

**Lab:** NA

---

**ANIMAL ID:** 2\_171

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 625 PPM

**DISP:** Scheduled Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Heart	Myocardium Nos	Fibrosis
Kidney		Inflammation, Chronic
Liver		Degeneration, Nos
		Hyperplasia, Focal
Lung		Pneumonia, Chronic Murine
Mammary gland		Dilatation, Ducts
		Fibroadenoma
Pituitary gland		Chromophobe Adenoma
Uterus	Endometrium	Hyperplasia, Nos

---

**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:48

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

**Lab:** NA

---

**ANIMAL ID:** 2\_172

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 625 PPM

**DISP:** Natural Death

**HISTO:**

---

**OBSERVATIONS**

Salivary gland

Adenocarcinoma, Nos

Spleen

Infarct, Nos

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:48

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

**Lab:** NA

---

**ANIMAL ID:** 2\_173

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 625 PPM

**DISP:** Scheduled Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Pituitary gland

Chromophobe Adenoma

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**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:48

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

**Lab:** NA

---

**ANIMAL ID:** 2\_174

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 625 PPM

**DISP:** Scheduled Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Kidney

Nephropathy, Toxic

Pituitary gland

Chromophobe Adenoma

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:48

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

**Lab:** NA

---

**ANIMAL ID:** 2\_175

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 625 PPM

**DISP:** Natural Death

**HISTO:**

---

**OBSERVATIONS**

Heart	Myocardium Nos	Fibrosis
Kidney		Tubular-Cell Adenoma
Unspecified	Multiple Organs Nos	Leukemia, Granulocytic

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:48

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

**Lab:** NA

---

**ANIMAL ID:** 2\_176

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 625 PPM

**DISP:** Scheduled Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Heart  
Kidney  
Liver  
Lung  
Pancreas  
Pituitary gland

Myocardium Nos

Fibrosis  
Inflammation, Chronic  
Hyperplasia, Focal  
Pneumonia, Chronic Murine  
Atrophy, Focal  
Chromophobe Adenoma

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:48

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

**Lab:** NA

---

**ANIMAL ID:** 2\_177

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 625 PPM

**DISP:** Scheduled Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Heart  
Intestine Large  
Kidney  
Liver

Myocardium Nos  
Colon

Bile Duct

Thyroid

Fibrosis  
Parasitism  
Inflammation, Chronic  
Hyperplasia, Focal  
Hyperplasia, Nos  
Hyperplasia, Follicular Cell

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:48

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

**Lab:** NA

---

**ANIMAL ID:** 2\_178

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 625 PPM

**DISP:** Scheduled Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Heart

Myocardium Nos

Fibrosis

Intestine Large

Colon

Parasitism

Kidney

Inflammation, Chronic

Pancreas

Atrophy, Focal

Unspecified

Multiple Organs Nos

Leukemia, Nos

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:48

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

**Lab:** NA

---

**ANIMAL ID:** 2\_180

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 625 PPM

**DISP:** Scheduled Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Liver

Pituitary gland

Cytoplasmic Change, Basophilic

Chromophobe Adenoma

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:48

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

**Lab:** NA

---

**ANIMAL ID:** 2\_181

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 625 PPM

**DISP:** Scheduled Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Pituitary gland

Cyst, Hemorrhagic

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:48

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

**Lab:** NA

---

**ANIMAL ID:** 2\_183

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 625 PPM

**DISP:** Scheduled Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Liver

Bile Duct

Hyperplasia, Nos

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:48

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

**Lab:** NA

---

**ANIMAL ID:** 2\_184

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 625 PPM

**DISP:** Scheduled Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Intestine Small

Mesentery Nos

Steatitis

Mammary gland

Fibroadenoma

Pituitary gland

Chromophobe Adenoma

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:48

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

**Lab:** NA

---

**ANIMAL ID:** 2\_185

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 625 PPM

**DISP:** Scheduled Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Heart	Myocardium Nos	Fibrosis
Kidney		Inflammation, Chronic
Liver		Hyperplasia, Focal
Lung		Pneumonia, Chronic Murine

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:48

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

**Lab:** NA

---

**ANIMAL ID:** 2\_186

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 625 PPM

**DISP:** Scheduled Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Heart	Myocardium Nos	Fibrosis
Kidney		Inflammation, Chronic
Liver		Degeneration, Nos
		Hyperplasia, Focal
	Bile Duct	Hyperplasia, Nos
Lung		Pneumonia, Chronic Murine
Pituitary gland		Cyst, Nos
Thyroid		C-Cell Adenoma
		Hyperplasia, C Cell
Uterus	Endometrium	Congestion, Nos

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:48

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

**Lab:** NA

---

**ANIMAL ID:** 2\_187

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 625 PPM

**DISP:** Scheduled Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Heart	Myocardium Nos	Fibrosis
Kidney		Inflammation, Chronic
Liver		Hyperplasia, Focal
Lung		Pneumonia, Chronic Murine
Pituitary gland		Cyst, Nos

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:49

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

**Lab:** NA

---

**ANIMAL ID:** 2\_188

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 625 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Heart  
Kidney  
Liver  
Pituitary gland

Myocardium Nos

Fibrosis  
Inflammation, Chronic  
Metamorphosis, Fatty  
Chromophobe Adenoma

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:49

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

**Lab:** NA

---

**ANIMAL ID:** 2\_189

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 625 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Heart	Myocardium Nos	Fibrosis
Kidney		Inflammation, Chronic
Liver		Metamorphosis, Fatty
Pituitary gland		Cyst, Nos
Unspecified	Multiple Organs Nos	Leukemia, Nos
Uterus	Endometrium	Hyperplasia, Cystic

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:49

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

**Lab:** NA

---

**ANIMAL ID:** 2\_190

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 625 PPM

**DISP:** Scheduled Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Heart	Myocardium Nos	Fibrosis
Kidney		Inflammation, Chronic
Liver		Hyperplasia, Focal
	Bile Duct	Hyperplasia, Nos
Lung		Alveolar/Bronchiolar Adenoma
		Hyperplasia, Adenomatous
		Pneumonia, Chronic Murine
Pituitary gland		Chromophobe Adenoma

---

**PRIMARY CAUSE OF DEATH**

-

---

**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:49

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

**Lab:** NA

---

**ANIMAL ID:** 2\_191

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 625 PPM

**DISP:** Scheduled Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Heart	Myocardium Nos	Fibrosis
Kidney		Inflammation, Chronic
Liver		Hyperplasia, Focal
Lung		Pneumonia, Chronic Murine
Pituitary gland		Chromophobe Adenoma

---

**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:49

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

**Lab:** NA

---

**ANIMAL ID:** 2\_192

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 625 PPM

**DISP:** Moribund Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Liver		Metamorphosis, Fatty
Unspecified	Multiple Organs Nos	Leukemia, Nos

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:49

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

**Lab:** NA

---

**ANIMAL ID:** 2\_194

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 625 PPM

**DISP:** Scheduled Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Heart	Myocardium Nos	Fibrosis
Kidney		Inflammation, Chronic
Liver		Hyperplasia, Focal
Lung		Pneumonia, Chronic Murine
Pituitary gland		Cyst, Nos
Skin		Basal-Cell Tumor
Uterus	Endometrium	Hyperplasia, Nos

---

**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:49

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

**Lab:** NA

---

**ANIMAL ID:** 2\_195

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 625 PPM

**DISP:** Scheduled Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Pituitary gland

Thyroid

Chromophobe Adenoma

Follicular-Cell Carcinoma

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:49

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

**Lab:** NA

---

**ANIMAL ID:** 2\_196

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 625 PPM

**DISP:** Scheduled Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Kidney

Inflammation, Chronic

Lung

Fibrosis

Ovary

Pneumonia, Chronic Murine

Pituitary gland

Cyst, Follicular Nos

Unspecified

Multiple Organs Nos

Granulosa-Cell Tumor

Chromophobe Adenoma

Leukemia, Nos

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:49

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

**Lab:** NA

---

**ANIMAL ID:** 2\_197

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 625 PPM

**DISP:** Scheduled Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Heart	Myocardium Nos	Fibrosis
Kidney		Inflammation, Chronic
Liver		Hyperplasia, Focal
Lung		Pneumonia, Chronic Murine
Thyroid		C-Cell Adenoma
Uterus		Endometrial Stromal Polyp
	Endometrium	Hyperplasia, Cystic

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:49

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

**Lab:** NA

---

**ANIMAL ID:** 2\_198

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 625 PPM

**DISP:** Scheduled Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Heart	Myocardium Nos	Fibrosis
Intestine Large	Colon	Parasitism
Kidney		Inflammation, Chronic
Lung		Pneumonia, Chronic Murine
Pancreas		Atrophy, Focal
Pituitary gland		Chromophobe Adenoma
Unspecified	Multiple Organs Nos	Leukemia, Nos
Uterus		Endometrial Stromal Polyp

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:49

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

**Lab:** NA

---

**ANIMAL ID:** 2\_199

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 625 PPM

**DISP:** Scheduled Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Heart	Myocardium Nos	Fibrosis
Liver		Hyperplasia, Focal
Lung		Pneumonia, Chronic Murine
Thyroid		Cyst, Ultimobranchial

---

**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:49

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

**Lab:** NA

---

**ANIMAL ID:** 2\_200

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 625 PPM

**DISP:** Scheduled Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Heart	Myocardium Nos	Degeneration, Nos
Kidney		Inflammation, Chronic
Liver		Hyperplasia, Focal
	Bile Duct	Hyperplasia, Nos
Lung		Pneumonia, Chronic Murine
Pancreas		Atrophy, Focal
Uterus		Endometrial Stromal Polyp
	Endometrium	Hyperplasia, Cystic

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:49

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

**Lab:** NA

---

**ANIMAL ID:** 3\_221

**TRT#:** 3

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Scheduled Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Heart	Myocardium Nos	Fibrosis
Kidney		Inflammation, Chronic
Liver		Hyperplasia, Focal
		Metamorphosis, Fatty
Lung		Pneumonia, Chronic Murine
Pituitary gland		Chromophobe Adenoma
Uterus		Endometrial Stromal Polyp

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:49

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

**Lab:** NA

---

**ANIMAL ID:** 3\_222

**TRT#:** 3

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Scheduled Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Heart	Myocardium Nos	Inflammation, Focal
Kidney		Inflammation, Chronic
Liver		Hyperplasia, Focal
	Bile Duct	Hyperplasia, Nos
Lung		Pneumonia, Chronic Murine
Pituitary gland		Chromophobe Adenoma
		Cyst, Nos

---

**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:49

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

**Lab:** NA

---

**ANIMAL ID:** 3\_223

**TRT#:** 3

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Scheduled Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Heart	Myocardium Nos	Fibrosis
Kidney		Inflammation, Chronic
Liver		Hyperplasia, Focal
	Bile Duct	Hyperplasia, Nos
Lung		Pneumonia, Chronic Murine
Pituitary gland		Cyst, Nos

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:49

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

**Lab:** NA

---

**ANIMAL ID:** 3\_224

**TRT#:** 3

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Scheduled Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Heart	Myocardium Nos	Fibrosis
Kidney		Inflammation, Chronic
Liver		Hyperplasia, Focal
Pancreas		Atrophy, Focal
Pituitary gland		Chromophobe Adenoma

---

**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:49

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

**Lab:** NA

---

**ANIMAL ID:** 3\_225

**TRT#:** 3

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Scheduled Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Heart	Myocardium Nos	Inflammation, Focal
Intestine Large	Colon	Parasitism
Kidney		Inflammation, Chronic
Liver		Hyperplasia, Focal
	Bile Duct	Hyperplasia, Nos
Lung		Pneumonia, Chronic Murine

---

**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:49

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

**Lab:** NA

---

**ANIMAL ID:** 3\_226

**TRT#:** 3

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Natural Death

**HISTO:**

---

**OBSERVATIONS**

Adrenal gland

Heart

Kidney

Liver

Unspecified

Myocardium Nos

Multiple Organs Nos

Lipoidosis

Fibrosis

Inflammation, Chronic

Metamorphosis, Fatty

Leukemia, Nos

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:49

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

**Lab:** NA

---

**ANIMAL ID:** 3\_227

**TRT#:** 3

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Scheduled Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Heart  
Kidney  
Lung  
Pituitary gland

Myocardium Nos

Fibrosis  
Inflammation, Chronic  
Pneumonia, Chronic Murine  
Chromophobe Adenoma

---

**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:49

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

**Lab:** NA

---

**ANIMAL ID:** 3\_228

**TRT#:** 3

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Scheduled Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Liver

Cytoplasmic Change, Basophilic

Pancreas

Acinus

Atrophy, Diffuse

Pituitary gland

Inflammation, Chronic

Chromophobe Adenoma

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:49

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

**Lab:** NA

---

**ANIMAL ID:** 3\_229

**TRT#:** 3

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Scheduled Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Heart	Myocardium Nos	Fibrosis
Kidney		Inflammation, Chronic
Liver		Hyperplasia, Focal
	Bile Duct	Hyperplasia, Nos
Lung		Pneumonia, Chronic Murine
Ovary		Cyst, Follicular Nos

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:49

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

**Lab:** NA

---

**ANIMAL ID:** 3\_230

**TRT#:** 3

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Moribund Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Heart	Myocardium Nos	Fibrosis
Kidney		Inflammation, Chronic
Liver		Hyperplasia, Focal
Lung		Pneumonia, Chronic Murine
Mammary gland		Fibroadenoma
Pituitary gland		Chromophobe Adenoma
Uterus	Endometrium	Hyperplasia, Nos

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:49

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

**Lab:** NA

---

**ANIMAL ID:** 3\_231

**TRT#:** 3

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Scheduled Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Pituitary gland

Unspecified

Multiple Organs Nos

Cyst, Hemorrhagic

Leukemia, Nos

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:49

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

**Lab:** NA

---

**ANIMAL ID:** 3\_233

**TRT#:** 3

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Scheduled Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Liver  
Pancreas  
Pituitary gland

Bile Duct  
Acinus

Hyperplasia, Nos  
Atrophy, Focal  
Cyst, Nos

---

**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:49

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

**Lab:** NA

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**ANIMAL ID:** 3\_234

**TRT#:** 3

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Scheduled Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Pituitary gland

Chromophobe Adenoma

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:49

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

**Lab:** NA

---

**ANIMAL ID:** 3\_235

**TRT#:** 3

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Natural Death

**HISTO:**

---

**OBSERVATIONS**

Uterus

Hyperplasia, Polypoid

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:49

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

**Lab:** NA

---

**ANIMAL ID:** 3\_236

**TRT#:** 3

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Scheduled Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Heart

Myocardium Nos

Fibrosis

Intestine Large

Colon

Parasitism

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:49

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

**Lab:** NA

---

**ANIMAL ID:** 3\_238

**TRT#:** 3

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Scheduled Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Liver

Bile Duct

Hyperplasia, Nos

Lung

Histiocytosis

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:49

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

**Lab:** NA

---

**ANIMAL ID:** 3\_239

**TRT#:** 3

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Natural Death

**HISTO:**

---

**OBSERVATIONS**

Unspecified

Multiple Organs Nos

Leukemia, Nos

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C03930

**Test Type:** Long-Term

**Route:** Dosed-Feed

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** p-Phenylenediamine dihydrochloride

**CAS Number:** 624-18-0

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 14:18:49

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

**Lab:** NA

---

**ANIMAL ID:** 3\_240

**TRT#:** 3

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Scheduled Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Ovary

Mesovarium

Cyst, Parovarian

---

**PRIMARY CAUSE OF DEATH**

-

---

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

\* PROTOCOL REQUIRED TISSUE