

CMHD Pathology Report



CMHD Pathology Core

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contact: Dr. Susan Newbigging email: newbigging@lunenfeld.ca **Mouse Genetics Project**

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ReportID: Report Date: January 30, 2014

Pathologist: Dr. H. Adissu

CMHD LabID: N13-915

Relevant History:

Phenotype: None

Large heart found in one mouse at necropsy

AnimalID: M01028865 (Male)

Histopathology Findings: heart (MA:0000072)

Histopath Description:

The heart is markedly larger than normal (estimated at 1.25x normal)

Morphological Diagnosis:

Distribution: generalized; Severity: severe; MPATH Process Term: hypertrophy MPATH:159

Definitive Diagnosis:

Cardiomegally

Histopathology Comments:

The change is consistent with gross observation



Heart, cardiomegally, 1.25x, HE



Heart, Wt, normal, 1.25x, HE

brain (MA:0000168)

Histopath Description:

There is moderate dilation of the fourth ventricle

Morphological Diagnosis:

Distribution: diffuse; **Severity:** moderate; **MPATH Process Term:** degenerative change MPATH:14

Definitive Diagnosis:

Dilation of the brain ventricles

Histopathology Comments:

Mild dilation of the ventricles is a background condition in mice of C57BL/6N background

liver (MA:0000358)

Histopath Description:

There is focal aggregate of moninuclear inflammatory cells. There are occasional foci of erythropoietic cells.

Morphological Diagnosis:

Distribution: multifocal; **Severity:** mild; **MPATH Diagnosis:** extramedullary hemopoiesis MPATH:595; **MPATH Process Term:** hyperplasia MPATH:134

Definitive Diagnosis:

hepatic erythropoiesis

Histopathology Comments:

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spleen (MA:0000141)

Histopath Description:

Mild erythropoiesis

Morphological Diagnosis:

Distribution: multifocal to coalescing; **Severity:** mild; **MPATH Diagnosis:** extramedullary

hemopoiesis MPATH:595; MPATH Process Term: hyperplasia MPATH:134

Definitive Diagnosis:

Mild erythropoiesis

eye (MA:0000261)

Histopath Description:

Involving one eye, there are clusters of external nuclear structures within the internal plexiform layer.

Morphological Diagnosis:

Distribution: multifocal; **Severity:** mild; **MPATH Process Term:** developmental dysplasia MPATH:64

Definitive Diagnosis:

Retinal dysplasia

Organ/Tissue Analyzed:

Histopathology examination included the following organs and tissues: brain, trigeminal ganglion, eyes, salivary glands, trachea, lungs, heart, thymus, thyroid gland, parathyroid gland, exocrine and endocrine pancreas, oesophagus, stomach, small intestine, large intestine, liver, gall bladder, spleen, kidneys, adrenal gland, lymph nodes, spinal cord, bone marrow, sternum, femur and tibia with associated skeletal muscles, brown fat, pinna, skin, testis, epididymis, seminal vesicle, and prostate.

AnimalID: M01028862 (Male)

Histopathology Findings:

lymph node (MA:0000139)

Histopath Description:

Within the sinuses of the superficial cervical lymphnode are numerous erythrocytes freely as well as within macrophages (erythrophagocytosis)

Morphological Diagnosis:

Duration: acute; **Distribution:** multifocal; **Severity:** mild; **MPATH Process Term:** hemorrhage and non-specified extravasation MPATH:119

Definitive Diagnosis:

Sinus erythrocytosis

Histopathology Comments:

The lesion suggests drainage of a recent hemorrhage in nearby tissues (usuall seen after retrobulbar bleeding).

Organ/Tissue Analyzed:

Histopathology examination included the following organs and tissues: brain, trigeminal ganglion, eyes, salivary glands, trachea, lungs, heart, thymus, thyroid gland, parathyroid gland, exocrine and endocrine pancreas, oesophagus, stomach, small intestine, large intestine, liver, gall bladder, spleen, kidneys, adrenal gland, lymph nodes, spinal cord, bone marrow, sternum, femur and tibia with associated skeletal muscles, brown fat, pinna, skin, testis, epididymis, seminal vesicle, and prostate.

AnimalID: M01017848 (Female)

Histopathology Findings:

kidney (MA:0000368)

Histopath Description:

Within the one kidney, there is a wedge shaped tubular proliferation extending from the capsule into

the cortex

Morphological Diagnosis:

Duration: chronic; Distribution: focally extensive; Severity: mild; MPATH Process Term:

hyperplasia MPATH:134

Definitive Diagnosis:

Focally extensive renal tubular hypperplasia

Histopathology Comments:

The lesion is consistent with old infarct and regenerative tubular hyperplasia

Organ/Tissue Analyzed:

Histopathology examination included the following organs and tissues: brain, trigeminal ganglion, eyes, salivary glands, trachea, lungs, heart, thymus, thyroid gland, parathyroid gland, exocrine and endocrine pancreas, oesophagus, stomach, small intestine, large intestine, liver, gall bladder, spleen, kidneys, adrenal gland, lymph nodes, spinal cord, bone marrow, sternum, femur and tibia with associated skeletal muscles, brown fat, pinna, skin, uterus, oviduct, and ovary, and mammary gland.

AnimalID: M00997929 (Female)

Histopathology Findings:

mesenteric lymph node (MA:0002829)

Histopath Description:

Early lymphoma

Morphological Diagnosis:

MPATH Diagnosis: lymphoid neoplasms MPATH:513; MPATH Process Term: neoplasia

MPATH:218

Definitive Diagnosis:

Early lymphoma

spleen (MA:0000141)

Histopath Description:

Moderate lymphoid hyperplasia with germinal centers.

Morphological Diagnosis:

Distribution: multifocal to coalescing; **Severity:** moderate; **MPATH Diagnosis:** lymphoid hyperplasia MPATH:147; **MPATH Process Term:** hyperplasia MPATH:134

Definitive Diagnosis:

Lymphoid hyperplasia

Histopathology Comments:

incidental

Organ/Tissue Analyzed:

Histopathology examination included the following organs and tissues: brain, trigeminal ganglion, eyes, salivary glands, trachea, lungs, heart, thymus, thyroid gland, parathyroid gland, exocrine and endocrine pancreas, oesophagus, stomach, small intestine, large intestine, liver, gall bladder, spleen, kidneys, adrenal gland, lymph nodes, spinal cord, bone marrow, sternum, femur and tibia with associated skeletal muscles, brown fat, pinna, skin, uterus, oviduct, and ovary, and mammary gland.

Report Summary and Recommendation:

Cardiomegally was seen in one mouse. Other lesions are incidental and/or are attributable to strain background.

Line summary: Cardiomegally (1/4)