

# **CMHD Pathology Report**



#### **CMHD Pathology Core**

Toronto Centre for Phenogenomics 25 Orde St. 3rd fl. Toronto, Ont. M5T 3H7 Tel.(416) 586-8375 Fax (416) 586-5993

contact: Dr. Susan Newbigging email:

newbigging@lunenfeld.ca

Mouse Genetics Project

Wellcome Trust Sanger Institute Wellcome Trust Genome Campus Hinxton, Cambridge CB10 1SA

UK

ReportID: Report Date: January 09, 2014

Pathologist: Dr. H. Adissu

CMHD LabID: N13-714

#### **Relevant History:**

Phenotype:

Homozygous preweaning lethality and embryonic lethality

# AnimalID: M01014797 (Male) Histopathology Findings:

lymph node (MA:0000139)

#### **Histopath Description:**

The mesenteric lymph node is markedly enlarged (greater than four fold). The medulla is particularly expanded by chords and sheets of plasmatoid cells. There are promient germinal centers within the medulla

### **Morphological Diagnosis:**

**Distribution:** Diffuse; **Severity:** moderate; **MPATH Diagnosis:** hyperplasia MPATH:134; **MPATH Process Term:** hyperplasia MPATH:134

# **Definitive Diagnosis:**

Lymphoid hyperplasia

## **Histopathology Comments:**

The changes in the mesenteric lymph node are suggestive of draining of a regional inflammatory process. However, such a process was not observed in the tissues examined. Early maginal center lymphoma is suspected.

#### 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: M00997500 (Male)**

#### 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: M00983983 (Female) Histopathology Findings: lymph node (MA:0000139)

#### **Histopath Description:**

There are moderate numbers of erythrocytes within subcapsular sinuses and some are within macrophages

#### **Morphological Diagnosis:**

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

#### **Definitive Diagnosis:**

Sinus erythrocytosis and erythrophagocytosis

#### **Histopathology Comments:**

The lesion is suggestive of recent hemorrhage in the surrouning tissue.

#### 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: M00983982 (Female)

#### **Histopathology Findings:**

#### eve (MA:0000261)

#### **Histopath Description:**

A 100 stalk of fibrous connective tissue containing a small artery in the center extends from the area of the optic disc towards the posterior vitreous. A small fragment of fibrous tissue is freely present within the vitreous anterior to this stalk (assumed to be extension of the stalk).

#### **Morphological Diagnosis:**

**MPATH Diagnosis:** developmental and structural abnormality MPATH:55; **MPATH Process Term:** developmental and structural abnormality MPATH:55

#### **Definitive Diagnosis:**

Persistent hyaloid artery

#### **Histopathology Comments:**

hyaloid artery remnant is a rare condition in which there remain some parts of the hyaloid artery. The posterior hyaloid vascular system of mice usually undergoes involution in the first month of life (Richard et al., 2000).

#### lymph node (MA:0000139)

#### **Histopath Description:**

The mesenteric lymph node is markedly enlarged (greater than four fold). The medulla is particularly expanded by chords and sheets of plasmatoid cells. There are promient germinal centers within the medulla

#### **Morphological Diagnosis:**

**Distribution:** Diffuse; **Severity:** moderate; **MPATH Diagnosis:** hyperplasia MPATH:134; **MPATH Process Term:** hyperplasia MPATH:134

#### **Definitive Diagnosis:**

Lymphoid hyperplasia

#### **Histopathology Comments:**

The changes in the mesenteric lymph node are suggestive of draining of a regional inflammatory process. However, such a process was not observed in the tissues examined. Early maginal center lymphoma is suspected.

#### 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:

Incidental lesions attributable to diet or strain background are observed in this line. No morphological abnormalities were detected to predict embryonic or preweaning lethality in homozygotes. Analysis of homozygous embryos and preweaning mice is recommended.

Line summary: None