



# CMHD Pathology Report



## CMHD Pathology Core

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ReportID: Report Date: not completed  
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## Mouse Genetics Project

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CMHD LabID: N13-243

## Relevant History:

increased heart weight  
decreased erythrocyte cell number  
decreased hemoglobin content  
decreased circulating alkaline phosphatase level  
decreased circulating creatine kinase level  
decreased circulating aspartate transaminase level  
increased lean body mass  
preweaning lethality  
embryonic lethality

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**AnimalID: M00334237 (Male)**

## Histopathology Findings:

### liver (MA:0000358)

#### Histopath Description:

severe lipidosis

#### Morphological Diagnosis:

**Distribution:** diffuse; **Severity:** severe; **MPATH Diagnosis:** steatosis MPATH:622

#### Definitive Diagnosis:

Hepatic lipidosis

### lymph node (MA:0000139)

#### Histopath Description:

The mesenteric lymph node is enlarged (greater than three-fold). There are multiple follicles with large germinal centers. The sinuses contain large numbers of mature lymphocytes.

#### Morphological Diagnosis:

**Duration:** Sub-acute; **Distribution:** Diffuse; **Severity:** moderate; **MPATH Diagnosis:** 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.

### kidney (MA:0000368)

#### Histopath Description:

There are multifocal small perivascular aggregates of mononuclear inflammatory cells at the corticomedullary junction.

#### Morphological Diagnosis:

**Duration:** Chronic-active; **Distribution:** Focal; **Severity:** mild; **MPATH Diagnosis:** inflammation MPATH:212

#### Definitive Diagnosis:

Focal perivascular inflammatory aggregate.

**Histopathology Comments:**

This is a common incidental and insignificant lesion in mice

**salivary gland (MA:0000346)****Histopath Description:**

There are multifocal perivascular mononuclear inflammatory cell aggregates.

**Morphological Diagnosis:**

**Distribution:** multifocal; **Severity:** mild;

**Definitive Diagnosis:**

Interstitial inflammatory aggregates

**knee (MA:0000046)****Histopath Description:**

The overall subgross anatomical organization of the femur, tibia, and the knee joint are within normal limits. Histologically, there is focal fissure and fraying (fibrillation) the tibial articular cartilage.

**Morphological Diagnosis:**

**Duration:** chronic; **Distribution:** focally extensive; **Severity:** mild; **MPATH Diagnosis:** degenerative change MPATH:14

**Definitive Diagnosis:**

Mild fibrillation and fissure of the superficial zone of femoral articular cartilage - consistent with low grade degenerative joint disease (DJD)

**Histopathology Comments:**

The histological changes within the superficial articular cartilage are indicative of early and very mild DJD. The lesions are likely age-associated. DJD occurs in all inbred strains of mice as part of the aging process.

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**AnimalID: M00334238 (Male)****Histopathology Findings:****kidney (MA:0000368)****Histopath Description:**

There are multifocal small perivascular aggregates of mononuclear inflammatory cells at the corticomedullary junction.

**Morphological Diagnosis:**

**Duration:** Chronic-active; **Distribution:** Focal; **Severity:** mild; **MPATH Diagnosis:** inflammation MPATH:212

**Definitive Diagnosis:**

Focal perivascular inflammatory aggregate.

**Histopathology Comments:**

This is a common incidental and insignificant lesion in mice

**salivary gland (MA:0000346)****Histopath Description:**

There are multifocal perivascular mononuclear inflammatory cell aggregates.

**Morphological Diagnosis:**

**Distribution:** multifocal; **Severity:** mild;

**Definitive Diagnosis:**

Interstitial inflammatory aggregates

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**AnimalID: M00338508 (Female)****Histopathology Findings:****lymph node (MA:0000139)****Histopath Description:**

The mesenteric lymph node is enlarged (greater than three-fold). There are multiple follicles with

large germinal centers. The sinuses contain large numbers of mature lymphocytes.

**Morphological Diagnosis:**

**Duration:** Sub-acute; **Distribution:** Diffuse; **Severity:** moderate; **MPATH Diagnosis:** 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.

**heart (MA:0000072)**

**Histopath Description:**

The right ventricular free wall is thickened. The RV to LV ration is 1:2 compared to wt controls (1:3 to 1:3.5)

**Morphological Diagnosis:**

**Distribution:** diffuse; **Severity:** moderate;

**Definitive Diagnosis:**

Left ventricular hypertrophy

**Histopathology Comments:**

There are no extracardiac lesions observed to suggest secondary hypertrophy

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**AnimalID: M00335649 (Female)**

**Histopathology Findings:**

**liver (MA:0000358)**

**Histopath Description:**

severe lipidosis

**Morphological Diagnosis:**

**Distribution:** diffuse; **Severity:** severe; **MPATH Diagnosis:** steatosis MPATH:622

**Definitive Diagnosis:**

Hepatic lipidosis

**stomach (MA:0000353)**

**Histopath Description:**

moderate neutrophilic gastritis

**Morphological Diagnosis:**

**Distribution:** multifocal to coalescing; **Severity:** moderate;

**Definitive Diagnosis:**

Gastritis, neutrophilic

**Report Summary and Recommendation:**

Increased right ventricular thickness in one mouse may explain the increased heart weight in this line. No lesions were found to explain the other clinical phenotypes. Most lesions in this line are attributable to diet or strain background.