**Gross Necropsy Report**

<table>
<thead>
<tr>
<th>Animal ID</th>
<th>MMU 16937</th>
<th>Report ID</th>
<th>17901</th>
<th>Report Complete</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>F</td>
<td>Death Type</td>
<td>K</td>
<td>Work Performed</td>
</tr>
<tr>
<td>Age</td>
<td>31 yrs 0 mon</td>
<td>Weight (KG)</td>
<td>8.8</td>
<td>Time Performed</td>
</tr>
</tbody>
</table>

**Gross Observation**

| BODY AS A WHOLE | The animal is presented in good flesh. |
| COLON           | The colon is distorted by numerous, variably sized, sometimes erythematous outpouchings filled with fecal matter (diverticulosis/diverticulitis). |
| HEART           | The free edge of the mitral valve is rendered irregular by several nodular with firm white thickenings 0.1-0.3 cm diameter (endocardiosis). |
| JOINT           | The stifle joints display irregular eburnation of articular surfaces, and synovial tissues are discolored brown. |
| LIVER           | Many small, 0.1-0.3 cm diameter, cystic, tan-yellow to green foci are scattered over hepatic capsular surfaces. |
| LUNG            | Numerous bullae, 0.2-0.7 cm diameter, are scattered liberally over lung surfaces. |
| STOMACH         | The gastric mucosa is variably erythematous mainly in fundus and body. |

**Gross Diagnosis**

1. COLON DIVERTICULITIS
2. STOMACH INFLAMMATION GASTRITIS,NOS
3. LUNGS (BOTH) BULLA (T-02...)
4. ACARIASIS
5. LIVER CYSTS, MULTIPLE (biliary cysts)
6. MITRAL VALVE ENDOCARDIOSIS
7. JOINT OF LOWER EXTREMITY (stifle joints)
8. INFLAMMATION ARTHRITIS,NOS

**Gross Comments**

The brain is perfused and collected for an investigator. The tongue, larynx, and related structures are collected to fulfill a biospecimen request. A truncated set of tissues is saved in formalin.

**Measurements**
Gross Necropsy Report

Animal ID  MMU 17557  Report ID  19021  Report Complete
Sex  F  Death Type  X  Work Performed  03/07/2008
Age  29 yrs 11 mon  Weight (KG)  10.83  Time Performed  09:30 AM

Gross Observation

<table>
<thead>
<tr>
<th>Body Part</th>
<th>Observation</th>
</tr>
</thead>
<tbody>
<tr>
<td>BODY AS A WHOLE</td>
<td>The animal is presented obese.</td>
</tr>
<tr>
<td>CECUM</td>
<td>The cecum is small and very firm in the region of the ileocecal junction, and the lumen is markedly reduced/constricted.</td>
</tr>
<tr>
<td>COLON</td>
<td>The colon is dilated with soft dark brown feces except for numerous diverticula which contain very firm material which is in some cases pale tan.</td>
</tr>
<tr>
<td>ILEUM</td>
<td>The ileum is markedly dilated with a thickened wall proximal to the ileocecal junction/stricture; this change extends back to include roughly the distal one third to one half of the ileum.</td>
</tr>
<tr>
<td>KIDNEY</td>
<td>The left kidney contains several, 0.3-0.6 cm diameter, cortical cysts.</td>
</tr>
<tr>
<td>LIVER</td>
<td>The liver is somewhat smaller than expected with elongated, thin lobes; 0.1-0.4 cm diameter, pale green, cysts are scattered irregularly and sparsely within the liver parenchyma.</td>
</tr>
<tr>
<td>LUNG</td>
<td>The lungs display numerous cysts measuring 0.2-0.5 cm diameter, major airways are dilated, and the lungs are diffusely stippled with pin-point black foci.</td>
</tr>
</tbody>
</table>

Gross Diagnosis

1  BODY AS A WHOLE OBESITY PERFUSION (brain perfusion)
2  CECUM ADENOCARCINOMA
3  COLON DIVERTICULOSIS (possible diverticulitis)
4  KIDNEY CYSTS, MULTIPLE
5  LIVER CYSTS, MULTIPLE (biliary cysts)
6  LUNGS (BOTH) ACARIASIS

Gross Comments

The brain is perfused and collected for the investigator (including skull minus skull cap, eyes, and pituitary). A truncated set of tissues is saved in formalin for histopathology.

Measurements
Gross Necropsy Report

Animal ID  MMU 19642  Report ID  17781  Report Complete  01/03/2008
Sex  F  Death Type  X  Work Performed  01/03/2008
Age  26 yrs 8 mon  Weight (KG)  9.38  Time Performed  09:30 AM

Gross Observation

> BODY AS A WHOLE
> The animal is presented in good flesh.
> COLON
> Numerous colonic diverticula are seen throughout the length of the colon, many of which are erythematous - diverticulitis.

Gross Diagnosis

1. BODY AS A WHOLE PERFUSION (brain perfusion)
2. COLON DIVERTICULITIS

Gross Comments

The brain is perfused and collected for the investigator - no other tissues are saved.

Measurements
Gross Necropsy Report

Animal ID: MMU 20348  
Sex: M  
Age: 26 yrs 0 mon  
Report ID: 20541  
Weight (KG): 11.47  
Death Type: X  
Time Performed: 01:00 PM  
Report Complete:  
Work Performed: 05/30/2008  

Gross Observation:

**BODY AS A WHOLE**  
The animal is presented thin and dehydrated with prominent kyphosis.

**COLON**  
Diverticula are present all along the length of the colon, but no fecal inspissation or inflammation are noted.

**LUNG**  
Numerous circular, 0.2-0.4 cm diameter, firm to bullous, tan to grey foci are present on mainly dorsal lung surfaces.

Gross Diagnosis:

1. BODY AS A WHOLE INANITION
2. COLON DIVERTICULOSIS
3. LUNGS (BOTH) ACARIASIS

Gross Comments:

The brain is perfused and collected for the investigator. Other tissues are collected per project protocol, and a truncated set is saved in formalin, but no histopathology is to be performed at this time.
Gross Necropsy Report

Animal ID: MMU 21057  
Report ID: 18102  
Report Complete:  
Sex: F  
Death Type: X  
Work Performed: 01/17/2008  
Age: 24 yrs 9 mon  
Weight (KG): 10.86  
Time Performed: 09:30 AM  

Gross Observation

**BODY AS A WHOLE**  
The animal is presented in abundant good flesh.

**LIVER**  
The liver is mildly enlarged with variably rounded edges, and the parenchyma is pale and friable.

**STOMACH**  
The gastric mucosa is thickened and erythematous, mainly in the antral area with a single focus of pronounced erythema, measuring 0.5 cm diameter, localized in the distal antrum. Nodular, white foci approximately 0.2-0.4 cm diameter are scattered sparsely in the mucosa suggesting lymphoid hyperplasia.

**UTERUS**  
The uterus is markedly enlarged, roughly 3.5 cm in greatest dimension, and very firm. On cut surfaces, interlacing bundles of firm, white tissues can be discerned suggesting leiomyoma. In addition, there are multiple, dark brown fluid filled, cystic foci present on the serosal surface of the uterus.

Gross Diagnosis

1. **BODY AS A WHOLE PERFUSION** (brain perfusion)
2. UTERUS AND CERVIX, CS ENDOMETRIOSIS
3. UTERUS LEIOMYOMA
4. STOMACH INFLAMMATION GASTRITIS, NOS
5. LIVER ABNORMAL APPEARANCE LIPIDOSIS

Gross Comments

The brain is perfused, and tissues are collected per project protocol. A truncated set of tissues is saved in formalin.

Measurements
Final Necropsy Report

Animal ID: MMU 21356
Report ID: 14900
Sex: F
Death Type: X
Age: 26 yrs 1 mon
Weight (KG): 9.5

Time Performed: 10:00 AM

Gross Observation

**BODY AS A WHOLE**
The animal is presented in good flesh.

**GASTROINTESTINAL TRACT**
The thickened omentum is focally adherent to the colonic mesentery forming a focal mass of scirrhous thickening - several irregularly shaped, dark blue-black foci associated with the scirrhous response strongly suggest endometriosis. The distal colon is also involved in a scirrhous reaction of its mesentery causing a mild "kink" and possible mild obstruction at this site. The mucosa at the ileocecal junction is irregularly thickened and erythematous.

**HEART**
Numerous small, 0.1-0.2 cm diameter, nodular, firm, white thickenings are present along the free edges of atroventricular valves (valvular endocardiosis); the intimal surface of the aorta displays multifocal to coalescing, irregularly shaped, tan-yellow plaques suggestive of atherosclerosis.

**LUNG**
Several, 0.2-0.4 cm diameter, circular, firm to bullous, tan to grey foci are scattered sparsely on lung surfaces suggesting previous lung mite infection.

**LYMPH NODES**
Obturator and iliac lymph nodes are dark red-brown on the left side.

**OVARY**
The ovaries are adherent to each other and possibly to the uterus.

Gross Diagnosis

1. **BODY AS A WHOLE PERFUSION** 9brain perfusion)
2. **OMENTUM ENDOMETRIOSIS, IMPLANTED**
3. **MESENTERY OF COLON ENDOMETRIOSIS, IMPLANTED**
4. **OVARY ENDOMETRIOSIS**
5. **CECUM INFLAMMATION TYPHLITIS,NOS (ileocecal junction)**
6. **LUNGS (BOTH) ACARIASIS**
7. **ATRIOVENTRICULAR VALVE ENDOCARDIOSIS**
8. **AORTA ATHEROSCLEROSIS**

Gross Comments
The brain is perfused and collected for the investigator. A truncated set of tissues is saved in formalin for histopathology.

Final Observations

**HEART**
aorta - arteriosclerosis, multifocal, mild to moderate. slide 4

**STOMACH**
gastritis, subacute, diffuse, moderate, with prominent plasmacytosis, multifocal follicular lymphocytic hyperplasia, and occasional mucosal atrophy, suggestive of H pylori infection. slide 3

**UTERUS**
endometriosis, extensive along the uterine surface and uterine tubes and invading into the myometrium. slide 1
omentum – endometriosis, extensive on the surface with endometrial cysts containing blood and hemosiderosis and with extensively multifocal scirrhous response. slide 2

**Final Diagnosis**

1. UTERUS AND FALLOPIAN TUBES, CS ENDOMETRIOSIS
2. OMENTUM ENDOMETRIOSIS, IMPLANTED
3. STOMACH INFLAMMATION, DIFFUSE GASTRITIS, NOS (strongly suggestive of H pylori infection)
4. AORTA ARTERIOSCLEROSIS

**Measurements**
Gross Necropsy Report

Animal ID    MMU  21887    Report ID    17982    Report Complete
Sex          M          Death Type    K          Work Performed    01/11/2008
Age          23 yrs 7 mon    Weight (KG)    15.67    Time Performed    11:45 AM

Gross Observation

BODY AS A WHOLE
The animal is presented in abundant good flesh with a large, roughly 15 cm diameter by 3-4 cm thick, area of induration in the subcutis of the abdomen roughly centered on the umbilicus.

LUNG
Several fibrinous to fibrous adhesions connect lung lobes to each other and to the chest wall.

SKIN
The subcuticular fat of the abdomen is laced with fibrous connective tissue and multifocal to coalescing, irregularly shaped, smooth-surfaced, tan "masses", some of which exude a tan-white, opaque material.

Gross Diagnosis
1. SUBCUTANEOUS TISSUE OF ABDOMEN (chronic steatitis)
   INFLAMMATION, ULCERATIVE
2. LUNGS (BOTH) ADHESION, FIBRINOUS (pleural adhesions)

Gross Comments
Several tissues are collected to fulfill biospecimen requests, including entire head with brain and eyes, tongue and larynx, trachea, testes, epididymides, seminal vesicles, abdominal aorta, long bones, and blood. A truncated set of tissues is saved in formalin for limited histopathology. Gastric pH = 6

Measurements
# Gross Necropsy Report

<table>
<thead>
<tr>
<th>Gross Observation</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>BODY AS A WHOLE</td>
<td>The animal is presented in good flesh with superficial abrasions to the face.</td>
</tr>
<tr>
<td>CECUM</td>
<td>The surface of the cecum displays adherent tan to red friable material consistent with fibrinopurulent exudate.</td>
</tr>
<tr>
<td>JEJUNUM</td>
<td>The serosal surface of proximal to mid jejunum has adherent tan to red inflammatory exudate.</td>
</tr>
<tr>
<td>LUNG</td>
<td>Numerous, 0.2-0.4 cm diameter, tan to grey, firm to bullous, circular foci are scattered over mainly dorsal lung surfaces.</td>
</tr>
<tr>
<td>URINARY BLADDER</td>
<td>A single small, roughly 0.3 cm diameter, dark red-blue, cystic structure is present on the dorsal surface of the bladder where it abuts the uterus.</td>
</tr>
<tr>
<td>UTERUS</td>
<td>The uterus is obscured by omental adhesions and fibrinous adhesions to colon, small intestine, and bladder; dark red-blue cystic structures on uterus and bladder suggest endometriosis.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gross Diagnosis</th>
<th>Details</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 BODY AS A WHOLE TRAUMATIC ABNORMALITY</td>
<td>(facial abrasions)</td>
<td>facial abrasions</td>
</tr>
<tr>
<td>2 PERITONEUM INFLAMMATION, EXUDATIVE, MULTIFOCAL PERITONITIS,NOS</td>
<td>(fibrinopurulent peritonitis)</td>
<td>fibrinopurulent peritonitis</td>
</tr>
<tr>
<td>3 UTERUS ENDOMETRIOSIS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 URINARY BLADDER ENDOMETRIOSIS, IMPLANTED</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 LUNGS (BOTH) ACARIAISIS</td>
<td>(P. simicola)</td>
<td>P. simicola</td>
</tr>
</tbody>
</table>

## Gross Comments
The peritoneum is swabbed for bacterial culture, and impression smears are taken of peritoneal exudate. A full set of tissues is saved in formalin for histopathology.
Gross Necropsy Report

Animal ID  MMU 22139  Report ID  17321  Report Complete
Sex  F  Death Type  X  Work Performed  12/11/2007
Age  24 yrs 7 mon  Weight (KG)  6.85  Time Performed  07:30 AM

Gross Observation

- **BODY AS A WHOLE**: The animal is presented thin and icteric with moderate kyphosis.
- **DIAPHRAGM**: Multiple small, roughly 0.1-0.2 cm diameter, firm, white nodules are noted on the abdominal surface of the diaphragm.
- **KIDNEY**: A firm, white nodule measuring roughly 0.5 cm diameter is present in the cortex of the right kidney.
- **LIVER**: The liver is deformed by multiple, firm, white, intraparenchymal nodules measuring up to approximately 0.5 cm diameter; in addition, there are two very large, over 4.0 cm in greatest dimension, white, cystic structures which seem filled with gas. The liver otherwise is pale and slightly enlarged with rounded edges on some lobes.
- **LUNG**: The lungs are diffusely stippled with pin-point black foci (anthracosis), as well as several larger, 0.2-0.4 cm diameter, circular, tan to grey, firm to bullous foci (lung mites).
- **LYMPH NODES**: Mesenteric, pancreaticocolicenal, and possibly gastric nodes are very firm and white.
- **PANCREAS**: The pancreas is very firm, white, and irregularly shaped with extensive adhesions to adjacent viscera.

Gross Diagnosis

1. **BODY AS A WHOLE INANITION PERFUSION** (brain perfusion)
2. **PANCREAS, NOS ADENOCARCINOMA**
3. **LIVER ADENOCARCINOMA, METASTATIC**
4. **KIDNEY ADENOCARCINOMA, METASTATIC**
5. **DIAPHRAGM ADENOCARCINOMA, METASTATIC**
6. **LYMPH NODE ADENOCARCINOMA, METASTATIC** (mesenteric, pancreaticocolicenal, gastric nodes)
7. **LUNGS (BOTH) ACARIASIS**
8. **LUNGS (BOTH) ANTHRACOSIS**
9. **BODY AS A WHOLE JAUNDICE, OBSTRUCTIVE**
10. **SPINE KYPHOSIS (T-10600)**

Gross Comments

The brain is perfused and collected/dissected for the investigators. Tissues are collected per project protocol.

Measurements
Gross Necropsy Report

Animal ID: MMU 22180  Report ID: 17761  Report Complete:
Sex: F  Death Type: X  Work Performed: 01/03/2008
Age: 24 yrs 9 mon  Weight (KG): 6.83  Time Performed: 08:00 AM

Gross Observation:

BODY AS A WHOLE: The animal is presented thin and mildly dehydrated.

COLON: Colonic mucosal lymphoid patches are multifocally erythematous, and the colon is dilated with soft to liquid contents - endometriosis in the pelvic inlet has resulted in marked narrowing of the rectal canal.

DUODENUM: The duodenal mucosa is irregularly erythematous.

GALLBLADDER: The gallbladder wall is diffusely thickened and opaque, and its contents are cloudy green-tan.

HEART: The free edges of atrioventricular valves are mildly nodular (endocardiosis).

KIDNEY: Kidneys are smaller than expected, pale tan, and firm with irregularly bumpy surfaces.

LIVER: The liver is moderately to markedly enlarged with rounded edges and a prominent serpiginous pattern of pallor on capsular and cut surfaces.

LUNG: The lungs display numerous, circular, tan to grey, firm to bullous foci, mainly on dorsal surfaces (lung mites).

RECTUM: The rectal lumen is moderately to markedly narrowed by adjacent endometriosis.

UTERUS: The uterus is enlarged, soft, and deformed my multiple, large (up to 2.0 cm diameter), dark brown-black fluid filled cysts (endometriosis). On cut sections, the endometriosis is seen to be markedly thickened with myriad tiny cysts and erosion/ulceration of the surface (endometrial hyperplasia).

Gross Diagnosis:

1. BODY AS A WHOLE PERFUSION (brain perfusion)
2. UTERUS ENDOMETRIOSIS
3. ENDOMETRIUM HYPERPLASIA, DIFFUSE
4. KIDNEY NEPHRITIS INTERSTITIAL (chronic interstitial nephritis)
5. GALLBLADDER AND COMMON BILE DUCT, CS INFLAMMATION CHOLECYSTITIS (choledochocystitis)
6. LIVER HYPERPLASIA, DIFFUSE LIPIDOSIS
7. DUODENUM INFLAMMATION (duodenitis)
8. COLON INFLAMMATION, MULTIFOCAL
9. ATRIOVENTRICULAR VALVE ENDOCARDIOSIS
10. LUNGS (BOTH) ACARIASIS

Gross Comments: The brain is perfused, and tissues are collected per project protocol.

Measurements
Gross Necropsy Report

Animal ID MMU 22218
Sex M
Age 24 yrs 3 mon
Report ID 15580
Work Performed 08/29/2007

Gross Diagnosis
1 KIDNEY AND PELVIS, CS INFLAMMATION, MULTIFOCAL
2 KNEE JOINT INFLAMMATION, MULTIFOCAL
3 LIVER DEGENERATION, FATTY
4 LUNG CYSTS, MULTIPLE MITES

Gross Comments
Pyelonephritis could account for the observed clinical signs. Hepatic lipidosis may have been secondary to anorexia or possibly diabetes; significant weight loss has occurred in the past 2 weeks according to this animal's file. A variety of sites were swabbed for bacterial culture and impression smears were made of some sites.

Measurements
# Gross Necropsy Report

**Animal ID**  MMU 22408  
**Report ID**  20121  
**Sex**  M  
**Age**  23 yrs 0 mon  
**Weight (KG)**  9.17  

## Animal Information

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<th>MMU 22408</th>
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<td>K</td>
<td>Work Performed</td>
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<tr>
<td>Age</td>
<td>23 yrs 0 mon</td>
<td>Time Performed</td>
<td>11:00 AM</td>
<td></td>
</tr>
</tbody>
</table>

## Gross Observation

- **BODY AS A WHOLE**: The animal is presented thin and dehydrated.
- **COLON**: The colonic mucosa is thickened with scattered small erosions, and the lumen is dilated with liquid feces and gas.
- **HEART**: The left atrioventricular valve is irregularly nodular along its free edge.
- **LIVER**: The liver is enlarged with rounded edges, and the parenchyma is firm and "waxy".

## Gross Diagnosis

1. **BODY AS A WHOLE DEHYDRATION**
2. **COLON INFLAMMATION DIARRHEA**
3. **LIVER HYPERTROPHY AMYLOIDOSIS**
4. **ATRIOVENTRICULAR VALVE ENDOCARDIOSIS**

## Gross Comments

The colon is swabbed for bacterial culture, and several tissues are collected to fulfill biospecimen requests (testes, epididymides, seminal vesicles, lymph nodes, trachea, lungs, long bones, abdominal aorta). A truncated set of tissues is saved in formalin for limited histopathology.

## Measurements
## Gross Necropsy Report

<table>
<thead>
<tr>
<th>Gross Observation</th>
<th>Gross Diagnosis</th>
<th>Measurements</th>
</tr>
</thead>
<tbody>
<tr>
<td>BODY AS A WHOLE</td>
<td>1 BODY AS A WHOLE PERFUSION</td>
<td>(brain perfusion)</td>
</tr>
<tr>
<td>CECUM</td>
<td>2 UTERUS LEIOMYOMA</td>
<td></td>
</tr>
<tr>
<td>ILEUM</td>
<td>3 ILEUM-CECUM ADENOCARCINOMA</td>
<td></td>
</tr>
<tr>
<td>UTERUS</td>
<td>4 CECUM ADENOCARCINOMA</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5 VULVA, LABIA, CLITORIS AND BARTHOLIN'S GLAND HYPERTROPHY</td>
<td>(enlarged clitoris)</td>
</tr>
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**Animal ID**  MMU 22432  **Report ID** 15940  **Report Complete**

<table>
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<th>Sex</th>
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<th>Age</th>
<th>Weight (KG)</th>
<th>Time Performed</th>
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<tbody>
<tr>
<td>F</td>
<td>X</td>
<td>22 yrs 4 mon</td>
<td>9.31</td>
<td>10:30 AM</td>
</tr>
</tbody>
</table>

**Report ID** 15940  **Report Complete**

**Work Performed** 09/21/2007  **Time Performed** 10:30 AM

---

The animal is presented in good flesh.

The cecum is contracted and adherent to the distal ileum, and the mucosal surface displays an irregularly serpiginous pattern of raised, white, firm areas.

The most distal approximately 1.0 cm of the ileum is circumferentially very firm and pale, and the ileocecal orifice is narrow and abnormally shaped.

Multiple firm, white nodules are present in, and in some cases protruding from, the body of the uterus. The clitoris is enlarged resembling a rudimentary penis.
Gross Necropsy Report

Animal ID: MMU 22476  
Report ID: 19662  
Report Complete: 

Sex: F  
Death Type: X  
Work Performed: 04/10/2008  

Age: 22 yrs 11 mon  
Weight (KG): 11.98  
Time Performed: 09:45 AM

Gross Observation

BODY AS A WHOLE  
The animal is presented in abundant good flesh.

CECUM  
The cecal mucosa is variably thickened and focally ulcerated.

DUODENUM  
Multiple circular, raised, tan to red-brown foci are present on the duodenal mucosa.

HEART  
Firm, white, nodules to tags are present on atrioventricular and semilunar valves.

JOINT  
Both stifle joints have markedly irregularly roughened to eburnated articular cartilage.

KIDNEY  
Multiple, cysts, 0.5-1.0 cm diameter, are present in both renal cortices.

LIVER  
The liver is enlarged with rounded edges, and the parenchyma is diffusely pale and friable.

SKIN  
Numerous pedunculated cutaneous tags, ranging from 0.2-1.0 cm in greatest dimension and varying from tan-pink to dark brown, are scattered liberally over the skin surface, most prominently on the face and abdomen.

STOMACH  
The gastric mucosa has multiple circular, raised, tan to white foci measuring 0.2-0.5 cm, scattered mainly in distal corpus and antrum.

UTERUS  
The uterine cervix is erythematous and swollen with multiple small mucosal nodules on the portion protruding into the vagina.

Gross Diagnosis

1. BODY AS A WHOLE PERFUSION (brain perfusion)  
2. CECUM INFLAMMATION, FOCAL ULCERATIVE TYPHILITIS, NOS  
3. STOMACH INFLAMMATION GASTRITIS, NOS (with lymphoid hyperplasia)  
4. JOINT OF LOWER EXTREMIT Y INFLAMMATION ARTHRITE S, NOS  
5. LIVER LIPIDOSIS  
6. ATRIOVENTRICULAR VALVE ENDOCARDIO SIS  
7. KIDNEY CYSTS, MULTIPLE  
8. CERVIX UTERI INFLAMMATION  
9. SKIN POLYPOSI S

Gross Comments  
The brain is perfused and collected for the investigator; other tissues are collected per project protocol.

Measurements
Gross Necropsy Report

Animal ID  MMU 22734  Report ID  14200  Report Complete
Sex  F  Death Type  K  Work Performed  06/20/2007
Age  21 yrs 7 mon  Weight (KG)  5.65  Time Performed  11:30 AM

Gross Observation

BODY AS A WHOLE
The animal is presented thin and dehydrated.

CECUM
The mucosa at the junction of cecum and colon is circumferentially thickened causing a stricture, and the more proximal cecal mucosa is irregularly erythematous, thickened, and multifocally ulcerated.

COLON
The colonic mucosa is thickened and erythematous, and contents are voluminous and thin liquid.

HEART
The left ventricular free wall is markedly thinned, closely approximating the thickness of the right ventricle, and the myocardium is streaked with pallor (fatty change).

JEJUNUM
The small intestinal mucosa is thickened and erythematous.

LYMPH NODES
Lymph nodes associated with the GIT are prominent to enlarged.

STOMACH
The longitudinal folds of the pyloric antrum are markedly thickened resulting in a functional stricture.

Gross Diagnosis

1  BODY AS A WHOLE INANITION DEHYDRATION
2  GASTROINTESTINAL TRACT ENTEROCOLITIS
3  CECUM THICKNESS, INCREASED  (thickened cecocolic junction)
4  CECUM ULCERATION
5  GASTRIC RUGAE HYPERTROPHY
6  LYMPH NODE HYPERTROPHY  (paracolic, mesenteric, ileocecal)
7  LEFT VENTRICLE DILATATION

Gross Comments
The brain is perfused and collected to fulfill a biospecimen request. Ovaries and kidneys are also collected to fulfill biospecimen requests. A truncated set of tissues is saved in formalin.

Measurements
Gross Necropsy Report

Animal ID  MMU 22799  Report ID  19141  Report Complete  03/13/2008
Sex  F  Death Type  X  Work Performed  03/13/2008
Age  22 yrs 0 mon  Weight (KG)  10.66  Time Performed  08:00 AM

Gross Observation

<table>
<thead>
<tr>
<th>BODY AS A WHOLE</th>
<th>The animal is presented obese.</th>
</tr>
</thead>
<tbody>
<tr>
<td>KIDNEY</td>
<td>The pelvis of the right kidney is markedly dilated suggesting ureteral stricture/obstruction.</td>
</tr>
<tr>
<td>LIVER</td>
<td>The liver is mildly enlarged with rounded edges.</td>
</tr>
<tr>
<td>STOMACH</td>
<td>The gastric mucosa is irregularly thickened and erythematous.</td>
</tr>
</tbody>
</table>

Gross Diagnosis

1  BODY AS A WHOLE OBESITY
2  BRAIN PERFUSION  (brain perfusion)
3  STOMACH INFLAMMATION, MULTIFOCAL GASTRITIS, NOS
4  KIDNEY AND PELVIS, CS DILATATION  (likely ureteral stricture)

Gross Comments
The brain is perfused and collected for the investigator, and multiple tissues are collected for collaborators. A truncated set of tissues is saved in formalin.

Measurements
# Gross Necropsy Report

<table>
<thead>
<tr>
<th>Gross Observation</th>
<th>Gross Diagnosis</th>
<th>Gross Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Animal ID</strong></td>
<td>18461</td>
<td><strong>Report ID</strong></td>
</tr>
<tr>
<td><strong>Sex</strong></td>
<td>M</td>
<td><strong>Death Type</strong></td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td>21 yrs 9 mon</td>
<td><strong>Weight (KG)</strong></td>
</tr>
<tr>
<td>BODY AS A WHOLE</td>
<td>COLON INFLAMMATION, CHRONIC DIFFUSE COLITIS</td>
<td>Several tissues are collected to fulfill biospecimen requests (testis, epididymis, seminal vesicles, abdominal aorta, long bones for marrow, head with brain and eyes, lymph nodes, blood). A truncated set of tissues is saved in formalin for limited histopathology.</td>
</tr>
<tr>
<td>BONE</td>
<td>Paracolic nodes are prominent to enlarged.</td>
<td></td>
</tr>
<tr>
<td>COLON</td>
<td>Bones are generally brittle suggesting osteopenia.</td>
<td></td>
</tr>
<tr>
<td>COLON</td>
<td>The colonic mucosa is thickened and variably erythematous, and the lumen is dilated with gas and liquid contents.</td>
<td></td>
</tr>
<tr>
<td>LYMPH NODES</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TESTIS</td>
<td>The right testis is missing (previous hemicastration).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>LYMPH NODE HYPERTROPHY (lymphadenopathy - paracolic)</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>BONE AND JOINT OSTEOPENIA</td>
</tr>
</tbody>
</table>
Gross Necropsy Report

Animal ID: MMU 22961  
Report ID: 19142  
Report Complete: 03/13/2008

Sex: F  
Death Type: X  
Work Performed: 03/13/2008

Age: 21 yrs 10 mon  
Weight (KG): 9.89  
Time Performed: 09:30 AM

Gross Observation

- **BODY AS A WHOLE**: The animal is presented obese.
- **LIVER**: The liver is enlarged with elongated, soft, tan lobes with rounded edges (lipidosis).
- **LUNG**: Numerous bullae ranging from a few millimeters to almost a centimeter in diameter, are scattered liberally over lung surfaces.
- **STOMACH**: The gastric mucosa is irregularly thickened and varies in color from white to grey to pink.
- **UTERUS**: The uterus is markedly enlarged, mainly as a result of hypertrophy of the endometrium which is thickened, tan, grey, and riddled with small, 0.1-0.4 cm diameter, dark brown fluid filled cysts.

Gross Diagnosis

1. BODY AS A WHOLE OBESITY
2. BRAIN PERFUSION
3. ENDOMETRIUM HYPERPLASIA
4. LIVER HYPERTROPHY LIPIDOSIS
5. STOMACH INFLAMMATION, MULTIFOCAL GASTRITIS, NOS
6. LUNGS (BOTH) BULLA (T-02...)
   ACARIASIS

Gross Comments

The brain is perfused and collected for the investigator, and multiple tissues are collected for collaborators. A truncated set of tissues is saved in formalin.

Measurements
Gross Necropsy Report

Animal ID: MMU 23022  
Report ID: 16422  

Sex: M  
Death Type: K  
Work Performed: 10/22/2007

Age: 21 yrs 6 mon  
Weight (KG): 9.6  
Time Performed: 12:00 AM

Gross Observation

<table>
<thead>
<tr>
<th>Organ</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>COLON</td>
<td>Approximately 10 cm distal to the ileocecal junction there is a colonic stricture resulting in narrowing of the lumen. The lumen of the proximal 3/4 of the colon contains an abundant amount of turbid light green liquid contents. The rectal contents is of similar color and pasty in consistency.</td>
</tr>
<tr>
<td>JOINT</td>
<td>There is kyphosis in the thoracolumbar region of the vertebral column.</td>
</tr>
<tr>
<td>KIDNEY</td>
<td>Diffusely the capsular surface of the kidney has a moderately granular roughend appearance.</td>
</tr>
<tr>
<td>LIVER</td>
<td>The parenchyma has a mottled red brown and pink color over the capsular surface, the edges are moderately rounded, and the cut surface has a soft waxy consistency suggestive of amyloidosis.</td>
</tr>
<tr>
<td>LUNG</td>
<td>Diffusely over the pleural surface of the lung there circular foci 2 to 3 mm in diameter consistent with lung mite infestation. Multifocally there fine fibrous adhesions between lung lobes.</td>
</tr>
<tr>
<td>SKIN</td>
<td>The skin lacks pliability consistent with dehydration. A tattoo on the skin of right medial thigh reads 23022.</td>
</tr>
</tbody>
</table>

Gross Diagnosis

1. COLON AND CECUM, CS INFLAMMATION, CHRONIC FOCAL LOOSE STOOL

2. LIVER AMYLOIDOSIS, FOCAL

3. KIDNEY FIBROSIS, MULTIFOCAL

4. LUNG INFLAMMATION, MULTIFOCAL PARASITE

Gross Comments

Colonic stricture is compatible with chronic or recurring colitis often due to bacterial infection. Hepatic amyloidosis is a common sequel to colonic stricture. The results of microbiology and histopathology will be presented in the final necropsy report.
# Gross Necropsy Report

<table>
<thead>
<tr>
<th>Animal ID</th>
<th>MMU 23081</th>
<th>Report ID</th>
<th>20101</th>
<th>Report Complete</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>F</td>
<td>Death Type</td>
<td>X</td>
<td>Work Performed</td>
</tr>
<tr>
<td>Age</td>
<td>21 yrs 10 mon</td>
<td>Weight (KG)</td>
<td>11.44</td>
<td>Time Performed</td>
</tr>
</tbody>
</table>

**Gross Observation**
- **BODY AS A WHOLE**: The animal is presented in abundant good flesh.
- **LUNG**: Several circular, 0.2–0.6 cm diameter, firm to bullous, tan to grey foci are scattered mainly over dorsal lung surfaces.
- **PITUITARY GLAND**: A roughly 0.4 cm diameter clear fluid filled cyst is present on the base of the pituitary.

**Gross Diagnosis**
1. BODY AS A WHOLE PERFUSION (brain perfusion)
2. LUNGS (BOTH) ACARIASIS
3. PITUITARY GLAND CYST

**Gross Comments**
The brain is perfused, and tissues are collected per project protocol.

**Measurements**
Gross Necropsy Report

Animal ID  MMU 23230  Report ID  16521  Report Complete
Sex  F  Death Type  X  WorkPerformed  10/26/2007
Age  21 yrs 3 mon  Weight (KG)  6.32  Time Performed  10:00 AM

Gross Observation  BODY AS A WHOLE  The anima is presented thin and dehydrated. There are multiple, smooth, grey to tan-white, irregularly elliptical, firm bodies in the abdominal cavity, usually attached to the omentum (pedunculated lipomas).

CECUM  The cecum appears similar to the colon with the addition of dark red streaks around the ileocecal junction (erosions/ulcerations).

COLON  The dolon is diffusely dilated with gas and voluminous liquid contents, and the mucosa is erythematous.

HEART  The left atroventricular valve is mildly deformed by multiple, small, 0.1-0.2 cm diameter nodules along its free edge (endocardiosis); the aorta, particularly the abdominal portion, is streaked with tan-yellow intimal deposits (atherosclerosis).

LUNG  The lungs are diffusely stippled with pin-point black foci, and there are several, circular, 0.2-0.4 cm diameter, tan to grey, firm to bullous foci scattered mainly over dorsal lung surfaces.

LYMPH NODES  Paracolic nodes are prominent to enlarged.

OVARY  Omental adhesions secure the right ovary to the cranial pole of the uterus, and there are a small (0.4 cm diameter) parovarian cyst and a pedunculated lipoma (roughly 1.0 cm in greatest dimension) adjacent to this area.

SPLEEN  The spleen is mildly to moderately enlarged.

STOMACH  The gastric mucosa, particularly in the body at the junction of antrum and body, is thickened with a "pebbled" to nodular surface.

Gross Diagnosis  1  BODY AS A WHOLE PERFUSION (brain perfusion)
  2  COLON INFLAMMATION, DIFFUSE COLITIS
  3  COLON DIARRHEA
  4  CECUM INFLAMMATION, ULCERATIVE TYPHILITIS,NOS
  5  STOMACH INFLAMMATION, FOLLICULAR GASTRITIS,NOS
  6  AORTA ATHEROSCLEROSIS
  7  ATRIOVENTRICULAR VALVE ENDOCARDISOSIS (left AV valve)
  8  LUNGS (BOTH) ANTHRACOSIS
  9  LUNGS (BOTH) ACARIASIS
  10  OVARY CYST
  11  LYMPH NODE HYPERTROPHY (lymphadenopathy - paracolic)
     SPLEEN HYPERTROPHY (splenomgaly)
Gross Comments

The brain is perfused and collected for the investigator. A truncated set of tissues is saved in formalin, but no histopathology is to be performed at this time.

Measurements
# Gross Necropsy Report

**Animal ID**  MMU 23448  
**Report ID**  14060  
**Report Complete**  06/07/2007

**Sex**  F  
**Death Type**  D  
**Work Performed**  06/07/2007

**Age**  20 yrs 3 mon  
**Weight (KG)**  12.1  
**Time Performed**  02:30 PM

## Gross Observation

<table>
<thead>
<tr>
<th>Gross Observation</th>
<th>Bodily Region</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BODY AS A WHOLE</td>
<td>The animal is presented in good flesh.</td>
<td></td>
</tr>
<tr>
<td>DUODENUM</td>
<td>The duodenal mucosa is stippled with pin-point red foci.</td>
<td></td>
</tr>
<tr>
<td>HEART</td>
<td>The hearts of perfused animals are difficult to interpret, but there appears to be an exaggerated &quot;shelf&quot; of muscle below the mitral valve suggestive of subaortic stenosis.</td>
<td></td>
</tr>
<tr>
<td>JEJUNUM</td>
<td>The jejunal mucosa is stippled with pin-point red foci.</td>
<td></td>
</tr>
<tr>
<td>KIDNEY</td>
<td>Massive retroperitoneal hemorrhage appears to originate at the site of rupture of the left kidney; the right kidney is within normal limits.</td>
<td></td>
</tr>
<tr>
<td>LIVER</td>
<td>The liver is mildly enlarged with slightly rounded edges and friable parenchyma; there is an enhanced reticular pattern of pallor on capsular and cut surfaces.</td>
<td></td>
</tr>
<tr>
<td>LUNG</td>
<td>The lungs are diffusely stippled with pin-point black foci, and several bullae, some up to a centimeter in diameter, are scattered particularly in middle lobes.</td>
<td></td>
</tr>
<tr>
<td>STOMACH</td>
<td>The antral gastric mucosa is stippled with pin-point foci.</td>
<td></td>
</tr>
</tbody>
</table>

## Gross Diagnosis

1. BODY AS A WHOLE PERFUSION
2. KIDNEY RUPTURE
3. RETROPERITONEUM HEMORRHAGE, MASSIVE
4. LIVER ABNORMAL APPEARANCE (enlarged, friable, pale)
5. STOMACH INFLAMMATION GASTRITIS, NOS
6. DUODENUM INFLAMMATION ENTERITIS, NOS
7. JEJUNUM INFLAMMATION ENTERITIS, NOS
8. LUNGS (BOTH) BULLA (T-02...) ACARIASIS
9. LEFT VENTRICLE STENOSIS (subaortic stenosis)

## Gross Comments

The brain is perfused with formalin and collected for the investigator, and other tissues are collected per project protocol.

## Measurements
# Gross Necropsy Report

<table>
<thead>
<tr>
<th>Animal ID</th>
<th>Report ID</th>
<th>Report Complete</th>
</tr>
</thead>
<tbody>
<tr>
<td>MMU 23645</td>
<td>16841</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sex</th>
<th>Age</th>
<th>Weight (KG)</th>
<th>Work Performed</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>20 yrs 6 mon</td>
<td>5.96</td>
<td>11/09/2007</td>
</tr>
</tbody>
</table>

## Gross Observation

- **BODY AS A WHOLE**
  - The animal is presented markedly thin and dehydrated.
- **CECUM**
  - The cecum, just distal to the ileocecal junction is circumferentially constricted by a firm, white area of thickened wall - the volume of the cecum is much smaller than normal.
- **COLON**
  - The colon is markedly dilated with soft to liquid, dark green-black, granular, foul smelling feces.
- **LIVER**
  - The liver is mildly enlarged and diffusely pale.
- **LUNG**
  - Multiple, circular, generally bullous lesions measuring roughly 0.2-0.4 cm diameter are scattered mainly over dorsal lung sufaces.

## Gross Diagnosis

1. **BODY AS A WHOLE INANITION DEHYDRATION**
2. **CECUM STRicture**
3. **CECUM ADENOCARCINOMA**
4. **LIVER ABNORMAL APPEARANCE**  (mildly enlarged and pale)
5. **LUNGS (BOTH) ACARIASIS**

## Gross Comments

A full set of tissues is saved in formalin for limited histopathology.

## Measurements
Gross Necropsy Report

Animal ID  MMU  23714  Report ID  20102  Report Complete
Sex  F  Death Type  X  Work Performed  05/08/2008
Age  21 yrs 1 mon  Weight (KG)  12.51  Time Performed  09:30 AM

Gross Observation

BODY AS A WHOLE  The animal is presented in abundant good flesh.
HEART  Fatty streaks are prominent in the aortic endothelium.
LIVER  The liver is mildly enlarged, and the parenchyma is somewhat friable - suggestive of hepatic lipidosis.
LUNG  Numerous circular, 0.2-0.4 diameter, firm to bullous, tan to grey foci are scattered mainly over dorsal lung surfaces, and the pulmonary parenchyma is stippled with pin-point black foci.
UTERUS  The endometrium is thickened and pale tan.

Gross Diagnosis

1  ENDOMETRIUM HYPERPLASIA, DIFFUSE
2  AORTA ATHEROSCLEROSIS  (fatty streaks)
3  LIVER LIPIDOSIS
4  LUNGS (BOTH) ACARIASIS

Gross Comments  The brain is perfused, and tissues are collected per project protocol.

Measurements
Gross Necropsy Report

Animal ID       MMU  23732       Report ID       19661       Report Complete
Sex            F                                       Work Performed  04/10/2008
Age            21 yrs 0 mon        Weight (KG)       10.78        Time Performed  08:00 AM

Gross Observation       BODY AS A WHOLE       The animal is presented in abundant good flesh.

Gross Diagnosis   1        BODY AS A WHOLE NO REMARKABLE FINDINGS PERFUSION (brain perfusion)

Gross Comments       The brain is perfused and collected for the investigator; other tissues are collected per project protocol.
Gross Necropsy Report

Animal ID  MMU 23743  Report ID  18702  Report Complete
Sex  F  Death Type  K  WorkPerformed  02/22/2008
Age  20 yrs 9 mon  Weight (KG)  9.34  Time Performed  01:30 PM

Gross Observation

<table>
<thead>
<tr>
<th>Gross Observation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BODY AS A WHOLE</td>
<td>The animal is presented in abundant good flesh with a roughly 4.0 cm diameter, approximately spherical, soft, subcutaneous mass at the umbilicus, subsequently demonstrated to be umbilical herniation of omentum.</td>
</tr>
<tr>
<td>LIVER</td>
<td>The liver is enlarged (with rounded edges) and pale with a reticular pattern of pale tan on capsular and cut surfaces.</td>
</tr>
<tr>
<td>LUNG</td>
<td>The lungs are firmly attached to the chest wall via tight fibrous pleural adhesions.</td>
</tr>
</tbody>
</table>

Gross Diagnosis

1  UMBILICUS HERNIA (umbilical herniation of omentum)
2  PLEURA ADHESIONS, FIBROUS
3  LIVER HYPERTROPHY LIPIDOSIS

Gross Comments
Several tissues are collected to fulfill biospecimen requests (ovaries, oviducts, tongue, larynx, trachea, thyroid gland), and a truncated set of tissues is saved in formalin for limited histopathology.

Measurements
Gross Necropsy Report

<table>
<thead>
<tr>
<th>Animal ID</th>
<th>MMU 23831</th>
<th>Report ID</th>
<th>19562</th>
<th>Report Complete</th>
<th>04/04/2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>M</td>
<td>Death Type</td>
<td>K</td>
<td>Work Performed</td>
<td>04/04/2008</td>
</tr>
<tr>
<td>Age</td>
<td>20 yrs 8 mon</td>
<td>Weight (KG)</td>
<td>9.09</td>
<td>Time Performed</td>
<td>11:30 AM</td>
</tr>
</tbody>
</table>

**Gross Observation**

- **BODY AS A WHOLE**: The animal is presented markedly thin and dehydrated with prominent spinal kyphosis.
- **COLON**: The colonic mucosa is thickened and erythematous, and contents are voluminous and mainly liquid.
- **LIVER**: The liver is enlarged with very sharp edges, diffuse pallor, and a firm, waxy texture.
- **LUNG**: Several circular, tan to grey, firm to bullous foci measuring 0.2-0.4 cm diameter are scattered mainly over dorsal lung surfaces.

**Gross Diagnosis**

1. **BODY AS A WHOLE** INANITION DEHYDRATION
2. **COLON** MUCOUS MEMBRANE INFLAMMATION, DIFFUSE COLITIS
3. **LIVER** AMYLOIDOSIS (diffuse, severe)
4. **LUNGS (BOTH)** ACARIASIS
5. **SPINE KYPHOSIS** (T-10600)

**Gross Comments**: A full set of tissues is saved in formalin for histopathology.

**Measurements**
Gross Necropsy Report

Animal ID   MMU 23837  Report ID  19843  Report Complete
Sex F  Death Type D  Work Performed 04/24/2008
Age 20 yrs 9 mon  Weight (KG) 7.32  Time Performed 11:30 AM

Gross Observation

BODY AS A WHOLE  The animal is presented thin.

CECUM  There is a firm walled stricture at the junction of cecum and colon which is circumferentially ulcerated on the mucosal surface.

DUODENUM  An irregularly oval, tan-white, soft, umbilicated mass, roughly 1.2 cm in greatest dimension, is present on the mucosal surface of the duodenum.

GALLBLADDER  The gallbladder is dilated with thin, cloudy, and the gallbladder wall is opaque.

KIDNEY  The left kidney has a focal induration at the cranial pole, and on cut surface displays two large tubular retention cysts, the largest roughly 1.0 cm diameter.

LIVER  The liver is markedly enlarged with rounded edges and with numerous pale tan-white foci, 0.1-0.3 cm diameter scattered throughout the somewhat pale and friable parenchyma.

Gross Diagnosis

1  BODY AS A WHOLE INANITION
2  CECUM ADENOCARCINOMA
3  LIVER HYPERTROPHY AMYLOIDOSIS
4  DUODENUM MASS, LOCALIZED, SOFT
5  GALLBLADDER INFLAMMATION (choledochocystitis)
   CHOLEDOCHITIS
6  KIDNEY CYSTS, MULTIPLE (renal tubular retention cysts)

Gross Comments  A full set of tissues is saved in formalin for histopathology.

Measurements  Heart 39.1 g
               Liver 642.26 g
Gross Necropsy Report

Animal ID  MMU 23931  Report ID  20001  Report Complete
Sex  F  Death Type  K  Work Performed  05/05/2008
Age  20 yrs 1 mon  Weight (KG)  11.5  Time Performed  02:45 PM

Gross Observation

<table>
<thead>
<tr>
<th>Body Part</th>
<th>Gross Observation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BODY AS A WHOLE</td>
<td>The animal is presented in abundant good flesh.</td>
<td></td>
</tr>
<tr>
<td>KIDNEY</td>
<td>Renal cortices are pale and soft, and the capsular surfaces are mildly irregular.</td>
<td></td>
</tr>
<tr>
<td>LIVER</td>
<td>The liver is mildly enlarged with prominently rounded edges, color that is slightly paler than normal, and a friable texture, all suggesting lipidosis.</td>
<td></td>
</tr>
<tr>
<td>LUNG</td>
<td>Caudal and to a lesser extent, middle lobes are dark red and heavy.</td>
<td></td>
</tr>
<tr>
<td>OVARY</td>
<td>The ovaries are obscured by fat, endometrial tissues, and adhesions to uterus.</td>
<td></td>
</tr>
<tr>
<td>UTERUS</td>
<td>The uterus is adherent to bladder, colon, and omentum.</td>
<td></td>
</tr>
</tbody>
</table>

Gross Diagnosis

1. UTERUS AND CERVIX, Fallopian tubes and ovaries, CS ENDOMETRIOSIS
2. LIVER LIPIDOSIS
3. KIDNEY ABNORMAL APPEARANCE (pale, irregular cortices)
4. LUNGS (BOTH) CONGESTION, ACUTE (likely related to anesthesia)

Gross Comments

A full set of tissues is saved in formalin for limited histopathology.

Measurements
Gross Necropsy Report

Animal ID: MMU 24195  
Report ID: 17241  
Report Complete:  
Sex: F  
Death Type: X  
Work Performed: 12/05/2007  
Age: 19 yrs 7 mon  
Weight (KG): 5.59  
Time Performed: 10:50 AM  
Report Complete:  

Gross Observation

- **BODY AS A WHOLE**: The animal is presented thin with an open midabdominal incision subsequent to experimental manipulation.
- **LIVER**: The liver is mildly enlarged with multiple, small, 0.4-0.7 cm diameter, firm, white nodules within the hepatic parenchyma.
- **SPLEEN**: The spleen is mildly to moderately enlarged.

Gross Diagnosis

1. LIVER MASS, LOCALIZED (multiple)
2. SPLEEN HYPERTROPHY (hepatomegaly)

Gross Comments

Tissues are collected per project protocol. Ovaries and kidneys are collected to fulfill biospecimen requests. A truncated set of tissues is saved for CNPRC histopathology.

Measurements
California National Primate Research Center
Pathology Report
Report run on: November 3, 2008 1:49 PM

Gross Necropsy Report

Sex  M  Death Type  K  Work Performed  12/17/2007
Age  19 yrs 7 mon  Weight (KG)  7.86  Time Performed  01:45 PM

Gross Observation

BONE
The ribs bend moderately before breaking. There mild scoliosis of the mid-thoracic vertebral column.

COLON
The colon is maximally distended to a diameter of 3.5 cm with fluctuant gas. There is a stricture at the cecal-colonic junction and accompanying mucosal polyps at this site; the largest of which is 5 mm in diameter.

GASTROINTESTINAL TRACT
Contents in the stomach and small intestine is within normal limits with regard to appearance and amount. A moderate amount of liquid green contents is present throughout the large intestine.

GINGIVA
The distal end of the left upper canine is jagged and irregular and a discolored light and dark grey. The lower right first molar is missing. The remainder of the permanent dentition is present and there is moderate wear of the cheek teeth.

HEART
The inside and outside diameter of the left ventricle midway between the apex and base is 18 and 30 cm respectively.

LUNG
There were fibrous adhesions between the left middle and caudal lobes and the right caudal lobe and the parietal pleura. Scattered dome-shaped translucent pleura vesicles were present in moderate numbers ranging from 2-3 mm in diameter.

SKIN
A tattoo on the right medial thigh reads 24197.

URINARY BLADDER
The lumen contains approximately 20 cc of clear amber urine; biliabstix results on a sample drawn by cysticentesis: glucose, bilirubin, ketone, blood, and protein are all negative, pH 6.

Gross Diagnosis
1  COLON AND CECUM, CS STRicture LOOSE  colitis STOOL
2  RIB OSTEOPENIA
3  LUNG INFLAMMATION, MULTIFOCAL MITES
4  BONE MARROW HYPOPLASIA

Gross Comments
the finding of colitis with accompanying stricture and mucosal polyps could account for the debilitated condition of this animal seen clinically. Bone marrow hypoplasia and osteopenia may have secondary to the debilitated condition. A variety of tissues are fixed in buffered 10% formalin for diagnostic pathology. The results of fecal occult blood determination, and microbiology will be presented in the final necropsy report.

Measurements
Gross Necropsy Report

Animal ID  MMU  24241
Sex        F
Age        19 yrs 11 mon
Report ID   19741
Report Complete  04/21/2008
Animal ID
Sex
Age
Report ID
Report Complete

Gross Observation

BODY AS A WHOLE

The animal is presented in good flesh with multiple soft, moveable, ovoid, subcutaneous masses on the left leg, one in the inguinal region measuring approximately 6.0 cm in greatest dimension, and a second one on the caudal aspect of the thigh that is pedunculated and roughly 4.0 cm in greatest dimension.

KIDNEY

The surfaces of both kidneys are irregularly creased and pitted, and on cut surfaces, the renal cortices display V-shaped areas of pallor suggestive of old infarcts.

LUNG

Numerous circular, 0.2-0.4 cm diameter, tan to grey, firm to bullous foci are scattered mainly over dorsal lung surfaces (pulmonary acariasis).

SKIN

Multiple ovoid, soft, subcutaneous masses on the left leg are revealed upon dissection to be composed of normal appearing fat (lipomas).

UTERUS

The uterus and ovaries are obscured by endometrial cysts containing dark, red-brown liquid, as well as by the scirrhous response and omental adhesions induced by the endometriosis.

Gross Diagnosis

1 UTERUS AND CERVIX, FALLOPIAN TUBES AND OVARIIES, CS ENDOMETRIOSIS
2 KIDNEY INFARC (multiple, bilateral)
3 LUNGS (BOTH) ACARIASIS
4 SUBCUTANEOUS TISSUE OF LEG LIPOMA (multiple)

Gross Comments

Tissues are collected per project protocol - none are saved for CNPRC.

Measurements
Gross Necropsy Report

Animal ID | MMU 24288 | Report ID | 20062 | Report Complete
Sex | F | Death Type | K | Work Performed 05/06/2008
Age | 19 yrs 11 mon | Weight (KG) | 6.2 | Time Performed 02:30 PM

Gross Observation

ADRENAL GLAND

Adrenal cortices are dark red.

BODY AS A WHOLE

The animal is presented severely dehydrated and markedly thin.

GASTROINTESTINAL TRACT

The mucosa throughout the GIT is variably thickened and erythematous.

HEART

There is a flattened, pale tan to red, rubbery mass firmly attached to the wall of the right ventricle.

KIDNEY

Renal medullae are pale with a surrounding rim of central cortical erythema.

LUNG

The lungs are "heavy and wet" and variably discolored dark red, particularly on the left side.

LYMPH NODES

Lymph nodes associated with the GIT are prominent to enlarged.

Gross Diagnosis

1 BODY AS A WHOLE INANITION DEHYDRATION

2 STOMACH INFLAMMATION GASTRITIS, NOS

3 GASTROINTESTINAL TRACT INFLAMMATION ENTEROCOLITIS

4 LYMPH NODE HYPERTROPHY (lymphadenopathy - nodes associated with the GIS)

5 KIDNEY AND PELVIS, CS NECROSIS, FOCAL (papillary pallor - necrosis?)

6 RIGHT VENTRICLE THROMBUS

7 LUNGS (BOTH) CONGESTION

Gross Comments

A full set of tissues is saved in formalin for histopathology. The colon and small intestine are swabbed for bacterial culture.

Measurements
# Gross Necropsy Report

| Animal ID | MMU 24481 |
| Report ID | 18081 |
| Report Complete | 01/16/2008 |
| Sex | F |
| Death Type | X |
| Work Performed | 01/16/2008 |
| Age | 19 yrs 3 mon |
| Weight (KG) | 10.28 |
| Time Performed | 01:00 PM |

**Gross Observation**  
BODY AS A WHOLE  
The animal is presented in good flesh with an open ventral midline abdominal incision subsequent to experimental manipulation.

**Gross Diagnosis**  
1  BODY AS A WHOLE NO REMARKABLE FINDINGS  
(tissue harvest per project protocol)

**Gross Comments**  
Tissues are collected per project protocol and to fulfill biospecimen requests - no other tissues are saved.

**Measurements**
Gross Necropsy Report

Animal ID: MMU 24796  
Report ID: 18541  
Report Complete: 02/14/2008  
Work Performed: 02/14/2008  
Time Performed: 08:00 AM

Sex: F  
Age: 22 yrs 10 mon  
Weight (KG): 4.23

Gross Observation

<table>
<thead>
<tr>
<th>Gross Observation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BODY AS A WHOLE</td>
<td>The animal is presented thin and dehydrated.</td>
</tr>
<tr>
<td>COLON</td>
<td>The colonic mucosa is thickened with scattered foci of dark red (possible ulceration), and contents are voluminous, liquid, and green; roughly midway along the length of the colon there is a firm, roughly 0.8 cm diameter, white, serosal nodule.</td>
</tr>
<tr>
<td>GALLBLADDER</td>
<td>The gallbladder is moderately dilated with dark green bile.</td>
</tr>
<tr>
<td>LIVER</td>
<td>The liver is dotted with numerous green fluid filled cysts measuring 0.1–0.4 cm diameter.</td>
</tr>
<tr>
<td>LYMPH NODES</td>
<td>Paracolic nodes are prominent to enlarged.</td>
</tr>
<tr>
<td>UTERUS</td>
<td>The uterus is prominently enlarged mainly due to a markedly thickened endometrium in which there are variably sized dark fluid filled cysts, the largest measuring roughly 0.4 cm diameter.</td>
</tr>
</tbody>
</table>

Gross Diagnosis

1. BODY AS A WHOLE INANITION DEHYDRATION
2. ENDOMETRIUM HYPERPLASIA, DIFFUSE
3. COLONIC MUCOUS MEMBRANE INFLAMMATION, DIFFUSE COLITIS
4. LIVER CYSTS, MULTIPLE (biliary cysts)
5. LYMPH NODE HYPERTROPHY (lymphadenopathy)

Gross Comments

The brain is perfused and collected for the investigator. Several tissues (bladder, urethra, visceral fat, muscle, mammary gland, liver, adrenal glands) are collected and saved fresh frozen and/or in formalin for various investigators, and a truncated set of tissues is saved in formalin.

Measurements
Gross Necropsy Report

Animal ID     MMU 24861           Report ID     19561           Report Complete
Sex            F               Death Type      K               Work Performed  04/04/2008
Age           18 yrs 11 mon           Weight (KG)     9.41           Time Performed  10:00 AM

Gross Observation

<table>
<thead>
<tr>
<th>Gross Observation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BODY AS A WHOLE</td>
<td>The animal is presented in good flesh.</td>
</tr>
<tr>
<td>LUNG</td>
<td>Multiple circular, 0.2-0.4 cm diameter, tan to grey, firm to bullous foci are scattered over mainly dorsal lung surfaces.</td>
</tr>
<tr>
<td>OVARY</td>
<td>Ovaries are obscured by fat and endometriosis.</td>
</tr>
<tr>
<td>UTERUS</td>
<td>The uterus is adherent to urinary bladder and colon and obscured by multiple endometrial cysts.</td>
</tr>
</tbody>
</table>

Gross Diagnosis

1. UTERUS AND CERVIX, FALLOPIAN TUBES AND OVARIES, CS ENDOMETRIOSIS
2. OVARY ENDOMETRIOSIS
3. LUNGS (BOTH) ACARIASIS

Gross Comments

A full set of tissues is saved in formalin for histopathology.

Measurements
Gross Necropsy Report

Animal ID     MMU 24978  Report ID    20441  Report Complete
Sex            M  Death Type  K  Work Performed  05/28/2008
Age            19 yrs 0 mon  Weight (KG)  7.45  Time Performed  09:30 AM

Gross Observation

BODY AS A WHOLE
- The animal is presented severely thin and dehydrated with prominent spinal kyphosis.

COLON
- The colon is dilated with liquid stool.

LIVER
- Some areas of the liver are firm, waxy, and pale tan (amyloidosis), and in others there are prominent dark red bullous lesions (peliosis hepatica?).
- Numerous circular, pale tan, bullous lesions are scattered over visceral pleural surfaces.

LUNG

Gross Diagnosis

1  BODY AS A WHOLE INANITION (severe)  DEHYDRATION
2  SPINE KYPHOSIS (T-10600)
3  COLON INFLAMMATION COLITIS
4  LIVER AMYLOIDOSIS, FOCAL
5  LIVER PELIOSIS HEPATIS
6  LUNGS (BOTH) ACARIASIS

Gross Comments

Multiple tissues are collected to fulfill biospecimen requests (testes, epididymides, seminal vesicles, lymph node, kidneys), and a truncated set of tissues is saved in formalin for limited histopathology.

Measurements
### Gross Necropsy Report

<table>
<thead>
<tr>
<th>Animal ID</th>
<th>MMU 25002</th>
<th>Report ID</th>
<th>18382</th>
<th>Report Complete</th>
<th>02/05/2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>M</td>
<td>Death Type</td>
<td>K</td>
<td>Work Performed</td>
<td>02/05/2008</td>
</tr>
<tr>
<td>Age</td>
<td>18 yrs 8 mon</td>
<td>Weight (KG)</td>
<td>10.32</td>
<td>Time Performed</td>
<td>11:30 AM</td>
</tr>
</tbody>
</table>

#### Gross Observation

- **GASTROINTESTINAL TRACT**: Contents in the stomach and small intestine and cecum is within normal limits of amount and appearance. Green liquid contents with a granular suspension is present throughout the large intestine.
- **JOINT**: There is kyphosis and spondylosis of the caudal thoracic and proximal lumbar vertebral column.
- **LUNG**: There are widely scattered dome-shaped pleural vesicles ranging up to 5 mm in diameter.
- **LYMPH NODES**: The ileocecal lymph nodes are markedly enlarged; the largest of these nodes is 2.5 cm. in diameter.
- **SKIN**: A tattoo on the right medial thigh reads 25002.
- **URINARY BLADDER**: Bililabstix results on a sample of slightly yellow turbid urine drawn by cysticentesis: glucose, bilirubin, ketone, and blood are all negative, ph 8, protein 1+ or 30 mg/dl.

#### Gross Diagnosis

1. COLON AND CECUM, CS INFLAMMATION, DIFFUSE LOOSE STOOL
2. VERTEBRAL COLUMN KYPHOSIS (T-10600) with spondylosis
3. LUNG INFLAMMATION, MULTIFOCAL ACARIASIS
4. COLON AND CECUM, CS HYPERTROPHY ileoceccolic lymphadenopathy
5. KIDNEY MORPHOLOGY NOT ASSIGNED IN SNOMED proteinuria 1+

#### Gross Comments

The finding of liquid contents throughout the large intestine is consistent with a clinical diagnosis of diarrhea. Additionally there was kyphosis and ankylosis spondylosis of vertebral column in the caudal thoracic and proximal lumbar region and ileoceccolic lymph nodes were markedly enlarged. Selected tissues are collected for the biospecimen request program and a variety of tissues are fixed in 10% buffered formalin for diagnostic pathology. The results of microbiology [small and large intestine] and histopathology will be presented in the final necropsy report.

#### Measurements
Gross Necropsy Report

Animal ID  MMU 25028  |  Report ID  17882  |  Report Complete  
Sex  F  |  Death Type  K  |  Work Performed  01/10/2008  
Age  18 yrs 7 mon  |  Weight (KG)  10.55  |  Time Performed  10:00 AM  

Gross Observation  
BODY AS A WHOLE  The animal is presented in good flesh with a palpably firm caudoventral abdomen.  
DUODENUM  The luminal surface of the duodenum displays multiple, sessile, smooth-surfaced, white polypoid protrusions, the largest of which is approximately 0.5 cm diameter.  
LIVER  The liver is mildly to moderately enlarged with rounded edges, and the parenchyma is friable.  
OVARY  The ovaries are completely obscured by endometriosis.  
UTERUS  The uterus is completely obscured by endometriosis and associated cysts/adhesions.  

Gross Diagnosis  
1  UTERUS ENDOMETRIOSIS  
2  OVARY ENDOMETRIOSIS  
3  DUODENUM POLYP  
4  LIVER HYPERTROPHY LIPIDOSIS  

Gross Comments  Several tissues are collected to fulfill biospecimen requests, including esophagus, long bones, abdominal aorta, blood, cerebellum, spinal cord, spleen, colon, and lymph nodes. A truncated set of tissues is saved in formalin for limited histopathology.  

Measurements
# Gross Necropsy Report

<table>
<thead>
<tr>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>F</td>
<td>Death Type</td>
<td>D</td>
<td>Work Performed</td>
<td>07/16/2007</td>
</tr>
<tr>
<td>Age</td>
<td>17 yrs 4 mon</td>
<td>Weight (KG)</td>
<td>13.68</td>
<td>Time Performed</td>
<td>01:00 PM</td>
</tr>
</tbody>
</table>

**Gross Observation**

<table>
<thead>
<tr>
<th>BODY AS A WHOLE</th>
<th>The animal is presented in good flesh.</th>
</tr>
</thead>
<tbody>
<tr>
<td>LUNG</td>
<td>The left cranial and middle lobes are mottled with dark red discoloration; several circular, roughly 0.2-0.5 cm diameter, generally bullous (lung mite) lesions are scattered over mainly dorsal lung surfaces.</td>
</tr>
<tr>
<td>PLACENTA</td>
<td>The placenta has detached from the endometrium resulting in massive intra-uterine hemorrhage.</td>
</tr>
<tr>
<td>STOMACH</td>
<td>The gastric mucosa is thinned but mildly erythematous.</td>
</tr>
<tr>
<td>UTERUS</td>
<td>The uterus is markedly enlarged as a result of pregnancy.</td>
</tr>
</tbody>
</table>

**Gross Diagnosis**

1. BODY AS A WHOLE PREGNANCY, THIRD TRIMESTER
2. PLACENTA ABRUPTIO PLACENTAE (T-88100)
3. STOMACH INFLAMMATION GASTRITIS, NOS
4. LUNGS (BOTH) ACARIASIS

**Gross Comments**

A truncated set of tissues is saved in formalin.

**Measurements**
Final Necropsy Report

Sex M  Death Type K  Work Performed 01/29/2008
Age 17 yrs 10 mon  Weight (KG) 11.9  Time Performed 09:30 AM

Final Observations

<table>
<thead>
<tr>
<th>Body Part</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BODY AS A WHOLE</td>
<td>The animal is presented in good flesh.</td>
</tr>
<tr>
<td>COLON</td>
<td>The mucosa of colon and cecum is thickened and variably erythematous, and contents are soft to liquid.</td>
</tr>
<tr>
<td>JOINT</td>
<td>Stifle joints are markedly deformed by erosions and eburnation, and synovial tissues are discolored brown.</td>
</tr>
<tr>
<td>LIVER</td>
<td>The liver is enlarged and firm with sharp edges and with a &quot;waxy&quot; appearance on cut surfaces suggestive of amyloidosis.</td>
</tr>
<tr>
<td>LUNG</td>
<td>Numerous bullous lesions of pulmonary acariasis measuring up to 0.6 cm diameter are scattered on lung surfaces.</td>
</tr>
</tbody>
</table>

Final Diagnosis

1. COLONIC MUCOUS MEMBRANE INFLAMMATION, DIFFUSE COLITIS
2. JOINT OF LOWER EXTREMITY (stifle joints) INFLAMMATION, CHRONIC DIFFUSE ARTHRITIS, NOS
3. LIVER HYPERTROPHY AMYLOIDOSIS
4. LUNGS (BOTH) ABNORMAL APPEARANCE ACARIASIS

Final Comments

Several tissues are collected to fulfill biospecimen requests (testes, epididymides, seminal vesicles, kidneys, hypothalamus, nasal turbinates), and a truncated set of tissues is saved in formalin, but no histopathology is to be performed at this time.

Measurements
Gross Necropsy Report

Sex  F  Death Type  X  Work Performed  04/25/2008
Age  17 yrs 11 mon  Weight (KG)  10.2  Time Performed  01:30 PM

Gross Observation  BODY AS A WHOLE  The pregnant animal is presented in abundant good flesh.
                     LIVER  The liver is enlarged with rounded edges, and the parenchyma is pale and friable.

Gross Diagnosis  1  BODY AS A WHOLE PREGNANCY, FIRST TRIMESTER
                  2  LIVER LIPIDOSIS

Gross Comments  Tissues are collected per project protocol - none are saved for CNPRC histopathology.

Measurements
# Gross Necropsy Report

<table>
<thead>
<tr>
<th>Animal ID</th>
<th>MMU 25709</th>
<th>Report ID</th>
<th>17242</th>
<th>Report Complete</th>
<th>12/05/2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>F</td>
<td>Death Type</td>
<td>X</td>
<td>Work Performed</td>
<td>12/05/2007</td>
</tr>
<tr>
<td>Age</td>
<td>17 yrs 5 mon</td>
<td>Weight (KG)</td>
<td>9.82</td>
<td>Time Performed</td>
<td>11:20 AM</td>
</tr>
</tbody>
</table>

## Gross Observation
BODY AS A WHOLE

The animal is presented in good flesh with an open midabdominal incision subsequent to experimental manipulation.

## Gross Diagnosis

1. BODY AS A WHOLE NO REMARKABLE FINDINGS

## Gross Comments
Tissues are collected per project protocol. Ovaries and kidneys are collected to fulfill biospecimen requests. No tissues are saved for CNPRC histopathology.

## Measurements
## Gross Necropsy Report

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>F</td>
<td>Death Type</td>
<td>K</td>
<td>Work Performed</td>
<td>10/23/2007</td>
</tr>
<tr>
<td>Age</td>
<td>16 yrs 6 mon</td>
<td>Weight (KG)</td>
<td>8.09</td>
<td>Time Performed</td>
<td>12:10 PM</td>
</tr>
</tbody>
</table>

### Gross Observation

<table>
<thead>
<tr>
<th>BONE MARROW</th>
<th>Approximately 80% gray fatty and 20% red-brown.</th>
</tr>
</thead>
<tbody>
<tr>
<td>GINGIVA</td>
<td>This animal has a full adult set of dentition in very good condition.</td>
</tr>
<tr>
<td>HEART</td>
<td>There is focal fibrous adhesion of the epicardium of the right ventricle near the apex to the pericardium.</td>
</tr>
<tr>
<td>LUNG</td>
<td>Multifocally in the left cranial lung lobe there are scattered dome-shaped transluscent cystic structures ranging from 2-3 mm in diameter consistent with lung mite infestatation</td>
</tr>
<tr>
<td>SKIN</td>
<td>A tattoo on the right medial thigh reads 25935. There is a moderate amount of moist red blood on the perineal skin.</td>
</tr>
<tr>
<td>UTERUS</td>
<td>There is extensive fibrous adhesion of the pelvic viscera to the body wall and each other; additionally there is several cc's of dark red fluid both within the peritoneal cavity and within cystic structures adjacent to the uterus.</td>
</tr>
</tbody>
</table>

### Gross Diagnosis

1. UTERUS ENDOMETRIOSIS
2. LUNG INFLAMMATION, MULTIFOCAL MITES
3. BONE MARROW HYPOPLASIA

### Gross Comments

The finding pelvic fibrous adhesions, pelvic cystic structures containing dark red fluid, and dark red fluid in the peritoneal cavity are all consistent with the clinical diagnosis of endometriosis. The results of histopathology will be presented in the final necropsy report.

### Measurements
**Gross Necropsy Report**

<table>
<thead>
<tr>
<th>Animal ID</th>
<th>Report ID</th>
<th>Report Complete</th>
</tr>
</thead>
<tbody>
<tr>
<td>MCY 25970</td>
<td>15180</td>
<td>08/14/2007</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sex</th>
<th>Death Type</th>
<th>Work Performed</th>
</tr>
</thead>
<tbody>
<tr>
<td>M</td>
<td>K</td>
<td>08/14/2007</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age</th>
<th>Weight (KG)</th>
<th>Time Performed</th>
</tr>
</thead>
<tbody>
<tr>
<td>16 yrs 4 mon</td>
<td>7.5</td>
<td>01:30 PM</td>
</tr>
</tbody>
</table>

**Gross Observation**

- **BODY AS A WHOLE**: The SRV positive animal is presented in robust good flesh.
- **LIVER**: Numerous clear fluid filled cysts are scattered over all hepatic surfaces, ranging from 0.1 to 2.8 cm diameter.

**Gross Diagnosis**

1. LIVER CYSTS, MULTIPLE

**Gross Comments**

Tissues are collected to fulfill biospecimen requests (kidney, testes, seminal vesicles, lymph node) and according to the project protocol. The liver is photographed.

**Measurements**
Gross Necropsy Report

Animal ID: MMU 26072
Report ID: 17581
Sex: M
Death Type: K
Work Performed: 12/21/2007
Age: 16 yrs 7 mon
Weight (KG): 10.78
Time Performed: 10:00 AM

Gross Observation

BONE MARROW
The femoral bone marrow is a pinkish tan core filling the medullary cavity.

GASTROINTESTINAL TRACT
Contents throughout the tract is within normal limits of appearance and amount.

GINGIVA
This animal has a full set of dentition in very good condition.

JOINT
There is moderate kyphosis with spondylosis of the caudal thoracic region of the vertebral column.

LIVER
The parenchyma is moderately increased in friability upon palpation of the cut surface.

LUNG
There is fibrous adhesion of the right middle lung lobe to pericardium medially nad the parietal pleura laterally. This lobe is firm on palpation and light red brown diffusely. A small number of bullae 2 to 3 mm in diameter are scattered on the pleural surface of all lung lobes and are consistent with lung mite infestation.

LYMPH NODES
The tracheobronchial lymph nodes are moderately to marked enlarged; the maximum measuring 7 mm. in diameter. The cut surface of this large lymph node has a homogeneous tan appearance.

SKIN
A tattoo on the right medial thigh reads 26072. The skin over the right elbow is bright red and finely wrinkled.

URINARY BLADDER
The lumen contains approximately 20cc. of clear light amber urine; billilabstix results on a sample of urine drawn by cysticentesis: glucose 2000 or more mg/dl, ketone, bilirubin, protein, and blood are all negative, pH 6.5 to 7.

Gross Diagnosis

1. URINARY BLADDER LESION
   glucosuria 2000 or more mg/dl

2. VERTEBRAL COLUMN KYPHOSIS (T-10600)
   and spondylosis [caudal thoracic region]

3. LIVER DEGENERATION, DIFFUSE

4. LUNG INFLAMMATION, MULTIFOCAL MITES

5. LUNG AND PLEURA, CS INFLAMMATION, POSSIBLE ASPIRATION
   FOCAL ASPIRATION, FOOD MATERIAL

Gross Comments
The finding of unilateral pneumonia in the right middle lung lobe may be due to aspiration of foreign material. Glucosuria is consistent with the clinical diagnosis of diabetes. Selected tissues are collected for investigators. A variety of tissues are fixed in 10% buffered formalin for pathology. The results of histopathology, microbiology [right middle lung lobe], and cytology [right middle lung lobe and tracheobronchial lymph node] will be presented in the final necropsy report.

Measurements
Final Necropsy Report

Animal ID  MMU  26166  Report ID  14040  Report Complete
Sex  M  Death Type  X  Work Performed  06/05/2007
Age  16 yrs 1 mon  Weight (KG)  13.41  Time Performed  11:00 AM

Final Observations  BODY AS A WHOLE  The animal is presented in good flesh.

Final Diagnosis  1  BODY AS A WHOLE NO REMARKABLE FINDINGS PERFUSION

Final Comments  The brain is perfused, and tissues are collected per project protocol.

Measurements
Gross Necropsy Report

Animal ID  MMU 26302  Report ID  17981  Report Complete
Sex  F  Death Type  K  Work Performed  01/11/2008
Age  16 yrs 7 mon  Weight (KG)  14.1  Time Performed  10:30 AM

Gross Observation
- BODY AS A WHOLE: The animal is presented in abundant good flesh.
- COLON: Numerous outpouchings of colon are filled with firm, inspissated feces (diverticulosis).
- GASTROINTESTINAL TRACT: The mesentery of the small intestine has adherent to it a small, roughly 1.0 cm in greatest dimension, variegated tan to red to brown, soft mass.
- UTERUS: The uterus is enlarged to roughly four times its normal size, and a couple of small, circular, dark red-black, cystic foci suggest serosal endometriosis; upon opening the uterus, the endometrium is observed to be abundant, uniformly pale tan, soft, and moist.

Gross Diagnosis
1. UTERUS ENDOMETRIOSIS
2. ENDOMETRIUM HYPERPLASIA, DIFFUSE
3. COLON DIVERTICULOSIS
4. MESENTERY MASS, LOCALIZED, SOFT

Gross Comments
Multiple tissues are collected to fulfill biospecimen requests (ovaries, uterine tubes, lymph node, trachea). Gastric pH = 6

Measurements
### Gross Necropsy Report

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>Sex</td>
<td>F</td>
<td>Death Type</td>
<td>D</td>
<td>Work Performed</td>
<td>12/02/2007</td>
</tr>
<tr>
<td>Age</td>
<td>23 yrs 6 mon</td>
<td>Weight (KG)</td>
<td>3.46</td>
<td>Time Performed</td>
<td>11:30 AM</td>
</tr>
</tbody>
</table>

#### Gross Observation

<table>
<thead>
<tr>
<th>Body Part</th>
<th>Observation</th>
</tr>
</thead>
<tbody>
<tr>
<td>BODY AS A WHOLE</td>
<td>The animal is presented thin with a severely distended, very tightly stretched abdomen.</td>
</tr>
<tr>
<td>COLON</td>
<td>The cecum and proximal one half of the colon are significantly distended, mainly with gas, and the mucosa is thickened and erythematous.</td>
</tr>
<tr>
<td>KIDNEY</td>
<td>Renal cortices are pale, probably due to reduced blood flow, and an irregular capsular surface on the left side suggests old infarcts.</td>
</tr>
<tr>
<td>LIVER</td>
<td>The liver is compressed cranially against the diaphragm with pale discoloration attributed to mechanical expulsion of most of its blood volume.</td>
</tr>
<tr>
<td>LUNG</td>
<td>Numerous fibrous strands connect lung lobes to each other and to the chest wall; all lobes are irregularly atelectatic.</td>
</tr>
<tr>
<td>PANCREAS</td>
<td>The pancreas if markedly compressed by the massively distended stomach.</td>
</tr>
<tr>
<td>STOMACH</td>
<td>The stomach, markedly distended with liquid food material and gas, accounts for most of the severe distention of the abdomen.</td>
</tr>
</tbody>
</table>

#### Gross Diagnosis

1. STOMACH ABNORMAL APPEARANCE BLOATING
2. COLON INFLAMMATION COLITIS
3. COLON ABNORMAL APPEARANCE BLOATING
4. LIVER COMPRESSION INJURY ISCHEMIA (due to the distended stomach)
5. KIDNEY INFARCT, HEALED ISCHEMIA
6. LUNGS (BOTH) ATELECTASIS
7. PLEURA ADHESIONS, FIBROUS

#### Gross Comments

The colon is swabbed for bacterial culture, and a full set of tissues is saved in formalin, but no histopathology is to be performed at this time. This animal's death is attributed to the effects of gastric bloat including compression of the liver against the diaphragm resulting in impaired oxygenation and compression of the vena cava resulting in poor venous return, impaired circulation, and major organ ischemia. The reason for gastric bloat in aged, usually female Macaca fascicularis, however, is unknown.
Gross Necropsy Report

Animal ID: MCY 26389  
Report ID: 15700  
Report Complete: 09/06/2007

Sex: F  
Death Type: K  
Work Performed: 09/06/2007

Age: 21 yrs 3 mon  
Weight (KG): 4.18  
Time Performed: 09:40 AM

Gross Observation
- BONE MARROW: The femoral bone marrow is a solid yellow fatty core filing the medullary cavity.
- COLON: There is liquid contents in the lumen proximally and semi-solid green contents in the middle and distal lumen.
- DIAPHRAGM: There is fibrous adhesion of the caudal lung lobes to the parietal pleura of the diaphragm.
- GASTROINTESTINAL TRACT: There is fibrous adhesion of the omentum to the ventral body wall.
- HEART: The midpoint inside diameter of the left ventricle (lumen) is 11 mm and the outside diameter is 20 mm.
- JOINT: There is moderate dorsal kyphotic arching of the thoracolumbar vertebral column.

Gross Diagnosis
1. COLON AND CECUM, CS INFLAMMATION, DIFFUSE LOOSE STOOL
2. BONE MARROW HYPOPLASIA
3. VERTEBRAL COLUMN KYPHOSIS (T-10600)

Gross Comments: The finding of semi-solid contents in the distal colon is consistent with a clinical diagnosis of colitis. Vertebral column kyphosis may have been due to abnormalities in the intervertebral discs, the articular facets, the bone, or combination of these factors. The results of microbiology and histopathology will be presented in the final necropsy report.

Measurements
# Gross Necropsy Report

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<tr>
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<td>K</td>
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<td>Weight (KG)</td>
<td>4.35</td>
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<td>10:30 AM</td>
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</table>

**Gross Observation**

- **BODY AS A WHOLE**: The SRV+ animal is presented in good flesh.
- **OVARY**: The left ovary is obscured by fat and a dark brown-black fluid filled cyst roughly the same size as the ovary.

**Gross Diagnosis**

1. **OVARY ENDOMETRIOSIS**

**Gross Comments**

Tissues are collected to fulfill a biospecimen request (ovaries) and per project protocol - no tissues are saved for CNPRC histopathology.
Gross Necropsy Report

Animal ID  MMU 26617
Sex          M
Age          15 yrs 7 mon
Report ID    16642
Report Complete 11/01/2007
Death Type   D
Work Performed 11/01/2007
Weight (KG)  15.2
Time Performed 10:45 AM

Gross Observation

BONE
There is lordosis of the thoracic vertebral column as evidenced by ventral arching deviation; in the caudal thoracic region there is marked spondylosis as evidenced by boney hard exostosis in this area.

BRAIN
The hypothalamus bulges ventrally and is soft in consistency.

GASTROINTESTINAL TRACT
The stomach contains a moderate amount of green granular soft contents. There is no contents in the small intestine. The cecum and large intestine contain a moderate amount of thick liquid green contents.

LUNG
The trachea and mainstem bronchi are filled with pink frothy fluid. The left lung lobes and medial aspect of the right lobes are red brown; all lobes have a moist glistening pleural surface.

LYMPH NODES
One right inguinal lymph node is dark red; the remaining right inguinal lymph nodes and the left nodes are grey.

SKIN
There is focally extensive dark red gelatinous hemorrhage in the subcutis and interfascicular connective tissue of the caudal aspect of the right hindlimb and the right side of the scrotum; the overlying skin is dark red. Over the Achilles tendon there is a circular red focus measuring 10 mm in diameter with a central tan grey area measuring 2 mm in diameter. A tattoo on the right medial thigh reads 26617.

URINARY BLADDER
The bladder is contracted and empty.

Gross Diagnosis
1  SKIN OF LEG HEMORRHAGE, MASSIVE
2  BRAIN MALACIA  Thoracic region with lordosis in the middle section
3  VERTEBRAL COLUMN SPONDYLOSIS

Gross Comments
The severe regional hemorrhage in the subcutis and interstitium of the skeletal muscle of the right hindlimb is consistent with some direct localized injury. The absence of gross involvement of the right foot and the most severe hemorrhage in the distal leg suggests an ascending pathogenesis which reach the right side of the scrotum and some right inguinal lymph nodes. There was a circular red focus with a central grey area over the Achilles tendon which may have been the result of some sort of bite or sting. The instilled material probably ascended in the lymphatics and caused extensive tissue injury enroute.

Measurements
# Gross Necropsy Report

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<thead>
<tr>
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<th>MMU 26619</th>
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<td>Sex</td>
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<tr>
<td>Age</td>
<td>15 yrs 8 mon</td>
<td>Weight (KG)</td>
<td>11.27</td>
<td>Time Performed</td>
</tr>
</tbody>
</table>

**Gross Observation**
BODY AS A WHOLE  The animal is presented very thin.

**Gross Diagnosis**
1. BODY AS A WHOLE INANITION PERFUSION (whole body perfusion - paraformaldehyde)

**Gross Comments**
The entire animal is perfused with paraformaldehyde, and brain, spine, and legs are collected for the investigator.

**Measurements**
### Final Necropsy Report

<table>
<thead>
<tr>
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<td>Age</td>
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<td>Weight (KG)</td>
<td>6.01</td>
<td>Time Performed</td>
<td>10:45 AM</td>
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</tbody>
</table>

#### Final Observations
- **BODY AS A WHOLE**: The animal is presented thin and mildly dehydrated.
- **LIVER**: The liver is diffusely pale tan suggesting lipidosis.
- **URINARY BLADDER**: The urinary bladder is distended with clear, pale yellow urine which tests positive for glucose (dipstick).

#### Final Diagnosis

<table>
<thead>
<tr>
<th>#</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>BODY AS A WHOLE INANITION DEHYDRATION</td>
</tr>
<tr>
<td>2</td>
<td>LIVER ABNORMAL APPEARANCE LIPIDOSIS</td>
</tr>
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</table>

#### Final Comments

Several tissues are collected to fulfill biospecimen requests, and a truncated set is saved in formalin, but no histopathology is to be performed at this time.

#### Measurements
# Gross Necropsy Report

<table>
<thead>
<tr>
<th>Animal ID</th>
<th>Report ID</th>
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**Gross Observation**

BODY AS A WHOLE

The animal is presented in robust good flesh.

**Gross Diagnosis**

1. BODY AS A WHOLE NO REMARKABLE FINDINGS

**Gross Comments**

Tissues are collected per project protocol - a truncated set is saved in formalin, but no histopathology is to be performed at this time.

Measurements
Gross Necropsy Report

Sex  M  Death Type  K  Work Performed  12/27/2007
Age  15 yrs 8 mon  Weight (KG)  12.03  Time Performed  10:05 AM

Gross Observation

<table>
<thead>
<tr>
<th>GASTROINTESTINAL TRACT</th>
<th>Contents throughout the tract is within normal limits of amount and appearance.</th>
</tr>
</thead>
<tbody>
<tr>
<td>GINGIVA</td>
<td>This animal has a full adult set of dentition in good condition.</td>
</tr>
<tr>
<td>JOINT</td>
<td>the articular cartilage of the medial condyle of the distal right femur is roughend and irregular. Light red brown fluid flows from the left stifle joint upon opening. The articular cartilage of the lateral and medial condyles on the distal left femur is roughened. The articular surface of the left patella has a red brown irregular depressed ulcerated appearance for approximately 25% of the surface. The articular surface of the proximal trochlea and condyles on the left femur is ulcerated for approximately 25% of the surface.</td>
</tr>
<tr>
<td>SKIN</td>
<td>A tattoo on the right medial thigh reads 26806.</td>
</tr>
<tr>
<td>URINARY BLADDER</td>
<td>Multifocally, especially in the distal fundic region there are several red brown dome-shaped hemorrhagic foci in the mucosa ranging from approximately 0.5 to 1 mm in diameter.</td>
</tr>
</tbody>
</table>

Gross Diagnosis

1. KNEE JOINT INFLAMMATION, ULCERATIVE
2. URINARY BLADDER INFLAMMATION, HEMORRHAGIC

Gross Comments

The finding of roughened and ulcerated articular cartilage especially of the left stifle can account for the clinical signs. Red turbid fluid in the synovial space of the left stifle is compatible with an active inflammatory process. Selected tissues are collected for the biospecimen request program and a variety of tissues are fixed in 10% buffered formalin for diagnostic pathology. The results of microbiology [left and right stifles and urinary bladder] and histopathology will be presented in the final necropsy report.

Measurements
Gross Necropsy Report

Sex  M  Death Type  K  Work Performed  08/15/2007
Age  15 yrs 3 mon  Weight (KG)  9.42  Time Performed  09:30 AM

Gross Observation

BODY AS A WHOLE  The animal is presented thin and mildly dehydrated.

CECUM  The cecum is poorly defined and when opened displays circumferential mural thickening with erythema at the ileocecal junction causing stricture; an additional, less prominent stricture is present at the cecocolic junction.

COLON  The colon, particularly proximally, is mildly dilated with soft to liquid contents.

DUODENUM  The duodenal mucosa is variably erythematous, particularly near the ampula of Vater.

ILEUM  The distal ileal mucosa is variably erythematous, and the lumen is dilated.

LYMPH NODES  Nodes associated with the gastrointestinal tract are prominent to enlarged.

STOMACH  The gastric mucosa is thickened and variably erythematous.

Gross Diagnosis

1  BODY AS A WHOLE  INANITION  DEHYDRATION

2  CECUM  STRicture  TYPHlITIS, NOS

3  ILEUM-CECUM  INFllmmATION  ENTERITIS, NOS

4  DUODENAL MUCOUS MEMBRANE  INFllmmATION

5  STOMACH  INFllmmATION  GASTRITIS, NOS

6  LYMPH NODE  HYPERTROPHY  (lymphadenopathy - paracolic, mesenteric, gastric)

Gross Comments  Tissues are collected to fulfill biospecimen requests (kidneys, testes, seminal vesicles, lymph node, trachea, lung), and a truncated set of tissues is saved in formalin for limited histopathology.

Measurements
Gross Necropsy Report

Sex        F  Death Type  K  Work Performed  06/27/2007
Age        15 yrs 1 mon  Weight (KG)  9.35  Time Performed  09:30 AM

Gross Observation

BODY AS A WHOLE  The animal is presented in good flesh with a palpably firm caudal abdominal mass.

COLON  The distal colon/rectum is compressed by the mass of endometriosis/scirrhou reaction in the pelvic inlet.

ILEUM  Multiple loops of ileum are entrapped within the endometiosis/scirrhous reaction in the caudal abdomen causing local strictures.

LUNG  There are multiple focal cysts, the largest over a centimeter in diameter, are present on lung surfaces.

URINARY BLADDER  The urinary bladder is flattened by the pressure of the expansile mass of endometriosis/scirrhou reaction.

UTERUS  The uterus and ovaries are incased in a combination of cysts and very firm fibrous connective tissue - colon, urinary bladder, and multiple loops of small intestine are also entrapped within this area of endometriosis and scirrhou reaction.

Gross Diagnosis

1  UTERUS AND CERVIX, FALLOPIAN TUBES AND OVARIES, CS ENDOMETRIOSIS
2  GASTROINTESTINAL TRACT STRicture
3  LUNGS (BOTH) ACARIASIS

Gross Comments  Kidneys and trachea are collected to fulfill biospecimen requests. A truncated set of tissues is saved in formalin for CNPRC histopathology.

Measurements
Gross Necropsy Report

Animal ID  MMU 26961  Report ID  15160  Report Complete  
Sex  F  Death Type  K  Work Performed  08/14/2007  
Age  15 yrs 2 mon  Weight (KG)  11.76  Time Performed  11:00 AM  

Gross Observation  
BODY AS A WHOLE  The animal is presented in abundant good flesh.  
OVARY  The ovaries are not clearly discerned in the endometriosis/uterine adhesions.  
UTERUS  The uterus is adherent to both bladder and colon and there are multiple irregular proliferative areas on its surface, some of them cystic with dark blue-black contents (endometriosis); the endometrium is diffusely thickened and pale tan.  

Gross Diagnosis  
1  UTERUS AND CERVIX, FALLOPIAN TUBES AND OVARIIES, CS ENDOMETRIOSIS  
2  ENDOMETRIUM HYPERPLASIA, DIFFUSE  

Gross Comments  
Kidneys and trachea are collected to fulfill biospecimen requests. A truncated set of tissues is saved in formalin for limited histopathology.  

Measurements
# Gross Necropsy Report

<table>
<thead>
<tr>
<th>Animal ID</th>
<th>Report ID</th>
<th>Report Complete</th>
<th>Sex</th>
<th>Death Type</th>
<th>Work Performed</th>
<th>Time Performed</th>
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<tbody>
<tr>
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</table>

**Gross Observation**: BODY AS A WHOLE
The animal is presented in good flesh with an openventral midabdominal incision subsequent to experimental surgical manipulation.

**Gross Diagnosis**: 1 BODY AS A WHOLE NO REMARKABLE FINDINGS

**Gross Comments**: Tissues are collected per project protocol and to fulfill biospecimen requests. No tissues are saved for CNPRC histopathology.

**Measurements**
# Gross Necropsy Report

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<td></td>
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</table>

**Gross Observation**

BODY AS A WHOLE

The animal is presented in good flesh.

**Gross Diagnosis**

1

BODY AS A WHOLE NO REMARKABLE FINDINGS

**Gross Comments**

Tissues are collected to fulfill biospecimen requests (testes, epididymides, seminal vesicles, lymph nodes), and a truncated set is saved in formalin, but no histopathology is to be performed at this time.
# Final Necropsy Report

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<tbody>
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<td>Sex</td>
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<td>X</td>
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<td>06/15/2007</td>
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<td>7.8</td>
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<td>07:30 AM</td>
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</table>

### Final Observations

**BODY AS A WHOLE**

The animal is presented in good flesh.

**STOMACH**

Multiple pedunculated polypoid structures, the largest roughly 0.7 cm diameter, are present in the gastric mucosa approximately at the junction of corpus and antrum.

### Final Diagnosis

1. STOMACH POLYP

### Final Comments

Tissues are collected per project protocol.

### Measurements
# Gross Necropsy Report

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<tbody>
<tr>
<td>Sex</td>
<td>F</td>
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<td></td>
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<td></td>
<td>Time Performed</td>
<td>12:20 PM</td>
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</tbody>
</table>

**Gross Observation**
- **BODY AS A WHOLE**: The animal is presented in good flesh with an open ventral midline abdominal incision subsequent to experimental manipulation.
- **LIVER**: Numerous 0.1-0.2 cm diameter, circular, green fluid filled cysts are scattered liberally over capsular surfaces (biliary cysts).

**Gross Diagnosis**
- 1 LIVER CYSTS, MULTIPLE (biliary cysts)

**Gross Comments**
- Tissues are collected per project protocol - none are saved for CNPRC histopathology.

**Measurements**
# Gross Necropsy Report

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<tr>
<th>Animal ID</th>
<th>Report ID</th>
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## Gross Observation

The animal is presented in good flesh with severe musculocutaneous trauma to the right arm and the right side of the face.

## Gross Diagnosis

1. **BODY AS A WHOLE TRAUMATIC ABNORMALITY** (bite wounds)

## Gross Comments

A truncated set of tissues (no brain/spinal cord/pituitary) is saved in formalin, but no histopathology is to be performed at this time.

## Measurements
# Gross Necropsy Report

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## Gross Observation
BODY AS A WHOLE

The animal is presented in good flesh with an open ventral mid-abdominal incision subsequent to experimental manipulation.

## Gross Diagnosis

1. BODY AS A WHOLE NO REMARKABLE FINDINGS

## Gross Comments

Tissues are collected per project protocol and to fulfill biopspecimen requests - no tissues are saved for CNPRC histopathology.

## Measurements
Gross Necropsy Report

Sex  F  Death Type  K  Work Performed  09/19/2007
Age  14 yrs 5 mon  Weight (KG)  7.96  Time Performed  01:30 PM

Gross Observation

<table>
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<tr>
<th>Observation</th>
<th>Description</th>
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<tbody>
<tr>
<td>BODY AS A WHOLE</td>
<td>The animal is presented in good flesh.</td>
</tr>
<tr>
<td>COLON</td>
<td>A single, roughly 0.6 cm diameter, dark blue-black, cystic structure is noted on the serosal surface of the colon approximately 6 cm proximal to the anus.</td>
</tr>
<tr>
<td>OVARY</td>
<td>Ovaries are not discernable.</td>
</tr>
<tr>
<td>SKELETAL MUSCLE</td>
<td>The muscle of the body wall extending up from the pelvis is markedly and irregularly thickened.</td>
</tr>
<tr>
<td>UTERUS</td>
<td>The uterus and ovaries are totally obscured by a dark red fluid containing cyst.</td>
</tr>
</tbody>
</table>

Gross Diagnosis

1. UTERUS AND CERVIX, FALLOPIAN TUBES
   AND OVARIES, CS ENDOMETRIOSIS
2. COLONIC SEROSA ENDOMETRIOSIS,
   IMPLANTED
3. MUSCLE OF ABDOMEN ENDOMETRIOSIS,
   IMPLANTED

Gross Comments

Kidneys are collected to fulfill a biospecimen request, and a truncated set of tissues is saved in formalin for limited histopathology.

Measurements
Gross Necropsy Report

Animal ID: MMU 27424  
Report ID: 16861  
Report Complete:  
Sex: F  
Death Type: X  
Age: 14 yrs 7 mon  
Weight (KG): 8.48  
Time Performed: 08:00 AM

Gross Observation

**BODY AS A WHOLE**
- The animal is presented in good flesh.

**CECUM**
- The mucosa in the tip of the cecum is thickened, nodular, and erythematous.

**HEART**
- The left atrioventricular valve is irregularly thickened along its free edge, and some of the papillary muscles are discolored grey-green.

**LUNG**
- Several, circular, 0.2-0.4 cm diameter, tan to grey, firm to bullous foci are scattered mainly over dorsal lung surfaces.

**STOMACH**
- The gastric mucosa is thrown up into exaggerated, thick, longitudinal folds in antrum.

**UTERUS**
- A single, roughly 0.5 cm diameter focus of dark blue-black on the ventral surface of the uterus suggests endometriosis.

Gross Diagnosis
1. **BODY AS A WHOLE PERFUSION** (brain perfusion)
2. **STOMACH HYPERTROPHY GASTRITIS,NOS** (proliferative gastritis)
3. **CECUM INFLAMMATION TYPHЛИTIS,NOS**
4. **ATRIOVENTRICULAR VALVE ENDOCARDIOSIS**
5. **UTERUS ENDOMETRIOSIS**
6. **LUNGS (BOTH) ACARIAISIS**

Gross Comments
- The brain is perfused and collected for the investigator. Several tissues are collected to fulfill biospecimen requests (mammary gland, muscle, visceral fat, adrenal glands, uterus, liver, urinary bladder, urethra).

Measurements
Gross Necropsy Report

Sex          M               Death Type    K           Work Performed 11/20/2007
Age          14 yrs 7 mon   Weight (KG) 17.26       Time Performed 09:30 AM

Gross Observation

GINGIVA
There is a small polypoid mass on the gingival margin medial to the left upper canine.

LIVER
The edges of the liver are moderately rounded and the parenchyma is moderately increased in friability on palpation of the cut surface.

LUNG
There are few opaque round to elliptical foci on the pleural surface ranging from 2 to 4 mm in diameter and suggestive of lung mite infestation.

SKIN
A tattoo on the right medial thigh reads 27432. On the dorsal surface of the forearms there are lacerations, superficial on the right side and deep on the left side.

STOMACH
The pH of the contents is 1.5.

URINARY BLADDER
The lumen contains approximately 5 cc of clear yellow urine; bililabstix results on a sample drawn by cysticentesis: glucose negative, ketone trace, bilirubin and blood negative, pH 6.5, protein negative.

Gross Diagnosis

1  SKIN OF UPPER EXTREMITY TRAUMATIC ABNORMALITY self-trauma
2  LIVER CONSISTENCY, ABNORMALLY SOFT hepatopathy

Gross Comments
The cutaneous lesions were consistent with clinical diagnosis of self trauma. The increased friability of the liver may have been due to hydropic change or lipidosis; trace ketones in the urine suggests that the liver may be lipidotic due to mobilization of fat for caloric use. The results of histopathology will be reported in the final necropsy report.
# Gross Necropsy Report

<table>
<thead>
<tr>
<th>Animal ID</th>
<th>Sex</th>
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<tr>
<th>Gross Observation</th>
<th>Gross Diagnosis</th>
<th>Gross Comments</th>
</tr>
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<tbody>
<tr>
<td>BODY AS A WHOLE</td>
<td>1 BODY AS A WHOLE NO REMARKABLE FINDINGS</td>
<td>Tissues are collected per project protocol - none are saved for CNPRC histopathology.</td>
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The animal is presented in good flesh with an open ventral midline abdominal incision subsequent to experimental manipulation.
# Gross Necropsy Report

<table>
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<th>Sex</th>
<th>Death Type</th>
<th>Work Performed</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>K</td>
<td>05/28/2008</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age</th>
<th>Weight (KG)</th>
<th>Time Performed</th>
</tr>
</thead>
<tbody>
<tr>
<td>15 yrs 1 mon</td>
<td>15.6</td>
<td>03:00 PM</td>
</tr>
</tbody>
</table>

## Gross Observation

<table>
<thead>
<tr>
<th>Body Part</th>
<th>Observation</th>
</tr>
</thead>
<tbody>
<tr>
<td>BODY AS A WHOLE</td>
<td>The animal is presented in abundant good flesh (obese).</td>
</tr>
<tr>
<td>GASTROINTESTINAL TRACT</td>
<td>There is mild erythematous stippling of the gastric mucosa, mainly in the antrum; the small intestine displays multisegmental erythema with red tinged contents in these areas.</td>
</tr>
<tr>
<td>LIVER</td>
<td>The liver is mildly enlarged with rounded edges, and the parenchyma is pale brown and friable.</td>
</tr>
<tr>
<td>LUNG</td>
<td>The lungs are &quot;heavy and wet&quot; with extensive dark red discoloration.</td>
</tr>
<tr>
<td>SKIN</td>
<td>Extensive healing cutaneous ulcerations extend irregularly over roughly 30% of the ventral body surface.</td>
</tr>
<tr>
<td>UTERUS</td>
<td>A small, roughly 0.6 cm diameter, clear fluid filled cyst is present on the ventral surface of the uterus approximately at the junction of body and cervix.</td>
</tr>
</tbody>
</table>

## Gross Diagnosis

1. BODY AS A WHOLE OBESITY
2. SKIN ULCERATION
3. LIVER LIPIDOSIS
4. GASTROINTESTINAL TRACT INFLAMMATION (gastroenteritis)
5. LUNGS (BOTH) EDEMA, GENERALIZED
6. UTERUS CYST

## Gross Comments

A full set of tissues is saved in formalin for limited histopathology.

## Measurements
Gross Necropsy Report

Animal ID: MMU 27627  
Report ID: 15800  
Report Complete: 09/14/2007

Sex: F  
Death Type: K  
Work Performed: 09/14/2007

Age: 14 yrs 4 mon  
Weight (KG): 6.4  
Time Performed: 09:30 AM

Gross Observation

- BODY AS A WHOLE: The animal is presented thin.
- COLON: The colonic mucosa is thickened, and the proximal colon is dilated with liquid contents.
- LYMPH NODES: Paracolic nodes are within normal limits to prominent.

Gross Diagnosis

1. BODY AS A WHOLE DIARRHEA
2. COLON INFLAMMATION COLITIS
3. LYMPH NODE HYPERTROPHY (lymphadenopathy - paracolic)

Gross Comments

Tissues are collected to fulfill biospecimen requests (urine, bladder, ovaries, oviducts, spleen, lymph nodes, adrenal glands, esophagus, trachea, cerebellum) - no tissues are saved for histopathology.

Measurements
Gross Necropsy Report

Animal ID  MCY  27883  Report ID  18701  Report Complete
Sex  F  Death Type  D  Work Performed  02/22/2008
Age  18 yrs 4 mon  Weight (KG)  4.6  Time Performed  02:30 PM

Gross Observation

**BODY AS A WHOLE**
The animal is presented thin with a tightly distended abdomen.

**DIAPHRAGM**
The diaphragm is displaced cranially reducing the pleural cavity.

**GASTROINTESTINAL TRACT**
The stomach, and to a lesser extent the cecum and proximal colon, is markedly distended with liquid and gas such that adjacent organs are severely compressed/displaced, particularly liver, spleen, pancreas, kidneys, and diaphragm.

**KIDNEY**
Kidneys appear small and pale.

**LIVER**
The liver is markedly compressed against the diaphragm and appears small and pale.

**LUNG**
The lungs are discolored dark purple (atelectasis).

**UTERUS**
A roughly 1.0 cm diameter, firm, white nodule protrudes from the craniolateral aspect of the uterus (leiomyoma), and the uterine tubes are enlarged and soft.

Gross Diagnosis

1  STOMACH DILATATION BLOATING
2  CECUM DILATATION BLOATING
3  VENA CAVA COMPRESSED STRUCTURE
4  LIVER COMPRESSED STRUCTURE
5  LUNGS (BOTH) ATELECTASIS, COMPRESSION
6  KIDNEY COMPRESSION INJURY
7  UTERUS LEIOMYOMA
8  FALLOPIAN TUBE DILATATION

Gross Comments
This is yet another case of a M. fascicularis succumbing to severe gastric bloat with the attendant compression of multiple organs, most significantly lungs and vena cava, causing poor oxygenation and reduced venous return. The cause of this syndrome is unclear. A truncated set of tissues is saved in formalin for limited histopathology.

Measurements
Gross Necropsy Report

Animal ID: MCY 27909  
Report ID: 14141  
Report Complete  
Sex: F  
Death Type: K  
Work Performed: 06/15/2007  
Age: 17 yrs 5 mon  
Weight (KG): 4.4  
Time Performed: 10:00 AM

Gross Observation

<table>
<thead>
<tr>
<th>Body Part</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BODY AS A WHOLE</td>
<td>The animal is presented in good flesh.</td>
</tr>
<tr>
<td>SKIN</td>
<td>An approximately 1.0 cm diameter cutaneous ulcer is present just lateral to the right nipple - the underlying tissue is firm and swollen. An oval area of cutaneous erythema, approximately 4x3 cm, is present in the left inguinal region.</td>
</tr>
<tr>
<td>UTERUS</td>
<td>The external os of the uterine cervix is deformed by the presence of numerous roughly 0.1-0.2 cm diameter polypoid masses - the cervical mucus is discolored red with blood.</td>
</tr>
</tbody>
</table>

Gross Diagnosis

1. SKIN OF CHEST ULCER
2. SKIN OF INGUINAL REGION ERYTHEMA
3. CERVIX UTERI POLYPOSIS

Gross Comments

The ovaries are collected to fulfill a biospecimen request. A truncated set of tissues is saved for histopathology. The chest, inguinal area, and cervix are photographed.
### Gross Necropsy Report

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>13 yrs 9 mon</td>
<td>Weight (KG)</td>
<td>9.85</td>
<td>Time Performed</td>
<td>11:30 AM</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Gross Observation

<table>
<thead>
<tr>
<th>Location</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>GASTROINTESTINAL TRACT</td>
<td>Contents of the stomach and small intestine is within normal limits of amount and appearance; however the green contents of the large intestine is liquid in consistency throughout.</td>
</tr>
<tr>
<td>GINGIVA</td>
<td>This animal has a full adult set of dentition with moderate wear of the cheek teeth.</td>
</tr>
<tr>
<td>HEART</td>
<td>The internal and external diameter of the left ventricle midway between the apex and base is 20 and 40 mm. respectively.</td>
</tr>
<tr>
<td>JOINT</td>
<td>Approximately 25% of the proximal articular surface of the distal right femur is roughened with a light reddish brown color. Approximately 25% of the articular surface of the right patella is roughened and light red brown.</td>
</tr>
<tr>
<td>SKELETAL MUSCLE</td>
<td>Multifocally there is extensive hemorrhage in the skeletal muscle of the thorax there are multiple tears in this musculature.</td>
</tr>
<tr>
<td>SKIN</td>
<td>A tattoo on the right medial thigh reads 28024. There is extensive erythematous reddening of the skin of the ventrum, especially of the chest and the medial aspect of the limbs. Additionally there are scattered abrasions and lacerations. there is extensive dark hemorrhage in the subcutis of the thorax.</td>
</tr>
<tr>
<td>URINARY BLADDER</td>
<td>Only a few drops of light amber urine are present on the mucosal surface of this contracted organ; bililabstix on a sample of urine drawn by cysticetesis: glucose, and bilirubin negative, ketone 80 mg/dl, blood 3+ [large], pH 6, protein &gt;2000 mg/dl or 4+</td>
</tr>
</tbody>
</table>

#### Gross Diagnosis

<table>
<thead>
<tr>
<th>Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>SKIN OF CHEST TRAUMATIC ABNORMALITY contusions, abrasions, and lacerations</td>
</tr>
<tr>
<td>2</td>
<td>SKELETAL MUSCLE HEMORRHAGE muscle tears or lacerations</td>
</tr>
<tr>
<td>3</td>
<td>KNEE JOINT DEGENERATION, FOCAL articular cartilage degeneration, right stifle</td>
</tr>
</tbody>
</table>

#### Gross Comments

There was sufficient traumatic tissue injury to the skin and underlying skeletal muscle to account for the death of this animal. A variety of tissues are fixed in 10% buffered formalin for diagnostic pathology. The results of microbiology [left and right stifles, small and large intestine, femoral bone marrow], and histopathology will be presented in the final necropsy report.
Gross Necropsy Report

Animal ID    MMU  28043      Report ID  18581      Report Complete  02/19/2008
Sex          F          Death Type  K          Work Performed  02/19/2008
Age          13 yrs 10 mon      Weight (KG)  6.58      Time Performed  01:00 PM

Gross Observation
BODY AS A WHOLE: The animal is presented thin and dehydrated.
KIDNEY: The right ureter is mildly to moderately enlarged measuring approximately 0.4 cm diameter.
LUNG: A few, circular, 0.2-0.4 cm diameter, tan foci are present on dorsal lung surfaces suggesting previous lung mite infection.
SPLEEN: The spleen is moderately enlarged, measuring roughly 7.5x3.5x1.2 cm., with a prominent follicular pattern of pallor on cut surfaces.
UTERUS: The animal is pregnant with a first trimester infant.

Gross Diagnosis
1. BODY AS A WHOLE INANITION DEHYDRATION
2. UTERUS HYPERTROPHY PREGNANCY, FIRST TRIMESTER
3. SPLEEN HYPERTROPHY (splenomegaly)
4. URETER DILATATION (hydroureter)
5. LUNGS (BOTH) ACARIASIS

Gross Comments
Several tissues are collected to fulfill biospecimen requests (fetus, ovaries, uterine tubes, kidneys, eyes), and a truncated set of tissues is saved in formalin, but no histopathology is to be performed.

Measurements
# Gross Necropsy Report

<table>
<thead>
<tr>
<th>Animal ID</th>
<th>Report ID</th>
<th>Report Complete</th>
<th>Sex</th>
<th>Death Type</th>
<th>Work Performed</th>
<th>Age</th>
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</tr>
</thead>
<tbody>
<tr>
<td>MCY 28107</td>
<td>15620</td>
<td>08/30/2007</td>
<td>F</td>
<td>K</td>
<td>08/30/2007</td>
<td>19 yrs 4 mon</td>
<td>3.1</td>
<td>09:40 AM</td>
</tr>
</tbody>
</table>

## Gross Observation

**COLON**

The large intestine is dilated to a maximum diameter of approximately 3 cm. There is an abundant amount of liquid brown contents throughout the cecum and large intestine and the wall of this organ is moderately thickened.

**OVARY**

A grey cyst measuring approximately 5 mm. in diameter is adjacent to the right ovary.

## Gross Diagnosis

1. COLON AND CECUM, CS INFLAMMATION, DIFFUSE
2. OVARY CYST, EMBRYONIC Parovarian Cyst, Right side

## Gross Comments

Diffusely the wall of the large intestine was moderately thickened and there were liquid contents throughout the lumen which could account for the debilitated condition of this animal and could account for the clinical diagnosis of poor body condition.

## Measurements
Gross Necropsy Report

Animal ID: MCY 28109
Report ID: 15600
Report Complete: 08/30/2007

Sex: F
Death Type: K
Work Performed: 08/30/2007

Age: 21 yrs 4 mon
Weight (KG): 4.42
Time Performed: 10:35 AM

Gross Observation
- LUNG: There is focal fibrous adhesion of the caudal margin of the caudal right lung lobe to the parietal pleura of the diaphragm.
- UTERUS: There is focal fibrous adhesion of the omentum to the uterine fundus and extending ventrally.

Gross Diagnosis
1. FUNDUS UTERI ADHESIONS, FIBROUS
   Uterine-Omental Fibrous Adhesion
2. RIGHT LOWER LOBE OF LUNG ADHESIONS, FIBROUS

Gross Comments
Fibrous adhesion of the omental to the uterine fundus could account for the abdominal mass diagnosed clinically. The linear white scar on the ventral central uterine with extension to the fundus is compatible with a healed surgical incision and the omental adhesion could a post-surgical occurrence.

Measurements
## Gross Necropsy Report

<table>
<thead>
<tr>
<th>Animal ID</th>
<th>MMU 28250</th>
<th>Report ID</th>
<th>18042</th>
<th>Report Complete</th>
<th>01/15/2008</th>
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</thead>
<tbody>
<tr>
<td>Sex</td>
<td>M</td>
<td>Death Type</td>
<td>K</td>
<td>Work Performed</td>
<td>01/15/2008</td>
</tr>
<tr>
<td>Age</td>
<td>13 yrs 8 mon</td>
<td>Weight (KG)</td>
<td>12.34</td>
<td>Time Performed</td>
<td>11:00 AM</td>
</tr>
</tbody>
</table>

### Gross Observation

<table>
<thead>
<tr>
<th>Location</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>HEART</td>
<td>There is a small epicardial white nodule on the right ventricle coronary band. The inside and outside diameter of the left ventricle midway between the apex and base is 22 and 48 mm, respectively.</td>
</tr>
<tr>
<td>JOINT</td>
<td>Multifocally on the thoracic vertebral column there is hard boney exostosis consistent with spondylosis.</td>
</tr>
<tr>
<td>LUNG</td>
<td>Multifocally there are scattered small numbers of dome-shaped transluscent vesicles measuring 2 to 3 mm in diameter. There fibrous adhesion of the right caudal lobe to the parietal pleura.</td>
</tr>
<tr>
<td>SKIN</td>
<td>A tattoo on the right medial thigh reads 28250.</td>
</tr>
<tr>
<td>URINARY BLADDER</td>
<td>Bililabstix results on a sample of urine drawn by cysticentesis; glucose, bilirubin, ketone, blood, and protein are all negative, pH 7.5.</td>
</tr>
</tbody>
</table>

### Gross Diagnosis

1. VERTEBRAL COLUMN SPONDYLOSIS thoracic region
2. LUNG INFLAMMATION, MULTIFOCAL ACARIASIS

### Gross Comments

Clinical signs may have been due to vertebral body instability secondary to degenerative intervertebral disc disease and/or degenerative intervertebral articular facet disease. Spondylosis seen at necropsy would be consistent with an attempted response to stabilize a vertebral instability. A variety of tissues are fixed in 10% formalin and selected tissues are collected for the biospecimen request program. The results of histopathology will be presented in the final necropsy report.

### Measurements
# Gross Necropsy Report

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>M</td>
<td>Death Type</td>
<td>X</td>
<td>Work Performed</td>
<td>08/08/2007</td>
</tr>
<tr>
<td>Age</td>
<td>13 yrs 3 mon</td>
<td>Weight (KG)</td>
<td>15.37</td>
<td>Time Performed</td>
<td>12:00 AM</td>
</tr>
</tbody>
</table>

**Gross Observation**

<table>
<thead>
<tr>
<th>BODY AS A WHOLE</th>
<th>The animal is presented in good flesh with a clamped midline abdominal incision.</th>
</tr>
</thead>
<tbody>
<tr>
<td>STOMACH</td>
<td>The gastric mucosa is variably finely nodular and palely erythematous.</td>
</tr>
</tbody>
</table>

**Gross Diagnosis**

1. STOMACH INFLAMMATION GASTRITIS, NOS

**Gross Comments**

Tissues are collected per project protocol as well as to fulfill biospecimen requests (kidneys, testes, seminal vesicles, lymph node). No tissues are saved for CNPRC histopathology.
# Gross Necropsy Report

<table>
<thead>
<tr>
<th>Animal ID</th>
<th>MMU 28392</th>
<th>Report ID</th>
<th>15381</th>
<th>Report Complete</th>
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</thead>
<tbody>
<tr>
<td>Sex</td>
<td>F</td>
<td>Death Type</td>
<td>X</td>
<td>Work Performed</td>
</tr>
<tr>
<td>Age</td>
<td>13 yrs 3 mon</td>
<td>Weight (KG)</td>
<td>7.58</td>
<td>Time Performed</td>
</tr>
</tbody>
</table>

**Gross Observation**

- BODY AS A WHOLE
  - The previously ovariectomized animal is presented in good flesh.

**Gross Diagnosis**

- BODY AS A WHOLE PERFUSION
  - (brain perfusion)

**Gross Comments**

- The brain is perfused and collected for the investigator. Several tissues are collected to fulfill biospecimen requests (adrenal glands, eyes, fat, muscle, mammary gland, liver, urinary bladder). A truncated set of tissues is saved in formalin.

**Measurements**
# Gross Necropsy Report

**Animal ID** MMU 28397  
**Sex** F  
**Age** 13 yrs 0 mon  
**Weight (KG)** 4.8  
**Death Type** K  
**Report Complete** 06/14/2007  
**Work Performed** 06/14/2007  
**Time Performed** 10:30 AM

## Gross Observation

- **BODY AS A WHOLE**
  - The animal is presented thin.
- **DUODENUM**
  - The duodenal lumen is small, and the mucosa is longitudinally streaked with erythema.
- **GALLBLADDER**
  - The gallbladder is mildly thickened and opaque, and occasional intrahepatic bile ductules are prominent.
- **JEJUNUM**
  - The junenal mucosa is thickened making a firm tube of its length.
- **KIDNEY**
  - Renal cortices are diffusely pale tan bilaterally.
- **LIVER**
  - The liver is mildly to moderately enlarged with rounded edges, and the color is somewhat more pale than normal. There are a few small, roughly 0.1 cm diameter, circular, dark green foci scattered over the capsular surface.
- **SPLEEN**
  - The spleen is mildly enlarged with a prominent follicular pattern of pallor on cut surfaces.
- **STOMACH**
  - The gastric mucosa is thickened and streaked with erythema, particularly in the antral region.
- **URINARY BLADDER**
  - The mucosa of the urinary bladder is mildly and irregularly erythematous.

## Gross Diagnosis

1. **BODY AS A WHOLE INANITION**
2. **STOMACH INFLAMMATION GASTRITIS,NOS**
3. **DUODENUM INFLAMMATION**
4. **JEJUNUM INFLAMMATION ENTERITIS,NOS**
5. **LIVER HYPERTROPHY**
6. **SPLEEN HYPERTROPHY**
7. **KIDNEY ABNORMAL APPEARANCE**
8. **URINARY BLADDER INFLAMMATION**

(hepatomegaly)  
(splenomegaly)  
(cortical pallor)
| Gross Comments | Ovaries, uterine tubes, and trachea are collected to fulfill biospecimen requests. A truncated set of tissues is saved in formalin for histopathology. |
| Measurements |
# Gross Necropsy Report

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>F</td>
<td>Death Type</td>
<td>K</td>
<td>Work Performed</td>
<td>12/12/2007</td>
</tr>
<tr>
<td>Age</td>
<td>16 yrs 4 mon</td>
<td>Weight (KG)</td>
<td>2.96</td>
<td>Time Performed</td>
<td>10:00 AM</td>
</tr>
</tbody>
</table>

## Gross Observation

**GINGIVA**
- There is a moderate amount of tarter along the gingival margin of the upper and lower incisors and canines.
- There a full adult set of dention with moderate wear of the cheek teeth.

**OVARY**
- A cyst measuring 5 mm in diameter is adjacent to the left ovary. A corpus luteum measuring 2 mm in diameter bulges from the surface of the right ovary.

**SKIN**
- A tattoo on the right medial thigh reads 28503.

**URINARY BLADDER**
- One cc of clear yellow urine tested with biliklabstix—results: glucose, ketone, bilirubin, and blood are all negative, pH between 7 and 7.5, protein 2+ or 100 mg/dl.

**UTERUS**
- There is fibrous adhesion of the omentum to the serosal surface of the uterus.

## Gross Diagnosis

1. **UTERUS ADHESIONS, FIBROUS**
2. **OVARY CYST**
   parovarian cyst, left side
3. **URINARY BLADDER DEFECT**
   proteinuria 2+

## Gross Comments

An alimentary mass was not seen at necropsy, however; omental uterine fibrous adhesions may have accounted for this diagnosis. A variety of tissues are collected for the biospecimen request program and for histopathology. The results of histopathology will be presented in the final necropsy report.

## Measurements
Gross Necropsy Report

Animal ID  MCY 28506  Report ID  16182  Report Complete
Sex  M  Death Type  D  Work Performed  10/08/2007
Age  17 yrs 2 mon  Weight (KG)  5.64  Time Performed  10:30 AM

Gross Observation

BODY AS A WHOLE
The animal is presented thin.

CECUM
The cecal mucosa is thickened and variably erythematos.

COLON
The colonic mucosa is thickened with linear erythema, and contents are scant.

HEART
Pericardial fluid is increased with strands of white material adherent to pericardium and epicardium.

LUNG
The middle and caudal lobes of the left lung display variable (mainly peripheral) dark red-blue discoloration (atelectasis).

Gross Diagnosis

1 COLONIC MUCOUS MEMBRANE INFLAMMATION, DIFFUSE COLITIS
2 CECUM INFLAMMATION, MULTIFOCAL TYPHЛИTIS, NOS
3 PERICARDIUM INFLAMMATION, FIBRINOUS PERICARDITIS, NOS
4 LUNG ABNORMAL APPEARANCE (atelectasis - likely post mortem)

Gross Comments
A full set of tissues saved in formalin for histopathology; colon is swabbed for bacterial culture.

Measurements
Gross Necropsy Report

Sex          F              Death Type   K    Work Performed 08/15/2007
Age          18 yrs 0 mon  Weight (KG) 5.05    Time Performed 10:30 AM

Gross Observation

- BODY AS A WHOLE
  - The SRV positive animal is presented in good flesh.
- LIVER
  - The liver is mildly enlarged with rounded edges.
- UTERUS
  - Dark brown-black fluid filled cysts are present between uterus and bladder where the two are adherent to each other (endometriosis); the fimbria on both sides are particularly exuberant, and on the left side, there is an approximately 1.0 cm diameter, slightly paler pink mass adherent to the fimbria.

Gross Diagnosis

1. UTERUS AND FALLOPIAN TUBES, CS (left fimbrial mass)
   MASS, LOCALIZED, SOFT
2. UTERUS ENDOMETRIOSIS
3. LIVER HYPERTROPHY (hepatomegaly)

Gross Comments

Tissues are collected to fulfill biospecimen requests (kidney, ovaries, lung, trachea) and per project protocol. After being photographed, the uterus is saved in formalin for histopathology.

Measurements
# Gross Necropsy Report

<table>
<thead>
<tr>
<th>Animal ID</th>
<th>Sex</th>
<th>Age</th>
<th>Weight (KG)</th>
<th>Report ID</th>
<th>Report Complete</th>
</tr>
</thead>
<tbody>
<tr>
<td>MCY 28542</td>
<td>F</td>
<td>20 yrs 0 mon</td>
<td>4.81</td>
<td>18821</td>
<td></td>
</tr>
</tbody>
</table>

## Gross Observation

<table>
<thead>
<tr>
<th>Gross Observation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BODY AS A WHOLE</td>
<td>The animal is presented in good flesh, with moderate dental caries.</td>
</tr>
<tr>
<td>CECUM</td>
<td>The cecum is markedly dilated with liquid contents and gas.</td>
</tr>
<tr>
<td>COLON</td>
<td>The colon, at the junction with cecum, is markedly narrowed by a circumferential fibrous band, and colon contents are soft to liquid.</td>
</tr>
</tbody>
</table>

## Gross Diagnosis

1. COLON STRICTURE DIARRHEA  
2. CECUM DILATATION  
3. TOOTH DENTAL CARIES

## Gross Comments

Tissues are collected to fulfill biospecimen requests (ovaries, uterine tubes, long bones for marrow), and a truncated set is saved in formalin for limited histopathology.

## Measurements
Gross Necropsy Report

Sex  F  Death Type  X  Work Performed  04/29/2008
Age  13 yrs 0 mon  Weight (KG)  11.05  Time Performed  09:00 AM

Gross Observation  BODY AS A WHOLE  The animal is presented in abundant good flesh.

Gross Diagnosis  1  BODY AS A WHOLE NO REMARKABLE FINDINGS

Gross Comments  The brain is perfused, and tissues are collected per project protocol.

Measurements
Gross Necropsy Report

Animal ID: MMU 28823  
Sex: F  
Age: 12 yrs 7 mon  
Report ID: 17261  
Weight (KG): 8.77  
Report Complete: 12/06/2007  
Work Performed: 12/06/2007  
Time Performed: 10:00 AM

Gross Observation

- **ADRENAL GLAND**: There are nodular adrenal cortical hyperplasia and multifocal mineralization bilaterally.
- **BODY AS A WHOLE**: The animal is presented in good flesh.
- **GASTROINTESTINAL TRACT**: The intestinal mucosa (small and large) is thickened, most prominently in cecum and proximal colon where there are erythema and erosion/ulceration, as well.
- **LYMPH NODES**: Paracolic and mesenteric nodes are prominent to enlarged.
- **SPLEEN**: The spleen is mildly to moderately enlarged.

Gross Diagnosis

1. **GASTROINTESTINAL TRACT INFLAMMATION ENTEROCOLITIS**
2. **LYMPH NODE HYPERTROPHY** (lymphadenopathy - paracolic, mesenteric nodes)
3. **SPLEEN HYPERTROPHY** (splenomegaly)
4. **ADRENAL CORTEX HYPERPLASIA, NODULAR**
5. **ADRENAL GLANDS, BOTH MINERALIZATION, DYSTROPHIC**

Gross Comments

The ovaries and uterine tubes are collected to fulfill biospecimen requests. A truncated set of tissues is saved in formalin (gut, adrenal glands).
# Gross Necropsy Report

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>F</td>
<td>Death Type</td>
<td>K</td>
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<td>09/10/2007</td>
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<td>Age</td>
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<td>Weight (KG)</td>
<td>6.4</td>
<td>Time Performed</td>
<td>01:15 PM</td>
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</tbody>
</table>

**Gross Observation**

- **KIDNEY**: There is a 2+ proteinuria on a sample of urine drawn by cysticentesis.
- **LIVER**: Diffusely the edges of the liver are slightly to moderately rounded and the parenchyma is moderately increased in friability on palpation of the cut surface.

**Gross Diagnosis**

1. LIVER DENSITY, DECREASED
2. KIDNEY MORPHOLOGY NOT ASSIGNED IN SNOMED PROTEIN, URINE

**Gross Comments**
The cause of precipitous weight loss in this case was not apparent grossly; the small and large intestine were swabbed for bacterial culture. The results of microbiology and histopathology will be presented in the final necropsy report.

**Measurements**
# Gross Necropsy Report

<table>
<thead>
<tr>
<th>Animal ID</th>
<th>Sex</th>
<th>Age</th>
<th>Report ID</th>
<th>Report Complete</th>
<th>Work Performed</th>
<th>Time Performed</th>
</tr>
</thead>
<tbody>
<tr>
<td>MMU 28841</td>
<td>F</td>
<td>12 yrs 9 mon</td>
<td>18361</td>
<td>02/04/2008</td>
<td>02/04/2008</td>
<td>10:00 AM</td>
</tr>
</tbody>
</table>

### Gross Observation

**GASTROINTESTINAL TRACT**
An irregularly surfaced firm nodule measuring 2 cm. in diameter is present at the ileocecal junction; the cecum is reduced in size and inconspicuous. On cut surface the wall of the gut at this site is thickened and white, also there is a focal depressed rough-surfaced ulcer measuring 1.5 cm. in diameter and the remainder of the mucosa at this site is thrown into folds protruding into the lumen. Contents throughout tract is within normal limits of amount and appearance.

**HEART**
The inside and outside diameter of the left ventricle at the midpoint between apex and base is 20 and 33 mm. respectively.

**LIVER**
The parenchyma is moderately increased in friability when palpated on the cut surface, and there is slight accentuation of the lobular pattern on the capsular surface.

**LUNG**
On the distal dorsal surface of the right middle lobe there is a transluscent dome-shaped cystic structure measuring 3 mm. in diameter and consistent with lung mite infestation.

**OVARY**
A transluscent cyst adjacent to the right ovary measures 2 cm. in diameter.

**SKIN**
A tattoo on the right medial thigh reads 28841.

**URINARY BLADDER**
The bladder contains approximately 2 cc. of clear light yellow urine; bililabstix results on a sample of urine drawn by cysticentesis: glucose, bilirubin, keton, and blood all negative, pH 8.5, protein trace.

### Gross Diagnosis

1. COLON AND CECUM, CS MASS, LOCALIZED
2. OVARY CYST

### Gross Comments
The finding of a mass at the ileocecal junction corroborates the clinical diagnosis; the cecum was inconspicuous and the site resembled an anastomosis of the intestine; this could reflect a previous surgery or distortion of the cecum due to fibrous connective tissue deposition. Selected tissues were collected for the biospecimen request program, a variety of tissue are fixed in 10% buffered formalin for diagnostic pathology. The results of histopathology will be presented in the final necropsy report.

### Measurements
Gross Necropsy Report

Sex          F                Death Type  K                Work Performed 07/27/2007
Age          12 yrs 2 mon    Weight (KG)  5.13         Time Performed 02:00 PM

Gross Observation

<table>
<thead>
<tr>
<th>Gross Observation</th>
<th>Body As A Whole</th>
<th>COLON</th>
<th>LYMPH NODES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The animal is presented thin and dehydrated with liquid stool at the anus.</td>
<td>The colonic mucosa is thickened and variably erythematous, and contents are thin, liquid, and voluminous.</td>
<td>Paracolic nodes are prominent to enlarged.</td>
</tr>
</tbody>
</table>

Gross Diagnosis

1. COLON INFLAMMATION COLITIS
2. LYMPH NODE HYPERTROPHY (lymphadenopathy – paracolic)
3. BODY AS A WHOLE DIARRHEA

Gross Comments

Several tissues including lung, trachea, nasal turbinate, ovaries, and uterus are collected to fulfill biospecimen requests. A truncated set of tissues is saved in formalin, but no histopathology is to be performed at this time.

Measurements
# Gross Necropsy Report

<table>
<thead>
<tr>
<th>Animal ID</th>
<th>MMU 29060</th>
<th>Report ID</th>
<th>19221</th>
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<tr>
<td>Sex</td>
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<td>Death Type</td>
<td>X</td>
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<tr>
<td>Age</td>
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<td>Weight (KG)</td>
<td>12.02</td>
<td>Time Performed</td>
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</table>

<table>
<thead>
<tr>
<th>Gross Observation</th>
<th>BODY AS A WHOLE</th>
<th>The animal is presented in good flesh.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross Diagnosis</td>
<td>1 BODY AS A WHOLE PERFUSION (brain/spinal cord perfusion)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2 BODY AS A WHOLE NO REMARKABLE FINDINGS</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3 SPINAL CORD (experimental lesion site)</td>
<td></td>
</tr>
<tr>
<td>Gross Comments</td>
<td>The whole body is perfused, and the brain and spinal cord are collected per project protocol. A truncated set of tissues is saved in formalin, but no histopathology is to be performed at this time.</td>
<td></td>
</tr>
</tbody>
</table>

**Measurements**

Gross Necropsy Report

Animal ID: MCY 29075  
Sex: F  
Age: 16 yrs 3 mon  
Report ID: 17521  
Weight (KG): 3.39  
Report Complete: 12/20/2007  
Work Performed: 12/20/2007  
Time Performed: 10:10 AM

Gross Observation

- **BONE**
  - the skull cut easier than expected with bone forceps.

- **BONE MARROW**
  - The marrow is a solid yellow fatty core filling the medullary cavity.

- **GASTROINTESTINAL TRACT**
  - Multifocal on the serosal surface there are a moderate number of scattered gray white nodules measuring 1 to 1.5 mm in diameter. Content throughout the tract is within normal limits of appearance and amount except in the rectum where the contents are moderately softer than expected.

- **HEART**
  - The inside and outside diameter of the midpoint of the left ventricle between apex and base is 10 and 18 mm. respectively.

- **LIVER**
  - The parenchyma is moderately increased from expected friability on palpation of the cut surface. Nodules similar to those on the serosal surface of the g.i. tract can be found on the capsular surface of the liver.

- **LUNG**
  - Multifocally there are a small number of widely scattered transparent bullae measuring 2 to 4 mm in diameter.

- **SKIN**
  - A tattoo on right medial thigh reads 29075.

- **URINARY BLADDER**
  - Approximately 2 cc. of clear yellow urine was collected from the bladder by cysticentesis, bililabstix results: glucose, bilirubin, ketone, and blood are all negative, pH5, protein trace.

Gross Diagnosis

1. BONE MARROW HYPOPLASIA
2. LUNG INFLAMMATION, MULTIFOCAL MITES bronchitis
3. PERITONEUM LESION nodules, multifocal
4. SKULL OSTEOGENIA

Gross Comments

The absence of glucosuria in the animal diagnosed with diabetes may be a function of sampling with regard to the time of food consumption. A variety of tissues are fixed in 10% buffered formalin. Selected tissues are collected for the biospecimen request program. The results of histopathology will be presented in the final necropsy report.

Measurements
# Gross Necropsy Report

<table>
<thead>
<tr>
<th>Gross Observation</th>
<th>Gross Diagnosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>BODY AS A WHOLE</td>
<td>1 BODY AS A WHOLE INANITION DEHYDRATION</td>
</tr>
<tr>
<td>COLON</td>
<td>2 COLONIC MUCOUS MEMBRANE INFLAMMATION COLITIS</td>
</tr>
<tr>
<td>LIVER</td>
<td>3 LYMPH NODE HYPERTROPHY</td>
</tr>
<tr>
<td>LUNG</td>
<td>4 LIVER ABNORMAL APPEARANCE LIPIDOSIS</td>
</tr>
<tr>
<td>LYMPH NODES</td>
<td>5 LUNGS (BOTH) ABNORMAL APPEARANCE PNEUMOCONIOSIS</td>
</tr>
</tbody>
</table>

| Gross Comments                       | Tissued are collected to fulfill biospecimen requests (blood, ovaries, oviducts, spleen, thymus), and a truncated set of tissues is saved in formalin. The colon is swabbed for bacterial culture. |

<table>
<thead>
<tr>
<th>Measurements</th>
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</table>
## Gross Necropsy Report

<table>
<thead>
<tr>
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<th>MMU 29375</th>
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<tr>
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<td>F</td>
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<td>K</td>
<td>Work Performed</td>
<td>01/15/2008</td>
</tr>
<tr>
<td>Age</td>
<td>11 yrs 9 mon</td>
<td>Weight (KG)</td>
<td>12.13</td>
<td>Time Performed</td>
<td>09:30 AM</td>
</tr>
</tbody>
</table>

### Gross Observation
- **HEART**: The inside and outside diameter of the left ventricle midway between the apex and base is less than 1 and 31 mm respectively.
- **SKIN**: A tattoo on the right medial thigh reads 29375.
- **URINARY BLADDER**: A sample drawn by cysticentesis is pink; bililabstix results: glucose, bilirubin, ketone all negative, blood large or 3+, pH 6.5 to 7.0, protein 1+ or 30 mg/dl.

### Gross Diagnosis
- 1 HEART HYPERTROPHY
- left ventricular myocardial hypertrophy

### Gross Comments
Left ventricular myocardial hypertrophy has been identified in this colony and is the subject of further investigation; any relationship to clinical signs in the case is uncertain. A variety of tissues were fixed in `10% formalin for diagnostic pathology and selected tissues were collected for the biospecimen request program. The results of histopathology will be presented in the final necropsy report.

### Measurements
Gross Necropsy Report

Sex  F  Death Type D  Work Performed 12/28/2007
Age  11 yrs 8 mon  Weight (KG) 4.47  Time Performed 12:47 PM

Gross Observation

<table>
<thead>
<tr>
<th>Observed Area</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BONE</td>
<td>The skull and femur are brittle when cut with bone forceps.</td>
</tr>
<tr>
<td>BONE MARROW</td>
<td>The femoral bone marrow has an amber gelatinous translucent appearance</td>
</tr>
<tr>
<td>CECUM</td>
<td>Multifocally there is red depressed ulceration of the mucosa of the cecum and proximal colon at the junction with the ileum.</td>
</tr>
<tr>
<td>HEART</td>
<td>The internal and external diameter of the left ventricle midway between the apex and base is 2 nad 20 mm. respectively.</td>
</tr>
<tr>
<td>SKIN</td>
<td>A tattoo on the right medial thigh reads 29434. There is an abundant amount of moist green fecal material on the skin and matted hair of the perianal region and the ventral tail. There is very little adipose tissue in the subcutis and the subcutis has a sticky tachy consistency.</td>
</tr>
</tbody>
</table>

Gross Diagnosis

1  CECUM INFLAMMATION, ULCERATIVE |
2  BODY AS A WHOLE LESION DEHYDRATION |
3  BONE MARROW ATROPHY, SEROUS |
4  BONE AND JOINT OSTEOPENIA |
5  HEART HYPERTROPHY left ventricle |

Gross Comments

The finding of multifocal ulceration of cecal and colonic mucosa could account for the morbidity and mortality of this animal possibly due to pathogenic bacterial infection of the alimentary tract. Left ventricle myocardial hypertrophy has been identified in this colony and is the subject of further investigation. A variety of tissues are fixed in 10% buffered formalin for diagnostic pathology; the results of microbiology [small and large intestine] and histopathology will be presented in the final necropsy report.

Measurements
Final Necropsy Report

Animal ID: MMU 29460  
Sex: F  
Age: 11 yrs 5 mon  
Weight (KG): 8.93  
Report ID: 16064  
Report Complete: 10/01/2007  
Work Performed: 10/01/2007  
Time Performed: 09:30 AM

Final Observations
- LYMPH NODES: Superficial and deep lymph nodes were within normal limits of size and appearance.
- SPLEEN: The spleen was within normal limits of size and appearance.

Final Diagnosis
1. LYMPH NODES, GENERALIZED NORMAL APPEARANCE  
SIV delta nef

Final Comments
The lymphoid tissue was within normal limits of size and appearance. There were no significant changes in the tissues examined. All tissues are taken by the investigators. This is a gross and final report.

Measurements
Gross Necropsy Report

Sex  F  Death Type  K  Work Performed  08/16/2007
Age  16 yrs 0 mon  Weight (KG)  4.3  Time Performed  09:30 AM

Gross Observation  BODY AS A WHOLE  The SRV+ animal is presented in good flesh.

Gross Diagnosis  1  BODY AS A WHOLE NO REMARKABLE FINDINGS (SRV+)

Gross Comments  Tissues are collected to fulfill biospecimen requests (ovaries) and per project protocol - none are saved for CNPRC histopathology.

Measurements
Gross Necropsy Report

Animal ID  MMU 29602  Report ID  18561  Report Complete  02/15/2008
Sex  F  Death Type  X  Work Performed  02/15/2008
Age  11 yrs 9 mon  Weight (KG)  6.64  Time Performed  10:40 AM

Gross Observation

- **BONE MARROW**: The marrow is a solid core that ranges from gray to light reddish-brown in the medullary cavity of the femurs bilaterally.
- **GASTROINTESTINAL TRACT**: Contents throughout the tract is within the normal limits of amount and appearance.
- **GINGIVA**: This animal has a full set of adult dentition in very good condition.
- **HEART**: Multifocally on the free margin of the left A-V valve there are several small (<1mm. diameter) smooth surfaces nodules consistent with endocardiosis. The inside and outside diameter of the left ventricle midway between the apex and base is 23 and 33mm. respectively.
- **SKIN**: A tattoo on the right medial thigh reads 29602.
- **URINARY BLADDER**: The lumen contains approximately 5 ml. of light yellow clear urine; billilabstix results on a sample of urine drawn by cysticentesis, glucose, bilirubin, ketone all negative, blood 3+ or large, pH between 7 and 7.5, protein trace.

Gross Diagnosis

1. **BODY AS A WHOLE NORMAL APPEARANCE**
   - **BARTONELLA**

Gross Comments

A variety of tissues were collected for investigators according to protocol; all tissue are taken by investigators. This will be a gross and final necropsy report.

Measurements
# Final Necropsy Report

<table>
<thead>
<tr>
<th>Animal ID</th>
<th>Sex</th>
<th>Age</th>
<th>Report ID</th>
<th>Report Complete</th>
<th>Work Performed</th>
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<tbody>
<tr>
<td>MMU 29605</td>
<td>F</td>
<td>11 yrs 9 mon</td>
<td>18181</td>
<td>01/23/2008</td>
<td>01/23/2008</td>
</tr>
</tbody>
</table>

| Final Observations | Body as a whole | The animal is presented in good flesh with an open midline abdominal incision subsequent to experimental manipulation. |

| Final Diagnosis | 1 | Body as a whole NO REMARKABLE FINDINGS |

| Final Comments | Tissues are collected per project protocol and to fulfill biospecimen requests - no tissues are saved for CNPRC histopathology. |

| Measurements | |

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# Gross Necropsy Report

<table>
<thead>
<tr>
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<tbody>
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<td>F</td>
<td>Death Type</td>
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<td>Age</td>
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<td>7.35</td>
<td>Time Performed</td>
<td>08:00 AM</td>
</tr>
</tbody>
</table>

**Gross Observation**
- BODY AS A WHOLE
- CECUM

The animal is presented in good flesh.

A focal area of erythematous stippling/induration measuring roughly 0.6 cm diameter is present on the cecal mucosa approximately opposite to the ileocecal orifice.

**Gross Diagnosis**
1. BODY AS A WHOLE PERFUSION (brain perfusion)
2. CECUM INFLAMMATION, FOCAL TYPHILITIS, NOS

**Gross Comments**
Tissues are collected per project protocol, and a truncated set is saved in formalin for histopathology.

**Measurements**
## Gross Necropsy Report

<table>
<thead>
<tr>
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<td>Death Type</td>
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<td>07/24/2007</td>
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<tr>
<td>Age</td>
<td>11 yrs 2 mon</td>
<td>Weight (KG)</td>
<td>8.07</td>
<td>Time Performed</td>
<td>01:30 PM</td>
</tr>
</tbody>
</table>

### Gross Observation

- **BODY AS A WHOLE**: The animal is presented in good flesh with an open longitudinal ventral abdominal incision.
- **GASTROINTESTINAL TRACT**: Multiple mesenteric vessels display local hemorrhages along their length; the mucosa of the distal ileum is mildly erythematous as is the serosa of the proximal colon.

### Gross Diagnosis

1. **MESENTERY HEMORRHAGE, ACUTE** (experimentally induced)

### Gross Comments

Tissues are collected per project protocol.

### Measurements
Gross Necropsy Report

Animal ID MMU 29704  Report ID 18881  Report Complete 03/04/2008
Sex F  Death Type X  Work Performed 03/04/2008
Age 11 yrs 9 mon  Weight (KG) 8.49  Time Performed 08:00 AM

Gross Observation  BODY AS A WHOLE  The animal is presented in good flesh.

Gross Diagnosis  1  BODY AS A WHOLE NO REMARKABLE FINDINGS PERFUSION
(brain perfusion)

Gross Comments  The brain is perfused and collected for the investigator. Other tissues are collected per project protocol.

Measurements
# Final Necropsy Report

<table>
<thead>
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<tbody>
<tr>
<td>Sex</td>
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<td>Weight (KG)</td>
<td>9.6</td>
<td>Time Performed</td>
<td>12:15 PM</td>
</tr>
</tbody>
</table>

### Final Observations

- **BODY AS A WHOLE**: The animal is presented in good flesh with an open ventral mid-abdominal incision subsequent to experimental manipulation.

### Final Diagnosis

1. **BODY AS A WHOLE NO REMARKABLE FINDINGS**
2. **NASAL CAVITY NO REMARKABLE FINDINGS**

### Final Comments

Tissues are collected per project protocol and to fulfill biospecimen requests - no other tissues are saved.

### Measurements
# Gross Necropsy Report

<table>
<thead>
<tr>
<th></th>
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<tbody>
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<tr>
<td>Age</td>
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<td>Weight (KG)</td>
<td>11.71</td>
<td>Time Performed</td>
<td>09:15 AM</td>
</tr>
</tbody>
</table>

## Gross Observation
- **BODY AS A WHOLE**: The animal is presented in good flesh with a sutured ventral midabdominal incision subsequent to experimental fetectomy.
- **PITUITARY GLAND**: A single, clear fluid filled cyst measuring approximately 0.25 cm is present in the pituitary gland.

## Gross Diagnosis
1. **PITUITARY GLAND CYST**

## Gross Comments
Tissues are harvested per project protocol - none are saved for CNPRC histopathology.

## Measurements
# Gross Necropsy Report

<table>
<thead>
<tr>
<th>Animal ID</th>
<th>MMU 29781</th>
<th>Report ID</th>
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<td>6.26</td>
<td>Time Performed</td>
<td>10:30 AM</td>
</tr>
</tbody>
</table>

## Gross Observation

- **BODY AS A WHOLE**: The animal is presented with a markedly distended abdomen.
- **LUNG**: The lungs are discolored dark red (congestion).
- **STOMACH**: The severely distended with liquid food and gas, with a small, approximately 1.0 cm diameter rupture in its wall - lack of hemorrhage at this site suggests the rupture was post-mortem. The gastric mucosa is diffusely infused with gas-filled bubbles (emphysema).
- **URINARY BLADDER**: The mucosa of the urinary bladder is diffusely infused with gas-filled bubbles (emphysema).

## Gross Diagnosis

1. STOMACH BLOATING
2. STOMACH EMPHYSEMA
3. URINARY BLADDER EMPHYSEMA
4. LUNGS (BOTH) CONGESTION

## Gross Comments

A truncated set of tissues is saved in formalin, but no histopathology is to be performed at this time.

## Measurements
Gross Necropsy Report

Animal ID     MCY 29869
Sex           F
Age           14 yrs 5 mon
Weight (KG)   3.96

Report ID     15841
Report Complete

Work Performed 09/17/2007
Time Performed 01:30 PM

Gross Observation
BODY AS A WHOLE The animal is presented in good flesh.
UTERUS Several, dark, blue-black, fluid-filled cysts measuring 0.2-0.8 cm diameter, deform the uterus and result in extensive fibrous adhesions with colon and mesentery.

Gross Diagnosis
1 UTERUS AND CERVIX, Fallopian Tubes And Ovaries, CS Endometriosis
2 Skeletal Muscle Endometriosis, (body wall) Implanted

Gross Comments
Several tissues are collected to fulfill biospecimen requests (kidneys, esophagus, adrenal glands, cerebellum), and a truncated set is saved in formalin for histopathology.

Measurements
# Gross Necropsy Report

<table>
<thead>
<tr>
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<th>CMO 29918</th>
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<td>Age</td>
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<td>1.24</td>
<td>Time Performed</td>
<td>11:00 AM</td>
</tr>
</tbody>
</table>

**Gross Observation**

BODY AS A WHOLE

The animal is presented thin.

**Gross Diagnosis**

1. BODY AS A WHOLE NO REMARKABLE FINDINGS

**Gross Comments**

Tissues are collected per project protocol - none are saved for CNPRC histopathology.
# Gross Necropsy Report

<table>
<thead>
<tr>
<th>Animal ID</th>
<th>MMU 29927</th>
</tr>
</thead>
<tbody>
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<td>F</td>
</tr>
<tr>
<td>Age</td>
<td>10 yrs 10 mon</td>
</tr>
<tr>
<td>Weight (KG)</td>
<td>6.52</td>
</tr>
<tr>
<td>Report ID</td>
<td>17863</td>
</tr>
<tr>
<td>Report Complete</td>
<td>01/09/2008</td>
</tr>
</tbody>
</table>

**Gross Observation**

- **BODY AS A WHOLE**: The animal is presented markedly thin and dehydrated with severely swollen stifle joints.
- **COLON**: The colonic mucosa is thickened and erythematous, and contents are voluminous and liquid.
- **JOINT**: The synovium of stifle and wrist joints is markedly edematous and thickened.
- **LYMPH NODES**: Lymph nodes associated with the GIT, as well as obturator and iliac nodes, are prominent to enlarged.

**Gross Diagnosis**

1. **BODY AS A WHOLE INANITION DEHYDRATION**
2. **SYNOVIAL TISSUE INFLAMMATION** (synovitis, stifle and wrist joints)
3. **COLONIC MUCOUS MEMBRANE INFLAMMATION, DIFFUSE COLITIS**
4. **LYMPH NODE HYPERTROPHY** (lymphadenopathy - paracolic, obturator, iliac, inguinal)

**Gross Comments**

Several tissues are collected to fulfill biospecimen requests (kidneys, ovaries, uterine tubes, gastric mucosa, long bones, abdominal aorta, blood). Stifle synovium is swabbed for bacterial culture, and a truncated set of tissues is saved in formalin for limited histopathology.

**Measurements**

- **Death Type**: K
- **Time Performed**: 11:30 AM
# Gross Necropsy Report

<table>
<thead>
<tr>
<th>Animal ID</th>
<th>MMU 30166</th>
<th>Report ID</th>
<th>18103</th>
<th>Report Complete</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>F</td>
<td>Death Type</td>
<td>X</td>
<td>Work Performed</td>
</tr>
<tr>
<td>Age</td>
<td>22 yrs 9 mon</td>
<td>Weight (KG)</td>
<td>9.75</td>
<td>Time Performed</td>
</tr>
</tbody>
</table>

## Gross Observation
- **BODY AS A WHOLE**: The animal is presented in abundant good flesh.
- **LIVER**: The liver is mildly enlarged with variably rounded edges, and the parenchyma is pale and friable.
- **PITUITARY GLAND**: The pituitary gland is mildly enlarged with a soft, red center.

## Gross Diagnosis
1. **BODY AS A WHOLE PERFUSION** (brain perfusion)
2. **PITUITARY GLAND MASS, LOCALIZED, SOFT**
3. **LIVER ABNORMAL APPEARANCE LIPIDOSIS**

## Gross Comments
The brain is perfused, and tissues are collected per project protocol. A truncated set of tissues is saved in formalin.

## Measurements
Gross Necropsy Report

Sex  M  Death Type  X  Work Performed  07/18/2007
Age  10 yrs 2 mon  Weight (KG)  11.7  Time Performed  01:30 AM

Gross Observation  BODY AS A WHOLE  The animal is presented in good flesh.
Gross Diagnosis  1  BODY AS A WHOLE NO REMARKABLE FINDINGS PERFUSION
(brain perfusion)
Gross Comments  The brain is perfused and collected for the investigator – no other tissues are saved.

Measurements
# Gross Necropsy Report

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>M</td>
<td>Death Type</td>
<td>X</td>
<td>Work Performed</td>
<td>09/13/2007</td>
</tr>
<tr>
<td>Age</td>
<td>9 yrs 6 mon</td>
<td>Weight (KG)</td>
<td>9.12</td>
<td>Time Performed</td>
<td>09:30 AM</td>
</tr>
</tbody>
</table>

**Gross Observation**  
BODY AS A WHOLE  
The animal is presented in good flesh.

**Gross Diagnosis**  
1  
BODY AS A WHOLE NO REMARKABLE FINDINGS PERFUSION

**Gross Comments**  
The animal is perfused and brain/spinal cord are collected per project protocol. A truncated set of tissues is saved in formalin.

**Measurements**
# Gross Necropsy Report

**Animal ID**: MMU 30567  
**Sex**: F  
**Age**: 9 yrs 10 mon  
**Weight (KG)**: 8.67  
**Report ID**: 17741  
**Report Complete**:  
**Death Type**: K  
**Work Performed**: 01/02/2008  
**Time Performed**: 02:00 PM

## Gross Observation

<table>
<thead>
<tr>
<th>Body Part</th>
<th>Observation</th>
</tr>
</thead>
<tbody>
<tr>
<td>BODY AS A WHOLE</td>
<td>The animal is presented in good flesh.</td>
</tr>
<tr>
<td>LIVER</td>
<td>The liver is markedly enlarged and dark red with rounded edges.</td>
</tr>
<tr>
<td>LUNG</td>
<td>The lungs fail to collapse upon opening the chest and are &quot;heavy and wet&quot;, as well as irregularly discolored dark red.</td>
</tr>
<tr>
<td>SALIVARY GLAND</td>
<td>An irregularly shaped oral abscess on the right side of the mouth involves the area of the pharyngeal tonsil, the right parotid and submandibular salivary glands, and local skeletal muscles.</td>
</tr>
<tr>
<td>SPLEEN</td>
<td>The spleen is moderately enlarged and pale.</td>
</tr>
<tr>
<td>UTERUS</td>
<td>The uterus is enlarged and contains and approximately gd80 female fetus.</td>
</tr>
</tbody>
</table>

## Gross Diagnosis

1. **SALIVARY GLAND ABSCESS, DRAINING** (general area of the parotid and submandibular salivary glands)
2. **LUNGS (BOTH) EDEMA, GENERALIZED PNEUMONIA, NOS**
3. **LIVER HYPERPHTROPHY** (hepatomegaly)
4. **SPLLEEN HYPERPHTROPHY** (splenomegaly)
5. **UTERUS PREGNANCY**

## Gross Comments

The abscess is swabbed for bacterial culture, and a complete set of tissues is saved for selected histopathology.

## Measurements
Gross Necropsy Report

Animal ID: MMU 30582  
Report ID: 19941  
Report Complete: 04/29/2008  

Sex: F  
Death Type: X  
Work Performed: 04/29/2008  

Age: 10 yrs 1 mon  
Weight (KG): 9.63  
Time Performed: 08:00 AM  

Gross Observation: BODY AS A WHOLE  
The animal is presented in robust good flesh.

Gross Diagnosis:  
1. BODY AS A WHOLE NO REMARKABLE FINDINGS

Gross Comments:  
The brain is perfused, and tissues are collected per protocol.

Measurements
# Final Necropsy Report

<table>
<thead>
<tr>
<th>Animal ID</th>
<th>Report ID</th>
<th>Report Complete</th>
<th>Sex</th>
<th>Death Type</th>
<th>Work Performed</th>
<th>Age</th>
<th>Weight (KG)</th>
<th>Time Performed</th>
</tr>
</thead>
<tbody>
<tr>
<td>MMU 30642</td>
<td>14084</td>
<td>06/13/2007</td>
<td>M</td>
<td>X</td>
<td>06/13/2007</td>
<td>9 yrs 2 mon</td>
<td>14.2</td>
<td>11:00 AM</td>
</tr>
</tbody>
</table>

## Final Observations
- BODY AS A WHOLE
- The animal is presented in good flesh.

## Final Diagnosis
1. BODY AS A WHOLE NO REMARKABLE FINDINGS PERFUSION

## Final Comments
- The brain is perfused and collected for the investigator – no tissues are saved for CNPRC histopathology.

## Measurements
# Gross Necropsy Report

<table>
<thead>
<tr>
<th>Animal ID</th>
<th>MMU 30684</th>
<th>Report ID</th>
<th>20063</th>
<th>Report Complete</th>
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</thead>
<tbody>
<tr>
<td>Sex</td>
<td>F</td>
<td>Death Type</td>
<td>D</td>
<td>Work Performed</td>
</tr>
<tr>
<td>Age</td>
<td>10 yrs 1 mon</td>
<td>Weight (KG)</td>
<td>10.2</td>
<td>Time Performed</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>03:45 PM</td>
</tr>
</tbody>
</table>

### Gross Observation

- **ADRENAL GLAND**: The left adrenal gland is mildly enlarged and contains a roughly 0.6 cm diameter, ovoid, soft, pale tan mass in the cortex.
- **BODY AS A WHOLE**: The animal is presented in good flesh.
- **COLON**: The colon contains mainly gas, a little liquid, and multiple small trichobezoars.
- **ESOPHAGUS**: The esophagus contains hair, and the mucosa is ulcerated in multiple foci.
- **STOMACH**: The stomach contains three moderately sized trichobezoars, and there is evidence of both mucosal inflammation and muscular hypertrophy.

### Gross Diagnosis

1. STOMACH TRICHOBEZOAR
2. COLON TRICHOBEZOAR
3. ADRENAL CORTEX MASS, LOCALIZED, SOFT
4. ESOPHAGEAL MUCOUS MEMBRANE ULCERATION

### Gross Comments

A full set of tissues is saved in formalin for limited histopathology.

### Measurements
Gross Necropsy Report

Animal ID: MMU 30695
Report ID: 14600
Report Complete: 07/12/2007

Sex: M
Death Type: X
Work Performed: 07/12/2007

Age: 9 yrs 3 mon
Weight (KG): 12.45
Time Performed: 09:30 AM

Gross Observation

The animal is presented in good flesh.

STOMACH
Gastric mucosal rugae are noticeably thickened in an irregular pattern that includes both pyloric antrum and gastric corpus.

Gross Diagnosis

1. GASTRIC RUGAE HYPERTROPHY
   GASTRITIS, NOS

2. BODY AS A WHOLE PERFUSION
   (brain/spinal cord perfusion)

Gross Comments

Kidneys are collected to fulfill a biospecimen request, and brain/spinal cord are collected per project protocol.

Measurements
Gross Necropsy Report

Animal ID    MCY 30753
Sex          F
Age          16 yrs 6 mon

Report ID    15060
Report Complete 08/10/2007
Work Performed 08/11/2007

Gross Observation
BONE
UTERUS

Gross Diagnosis
A large fluctuant cyst containing dark red fluid is present in the pelvic region and obscures the viscera.

Measurements

Weight (KG) 2.78
Time Performed 11:00 AM
Gross Necropsy Report

Sex F  Death Type K  Work Performed 08/10/2007
Age 16 yrs 6 mon  Weight (KG) 2.78  Time Performed 11:00 AM

Gross Observation

<table>
<thead>
<tr>
<th>Gross Observation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BONE</td>
<td>There is S-shaped deviation and dorsal arching of the vertebral column in the caudal thoracic and cranial lumbar region.</td>
</tr>
<tr>
<td>UTERUS</td>
<td>A large fluctuant cyst filled with red fluid is present in the pelvic region and obscures the viscera.</td>
</tr>
</tbody>
</table>

Gross Diagnosis 1  UTERUS ENDOMETRIOSIS

Gross Comments The presence of a blood-filled cyst in the pelvic region is consistent with a clinical diagnosis of endometriosis. The results of histopathology will follow in the final necropsy report.

Measurements
# Gross Necropsy Report

<table>
<thead>
<tr>
<th>Animal ID</th>
<th>MMU 30805</th>
<th>Report ID</th>
<th>18001</th>
<th>Report Complete</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>M</td>
<td>Death Type</td>
<td>K</td>
<td>Work Performed</td>
</tr>
<tr>
<td>Age</td>
<td>9 yrs 9 mon</td>
<td>Weight (KG)</td>
<td>11.94</td>
<td>Time Performed</td>
</tr>
</tbody>
</table>

## Gross Observation

<table>
<thead>
<tr>
<th>Body Part</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BODY AS A WHOLE</td>
<td>The animal is presented in good flesh with severe traumatic injuries (self inflicted) on all limbs.</td>
</tr>
<tr>
<td>CHEEK POUCH</td>
<td>The mucosal surfaces of both cheek pouches are irregularly roughened with white plaque-like areas suggestive of possible candidiasis.</td>
</tr>
<tr>
<td>HEART</td>
<td>The myocardium displays multifocal pallor in left ventricular free wall and septum suggestive of ischemic injury.</td>
</tr>
</tbody>
</table>

## Gross Diagnosis

<table>
<thead>
<tr>
<th>Observation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>BODY AS A WHOLE TRAUMATIC ABNORMALITY (self-inflicted trauma)</td>
</tr>
<tr>
<td>2</td>
<td>LEFT VENTRICLE ABNORMAL APPEARANCE (possible infarction)</td>
</tr>
<tr>
<td>3</td>
<td>CHEEK POUCH INFLAMMATION, MULTIFOCAL CANDIDIASIS</td>
</tr>
</tbody>
</table>

## Gross Comments

A full set of tissues is saved in formalin for limited histopathology.

## Measurements
# Gross Necropsy Report

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>F</td>
<td>Death Type</td>
<td>K</td>
<td>Work Performed</td>
<td>12/03/2007</td>
</tr>
<tr>
<td>Age</td>
<td>9 yrs 7 mon</td>
<td>Weight (KG)</td>
<td>5.71</td>
<td>Time Performed</td>
<td>09:30 AM</td>
</tr>
</tbody>
</table>

## Gross Observation
- **BODY AS A WHOLE**: The animal is presented thin.
- **HEART**: Multiple small, roughly 0.1 cm diameter, firm, white nodules are scattered along the free edges of the left atrioventricular valve.
- **UTERUS**: The uterine tubes are tortuous and markedly dilated, on the left side completely obscuring the ovary.

## Gross Diagnosis
1. **BODY AS A WHOLE INANITION**
2. **FALLOPIAN TUBE DILATATION**
3. **ATRIOVENTRICULAR VALVE ENDOCARDIOSIS**

## Gross Comments
Multiple tissues are collected to fulfill biospecimen requests (ovary, colon, jejunum, lung trachea, kidneys), and a truncated set is saved in formalin for limited histopathology.

## Measurements
Gross Necropsy Report

Sex  M  Death Type  X  Work Performed  10/24/2007
Age  9 yrs 6 mon  Weight (KG)  13.52  Time Performed  10:00 AM

Gross Observation  BODY AS A WHOLE  The animal is presented in good flesh.

Gross Diagnosis  1  BODY AS A WHOLE NO REMARKABLE FINDINGS PERFUSION (brain perfusion)

Gross Comments  The whole body is perfused, and tissues are collected per project protocol. A truncated set of tissues is saved in formalin, but no histopathology is to be performed at this time.

Measurements
Final Necropsy Report

Animal ID    MMU 30922
Sex           M
Age          9 yrs 1 mon
Report ID     14085
Report Complete 06/13/2007
Work Performed 06/13/2007

Final Observations
BODY AS A WHOLE The animal is presented in good flesh.

Final Diagnosis
1 BODY AS A WHOLE NO REMARKABLE FINDINGS PERFUSION

Final Comments
The brain is perfused and collected for the investigator - no tissues are saved for CNPRC histopathology.

Measurements
Gross Necropsy Report

Animal ID       MMU 31090   Report ID   15382   Report Complete   
Sex             F             Death Type  X             Work Performed  08/21/2007
Age             9 yrs 2 mon  Weight (KG) 6.51 Time Performed 10:00 AM

Gross Observation

BODY AS A WHOLE The previously ovariectomized animal is presented in good flesh.

Gross Diagnosis

1 BODY AS A WHOLE PERFUSION (brain perfusion)

Gross Comments

The brain is perfused and collected for the investigator. Several tissues are collected to fulfill biospecimen requests (adrenal glands, eyes, uterus, bladder, muscle, fat, mammary gland). A truncated set of tissues is saved in formalin.

Measurements
# Gross Necropsy Report

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>F</td>
<td>Death Type</td>
<td>X</td>
<td>Work Performed</td>
<td>11/28/2007</td>
</tr>
<tr>
<td>Age</td>
<td>9 yrs 5 mon</td>
<td>Weight (KG)</td>
<td>6.1</td>
<td>Time Performed</td>
<td>10:30 AM</td>
</tr>
</tbody>
</table>

**Gross Observation**

BODY AS A WHOLE

The animal is presented in good flesh with an open ventral mid-abdominal incision subsequent to experimental manipulation.

**Gross Diagnosis**

1. BODY AS A WHOLE NO REMARKABLE FINDINGS

**Gross Comments**

Tissues are collected per project protocol and to fulfill biopspecimen requests - no tissues are saved for CNPRC histopathology.

**Measurements**
Gross Necropsy Report

<table>
<thead>
<tr>
<th>Animal ID</th>
<th>CMO 31267</th>
<th>Report ID</th>
<th>17782</th>
<th>Report Complete</th>
<th>01/03/2008</th>
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</thead>
<tbody>
<tr>
<td>Sex</td>
<td>M</td>
<td>Death Type</td>
<td>X</td>
<td>Work Performed</td>
<td>01/03/2008</td>
</tr>
<tr>
<td>Age</td>
<td>9 yrs 2 mon</td>
<td>Weight (KG)</td>
<td>1.49</td>
<td>Time Performed</td>
<td>10:00 AM</td>
</tr>
</tbody>
</table>

Gross Observation
BODY AS A WHOLE
The animal is presented thin.

Gross Diagnosis
1 BODY AS A WHOLE NO REMARKABLE FINDINGS

Gross Comments
Tissues are collected per project protocol - none are saved for CNPRC histopathology

Measurements
Gross Necropsy Report

Animal ID  CMO 31289  |  Report ID  17801  |  Report Complete  01/04/2008
Sex  M  |  Death Type  X  |  Work Performed  01/04/2008
Age  8 yrs 11 mon  |  Weight (KG)  1.53  |  Time Performed  10:00 AM

Gross Observation  BODY AS A WHOLE  The animal is presented in good flesh with a prominently enlarged right breast (subcutaneous lipoma).
                        BRAIN  Both frontal lobes are misshapen.

Gross Diagnosis  1  SUBCUTANEOUS TISSUE OF CHEST LIPOMA

Gross Comments  Tissues are collected per project protocol - no other tissues are saved.

Measurements
Final Necropsy Report

<table>
<thead>
<tr>
<th>Gross Observation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BODY AS A WHOLE</td>
<td>The animal is presented thin with diffuse, chronic dermatitis characterized by thickening of the skin with scaling and erythema.</td>
</tr>
<tr>
<td>LYMPH NODES</td>
<td>Peripheral nodes are prominent to enlarged.</td>
</tr>
<tr>
<td>OVARY</td>
<td>There is a fluid filled cyst, approximately 0.6 cm diameter adjacent to the right ovary.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gross Diagnosis</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 SKIN INFLAMMATION, DIFFUSE DERMATITIS</td>
<td></td>
</tr>
<tr>
<td>2 LYMPH NODE HYPERTROPHY</td>
<td>(lymphadenopathy, peripheral)</td>
</tr>
<tr>
<td>3 OVARY CYST</td>
<td>(parovarian cyst)</td>
</tr>
</tbody>
</table>

| Gross Comments | M:ultiple tissues are collected to fulfill biospecimen requests (kidneys, ovaries, uterine tubes, trachea), and a truncates set of tissues is saved in formalin. |

<table>
<thead>
<tr>
<th>Final Observations</th>
<th>Tissue Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADRENAL GLAND</td>
<td>NSL. slide 11</td>
</tr>
<tr>
<td>BONE MARROW</td>
<td>NSL. slide 10</td>
</tr>
<tr>
<td>BRAIN</td>
<td>NSL. slides 16-18</td>
</tr>
<tr>
<td>CHEEK POUCH</td>
<td>NSL. slide 7</td>
</tr>
<tr>
<td>COLON</td>
<td>coitis, subacute, diffuse, mild, with lamina proprial edema and surface spirochetosis proximally. slide 5</td>
</tr>
<tr>
<td>ESOPHAGUS</td>
<td>NSL. slide 1</td>
</tr>
<tr>
<td>EYE</td>
<td>NSL. slide 15</td>
</tr>
<tr>
<td>HEART</td>
<td>NSL. slide 13</td>
</tr>
<tr>
<td>JEJUNUM</td>
<td>enteritis, eosinophilic, diffuse, mild to moderate. slide 3</td>
</tr>
<tr>
<td>LIVER</td>
<td>NSL. slide 6</td>
</tr>
<tr>
<td>LUNG</td>
<td>NSL. slide 12</td>
</tr>
<tr>
<td>LYMPH NODES</td>
<td>mesenteric - draining eosinophilic inflammation and edema. slide 9</td>
</tr>
<tr>
<td></td>
<td>tonsil - hyperplasia, lymphoid, diffuse, moderate, with surface neutrophils. slide 9</td>
</tr>
<tr>
<td></td>
<td>peripheral nodes - sinus histiocytosis, mild. slide 10</td>
</tr>
<tr>
<td>PANCREAS</td>
<td>NSL. slide 3</td>
</tr>
<tr>
<td>PITUITARY GLAND</td>
<td>NSL. slide 11</td>
</tr>
<tr>
<td>SALIVARY GLAND</td>
<td>NSL. slide 1</td>
</tr>
<tr>
<td>SKIN</td>
<td></td>
</tr>
<tr>
<td>SPINAL CORD</td>
<td>NSL. slide 15</td>
</tr>
<tr>
<td>SPLEEN</td>
<td>NSL. slide 9</td>
</tr>
<tr>
<td>Organ</td>
<td>Findings</td>
</tr>
<tr>
<td>-----------------------</td>
<td>---------------------------------------------------------------------------</td>
</tr>
<tr>
<td>STOMACH</td>
<td>gastritis, subacute, multifocal to diffuse, mild, with multifocal follicular lymphocytic hyperplasia, Helicobacter heilmanni in corpus, and possible H pylori in antrum. slide 2</td>
</tr>
<tr>
<td>THYMUS</td>
<td>NSL (involuted). slide 10</td>
</tr>
<tr>
<td>THYROID GLAND</td>
<td>hyperplasia, lymphoid, follicular, multifocal, mild. slide 11</td>
</tr>
<tr>
<td>TONGUE</td>
<td>glossitis, subacute, multifocal, mild. slide 1</td>
</tr>
<tr>
<td>TRACHEA</td>
<td>tracheitis, subacute, diffuse, mild. slide 1</td>
</tr>
<tr>
<td>URINARY BLADDER</td>
<td>NSL. slide 7</td>
</tr>
<tr>
<td>UTERUS</td>
<td>NSL. slide 8</td>
</tr>
<tr>
<td>VAGINA</td>
<td>vaginitis, subacute, multifocal to diffuse, mild. slide 8</td>
</tr>
</tbody>
</table>

**Final Diagnosis**

1. STOMACH INFLAMMATION GASTRITIS, NOS
2. STOMACH HELICOBACTER (H. heilmanni, possible H. pylori)
3. JEJUNUM INFLAMMATION, DIFFUSE ENTERITIS, NOS (eosinophilic)
4. COLON INFLAMMATION, DIFFUSE COLITIS
5. VAGINA INFLAMMATION, SUBACUTE (vaginitis)
6. TONGUE INFLAMMATION, SUBACUTE GLOSSITIS, NOS (tracheitis)
7. TRACHEAL MUCOUS MEMBRANE INFLAMMATION, DIFFUSE

**Measurements**
Gross Necropsy Report

Animal ID  MMU  31470          Report ID  16922          Report Complete
Sex        M                Death Type  X                Work Performed  11/16/2007
Age        8 yrs 7 mon    Weight (KG)  9.05            Time Performed  09:00 AM

Gross Observation

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>BODY AS A WHOLE</td>
<td>The SIV inoculated animal is presented thin.</td>
<td></td>
</tr>
<tr>
<td>ILEUM</td>
<td>The mucosa of the small intestine, mainly ileum, is erythematous, and contents are mildly hemorrhagic.</td>
<td></td>
</tr>
<tr>
<td>LUNG</td>
<td>The lungs fail to collapse upon opening the chest, are firm, and are discolored pale tan (pneumocystosis).</td>
<td></td>
</tr>
<tr>
<td>LYMPH NODES</td>
<td>Lymph nodes are generally enlarged, and mesenteric nodes are discolored brown.</td>
<td></td>
</tr>
<tr>
<td>SPLEEN</td>
<td>The spleen is mildly to moderately enlarged with a prominent follicular pattern of pallor on cut surfaces.</td>
<td></td>
</tr>
</tbody>
</table>

Gross Diagnosis

1. BODY AS A WHOLE INANITION  (SIV inoculated)
2. LUNGS (BOTH) ABNORMAL APPEARANCE PNEUMOCYSTIS CARINII
3. SPLEEN HYPERTROPHY  (splenomegaly)
4. LYMPH NODES, GENERALIZED HYPERTROPHY  (lymphadenopathy - generalized)
5. ILEUM INFLAMMATION, HEMORRHAGIC

Gross Comments

Tissues are collected per project protocol.

Measurements
# Gross Necropsy Report

<table>
<thead>
<tr>
<th>Animal ID</th>
<th>MMU 31500</th>
<th>Report ID</th>
<th>17822</th>
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<td>Death Type</td>
<td>X</td>
<td>Work Performed</td>
</tr>
<tr>
<td>Age</td>
<td>8 yrs 9 mon</td>
<td>Weight (KG)</td>
<td>9.85</td>
<td>Time Performed</td>
</tr>
</tbody>
</table>

**Gross Observation**
- BODY AS A WHOLE: The animal is presented in good flesh.
- LIVER: The liver is mildly enlarged with a moderately prominent reticular pattern of pallor on capsular and cut surfaces, and the texture is soft.

**Gross Diagnosis**
1. BODY AS A WHOLE NO REMARKABLE FINDINGS PERFUSION (brain perfusion)
2. LIVER LIPIDOSIS

**Gross Comments**
The brain is perfused, and tissues are collected per project protocol.

**Measurements**

---

California National Primate Research Center
Pathology Report
Report run on: November 3, 2008 1:49 PM
## Gross Necropsy Report

<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>Sex</td>
<td>M</td>
<td>Death Type</td>
<td>X</td>
<td>Work Performed</td>
<td>07/18/2007</td>
</tr>
<tr>
<td>Age</td>
<td>8 yrs 3 mon</td>
<td>Weight (KG)</td>
<td>10.68</td>
<td>Time Performed</td>
<td>12:00 AM</td>
</tr>
</tbody>
</table>

### Gross Observation

- **BODY AS A WHOLE**
  - The animal is presented in good flesh with a severely hyperextended right stifle joint.
- **JOINT**
  - The articular cartilage of the stifle joint on the right side is inflamed and extensively eroded/ulcerated.
- **SKELETAL MUSCLE**
  - The stifle extensor group on the right side is markedly contracted/atrophied.

### Gross Diagnosis

1. **BODY AS A WHOLE PERFUSION** (brain perfusion)
2. **MUSCLE OF HIP AND THIGH ATROPHY** (atrophy/contraction)
3. **JOINT OF LOWER EXTREMITY INFLAMMATION, ULCERATIVE ARTHRITIS, NOS**

### Gross Comments

The brain is perfused and collected for the investigator. Apparently numerous injections into the right quadriceps during the animal's history resulted in subsequent atrophy/contraction and hyperextension of the stifle.

### Measurements
# Gross Necropsy Report

<table>
<thead>
<tr>
<th>Animal ID</th>
<th>MMU 31628</th>
<th>Report ID</th>
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<td>Death Type</td>
<td>K</td>
<td>Work Performed</td>
</tr>
<tr>
<td>Age</td>
<td>9 yrs 0 mon</td>
<td>Weight (KG)</td>
<td>5.4</td>
<td>Time Performed</td>
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</table>

<table>
<thead>
<tr>
<th>Gross Observation</th>
</tr>
</thead>
</table>
| BODY AS A WHOLE   | The animal is presented severely thin and dehydrated.  
| LUNG              | The lungs display multiple small, firm areas measuring 0.2-0.7 cm in greatest dimension and some of which are hemorrhagic.  
| SALIVARY GLAND    | The right parotid salivary gland is markedly enlarged and firm and extends around/through the mandible to impinge on the area of the larynx.  

<table>
<thead>
<tr>
<th>Gross Diagnosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 BODY AS A WHOLE INANITION (severe)</td>
</tr>
<tr>
<td>2 PAROTID GLAND MASS, LOCALIZED</td>
</tr>
<tr>
<td>3 LUNGS (BOTH) MASS, LOCALIZED (multiple, hemorrhagic)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gross Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>A full set of tissues is saved in formalin for histopathology.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Measurements</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>


# Gross Necropsy Report

<table>
<thead>
<tr>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex: F</td>
<td>Death Type: X</td>
<td>Work Performed: 10/16/2007</td>
</tr>
<tr>
<td>Age: 8 yrs 6 mon</td>
<td>Weight (KG): 7.23</td>
<td>Time Performed: 08:00 AM</td>
</tr>
</tbody>
</table>

**Gross Observation**

- **BODY AS A WHOLE**: The animal is presented in good flesh.
- **TONGUE**: The anterior approximately one fourth to one third of the tongue is missing, and at the site of the healed laceration, there are multiple, clear, fluid-filled cysts measuring roughly 0.3 cm diameter (likely salivary cysts).

**Gross Diagnosis**

1. **BODY AS A WHOLE PERFUSION** (brain perfusion)
2. **TONGUE ABNORMAL APPEARANCE** (healed laceration)

**Gross Comments**

The brain is perfused and tissues are collected per project protocol. A truncated set of tissues is saved in formalin.

**Measurements**
Gross Necropsy Report

Sex  F  Death Type  X  Work Performed  09/18/2007
Age  8 yrs 5 mon  Weight (KG)  6.45  Time Performed  09:00 AM

Gross Observation  BODY AS A WHOLE  The animal is presented in good flesh.
STOMACH  The gastric mucosa, particularly the corpus at the junction of corpus and antrum, is thickened and erythematous.

Gross Diagnosis
1  BODY AS A WHOLE PERFUSION  (brain perfusion)
2  STOMACH INFLAMMATION,
   PROLIFERATIVE, FOCAL GASTRITIS,NOS

Gross Comments  Tissues are collected per project protocol, and a truncated set is saved in formalin for histopathology.

Measurements
# Gross Necropsy Report

<table>
<thead>
<tr>
<th>Animal ID</th>
<th>MMU 31892</th>
<th>Report ID</th>
<th>14001</th>
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<th>06/01/2007</th>
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<tbody>
<tr>
<td>Sex</td>
<td>F</td>
<td>Age</td>
<td>36 yrs 2 mon</td>
<td>Weight (KG)</td>
<td>6.97</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Gross Observation**

- **BODY AS A WHOLE**
  - The animal is presented in good flesh.

- **BRAIN**
  - Cerebral surface vessels are congested.

- **COLON**
  - The colonic lumen contains a moderate amount of very dry, very firm feces, one bolus of which measures approximately 2.0 cm in greatest dimension and which grossly was mistaken for a possible mass lesion.

- **GALLBLADDER**
  - The gallbladder is moderately dilated, and the common bile duct is quite wide, over 0.5 cm diameter.

- **HEART**
  - The pericardium is adherent to the epicardial surface of the heart in multiple foci, and there is a mildly increased amount of pericardial fluid. The atrioventricular valves display nodular thickening along their free edges (endocardiosis). The intimal surfaces of aorta and pulmonary artery are longitudinally "wrinkled" and discolored yellow suggestive of significant atherosclerosis.

- **LIVER**
  - There is focal hemorrhage on the dorsal surface of the right lateral lobe with more extensive hemorrhage on the ventral surface. The hepatic parenchyma is soft/friable, and there is a roughly 1.0 cm diameter nodular swelling on the dorsal surface of the middle lobe (likely nodular regeneration).

- **LUNG**
  - Numerous circular, 0.2-0.4 cm diameter, tan to grey, frequently bullous foci are scattered over mainly dorsal lung surfaces, and pulmonary arteries are prominently dilated; the lungs are discolored red to dark red with irregular parietal pleural surfaces to some extent associated with fibrous pleural adhesions.

- **STOMACH**
  - There is a focus of dark red discoloration on the serosal surface consistent with a nick by the biopsy instrument penetrating the liver, but there is no evidence of penetration of the stomach wall; the gastric mucosa is mildly stippled with red, pin-point foci.

**Gross Diagnosis**

1. LIVER HEMORRHAGE, ACUTE (site of needle biopsy)
2. STOMACH INFLAMMATION GASTRITIS, NOS
3. PERICARDIUM INFLAMMATION PERICARDITIS, NOS
4. LUNGS (BOTH) ACARIASIS
5. PLEURA ADHESIONS, FIBROUS
6. BRAIN CONGESTION

**Gross Comments**

It appears that the biopsy needle sampling the liver probabably completely penetrated the liver, possibly lacerating the serosal surface of the stomach. There may have been a mild peritonitis based on the tight enclosing of the abdominal viscera by the omentum and a mild amount of peritoneal fluid. There is also atherosclerosis of the great arteries which may have lead to back pressure and pulmonary hypertension. A full set of
tissues is saved in formalin for histopathology. The peritoneum and pericardium are swabbed for bacterial culture.

Measurements
Gross Necropsy Report

Sex  F  Death Type  X  Work Performed  12/20/2007
Age  35 yrs 8 mon  Weight (KG)  4.89  Time Performed  10:00 AM

Gross Observation

BODY AS A WHOLE
The animal is presented markedly thin with reduced range of motion in all limbs, prominent spinal kyphosis, and mild jaundice.

HEART
Free edges of atrioventricular valves display multiple nodular thickenkngs roughly 0.1-0.2 cm diameter (endocardiosis).

LIVER
The liver appears slightly smaller than expected, and fibrinous adhesions attach the lobes to each other and to the diaphragm; multiple biliary cysts are apparent on capsular and cut surfaces.

LUNG
The lungs are diffusely stippled with pin-point black foci, and fibrinous adhesion attach the lobes to each other.

STOMACH
The gastric mucosa is variably thickened and erythematous mainly in the antrum0corpus junctional region.

Gross Diagnosis
1  BODY AS A WHOLE INANITION PERFUSION  (brain perfusion)
2  STOMACH INFLAMMATION GASTRITIS,NOS
3  LIVER CYSTS, MULTIPLE  (biliary cysts)
4  ATRIOVENTRICULAR VALVE ENDOCARDIOSIS
5  LUNGS (BOTH) ANTHRACOSIS

Gross Comments
The brain is perfused and collected for the investigator. A truncated set of tissues is saved in formalin for limited histopathology.

Measurements
Gross Necropsy Report

Sex  F  Death Type  X  Work Performed  07/12/2007
Age  15 yrs 3 mon  Weight (KG)  Time Performed  11:45 AM

Gross Observation  BODY AS A WHOLE  The animal is presented in good flesh with a xiphoid process to pubis ventral midline incision.
LIVER  Multiple biliary cysts are noted on the capsular surface of the liver, the largest roughly 0.5 cm diameter.
LUNG  The lungs are diffusely stippled with pin-point black foci (pneumoconiosis).

Gross Diagnosis  
1  LIVER CYSTS, MULTIPLE  (biliary cysts)
2  LUNGS (BOTH) PNEUMOCONIOSIS

Gross Comments  
Tissues are collected per project protocol, and ovaries are collected to fulfill a biospecimen request. No other tissues are saved.

Measurements
# Gross Necropsy Report

**Animal ID**  MMU 31933  
**Sex**  F  
**Age**  13 yrs 5 mon  
**Report ID**  15781  
**Report Complete**  09/13/2007  
**Death Type**  X  
**Work Performed**  09/13/2007  
**Weight (KG)**  8.32  
**Time Performed**  12:30 PM

## Gross Observation

<table>
<thead>
<tr>
<th>Location</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BODY AS A WHOLE</td>
<td>The animal is presented in good flesh with an open ventral mid abdominal incision.</td>
</tr>
<tr>
<td>LIVER</td>
<td>The liver is mildly enlarged with rounded edges, and there are several, small, 0.1-0.2 cm diameter, circular, raised, dark green cystic structures scattered over the capsular surface (biliary cysts)</td>
</tr>
</tbody>
</table>

## Gross Diagnosis

<table>
<thead>
<tr>
<th>Diagnosis</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 LIVER CYSTS, MULTIPLE (biliary cysts)</td>
<td></td>
</tr>
</tbody>
</table>

## Gross Comments

Tissues are collected to fulfill biospecimen requests (kidneys) and per project protocol. No other tissues are saved.
Gross Necropsy Report

Animal ID  MMU 31993  Report ID  20382  Report Complete
Sex  F  Death Type  X  Work Performed  05/27/2008
Age  10 yrs 1 mon  Weight (KG)  5.32  Time Performed  09:30 AM

Gross Observation  BODY AS A WHOLE  The animal is presented thin.

Gross Diagnosis
1  BODY AS A WHOLE INANITION
2  BODY AS A WHOLE PERFUSION  (brain perfusion)

Gross Comments  The brain is perfused, and tissues are collected per project protocol.

Measurements
# Gross Necropsy Report

<table>
<thead>
<tr>
<th>Animal ID</th>
<th>MMU 31998</th>
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<th>18882</th>
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<tr>
<td>Sex</td>
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</tr>
<tr>
<td>Age</td>
<td>10 yrs 2 mon</td>
<td>Weight (KG)</td>
<td>4.96</td>
<td>Time Performed</td>
<td>09:40 AM</td>
</tr>
</tbody>
</table>

## Gross Observation
- **BODY AS A WHOLE**: The animal is presented thin.
- **STOMACH**: The gastric mucosa is thickened and variably erythematous.

## Gross Diagnosis
1. **BODY AS A WHOLE INANITION**
2. **BODY AS A WHOLE PERFUSION** (brain perfusion)
3. **STOMACH INFLAMMATION GASTRITIS,NOS**

## Gross Comments
The brain is perfused and collected for the investigator. Other tissues are collected per project protocol.

## Measurements
Gross Necropsy Report

Animal ID: MCY 32007  
Sex: F  
Age: 7 yrs 10 mon  
Report ID: 17481  
Report Complete: 12/19/2007  
Animal ID: 12/19/2007  
Work Performed: 12/19/2007  
Weight (KG): 5.69  
Time Performed: 10:10 AM

Gross Observation

<table>
<thead>
<tr>
<th>Gross Observation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BONE MARROW</td>
<td>The femoral bone marrow bilaterally is yellow solid fatty core.</td>
</tr>
<tr>
<td>GASTROINTESTINAL TRACT</td>
<td>Content throughout the tract is within normal limits of amount and appearance.</td>
</tr>
<tr>
<td>GINGIVA</td>
<td>This animal has a full set of adult dentition in good condition; a moderate amount of yellow hard tarter is present along the gingival margin of the upper and lower incisors.</td>
</tr>
<tr>
<td>HEART</td>
<td>The inside and outside diameter of the left ventricle midway between the apex and base is 11 and 25 cm. respectively.</td>
</tr>
<tr>
<td>LUNG</td>
<td>The pleural surface is a splotchy dark and light red color and has a collapsed atelectatic appearance centrally.</td>
</tr>
<tr>
<td>OVARY</td>
<td>Adjacent to the left ovary, there is a large fluctuant, translucent cyst measuring 2 cm. in diameter.</td>
</tr>
<tr>
<td>SKIN</td>
<td>A tattoo on the right medial thigh reads 32007.</td>
</tr>
<tr>
<td>URINARY BLADDER</td>
<td>The lumen contains approximately 1/2 cc of clear amber urine; bililabstix results on a sample of urine drawn by cysticentesis: glucose, bilirubin, ketone and blood are all negative, pH 5, protein 2+ [100 mg/dl]</td>
</tr>
</tbody>
</table>

Gross Diagnosis

1. LYMPH NODES, GENERALIZED NORMAL APPEARANCE INFECTIOUS OR COMMUNICABLE DISEASE SRV+
2. BONE MARROW HYPOPLASIA
3. OVARY CYST left side

Gross Comments

A variety of tissues are collected for the biospecimen request program and histopathology in buffered 10% formalin. The relationship of bone marrow hypoplasia to the SRV positive status is uncertain, although anemia has been reported with SRV infection. The results of histopathology will be presented in the final necropsy report.

Measurements
# Gross Necropsy Report

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</table>

<table>
<thead>
<tr>
<th>Age</th>
<th>Weight (KG)</th>
<th>Time Performed</th>
</tr>
</thead>
<tbody>
<tr>
<td>19 yrs 0 mon</td>
<td>8.4</td>
<td>11:00 AM</td>
</tr>
</tbody>
</table>

**Gross Observation**

- **BODY AS A WHOLE**: The animal is presented in good flesh with an approximately 2.0 cm diameter, well circumscribed, soft, roughly circular, subcutaneous mass on the medial aspect of the right thigh (lipoma).
- **HEART**: The free edges of mitral, aoartic, and pulmonary valves are thickened by tan, irregular nodular swellings.
- **LUNG**: Several, 0.2-0.5 cm diameter, tan-grey, frequently bullous foci are scattered over mainly dorsal lung surfaces (pulmonary acariasis).
- **UTERUS**: The uterus, ovaries, and urinary bladder are obscured by firm omental adhesions; dark brown fluid filled cysts are present among these adhesions; the endometrium appears enlarged, soft, and tan.

**Gross Diagnosis**

1. UTERUS AND CERVIX, FALLOPIAN TUBES AND OVARIES, CS ENDOMETRIOSIS
2. AORTIC VALVE ENDOCARDIOSIS
3. MITRAL VALVE ENDOCARDIOSIS
4. PULMONIC VALVE ENDOCARDIOSIS
5. LUNGS (BOTH) ACARIASIS
6. SUBCUTANEOUS TISSUE OF INGUINAL REGION LIPOMA

**Gross Comments**: The hypothalamus is collected to fulfill a biospecimen request, and a truncated set of tissues is saved in formalin for limited histopathology.

**Measurements**
Gross Necropsy Report

Sex  F  Death Type  K  Work Performed  06/22/2007
Age  18 yrs 2 mon  Weight (KG)  6.84  Time Performed  03:00 PM

Gross Observation

BODY AS A WHOLE
The animal is presented thin with a mildly distended abdomen and a palpably firm mid-abdominal mass. The mass, attached to the ventral body wall, is in the markedly thickened omentum and is roughly rectangular measuring approximately 7.0x5.0x2.5 cm. It is yellow with an irregular surface punctuated by multiple slightly raised, circular, red foci. The distal abdominal cavity contains a large amount of dark red (bloody) fluid.

DIAPHRAGM
Multiple circular, focal to coalescing, dark blue/black, cystic foci are bulging on both dorsal and ventral surfaces of the diaphragm – on the ventral surface, these areas are adherent to the liver.

GASTROINTESTINAL TRACT
The gastrointestinal tract is encased, and somewhat compressed, within the markedly thickened omentum; the wall is thickened, and there are multiple strictures caused by adhesions and kinks in the thickened wall. Multiple, irregularly circular, dark blue/black, foci (endometriosis) are scattered along the serosal surface of the GIT and in the mesentery supporting it.

HEART
Multiple nodular thickenings of the free edge of atrioventricular valves are more prominent on the mitral valve.

LIVER
The liver is enlarged with rounded edges and a soft, friable texture, and it is adherent to the diaphragm at multiple sites.

OVARY
Ovaries are not clearly seen.

UTERUS
The uterus is adherent to the colon dorsally and to the urinary bladder ventrally and is encased within a firm fibrous capsule having multiple dark blue-black foci (endometriosis) scattered over its surface.

Gross Diagnosis
1  BODY AS A WHOLE INANITION
2  UTERUS AND CERVIX, FALLOPIAN TUBES AND OVARIIES, CS ENDOMETRIOSIS
3  GASTROINTESTINAL TRACT ENDOMETRIOSIS, IMPLANTED
4  OMENTUM ENDOMETRIOSIS, IMPLANTED
5  DIAPHRAGM ENDOMETRIOSIS, IMPLANTED
6  LIVER HYPERTROPHY
7  ATRIOVENTRICULAR VALVE ENDOCARDIOSIS

Gross Comments
Several tissues are photographed, and a complete set of tissues is saved in formalin for histopathology.

Measurements
Final Necropsy Report

Sex          M  Death Type  X  Work Performed  06/14/2007
Age          7 yrs 3 mon  Weight (KG)  16  Time Performed  10:00 AM

Final Observations  BODY AS A WHOLE  The animal is presented in robust good flesh.

Final Diagnosis  1  BODY AS A WHOLE NO REMARKABLE FINDINGS PERFUSION

Final Comments  The brain is perfused and collected for the investigator - no other tissues are saved.

Measurements
# Final Necropsy Report

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>Sex</td>
<td>M</td>
<td>Death Type</td>
<td>X</td>
<td>Work Performed</td>
<td>06/14/2007</td>
</tr>
<tr>
<td>Age</td>
<td>7 yrs 3 mon</td>
<td>Weight (KG)</td>
<td>12.75</td>
<td>Time Performed</td>
<td>11:30 AM</td>
</tr>
</tbody>
</table>

## Final Observations
BODY AS A WHOLE
The animal is presented in good flesh.

## Final Diagnosis
1. BODY AS A WHOLE NO REMARKABLE FINDINGS PERFUSION

## Final Comments
The brain is perfused and collected for the investigator – no other tissues are saved.

## Measurements
Final Necropsy Report

Sex M Death Type X Work Performed 09/28/2007
Age 7 yrs 6 mon Weight (KG) 8.65 Time Performed 11:10 AM

Final Observations
HEART

The diameter of the left ventricle midway between the apex and base was 33 mm; the diameter of the left ventricle lumen at this point was 19 mm. These measurements are within normal limits.

LYMPH NODES

Superficial and deep lymph nodes were within normal limits of expected size and appearance.

SPLEEN

The spleen was within normal limits of size and appearance.

Final Diagnosis
1 LYMPH NODES, GENERALIZED NORMAL APPEARANCE SIV delta nef

Final Comments
There were no significant changes in the tissues examined; all tissues were taken by the investigators. This is a gross and final necropsy report.

Measurements
Gross Necropsy Report

Animal ID: MMU 32156
Report ID: 16863

Sex: M
Age: 7 yrs 7 mon
Weight (KG): 8.51

Gross Observation

<table>
<thead>
<tr>
<th>Gross Observation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BODY AS A WHOLE</td>
<td>The animal is presented in good flesh with a sutured ventral abdominal incision subsequent to exploratory laparotomy.</td>
</tr>
<tr>
<td>CECUM</td>
<td>The cecum is perforated at the site of surgical exploration.</td>
</tr>
<tr>
<td>COLON</td>
<td>The proximal colon is moderately and circumferentially thickened over a distance of approximately 10 cm.; the colonic mucosa is diffusely thickened, and contents are liquid.</td>
</tr>
<tr>
<td>DUODENUM</td>
<td>The duodenal mucosa is thickened and variably erythematous.</td>
</tr>
<tr>
<td>ILEUM</td>
<td>The ileal mucosa is thickened and contents are liquid and tinged with green (bile).</td>
</tr>
<tr>
<td>JEJUNUM</td>
<td>The jejunal mucosa is thickened with liquid contents tinged with green (bile).</td>
</tr>
<tr>
<td>LYMPH NODES</td>
<td>Abdominal lymph nodes are prominent to enlarged.</td>
</tr>
</tbody>
</table>

Gross Diagnosis

1. PERITONEUM INFLAMMATION, EXUDATIVE PERITONITIS, NOS
2. CECUM PERFORATION
3. GASTROINTESTINAL TRACT INFLAMMATION ENTEROCOLITIS
4. COLON STRICTURE
5. LYMPH NODE HYPERTROPHY
6. DUODENUM INFLAMMATION

Gross Comments

A full set of tissues (minus brain and spinal cord) are saved in formalin.

Measurements
# Gross Necropsy Report

<table>
<thead>
<tr>
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<tr>
<td>7 yrs 9 mon</td>
<td>7.74</td>
<td>08:00 AM</td>
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</tbody>
</table>

**Gross Observation**

BODY AS A WHOLE

The animal is presented in good flesh.

**Gross Diagnosis**

1. BODY AS A WHOLE NO REMARKABLE FINDINGS PERFUSION (brain perfusion)

**Gross Comments**

The brain is perfused, and tissues are collected per project protocol.

Measurements
Gross Necropsy Report

Animal ID  MMU 32217  Report ID  18542  Report Complete
Sex  F  Death Type  X  Work Performed  02/14/2008
Age  23 yrs 7 mon  Weight (KG)  11.45  Time Performed  09:20 AM

Gross Observation

BODY AS A WHOLE  The animal is presented in abundant good flesh.
LIVER  The liver is mildly enlarged, friable, and diffusely pale.
LUNG  The lungs are diffusely stippled with pin point black foci, and tracheobronchial nodes are dark black.
UTERUS  An ovoid, dark brown opaque fluid filled cyst measuring roughly 0.9 cm in greatest dimension is present on the ventral surface of the uterus.

Gross Diagnosis

1  BODY AS A WHOLE PERFUSION  (brain perfusion)
2  UTERUS ENDOMETRIOSIS
3  LIVER LIPIDOSIS
4  LUNGS (BOTH) ANTHRACOSIS

Gross Comments  The brain is perfused and collected for the investigator. Multiple tissues (adrenal glands, mammary gland, visceral fat, muscle, liver, uterus, bladder urethra) are collected and saved either fresh frozen and/or in formalin) for investigator. A truncates set of tissues is saved in formalin.

Measurements
Final Necropsy Report

Animal ID: MMU 32223  
Report ID: 14500  
Report Complete:  
Sex: F  
Death Type: X  
Work Performed: 07/07/2007  
Age: 25 yrs 2 mon  
Weight (KG): 8.03  
Time Performed: 07:30 PM

Gross Observation

BODY AS A WHOLE  
The animal is presented in good flesh with a bandaged wound on the left lower back.

LIVER  
The liver is mildly enlarged, pale, and soft suggesting lipidosis.

LUNG  
The left caudal lobe is dark red-purple (atelectatic), as are scattered foci in other lobes.

SKIN  
The skin and subcutis on the back, the site of an abscess, appears clean with the area of the abscess well walled off by fibrosis.

Gross Diagnosis

1. LIVER ABNORMAL APPEARANCE LIPIDOSIS
2. LUNG ATELECTASIS
3. SUBCUTANEOUS TISSUE OF BACK ABSCESS (cleaned/drained)

Gross Comments

The brain is perfused and collected for the investigator. Adrenal glands, eyes, and uterus are collected for investigators. A truncated set of tissues is saved in formalin.

Final Observations

HEART  
Fibrosis, interfiber, extensively multifocal, moderate; lipofuscinosis, diffuse, mild. slide 13

ILEUM  
Hyperplasia, lymphoid, diffuse, moderate to severe. slide 4

KIDNEY  
Nephritis, interstitial, chronic, multifocal, mild to moderate, with multifocal glomerulosclerosis. slide 7

LIVER  
Lipidosis, diffuse, mild to moderate. slide 6

PANCREAS  
Islet amyloidosis, diffuse, severe. slide 3

SKIN  
Site of abscess on back - dermatitis/cellulitis, chronic, focal, moderate, with subcutaneous fat necrosis. slide 15

THYROID GLAND  
Adenoma, follicular (oxyphilic), focal. slide 11

Final Diagnosis

1. PANCREAS,NOS AMYLOIDOSIS, FOCAL (islet amyloidosis)
2. LIVER ABNORMAL APPEARANCE LIPIDOSIS
3. KIDNEY INFLAMMATION, CHRONIC (chronic interstitial nephritis)
4. HEART FIBROSIS, MULTIFOCAL LIPOFUSCINOSIS
5. THYROID GLAND ADENOMA (follicular adenoma, oxyphilic)
6. SKIN OF BACK INFLAMMATION, FOCAL DERMATITIS (site of abscess)

Final Comments

Founknownreasons, this animal's tissues have the appearance of an older animal - myocardial fibrosis/lipofuscinosis, chronic interstitial nephritis, hepatic lipidosis, pancreatic islet amyloidosis.

Measurements
Gross Necropsy Report

Animal ID: MMU 32225
Sex: F
Age: 24 yrs 10 mon
Weight (KG): 6.43

Report ID: 17881
Work Performed: 01/10/2008
Time Performed: 08:00 AM

Gross Observation

- BODY AS A WHOLE: The animal is presented thin with a large volume of intra-abdominal dark red fluid (hemorrhage).
- KIDNEY: Renal pelvises bilaterally are mildly enlarged (hydronephrosis).
- LIVER: The liver is mildly enlarged, pale, soft, and contains multiple biliary cysts.
- LUNG: The lungs are diffusely stippled with pin-point black foci.
- OVARY: The ovaries are not seen.
- UTERUS: The uterus is completely obscured by endometriosis and the associated cysts/adhesions - the largest of these cysts, which completely encases the uterus, has ruptured resulting in intra-abdominal hemorrhage.

Gross Diagnosis

1. UTERUS AND CERVIX, FALLOPIAN TUBES AND OVARIES, CS ENDOMETRIOSIS
2. KIDNEY AND PELVIS, CS DILATATION (hydronephrosis, bilateral)
3. LIVER HYPERTROPHY LIPIDOSIS (hepatopathy, biliary cysts)
4. LUNGS (BOTH) ANTHRACOSIS

Gross Comments
A full set of tissues is saved in formalin for histopathology.

Measurements
Gross Necropsy Report

Animal ID: MMU 32226  
Report ID: 14180  
Report Complete:  

Sex: F  
Death Type: X  
Work Performed: 06/19/2007  

Age: 24 yrs 0 mon  
Weight (KG): 8  
Time Performed: 09:30 AM  

---

Gross Observation

BODY AS A WHOLE: The animal is presented in good flesh.

KIDNEY: There is a single, roughly 0.5 cm diameter cyst in the left renal cortex.

LIVER: The liver is enlarged with rounded edges, and the parenchyma is friable. There are multiple green fluid filled cysts (biliary cysts), as well as areas of apparent nodular regeneration.

LUNG: Lungs are diffusely stippled with pin point black foci.

STOMACH: The gastric mucosa is streaked with erythema.

---

Gross Diagnosis

1. BODY AS A WHOLE PERFUSION (brain perfusion)
2. LIVER HYPERTROPHY (hepatomegaly)
3. LIVER CYSTS, MULTIPLE (biliary cysts)
4. KIDNEY CYST (cortical cyst)
5. STOMACH INFLAMMATION GASTRITIS, NOS

---

Gross Comments

The brain is perfused and collected to fulfill a biospecimen request; ovaries are also collected for the same reason. A truncated set of tissues is saved in formalin for histopathology.

---

Measurements
# Gross Necropsy Report

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<tr>
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<td>Weight (KG)</td>
<td>10.07</td>
<td>Time Performed</td>
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## Gross Observation
- **BODY AS A WHOLE**: The animal is presented in good flesh.
- **UTERUS**: The animal is pregnant with a male fetus of approximately 65 days gestation.

## Gross Diagnosis

1. **BODY AS A WHOLE PERFUSION** (brain perfusion)

## Gross Comments
The brain is perfused and collected per project protocol, and the fetus is harvested, also for brain perfusion. The ovaries are collected to fulfill a biospecimen request. No tissues are saved for CNPRC histopathology.

## Measurements
# Gross Necropsy Report

**Animal ID**: MMU 32286  
**Report ID**: 18061  
**Report Complete**: 01/16/2008  
**Sex**: F  
**Death Type**: K  
**Work Performed**: 01/15/2008  
**Age**: 7 yrs 9 mon  
**Weight (KG)**: 7.65  
**Time Performed**: 11:20 AM

### Gross Observation

**GASTROINTESTINAL TRACT**: Contents in the stomach and small intestine is within normal limits of appearance and amount; there is green contents in the proximal and distal large intestine. This animal has a full adult set of dentition in very good condition.

**SKIN**: A tattoo on the right medial thigh reads 32286.

**URINARY BLADDER**: The results of bililabstix results on a sample drawn by cysticentesis: glucose, ketone, bilirubin, and blood are all negative, pH 8.5, protein trace.

### Gross Diagnosis

1. COLON NORMAL APPEARANCE
   - medical cull-diarrhea

### Gross Comments

A variety of tissues are fixed in 10% buffered formalin and selected tissues are collected for the biospecimen request program. The results of microbiology [small and large intestine] and histopathology will be presented in the final necropsy report.

### Measurements
Gross Necropsy Report

Animal ID  MMU 32315  Report ID  16221  Report Complete
Sex  F  Death Type  K  Work Performed  10/09/2007
Age  7 yrs 6 mon  Weight (KG)  6.8  Time Performed  09:30 AM

Gross Observation  BODY AS A WHOLE  The animal is presented in good flesh.
                  COLON  Multiple colonic strictures, the most prominent located roughly 15 cm proximal to the anus, have resulted in dilatation and thickening of the colon proximal to the strictures all the way back to the cecum. At the site of the most prominent stricture, the mucosa is markedly thickened circumferentially, and there is multifocal mucosal erythema.
                  LIVER  The liver is prominently enlarged and firm with very sharp edges suggestive of amyloidosis.
                  LYMPH NODES  Paracolic nodes are prominent to enlarged.
                  SPLEEN  The spleen is moderately enlarged but otherwise appears within normal limits.

Gross Diagnosis  1  COLON STRicture
                2  COLON DILATATION
                3  COLONIC MUCOUS MEMBRANE INFLAMMATION, MULTIFOCAL COLITIS
                4  LYMPH NODE HYPERTROPHY  (lymphadenopathy - paracolic nodes)
                5  SPLEEN HYPERTROPHY  (splenomagaly)
                6  LIVER AMYLOIDOSIS, FOCAL  (amyloidosis, diffuse)

Gross Comments  Multiple tissues are collected to fulfill biospecimen requests (kidneys, ovaries, uterine tubes, trachea), and a truncated set of tissues is saved in formalin for histopathology.

Measurements
# Gross Necropsy Report

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<td>Age</td>
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<td>Weight (KG)</td>
<td>9.15</td>
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<td>09:50 AM</td>
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</table>

**Gross Observation**

**Body As A Whole**

The animal is presented in good flesh.

**Gross Diagnosis**

1. **Body As A Whole No Remarkable**
   FINDINGS PERFUSION

**Gross Comments**

The brain is perfused and collected for the investigator. Other tissues are collected per project protocol.

**Measurements**
## Gross Necropsy Report

<table>
<thead>
<tr>
<th>Gross Observation</th>
<th>Gross Diagnosis</th>
<th>Gross Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>BODY AS A WHOLE</td>
<td>BODY AS A WHOLE INANITION DEHYDRATION</td>
<td>Ovaries and uterine tubes are collected to fulfill biospecimen requests. A truncated set of tissues is saved in formalin, but no histopathology is to be performed at this time.</td>
</tr>
<tr>
<td>GASTROINTESTINAL TRACT</td>
<td>GASTROINTESTINAL TRACT INFLAMMATION (gastroenterocolitis)</td>
<td></td>
</tr>
<tr>
<td>LIVER</td>
<td>LIVER HYPERTROPHY AMYLOIDOSIS</td>
<td></td>
</tr>
<tr>
<td>LYMHP NODES</td>
<td>LYMHP NODE HYPERTROPHY (lymphadenopathy - paracolic, mesenteric, gastric)</td>
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</tr>
</tbody>
</table>

**Animal ID** MMU 32363  
**Sex** F  
**Age** 7 yrs 2 mon  
**Report ID** 14261  
**Work Performed** 06/22/2007  
**Death Type** K  
**Report Complete** 06/22/2007  
**Time Performed** 10:45 AM  
**Weight (KG)** 4.31
## Gross Necropsy Report

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### Gross Observation

| BODY AS A WHOLE | The animal is presented in good flesh. |
| LUNG            | Extensive adhesions between visceral and parietal pleura firmly attach the left lung lobes to the body wall. |

### Gross Diagnosis

1. BODY AS A WHOLE PERFUSION (brain perfusion)
2. LUNG ADHESIONS, FIBROUS ACARIASIS

### Gross Comments

The brain is perfused and collected for the investigator. Several tissues are collected to fulfill biospecimen requests (mammary gland, muscle, visceral fat, adrenal glands, uterus, liver, urinary bladder, urethra).

### Measurements
# Gross Necropsy Report

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<tr>
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<td>Weight (KG)</td>
<td>9.49</td>
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</table>

**Gross Observation**
- BODY AS A WHOLE: The animal is presented in good flesh.
- UTERUS: The endometrium is diffusely thickened and pale tan.

**Gross Diagnosis**
1. BODY AS A WHOLE PERFUSION (BRAIN PERFUSION)
2. ENDOMETRIUM HYPERPLASIA, DIFFUSE

**Gross Comments**
The brain is perfused, and tissues are collected per project protocol.

**Measurements**
# Gross Necropsy Report

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<td>Age</td>
<td>7 yrs 1 mon</td>
<td>Weight (KG)</td>
<td>11.35</td>
<td>Time Performed 09:30 AM</td>
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</table>

## Gross Observation
- **BODY AS A WHOLE**: The animal is presented in good flesh.
- **HEART**: The left ventricular free wall is thinner than expected, and the ventricle is dilated.
- **KIDNEY**: A large, 3.0 cm diameter, clear fluid filled cyst is present in the cortex of the left kidney.

## Gross Diagnosis
1. BODY AS A WHOLE PERFUSION
2. KIDNEY CYST
3. LEFT VENTRICLE DILATATION

## Gross Comments
The animal is perfused, and tissues are collected per project protocol. Only kidney and heart are saved for CNPRC.

## Measurements
**Gross Necropsy Report**

**Animal ID** MMU 32567  
**Report ID** 16342  
**Report Complete**

**Sex** F  
**Death Type** X  
**Work Performed** 10/16/2007  
**Time Performed** 08:45 AM

<table>
<thead>
<tr>
<th>Gross Observation</th>
<th>The animal is presented in good flesh.</th>
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<tbody>
<tr>
<td>BODY AS A WHOLE</td>
<td></td>
</tr>
<tr>
<td>PITUITARY GLAND</td>
<td>The pituitary gland is mildly enlarged and protrudes out the top of the sella turcica.</td>
</tr>
</tbody>
</table>

**Gross Diagnosis**

1. BODY AS A WHOLE PERFUSION (brain perfusion)
2. PITUITARY GLAND HYPERTROPHY

**Gross Comments**
The brain is perfused and tissues are collected per project protocol. A truncated set of tissues is saved in formalin.
## Gross Necropsy Report

<table>
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<th>Animal ID</th>
<th>Report ID</th>
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<td>11 yrs 9 mon</td>
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### Gross Observation
- **BODY AS A WHOLE**: The SRV+ animal is presented in good flesh.
- **LIVER**: The liver is mildly enlarged with slightly rounded edges, and the parenchyma is diffusely pale tan and soft.

### Gross Diagnosis
1. LIVER HYPERTROPHY LIPIDOSIS

### Gross Comments
Tissues are collected to fulfill a biospecimen request (ovaries) and per project protocol. None are saved for CNPRC histopathology.

### Measurements
## Gross Necropsy Report

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<td>9.01</td>
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**Gross Observation**  
BODY AS A WHOLE  
The animal is presented in good flesh with an open ventral midline abdominal incision subsequent to experimental manipulation.

**Gross Diagnosis**  
1  
BODY AS A WHOLE NO REMARKABLE FINDINGS

**Gross Comments**  
Tissues are collected per project protocol and to fulfill biospecimen requests (kidneys, testes, epididymides, seminal vesicles, lymph nodes) - no tissues are saved for CNPRC histopathology.

**Measurements**
# Gross Necropsy Report

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**Gross Observation**
BODY AS A WHOLE
The animal is presented in abundant good flesh.

**Gross Diagnosis**
1 BODY AS A WHOLE NO REMARKABLE FINDINGS PERFUSION (brain/spinal cord perfusion)

**Gross Comments**
Brain and spinal cord are perfused and collected for the investigator. Kidneys are collected to fulfill a biospecimen request.

**Measurements**
## Gross Necropsy Report

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<td>Weight (KG)</td>
<td>7.45</td>
<td>Time Performed</td>
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</table>

### Gross Observation
BODY AS A WHOLE The animal is presented in good flesh.

### Gross Diagnosis
1. BODY AS A WHOLE NO REMARKABLE FINDINGS PERFUSION (brain perfusion)

### Gross Comments
The brain is perfused and collected for the investigator, and ovaries are collected to fulfill a biospecimen request. No other tissues are saved.

### Measurements
# Gross Necropsy Report

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<th>Age</th>
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<tbody>
<tr>
<td>7 yrs 0 mon</td>
<td>6.94</td>
<td>08:00 AM</td>
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</table>

**Gross Diagnosis**

1. BODY AS A WHOLE NO REMARKABLE FINDINGS PERFUSION (brain perfusion)

**Gross Comments**

The brain is perfused and collected for the investigator. Other tissues are collected per project protocol.

**Measurements**
# Gross Necropsy Report

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<td>8.86</td>
<td>Time Performed 01:20 PM</td>
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### Gross Observation
Body as a whole: The animal is presented in good flesh with an open, midline, caudoventral incision subsequent to experimental manipulation.

### Gross Diagnosis
1. Body as a whole no remarkable findings (tissue harvest per project protocol)

### Gross Comments
Tissues are collected per project protocol and to fulfill biospecimen requests (kidneys, ovaries, skin, eyes) - no tissues are saved for histopathology.

### Measurements
Gross Necropsy Report

Sex  F  Death Type  X  Work Performed  07/10/2007
Age  6 yrs  3 mon  Weight (KG)  5.91  Time Performed  07:45 AM

Gross Observation

| BODY AS A WHOLE | The animal is presented in good flesh. |
| STOMACH        | The gastric mucosa is thickened and variably erythematous, mainly in antrum and corpus near the junction with antrum. |

Gross Diagnosis  1  STOMACH INFLAMMATION GASTRITIS,NOS

Gross Comments  Tissues are collected per project protocol.

Measurements
Final Necropsy Report

Sex  M  Death Type  X  Work Performed  01/23/2008
Age  6 yrs 9 mon  Weight (KG)  9  Time Performed  11:20 AM

Final Observations  BODY AS A WHOLE  The animal is presented thin with an open ventral midline abdominal incision subsequent to experimental manipulation

Final Diagnosis  1  BODY AS A WHOLE INANITION

Final Comments  Tissues are collected per project protocol and to fulfill biospecimen requests – no tissues are saved for CNPRC histopathology.

Measurements
# Gross Necropsy Report

<table>
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<td>M</td>
<td>Death Type</td>
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</tbody>
</table>

| Gross Observation | BODY AS A WHOLE | The animal is presented in good flesh with an open ventral midline abdominal incision subsequent to experimental surgery. |

| Gross Diagnosis   | BODY AS A WHOLE NO REMARKABLE FINDINGS |
| Gross Comments    | Tissues are collected per project protocol and to fulfill biospecimen requests - none are saved for CNPRC histopathology. |

Measurements
Gross Necropsy Report

Animal ID: MMU 33250  
Report ID: 15782  

Sex: F  
Death Type: K  
Work Performed: 09/13/2007

Age: 6 yrs 4 mon  
Weight (KG): 5.76  
Time Performed: 09:30 AM

Gross Observation  
BODY AS A WHOLE: The animal is presented in good flesh.  
COLON: Colonic contents are soft.  
LYMPH NODES: Paracolic nodes are within normal limits to prominent.  
STOMACH: The gastric mucosa is variably erythematous.

Gross Diagnosis  
1. COLON DIARRHEA  
2. STOMACH INFLAMMATION GASTRITIS, NOS  
3. LYMPH NODE HYPERTROPHY (lymphadenopathy, mild – paracolic nodes)

Gross Comments  
Several tissues are collected to fulfill biospecimen requests, including ovaries, uterine tubes, urinary bladder, adrenal glands, esophagus, trachea, cerebellum, and urine. No other tissues are saved.

Measurements
Gross Necropsy Report

Sex  F  Death Type  K  Work Performed  11/19/2007
Age  6 yrs 6 mon  Weight (KG)  4.59  Time Performed  11:55 AM

Gross Observation

- BODY AS A WHOLE: This animal is thin; the bone are readily palpable.
- COLON: There is liquid green contents throughout the lumen and the wall is slightly thickened.
- LYMPH NODES: The mesenteric lymph node patch is moderately enlarged measuring approximately 4.5 cm in length.
- SKIN: A tattoo on the right medial thigh reads 33273. A moderate of green moist and dry fecal material is present on the skin and matted hair of the perianal region and ventral tail.
- STOMACH: The mucosa has fine granular surface appearance. The lumen contains an abundant amount of yellow green soft granular contents, the pH of the luminal contents is 4.
- URINARY BLADDER: The bladder contains approximately 1 cc of clear yellow urine; bililabstix results on a sample drawn by cysticentesis glucose, bilirubin, ketone, all negative, blood large or 3+, pH 6.5, protein negative.

Gross Diagnosis

1. COLON INFLAMMATION, DIFFUSE LOOSE STOOL
2. BODY AS A WHOLE INANITION

Gross Comments

The finding of liquid contents throughout the large intestine is consistent with a clinical diagnosis of colitis; additionally slight thickening of the wall of the large intestine may be due to a mucosal inflammatory cell infiltrate or structural changes. The results of microbiology and histopathology will be presented in the final necropsy report.

Measurements
Gross Necropsy Report

Animal ID  MMU  33280  Report ID  16401  Report Complete
Sex  M  Death Type  X  Work Performed  10/19/2007
Age  6 yrs 5 mon  Weight (KG)  8.52  Time Performed  09:30 AM

Gross Observation  BODY AS A WHOLE  The SIV inoculated animal is presented in good flesh.

Gross Diagnosis  1  BODY AS A WHOLE NO REMARKABLE FINDINGS  (SIV inoculated)

Gross Comments  Tissues are collected per project protocol.

Measurements
Gross Necropsy Report

Animal ID: MMU 33322  
Report ID: 17281  
Report Complete:  

Sex: F  
Death Type: K  
Work Performed: 12/07/2007  

Age: 6 yrs 7 mon  
Weight (KG): 4.57  
Time Performed: 10:00 AM  

Gross Observation

<table>
<thead>
<tr>
<th>Gross Observation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BODY AS A WHOLE</td>
<td>The animal is presented slightly thin and mildly dehydrated.</td>
</tr>
<tr>
<td>COLON</td>
<td>The colonic mucosa is diffusely thickened and erythematous, and contents are voluminous and liquid.</td>
</tr>
<tr>
<td>LYMPH NODES</td>
<td>Paracolic nodes are prominent to enlarged.</td>
</tr>
</tbody>
</table>

Gross Diagnosis

<table>
<thead>
<tr>
<th>Gross Diagnosis</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 BODY AS A WHOLE INANITION (mild) DEHYDRATION</td>
<td></td>
</tr>
<tr>
<td>2 COLONIC MUCOUS MEMBRANE INFLAMMATION, DIFFUSE COLITIS</td>
<td></td>
</tr>
<tr>
<td>3 LYMPH NODE HYPERTROPHY (lymphadenopathy - paracolic)</td>
<td></td>
</tr>
</tbody>
</table>

Gross Comments

Ovaries and uterine tubes are collected to fulfill biospecimen requests. A truncated set of tissues is saved in formalin, but no histopathology is to be performed at this time. Gastric pH = 1.5

Measurements
# Gross Necropsy Report

<table>
<thead>
<tr>
<th>Animal ID</th>
<th>MMU 33362</th>
<th>Report ID</th>
<th>19502</th>
<th>Report Complete</th>
<th>04/02/2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>M</td>
<td>Death Type</td>
<td>X</td>
<td>Work Performed 04/02/2008</td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>6 yrs 10 mon</td>
<td>Weight (KG)</td>
<td>15.44</td>
<td>Time Performed</td>
<td>09:30 AM</td>
</tr>
</tbody>
</table>

**Gross Observation**

BODY AS A WHOLE The animal is presented in robust good flesh.

**Gross Diagnosis**

1 BODY AS A WHOLE NO REMARKABLE FINDINGS PERFUSION (whole body perfusion)

**Gross Comments**

The whole body is perfused, and brain/spinal cord are collected for the investigator. A truncated set of tissues is saved in formalin, but no histopathology is to be performed at this time.

**Measurements**
Gross Necropsy Report

Animal ID  MMU  33414  Report ID  20181  Report Complete  05/15/2008
Sex  M  Death Type  X  Work Performed  05/15/2008
Age  6 yrs 11 mon  Weight (KG)  Time Performed  09:30 AM

Gross Observation

<table>
<thead>
<tr>
<th>Gross Observation</th>
<th>Body as a Whole</th>
<th>The animal is presented in good flesh.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Heart</td>
<td>The heart has a rounded profile, and the left ventricle appears dilated.</td>
</tr>
<tr>
<td></td>
<td>Spinal Cord</td>
<td>The spinal cord, dural surface, is discolored red at the site of surgical intervention.</td>
</tr>
</tbody>
</table>

Gross Diagnosis

1. BODY AS A WHOLE PERFUSION
2. HEART DILATATION (left ventricle)
3. SPINAL CORD HEMORRHAGE, LOCAL/FOCAL (at surgical site)

Gross Comments

The whole body is perfused, and brain and spinal cord are collected for the investigator. A truncated set of tissues is saved in formalin, but no histopathology is to be performed at this time.

Measurements
Gross Necropsy Report

Sex          F  Death Type  K  Work Performed  10/10/2007
Age         6 yrs 3 mon  Weight (KG)  5.77  Time Performed  11:00 AM

Gross Observation  BODY AS A WHOLE  The animal is presented in good flesh.
Gross Diagnosis   1  BODY AS A WHOLE PERFUSION (whole body perfusion)
Gross Comments   The animal is perfused to provide a specimen for anatomical study.

Measurements
**Gross Necropsy Report**

<table>
<thead>
<tr>
<th>Animal ID</th>
<th>Report ID</th>
<th>Report Complete</th>
</tr>
</thead>
<tbody>
<tr>
<td>MCY 33550</td>
<td>15300</td>
<td>08/17/2007</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sex</th>
<th>Death Type</th>
<th>Work Performed</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>K</td>
<td>08/17/2007</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age</th>
<th>Weight (KG)</th>
<th>Time Performed</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 yrs 11 mon</td>
<td>4.05</td>
<td>11:30 AM</td>
</tr>
</tbody>
</table>

**Gross Observation**

- **BODY AS A WHOLE**: The SRV+ animal is presented in good flesh.
- **LYMPH NODES**: Both peripheral and visceral nodes are generally prominent to enlarged.
- **SPLEEN**: The spleen is moderately enlarged.

**Gross Diagnosis**

1. **SPLEEN HYPERTROPHY** (splenomegaly)
2. **LYMPH NODES, GENERALIZED HYPERTROPHY** (lymphadenopathy)

**Gross Comments**

Tissues are collected to fulfill a biospecimen request (ovaries) and per project protocol – none are saved for CNPRC histopathology.

**Measurements**
Final Necropsy Report

Sex  F  Death Type  X  Work Performed  08/27/2007
Age  15 yrs 3 mon  Weight (KG)  

Final Observations
- DUODENUM: Samples were collected for investigators according to protocol.
- ILEUM: Samples were collected for investigators according to protocol.
- JEJUNUM: Samples were collected for investigators according to protocol.
- LIVER: Samples were collected for investigators according to protocol.

Final Diagnosis
1. DUODENUM NORMAL APPEARANCE
2. JEJUNUM NORMAL APPEARANCE
3. ILEUM NORMAL APPEARANCE
4. LIVER NORMAL APPEARANCE

Final Comments
Dye was injected into the lumen of the small intestine in amounts of 0.1, 0.5, and 1.0 ml and extended 3.5, 8.0, and 15 cm along the length of the mucosa respectively. At the 1.0 ml volume, the dye pooled and appeared to distend the small intestine for a length of approximately 8 cm. Samples of small intestine and liver were collected for investigators according to protocol. All tissues were taken by investigators. This is a gross and final necropsy report.

Measurements
# Gross Necropsy Report

<table>
<thead>
<tr>
<th>Animal ID</th>
<th>Report ID</th>
<th>Report Complete</th>
<th>Work Performed</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Sex</th>
<th>Death Type</th>
<th>Time Performed</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>X</td>
<td>11:25 AM</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age</th>
<th>Weight (KG)</th>
</tr>
</thead>
<tbody>
<tr>
<td>13 yrs 4 mon</td>
<td>7.57</td>
</tr>
</tbody>
</table>

**Gross Observation**

- BODY AS A WHOLE
  - The animal is presented in good flesh with an open ventral midline abdominal incision subsequent to experimental manipulation.

**Gross Diagnosis**

- 1 BODY AS A WHOLE NO REMARKABLE FINDINGS

**Gross Comments**

- Tissues are collected per project protocol and to fulfill biospecimen requests (ovaries, kidneys). No tissues are saved.

**Measurements**
Gross Necropsy Report

Sex  M  Death Type  K  Work Performed  09/11/2007
Age  5 yrs 6 mon  Weight (KG)  6.63  Time Performed  09:30 AM

Gross Observation

- BODY AS A WHOLE: The animal is presented in good flesh with multiple, mostly healed or healing, cutaneous lacerations.
- COLON: The colon is dilated with soft to liquid feces.
- LYMPH NODES: Paracolic nodes are within normal limits to prominent.

Gross Diagnosis

1. BODY AS A WHOLE TRAUMATIC ABNORMALITY (self trauma)
2. COLON DIARRHEA
3. LYMPH NODE HYPERTROPHY (lymphadenopathy, mild, paracolic nodes)

Gross Comments

Several tissues are collected to fulfill biopsecimen requests (kidneys, testes, seminal vesicles, lung, trachea, spleen lymph nodes, small intestine) - none are save for histopathology.

Measurements
# Gross Necropsy Report

<table>
<thead>
<tr>
<th>Animal ID</th>
<th>Report ID</th>
<th>Report Complete</th>
</tr>
</thead>
<tbody>
<tr>
<td>MMU 33718</td>
<td>17301</td>
<td></td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Sex</th>
<th>Work Performed</th>
<th>Age</th>
<th>Weight (KG)</th>
<th>Time Performed</th>
</tr>
</thead>
<tbody>
<tr>
<td>M</td>
<td>12/10/2007</td>
<td>5 yrs 9 mon</td>
<td>7.02</td>
<td>09:00 AM</td>
</tr>
</tbody>
</table>

**Gross Observation**

- BODY AS A WHOLE: This SIV inoculated animal is presented thin.
- SKIN: A roughly 1.0 cm diameter wound on the anterior aspect or the right ankle displays exuberant granulation tissue.
- STOMACH: The gastric mucosa is streaked with erythema, mainly in fundus and body.

**Gross Diagnosis**

1. STOMACH INFLAMMATION
2. SKIN OF SHIN INFLAMMATION, FOCAL GRANULOMATOUS

**Gross Comments**

Tissues are collected per project protocol.

**Measurements**
Gross Necropsy Report

Animal ID: MMU 33785  
Report ID: 14560  

Sex: F  
Death Type: X  

Age: 5 yrs 3 mon  
Weight (KG): 7.3  
Time Performed: 08:00 AM

Gross Observation:  
BODY AS A WHOLE  
The animal is presented in good flesh.

Gross Diagnosis:  
1  BODY AS A WHOLE NO REMARKABLE FINDINGS

Gross Comments:  
Tissues are collected per project protocol - none are saved for CNPRC histopathology.

Measurements
Gross Necropsy Report

Animal ID  MMU 33797  Report ID  18362  Report Complete  02/04/2008
Sex  M  Death Type  K  Work Performed  02/04/2008
Age  5 yrs 10 mon  Weight (KG)  7.74  Time Performed  12:00 AM

Gross Observation

GASTROINTESTINAL TRACT  Contents in the stomach and small intestine is within normal limits of amount and appearance; there is an abundant amount of thick liquid green contents throughout the cecum colon.

HEART  The inside and outside diameter of the left ventricle midway between the apex and base is 14 and 28mm, respectively.

SKIN  A tattoo on the right medial thigh reads 33797. Liquid green fecal material is flowing from the anal orifice and similar material is present on the perianal skin.

URINARY BLADDER  The lumen contains approximately 100 cc. of clear colorless urine; bililabstix results on a sample of urine drawn by cysticentesis: glucose, bilirubin, ketone, blood, and protein are all negative, pH between 6.5 and 7.

Gross Diagnosis 1  COLON AND CECUM, CS INFLAMMATION, DIFFUSE LOOSE STOOL

Gross Comments  The finding of liquid contents throughout the large intestine is consistent with a clinical diagnosis of diarrhea. Selected tissues were collected for the biospecimen request program and a variety of tissue are fixed in 10% buffered formalin for diagnostic pathology. The results of microbiology [small and large intestine] and histopathology will be presented in the final necropsy report.

Measurements
Gross Necropsy Report

Sex         M                Death Type  X                Work Performed 10/02/2007
Age         5 yrs 6 mon     Weight (KG) 9.12     Time Performed 09:05 AM

Gross Observation
HEART         The diameter of the left ventricle midway between the apex and base was 35 mm and the ventricular lumen diameter at that point was 19mm.
LYMPH NODES  Superficial and deep lymph nodes were moderately enlarged and prominent.
SPLEEN       The spleen was moderately enlarged measuring approximately 7 cm long and 1 cm in maximum thickness.

Gross Diagnosis
1  LYMPH NODES, GENERALIZED HYPERTROPHY SIV
2  SPLEEN HYPERTROPHY SIV

Gross Comments
This animal appeared to be in the proliferative phase of an SIV infection as evidenced by moderate enlargement of the superficial and deep lymph nodes, as well as the spleen. A variety of tissues were collected for and taken by investigators. The results of histopathology will be presented in the final necropsy report.

Measurements
# Gross Necropsy Report

<table>
<thead>
<tr>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>M</td>
<td>Death Type</td>
<td>K</td>
<td>Work Performed</td>
<td>12/14/2007</td>
</tr>
<tr>
<td>Age</td>
<td>5 yrs 8 mon</td>
<td>Weight (KG)</td>
<td>6.48</td>
<td>Time Performed</td>
<td>10:15 AM</td>
</tr>
</tbody>
</table>

## Gross Observation

<table>
<thead>
<tr>
<th>Gross Observation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>COLON</td>
<td>Multifocally there is a moderate number of red foci on the mucosal surface ranging up to 1mm in diameter. The colonic wall is moderately thickened.</td>
</tr>
<tr>
<td>GINGIVA</td>
<td>Dentition: full permanent set minus the upper left first incisor. Multifocally there reddening of the gingiva around the incisors and there is tarter along the gingival margin of the lower incisors.</td>
</tr>
<tr>
<td>ILEUM</td>
<td>Multifocally there are mucosal ulcerations that are visible as red foci on the serosal surface.</td>
</tr>
<tr>
<td>JOINT</td>
<td>Bilaterally the articular cartilage of the distal femur is multifocally irregular and depressed involving approximately 20% of the surface on each side; on the left side there is also reddening of the ulcerations.</td>
</tr>
<tr>
<td>KIDNEY</td>
<td>Bililabstix results on a sample of urine drawn by cysticentesis: glucose, ketone and bilirubin are all negative, blood hemolyzed trace, protein trace.</td>
</tr>
<tr>
<td>SKELETAL MUSCLE</td>
<td>There is moderate pale tan steaking of the skeletal muscle surrounding the right sciatic nerve.</td>
</tr>
<tr>
<td>SKIN</td>
<td>A tattoo on the right medial thigh reads 33828. Light brown fecal material is adherent to the skin and matted hair of the ventral tail and perianal region.</td>
</tr>
<tr>
<td>STOMACH</td>
<td>the amount and appearance of the contents is within normal limits</td>
</tr>
</tbody>
</table>

## Gross Diagnosis

1. KNEE JOINT INFLAMMATION, ULCERATIVE
2. SMALL INTESTINE INFLAMMATION, ULCERATIVE
3. COLON INFLAMMATION, MULTIFOCAL
4. LEG NECROSIS

## Gross Comments

The finding of bilateral articular cartilage ulceration in the distal femurs can account for the clinical signs of lameness. Additionally there was multifocal ulcerative enteritis and multifocal reddening of the colonic mucosa. The etiology of the right hindlimb skeletal muscle necrosis in the right hindlimb may be due to direct trauma or impaired blood supply. The results of microbiology and histopathology will be presented in the final necropsy report.

## Measurements
# Gross Necropsy Report

<table>
<thead>
<tr>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>F</td>
<td>Death Type</td>
<td>X</td>
<td>Work Performed</td>
<td>11/27/2007</td>
</tr>
<tr>
<td>Age</td>
<td>5 yrs 8 mon</td>
<td>Weight (KG)</td>
<td>7.4</td>
<td>Time Performed</td>
<td>01:00 PM</td>
</tr>
</tbody>
</table>

**Gross Observation**  
BODY AS A WHOLE  
The animal is presented in good flesh with an openventral midabdominal incision subsequent to experimental surgical manipulation.

**Gross Diagnosis**  
1  
BODY AS A WHOLE NO REMARKABLE FINDINGS

**Gross Comments**  
Tissues are collected per project protocol and to fulfill biospecimen requests. No tissues are saved for CNPRC histopathology.

**Measurements**
Gross Necropsy Report

Sex  M  Death Type  X  Work Performed 09/25/2007
Age  5 yrs 6 mon  Weight (KG) 8.27  Time Performed 09:00 AM

Gross Observation

- BODY AS A WHOLE: The SIV inoculated animal is presented thin.
- LYMPH NODES: Lymph nodes are generally prominent to enlarged.
- RECTUM: The rectal mucosa is multifocally erythematous.
- SPLEEN: The spleen is moderately enlarged.

Gross Diagnosis

1. Spleen Hypertrophy (splenomegaly)
2. Lymph Nodes, Generalized Hypertrophy (lymphadenopathy)
3. Rectal Mucous Membrane Inflammation, Multifocal Proctitis

Gross Comments

Tissues are collected per project protocol.

Measurements
# Gross Necropsy Report

|-----------|-----------|-----------------|-----|------------|----------------|-----------------|-----|-----------------|

<table>
<thead>
<tr>
<th>Age</th>
<th>Weight (KG)</th>
<th>Time Performed</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 yrs 4 mon</td>
<td>5.55</td>
<td>08:30 AM</td>
</tr>
</tbody>
</table>

**Gross Observation**

<table>
<thead>
<tr>
<th>Body Part</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BODY AS A WHOLE</td>
<td>The SIV/bartonella inoculated animal is presented thin and dehydrated.</td>
</tr>
<tr>
<td>COLON</td>
<td>The colonic mucosa is thickened, and contents are soft to liquid.</td>
</tr>
<tr>
<td>LYMPH NODES</td>
<td>Paracolic nodes are prominent to enlarged.</td>
</tr>
<tr>
<td>SKIN</td>
<td>There is a small supernumerary teat below the left normal teat.</td>
</tr>
<tr>
<td>SPLEEN</td>
<td>The spleen is mildly enlarged.</td>
</tr>
<tr>
<td>THYMUS</td>
<td>The thymus is small for an animal this age.</td>
</tr>
</tbody>
</table>

**Gross Diagnosis**

1. BODY AS A WHOLE INANITION (SIV/bartonella)
2. COLONIC MUCOUS MEMBRANE INFLAMMATION, DIFFUSE COLITIS
3. LYMPH NODE HYPERTROPHY (lymphadenopathy - paracolic)
4. SPLEEN HYPERTROPHY (splenomegaly, mild)
5. THYMUS ATROPHY
6. SKIN OF CHEST ABNORMAL APPEARANCE (supernumerary teat)

**Gross Comments**

Tissues are collected per project protocol.

**Measurements**
# Gross Necropsy Report

<table>
<thead>
<tr>
<th></th>
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<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>M</td>
<td>Death Type</td>
<td>X</td>
<td>Work Performed</td>
<td>10/18/2007</td>
</tr>
<tr>
<td>Age</td>
<td>5 yrs 6 mon</td>
<td>Weight (KG)</td>
<td>7.35</td>
<td>Time Performed</td>
<td>10:15 AM</td>
</tr>
</tbody>
</table>

### Gross Observation

| BODY AS A WHOLE | The SIV infected animal is presented in good flesh. |
| HEART           | The left atrioventricular valve is deformed by rough surfaced nodular growths, the largest approximately 0.4 cm diameter. |
| KIDNEY          | Irregular areas of pallor are present in cortex and papilla. |
| LYMPH NODES     | Lymph node enlargement is generalized. |
| SPLEEN          | The spleen is markedly enlarged with a prominent follicular pattern of pallor on capsular and cut surfaces. |

### Gross Diagnosis

1. **BODY AS A WHOLE** *(SIV infected)*
2. **SPLEEN HYPERTROPHY** *(splenomegaly)*
3. **LYMPH NODES, GENERALIZED HYPERTROPHY** *(lymphadenopathy)*
4. **ATRIOVENTRICULAR VALVE ENDOCARDITIS, VERRUCOUS** *(left AV valve)*
5. **KIDNEY ABNORMAL APPEARANCE** *(irregular areas of pallor)*

### Gross Comments

Tissues are collected per project protocol.

### Measurements
# Gross Necropsy Report

**Animal ID** | MMU 34029  
---|---
**Report ID** | 16102  
**Age** | 5 yrs 5 mon  
**Weight (KG)** | 7.22  
**Sex** | M  
**Death Type** | X  
**Report Complete** | 10/02/2007  
**Work Performed** | 10/02/2007  
**Time Performed** | 10:10 AM  

## Gross Observation

<table>
<thead>
<tr>
<th>Observation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>GINGIVA</td>
<td>The marginal and papillary gingiva was moderately reddened and swollen. There was a small amount of dental calculus or tartar on the upper and lower incisors and canines along the gingival margin.</td>
</tr>
<tr>
<td>HEART</td>
<td>The diameter of the left ventricle midway between the apex and base was 32 mm and the diameter of the left ventricle lumen at that point was 17 mm.</td>
</tr>
<tr>
<td>LYMPH NODES</td>
<td>Superficial and deep lymph nodes were markedly enlarged and prominent.</td>
</tr>
<tr>
<td>SPLEEN</td>
<td>The spleen was moderately enlarged measuring approximately 7 cm long and 1.5 cm in maximum thickness.</td>
</tr>
<tr>
<td>THYMUS</td>
<td>The thymus was moderately reduced from expected size in the anterior mediastinum.</td>
</tr>
</tbody>
</table>

## Gross Diagnosis

<table>
<thead>
<tr>
<th>Number</th>
<th>Diagnosis</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>LYMHP NODES, GENERALIZED HYPERSTROPHY</td>
<td>SIV</td>
</tr>
<tr>
<td>2</td>
<td>SPLEEN HYPERSTROPHY</td>
<td>SIV</td>
</tr>
<tr>
<td>3</td>
<td>THYMUS INVOLUTION</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>GINGIVAL MUCOUS MEMBRANE INFLAMMATION</td>
<td>Dental calculus or tartar</td>
</tr>
</tbody>
</table>

## Gross Comments

This animal was in the proliferative phase of an SIV infection as evidenced by prominent superficial and deep lymph nodes as well as splenomegaly. A variety of tissues were collected for and taken by investigators. The results of histopathology will be presented in the final necropsy report.
# Gross Necropsy Report

<table>
<thead>
<tr>
<th>Animal ID</th>
<th>Report ID</th>
<th>Report Complete</th>
</tr>
</thead>
<tbody>
<tr>
<td>MMU 34037</td>
<td>17661</td>
<td>12/28/2007</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Sex</th>
<th>Death Type</th>
<th>Work Performed</th>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Age</th>
<th>Weight (KG)</th>
<th>Time Performed</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 yrs 8 mon</td>
<td>6.03</td>
<td>10:00 AM</td>
</tr>
</tbody>
</table>

**Gross Observation**

- **COLON**: The wall is diffusely moderately thickened.
- **GASTROINTESTINAL TRACT**: Contents is within normal limits in the stomach and small intestine; however there is liquid contents throughout the colon.
- **HEART**: The inside and outside diameter of the left ventricle midway between the apex and base is 11 and 23 mm respectively.
- **LYMPH NODES**: The mesenteric lymph node patch is approximately 4 cm. in diameter and the colonic lymph nodes range from approximately 0.5 to 1.2 cm long.
- **SKIN**: A tattoo on the right medial thigh reads 34037. This animal is very thin; the bones are readily palpable and there is scant adipose tissue throughout the subcutis and body cavities. An abundant amount of moist green fecal material is present on the skin and matted hair of the perianal region and the ventral tail.
- **URINARY BLADDER**: The lumen contains approximately 5 cc. of yellow clear urine; bililabstix results on a sample of urine drawn by cysticentesis: glucose, bilirubin, ketone, and blood all negative, ph 5, protein 2+

**Gross Diagnosis**

1. BODY AS A WHOLE INANITION
2. COLON INFLAMMATION, DIFFUSE LOOSE STOOL
3. MESENTERIC LYMPH NODE HYPERTROPHY and colonic

**Gross Comments**

The of liquid contents throughout the colon with accompanying thickened wall is consistent with the clinical diagnosis of colitis. Selected tissues are collected for the biospecimen request program and a variety of tissues are fixed in 10% buffered formalin for diagnostic pathology. The results of microbiology [small and large intestine] and histopathology will be presented in the final necropsy report.

**Measurements**
Gross Necropsy Report

Sex          F                  Death Type    K                  Work Performed    09/14/2007
Age          5 yrs 4 mon      Weight (KG)    3.88              Time Performed    02:30 PM

Gross Observation

BODY AS A WHOLE
- The animal is presented markedly thin and severely dehydrated.

COLON
- The coloni cmucosa is thickened, and the lumen is dilated with thin liquid contents.

LYMPH NODES
- Paracolic, and to a lesser extent mesenteric, nodes are prominent to enlarged.

THYMUS
- The thymus is small for an animal this age.

Gross Diagnosis

1. BODY AS A WHOLE INANITION DEHYDRATION
2. BODY AS A WHOLE DIARRHEA
3. COLON INFLAMMATION COLITIS
4. LYMPH NODE HYPERTROPHY (lymphadenopathy - paracolic, mesenteric)
5. THYMUS ATROPHY

Gross Comments

A full set of tissues is saved in formalin, but no histopathology is to be performed at this time. The colon is swabbed for bacterial culture.

Measurements
### Gross Necropsy Report

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<thead>
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</thead>
<tbody>
<tr>
<td>Sex</td>
<td>M</td>
<td>Death Type</td>
<td>X</td>
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<td>08/13/2007</td>
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<tr>
<td>Age</td>
<td>5 yrs 3 mon</td>
<td>Weight (KG)</td>
<td>8.68</td>
<td>Time Performed</td>
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</table>

<table>
<thead>
<tr>
<th>Gross Observation</th>
<th>BODY AS A WHOLE</th>
<th>The animal is presented in good flesh with an open midline abdominal incision subsequent to experimental surgery; mesenteric vessels display areas of local hemorrhage associated with blood sampling.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>STOMACH</td>
<td>The gastric mucosa is thickened and variably erythematous.</td>
</tr>
<tr>
<td>Gross Diagnosis</td>
<td>1 STOMACH INFLAMMATION GASTRITIS,NOS</td>
<td></td>
</tr>
<tr>
<td>Gross Comments</td>
<td>Tissues are collected per project protocol and to fulfill biospecimen requests.</td>
<td></td>
</tr>
</tbody>
</table>

Measurements
Gross Necropsy Report

Animal ID: MMU 34219  
Report ID: 16381  
Report Complete: 10/18/2007

Sex: M  
Death Type: X  
Work Performed: 10/18/2007

Age: 5 yrs 5 mon  
Weight (KG): 8.02  
Time Performed: 09:00 AM

Gross Observation

BODY AS A WHOLE
The SIV infected animal is presented in good flesh.

ESOPHAGUS
The musculature of the esophagus is prominently thickened in the distal one fourth to one third of its length.

LUNG
Extensive fibrous adhesions between parietal and visceral pleura connect the left caudal lung lobe to the thoracic wall.

LYMPH NODES
Lymph nodes are generally enlarged.

SPLEEN
The spleen is markedly enlarged with a prominent follicular pattern of pallor on capsular and cut surfaces.

STOMACH
The gastric mucosa is thickened and erythematous, particularly in the corpus at the junction with antrum.

Gross Diagnosis

1. BODY AS A WHOLE (SIV infected)
2. SPLEEN HYPERTROPHY (splenomegaly)
3. LYMPH NODES, GENERALIZED HYPERTROPHY (lymphadenopathy)
4. STOMACH INFLAMMATION, FOCAL GASTRITIS, NOS
5. LUNG ADHESIONS, FIBROUS
6. ESOPHAGUS HYPERTROPHY (muscle hypertrophy, distal esophagus)

Gross Comments
Tissues are collected per project protocol.

Measurements
Gross Necropsy Report

Animal ID  MMU 34259  Report ID  18521  Report Complete  02/13/2008
Sex  F  
Age  5 yrs 8 mon  Weight (KG)  2.97  Time Performed  10:15 AM

Gross Observation

BODY AS A WHOLE
This animal is very thin, the bones are readily palpable. There is very little adipose tissue throughout the body cavities and in the subcutis.

GASTROINTESTINAL TRACT
There was no contents in the stomach, duodenum, jejunum, and proximal ileum; in the distal ileum there is a moderate amount of soft green granular contents. Throughout the cecum and large intestine there is a moderate amount of green contents; this contents is thick liquid in the cecum and proximal 3/4 of the colon and semi-solid in the distal colon and rectum.

SKIN
A tattoo on the right medial thigh reads 34259. A moderate amount of dry green fecal material is adherent to the skin and matted hair of the perianal region and the ventral tail.

Gross Diagnosis

1 COLON AND CECUM, CS INFLAMMATION, DIFFUSE LOOSE STOOL
2 BODY AS A WHOLE INANITION

Gross Comments
The finding of semi-solid contents in the distal colon and rectum is consistent with clinical diagnosis of diarrhea. Selected tissue were collected for the biospecimen request program and a variety of tissues were fixed in 10% buffered formalin. The results of microbiology [small and large intestine] and histopathology will be presented in the final necropsy report.

Measurements
Gross Necropsy Report

<table>
<thead>
<tr>
<th>Animal ID</th>
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<tr>
<td>MMU 34297</td>
<td>15982</td>
<td>09/25/2007</td>
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<th>Work Performed</th>
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<tbody>
<tr>
<td>M</td>
<td>X</td>
<td>09/25/2007</td>
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<tr>
<th>Age</th>
<th>Weight (KG)</th>
<th>Time Performed</th>
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<tbody>
<tr>
<td>5 yrs 3 mon</td>
<td>7.44</td>
<td>10:00 AM</td>
</tr>
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</table>

Gross Observation

<table>
<thead>
<tr>
<th>Gross Observation</th>
</tr>
</thead>
<tbody>
<tr>
<td>BODY AS A WHOLE</td>
</tr>
<tr>
<td>The SIV inoculated animal is presented thin.</td>
</tr>
<tr>
<td>LYMPH NODES</td>
</tr>
<tr>
<td>Lymph nodes are generally prominent to enlarged.</td>
</tr>
<tr>
<td>SPLEEN</td>
</tr>
<tr>
<td>The spleen is moderately enlarged.</td>
</tr>
</tbody>
</table>

Gross Diagnosis

<table>
<thead>
<tr>
<th>Gross Diagnosis</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1 SPLEEN HYPERTROPHY</td>
<td>(splenomegaly)</td>
</tr>
<tr>
<td>2 LYMPH NODES, GENERALIZED HYPERTROPHY</td>
<td>(lymphadenopathy)</td>
</tr>
</tbody>
</table>

Gross Comments

Tissues are collected per project protocol.

Measurements
Final Necropsy Report

Animal ID  MMU 34308  Report ID  14720  Report Complete
Sex       M  Death Type  X  Work Performed  07/18/2007
Age  5 yrs 1 mon  Weight (KG)  8.61  Time Performed  11:00 AM

Gross Observation  BODY AS A WHOLE  The animal is presented thin and mildly dehydrated with marked abdominal distention, the latter with resembling fluid accumulation - opening the abdomen reveals a diffuse, severe, fibrinous peritonitis with prodigious clear, dark yellow/orange ascites.

GALLBLADDER  The gallbladder and major bile ducts are thickened and opaque.

GASTROINTESTINAL TRACT  The mucosa throughout the GIT is thickened, and colon contents are liquid; all segments of the GIT are firmly adherent to each other and encased in a fibrinous "membrane".

HEART  The heart is diffusely flaccid but otherwise within normal limits.

LIVER  The liver is mildly enlarged and very firm and is encased in a fibrinous "capsule" which is adherent to diaphragm cranially and GIT caudally.

LUNG  The lungs are variably mottled with a dark tan pallor.

LYMPH NODES  Lymph nodes are generally markedly enlarged.

SPLEEN  The spleen is mildly enlarged and encased in a fibrinous "capsule".

THYMUS  The thymus is virtually undetectable, i.e. small for an animal this age.

Gross Diagnosis
1  BODY AS A WHOLE INANITION  (SHIV inoculated)
2  PERITONEUM INFLAMMATION, FIBRINOUS PERITONITIS, NOS
3  LYMPH NODES, GENERALIZED HYPTERTROPHY  (lymphadenopathy)
4  GASTROINTESTINAL TRACT INFLAMMATION ENTEROCOLITIS  (gastroenterocolitis)
5  LIVER HYPTERTROPHY AMYLOIDOSIS
6  GALLBLADDER AND COMMON BILE DUCT, CS INFLAMMATION CHOLEDOCHITIS  (choledochocystitis)
7  SPLEEN HYPTERTROPHY  (splenomegaly)
8  THYMUS ATROPHY

Gross Comments  Tissues are collected per project protocol.

Final Observations  BRAIN  choroid plexus - choroid plexitis, subacute, diffuse, moderate to severe, with multifocal follicular lymphocytic hyperplasia.
meninges - meningitis, subacute, perivascular, very mild, with multifocal subarachnoid hemorrhage, mild.
brain - encephalitis, subacute, multifocally perivascular very mild.
<table>
<thead>
<tr>
<th>Organ</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>COLON</td>
<td>serositis, chronic, diffuse, severe, with marked plasmacytic, lymphocytic inflammation and multifocal follicular lymphocytic hyperplasia on a background of extensive fibrosis.</td>
</tr>
<tr>
<td>GALLBLADDER</td>
<td>cholecystitis, subacute to chronic, diffuse, moderate to severe.</td>
</tr>
<tr>
<td>HEART</td>
<td>necrosis, subacute, ischemic, multifocal, mild; myocarditis/epicarditis, subacute, multifocal, very mild, with mild multifocal fiber disarray.</td>
</tr>
<tr>
<td>ILEUM</td>
<td>serositis, chronic, diffuse, severe, with marked plasmacytic, lymphocytic inflammation and multifocal follicular lymphocytic hyperplasia on a background of extensive fibrosis; hyperplasia, lymphoid, multifocal to coalescing (Peyer's patches), moderate.</td>
</tr>
<tr>
<td>JEJUNUM</td>
<td>serositis, chronic, diffuse, severe, with marked plasmacytic, lymphocytic inflammation and multifocal follicular lymphocytic hyperplasia on a background of extensive fibrosis.</td>
</tr>
<tr>
<td>KIDNEY</td>
<td>nephritis, subacute, multifocal, mild, with multifocally scattered follicular lymphocytic hyperplasia.</td>
</tr>
<tr>
<td>LIVER</td>
<td>hepatitis, subacute to chronic, multifocal (predominantly periportal), moderate, with hepatocyte necrosis, fibrosis, and marked biliary hyperplasia; serositis, chronic, diffuse, severe.</td>
</tr>
<tr>
<td>LUNG</td>
<td>A severe, diffuse bronchitis/bronchiolitis is composed predominantly of eosinophils admixed with lesser numbers of histiocytes and lymphocytes and a few neutrophils; scattered in the parenchyma are several variably sized but generally small aggregates of cells comprising histiocytes (including occasional multinucleate cells), lymphocytes, and rare neutrophils or eosinophils; in some areas the histiocytes have &quot;ground glass&quot; like cytoplasm suggesting the possibility of a mild pneumocystis infection, and others contain pigmented material – either inhaled contaminants or hemosiderin.</td>
</tr>
<tr>
<td>LYMPH NODES</td>
<td>hyperplasia, lymphoid, diffuse (mainly paracortical), moderate to marked, with varying levels of early depletion.</td>
</tr>
<tr>
<td>PANCREAS</td>
<td>NSL.</td>
</tr>
<tr>
<td>PENIS</td>
<td>NSL.</td>
</tr>
<tr>
<td>PROSTATE GLAND</td>
<td>NSL.</td>
</tr>
<tr>
<td>SEMINAL VESICLE</td>
<td>hyperplasia, lymphoid, follicular, multifocal, very mild.</td>
</tr>
<tr>
<td>SPINAL CORD</td>
<td>spinal cord meninges – meningitis, subacute, multifocal to diffuse, mild to moderate. spinal nerves – perineuritis, subacute, multifocal, mild to moderate.</td>
</tr>
<tr>
<td>SPLEEN</td>
<td>fibromatosis, capsular, diffuse, moderate to severe, with mononuclear inflammation comprising mainly plasma cells and lymphocytes.</td>
</tr>
<tr>
<td>TESTIS</td>
<td>epididymis – hyperplasia, lymphoid, follicular,</td>
</tr>
</tbody>
</table>
multifocal, moderate to severe.
URINARY BLADDER  serositis, chronic, diffuse, moderate to severe, with fibromatosis.

<table>
<thead>
<tr>
<th>Final Diagnosis</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>1  GASTROINTESTINAL TRACT INFLAMMATION, CHRONIC DIFFUSE</td>
<td>(retroperitoneal fibromatosis)</td>
</tr>
<tr>
<td>2  LYMPH NODE HYPERPROPHY LYMPHOCYTE PRODUCTION, INCREASED</td>
<td>(lymphadenopathy)</td>
</tr>
<tr>
<td>3  LUNGS (BOTH) INFLAMMATION, GRANULOMATOUS PNEUMONIA,NOS</td>
<td>(bronchitis/bronchiolitis)</td>
</tr>
<tr>
<td>4  BRONCHUS INFLAMMATION, SUBACUTE</td>
<td>(biliary hyperplasia)</td>
</tr>
<tr>
<td>5  GALLBLADDER AND COMMON BILE DUCT, CS INFLAMMATION, CHRONIC CHOLECYSTITIS</td>
<td>(very mild)</td>
</tr>
<tr>
<td>6  BILE DUCT AND LIVER, CS HYPERPLASIA</td>
<td>(very mild)</td>
</tr>
<tr>
<td>7  LIVER INFLAMMATION, SUBACUTE HEPATITIS,NOS</td>
<td>(very mild with acute ischemic necrosis)</td>
</tr>
<tr>
<td>8  KIDNEY INFLAMMATION, SUBACUTE NEPHRITIS INTERSTITIAL</td>
<td></td>
</tr>
<tr>
<td>9  HEART INFLAMMATION MYOCARDITIS</td>
<td></td>
</tr>
<tr>
<td>10 BRAIN AND MENINGES, CS INFLAMMATION MENINGOENCEPHALITIS</td>
<td></td>
</tr>
</tbody>
</table>

Measurements
# Gross Necropsy Report

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>F</td>
<td>Death Type</td>
<td>K</td>
<td>Work Performed</td>
<td>01/11/2008</td>
</tr>
<tr>
<td>Age</td>
<td>5 yrs 7 mon</td>
<td>Weight (KG)</td>
<td>6.14</td>
<td>Time Performed</td>
<td>09:15 AM</td>
</tr>
</tbody>
</table>

## Gross Observation

BODY AS A WHOLE

The animal is presented in good flesh with the right arm bandaged subsequent accidental trauma.

## Gross Diagnosis

1. BODY AS A WHOLE TRAUMATIC ABNORMALITY

## Gross Comments

Tissues are collected to fulfill biospecimen requests, but none are save for histopathology. Gastric pH = 5.

## Measurements
## Gross Necropsy Report

<table>
<thead>
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</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>M</td>
<td>Death Type</td>
<td>X</td>
<td>Work Performed</td>
<td>11/06/2007</td>
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<tr>
<td>Age</td>
<td>5 yrs 4 mon</td>
<td>Weight (KG)</td>
<td>10.24</td>
<td>Time Performed</td>
<td>09:30 AM</td>
</tr>
</tbody>
</table>

### Gross Observation
- **B**ODY **A**S **A** **W**HOLE
  - The animal is presented in good flesh.

### Gross Diagnosis
- 1. **B**ODY **A**S **A** **W**HOLE **P**ERFUSION

### Gross Comments
- The whole body is perfused, and tissues are collected per project protocol. A truncated set of tissues is saved in formalin, but no histopathology is to be performed at this time.

### Measurements
### Gross Necropsy Report

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
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<td>F</td>
<td>Death Type</td>
<td>K</td>
<td>Work Performed</td>
<td>10/10/2007</td>
</tr>
<tr>
<td>Age</td>
<td>5 yrs 3 mon</td>
<td>Weight (KG)</td>
<td>4.83</td>
<td>Time Performed</td>
<td>09:30 AM</td>
</tr>
</tbody>
</table>

**Gross Observation**

BODY AS A WHOLE  The animal is presented thin.

**Gross Diagnosis**

1  BODY AS A WHOLE PERFUSION  (whole body perfusion)

**Gross Comments**

The animal is perfused to provide a specimen for anatomical study.

**Measurements**
Gross Necropsy Report

Sex  M  Death Type  X  Work Performed  06/22/2007
Age  4 yrs 11 mon  Weight (KG)  5.88  Time Performed  09:30 AM

Gross Observation

BODY AS A WHOLE  The SIV inoculated animal is presented thin and dehydrated with liquid stool at the perianal region and base of tail.

COLON  The colonic mucosa is diffusely thickened and variably erythematous, and colon contents are liquid.

GALLBLADDER  The wall of the gallbladder and major bile ducts is mildly to moderately thickened, and there is a focal white thickening, roughly 0.6 cm diameter, at the tip of the gallbladder.

JEJUNUM  The mucosa of the small intestine is mildly thickened.

LYMPH NODES  Lymph nodes, particularly those associated with the gastrointestinal tract, are prominent to enlarged.

SPLEEN  The spleen is mildly enlarged.

STOMACH  The gastric mucosa is thickened with a band of red stippling at the junction of corpus and antrum.

Gross Diagnosis

1  BODY AS A WHOLE INANITION DEHYDRATION
2  LYMPH NODES, GENERALIZED HYPERTROPHY (lymphadenopathy)
3  COLON INFLAMMATION COLITIS
4  STOMACH INFLAMMATION GASTRITIS,NOS
5  JEJUNUM AND ILEUM INFLAMMATION ENTEROCOLITIS
6  GALLBLADDER AND COMMON BILE DUCT, CS INFLAMMATION (choledochocystitis)

Gross Comments  Tissues are collected per project protocol - none are saved for CNPRC histopathology.

Measurements
Gross Necropsy Report

Sex F  Death Type K  Work Performed 11/20/2007
Age 19 yrs 8 mon  Weight (KG) 3.7  Time Performed 11:00 AM

Gross Observation

CECUM
The lumen contains an abundant amount of green granular soft contents.

COLON
Seven centimeters proximal to the anal-rectal junction the colon is distended to a diameter of 3 cm for a length of 22 cm proximally. Approximately 10% of the serosal surface of this distended segment is discolored tan to pinkish-tan.

LUNG
Multifocally on the pleural surface there are a moderate number of cystic structures ranging from 2 to 8 mm in diameter and consistent with lung mite infestation. Multifocally there is fibrous adhesion of the caudal margin of the caudal lung lobes to the parietal pleura.

SKIN
A tattoo on the skin of the right medial thigh reads 34403.

URINARY BLADDER
The lumen contains approximately 3 cc of clear yellow urine; billilabstix results on a sample drawn by cysticentesis: bilirubin, glucose, ketone, and blood are all negative, pH 7.5, protein1+ or 30 mg/dl.

Gross Diagnosis
1 COLON IMPACTION  Megacolon
2 LUNG INFLAMMATION ACARIASIS

Gross Comments
The distended colonic segment containing an abundant of formed contents is consistent with the clinical diagnosis of impaction and was probably secondary to megacolon which has been reported in female cynomolgus monkeys. The results of histopathology will be reported in the final necropsy report..

Measurements
Gross Necropsy Report

Sex  F  Death Type  K  Work Performed  12/13/2007
Age  16 yrs 9 mon  Weight (KG)  4.53  Time Performed  11:40 AM

Gross Observation

GASTROINTESTINAL TRACT
The appearance and amount of contents is within normal limits.

GINGIVA
Full set of adult dentition with moderate wear of the cheek teeth. There are scattered black foci up to approximately 0.5 mm in diameter on the surface of the teeth and black discoloration of the gingival margin along the lower incisors.

HEART
The inside anad outside diameter of the left ventricle midway between the apex and base is 12 and 22 mm respectively.

LUNG
Multifocally there are fibrous adhesions to the parietal pleura and scattered dome-shaped translucent foci measuring 2-3 mm in diameter consistent with lung mite infestation.

LYMPH NODES
The right inguinal and obturator lymph nodes are markedly enlarged.

SKELETAL MUSCLE
The skeletal muscle of the right hindlimb has a pale light red brown appearance.

SKIN
A tattoo on the right medial thigh reads 34407. The skin of the right hindlimb has a splotchy gray appearance.

URINARY BLADDER
Bililabstix results: glucose, bilirubin, ketone and blood are all negative, pH 6.5, protein trace.

Gross Diagnosis
1  UTERUS ADHESIONS, FIBROUS  omental-uterine fibrous adhesions
2  LYMPH NODE HYPERTROPHY  lymphadenopathy, inguinal and obturator, right side
3  LUNG INFLAMMATION, MULTIFOCAL MITES

Gross Comments
Pallor of deep tissues of the right hindlimb and right side lymphadenopathy of the hindlimbs is consistent with a resolving inflammatory process which was diagnosed clinically. The results of microbiology and histopathology will be presented in the final necropsy report.

Measurements
Gross Necropsy Report

Animal ID  MMU  34418  Report ID  18082  Report Complete  01/16/2008
Sex  M  Death Type  X  Work Performed  01/16/2008
Age  5 yrs 4 mon  Weight (KG)  34.418  Time Performed  01:30 PM

Gross Observation  BODY AS A WHOLE  The animal is presented thin and very pale with an open ventral midline abdominal incision subsequent to experimental manipulation.

Gross Diagnosis  1  BODY AS A WHOLE INANITION ANEMIA

Gross Comments  Tissues are collected per project protocol and to fulfill biospecimen requests – no other tissues are saved.

Measurements
Gross Necropsy Report

Animal ID: MMU 34459  
Report ID: 16601  
Report Complete: 10/30/2007  
Sex: F  
Death Type: K  
Work Performed: 10/30/2007  
Age: 13 yrs 4 mon  
Weight (KG): 5.58  
Time Performed: 10:00 AM

Gross Observation

**BONE**
At the site of the missing mandibular teeth there is a ventral arching boney deficit. The bone at the mandibular symphasis is softened and the lower incisors are freely movable. Ventrally, the right mandibular ramus is approximately 5mm in greatest width, and the left mandibular ramus is 15 mm wide maximally and has a homogeneous light reddish tan appearance.

**GASTROINTESTINAL TRACT**
There is a moderate to an abundant amount of contents within normal limits of appearance throughout the tract.

**GINGIVA**
This animal has an adult set of dentition; the following teeth are missing on the lower left arcade: PM 1 and 2, M 1 and 2.

**HEART**
The outside and inside diameter of the left ventricle midway between the apex and base is 34 and 20 mm respectively.

**LYMPH NODES**
The cervical lymph nodes are slightly enlarged.

**SKIN**
A tattoo on the right medial thigh reads 34459.

**URINARY BLADDER**
The bladder contains approximately 5 cc of light yellow turbid urine; bililabstix results on a sample of urine drawn by cysticentesis: glucose, bilirubin, ketone, and blood are all negative, pH between 8 and 8.5, protein trace.

**UTERUS**
There fibrous adhesions of the omentum to the uterine fundus and the parietal peritoneum of the ventral abdominal midline.

Gross Diagnosis
1. MANDIBLE MASS, LOCALIZED  
possible neoplasia

Gross Comments
The homogeneous expansion of the left mandibular ramus with accompanying softening of the bone and loss of cheek teeth is compatible with the lytic lesion seen clinically and is suggestive of a possible neoplasia. A variety of tissues are fixed in 10% formalin; the results of histopathology and impression smear of the mandibular mass will be presented in the final necropsy report.

Measurements
Gross Necropsy Report

Animal ID: MMU 34488  
Report ID: 17221  
Sex: M  
Death Type: X  
Work Performed: 12/04/2007  
Age: 13 yrs 7 mon  
Weight (KG): 7.6  
Time Performed: 09:30 AM

Gross Observation

BODY AS A WHOLE  
The animal is presented markedly thin with severe kyphosis and prominent subcutaneous edema particularly over the right biceps area and chest.

JOINT  
The right shoulder joint is arthritic with diffuse thinning and multifocal erosion/pitting of articular cartilage.

LUNG  
The lungs are diffusely stippled with pin-point black foci (anthracosis), and there are multiple irregularly shaped areas of atelectasis at the periphery of some lobes.

STOMACH  
The gastric mucosa is irregularly thickened and erythematous, most prominently in the antral area.

Gross Diagnosis

1. BODY AS A WHOLE PERFUSION (brain/spinal cord perfusion)
2. BODY AS A WHOLE INANITION
3. STOMACH INFLAMMATION, PROLIFERATIVE NOS GASTRITIS,NOS
4. SKELETAL SYSTEM KYPHOSIS (T-10600)
5. SHOULDER JOINT INFLAMMATION, EROSIVE ARTHRITIS,NOS
6. LUNGS (BOTH) ABNORMAL APPEARANCE ANTHRACOSIS

Gross Comments  
The brain and spinal cord are perfused and collected per protocol; a truncates set of tissues is saved in formalin, but no histopathology is to be performed at this time.

Measurements
Final Necropsy Report

Animal ID  MMU  34497
Sex        F
Age        13 yrs 6 mon
Animal ID  MMU  34497
Sex        F
Age        13 yrs 6 mon

Report ID   16321    Report Complete  01/24/2008
Work Performed  10/15/2007

Gross Observation
BODY AS A WHOLE  The animal is presented with a palpable, firm, caudal abdominal swelling.
LUNG  The lungs are diffusely stippled with pin-point black foci (anthracosis).
UTERUS  The uterus displays two firm enlargements, the larger and more cranial one measuring 3.7 cm in greatest dimension. On cut surfaces the masses appear to be composed of randomly interlacing bundles of firm, white, tissue.

Gross Diagnosis
1  UTERUS LEIOMYOMA  (multiple)
2  LUNGS (BOTH) ABNORMAL APPEARANCE ANTHRACOSIS

Gross Comments
Kidneys are collected to fulfill a biospecimen request, and a truncated set of tissues is saved in formalin for histopathology. The uterus is photographed.

Final Observations
CECUM  hyperplasia, lymphoid, multifocal to diffuse, moderate, with diffuse surface spirochetosis. slide 4
ILEUM  hyperplasia, lymphoid, diffuse, moderate. slide 4
LUNG  pneumonoconiosis, extensively multifocal, moderate to severe. slide 12
STOMACH  gastritis, subacute, multifocal to diffuse, very mild, with mild multifocal follicular lymphocytic hyperplasia and myriad H. heilmanni organisms. slide 2
TRACHEA  tracheitis, subacute, diffuse, moderate, with multifocally extensive erosion of tracheal epithelium. slide 1
UTERUS  leiomyoma, multifocal, very prominent. slide 8

Final Diagnosis
1  UTERUS LEIOMYOMA  (multiple, large)
2  LUNGS (BOTH) ANTHRACOSIS  (inhaled particulate matter, not all carbon)
3  TRACHEA INFLAMMATION, DIFFUSE  (tracheitis)
4  STOMACH INFLAMMATION HELICOBACTER  (H heilmanni)

Final Comments
This animal likely suffered many of the signs of large leiomyomas or fibroid tumors of the uterus including pain, abnormal menses, colonic obstruction, and likely infertility.

Measurements
# Gross Necropsy Report

<table>
<thead>
<tr>
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<td>10.35</td>
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</table>

## Gross Observation
- **BODY AS A WHOLE**: The SIV/bartonella inoculated animal is presented in good flesh with six digits on the left hand.
- **Spleen**: The spleen is mildly enlarged.

## Gross Diagnosis
1. **Bone of Hand Abnormal Appearance (Polydactyly)**
2. **Spleen Hypertrophy (Splenomegaly)**

## Gross Comments
Tissues are collected per project protocol.

## Measurements
# Gross Necropsy Report

<table>
<thead>
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<tbody>
<tr>
<td>Sex</td>
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<table>
<thead>
<tr>
<th>Gross Observation</th>
<th>Stomach and Small Intestine-no contents</th>
<th>Cecum-moderate amount of semisolid green contents</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Large Intestine-small to moderate amount of green contents int he proximal 3/4; proximally the contents is semi-solid and distally the there is a mixture of semi-solid and formed pelleted material.</td>
<td></td>
</tr>
<tr>
<td>GASTROINTESTINAL TRACT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GINGIVA</td>
<td>There is mild hyperemic reddening of the marginal gingiva of the upper and lower incisors and canines. There is a full adult set of dentition in very good condition.</td>
<td></td>
</tr>
<tr>
<td>HEART</td>
<td>The internal and external diameter of the left ventricle at the midpoint between the apex and base are 7 and 28 mm respectively.</td>
<td></td>
</tr>
<tr>
<td>LYMPH NODES</td>
<td>Bilaterally the phrygeal tonsils were moderately enlarged and had multifocal light tan foci on the surface measuring up to approximately 0.5 mm in diameter.</td>
<td></td>
</tr>
<tr>
<td>URINARY BLADDER</td>
<td>Contains approximately 30cc of clear light yellow urine; bililabstix results on a sample of urine drawn by cysticentesis:glucose, bilirubin, ketone, blood all negative, pH 8, protein trace</td>
<td></td>
</tr>
</tbody>
</table>

## Gross Diagnosis

1. LYMPH NODES, GENERALIZED NORMAL APPEARANCE  
   SIV, within normal limits

2. TONSIL INFLAMMATION, ACUTE PUSTULAR pharyngeal tonsil

## Gross Comments

Lymphoid tissue in this SIV infected animal appeared to be within normal limits grossly. Light tan foci on the surface of the pharyngeal tonsils suggested the occurrence of a pustular tonsillitis possibly due to an active or resolving infection, possibly bacterial. A variety of tissues were collected for investigators according to protocol. This results of histopathology will be presented in the final necropsy report.

## Measurements

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Californi National Primate Research Center  
Pathology Report  
Report run on: November 3, 2008 1:49 PM
# Gross Necropsy Report

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<th>Animal ID</th>
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</table>

## Gross Observation
BODY AS A WHOLE
There were no significant changes seen in the tissues examined.

## Gross Diagnosis
1 BODY AS A WHOLE NORMAL APPEARANCE

## Gross Comments
There were no significant changes seen in the tissues examined. A variety of tissues were collected for the biospecimen request program. A variety of tissues were fixed in 10% formalin. The results of histopathology will be presented in the final necropsy report.

## Measurements
Gross Necropsy Report

Animal ID: MMU 34629  
Sex: M  
Age: 4 yrs 8 mon  
Weight (KG): 6.54

Report ID: 16261  
Time Performed: 09:30 AM

Gross Observation

- BODY AS A WHOLE: The SIV inoculated animal is presented in good flesh.
- LYMPH NODES: Lymph nodes are generally prominent to enlarged.
- SPLEEN: The spleen is moderately enlarged with a prominent follicular pattern of pallor on cut surfaces.

Gross Diagnosis

1. SPLEEN HYPERTROPHY (splenomegaly)
2. LYMPH NODES, GENERALIZED HYPERTROPHY (lymphadenopathy)

Gross Comments

Tissues are collected per project protocol - none are saved for CNPRC histopathology.
# Gross Necropsy Report

<table>
<thead>
<tr>
<th>Animal ID</th>
<th>MMU 34644</th>
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**Gross Observation**  
BODIES AS A WHOLE  
The animal is presented in good flesh with an open ventral midline abdominal incision subsequent to experimental manipulation.

**Gross Diagnosis**  
1  
BODIES AS A WHOLE NO REMARKABLE FINDINGS

**Gross Comments**  
Tissues are collected per project protocol and to fulfill biospecimen requests (kidneys, ovaries) – no tissues are saved for CNPRC histopathology.

**Measurements**
# Gross Necropsy Report

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**Gross Observation**  
BODY AS A WHOLE  
The animal is presented in good flesh with an open ventral midline abdominal incision subsequent to experimental manipulation.

**Gross Diagnosis**  
1  BODY AS A WHOLE NO REMARKABLE FINDINGS

**Gross Comments**  
Tissues are collected per project protocol and to fulfill biospecimen requests (kidneys, ovaries, uterine tubes) – no tissues are saved for CNPRC histopathology.

**Measurements**
# Gross Necropsy Report

<table>
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<tr>
<th>Animal ID</th>
<th>Sex</th>
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**Gross Observation**  
BODY AS A WHOLE  
The animal is presented in good flesh with an open ventral midline abdominal incision subsequent to experimental manipulation.

**Gross Diagnosis**  
1  
BODY AS A WHOLE NO REMARKABLE FINDINGS

**Gross Comments**  
Tissues are collected per project protocol and to fulfill biopspecimen requests (testes, epididymides, seminal vesicles, kidneys). No tissues are saved.

**Measurements**
Gross Necropsy Report

Animal ID: MMU 34882  
Report ID: 14620  
Sex: M  
Death Type: X  
Work Performed: 07/13/2007  
Age: 4 yrs 3 mon  
Weight (KG): 9.65  
Time Performed: 07:15 AM

Gross Observation

<table>
<thead>
<tr>
<th>Gross Observation</th>
<th>Description</th>
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<tbody>
<tr>
<td>BODY AS A WHOLE</td>
<td>The animal is presented in good flesh with a mild amount of clear, colorless, peritoneal transudate.</td>
</tr>
<tr>
<td>COLON</td>
<td>The colonic mucosa is mildly thickened, and contents are soft to liquid.</td>
</tr>
<tr>
<td>LYMPH NODES</td>
<td>Paracolic nodes are prominent to enlarged.</td>
</tr>
<tr>
<td>THYMUS</td>
<td>The thymus is small for an animal this age.</td>
</tr>
</tbody>
</table>

Gross Diagnosis

1. PERITONEAL CAVITY ASCITES, NOS
2. COLON INFLAMMATION COLITIS
3. LYMPH NODE HYPERTROPHY (lymphadenopathy - paracolic nodes)
4. THYMUS ATROPHY

Gross Comments

Tissues are collected per project protocol - none are saved for CNPRC histopathology.
Gross Necropsy Report

Sex  M  Death Type  X  Work Performed  10/03/2007
Age  4 yrs 5 mon  Weight (KG)  10.04  Time Performed  11:00 AM

Gross Observation  BODY AS A WHOLE  The animal is presented thin with an open ventral midline abdominal incision (experimental procedure).

Gross Diagnosis  1  BODY AS A WHOLE NO REMARKABLE FINDINGS

Gross Comments  Tissues are collected per project protocol and to fulfill biospecimen requests - none are saved for CNPRC histopathology.

Measurements
Gross Necropsy Report

Animal ID       MMU 34969  |  Report ID       20142  |  Report Complete 05/12/2008
Sex              M               |  Death Type       X          |  Work Performed 05/12/2008
Age              5 yrs 0 mon  |  Weight (KG) 8.62  |  Time Performed 01:30 PM

Gross Observation

BODY AS A WHOLE
The animal is presented in good flesh with an open ventral midline abdominal incision subsequent to experimental manipulation.

ILEUM
A segment of roughly 5 cm of distal ileum, approximately 10 cm proximal to the ileocecal junction is markedly discolored dark red (hyperpemic).

STOMACH
The mucosa of both antrum and cardia is stippled with erythema.

Gross Diagnosis
1  ILEUM HYPEREMIA  (segmental)
2  STOMACH INFLAMMATION GASTRITIS,NOS  (antrum and cardia)

Gross Comments
Tissues are collected per project protocol and to fulfill biospecimen requests (kidneys, testes, epididymides, seminal vesicles, lymph node, stomach) - no tissues are saved for CNPRC histopathology.

Measurements
# Final Necropsy Report

<table>
<thead>
<tr>
<th>Animal ID</th>
<th>Report ID</th>
<th>Report Complete</th>
<th>Sex</th>
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<td>01/25/2008</td>
<td>M</td>
<td>K</td>
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<tr>
<td>4 yrs 6 mon</td>
<td>7.3</td>
<td>09:30 AM</td>
<td></td>
<td></td>
<td></td>
</tr>
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</table>

### Gross Observation
- **BODY AS A WHOLE**: The animal is presented in good flesh.
- **SKIN**: There are multiple (self-inflicted) cutaneous abrasions/lacerations.

### Gross Diagnosis
1. SKIN TRAUMATIC ABNORMALITY (self trauma)

### Gross Comments
Multiple tissues are collected to fulfill biospecimen requests (kidneys, testes, seminal vesicles, head/brain/eyes). Only stomach is saved in formalin for histopathology.

### Final Observations
- **STOMACH**: gastritis, subacute, diffuse, mild to moderate - suggestive of H pylori infection.

### Final Diagnosis
1. STOMACH INFLAMMATION, DIFFUSE GASTRITIS, NOS
2. STOMACH INFLAMMATION, SUBACUTE HELICOBACTER PYLORI

### Measurements
Gross Necropsy Report

Animal ID  MMU  35041  Report ID  18161  Report Complete  01/22/2008
Sex  F  Death Type  K  Work Performed  01/22/2008
Age  4 yrs 8 mon  Weight (KG)  5.4  Time Performed  09:55 AM

Gross Observation  JOINT

Maximal extension of the left hindlimd is approximately 120 degrees; maximal extension of the right hindlimd is approximately 150 degrees. There is focal ulceration of the distal right patella articular cartilage, and multifocal on the distal left patella. Multifoalaly, the lateral and medial margins of the left distal femur articular surface is red and ulcerated.

SKIN

A tattoo on the right medial thigh reads 35041.

Gross Diagnosis

1  KNEE JOINT INFLAMMATION, ULCERATIVE

Gross Comments

The finding of multifocal ulceration of the articular surfaces of the stifle joints bilaterally is consistent with the clinical diagnosis of bilateral leg lameness and the finging of limited hindlimb extentesion at necropsy. The results of microbiology (left and right stifle) and histopathology will be presented in the final necropsy report.

Measurements
# Final Necropsy Report

<table>
<thead>
<tr>
<th>Animal ID</th>
<th>MMU 35047</th>
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<th>17441</th>
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<tr>
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<td>Age</td>
<td>4 yrs 7 mon</td>
<td>Weight (KG)</td>
<td>7.86</td>
<td>Time Performed</td>
<td>10:50 AM</td>
</tr>
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</table>

**Final Observations**

- **GASTROINTESTINAL TRACT**: A moderate amount of granular particulate material is present on the serosal surface especially apparent on the parietal peritoneum. Contents throughout the tract is within normal limits of amount and appearance. Small red foci of hemorrhage are present in the gastric and duodenal mucosa.

- **SKIN**: A tattoo on the right medial thigh reads 35047.

- **URINARY BLADDER**: The bladder contains approximately 2cc of urine; a sample of urine was drawn by cysticentesis. Bililabstix results: glucose + [1000mg/dl], bilirubin and ketone negative, blood 2+ [moderate], pH 8, protein trace.

**Final Diagnosis**

1. URINARY BLADDER LESION Glucosuria [1000 mg/dl]
2. DUODENUM HEMORRHAGE, PETECHIAL
3. STOMACH HEMORRHAGE, PETECHIAL

**Final Comments**

A variety of tissues are fixed in 10% buffered formalin according to protocol for investigators including a sample of parietal peritoneum. All tissues will be taken by investigators. This is a gross and final necropsy report.

**Measurements**
Gross Necropsy Report

Animal ID: MMU 35103  
Report ID: 17883  
Report Complete: 01/10/2008

Sex: M  
Death Type: K  
Work Performed: 01/10/2008

Age: 4 yrs 8 mon  
Weight (KG): 9.09  
Time Performed: 12:00 AM

Gross Observation: BODY AS A WHOLE  
The animal is presented in good flesh with multiple, self-inflicted, cutaneous wounds on arms and legs.

Gross Diagnosis:  
1 BODY AS A WHOLE TRAUMATIC ABNORMALITY (self mutilation)

Gross Comments: Several tissues are collected to fulfill biospecimen requests, including esophagus, testes, seminal vesicles, long bones, abdominal aorta, blood, cerebellum, spinal cord, and lymph nodes. Gastric pH = 1.0

Measurements


# Final Necropsy Report

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<td>Death Type</td>
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<td>01/29/2008</td>
</tr>
<tr>
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<td>4 yrs 8 mon</td>
<td>Weight (KG)</td>
<td>8.65</td>
<td>Time Performed</td>
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## Final Observations
BODY AS A WHOLE
The animal is presented in good flesh with an open ventral mid-abdominal incision subsequent to experimental manipulation.

## Final Diagnosis
1. BODY AS A WHOLE NO REMARKABLE FINDINGS

## Final Comments
Tissues are collected per project protocol and to fulfill biospecimen requests - no other tissues are saved.

## Measurements
Gross Necropsy Report

Animal ID   MMU 35187  Report ID  19241  Report Complete
Sex         M         Death Type  K         Work Performed  03/24/2008
Age         4 yrs 10 mon  Weight (KG)  3.6  Time Performed  12:00 AM

Gross Observation

BODY AS A WHOLE
The animal is presented thin.

BONE
Bones are generally very thin and brittle, and cartilage, particularly at the osteochondral junctions of the ribs, is prominent.

COLON
The colonic mucosa is thickened, and contents are soft.

LYMPH NODES
Visceral nodes are generally prominent to enlarged.

THYMUS
The thymus is somewhat small for an animal this age.

Gross Diagnosis

1  BODY AS A WHOLE INANITION DIARRHEA

2  BONE AND JOINT OSTEOPENIA

3  COLON INFLAMMATION COLITIS

4  LYMPH NODE HYPERTROPHY (lymphadenopathy - mainly visceral nodes)

5  THYMUS ATROPHY

Gross Comments
This animal is interesting in that all its bones are markedly thin and brittle and with prominent cartilages, the costochondral junctions of the ribs forming something like a rachitic rosary and with the ribs collapsed inward causing a narrowing of the chest cavity and raising questions about the animal's vitamin D status. Multiple tissues are collected to fulfill biospecimen requests (testes, seminal vesicles, lymph node, kidneys, head with brain and eyes, esophagus), and a truncated set is saved in formalin.

Measurements
Gross Necropsy Report

Animal ID: MMU 35273
Report ID: 16621
Report Complete: 10/31/2007
Sex: M
Death Type: K
Work Performed: 10/31/2007
Age: 4 yrs 3 mon
Weight (KG): 7.37
Time Performed: 09:30 AM

Gross Observation
- GASTROINTESTINAL TRACT: There is moderate to abundant contents throughout the tract within normal limits of appearance.
- HEART: The outside and inside diameter of the left ventricle midway between the apex and base is 32 and 10 mm respectively.
- SKIN: A tattoo on the right medial thigh reads 35273. There are a few cutaneous lesions on the medial aspect of the lower left leg.
- URINARY BLADDER: The bladder contains approximately 20 cc's of clear light yellow urine; bililabstix results on a sample of urine drawn by cysticentesis is glucose, bilirubin, ketone, and blood all negative, pH between 8 and 8.5, protein trace.

Gross Diagnosis: 1 SKIN TRAUMATIC ABNORMALITY self-inflicted trauma

Gross Comments: Organs and tissues were within normal limits at necropsy examination. Selected tissues were collected for the biomedical request program; a variety of tissues were fixed in 10% formalin. The results of histopathology will be presented in the final necropsy report.

Measurements
Gross Necropsy Report

Animal ID  MMU  35297  Report ID  20222  Report Complete  05/19/2008
Sex  M  Death Type  K  Work Performed  01/18/2008
Age  4 yrs 5 mon  Weight (KG)  6.71  Time Performed  08:00 AM

Gross Observation  BODY AS A WHOLE  The animal is presented thin with multiple (self-inflicted) cutaneous lacerations.
Gross Diagnosis  1  SKIN SELF-INFLICTED INJURY
Gross Comments  Tissues are collected per project protocol – none are saved for CNPRC histopathology.

Measurements
### Gross Necropsy Report

<table>
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</tbody>
</table>

**Gross Observation**

`BODY AS A WHOLE`

The animal is presented in good flesh with a ventral midline abdominal incision subsequent to experimental manipulation.

**Gross Diagnosis**

1. `BODY AS A WHOLE NO REMARKABLE FINDINGS`

**Gross Comments**

Tissues are collected per project protocol and to fulfill biospecimen requests - no tissues are saved for CNPRC histopathology.

**Measurements**
# Gross Necropsy Report

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>M</td>
<td>Death Type</td>
<td>X</td>
<td>Work Performed</td>
<td>04/23/2008</td>
</tr>
<tr>
<td>Age</td>
<td>4 yrs 7 mon</td>
<td>Weight (KG)</td>
<td>7.65</td>
<td>Time Performed</td>
<td>01:30 PM</td>
</tr>
</tbody>
</table>

## Gross Observation

**BODY AS A WHOLE**

The animal is presented thin with a ventral midline abdominal incision subsequent to experimental manipulation.

**STOMACH**

The gastric mucosa is irregularly erythematous in the region of the pyloric antrum.

## Gross Diagnosis

1. STOMACH INFLAMMATION, FOCAL GASTRITIS, NOS

## Gross Comments

Tissues are collected per project protocol and to fulfill biospecimen requests - no tissues are saved for CNPRC histopathology.

## Measurements
Californian National Primate Research Center
Pathology Report
Report run on: November 3, 2008 1:49 PM

Gross Necropsy Report

Animal ID: MMU 35599  
Report ID: 18021  
Report Complete: 01/16/2008

Sex: F  
Death Type: K  
Work Performed: 01/15/2008

Age: 3 yrs 9 mon  
Weight (KG): 3.97  
Time Performed: 12:00 AM

Gross Observation

<table>
<thead>
<tr>
<th>Gross Observation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>COLON</td>
<td>The wall is moderately thickened and multifocally there are moderate numbers of whipworms on the mucosal surface of the proximal colon and cecum.</td>
</tr>
<tr>
<td>GASTROINTESTINAL TRACT</td>
<td>Contents in the stomach and small intestine is within normal limits of appearance and amount; contents throughout the large intestine is liquid.</td>
</tr>
<tr>
<td>ILEUM</td>
<td>Multifocally there are a few scattered red mucosal ulcers measuring 3 to 4 mm. long.</td>
</tr>
<tr>
<td>JOINT</td>
<td>Bilaterally the hindlimbs can not be completely extended. The right wrist is enlarged and hard. The articular surface of the distal right radius is roughened and ulcerated at the perimeter. There is a deep red ulcerated groove in the articular surface of the right distal femur in the trochlear groove which measures 5mm. long and 2 mm. wide. There is thoraco-lumbar vertebral kyphosis.</td>
</tr>
<tr>
<td>LYMPH NODES</td>
<td>The right inguinal lymph nodes are moderately enlarged and prominent.</td>
</tr>
<tr>
<td>SKIN</td>
<td>A tattoo on the right medial thigh reads 35599. This animal is very thin. A moderate amount of fecal material is adherent to the perianal region. Liquid green contents is flowing from the anal orifice.</td>
</tr>
<tr>
<td>URINARY BLADDER</td>
<td>Bililabstix on a 2 cc. turbid light red sample of urine drawn by cysticentesis: glucose, bilirubin, ketone all negative, pH 7 to 7.5, blood, small, protein 1+ or 30mg/dl.</td>
</tr>
</tbody>
</table>

Gross Diagnosis

1. JOINT OF LOWER EXTREMITY  
   INFLAMMATION, FOCAL ULCERATIVE  
   right stifle and right wrist, thoraco-lumbar kyphosis
2. BODY AS A WHOLE INANITION
3. COLON AND CECUM, CS INFLAMMATION,  
   DIFFUSE PARASITE, METAZOAN  
   whipworms

Gross Comments

Joint and colonic changes can account for clinical signs. A variety of tissues are collected in 10% buffered formalin for diagnostic pathology and selected tissues are collected for the biospecimen request program. The results of microbiology will be presented in the final necropsy report for the small and large intestine. and the right stifle. Histopathology will also be presented in the final report.

Measurements
Gross Necropsy Report

Animal ID  MMU 35679  Report ID  18801  Report Complete  02/28/2008
Sex  M  Death Type  X  Work Performed  02/27/2008
Age  3 yrs 10 mon  Weight (KG)  6.52  Time Performed  12:45 PM

Gross Observation  BODY AS A WHOLE  The animal is presented thin with an open, midline, ventral abdominal incision subsequent to experimental manipulation.

   JOINT  The synovium of the left stifle joint is thickened and exudes a thick, opaque, tan material.

Gross Diagnosis  1  JOINT OF LOWER EXTREMITY (synovitis)

Gross Comments  Tissues are collected per project protocol and to fulfill biospecimen requests (kidneys, testes, skin, eyes). The synovium of the left stifle joint is swabbed for bacterial culture, and a sample is saved for histopathology.

Measurements
Gross Necropsy Report

Sex          F  Death Type  K  Work Performed 05/23/2008
Age          4 yrs 1 mon  Weight (KG) 3.48  Time Performed 10:00 AM

Gross Observation

- **BODY AS A WHOLE**: The animal is presented severely thin and markedly dehydrated.
- **BRAIN**: The pia and arachnoid meninges appear "cloudy and wet".
- **GASTROINTESTINAL TRACT**: The mucosa throughout the gastrointestinal tract is thickened with scattered and variable erythema; colon contents are voluminous and liquid.
- **LYMPH NODES**: Lymph nodes are generally prominent to enlarged, particularly those associated with the GIT, as well as the obturator and iliac nodes.
- **THYMUS**: The thymus is very small for an animal this age.

Gross Diagnosis

1. **BODY AS A WHOLE INANITION DEHYDRATION**
2. **GASTROINTESTINAL TRACT INFLAMMATION** (gastroenterocolitis)
3. **LYMPH NODES, GENERALIZED HYPERERTROPHY** (lymphadenopathy, generalized)
4. **THYMUS ATROPHY**
5. **MENINGES INFLAMMATION** (possible meningitis)

Gross Comments

Multiple tissues are collected to fulfill biospecimen requests (trachea, ovaries, uterine tubes), and a truncated set is saved in formalin, but no histoapthology is to be performed at this time. The colon and meninges are swabbed for bacterial culture.
Gross Necropsy Report

Animal ID  MMU 35717  Report ID  15660  Report Complete 09/05/2007
Sex  M  Death Type  X  Work Performed 09/05/2007
Age  22 yrs 11 mon  Weight (KG)  13.59  Time Performed 09:30 AM

Gross Observation

<table>
<thead>
<tr>
<th>Body Part</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>BODY AS A WHOLE</td>
<td>The animal is presented in good flesh with a cranial implant. Dorsocaudal intra-abdominal fat pads are very prominent, particularly on the left. A small amount of omentum has herniated through the umbilicus.</td>
</tr>
<tr>
<td>KIDNEY</td>
<td>A few renal cysts, roughly 0.4 cm in greatest dimension, are noted bilaterally on cortical surfaces.</td>
</tr>
<tr>
<td>SKIN</td>
<td>There are numerous, small, approximately 0.2–0.4 cm in greatest dimension, fleshy, cutaneous papillae scattered over this animal's body, most prominent on the eyelids.</td>
</tr>
</tbody>
</table>

Gross Diagnosis

1. BODY AS A WHOLE PERFUSION (brain perfusion)
2. KIDNEY CYSTS, MULTIPLE (renal tubular cysts)
3. SKIN POLYP (cutaneous tags)

Gross Comments
The brain is perfused, and tissues are collected per project protocol.

Measurements
# Gross Necropsy Report

<table>
<thead>
<tr>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>F</td>
<td>Death Type</td>
<td>K</td>
<td>Work Performed</td>
<td>08/28/2007</td>
</tr>
<tr>
<td>Age</td>
<td>3 yrs 4 mon</td>
<td>Weight (KG)</td>
<td></td>
<td>Time Performed</td>
<td>10:30 AM</td>
</tr>
</tbody>
</table>

**Gross Observation**  
COLON  
There is liquid contents throughout the length of this organ.

**Gross Diagnosis**  
1  
COLON AND CECUM, CS INFLAMMATION, DIFFUSE

**Gross Comments**  
The finding of liquid contents throughout the large intestine is consistent with the clinical diagnosis of colitis and could account for the debilitated condition of this animal. The small and large intestine were swabbed for bacterial culture. The results of microbiology and histopathology will be presented in the final necropsy report.

**Measurements**
Gross Necropsy Report

Animal ID  MMU  35823  Report ID  18862  Report Complete  02/29/2008
Sex  F  Death Type  K  Work Performed  02/29/2008
Age  3 yrs 10 mon  Weight (KG)  4.5  Time Performed  10:00 AM

Gross Observation

BODY AS A WHOLE  The animal is presented thin and dehydrated.

COLON  The colon is dilated with gas and liquid feces, and the mucosa is diffusely thickened and erythematous with scattered darker red foci (ulcerations?).

GALLBLADDER  The gallbladder is thickened and opaque.

LYMPH NODES  Paracolic and gastric nodes are prominent to enlarged.

THYMUS  The thymus is very small for an animal this age.

Gross Diagnosis

1  BODY AS A WHOLE INANITION
   DEHYDRATION

2  COLON INFLAMMATION, DIFFUSE COLITIS

3  LYMPH NODE HYPERTROPHY  (lymphadenopathy)

4  GALLBLADDER AND COMMON BILE DUCT, CS INFLAMMATION CHOLEDOCHITIS

5  THYMUS ATROPHY

Gross Comments  Several tissues are collected to fulfill biospecimen requests (ovaries, uterine tubes, urine, blood, abdominal aorta, eyes, and long bones for marrow), and a truncated set of tissues is saved in formalin, but no histopathology is to be performed at this time.

Measurements
Gross Necropsy Report

Sex  F  Death Type  K  Work Performed  09/24/2007
Age  3 yrs 4 mon  Weight (KG)  4.5  Time Performed  09:40 AM

Gross Observation

<table>
<thead>
<tr>
<th>Gross Observation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>COLON</td>
<td>Diffusely throughout the cecum and colon there is a moderate amount of semi-solid green contents.</td>
</tr>
<tr>
<td>THYMUS</td>
<td>The thymus is moderately reduced from expected size in the anterior mediastinum.</td>
</tr>
</tbody>
</table>

Gross Diagnosis

1. COLON AND CECUM, CS INFLAMMATION, DIFFUSE LOOSE STOOL
2. THYMUS INVOLUTION

Gross Comments
The finding of semi-solid contents in the distal large intestine is consistent with the clinical diagnosis of diarrhea and colitis. Thymic atrophy/involution is probably due to the stress of recurring or chronic diarrhea. The results of microbiology and histopathology will be presented in the final necropsy report.

Measurements
# Final Necropsy Report

<table>
<thead>
<tr>
<th>Animal ID</th>
<th>MMU 35927</th>
<th>Report ID</th>
<th>18121</th>
<th>Report Complete</th>
<th>01/18/2008</th>
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<tbody>
<tr>
<td>Sex</td>
<td>F</td>
<td>Death Type</td>
<td>K</td>
<td>Work Performed</td>
<td>01/18/2008</td>
</tr>
<tr>
<td>Age</td>
<td>3 yrs 8 mon</td>
<td>Weight (KG)</td>
<td>6.71</td>
<td>Time Performed</td>
<td>08:20 AM</td>
</tr>
</tbody>
</table>

## Final Observations
BODY AS A WHOLE
The animal is presented thin with multiple cutaneous abrasion/lacerations (self-injurious behavior).

## Final Diagnosis
1. BODY AS A WHOLE TRAUMATIC ABNORMALITY (self-injurious behavior)

## Final Comments
Tissues are collected per project protocol – none are saved for CNPRC histopathology.

## Measurements
Gross Necropsy Report

Animal ID       MMU 35936       Report ID  20061       Report Complete  05/06/2008
Sex             F              Death Type  K              Work Performed  05/06/2008
Age             3 yrs 11 mon    Weight (KG)  5.24          Time Performed  01:00 PM

Gross Observation

- BODY AS A WHOLE: The animal is presented thin and dehydrated.
- GASTROINTESTINAL TRACT: The GIT contains mainly liquid and gas, and the mucosa of small and large intestines is thickened and erythematous.
- LYMPH NODES: Lymph nodes associated with the GIT are prominent to enlarged.

Gross Diagnosis

1. BODY AS A WHOLE INANITION DEHYDRATION
2. GASTROINTESTINAL TRACT INFLAMMATION ENTEROCOLITIS
3. LYMPH NODE HYPERTROPHY (lymphadenopathy - GIT)

Gross Comments

Multiple tissues are collected to fulfill biospecimen requests (ovaries, uterine tubes, kidneys, trachea), but no tissues are saved for histopathology. The colon is swabbed for bacterial culture.

Measurements
Final Necropsy Report

Animal ID: MMU 35970  
Sex: M  
Age: 3 yrs 7 mon  
Report ID: 17921  
Report Complete: 01/11/2008  
Report ID: 17921  
Report Complete: 01/11/2008  
Work Performed: 01/10/2008  
Time Performed: 12:00 AM  

Final Observations  
BODY AS A WHOLE gross appearance

An irregularly surfaced gray and brown sample of tissue measuring 1.7 by 0.9 by 0.3 mm and maximum dimensions is presented in formalin all form (tube label: MMU 35970).

microscopic appearance

blood vessels-The tunica media is of varying thickness. Smooth muscle cells are multifocally separated by fibrous connective tissue and multifocally there is sub-intimal basophilic homogeneous material.

Final Diagnosis

1 BODY AS A WHOLE MORPHOLOGIC ABNORMALITY VASCULAR FLOW, ABNORMAL  
Biopsy diagnosis-blood vessels tunica media hypertrophy, fibrosis, and sub intimal (possible A-V shunt, right femoral)

Final Comments

Although not pathognomonic, the changes in the blood vessel walls is consistent with varying intra-luminal pressure which may have resulted from a shunt.

Measurements
Final Necropsy Report

Sex         M  Death Type  K  Work Performed  01/28/2008
Age         3 yrs 7 mon  Weight (KG)  4.75  Time Performed  10:00 AM

Final Observations
- BODY AS A WHOLE
  The animal is presented thin and dehydrated.
- COLON
  The colonic mucosa is thickened and variably erythematous, and contents are liquid.
- LYMPH NODES
  Paracolic nodes are prominent to enlarged.
- THYMUS
  The thymus is small for an animal this age.

Final Diagnosis
1  BODY AS A WHOLE INANITION DEHYDRATION
2  COLON INFLAMMATION DIARRHEA
3  LYMPH NODE HYPERTROPHY (lymphadenopathy)
4  THYMUS ATROPHY

Final Comments
Several tissues are collected to fulfill biospecimen requests (long bones, testes, epididymides, seminal vesicles, lymph nodes, kidneys, eyes, hypothalamus). No other tissues are saved.

Measurements
Gross Necropsy Report

Animal ID  MCY  36103
Sex          M
Age  2 yrs 11 mon
Weight (KG)  2.28

Gross Observation

BODY AS A WHOLE
The animal is presented markedly thin and severely dehydrated.

COLON
The colonic mucosa is thickened, and contents are liquid.

LYMPH NODES
Nodes associated with the GIT are generally prominent to enlarged.

THYMUS
The thymus is smaller than expected in an animal this age.

Gross Diagnosis
1  BODY AS A WHOLE INANITION DEHYDRATION
2  COLON INFLAMMATION COLITIS
3  LYMPH NODE HYPERTROPHY (lymphadenopathy - paracolic, mesenteric)
4  THYMUS ATROPHY

Gross Comments
A full set of tissues is saved in formalin, but no histopathology is to be performed at this time. The colon is swabbed for bacterial culture.

Measurements
Final Necropsy Report

Animal ID: MMU 36131  
Report ID: 19301  
Report Complete:  
Sex: M  
Death Type: X  
Work Performed: 03/25/2008  
Age: 3 yrs 7 mon  
Weight (KG): 5.2  
Time Performed: 09:00 AM  

Gross Observation:
BODY AS A WHOLE: The SHIV inoculated animal is presented thin.
SPLEEN: The spleen is mildly enlarged.

Gross Diagnosis:
1. BODY AS A WHOLE: SHIV
2. SPLEEN: HYPERTROPHY (splenomegaly, mild)

Gross Comments: The animal is perfused with saline, and tissues are collected per project protocol.

Final Observations:
- BONE MARROW: NSL. slide 9
- BRAIN: NSL. slides 19-24, 28
- CECUM: spirochetosis, diffuse, moderate. slide 14
- COLON: NSL. slide 15
- DUODENUM: NSL. slide 11
- HEART: NSL. slide 17
- ILEUM: eosinophilia, diffuse, mild, with occasional exocytosis of eosinophils through mucosal epithelium. slides 13, 29
- JEJUNUM: NSL. slide 12
- LIVER: NSL. slide 16 (centrilobular hepatocellular pallor thought to be secondary to saline perfusion)
- LUNG: pneumonia, subacute, multifocal (mainly perivascular), very mild. slide 18
- LYMPH NODES: mesenteric - hyperplasia, lymphoid, paracortical, mild to moderate, with variable sinus histiocytosis and scattered eosinophils. slide 2
- axillary - NSL. slide 3
- inguinal - only fat on slide (4)
- iliac - hyperplasia, lymphoid, paracortical, mild. slide 5
- obturator - hyperplasia, lymphoid, paracortical, moderate. slide 6
- cervical - hyperpalsia, lymphoid, paracortical, mild. slide 7 (very small sample)
- tonsil - no tonsil included on slide (10).
- PITUITARY GLAND: NSL. slide 27
- SPINAL CORD: NSL. slides 25-26
- SPLEEN: hyperplasia, lymphoid, multifocal to coalescing, mild. slide 1
- THYMUS: NSL. slide 8

Final Diagnosis:
1. SPLEEN: HYPERTROPHY, LYMPHOCYTE PRODUCTION, INCREASED
LUNGS (BOTH) INFLAMMATION PNEUMONIA, NOS
ILEUM INFLAMMATION ENTERITIS, NOS

Final Comments
This SHIV inoculated animal appears to pretty much be within normal limits with only mild splenomegaly and no significant opportunistic infections. It is unlikely the mild pneumonia or ileal eosinophilia were of clinical significance.

Measurements
# Gross Necropsy Report

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Sex</td>
<td>M</td>
<td>Death Type</td>
<td>X</td>
<td>Work Performed</td>
<td>10/25/2007</td>
</tr>
<tr>
<td>Age</td>
<td>2 yrs 8 mon</td>
<td>Weight (KG)</td>
<td>3.22</td>
<td>Time Performed</td>
<td>09:10 AM</td>
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</table>

## Gross Observation

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BODY AS A WHOLE</td>
<td>This animal is thin; the bone are readily palpable.</td>
</tr>
<tr>
<td>GINGIVA</td>
<td>Dental formula: 2 upper permanent I's, 2 upper deciduous I 2's, 4 lower deciduous incisors, 2 upper and 2 lower deciduous canines, 4 upper and 4 lower deciduous premolars, 2 upper and 2 lower molars.</td>
</tr>
<tr>
<td>HEART</td>
<td>The outside and inside diameter of the left ventricle midway between the apex and base is 29 and 18 mm respectively.</td>
</tr>
<tr>
<td>LYMPH NODES</td>
<td>The mesenteric, and iliac lymph nodes are moderately enlarged, the obturator lymph nodes are markedly enlarged and red-brown.</td>
</tr>
<tr>
<td>SKELETAL MUSCLE</td>
<td>There is dorsal kyphotic arching of the caudal thoracic vertebral column; the 18th inter-vertebral disc ventrally bulges into the spinal canal, and has an uneven undulating surface with indistinct anterior and posterior margins.</td>
</tr>
<tr>
<td>SKIN</td>
<td>A tattoo on the skin of the right medial thigh of this young male rhesus monkey reads 36166.</td>
</tr>
<tr>
<td>THYMUS</td>
<td>The thymus is markedly reduced from expected size in the anterior mediastinum.</td>
</tr>
<tr>
<td>URINARY BLADDER</td>
<td>The bladder contains approximately 5 cc of clear yellow urine; biliabstix results on a sample of urine drawn by cysticentesis: glucose negative, ketone small (10 mg/dl), bilirubin negative, blood negative, pH 7.0, protein small (30 mg/dl).</td>
</tr>
</tbody>
</table>
A sample of urine was d

**Gross Diagnosis**

1. LYMPH NODES, GENERALIZED HYPERTROPHY
   - SHIV, mesenteric, iliac, obturator lymph nodes
2. THYMUS INVOLUTION
   - Marked
3. VERTEBRAL COLUMN KYPHOSIS (T-10600)
   - Caudal thoracic (inter-vertebral disc 18)
4. BODY AS A WHOLE ATROPHY
   - Inanition

**Gross Comments**

This SHIV infected animal appeared to be in the proliferative phase of the infection as evidence by enlarged mediastinal, obturator, and iliac lymph nodes.

**Measurements**
Gross Necropsy Report

Animal ID  MMU 36183  Report ID  18921  Report Complete  03/05/2008
Sex  M  Death Type  X  Work Performed  03/05/2008
Age  3 yrs 0 mon  Weight (KG)  4.48  Time Performed  10:00 AM

Gross Observation  
BODY AS A WHOLE  The animal is presented thin.
COLON  Colon contents are soft throughout its length.

Gross Diagnosis  
1  BODY AS A WHOLE INANITION  (mild)
2  COLON COLITIS  (mild)

Gross Comments  
Tissues are collected per project protocol - none are saved for CNPRC histopathology.

Measurements
# Final Necropsy Report

<table>
<thead>
<tr>
<th>Animal ID</th>
<th>Report ID</th>
<th>Report Complete</th>
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</thead>
<tbody>
<tr>
<td>MMU 36183</td>
<td>21944</td>
<td>08/12/2008</td>
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</table>

<table>
<thead>
<tr>
<th>Sex</th>
<th>Death Type</th>
<th>Work Performed</th>
</tr>
</thead>
<tbody>
<tr>
<td>M</td>
<td>X</td>
<td>03/05/2008</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age</th>
<th>Weight (KG)</th>
<th>Time Performed</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 yrs 0 mon</td>
<td>4.48</td>
<td>12:00 AM</td>
</tr>
</tbody>
</table>

## Final Observations

## Final Diagnosis

## Final Comments

as per gross report

## Measurements
Final Necropsy Report

<table>
<thead>
<tr>
<th>Animal ID</th>
<th>MMU 36205</th>
<th>Report ID</th>
<th>21945</th>
<th>Report Complete</th>
<th>08/12/2008</th>
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</thead>
<tbody>
<tr>
<td>Sex</td>
<td>M</td>
<td>Death Type</td>
<td>X</td>
<td>Work Performed</td>
<td>05/21/2008</td>
</tr>
<tr>
<td>Age</td>
<td>3 yrs 2 mon</td>
<td>Weight (KG)</td>
<td>3</td>
<td>Time Performed</td>
<td>12:00 AM</td>
</tr>
</tbody>
</table>

Final Observations

Final Diagnosis

Final Comments as per gross report

Measurements
Gross Necropsy Report

Animal ID MMU 36205 Report ID 20282 Report Complete 05/21/2008
Sex M Death Type X Work Performed 05/21/2008
Age 3 yrs 2 mon Weight (KG) 3 Time Performed 11:45 AM

Gross Observation

<table>
<thead>
<tr>
<th>Body Area</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BODY AS A WHOLE</td>
<td>The animal is presented thin and mildly dehydrated.</td>
</tr>
<tr>
<td>LYMPH NODES</td>
<td>Lymph nodes are generally prominent with those in the abdominal cavity particularly so.</td>
</tr>
<tr>
<td>URINARY BLADDER</td>
<td>Prominent aggregates of experimentally administered microbeads are present caudal and dorsal to the urinary bladder with omental adhesions along its cranial pole; some of the aggregates of beads are encapsulated by thin fibrous capsules.</td>
</tr>
</tbody>
</table>

Gross Diagnosis

1. BODY AS A WHOLE INANITION DEHYDRATION
2. OMENTUM ADHESION (omental adhesions to urinary bladder and seminal vescicles)
3. LYMPH NODE HYPERTROPHY (lymphadenopathy)

Gross Comments

Tissues are collected per project protocol - none are saved for CNPRC histopathology.

Measurements
Final Necropsy Report

Sex  M  Death Type  X  Work Performed  12/18/2007
Age  2 yrs 9 mon  Weight (KG)  4.32  Time Performed  08:40 AM

Final Observations
GASTROINTESTINAL TRACT
There is slight increase in the clear peritoneal fluid; parietal and visceral serosal surfaces have a finely granular appearance. contents throughout is within normal limits of amount and appearance.

ILEUM
Focally there is a small red depressed ulceration of the mucosa which is visible from the serosal surface.

KIDNEY
Bilaterally there is a subcapsular tan, slightly elevated focus measuring approximately 1 mm in diameter.

SKIN
A tattoo on the right medial thigh reads 36222.

THYROID GLAND
Focally on the right thyroid gland there is a red subcapsular hemorrhage measuring approximately 2mm long and 1 mm in diameter.

URINARY BLADDER
A sample of urine was drawn by cysticentesis; bililabstix results: glucose + [1000 mg/dl], bilirubin and ketone negative, blood moderate [2+], pH 7.5, protein trace.

Final Diagnosis
1  URINARY BLADDER LESION  Glucosuria [1000mg/dl]
2  ILEUM ULCER, FOCAL
3  THYROID GLAND HEMORRHAGE, PETECHIAL

Final Comments
A variety of tissues are collected for investigators and all tissues will be taken by investigators. This is a gross and final necropsy report..
# Gross Necropsy Report

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>Sex</td>
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<td>Death Type</td>
<td>K</td>
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## Gross Observation
- **COLON**: There is thick liquid green contents multifocally in the lumen.
- **HEART**: The midpoint diameter of the left ventricular lumen is 15 mm and the midpoint diameter of the left ventricle is 22 mm.

## Gross Diagnosis
1. COLON AND CECUM, CS INFLAMMATION, DIFFUSE LOOSE STOOL

## Gross Comments
The finding of liquid contents multifocally throughout the lumen of the large intestine is consistent with the clinical diagnosis of colitis.

## Measurements
## Final Necropsy Report

<table>
<thead>
<tr>
<th></th>
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### Gross Observation

<table>
<thead>
<tr>
<th>Gross Observation</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>BODY AS A WHOLE</td>
<td>The SHIV inoculated animal is presented thin.</td>
</tr>
<tr>
<td>LYMPH NODES</td>
<td>Lymph nodes are generally prominent.</td>
</tr>
<tr>
<td>SPLEEN</td>
<td>The spleen is mildly enlarged.</td>
</tr>
<tr>
<td>STOMACH</td>
<td>The gastric mucosa is thickened with a finely &quot;pebbled&quot; surface and prominent erythema on the corpus near the junction with antrum.</td>
</tr>
</tbody>
</table>

### Gross Diagnosis

<table>
<thead>
<tr>
<th>Gross Diagnosis</th>
<th>Diagnosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>BODY AS A WHOLE PERFUSION (whole body perfusion with saline)</td>
</tr>
<tr>
<td>2</td>
<td>SPLEEN HYPERTROPHY (splenomagaly, mild)</td>
</tr>
<tr>
<td>3</td>
<td>LYMPH NODES, GENERALIZED HYPERTROPHY (lymphadenopathy, mild)</td>
</tr>
<tr>
<td>4</td>
<td>STOMACH INFLAMMATION, FOCAL GASTRITIS, NOS</td>
</tr>
</tbody>
</table>

### Gross Comments

The animal is perfused with saline, and tissues are collected per project protocol.

### Final Observations

<table>
<thead>
<tr>
<th>Final Observations</th>
<th>NSL. slide 9</th>
</tr>
</thead>
<tbody>
<tr>
<td>BONE MARROW</td>
<td>NSL. slides 19-22,24</td>
</tr>
<tr>
<td>BRAIN</td>
<td>NSL. slides 19-22,24</td>
</tr>
<tr>
<td>CECUM</td>
<td>spirochetosis, diffuse (luminal), moderate; lymphodepletion, diffuse (lamina propria), mild to moderate - however submucosal lymphoid patches are prominent. slide 14</td>
</tr>
<tr>
<td>COLON</td>
<td>depletion, lymphoid, diffuse (particularly in lamina propria), moderate, with mild edema and prominent lymphoid patches which also display mild to moderate evidence of lymphoid depletion. slide 15</td>
</tr>
<tr>
<td>DUODENUM</td>
<td>NSL. slide 11 The normally present lamina proprial inflammatory component is more plasmacytic than expected with fewer than normal lymphocytes.</td>
</tr>
<tr>
<td>HEART</td>
<td>necrosis, ischemic, acute, multifocal, mild, likely associated with euthanasia. slide 17</td>
</tr>
<tr>
<td>ILEUM</td>
<td>lymphodepletion, diffuse (lamina propria and to a lesser extent submucosal lymphoid patches), mild to moderate. slide 13</td>
</tr>
<tr>
<td>JEJUNUM</td>
<td>NSL. slide 12</td>
</tr>
<tr>
<td>LIVER</td>
<td>hepatocellular swelling, acute to subacute, diffuse, mild to moderate. slide 16</td>
</tr>
<tr>
<td>LUNG</td>
<td>NSL. slide 18</td>
</tr>
<tr>
<td>LYMPH NODES</td>
<td>mesenteric - lymphodepethion, regional to extensive, mild to moderate with sinus histiocytosis and edema; hemorrhage, acute, multifocal (cortical), mild. slide 2 axillary - hemorrhage, acute, focal, very mild; this node appears fairly bland, but there has likely been mild to moderate paracortical expansion followed by</td>
</tr>
</tbody>
</table>
early lymphodepletion. slide 3
inguinal - NSL; similar to the axillary node, this node appears to have undergone mild to moderate paracortical expansion with subsequent mild depletion. slide 4
iliac - lymphodepletion, diffuse, mild, with sinus histiocytosis (likely subsequent to paracortical expansion). slide 5
obturator - lymphodepletion, diffuse, mild, with sinus histiocytosis (likely subsequent to paracortical expansion). slide 6
cervical - lymphodepletion, diffuse, mild. slide 7

Final Diagnosis

1. BODY AS A WHOLE SHIV
2. LYMPH NODES, GENERALIZED LYMPHOCYTE DESTRUCTION
3. SPLEEN LYMPHOCYTE DESTRUCTION
4. GASTROINTESTINAL TRACT LYMPHOCYTE DESTRUCTION
5. TONGUE INFLAMMATION GLOSSITIS, NOS
6. HEART NECROSIS (acute ischemic necrosis)
7. STOMACH INFLAMMATION, SUBACUTE GASTRITIS, NOS
8. STOMACH HELICOBACTER PYLORI

Final Comments
This SHIV inoculated animal shows signs of early lymphodepletion, particularly in gastrointestinal tract, as well as evidence of early opportunistic infections (exacerbation of likely pre-existing infections) including gastric helicobacteriosis and colonic spirochetosis.
Final Necropsy Report

Animal ID  MMU 36293  Report ID  21946  Report Complete  08/12/2008
Sex  F  Death Type  X  Work Performed  06/28/2007
Age  2 yrs 3 mon  Weight (KG)  Time Performed  12:00 AM

Final Observations

Final Diagnosis

Final Comments  as per gross report

Measurements
## Gross Necropsy Report

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<tr>
<td>Age</td>
<td>2 yrs 3 mon</td>
<td>Weight (KG)</td>
<td>3</td>
<td>Time Performed</td>
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### Gross Observation

<table>
<thead>
<tr>
<th>BODY AS A WHOLE</th>
<th>The animal is presented thin.</th>
</tr>
</thead>
<tbody>
<tr>
<td>BRAIN</td>
<td>Meningeal and surface cerebral vessels are markedly congested, and there is opaque tan material in some surface crevices; there is an approximately 1.0 cm diameter focus of dark red discoloration within the cerebellum.</td>
</tr>
<tr>
<td>KIDNEY</td>
<td>Renal cortices are pale, and blood vessels are congested.</td>
</tr>
<tr>
<td>LIVER</td>
<td>The hepatic parenchyma is variably pale.</td>
</tr>
<tr>
<td>LUNG</td>
<td>Small, roughly 0.1-0.2 cm diameter, red foci are scattered over lung surfaces.</td>
</tr>
</tbody>
</table>

### Gross Diagnosis

1. MENINGES INFLAMMATION
2. CEREBELLUM HEMORRHAGE, LOCAL/FOCAL
3. LUNGS (BOTH) HEMORRHAGE, PETECHIAL
4. KIDNEY ABNORMAL APPEARANCE (renal cortical pallor)
5. LIVER ABNORMAL APPEARANCE (hepatic parenchymal pallor)

### Gross Comments

The meninges are swabbed for bacterial culture, and a full set of tissues is saved in formalin for banking at the CNPRC.

### Measurements
Final Necropsy Report

Animal ID MMU 36301 Report ID 17862 Report Complete
Sex F Death Type K Work Performed 01/09/2008
Age 2 yrs 9 mon Weight (KG) 2.82 Time Performed 10:30 AM

Gross Observation

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<tbody>
<tr>
<td>Animal ID</td>
<td>Report ID</td>
<td>Report Complete</td>
</tr>
</tbody>
</table>

Gross Observation

BODY AS A WHOLE

The animal is presented markedly thin and dehydrated.

GASTROINTESTINAL TRACT

The mucosa of the gastrointestinal tract is variably thickened and erythematous; the colon is most affected and contains only liquid diarrhea.

LYMPH NODES

Lymph nodes associated with the GIT, particularly paracolic nodes, are prominent to enlarged.

THYMUS

The thymus is very small for an animal this age.

Gross Diagnosis

1 BODY AS A WHOLE INANITION DEHYDRATION

2 COLONIC MUCOUS MEMBRANE INFLAMMATION, DIFFUSE COLITIS

3 LYMPH NODE HYPERTROPHY (lymphadenopathy - nodes associated with the GIT, particularly paracolic nodes)

4 THYMUS ATROPHY

Gross Comments

Multiple tissues are collected to fulfill biospecimen requests, including kidneys, ovaries, uterine tubes, blood, abdominal aorta, long bones, and gastric mucosa. A truncated set of tissues is saved in formalin, but no histopathology is to be performed at this time.

Final Observations

CECUM

typhilitis, subacute, diffuse, moderate to severe, with expansion of the lamina propria by a mixed inflammatory infiltrate which is predominantly mononuclear but contains a significant neutrophilic component (including "crypt abscesses" and exocytosis of neutrophils through the mucosal epithelium), crypt hyperplasia, and prominent surface epithelial "tufting" with numerous luminal bacteria.

COLON

colitis, subacute, diffuse, moderate to severe, with expansion of the lamina propria by a mixed inflammatory infiltrate which is predominantly mononuclear but contains a significant neutrophilic component (including "crypt abscesses" and exocytosis of neutrophils through the mucosal epithelium), crypt hyperplasia, and prominent surface epithelial "tufting" with numerous luminal bacteria many of which seem adherent to the epithelial surface.

DUODENUM

NSL. slide 3

ILEUM

ileitis, subacute, diffuse, mild to moderate, with villus blunting and fusion, as well as lymphoid hyperplasia. slide 4

JEJUNUM

NSL. slide 3

PANCREAS

NSL. slide 3

STOMACH

gastritis, subacute, diffusely superficial, mild to moderate, with multifocal follicular lymphocytic hyperplasia. slide 2
Final Diagnosis

1. COLON INFLAMMATION, DIFFUSE COLITIS
2. CECUM INFLAMMATION, DIFFUSE TYPHLITIS, NOS
3. ILEUM INFLAMMATION ENTERITIS, NOS
4. STOMACH INFLAMMATION GASTRITIS, NOS

Final Comments

The major lesion in this animal is a typhlocolitis which is damaging the surface epithelium resulting in prominent epithelial regeneration. Many bacterial are present in the lumen of the large intestine, many of which appear adherent to the surface epithelium. The prominent neutrophilic component of the inflammation in cecum and colon, along with the adherent bacteria, suggest a bacterial etiology for this lesion.

Measurements
Gross Necropsy Report

Sex  M  Death Type  K  Work Performed  11/21/2007
Age  2 yrs 7 mon  Weight (KG)  2.71  Time Performed  02:05 PM

Gross Observation

COLON
An abundant amount of liquid green contents is present in the lumen throughout.

GINGIVA
Dental formula: 4 upper permanent incisors, 2 lower permanent first incisors, 2 lower deciduous second incisors, 2 upper and 2 lower deciduous canines, 4 upper and 4 lower deciduous pre-molars, 2 upper and 2 lower molars.

LYMPH NODES
The colonic lymph nodes are moderately to markedly enlarged measuring up to 5 mm long. The mesenteric lymph node patch is moderately enlarged measuring approximately 3 cm in diameter.

SKIN
A tattoo on the right medial thigh reads 36318. Diffusely the subcutis has a sticky tachy consistency and there is very little adipose tissue throughout. There is an abundant amount of moist and dry fecal material on the skin and matted hair of the perianal region and the ventral tail.

STOMACH
The lumen contains an abundant amount of soft green granular contents; the pH of the contents is between 4 and 5.

THYMUS
The thymus is markedly reduced from expected size in the anterior mediastinum.

URINARY BLADDER
The lumen contains 5 cc of clear yellow urine; bililabstix results on a sample drawn by cysticentesis: glucose, bilirubin, ketone, and blood are all negative, pH 6, protein trace.

Gross Diagnosis
1. COLON AND CECUM, CS INFLAMMATION, DIFFUSE LOOSE STOOL
2. THYMUS ATROPHY
3. BODY AS A WHOLE INANITION DEHYDRATION

Gross Comments
The finding of liquid contents throughout the large intestine is consistent with the clinical diagnosis of colitis. A variety of tissues are collected for diagnostic pathology and for investigators according to special necropsy instructions. The results of microbiobiology [small and large intestine] and histopathology will be presented in the final necropsy report.

Measurements
Gross Necropsy Report

Sex  F  Death Type  K  Work Performed 10/03/2007
Age  2 yrs 6 mon  Weight (KG)  4.15  Time Performed 09:30 AM

Gross Observation

<table>
<thead>
<tr>
<th>Observation</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>SKELETAL MUSCLE</td>
<td>Diffusely the skeletal muscle of the distal left forelimb was tan grey with red mottling.</td>
</tr>
<tr>
<td>SKIN</td>
<td>Multifocally the skin of the distal digits of the left forelimb was black and there was ulceration over the left wrist and medial palmar surface of the left hand.</td>
</tr>
<tr>
<td>THYMUS</td>
<td>The thymus was moderately reduced from expected size in the anterior mediastinum.</td>
</tr>
</tbody>
</table>

Gross Diagnosis

1. SKELETAL MUSCLE NECROSIS, DIFFUSE distal left forelimb
2. SKIN OF DORSAL AREA OF WRIST ULCERATION dorsal left wrist and palmar left hand
3. THYMUS INVOLUTION

Gross Comments

Extensive skeletal muscle necrosis of the left distal forelimb and accompanying nerosis of the skin of the distal end of the digits of the left hand is suggestive of vascular compromise and infarction which may have been due to either vascular traumatic damage and/or thrombosis. A variety were collected for histopathology and selected tissues were collected for the biospecimen request program. The skeletal muscle of the distal left forelimb was swabbed for bacterial culture. The results of microbiology and histopathology will be presented in the final necropsy report.

Measurements
# Gross Necropsy Report

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<th>MMU 36353</th>
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<td>Time Performed</td>
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</table>

## Gross Observation

| | BODY AS A WHOLE | The SHIV animal is presented thin and dehydrated. |
| | LYMPH NODES | Lymph nodes are generally prominent to enlarged, particularly those associated with the gastrointestinal tract. |
| | SPLEEN | The spleen is mildly enlarged. |
| | STOMACH | The gastric mucosa is multifocally stippled with pinpoint erythema, most notably in fundus, body near the junction with antrum, and in antrum. |

## Gross Diagnosis

1. BODY AS A WHOLE INANITION DEHYDRATION
2. LYMPH NODES, GENERALIZED HYPERTROPHY (lymphadenopathy, mild to moderate)
3. SPLEEN HYPERTROPHY (splenomegaly)
4. STOMACH INFLAMMATION, MULTIFOCAL GASTRITIS, NOS

## Gross Comments

Tissues are collected per project protocol.

## Measurements
Final Necropsy Report

Animal ID  MMU 36377  Report ID 21985  Report Complete 09/03/2008
Sex F  Death Type D  Work Performed 01/23/2008
Age 2 yrs 9 mon  Weight (KG) 3.39  Time Performed 12:00 AM

Final Observations  GASTROINTESTINAL TRACT

Two upper and two lower permanent 1st incisors, two upper and two lower deciduous 2nd incisors there are 2 upper and two lower deciduous canines, four upper and four deciduous promoters. The oral cavity contains a small amount of green masticate material. Bilaterally the cheek pouches are full of masticated green material and bulge ventrally.

- Two upper and two lower permanent 1st incisors, two upper and two lower deciduous 2nd incisors there are 2 upper and two lower deciduous canines, four upper and four deciduous promoters. The oral cavity contains a small amount of green masticate material. Bilaterally the cheek pouches are full of masticated green material and bulge ventrally.

HEART

The inside and outside diameter of the left ventricle at the midpoint between apex in base is 2 and 22 mm respectively. Circumferential the wall of a left ventricle appears markedly thickened with a corresponding decrease in diameter of the left ventricular lumen

KIDNEY

The medulla is a dark red congested color diffusely.

LIVER

The parenchyma is a dark red congested color with slight accentuation of the lobular pattern over the capsular surface.

LUNG

Approximately 95 percent of the lung is a dark red congested color, the edges are pink.

SKIN

A tattoo on the right medial thigh of this young female rhesus monkey reads 36377. There is moist green fecal material on the skin and matted hair of the perianal region and the ventral tail. A thin red linear focus measuring approximately 0.1 mm wide and 4mm long is present in the abdominal skin approximately 1 cm lateral to the umbilicus on the left side. This focus is covered with material resembling a dried adhesive.

Final Diagnosis  1  HEART HYPERTROPHY  left ventricular myocardial hypertrophy.

2  LUNG CONGESTION

3  LIVER CONGESTION
Left ventricular hypertrophy has been identified in colony animals at the CNPRC and is the subject of further investigation. This heart lesion was not attributed to the experimental protocol. The finding of disseminated nuclear pyknosis within colonic crypt epithelium suggests crypt epithelial necrosis possibly due to an infectious etiology. The results of microbiology were negative for a colonic bacterial pathogen. Selective cellular damage within the crypts further suggests a viral etiology, parvovirus and cytomegalovirus were considered as differential diagnoses; however features definitive for either of these agents were not seen by light and electronmicroscopy. Ultrastructurally, interesting small bacteria were found adjacent to the colonic crypt epithelial cells (corroborated by Bob Munn of CCM), however the significance of these organisms is uncertain. Also, immunohistochemistry on colon using antibody for canine parvovirus was negative. The cause of diarrhea and colitis with crypt necrosis is uncertain but may be related to the immunocompromised state of this animal.

Microbiology—the small and large intestine were negative for bacterial pathogens.

Clinical pathology—adequate cellularity few megakaryocytes moderate numbers of lymphocytes erythroid series appears complete and normal myeloid series is incomplete with a moderate left shift and marked decrease in mature forms; M:E ratio approx. 3:1

Body weight—3.39 Kg.

Organ weight (g)

adrenal glands—0.848
kidneys—24.214
lung—27.961
pituitary gland—0.055
thyroid and parathyroid glands—0.352
brain—104.980
heart—13.862
liver—106.792
ovaries—0.156
spleen—3.030
thymus—5.313
pancreas—4.349

Final Comments
Measurements
Gross Necropsy Report

Animal ID MMU 36383
Report ID 15501
Report Complete 08/24/2007
Sex F
Death Type D
Work Performed 08/24/2007
Age 2 yrs 4 mon
Weight (KG) 3.58
Time Performed 11:00 AM

Gross Observation

BODY AS A WHOLE
The animal is presented markedly thin and severely dehydrated with dark red staining of perianal hair.

CECUM
The cecal mucosa is thickened and darkly erythematous with numerous, white, thread-like nematode parasites attached (trichuriasis)

COLON
The colonic mucosa is diffusely thickened and variably erythematous, in some areas dark red, and contents are liquid.

ILEUM
The small intestinal mucosa is erythematous, and the lumen is dilated with thick pink-yellow mucoid material.

LIP
The inner aspect of the right side of the lower lip displays multiple circular lesions which vary from bullous to eroded/ulcerated.

LYMPH NODES
Lymph nodes associated with the GIT are prominent to enlarged.

STOMACH
The gastric mucosa is irregularly stippled with erythema and contains nothing but thick yellow mucus.

THYMUS
The thymus is small even for an animal this age.

Gross Diagnosis

1 BODY AS A WHOLE INANITION DEHYDRATION
2 COLONIC MUCOUS MEMBRANE INFLAMMATION, DIFFUSE COLITIS
3 CECUM INFLAMMATION, DIFFUSE TYPHILITIS, NOS
4 CECUM TRICHURIASIS
5 STOMACH INFLAMMATION GASTRITIS, NOS
6 ILEUM INFLAMMATION ENTERITIS, NOS
7 LIP INFLAMMATION, FOCAL ULCERATIVE (chelitis)
8 LYMPH NODE HYPERTROPHY (lymphadenopathy, paracolic, mesenteric, gastric)
9 THYMUS ATROPHY

Gross Comments
The colon and ileum are swabbed for bacterial culture, and a full set of tissues is saved in formalin.

Measurements
## Final Necropsy Report

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### Final Observations
BODY AS A WHOLE
There were no significant changes in the tissues examined.

### Final Diagnosis
1. BODY AS A WHOLE NORMAL APPEARANCE

### Final Comments
There were no significant changes in the tissues examined. All tissues are given to investigators. This is a gross and final necropsy report.

### Measurements
**Gross Necropsy Report**

<table>
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<tr>
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</table>

**Gross Observation**

- **HEART**: The inside and outside diameter of the left ventricle at the midpoint between the apex and base is 10 and 22 mm respectively.

- **JOINT**: The synovial membrane of the left stifle joint is a light red brown congested color. There is loss of articular cartilage over the proximal femoral condyles and the surface has a reddish brown roughened appearance.

- **LYMPH NODES**: The inguinal and obturator lymph nodes on the left side are mildly to moderately enlarged measuring 3 to 5 mm long.

- **SKIN**: A tattoo on the skin of the right medial thigh reads 36428.

- **URINARY BLADDER**: The bladder contains approximately 5 cc of yellow turbid urine; biliabstix results on a sample of urine drawn by cysticentesis glucose, bilirubin, ketone, and blood are all negative, pH 7.5, protein trace.

**Gross Diagnosis**

1. KNEE JOINT INFLAMMATION, EROSION  
Arthritis, left stifle
2. INGUINAL LYMPH NODE HYPERTROPHY  
Inguinal and obturator lymphadenopathy

**Gross Comments**

- The finding of congested synovial membranes with accompanying articular cartilage erosion of the lateral femoral condyles is consistent with the clinical diagnosis of arthritis. The results of microbiology and histopathology will be presented in the final necropsy report.

**Measurements**
# Gross Necropsy Report

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<tbody>
<tr>
<td>2 yrs 10 mon</td>
<td>5.27</td>
<td>09:00 AM</td>
</tr>
</tbody>
</table>

**Gross Observation**
- BODY AS A WHOLE
- LYMPH NODES

The SHIV inoculated animal is presented thin. Lymph nodes are generally prominent to enlarged.

**Gross Diagnosis**
1. BODY AS A WHOLE INANITION SHIV
2. LYMPH NODES, GENERALIZED (lymphadenopathy, generalized) HYPERTROPHY

**Gross Comments**
The animal is perfused with saline, and tissues are collected per project protocol.

**Measurements**
# Gross Necropsy Report

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<td>X</td>
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<td>09:00 AM</td>
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<td>Weight (KG)</td>
<td>3.11</td>
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</table>

## Gross Observation
- **BODY AS A WHOLE**: The SHIV inoculated animal is presented thin.
- **COLON**: Colonic mucosa is diffusely thickened, and contents are soft to liquid.
- **DUODENUM**: The duodenal mucosa is thickened and multifocally erythematous.
- **ILEUM**: The mucosa is thickened throughout the length of the ileum.
- **JEJUNUM**: The mucosa is diffusely thickened.
- **LYMPH NODES**: Lymph nodes are generally prominent to enlarged, especially those associated with the gastrointestinal tract.
- **SPLEEN**: The spleen is moderately enlarged.
- **STOMACH**: The gastric mucosa is diffusely thickened and mildly erythematous in the distal portion of the corpus abutting the junction of corpus and antrum.
- **THYMUS**: The thymus is somewhat small for an animal this age.

## Gross Diagnosis
1. **BODY AS A WHOLE INANITION SHIV**
2. **STOMACH INFLAMMATION GASTRITIS, NOS**
3. **GASTROINTESTINAL MUCOUS MEMBRANE INFLAMMATION, DIFFUSE ENTEROCOLITIS**
4. **SPLEEN HYPERTROPHY**
5. **LYMPH NODES, GENERALIZED HYPERTROPHY**
6. **THYMUS ATROPHY**

## Gross Comments
Tissues are collected per project protocol.

## Measurements
Final Necropsy Report

Sex  M  Death Type  X  Work Performed  12/18/2007
Age  2 yrs 8 mon  Weight (KG)  4.39  Time Performed  12:30 PM

Final Observations
- GASTROINTESTINAL TRACT
  The amount of peritoneal fluid and the serosal surfaces of the abdominal cavity are within normal limits. The amount and the appearance of contents throughout is within normal limits.
- URINARY BLADDER
  A sample of urine is drawn by cysticentesis, bililabstix results are glucose = [2000mg/dl], bilirubin negative, ketone large [160 mg/dl], blood and protein negative, pH 5.

Final Diagnosis
1  URINARY BLADDER LESION  Glucosuria [2000 mg/dl], ketonuria large [160 mg/dl]

Final Comments
No gross tissue abnormalities were seen externally or internally. This a gross and final necropsy report, no tissues were collected for investigators. Selected tissues were collected for the biospecimen request program.

Measurements
Gross Necropsy Report

Sex  F  Death Type  K  Work Performed  08/20/2007
Age  2 yrs 4 mon  Weight (KG)  3.22  Time Performed  10:30 AM

Gross Observation

BODY AS A WHOLE  The animal is presented in good flesh.
COLON  The colonic mucosa, particularly proximally, is thickened and erythematous, and contents are liquid.
LYMPH NODES  Paracolic nodes are prominent to enlarged.

Gross Diagnosis

1  BODY AS A WHOLE DIARRHEA
2  COLONIC MUCOUS MEMBRANE INFLAMMATION, CHRONIC COLITIS
3  LYMPH NODE HYPERTROPHY (lymphadenopathy - paracolic)

Gross Comments  Tissues are collected to fulfill biospecimen requests (ovaries, oviducts, kidneys, trachea), and a truncated set of tissues is saved in formalin (colon, lymph nodes). The colon is swabbed for bacterial culture.

Measurements
Final Necropsy Report

Animal ID  MMU 36556  Report ID  18922  Report Complete  08/12/2008
Sex  M  Death Type  X  Work Performed  03/05/2008
Age  2 yrs 10 mon  Weight (KG)  4.15  Time Performed  11:30 AM

Gross Observation
- BODY AS A WHOLE: The animal is presented thin.
- COLON: The colonic mucosa is thickened, and contents are soft throughout its length.
- LYMPH NODES: Paracolic nodes are prominent to enlarged.

Gross Diagnosis
1. BODY AS A WHOLE INANITION
2. COLON INFLAMMATION COLITIS (mild)
3. LYMPH NODE HYPERTROPHY (lymphadenopathy - paracolic nodes)

Gross Comments: Tissues are collected per project protocol - none are saved for CNPRC histopathology.

Final Observations

Final Diagnosis

Final Comments  as per gross report

Measurements
Final Necropsy Report

Animal ID  MMU 36603  Report ID  21969  Report Complete  08/12/2008
Sex  M  Death Type  X  Work Performed  07/24/2007
Age  2 yrs 3 mon  Weight (KG)  3.69  Time Performed  12:00 AM

Final Observations

Final Diagnosis

Final Comments  as per gross report

Measurements
## Gross Necropsy Report

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<td>Weight (KG)</td>
<td>3.69</td>
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<td>10:30 AM</td>
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</table>

### Gross Observation
- **BODY AS A WHOLE**: The animal is presented in good flesh.
- **GASTROINTESTINAL TRACT**: The omentum is diffusely but mildly granular.
- **STOMACH**: The gastric mucosa is thickened and variegated with erythema.

### Gross Diagnosis
1. **STOMACH INFLAMMATION GASTRITIS, NOS**
2. **OMENTUM ABNORMAL APPEARANCE** (finely granular)

### Gross Comments
Tissues are collected per project protocol - none are saved for CNPRC histopathology.

### Measurements
Gross Necropsy Report

Sex  F  Death Type  D  Work Performed  09/27/2007
Age  2 yrs 5 mon  Weight (KG)  2.44  Time Performed  11:00 AM

Gross Observation  GASTROINTESTINAL TRACT  Diffusely the mucosa of the small and large intestine was a dark red congested color; scattered darker red foci up to approximately 1 mm in diameter were present throughout the alimentary tract mucosa.

GROSS DIAGNOSIS

1  GASTROENTEROCOLITIS INFLAMMATION, DIFFUSE
2  THYMUS ATROPHY, DISUSE
3  MESENTERIC LYMPH NODE HYPERTROPHY

Gross Comments  The finding of diffuse mucosal congestion of the gastrointestinal tract is suggestive of an acute enterocolitis and consistent with the clinical diagnosis of yersiniosis. Thymic atrophy was probably secondary to the stress of diarrhea and dehydration. The results of microbiology and histopathology will be presented in the final necropsy report.
Final Necropsy Report

Animal ID  MMU 36639  Report ID 21970  Report Complete 08/12/2008
Sex  F  Death Type  X  Work Performed 05/28/2008
Age  3 yrs 1 mon  Weight (KG) 4  Time Performed 12:00 AM

Final Observations

Final Diagnosis

Final Comments  as per gross report

Measurements
Gross Necropsy Report

Animal ID: MMU 36639
Sex: F
Age: 3 yrs 1 mon
Weight (KG): 4

Report ID: 20461
Report Complete: 05/28/2008
Work Performed: 05/28/2008
Time Performed: 12:00 AM

Gross Observation: BODY AS A WHOLE
The animal is presented thin with a few small (0.5-1.0 cm in greatest dimension) clumps of microbeads posterior to bladder and uterus in the pelvic inlet; similar but small clumps are noted in the omentum.

Gross Diagnosis
1. BODY AS A WHOLE NO REMARKABLE FINDINGS

Gross Comments: Tissues are collected per project protocol - none are saved for CNPRC histopathology.

Measurements
# Gross Necropsy Report

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<th>Animal ID</th>
<th>Sex</th>
<th>Age</th>
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## Gross Observation

- **GASTROINTESTINAL TRACT**
  - In the stomach there is a moderate amount of soft green granular contents. There is no contents in the small intestine. The cecum and large intestine contain a moderate amount of green contents which is thick liquid proximally and pliable pellets distally.

- **LYMPH NODES**
  - The inguinal lymph nodes are moderately enlarged measuring approximately 5 to 6 mm in maximum diameter.

- **SKIN**
  - A tattoo on the right medial thigh reads 3666.

## Gross Diagnosis

- 1. LYMPH NODES, GENERALIZED HYPERTROPHY

## Gross Comments

In this SHIV infected animal the inguinal lymph nodes were moderately enlarged; lymphoid tissue elsewhere in the body appeared ample but within normal limits of expected size for this young monkey.
# Gross Necropsy Report

<table>
<thead>
<tr>
<th>Animal ID</th>
<th>MMU 36715</th>
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<td>Weight (KG)</td>
<td>4.75</td>
<td>Time Performed</td>
<td>09:30 AM</td>
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</table>

### Gross Observation
- **BODY AS A WHOLE**: The animal is presented thin.
- **KIDNEY**: On the capsular surface of the left kidney is a roughly 0.3 cm in greatest dimension, irregularly oval focus of pale tan discoloration.

### Gross Diagnosis
1. **BODY AS A WHOLE INANITION**
2. **KIDNEY FIBROSIS, FOCAL**

### Gross Comments
Tissues are collected per project protocol.

### Measurements
Final Necropsy Report

Animal ID   MMU 36715  Report ID  21972  Report Complete  08/12/2008
Sex           M  Death Type    X  Work Performed  05/07/2008
Age  3 yrs 0 mon  Weight (KG)  4.75  Time Performed  12:00 AM

Final Observations

Final Diagnosis

Final Comments  as per gross report

Measurements
Final Necropsy Report

Animal ID  MMU 36755
Sex        F
Age        2 yrs 8 mon
Report ID   18063
Report Complete
Death Type  X
Work Performed 01/16/2008
Weight (KG) 3.51
Time Performed 10:30 AM

Final Observations
GASTROINTESTINAL TRACT
There is no contents in the stomach and small intestine; contents in the colon is with normal limits of amount and appearance.

SKIN
A tattoo on the right medial thigh reads 36755.

THYROID GLAND
A elliptical white slightly raised focus measuring 6 mm. long and 2 mm. in greatest width is present on the lateral surface of the right thyroid gland.

URINARY BLADDER
There fibrous adhesion of the omentum to the dorsal surface of the urinary bladder for a length of approximately 1.5 cm and there is a cyst in close proximity measuring measuring 4mm. long and 2 mm. in diameter. There is also bilateral adhesion of the omentum to the dorsal parietal peritoneum lateral to the bladder and disseminated fine white granularity of the parietal peritoneum.

Final Diagnosis
1 URINARY BLADDER ADHESIONS, FIBROUS Omental-Urinary Bladder Fibrous Adhesions
2 GASTROINTESTINAL TRACT ABNORMAL APPEARANCE Parietal Peritoneal Granularity
3 KIDNEY ABNORMAL APPEARANCE Ketonuria, Glucosuria

Final Comments
Peritoneal fibrous adhesions and granular surface appearance were probably attributable to the experimentally instilled beads. Glucosuria is consistent with the experimentally induced diabetic state and the accompanying ketonuria is compatible with lipid mobilization for physiologic energy requirement due to the unavailability of glucose.

Measurements
Final Necropsy Report

Animal ID  MMU  36786  Report ID  18062  Report Complete  01/17/2008
Sex  F  Death Type  X  Work Performed  01/16/2008
Age  2 yrs 7 mon  Weight (KG)  3.85  Time Performed  09:50 AM

Final Observations
- GASTROINTESTINAL TRACT: There is no contents in the stomach and small intestine; contents in the colon in within normal limits of amount and appearance.
- SKIN: A tattoo on the right medial thigh reads 36786.
- UTERUS: There fibrous adhesion of the omentum to the dorsal surface of the uterus; accompanying these adhesions there are two oval cystic structures and a grey-tan nodule; the cysts measure 4 x 2 x 2 cm and 0.5 x 0.3 x 0.3 cm. and the nodule measures 1 cm long.

Final Diagnosis
1  UTERUS ADHESIONS, FIBROUS  omental-uterine fibrous adhesion with cysts and nodule; omental granularity

Final Comments
A variety of tissues are collected for investigators according to protocol; all tissues are taken by investigators. This is a gross and final necropsy report.

Measurements
Gross Necropsy Report

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<th>Animal ID</th>
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Gross Observation

- COLON: There is liquid tan green contents throughout.
- THYMUS: The thymus is moderately reduced from expected size in the anterior mediastinum.

Gross Diagnosis

1. COLON AND CECUM, CS INFLAMMATION, DIFFUSE LOOSE STOOL
2. THYMUS ATROPHY, SECONDARY

Gross Comments

The finding of liquid contents throughout the large intestine is consistent with the clinical diagnosis of colitis. The results of microbiology and histopathology will be presented in the final necropsy report.

Measurements
Final Necropsy Report

Animal ID: MMU 36815  
Report ID: 22022  
Report Complete: 08/14/2008

Sex: F  
Death Type: X  
Work Performed: 04/16/2008

Age: 2 yrs 10 mon  
Weight (KG): 3.83  
Time Performed: 12:00 AM

Final Observations
- BODY AS A WHOLE: There were no significant changes in the tissues examined.
- KIDNEY: proteinuria 2+

Final Diagnosis
1. BODY AS A WHOLE: NORMAL APPEARANCE

Final Comments
There were no significant changes in the tissues examined. All tissues were given to investigators. This is a gross and final necropsy report. Proteinuria may occur in diabetes, however glucose was negative in the urine and the cause of the mild proteinuria in this case is uncertain.

Measurements
Gross Necropsy Report

Animal ID  MMU 36841  Report ID  18241  Report Complete  01/28/2008
Sex  M  Death Type  K  Work Performed  01/23/2008
Age  2 yrs 7 mon  Weight (KG)  2.81  Time Performed  09:45 AM

Gross Observation

BRAIN  There is moderate congestion over the meningeal surface as evidenced by a prominent vascular pattern and the surface is moist.

GASTROINTESTINAL TRACT  Contents of the stomach and small intestine is within normal limits of amount and appearance.

HEART  The inside and outside diameter of the left ventricle midway between apex and base is 4 and 17 mm. respectively.

SKIN  A tattoo on the right medial thigh reads 36841. An abundant amount of dry dark green fecal material is adherent to the skin and matted hair of the perianal region and the ventral tail.

THYMUS  The thymus is decreased from expected size in the anterior mediastinum.

Gross Diagnosis

1  COLON INFLAMMATION, DIFFUSE LOOSE STOOL
2  THYMUS ATROPHY

Gross Comments  The finding of fecal material on the perianal skin and ventral tail is consistent with a clinical diagnosis of colitis and diarrhea. Thymic atrophy was attributed to the stress of chronic or recurring colitis. The results of microbiology [small and large intestine] and histopathology will be presented in the final necropsy report.

Measurements
Gross Necropsy Report

Animal ID  MMU 36842  Report ID  18381  Report Complete  02/05/2008
Sex  M  Death Type  K  Work Performed  02/05/2008
Age  2 yrs 8 mon  Weight (KG)  3.67  Time Performed  10:00 AM

Gross Observation

GASTROINTESTINAL TRACT  Contents in the stomach and small intestine is within normal limits of amount and appearance; contents throughout the colon is green liquid and the wall is slightly thickened.

HEART  The internal and external diameter of the left ventricle midway between the apex and base is 12 and 24 mm. respectively.

SKIN  A tattoo on the right medial thigh reads 36842 (the 6 is somewhat indistinct and a tattoo on the chest reads 842). There is a moderate amount of moist and dry green fecal material adherent to the skin and matted hair of the perianal region and the ventral tail.

URINARY BLADDER  Bililabstix results on a sample of urine drawn by cysticentesis: glucose, bilirubin, ketone, and blood are all negative, pH between 7.5 and 8, protein trace.

Gross Diagnosis

1  COLON AND CECUM, CS INFLAMMATION, DIFFUSE LOOSE STOOL

Gross Comments

The finding of liquid contents throughout the large intestine and a thickened wall of the organ is consistent with the clinical diagnosis of diarrhea. Selected tissues are collected for the biospecimen request program and a variety of tissues are fixed in 10% buffered formalin for diagnostic pathology. The results of microbiology [small and large intestine] and histopathology will be presented in the final necropsy report.

Measurements
**Gross Necropsy Report**

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**Gross Observation**

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<th>BODY AS A WHOLE</th>
<th>GASTROINTESTINAL TRACT</th>
<th>LYMPH NODES</th>
<th>THYMUS</th>
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<tbody>
<tr>
<td>BODY AS A WHOLE</td>
<td>The animal is presented markedly thin and severely dehydrated.</td>
<td>The mucosa of small and large intestines is thickened and erythematous, and contents are liquid; threadlike, white nematode parasites (Trichuris spp) are prominent in cecum and proximal colon.</td>
<td>Lymph nodes associated with the gastrointestinal tract are prominent to enlarged.</td>
<td>The thymus is very small for an animal this age.</td>
</tr>
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</table>

**Gross Diagnosis**

1. BODY AS A WHOLE INANITION DEHYDRATION
2. GASTROINTESTINAL TRACT INFLAMMATION, HEMORRHAGIC ENTEROCOLITIS
3. GASTROINTESTINAL TRACT, LOWER INFLAMMATION, HEMORRHAGIC TRICHIURIASIS
4. LYMPH NODE HYPERTROPHY (lymphadenopathy - GIT nodes)
5. THYMUS ATROPHY

**Gross Comments**

Small and large intestines are swabbed for bacterial culture, and a complete set of tissues is saved in formalin, but no histopathology is to be performed at this time.

**Measurements**


Gross Necropsy Report

Animal ID  MMU 36885  Report ID  20281  Report Complete  05/21/2008
Sex  F  Death Type  X  Work Performed  05/21/2008
Age  2 yrs 11 mon  Weight (KG)  3.33  Time Performed  10:00 AM

Gross Observation

- BODY AS A WHOLE: The animal is presented thin and mildly dehydrated.
- URINARY BLADDER: Experimentally administered microbeads are clumped in irregular aggregates in the pelvic inlet dorsal to the bladder partially enclosed by omental adhesions to its cranial pole.
- UTERUS: Microbeads are aggregated around the uterus and ovaries, partially enclosed by omental adhesions.

Gross Diagnosis

1. BODY AS A WHOLE INANITION (mild)
2. URINARY BLADDER ADHESIONS, FIBROUS (omental adhesions to bladder)
3. FALLOPIAN TUBE, BROAD LIGAMENT, PARAMETRIUM ADHESIONS, FIBROUS (omental adhesions)

Gross Comments

Tissues are collected per project protocol – none are saved for CNPRC histopathology.

Measurements
Final Necropsy Report

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<th>Animal ID</th>
<th>MMU 36885</th>
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Final Observations

Final Diagnosis

Final Comments as per gross report

Measurements
Gross Necropsy Report

Sex  F  Death Type  K  Work Performed 08/20/2007
Age  2 yrs 1 mon  Weight (KG)  2.88  Time Performed 09:30 AM

Gross Observation  
- BODY AS A WHOLE
- GASTROINTESTINAL TRACT
- LYMPH NODES

The animal is presented thin and mildly dehydrated. The mucosa throughout the GIT is thickened and variably erythematous; colon contents are soft to liquid. Lymph nodes associated with the GIT, gastric, mesenteric, and paracolic, are prominent to enlarged.

Gross Diagnosis
1  BODY AS A WHOLE INANITION DEHYDRATION
2  GASTROINTESTINAL TRACT INFLAMMATION (gastroenterocolitis)
   ENTEROCOLITIS
3  STOMACH INFLAMMATION GASTRITIS, NOS
4  LYMPH NODE HYPERTROPHY (lymphadenopathy - gastric, mesenteric, paracolic)

Gross Comments  Tissues are collected to fulfill biospecimen requests (kidneys, ovaries, oviducts, trachea), and a truncated set of tissues is saved in formalin (GIT, lymph nodes, brain). The colon is swabbed for bacterial culture.

Measurements
# Gross Necropsy Report

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## Gross Observation

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<th>Observation</th>
<th>Description</th>
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<tbody>
<tr>
<td>BODY AS A WHOLE</td>
<td>The animal is presented thin and dehydrated, and in a state of early autolysis.</td>
</tr>
<tr>
<td>CECUM</td>
<td>The cecal mucosa resembles that of the colon.</td>
</tr>
<tr>
<td>COLON</td>
<td>The colonic mucosa is thickened and irregular nodular with liquid contents.</td>
</tr>
<tr>
<td>ILEUM</td>
<td>The ileal mucosa is mildly thickened and contents are liquid.</td>
</tr>
<tr>
<td>JEJUNUM</td>
<td>The jejunal mucosa is thickened.</td>
</tr>
<tr>
<td>LYMPH NODES</td>
<td>Nodes associated with the gastrointestinal tract are prominent to enlarged.</td>
</tr>
<tr>
<td>STOMACH</td>
<td>The gastric mucosa is thickened and mildly erythematous.</td>
</tr>
<tr>
<td>THYMUS</td>
<td>The thymus is virtually non-existent, i.e. very small for an animal this age.</td>
</tr>
</tbody>
</table>

## Gross Diagnosis

1. BODY AS A WHOLE INANITION DEHYDRATION
2. BODY AS A WHOLE AUTOLYSIS
3. COLON INFLAMMATION COLITIS
4. CECUM INFLAMMATION TYPHILITIS,NOS
5. ILEUM INFLAMMATION ENTERITIS,NOS
6. STOMACH INFLAMMATION GASTRITIS,NOS
7. LYMPH NODE HYPERTROPHY (lymphadenopathy)
8. THYMUS ATROPHY

## Gross Comments

The colon is photographed, colon and small intestine are cultured, and a truncated set of tissues is saved in formalin.
**Gross Necropsy Report**

**Animal ID**  MCY 36908  
**Sex**  F  
**Age**  2 yrs 3 mon  
**Weight (KG)**  3.89  
**Report ID**  16682  
**Report Complete**  
**Death Type**  D  
**Time Performed**  10:00 AM  
**Work Performed**  11/05/2007

**Gross Observation**  
**BODY AS A WHOLE**  The animal is presented thin with a severely distended abdomen upon which there are multiple cutaneous bullae containing clear, red fluid - the largest measuring roughly 1.5 cm in greatest dimension. There is blood at the nares and around the borders of the mouth.

**GASTROINTESTINAL TRACT**  The stomach is markedly distended with both liquid (water and food) and gaseous contents; the small intestines, cecum, and roughly one half to two thirds of the colon are similarly distended, mainly with gas.

**LIVER**  The liver is markedly compressed by the distended stomach such that its entire volume is cranial to the most caudal extent of the ribs and to the right of midline - the color is a pale tan.

**LUNG**  Pulmonary atelectasis accounts for roughly one half to two thirds of the lung volume causing the lungs to be extensively and irregularly discolored dark red-purple.

**SKIN**  Multiple bullae, the largest two measuring roughly 1.5 cm in greatest dimension, filled with clear red liquid are present on the ventral abdominal surface.

**TRACHEA**  The tracheal lumen is lined with red tinged fluid.

**Gross Diagnosis**  
1. STOMACH DISTENTION BLOATING  
2. COLON DISTENTION BLOATING  
3. LIVER COMPRESSION INJURY  
4. LUNGS (BOTH) ATELECTASIS  
5. LUNGS (BOTH) HEMORRHAGE  
6. SKIN OF ABDOMEN BULLA  (T-02...)

**Gross Comments**  A full set of tissues is saved in formalin.

**Measurements**
# Gross Necropsy Report

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>M</td>
<td>Death Type</td>
<td>K</td>
<td>Work Performed</td>
<td>08/22/2007</td>
</tr>
<tr>
<td>Age</td>
<td>2 yrs 1 mon</td>
<td>Weight (KG)</td>
<td>2.52</td>
<td>Time Performed</td>
<td>11:30 AM</td>
</tr>
</tbody>
</table>

## Gross Observation

<table>
<thead>
<tr>
<th>BODY AS A WHOLE</th>
<th>The animal is presented markedly thin and severely dehydrated.</th>
</tr>
</thead>
<tbody>
<tr>
<td>COLON</td>
<td>The colonic mucosa is diffusely thickened and erythematous, and contents are liquid.</td>
</tr>
<tr>
<td>LYMPH NODES</td>
<td>Lymph nodes associated with the GIT are prominent to enlarged.</td>
</tr>
<tr>
<td>STOMACH</td>
<td>The gastric mucosa is thickened and variably erythematous, particularly at the junction of antrum and corpus.</td>
</tr>
<tr>
<td>THYMUS</td>
<td>The thymus is very small for an animal this age.</td>
</tr>
</tbody>
</table>

## Gross Diagnosis

1. BODY AS A WHOLE INANITION DEHYDRATION
2. COLONIC MUCOUS MEMBRANE INFLAMMATION COLITIS
3. STOMACH INFLAMMATION GASTRITIS, NOS
4. LYMPH NODE HYPERTROPHY (lymphadenopathy - paracolic, mesenteric, gastric)
5. THYMUS ATROPHY

## Gross Comments

Tissue is collected to fulfill a biospecimen request (trachea), and a truncated set of tissues is saved in formalin.

## Measurements
Gross Necropsy Report

Animal ID: MMU 36962  
Report ID: 15420  
Report Complete: 08/22/2007

Sex: F  
Death Type: K  
Work Performed: 08/22/2007

Age: 1 yrs 10 mon  
Weight (KG): 2.18  
Time Performed: 10:30 AM

Gross Observation

<table>
<thead>
<tr>
<th>Gross Observation</th>
<th>Diagnosis</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BODY AS A WHOLE</td>
<td>1</td>
<td>BODY AS A WHOLE INANITION DEHYDRATION</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>BODY AS A WHOLE DIARRHEA</td>
</tr>
<tr>
<td>COLON</td>
<td>3</td>
<td>COLONIC MUCOUS MEMBRANE INFLAMMATION COLITIS</td>
</tr>
<tr>
<td>LYMPH NODES</td>
<td>4</td>
<td>STOMACH INFLAMMATION GASTRITIS,NOS</td>
</tr>
<tr>
<td>STOMACH</td>
<td>5</td>
<td>LYMPH NODE HYPERTROPHY (lymphadenopathy - paracolic, gastric)</td>
</tr>
<tr>
<td>THYMUS</td>
<td>6</td>
<td>THYMUS ATROPHY</td>
</tr>
</tbody>
</table>

Gross Comments
Tissues are collected to fulfill biospecimen requests (trachea, ovaries, oviducts) and a very truncated set of tissues is saved in formalin.
Gross Necropsy Report

Sex | M | Death Type | D | Work Performed | 08/21/2007
Age | 1 yrs 10 mon | Weight (KG) | 3.65 | Time Performed | 08:00 AM

Gross Observation

<table>
<thead>
<tr>
<th>Body Part</th>
<th>Observation</th>
</tr>
</thead>
<tbody>
<tr>
<td>BODY AS A WHOLE</td>
<td>The animal is presented with a tautly distended abdomen.</td>
</tr>
<tr>
<td>GASTROINTESTINAL TRACT</td>
<td>The entire GIT is variably distended with gas and liquid contents, the stomach being the most severely affected.</td>
</tr>
<tr>
<td>LIVER</td>
<td>The liver is much smaller than usual due to compression by the distended stomach.</td>
</tr>
<tr>
<td>STOMACH</td>
<td>The stomach is severely distended with liquid food and gas such that the liver is compressed cranially against the diaphragm, and the great vessels, particularly the vena cava, are compressed against the posterior body wall.</td>
</tr>
</tbody>
</table>

Gross Diagnosis

1. STOMACH BLOATING (gastric bloat, severe)
2. LIVER COMPRESSION INJURY

Gross Comments

Although the cause of gastric bloat is unclear, its sequellae include compression of the liver against the diaphragm impairing the ability to breath and compression of the aorta and vena cava, the latter being more severely affected, resulting in impaired venous return. These combine to cause ischemia/anoxia ultimately resulting in the death of the animal.
# Gross Necropsy Report

**Sex** | M | **Death Type** | D | **Work Performed** | 08/13/2007  
**Age** | 1 yrs 7 mon | **Weight (KG)** | 1.34 | **Time Performed** | 12:00 PM  

### Gross Observation

<table>
<thead>
<tr>
<th>Gross Observation</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>BODY AS A WHOLE</td>
<td>The animal is presented markedly thin and severely dehydrated.</td>
</tr>
<tr>
<td>COLON</td>
<td>The colonic mucosa is diffusely thickened and variably erythematous, and contents are nearly nonexistent.</td>
</tr>
<tr>
<td>LYMPH NODES</td>
<td>Nodes associated with the gastrointestinal tract are prominent to enlarged.</td>
</tr>
<tr>
<td>STOMACH</td>
<td>Gastric mucosa is thickened and mildly erythematous.</td>
</tr>
<tr>
<td>THYMUS</td>
<td>The thymus is very small for an animal this age.</td>
</tr>
</tbody>
</table>

### Gross Diagnosis

1. **BODY AS A WHOLE INANITION** (severe)  
2. **COLONIC MUCOUS MEMBRANE INFLAMMATION COLITIS**  
3. **STOMACH INFLAMMATION GASTRITIS,NOS**  
4. **LYMPH NODE HYPERTROPHY** (lymphadenopathy - paracolic, mesenteric, gastric nodes)  
5. **THYMUS ATROPHY**  

### Gross Comments

The colon is swabbed for bacterial culture, and a truncated set of tissues is saved in formalin.
## Gross Necropsy Report

<table>
<thead>
<tr>
<th>Animal ID</th>
<th>Report ID</th>
<th>Report Complete</th>
<th>Sex</th>
<th>Death Type</th>
<th>Work Performed</th>
<th>Age</th>
<th>Weight (KG)</th>
<th>Time Performed</th>
</tr>
</thead>
<tbody>
<tr>
<td>MMU 36998</td>
<td>18242</td>
<td>01/28/2008</td>
<td>M</td>
<td>K</td>
<td>01/28/2008</td>
<td>1 yrs 11 mon</td>
<td>2.87</td>
<td>11:00 AM</td>
</tr>
</tbody>
</table>

### Gross Observation

<table>
<thead>
<tr>
<th>Mountain</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>GASTROINTESTINAL TRACT</td>
<td>The contents is within normal limits of amount and appearance throughout.</td>
</tr>
<tr>
<td>HEART</td>
<td>The inside and outside diameter of the left ventricle midway between the apex and base is 8 and 20 mm, respectively.</td>
</tr>
<tr>
<td>SKIN</td>
<td>A tattoo on the right medial thigh reads 36998.</td>
</tr>
<tr>
<td>THYMUS</td>
<td>The thymus is reduced from expected size in the anterior mediastinum.</td>
</tr>
</tbody>
</table>

### Gross Diagnosis

1. THYMUS ATROPHY

### Gross Comments

Thymic atrophy was probably attributable to chronic or recurring diarrhea which was diagnosed clinically. The results of microbiology [small and large intestine] and histopathology will be presented in the final necropsy report.

### Measurements
California National Primate Research Center
Pathology Report
Report run on: November 3, 2008 1:49 PM

Gross Necropsy Report

<table>
<thead>
<tr>
<th>Animal ID</th>
<th>CAE 37019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>M</td>
</tr>
<tr>
<td>Age</td>
<td>7 yrs 9 mon</td>
</tr>
<tr>
<td>Weight (KG)</td>
<td>7.5</td>
</tr>
</tbody>
</table>

Report ID 20324
Report Complete 05/22/2008
Work Performed 05/22/2008

Gross Observation

BODY AS A WHOLE
The SIV infected animal is presented in good flesh.

Gross Diagnosis

1 BODY AS A WHOLE NO REMARKABLE FINDINGS

Gross Comments

Tissues are collected per project protocol - none are saved for CNPRC histopathology.

Measurements
# Gross Necropsy Report

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>M</td>
<td>Death Type</td>
<td>X</td>
<td>Work Performed</td>
<td>05/29/2008</td>
</tr>
<tr>
<td>Age</td>
<td>8 yrs 1 mon</td>
<td>Weight (KG)</td>
<td>8.8</td>
<td>Time Performed</td>
<td>09:00 AM</td>
</tr>
</tbody>
</table>

**Gross Observation**

BODY AS A WHOLE

The SIV infected animal is presented in good flesh.

**Gross Diagnosis**

1 BODY AS A WHOLE NO REMARKABLE FINDINGS

**Gross Comments**

Tissues are collected per project protocol - none are saved for CNPRC histopathology.
# Gross Necropsy Report

<table>
<thead>
<tr>
<th>Animal ID</th>
<th>CAE 37021</th>
<th>Report ID</th>
<th>20502</th>
<th>Report Complete</th>
<th>05/29/2008</th>
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</thead>
<tbody>
<tr>
<td>Sex</td>
<td>M</td>
<td>Death Type</td>
<td>X</td>
<td>Work Performed</td>
<td>05/29/2008</td>
</tr>
<tr>
<td>Age</td>
<td>7 yrs 10 mon</td>
<td>Weight (KG)</td>
<td>7.6</td>
<td>Time Performed</td>
<td>10:20 AM</td>
</tr>
</tbody>
</table>

**Gross Observation**
BODY AS A WHOLE

The SIV infected animal is presented in good flesh.

**Gross Diagnosis**
1 BODY AS A WHOLE NO REMARKABLE FINDINGS

**Gross Comments**
Tissues are collected per project protocol - none are saved for CNPRC histopathology.

**Measurements**
# Gross Necropsy Report

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>M</td>
<td>Gross Type</td>
<td>X</td>
<td>Work Performed</td>
<td>05/29/2008</td>
</tr>
<tr>
<td>Age</td>
<td>7 yrs 8 mon</td>
<td>Weight (KG)</td>
<td>7.6</td>
<td>Time Performed</td>
<td>11:40 AM</td>
</tr>
</tbody>
</table>

**Gross Observation**

BODY AS A WHOLE The SIV infected animal is presented in good flesh.

**Gross Diagnosis**

1 BODY AS A WHOLE NO REMARKABLE FINDINGS

**Gross Comments**

Tissues are collected per project protocol - none are saved for CNPRC histopathology.

**Measurements**
# Gross Necropsy Report

<table>
<thead>
<tr>
<th>Animal ID</th>
<th>CAE 37023</th>
<th>Report ID</th>
<th>20201</th>
<th>Report Complete</th>
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</thead>
<tbody>
<tr>
<td>Sex</td>
<td>M</td>
<td>Death Type</td>
<td>X</td>
<td>Work Performed 05/19/2008</td>
</tr>
<tr>
<td>Age</td>
<td>7 yrs 9 mon</td>
<td>Weight (KG)</td>
<td>8.15</td>
<td>Time Performed 10:30 AM</td>
</tr>
</tbody>
</table>

**Gross Observation**  
BODY AS A WHOLE  
The SIV infected animal is presented in good flesh.

**Gross Diagnosis**  
1  
BODY AS A WHOLE NO REMARKABLE FINDINGS

**Gross Comments**  
Tissues are collecte per project protocol - none are saved for CNPRC histopathology.

**Measurements**
# Gross Necropsy Report

<table>
<thead>
<tr>
<th>Animal ID</th>
<th>CAE 37024</th>
<th>Report ID</th>
<th>20202</th>
<th>Report Complete</th>
<th>05/19/2008</th>
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</thead>
<tbody>
<tr>
<td>Sex</td>
<td>M</td>
<td>Death Type</td>
<td>X</td>
<td>Work Performed</td>
<td>05/19/2008</td>
</tr>
<tr>
<td>Age</td>
<td>7 yrs 7 mon</td>
<td>Weight (KG)</td>
<td>8.8</td>
<td>Time Performed</td>
<td>11:50 AM</td>
</tr>
</tbody>
</table>

## Gross Observation
- **BODY AS A WHOLE**: The animal is presented in good flesh.
- **LIVER**: The capsular surface of the liver is irregularly "pebbled", and there are a few, scattered 0.3-0.8 cm diameter, dark red, cystic appearing foci, also on the capsular surface.

## Gross Diagnosis
1. LIVER CYSTS, MULTIPLE

## Gross Comments
Tissues are collecte per project protocol – none are saved for CNPRC histopathology.

## Measurements
# Gross Necropsy Report

<table>
<thead>
<tr>
<th>Animal ID</th>
<th>Sex</th>
<th>Age</th>
<th>Weight (KG)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAE 37025</td>
<td>M</td>
<td>7 yrs 9 mon</td>
<td>7.7</td>
</tr>
</tbody>
</table>

**Report ID** 20203  
**Report Complete** 05/19/2008  
**Work Performed** 05/19/2008  
**Time Performed** 01:00 PM  

**Gross Observation**  
BODY AS A WHOLE  
The SIV infected animal is presented in good flesh.

**Gross Diagnosis**  
1 BODY AS A WHOLE NO REMARKABLE FINDINGS

**Gross Comments**  
Tissues are collected per project protocol - none are saved for CNPRC histopathology.
Gross Necropsy Report

Animal ID  CAE  37026  Report ID  20322  Report Complete  05/22/2008
Sex  M  Death Type  X  Work Performed  05/22/2008
Age  7 yrs 11 mon  Weight (KG)  7.6  Time Performed  09:00 AM

Gross Observation  BODY AS A WHOLE  The SIV infected animal is presented in good flesh.

Gross Diagnosis  1  BODY AS A WHOLE NO REMARKABLE FINDINGS

Gross Comments  Tissues are collected per project protocol - none are saved for CNPRC histopathology.

Measurements
## Gross Necropsy Report

<table>
<thead>
<tr>
<th>Animal ID</th>
<th>CAE 37027</th>
<th>Report ID</th>
<th>20323</th>
<th>Report Complete</th>
<th>05/22/2008</th>
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</thead>
<tbody>
<tr>
<td>Sex</td>
<td>M</td>
<td>Death Type</td>
<td>X</td>
<td>Work Performed</td>
<td>05/22/2008</td>
</tr>
<tr>
<td>Age</td>
<td>7 yrs 9 mon</td>
<td>Weight (KG)</td>
<td>7.5</td>
<td>Time Performed</td>
<td>10:30 AM</td>
</tr>
</tbody>
</table>

### Gross Observation
BODY AS A WHOLE
The SIV infecte animal is presented in good flesh.

### Gross Diagnosis
1 BODY AS A WHOLE NO REMARKABLE FINDINGS

### Gross Comments
Tissues are collected per project protocol - none are saved for CNPRC histopathology.

### Measurements
Gross Necropsy Report

Animal ID: MMU 37028  
Report ID: 15840  
Report Complete:  
Sex: F  
Death Type: K  
Age: 1 yrs 6 mon  
Weight (KG): 2.85  
Time Performed: 10:00 AM  

Gross Observation  
BODY AS A WHOLE: The animal is presented thin.  
COLON: The colon approximately 6.0 cm proximal to the anus is markedly narrowed by a fibrous stricture - at this site the colon is adherent to the tip of the cecum.

Gross Diagnosis  
1  COLON STRICTURE

Gross Comments  
The colon is markedly dilated proximal to a firm, fibrous area of induration forming a circumferential stricture. It is not clear what caused this lesion, though post inflammatory scarring is a likely possibility.

Measurements
Gross Necropsy Report

Animal ID: MMU 37068
Report ID: 15760

Sex: M
Death Type: D
Work Performed: 09/10/2007

Age: 1 yrs 6 mon
Weight (KG): 3.43
Time Performed: 09:40 AM

Gross Observation: SKIN
Multifocally there is subcutaneous hemorrhage corresponding to areas of cutaneous contusion. Diffusely the subcutis has a sticky tacky consistency.

Gross Diagnosis: 1 SKIN HEMORRHAGE DEHYDRATION

Gross Comments: Death may have been due to a combination of dehydration/electrolyte imbalance with accompanying shock due to trauma. The femoral bone marrow was swabbed for bacterial culture. The results of microbiology and histopathology will be presented in the final necropsy report.

Measurements
# Gross Necropsy Report

<table>
<thead>
<tr>
<th>Animal ID</th>
<th>MMU 37111</th>
<th>Report ID</th>
<th>17721</th>
<th>Report Complete</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>F</td>
<td>Death Type</td>
<td>K</td>
<td>Work Performed 01/02/2008</td>
</tr>
<tr>
<td>Age</td>
<td>21 yrs 5 mon</td>
<td>Weight (KG)</td>
<td>5.55</td>
<td>Time Performed 10:00 AM</td>
</tr>
</tbody>
</table>

**Gross Observation**

- **BODY AS A WHOLE**: The animal is presented thin.

- **COLON**: Firm, cecumferential masses constric the colon at the cecocolic junction and roughly 15 cm distal to this site; the mucosa is thickened and eroded/ulcerated, and the lumen tends to be dilated proximal to these sites if constriction.

- **HEART**: The free edges of the left atrioventricular valve are multifocally thickened by firm, nodules measuring roughly 0.1 cm diameter.

- **OVARY**: Multiple, small, 0.1-0.2 cm diameter, clear fluid filled cysts abut the left ovary.

- **UTERUS**: A semi-firm, white, ovoid mass measuring approximately 0.9 cm in greatest dimension protrudes from the ventral surface of the uterus.

**Gross Diagnosis**

1. COLON ADENOCARCINOMA (multifocal)
2. UTERUS MASS, LOCALIZED
3. OVARY CYSTS, MULTIPLE (parovarian cytsts)
4. MITRAL VALVE ENDOCARDIOSIS
5. BODY AS A WHOLE INANITION

**Gross Comments**

Tissues are collected to fulfill biospecimen requests (kidneys, bones/marrow, abdominal aorta, blood, normal gut, colon mass), and a truncated set is saved in formalin for histopathology.

Gastric pH = 5.0

**Measurements**
# Gross Necropsy Report

<table>
<thead>
<tr>
<th>Animal ID</th>
<th>MMU 37114</th>
<th>Report ID</th>
<th>14980</th>
<th>Report Complete</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>F</td>
<td>Death Type</td>
<td>K</td>
<td>Work Performed 08/01/2007</td>
</tr>
<tr>
<td>Age</td>
<td>1 yrs 4 mon</td>
<td>Weight (KG)</td>
<td>1.9</td>
<td>Time Performed 11:00 AM</td>
</tr>
</tbody>
</table>

## Gross Observation

- **BODY AS A WHOLE**: The animal is presented thin with a "pot belly" and is mildly dehydrated.
- **GASTROINTESTINAL TRACT**: The mucosa of the GIT is diffusely thickened, and colonic contents are soft to liquid.
- **LYMPH NODES**: Nodes associated with the gastrointestinal tract are prominent to enlarged.

## Gross Diagnosis

1. **BODY AS A WHOLE DIARRHEA**
2. **GASTROINTESTINAL TRACT INFLAMMATION** (gastroenterocolitis)
   - ENTEROCOLITIS
3. **LYMPH NODE HYPERTROPHY** (lymphadenopathy - gastric, mesenteric, paracolic)

## Gross Comments

The animal received a whole body perfusion through the femoral artery to prepare it as an anatomical specimen. No histopathology is to be performed.

## Measurements
Gross Necropsy Report

Sex  F  Death Type  K  Work Performed  10/03/2007
Age  1 yrs 6 mon  Weight (KG)  2.03  Time Performed  11:00 AM

Gross Observation  COLON  Diffusely there is thick liquid green contents throughout the lumen of the large intestine.
                     THYMUS  The thymus is markedly reduced from expected size in the anterior mediastinum.

Gross Diagnosis  1  COLON AND CECUM, CS INFLAMMATION, DIFFUSE LOOSE STOOL
                  2  THYMUS INVOLUTION

Gross Comments  The finding of thick liquid contents throughout the lumen of the large intestine is consistent with the clinical diagnosis of colitis. A variety of tissues were collected for diagnostic pathology and selected tissues were collected for the biospecimen request program. The small and large intestine were swabbed for bacterial culture. The results of microbiology and histopathology will be presented in the final necropsy report.

Measurements
Final Necropsy Report

Animal ID: MMU 37194  
Report ID: 19501  
Report Complete:  
Sex: F  
Death Type: K  
Age: 2 yrs 0 mon  
Weight (KG): 2.71  
Work Performed: 04/02/2008  
Time Performed: 09:40 AM

Gross Observation

- BODY AS A WHOLE: The animal is presented thin and dehydrated.
- COLON: The colonic mucosa is diffusely thickened, and contents are voluminous and liquid.
- LUNG: A few petechial hemorrhages are noted on visceral pleural surfaces - likely hemorrhages associated with euthanasia.
- THYMUS: The thymus is very small for an animal this age.

Gross Diagnosis

1. BODY AS A WHOLE INANITION DEHYDRATION
2. COLON INFLAMMATION, DIFFUSE COLITIS
3. THYMUS ATROPHY

Gross Comments

Multiple tissues are collected to fulfill biospecimen requests (kidneys, ovaries, uterine tubes, trachea), and a truncated set is saved in formalin, but no histopathology is to be performed at this time.

Final Observations

- CECUM: typhlitis, subacute, diffuse, moderate, with numerous Balantidium coli organisms in lumen and crypts. slide 3
- COLON: colitis, subacute, diffuse, moderate to severe, with crypt hyperplasia, crypt "abscesses", prominent surface epithelial "tufting", and numerous surface bacteria, predominantly short bacilli (E coli?).
- DUODENUM: NSL. slide 2
- GALLBLADDER: cholecystitis, subacute, diffuse, very mild. slide 5
- ILEUM: NSL. slide 3
- JEJUNUM: NSL. slide 2
- LIVER: cholangitis/cholangiohepatitis, subacute, multifocal, mild. slide 5
- PANCREAS: NSL. slide 2
- STOMACH: gastritis, subacute (plasmacytic, lymphocytic with admixed histiocytes, occasional neutrophils), diffusely superficial, moderate, with multifocal follicular lymphocytic hyperplasia. slide 1

Final Diagnosis

1. COLON INFLAMMATION, DIFFUSE COLITIS (appears bacterial - possibly E coli)
2. CECUM INFLAMMATION, DIFFUSE TYPHILITIS, NOS
3. STOMACH INFLAMMATION, DIFFUSE GASTRITIS, NOS (suggestive of H pylori infection)
4. LIVER INFLAMMATION, MULTIFOCAL CHOLANGIOHEPATITIS
5. GALLBLADDER AND COMMON BILE DUCT, CS INFLAMMATION, DIFFUSE (mild)
Final Comments
This animal's disease is gastrointestinal, most severe in the cecum and colon where numerous bacteria, particularly short bacilli, are prominent along the luminal surface - possibly E coli, either attaching/effacing or enteropathogenic. In the stomach, the inflammation is strongly suggestive of H pylori infection. The relatively more mild biliary/hepatic lesions are suggestive of an ascending infection, though no etiology is apparent.

Measurements
Gross Necropsy Report

Sex  F  Death Type  K  Work Performed  12/20/2007
Age  1 yrs 8 mon  Weight (KG)  1.88  Time Performed  11:30 AM

Gross Observation

<table>
<thead>
<tr>
<th>Gross Observation</th>
<th>Body as a Whole</th>
<th>COLON</th>
<th>EYE</th>
<th>GASTROINTESTINAL TRACT</th>
<th>GINGIVA</th>
<th>HEART</th>
<th>SKIN</th>
<th>THYMUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>This animal is thin; the bones are readily palpable.</td>
<td>The colon is diffusely distended with fluccuant gas to a maximum diameter of approximately 2 cm. a moderate amount of liquid green contents is present throughout the colon and the wall of this organ is moderately thickened.</td>
<td>Bilaterally the eyes are moderately sunken.</td>
<td>Contents in the stomach and small intestine is within normal limits of amount and appearance.</td>
<td>Dental formula: 4 upper and 4 lower deciduous incisors, 2 upper and 2 lower deciduous canines, 4 upper and 4 lower deciduous pre-molars, 2 upper and 2 lower molars.</td>
<td>The inside and outside diameter of the left ventricle midway between the apex and base is 10 and 22 mm. respectively.</td>
<td>A tattoo on the right medial thigh reads 37249. Diffuse the subcutis has a stickly tachy consistency. Multifocally the plantar and palmar surfaces are pale tan; most pronounced on the right hand.</td>
<td>The thymus is moderately reduced from expected size in the anterior mediastinum.</td>
<td></td>
</tr>
</tbody>
</table>

Gross Diagnosis

1. COLON AND CECUM, CS INFLAMMATION, CHRONIC DIFFUSE LOOSE STOOL
2. BODY AS A WHOLE LESION DEHYDRATION
3. THYMUS ATROPHY
4. BONE AND JOINT OSTEOPENIA

Gross Comments

The finding of a diffusely thickened large intestine wall with accompanying liquid contents throughout the lumen is consistent with a clinical diagnosis of colitis. A variety of tissues are fixed in 10% buffered formalin. Selected tissues are collected for the biospecimen request program. The results of microbiology [small and large intestine] and histopathology will be presented in the final necropsy report.

Measurements
Gross Necropsy Report

Animal ID: MMU 37253
Report ID: 15901
Report Complete: 09/19/2007
Sex: M
Death Type: D
Work Performed: 09/19/2007
Age: 1 yrs 5 mon
Weight (KG): 2.5
Time Performed: 10:15 AM

Gross Observation

BODY AS A WHOLE
The animal is presented thin and dehydrated.

COLON
The colon is virtually empty of contents with variable patchy mucosal erythema.

HEART
The left ventricular wall appears thick, though it is difficult to tell if this is contraction or hypertrophy.

ILEUM
The ileum is dilated with liquid contents, and the mucosa is mildly thickened.

JEJUNUM
The jejunum is dilated with liquid contents, and the mucosa is mildly thickened.

LUNG
The lungs fail to collapse upon opening the chest and diffusely firmer than normal and wet on cut surfaces.

LYMPH NODES
Mesenteric and paracolic nodes are prominent to enlarged.

THYMUS
The thymus is small for an animal this age.

Gross Diagnosis

1. BODY AS A WHOLE INANITION DEHYDRATION
2. GASTROINTESTINAL TRACT INFLAMMATION ENTEROCOLITIS
3. LUNGS (BOTH) EDEMA
4. MYOCARDIUM OF LEFT VENTRICLE HYPERTROPHY
5. LYMPH NODE HYPERTROPHY (mesenteric, paracolic)
6. THYMUS ATROPHY

Gross Comments
Colon, ileum, and lung are swabbed for bacterial culture, and a full set of tissues is saved in formalin for histopathology.

Measurements
# Gross Necropsy Report

<table>
<thead>
<tr>
<th>Animal ID</th>
<th>Report ID</th>
<th>Report Complete</th>
</tr>
</thead>
<tbody>
<tr>
<td>MMU 37344</td>
<td>16441</td>
<td>10/23/2007</td>
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<table>
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<tbody>
<tr>
<td>M</td>
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</table>

<table>
<thead>
<tr>
<th>Age</th>
<th>Weight (KG)</th>
<th>Time Performed</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 yrs 6 mon</td>
<td>2.84</td>
<td>12:00 AM</td>
</tr>
</tbody>
</table>

### Gross Observation

- **BODY AS A WHOLE**: Good condition
- **COLON**: The lumen contain mostly thick liquid green contents; in the rectum there is an admixture of semi-solid material. The wall of the colon is mildly thickened.
- **HEART**: The outside and inside diameter of the left ventricle at the midpoint between apex and base is 23 and 12 mm respectively.
- **LYMPH NODES**: The retropharyngeal and tracheobronchial lymphnodes are moderately enlarged and prominent measuring approximately 3 mm wide and 5 mm long in largest dimensions.
- **SKIN**: A tattoo on the right medial thigh reads 37344.
- **URINARY BLADDER**: Approximately 3 cc of urine; bililabstix results glucose, ketone, bilirubin, blood, all negative, protein 1+, pH 8-8.5

### Gross Diagnosis

1. **COLON AND CECUM**, CS INFLAMMATION, DIFFUSE LOOSE STOOL
2. **KIDNEY GLOMERULONEPHRITIS**, 1+ proteinuria
   - MEMBRANOPROLIFERATIVE PROTEIN, URINE

### Gross Comments

The finding of a thickened colonic wall with accompanying liquid contents throughout the lumen is compatible with the clinical diagnosis of colitis. The results of histopathology and microbiology will be presented in the final necropsy report.

### Measurements
Gross Necropsy Report

<table>
<thead>
<tr>
<th>Animal ID</th>
<th>MMU 37449</th>
<th>Report ID</th>
<th>18142</th>
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<tr>
<td>Age</td>
<td>1 yrs 8 mon</td>
<td>Weight (KG)</td>
<td>2.55</td>
<td>Time Performed</td>
<td>10:40 AM</td>
</tr>
</tbody>
</table>

**Gross Observation**

**COLON**
Diffusely the wall of the large intestine is moderately thickened.

**GASTROINTESTINAL TRACT**
Contents in the stomach and small intestine is within normal limits of appearance and amount. Diffusely throughout the colon there is a moderate amount of thick liquid contents.

**HEART**
The inside and outside diameter of the left ventricle midway between the apex and base is 11 and 19 mm, respectively.

**LUNG**
There is moderate dark red splotchy congestion of the dorsal surface of the caudal lobes bilaterally.

**SKIN**
A tattoo on the right medial thigh reads 37449. A moderate amount of moist green fecal material is adherent to the ventral tail and perianal skin. Diffusely the subcutis has a sticky tachy consistency.

**URINARY BLADDER**
The bladder contains approximately 5 cc. of clear light yellow urine; bililabstix results on a sample drawn by cysticentesis: glucose, bilirubin, ketone, blood, and protein are all negative, protein between 6.5 and 7.

**Gross Diagnosis**

1. COLON AND CECUM, CS INFLAMMATION, DIFFUSE LOOSE STOOL
2. LUNG CONGESTION

**Gross Comments**
The finding of liquid contents throughout the large intestine with moderate thickening of the wall of the organ is consistent with the clinical diagnosis of chronic diarrhea. A variety of tissues were fixed in 10% buffered formalin for diagnostic pathology, selected tissues were collected for the biospecimen request program. The results of microbiology [small and large intestine] and histopathology will be presented in the final necropsy report.

**Measurements**
Gross Necropsy Report

Animal ID: MMU 37514  
Report ID: 17861  
Report Complete: 01/09/2008

Sex: F  
Death Type: K  
Work Performed: 01/09/2008

Age: 1 yrs 8 mon  
Weight (KG): 2.1  
Time Performed: 09:30 AM

Gross Observation

| BODY AS A WHOLE | The animal is presented markedly thin and dehydrated. |
| GASTROINTESTINAL TRACT | The mucosa throughout the GIT is variably thickened and erythematous; whip worms are present in cecum and proximal colon, and colon contents are liquid. |
| LYMPH NODES | Nodes associated with the GIT are prominent to enlarged. |
| THYMUS | The thymus is very small for an animal this age. |

Gross Diagnosis

1. BODY AS A WHOLE INANITION DEHYDRATION
2. GASTROINTESTINAL TRACT INFLAMMATION, DIFFUSE (gastroenterocolitis)
3. CECUM INFLAMMATION, DIFFUSE TRICHURIASIS
4. THYMUS ATROPHY

Gross Comments

Several tissues are collected to fulfill biopsecimen requests (kidneys, ovaries, uterine tubes, blood, abdominal aorta, long bones, gastric mucosa). The colon is swabbed for bacterial culture, and a truncated set of tissues is saved in formalin, but no histopathology is to be performed at this time.

Measurements
Gross Necropsy Report

Animal ID  MMU 37553          Report ID  19022          Report Complete
Sex          F                      Death Type  K          Work Performed  03/07/2008
Age  1 yrs 9 mon                      Weight (KG)  2.35          Time Performed  10:00 AM

Gross Observation

<table>
<thead>
<tr>
<th>Body Part</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>BODY AS A WHOLE</td>
<td>The animal is presented thin.</td>
</tr>
<tr>
<td>GASTROINTESTINAL TRACT</td>
<td>The mucosa of colon and small intestine is diffusely thickened and variably erythematous, particularly colon, and colon contents are liquid.</td>
</tr>
<tr>
<td>LUNG</td>
<td>The lungs fail to collapse upon opening the chest, and they are diffusely mottled with dark red.</td>
</tr>
<tr>
<td>LYMPH NODES</td>
<td>Lymph nodes associated with GIT, mainly mesenteric and paracolic nodes, are prominent to enlarged.</td>
</tr>
<tr>
<td>PANCREAS</td>
<td>The pancreas is diffusely erythematous.</td>
</tr>
<tr>
<td>THYMUS</td>
<td>The thymus is virtually undetectable, i.e. very small for an animal this age.</td>
</tr>
</tbody>
</table>

Gross Diagnosis

1. BODY AS A WHOLE INANITION
2. GASTROINTESTINAL TRACT INFLAMMATION ENTEROCOLITIS
3. LYMPH NODE HYPERTROPHY (lymphadenopathy - paracolic, mesenteric nodes)
4. LUNGS (BOTH) ABNORMAL APPEARANCE (pulmonary congestion/edema)
5. PANCREAS, NOS ABNORMAL APPEARANCE (pancreatic erythema - possible pancreatitis)
6. THYMUS ATROPHY

Gross Comments

Colon and lung are swabbed for bacterial culture, and a full set of tissues is saved in formalin for limited histopathology.

Measurements
# Gross Necropsy Report

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<thead>
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<th>Animal ID</th>
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</thead>
<tbody>
<tr>
<td>M</td>
<td>K</td>
<td>09/11/2007</td>
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<table>
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<tr>
<th>Age</th>
<th>Weight (KG)</th>
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</thead>
<tbody>
<tr>
<td>1 yrs 3 mon</td>
<td>2.93</td>
<td>10:30 AM</td>
</tr>
</tbody>
</table>

## Gross Observation

- **BODY AS A WHOLE**: The animal is presented in good flesh with mild anisocoria.
- **COLON**: The colon is dilated with liquid, foul-smelling contents.
- **LYMPH NODES**: Paracolic nodes are within normal limits to prominent.
- **THYMUS**: The thymus is small for an animal this age.

## Gross Diagnosis

1. **EYE ABNORMAL APPEARANCE ANISOCORIA**
2. **COLON INFLAMMATION DIARRHEA**
3. **LYMPH NODE HYPERTEBROPHY** (lymphadenopathy, mild, paracolic nodes)
4. **THYMUS ATROPHY**

## Gross Comments

Several tissues are collected to fulfill biospecimen requests (testes, epididymides, lymph nodes, spleen, trachea, kidneys). Eyes, optic tracts, and brain are saved for histopathology.

## Measurements
Final Necropsy Report

Animal ID  MMU 37648  Report ID  19362  Report Complete
Sex  M  Death Type  M  Work Performed  03/26/2008
Age  1 yrs 9 mon  Weight (KG)  2.2  Time Performed  01:45 PM

Gross Observation
- BODY AS A WHOLE: The animal is presented markedly thin, with prominent muscle atrophy, and severely dehydrated.
- COLON: A fibrous stricture with omental attachment severely narrows the colon roughly at the junction of colon and rectum; the colon proximal to the stricture is markedly dilated with gas and liquid stool; the colonic mucosa is thickened in a vaguely cobblestone pattern, and lymphoid areas are prominently visible, particularly from the serosal surface.
- KIDNEY: Renal cortices are markedly pale.
- LYMPH NODES: Nodes associated with the gastrointestinal tract are prominent to enlarged.
- THYMUS: The thymus is virtually undetectable, i.e. very small for an animal this age.

Gross Diagnosis
1. BODY AS A WHOLE INANITION  (severe)
2. COLON INFLAMMATION, DIFFUSE COLITIS
3. COLON STRicture
4. LYMPH NODE HYPERTROPHY  (lymphadenopathy - nodes associated with the GIT)
5. THYMUS ATROPHY
6. KIDNEY ABNORMAL APPEARANCE  (cortical pallor)

Gross Comments: The colon is swabbed for bacterial culture, and a full set of tissues is saved in formalin for histopathology.

Final Observations
- ADRENAL GLAND  NSL. slide 11
- BONE MARROW: There is a relative paucity of mature cells, particularly neutrophils, but otherwise there is NSL. slide 10
- CECUM: typhlitis, chronic active, diffuse, severe, with "crypt abscesses", many luminal bacteria, and prominent trichomoniasis. slide 4
- COLON
- DUODENUM  NSL. slides 2,3
- ESOPHAGUS  NSL. slide 1
- GALLBLADDER  NSL. slide 6
- HEART  NSL. slide 13
- ILEUM: enteritis, subacute, regionally extensive (distal), moderate to severe, and regenerative, with scattered foci of amyloid accumulation (mainly distally). slide 4
- JEJUNUM  NSL. slide 3
KIDNEY: dilatation, tubular, diffuse, mild, with intratubular flocculent eosinophilic material, likely protein/cellular debris. slide 7

LIVER: necrosis, hepatocellular, multifocal (both centrilobular and periportal), acute to subacute, mild to moderate, with occasional smudgy, amphophilic, intranuclear/intracytoplasmic inclusion bodies. slide 6

LUNG: NSL. slide 12

NERVE: NSL. slide 14

PANCREAS: NSL. slide 3

PITUITARY GLAND: NSL. slide 11

SALIVARY GLAND: submandibular salivary gland – NSL. slide 1

SKELETAL MUSCLE: NSL. slide 14

SKIN: NSL. slide 14

SPLEEN: NSL. slide 9

STOMACH: gastritis, subacute, multifocal, mild, with multifocal follicular lymphocytic hyperplasia, also mild. slide 2

THYROID GLAND: NSL. slide 11

TRACHEA: NSL. slide 1

URINARY BLADDER: NSL. slide 7

Final Diagnosis

Measurements
## Gross Necropsy Report

<table>
<thead>
<tr>
<th></th>
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<tr>
<td>Sex</td>
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<td>Death Type</td>
<td>K</td>
<td>Work Performed</td>
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<tr>
<td>Age</td>
<td>1 yrs 2 mon</td>
<td>Weight (KG)</td>
<td></td>
<td>Time Performed</td>
<td>01:15 PM</td>
</tr>
</tbody>
</table>

### Gross Observation
- **COLON**: Liquid green contents is present throughout the entire length of this organ.
- **THYMUS**: The thymus is reduced from expected size in the anterior mediastinum.

### Gross Diagnosis
1. COLON INFLAMMATION, DIFFUSE
2. THYMUS ATROPHY, DISUSE

### Gross Comments
The small and large intestine were swabbed for bacterial culture. The finding of liquid contents throughout the large intestine is consistent with the clinical finding of diarrhea and the diagnosis of colitis. The results of microbiology and histopathology will be presented in the final necropsy report.

### Measurements
Gross Necropsy Report

Sex  M  Death Type K  Work Performed 09/14/2007
Age 1 yrs 2 mon  Weight (KG) 1.82  Time Performed 11:00 AM

Gross Observation

<table>
<thead>
<tr>
<th>Area</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BODY AS A WHOLE</td>
<td>The animal is presented markedly thin and severely dehydrated.</td>
</tr>
<tr>
<td>COLON</td>
<td>The colonic mucosa is thickened, and the lumen is dilated with liquid contents.</td>
</tr>
<tr>
<td>LYMPH NODES</td>
<td>Mesenteric and paracolic nodes are prominent to enlarged.</td>
</tr>
<tr>
<td>THYMUS</td>
<td>The thymus is very small for an animal this age.</td>
</tr>
</tbody>
</table>

Gross Diagnosis

1. BODY AS A WHOLE INANITION DEHYDRATION
2. BODY AS A WHOLE DIARRHEA
3. COLON INFLAMMATION COLITIS
4. LYMPH NODE HYPERTROPHY (lymphadenopathy - mesenteric, paracolic nodes)
5. THYMUS ATROPHY

Gross Comments

Tissues are collected to fulfill biospecimen requests (lung, trachea, spleen, lymph nodes), but none are saved for histopathology.

Measurements
Gross Necropsy Report

Animal ID: MMU 37716  
Report ID: 18141  
Report Complete: 01/18/2008

Sex: F  
Death Type: K  
Work Performed: 01/18/2008

Age: 1 yrs 6 mon  
Weight (KG): 1.61  
Time Performed: 09:40 AM

Gross Observation

- BODY AS A WHOLE: This animal is very thin. The subcutis has a sticky tachy consistency.
- COLON: Diffusely the wall of the large intestine is moderately thickened.
- EYE: Bilaterally the eyes are moderately sunken.
- GASTROINTESTINAL TRACT: Contents in the stomach and small intestine is within normal limits of amount and appearance; contents in the large intestine is liquid throughout.
- HEART: The inside and outside diameter of the left ventricle midway between the apex and base is 10 and 19 mm, respectively.
- KIDNEY: Bilaterally the cortex has a lightly pale light brown color.
- SKIN: A tattoo on the right medial thigh reads 37716. A moderate amount of moist brown fwn fecal material is adherent to the ventral tail and perianal area.
- THYMUS: The thymus is markedly reduced from expected size in the anterior mediastinum.
- URINARY BLADDER: The bladder contains approximately 0.5 cc. of dark yellow clear urine; bililabstix results on a sample of urine drawn by cysticentesis: glucose, ketone, bilirubin, and blood all negative, pH 5, protein 1+ or 30 mg/dl.

Gross Diagnosis

1. COLON AND CECUM, CS INFLAMMATION, DIFFUSE LOOSE STOOL
2. BODY AS A WHOLE INANITION DEHYDRATION
3. THYMUS ATROPHY

Gross Comments

The finding of liquid contents throughout the large intestine with a thickened wall of this organ and accompanying inanition and dehydration is consistent with the clinical diagnosis of chronic diarrhea. Selected tissues were collected for the biospecimen request program and a variety of tissues were fixed in 10% buffered formalin for diagnostic pathology. The results of microbiology [small and large intestine] and histopathology will be presented in the final necropsy report.

Measurements
Gross Necropsy Report

Animal ID: MMU 37730
Report ID: 18621
Sex: M
Death Type: D
Age: 1 yrs 7 mon
Weight (KG): 1.62

Report Complete: 02/20/2008
Work Performed: 02/20/2008
Time Performed: 01:00 PM

Gross Observation

BODY AS A WHOLE: The animal is presented thin and dehydrated.
COLON: The colonic mucosa is thickened, and contents are soft.
DUODENUM: The duodenal mucosa is diffusely erythematous.
LYMPH NODES: Lymph nodes associated with the GIT are prominent to enlarged.
STOMACH: The gastric mucosa is thickened and erythematous, particularly in distal corpus and antrum.
THYMUS: The thymus is very small for an animal this age.

Gross Diagnosis

1. BODY AS A WHOLE INANITION
   DEHYDRATION
2. STOMACH INFLAMMATION, CONFLUENT
   GASTRITIS, NOS
3. COLON INFLAMMATION, DIFFUSE COLITIS (mild)
4. LYMPH NODE HYPERTROPHY
   (lymphadenopathy, mesenteric, paracolic, gastric)
5. DUODENUM INFLAMMATION, DIFFUSE
6. THYMUS ATROPHY

Gross Comments
A full set of tissues is saved in formalin.

Measurements
**Gross Necropsy Report**

**Animal ID**  MMU 37751  
**Report ID**  17183  
**Report Complete**

**Sex**  F  
**Death Type**  D  
**Work Performed**  12/03/2007  
**Age**  1 yrs 4 mon  
**Weight (KG)**  1.82  
**Time Performed**  11:15 AM

**Gross Observation**
- **BODY AS A WHOLE**: The animal is presented markedly thin and extremely dehydrated.
- **LYMPH NODES**: Lymph nodes associated with the stomach are prominent.
- **STOMACH**: The gastric mucosa is thickened with a "pebbled" mucosal surface, particularly in the antrum.
- **THYMUS**: The thymus is virtually undetectable, i.e. very small for an animal this age.

**Gross Diagnosis**
1. **BODY AS A WHOLE**: INANITION DEHYDRATION
2. **STOMACH**: INFLAMMATION, CHRONIC GASTRITIS, NOS
3. **THYMUS**: ATROPHY
4. **LYMPH NODE**: EPIGASTRIC HYPERTROPHY (lymphadenopathy - epigastric nodes)

**Gross Comments**
A full set of tissues is saved in formalin for limited histopathology.

**Measurements**
Gross Necropsy Report

Animal ID: MMU 37773  
Sex: M  
Age: 1 yrs 2 mon  
Report ID: 16622  
Report Complete: 10/31/2007  
Work Performed: 10/31/2007  
Weight (KG): 2.37  
Time Performed: 11:00 AM

Gross Observation

<table>
<thead>
<tr>
<th>Gross Observation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CECUM</td>
<td>A moderate amount of semi-solid contents is present in the lumen.</td>
</tr>
<tr>
<td>COLON</td>
<td>A moderate amount of semi-solid contents is present in the lumen throughout. Diffusely the wall of the colon is slightly thickened.</td>
</tr>
<tr>
<td>DUODENUM</td>
<td>No contents is present.</td>
</tr>
<tr>
<td>ILEUM</td>
<td>Green thick liquid contents is present throughout.</td>
</tr>
<tr>
<td>JEJUNUM</td>
<td>Green thick liquid contents is present in the distal lumen.</td>
</tr>
<tr>
<td>SKIN</td>
<td>A tattoo on the right medial thigh reads 37773. An abundant amount of dry dark green fecal material is adherent to the skin and matted hair of the perianal skin and ventral tail.</td>
</tr>
<tr>
<td>STOMACH</td>
<td>An abundant amount of thick tan liquid contents is present in the lumen.</td>
</tr>
</tbody>
</table>

Gross Diagnosis

1. COLON AND CECUM, CS INFLAMMATION, DIFFUSE LOOSE STOOL

Gross Comments

Selected tissues were collected for the biospecimen request program; a variety of tissues were fixed in 10% formalin for diagnostic pathology. The finding of semi-solid contents throughout the colon with accompanying thickening of the colonic wall is consistent with a clinical diagnosis of colitis. The results of histopathology and microbiology will be presented in the final necropsy report.
Gross Necropsy Report

Sex  M  Death Type  X  Work Performed  07/17/2007
Age  9 mon 7 days  Weight (KG)  1.73  Time Performed  07:15 AM

Gross Observation  BODY AS A WHOLE  The animal is presented in good flesh.

Gross Diagnosis  1  BODY AS A WHOLE NO REMARKABLE FINDINGS

Gross Comments  Tissues are collected per project protocol - none are saved for CNPRC histopathology.

Measurements
# Gross Necropsy Report

<table>
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<td>M</td>
<td>Death Type</td>
<td>K</td>
<td>Work Performed</td>
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<tr>
<td>Age</td>
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<td>Weight (KG)</td>
<td>1.08</td>
<td>Time Performed</td>
<td>10:00 AM</td>
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</table>

**Gross Observation**

| COLON | Diffusely the wall is moderately thickened and there is liquid green contents throughout. |

**Gross Diagnosis**

| 1 | COLITIS |

**Gross Comments**

The thickened colonic wall and accompanying liquid contents are consistent with a clinical diagnosis of colitis. Results of microbiology and histopathology will follow in the final necropsy report.

**Measurements**
## Gross Necropsy Report

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<tbody>
<tr>
<td>Sex</td>
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<td>06/22/2007</td>
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<tr>
<td>Age</td>
<td>3 mon 19 days</td>
<td>Weight (KG)</td>
<td>.756</td>
<td>Time Performed</td>
<td>12:05 PM</td>
</tr>
</tbody>
</table>

### Gross Observation
- **BODY AS A WHOLE**: The animal is presented in good flesh with flexure of all extremities.
- **LUNG**: The lungs are diffusely mottled with dark red, and they fail to collapse upon opening the chest.
- **THYMUS**: The thymus is very small for an animal this age.

### Gross Diagnosis
1. LUNGS (BOTH) ABNORMAL APPEARANCE PNEUMONIA, NOS
2. THYMUS ATROPHY

### Gross Comments
A full set of tissues is saved in formalin.

### Measurements
# Gross Necropsy Report

<table>
<thead>
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<td>Weight (KG)</td>
<td>1.108</td>
<td>Time Performed</td>
<td>09:10 AM</td>
</tr>
</tbody>
</table>

---

**Gross Observation**

**Gross Diagnosis**  
1. LYMPH NODES, GENERALIZED NORMAL VARIATION

**Gross Comments**  
There were no significant gross changes in tissues examined at necropsy.

---

**Measurements**
Gross Necropsy Report

Animal ID: MMU 37902  
Sex: F  
Age: 3 mon 7 days  
Report ID: 14340  

Gross Observation:
- LYMPH NODES: Superficial and deep lymph nodes were increased in size.
- THYMUS: The thymus was slightly reduced from expected size in the anterior mediastinum.

Gross Diagnosis:
1. LYMPH NODES, GENERALIZED HYPERPLASIA, LYMPHOID MILD  
2. THYMUS ATROPHY MILD

Gross Comments:
Generalized prominent enlargement of superficial and deep lymph nodes is suggestive of a systemic response to some antigenic stimulus.

Measurements:
Gross Necropsy Report

Animal ID: MMU 37907  
Sex: F  
Age: 3 mon 9 days  
Report ID: 14380  
Weight (KG): 1.087  
Work Performed: 06/28/2007  
Time Performed: 09:00 AM

Gross Observation
- BODY AS A WHOLE: The SIV inoculated animal is presented in good flesh.
- LYMPH NODES: Lymph nodes are generally prominent to enlarged.
- SPLEEN: The spleen is mildly enlarged.

Gross Diagnosis
1. SPLEEN HYPERTROPHY (splenomegaly)
2. LYMPH NODES, GENERALIZED HYPERTROPHY (lymphadenopathy)

Gross Comments: Tissues are collected per project protocol.

Measurements
Gross Necropsy Report


Age: 3 mon 9 days  Weight (KG): .972  Time Performed: 10:00 AM

Gross Observation
- BODY AS A WHOLE: The SIV inoculated animal is presented in good flesh.
- LYMPH NODES: Lymph nodes are generally prominent to enlarged.
- SPLEEN: The spleen is mildly enlarged.

Gross Diagnosis
1. SPLEEN HYPERTROPHY (splenomegaly)
2. LYMPH NODES, GENERALIZED HYPERTROPHY (lymphadenopathy)

Gross Comments: Tissues are collected per project protocol.

Measurements
## Gross Necropsy Report

<table>
<thead>
<tr>
<th>Animal ID</th>
<th>MMU 37909</th>
<th>Report ID</th>
<th>19101</th>
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<th>03/10/2008</th>
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<tbody>
<tr>
<td>Sex</td>
<td>F</td>
<td>Death Type</td>
<td>X</td>
<td>Work Performed</td>
<td>03/10/2008</td>
</tr>
<tr>
<td>Age</td>
<td>11 mon 21 days</td>
<td>Weight (KG)</td>
<td>1.84</td>
<td>Time Performed</td>
<td>07:00 AM</td>
</tr>
</tbody>
</table>

**Gross Observation**

BODY AS A WHOLE

The animal is presented thin.

**Gross Diagnosis**

1. BODY AS A WHOLE NO REMARKABLE FINDINGS

**Gross Comments**

Tissues are collected per project protocol - none are saved for CNPRC histopathology.

**Measurements**
# Gross Necropsy Report

<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>Sex</td>
<td>F</td>
<td>Death Type</td>
<td>X</td>
<td>Work Performed</td>
<td>07/02/2007</td>
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<tr>
<td>Age</td>
<td>3 mon 13 days</td>
<td>Weight (KG)</td>
<td>1.043</td>
<td>Time Performed</td>
<td>12:00 AM</td>
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</table>

**Gross Observation**  
LYMPH NODES  
Superficial and deep lymph nodes were increased in size.

**Gross Diagnosis**  
1  
LYMPH NODE HYPERPLASIA MULTIFOCAL TO DIFFUSE  
SIV

**Gross Comments**  
Generalized prominent increased size of superficial and deep lymph nodes is suggestive of a systemic response to some antigenic stimulus.

**Measurements**
Gross Necropsy Report

Animal ID: MMU 37916  
Report ID: 19181  
Report Complete: 03/17/2008

Sex: M  
Death Type: X  
Work Performed: 03/17/2008

Age: 11 mon 28 days  
Weight (KG): 2.53  
Time Performed: 07:30 AM

Gross Observation  
BODY AS A WHOLE: The animal is presented thin.  
LYMPH NODES: Mesenteric and ileocecal nodes are prominent to enlarged.

Gross Diagnosis  
1. LYMPH NODE HYPERTROPHY (lymphadenopathy - mesenteric, ileocecal nodes)

Gross Comments  
Tissues are collected per project protocol - none are saved for CNPRC histopathology.

Measurements
# Gross Necropsy Report

<table>
<thead>
<tr>
<th>Animal ID</th>
<th>MMU 37917</th>
<th>Report ID</th>
<th>19201</th>
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<tbody>
<tr>
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<td>F</td>
<td>Death Type</td>
<td>X</td>
<td>Work Performed</td>
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</tr>
<tr>
<td>Age</td>
<td>1 yrs 0 mon</td>
<td>Weight (KG)</td>
<td>2.27</td>
<td>Time Performed</td>
<td>07:30 AM</td>
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</table>

**Gross Observation**

BODY AS A WHOLE

The animal is presented thin.

**Gross Diagnosis**

1. BODY AS A WHOLE NO REMARKABLE FINDINGS

**Gross Comments**

Tissues are collected per project protocol – none are saved for CNPRC histopathology.

**Measurements**
# Gross Necropsy Report

<table>
<thead>
<tr>
<th>Animal ID</th>
<th>Report ID</th>
<th>Report Complete</th>
<th>Sex</th>
<th>Death Type</th>
<th>Work Performed</th>
<th>Age</th>
<th>Weight (KG)</th>
<th>Time Performed</th>
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</thead>
<tbody>
<tr>
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<td>14740</td>
<td>07/19/2007</td>
<td>F</td>
<td>X</td>
<td>07/19/2007</td>
<td>3 mon 29 days</td>
<td>1.325</td>
<td>09:00 AM</td>
</tr>
</tbody>
</table>

### Gross Observation
- **BODY AS A WHOLE**: The SIV inoculated animal is presented in good flesh.
- **LYMPH NODES**: Lymph nodes are generally prominent to enlarged.
- **SPLEEN**: The spleen is mildly enlarged.

### Gross Diagnosis
1. **SPLEEN HYPERTROPHY** (splenomagaly)
2. **LYMPH NODES, GENERALIZED HYPERTROPHY** (lymphadenopathy)

### Gross Comments
Tissues are collected per project protocol.

### Measurements
Gross Necropsy Report

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
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<tbody>
<tr>
<td>Sex</td>
<td>M</td>
<td>Death Type</td>
<td>X</td>
<td>Work Performed</td>
<td>07/02/2007</td>
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<tr>
<td>Age</td>
<td>3 mon 12 days</td>
<td>Weight (KG)</td>
<td>1.142</td>
<td>Time Performed</td>
<td>12:00 AM</td>
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</table>

**Gross Observation**  
LYMPH NODES  
Superficial and deep lymph nodes were increased in size.

**Gross Diagnosis**  
1  
LYMPH NODES, GENERALIZED  
HYPERPLASIA, LYMPHOID MULTIFOCAL TO DIFFUSE  
SIV

**Gross Comments**  
The generalized prominent increased size of superficial and deep lymph nodes suggests a systemic response to some antigenic stimulus.

**Measurements**
Gross Necropsy Report

Sex F  Death Type K  Work Performed 12/26/2007
Age 9 mon 4 days  Weight (KG) 1.47  Time Performed 11:10 AM

Gross Observation

COLON  The wall of the large intestine is moderately thickened.

GASTROINTESTINAL  Contents within the stomach and small intestine is within normal limits of amount and appearance; there is no contents in the large intestine.

GINGIVA  This animal has a full set of deciduous dentition in very good condition.

LYMPH NODES  The mesenteric lymph nodes patch measures 3 cm. in diameter. the ileocecal and colonic lymph nodes are also moderately enlarged.

SKIN  A tattoo on the right medial thigh reads 37932. The hair on the perianal skin and ventral tail is wet and matted.

THYMUS  The thymus is slightly reduced in the anterior mediastinum.

URINARY BLADDER  Approximately 3 cc. of light yellow urine is present in the lumen; bililabstix results on a sample of urine drawn by cysticentesis glucose, bilirubin, ketone, blood, and protein are all negative, pH 5.

Gross Diagnosis

1 COLON INFLAMMATION, DIFFUSE
2 LYMPH NODES, GENERALIZED mesenteric, ileocecal, colonic HYPERTROPHY
3 THYMUS ATROPHY

Gross Comments

The finding of a thickened large intestine wall is consistent with a clinical diagnosis of colitis; additionally, lymph nodes draining the alimentary tract were enlarged consistent with a reactive condition. A variety of tissues were fixed in 10% buffered formalin and selected tissues were collected for the biospecimen request program. The results of microbiology [small and large intestine] and histopathology will be presented in the final necropsy report.

Measurements
Gross Necropsy Report

Animal ID    Report ID    Report Complete
MMU 37934    17001        11/21/2007

Sex          Death Type   Work Performed
M             K            11/21/2007

Age          Weight (KG)  Time Performed
7 mon 29 days .78         09:45 AM

Gross Observation

<table>
<thead>
<tr>
<th>Body Part</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BODY AS A WHOLE</td>
<td>Diffusely throughout the subcutis and body cavities there is very little adipose tissue.</td>
</tr>
<tr>
<td>COLON</td>
<td>Diffusely the wall of the large intestine is slightly thickened.</td>
</tr>
<tr>
<td>GASTROINTESTINAL TRACT</td>
<td>Throughout the small intestine there is a moderate amount of green thick liquid contents; there is an admixture of yellow-green soft granular material in the distal ileum. Throughout the cecum and large intestine there is a moderate amount of green thick liquid turbid contents.</td>
</tr>
<tr>
<td>HEART</td>
<td>The inside and outside diameter of the left ventricle midway between the apex and base is 8 and 15 mm respectively.</td>
</tr>
<tr>
<td>KIDNEY</td>
<td>Bilaterally and diffusely the renal cortex is a moderately pale light brown color.</td>
</tr>
<tr>
<td>SKIN</td>
<td>A tattoo on the right medial thigh reads 37934.</td>
</tr>
<tr>
<td>STOMACH</td>
<td>The pH of the contents is 6.</td>
</tr>
<tr>
<td>THYMUS</td>
<td>The thymus is markedly reduced from expected size in the anterior mediastinum.</td>
</tr>
<tr>
<td>URINARY BLADDER</td>
<td>The lumen contains approximately 0.5 cc of yellow clear urine; a sample was taken by cysticentesis, bililabstix results are: glucose, bilirubin, and ketone are all negative, blood is moderate or 2+, protein trace.</td>
</tr>
</tbody>
</table>

Gross Diagnosis

1. COLON AND CECUM, CS INFLAMMATION, DIFFUSE LOOSE STOOL
2. THYMUS ATROPHY
3. BODY AS A WHOLE INANITION

Gross Comments

The finding of liquid contents throughout the large intestine with accompanying thickening of the wall of this organ is consistent with the clinical diagnosis of colitis. Thymic atrophy was probably secondary to the stress of recurring or chronic alimentary tract disease. A variety of tissue were fixed in 10% formalin, selected tissues were collected for the biospecimen request program. The results of microbiology [small and large intestine] and histopathology will be presented in the final necropsy report.

Measurements
Gross Necropsy Report

Animal ID: MMU 37942  
Report ID: 20522  
Report Complete: 09/04/2008  
Animal ID: 09/04/2008  
Work Performed: 05/30/2008  
Sex: F  
Death Type: K  
Age: 1 yrs 2 mon  
Weight (KG): 1.54  
Time Performed: 09:30 AM

Gross Observation

<table>
<thead>
<tr>
<th>BODY AS A WHOLE</th>
<th>The animal is presented markedly thin and dehydrated.</th>
</tr>
</thead>
<tbody>
<tr>
<td>GASTROINTESTINAL TRACT</td>
<td>The mucosa of small and large intestines is thickened and variably erythematous.</td>
</tr>
<tr>
<td>LYMPH NODES</td>
<td>Mesenteric and paracolic nodes are prominent to enlarged.</td>
</tr>
<tr>
<td>THYMUS</td>
<td>The thymus is small for an animal this age.</td>
</tr>
</tbody>
</table>

Gross Diagnosis

1. BODY AS A WHOLE INANITION DEHYDRATION
2. GASTROINTESTINAL MUCOUS MEMBRANE INFLAMMATION ENTEROCOLITIS
3. LYMPH NODE HYPERTROPHY (lymphadenopathy - mesenteric, paracolic)
4. THYMUS ATROPHY

Gross Comments

A truncated set of tissues is saved in formalin, but no histopathology is to be performed at this time.

Measurements
Gross Necropsy Report

Animal ID: MMU 37963  
Report ID: 15900  
Report Complete: 09/19/2007

Sex: M  
Death Type: K  
Work Performed: 09/19/2007

Age: 5 mon 23 days  
Weight (KG): .94  
Time Performed: 09:30 AM

Gross Observation
- BODY AS A WHOLE: The animal is presented slightly thin with a mildly distended abdomen.
- GASTROINTESTINAL TRACT: The mucosa of small and large intestines is thickened, and contents are liquid.
- LYMPH NODES: Lymph nodes associated with the GIT are prominent to enlarged, particularly mesenteric and paracolic nodes.
- THYMUS: The thymus is somewhat small for an animal this age.

Gross Diagnosis
1. GASTROINTESTINAL TRACT INFLAMMATION ENTEROCOLITIS
2. LYMPH NODE HYPERTROPHY (lymphadenopathy)
3. THYMUS ATROPHY

Gross Comments: Several tissues are collected to fulfill biospecimen requests (kidneys, lungs, trachea), and the colon is swabbed for bacterial culture. No tissues are saved.

Measurements
# Gross Necropsy Report

<table>
<thead>
<tr>
<th>Animal ID</th>
<th>Report ID</th>
<th>Report Complete</th>
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</thead>
<tbody>
<tr>
<td>MMU 37980</td>
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<td>04/01/2008</td>
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<thead>
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<th>Death Type</th>
<th>Work Performed</th>
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<td>04/01/2008</td>
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<tr>
<th>Age</th>
<th>Weight (KG)</th>
<th>Time Performed</th>
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</thead>
<tbody>
<tr>
<td>1 yrs 0 mon</td>
<td>2.57</td>
<td>06:45 AM</td>
</tr>
</tbody>
</table>

**Gross Observation**  
BODY AS A WHOLE  
The animal is presented thin.

**Gross Diagnosis**  
1  
BODY AS A WHOLE NO REMARKABLE FINDINGS

**Gross Comments**  
Tissues are collected per project protocol - none are saved for CNPRC histopathology.

**Measurements**
# Gross Necropsy Report

<table>
<thead>
<tr>
<th>Animal ID</th>
<th>MMU 37983</th>
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<th>19421</th>
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<td>Death Type</td>
<td>X</td>
<td>Work Performed</td>
<td>03/31/2008</td>
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<tr>
<td>Age</td>
<td>1 yrs 0 mon</td>
<td>Weight (KG)</td>
<td>2.16</td>
<td>Time Performed</td>
<td>07:00 AM</td>
</tr>
</tbody>
</table>

**Gross Observation**
- BODY AS A WHOLE
- The animal is presented thin.

**Gross Diagnosis**
- 1 BODY AS A WHOLE NO REMARKABLE FINDINGS

**Gross Comments**
- Tissues are collected per project protocol - none are saved for CNPRC histopathology.

**Measurements**
# Gross Necropsy Report

<table>
<thead>
<tr>
<th>Animal ID</th>
<th>MMU 37984</th>
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<th>19261</th>
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<tr>
<td>Sex</td>
<td>F</td>
<td>Death Type</td>
<td>X</td>
<td>Work Performed</td>
<td>03/24/2008</td>
</tr>
<tr>
<td>Age</td>
<td>11 mon 26 days</td>
<td>Weight (KG)</td>
<td>2.39</td>
<td>Time Performed</td>
<td>01:00 PM</td>
</tr>
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</table>

**Gross Observation**  
BODY AS A WHOLE  
The animal is presented thin.

**Gross Diagnosis**  
1  
BODY AS A WHOLE NO REMARKABLE FINDINGS

**Gross Comments**  
Tissues are collected per project protocol - none are saved for CNPRC histopathology.

**Measurements**
Final Necropsy Report

Animal ID: MMU 38010  
Report ID: 16683  
Report Complete: 01/25/2008  
Sex: F  
Death Type: K  
Work Performed: 11/05/2007  
Age: 7 mon 4 days  
Weight (KG): 1.03  
Time Performed: 10:30 AM

Gross Observation
- BODY AS A WHOLE: The animal is presented thin and dehydrated with dried liquid stool at the anus and base of tail.
- COLON: The colon is mildly dilated with liquid contents.
- LYMPH NODES: Paracolic nodes are prominent.
- THYMUS: The thymus is small for an animal this age.

Gross Diagnosis
1. BODY AS A WHOLE INANITION DEHYDRATION
2. COLON INFLAMMATION COLITIS
3. COLONIC CONTENTS DIARRHEA
4. LYMPH NODE HYPERTROPHY (lymphadenopathy - paracolic)
5. THYMUS ATROPHY

Gross Comments
Multiple tissues are collected to fulfill biospecimen requests (kidneys, ovaries, lung, trachea, head/brain/eyes). Only stomach is saved in formalin for histopathology.

Final Observations
Final Diagnosis
1. STOMACH INFLAMMATION, DIFFUSE GASTRITIS, NOS
2. STOMACH INFLAMMATION, SUBACUTE HELICOBACTER PYLORI

Measurements
# Gross Necropsy Report

<table>
<thead>
<tr>
<th>Animal ID</th>
<th>Sex</th>
<th>Age</th>
<th>Weight (KG)</th>
<th>Gross Observation</th>
<th>Gross Diagnosis</th>
<th>Gross Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>MMU 38029</td>
<td>F</td>
<td>8 mon 23 days</td>
<td>1.02</td>
<td>COLON</td>
<td>1 COLON INFLAMMATION, DIFFUSE</td>
<td>The finding of a moderately thickened wall of the large intestine is consistent with a clinical diagnosis of colitis. A variety of tissues are fixed in 10% buffered formalin for diagnostic pathology and selected tissues are collected for the biospecimen request program. The results of microbiology [small and large intestine] and histopathology will be presented in the final necropsy report.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>GASTROINTESTINAL TRACT</td>
<td>2 THYMUS ATROPHY</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>GINGIVA</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>SKIN</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>THYMUS</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>URINARY BLADDER</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Gross Comments**

1. COLON INFLAMMATION, DIFFUSE
2. THYMUS ATROPHY

The finding of a moderately thickened wall of the large intestine is consistent with a clinical diagnosis of colitis. A variety of tissues are fixed in 10% buffered formalin for diagnostic pathology and selected tissues are collected for the biospecimen request program. The results of microbiology [small and large intestine] and histopathology will be presented in the final necropsy report.
Gross Necropsy Report

Animal ID       MMU 38039
Sex              M
Age              5 mon 11 days
Report ID        15820
Report Complete  09/14/2007
Death Type       D
Work Performed   09/14/2007
Weight (KG)      1.07
Time Performed   02:00 PM

Gross Observation
BODY AS A WHOLE
The animal is presented markedly thin and severely dehydrated and in a state of advanced autolysis.

GASTROINTESTINAL TRACT
The GIT is virtually empty of contents.

THYMUS
The thymus is small for an animal this age.

Gross Diagnosis
1. BODY AS A WHOLE INANITION DEHYDRATION
2. THYMUS ATROPHY

Gross Comments
This animal presumably suffered parental neglect/peer rejection and starved. The pleura and peritoneum are swabbed for bacterial culture, but no tissues are saved.

Measurements
Gross Necropsy Report

Animal ID: MMU 38061  
Report ID: 16902

Sex: M  
Death Type: K  

Age: 7 mon 11 days  
Weight (KG): .92  
Time Performed: 10:45 AM

**Gross Observation**

**BODY AS A WHOLE**
The animal is presented extremely thin and severely dehydrated.

**BRAIN**
The cerebral surface is pale with a finely granular appearance, and there is increased cerebral spinal fluid.

**CECUM**
The cecal mucosa is thickened and erythematous with several, thread-like, white nematode parasites attached to the mucosa (trichuriasis).

**COLON**
The colonic mucosa is thickened and mildly erythematous with proximal trichuriasis.

**GALLBLADDER**
The gallbladder wall is mildly thickened, and intrahepatic bile ductules are mildly prominent.

**THYMUS**
The thymus is virtually undetectable, i.e. very small for an animal this age.

**Gross Diagnosis**
1. BODY AS A WHOLE INANITION DEHYDRATION
2. COLONIC MUCOUS MEMBRANE INFLAMMATION, DIFFUSE COLITIS
3. COLON TRICHURIASIS
4. CECUM INFLAMMATION, DIFFUSE TRICHURIASIS
5. GALLBLADDER AND COMMON BILE DUCT, CS INFLAMMATION CHOLEDOTHITIS (choledochocystitis)
6. MENINGES ABNORMAL APPEARANCE (possible meningitis)
7. THYMUS ATROPHY

**Gross Comments**
The colon and meninges are swabbed for bacterial culture, and a full set of tissues is saved in formalin. Gastric pH = 5.

**Measurements**
# Gross Necropsy Report

<table>
<thead>
<tr>
<th>Animal ID</th>
<th>MMU 38073</th>
<th>Report ID</th>
<th>19341</th>
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<th>03/26/2008</th>
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<tbody>
<tr>
<td>Sex</td>
<td>M</td>
<td>Death Type</td>
<td>K</td>
<td>Work Performed</td>
<td>03/26/2008</td>
</tr>
<tr>
<td>Age</td>
<td>11 mon 20 days</td>
<td>Weight (KG)</td>
<td>1.83</td>
<td>Time Performed</td>
<td>11:30 AM</td>
</tr>
</tbody>
</table>

## Gross Observation
- **BODY AS A WHOLE**: The animal is presented in good flesh.
- **GASTROINTESTINAL TRACT**: The gastrointestinal tract is dilated with food and soft to liquid contents - the mucosa, particularly in colon is thickened, and there are small areas of erythema that may be ulcers.
- **LYMPH NODES**: Lymph nodes associated with the GIT are prominent to enlarged.

## Gross Diagnosis
1. GASTROINTESTINAL TRACT INFLAMMATION ENTEROCOLITIS
2. LYMPH NODE HYPERTROPHY (lymphadenopathy - paracolic, mesenteric nodes)

## Gross Comments
This animal appears quite healthy, but clearly has GI disease upon necropsy examination. Tissues are collected to fulfill biospecimen requests (testes, seminal vesicles, lymph node, lungs, trachea, kidneys, head with brain and eyes) and a truncated set of tissues is saved in formalin, but no histopathology is to be performed at this time.

## Measurements
Gross Necropsy Report

**Animal ID** | MMU 38081 | **Report ID** | 17823 | **Report Complete** | 01/08/2008
---|---|---|---|---|---
**Sex** | M | **Death Type** | K | **Work Performed** | 01/08/2008
**Age** | 9 mon 2 days | **Weight (KG)** | .97 | **Time Performed** | 09:30 AM

| Gross Observation | BODY AS A WHOLE | The animal is presented markedly thin and severely dehydrated.
| | GASTROINTESTINAL TRACT | The stomach and small intestine are empty of contents; cecum and colon contain soft fecal material; a few scattered foci of erythema are noted in ileum.
| | LYMPH NODES | Mesenteric nodes are prominent to enlarged.
| | THYMUS | The thymus is very small for an animal this age.

<table>
<thead>
<tr>
<th>Gross Diagnosis</th>
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<tbody>
<tr>
<td>1</td>
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<td>3</td>
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<tr>
<td>4</td>
</tr>
</tbody>
</table>

**Gross Comments**
The small intestine is swabbed for bacterial culture, but no tissues are saved.

**Measurements**
# Gross Necropsy Report

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<tbody>
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<td>Death Type</td>
<td>K</td>
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<td>11/14/2007</td>
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<tr>
<td>Age</td>
<td>7 mon 8 days</td>
<td>Weight (KG)</td>
<td>.99</td>
<td>Time Performed</td>
<td>09:30 AM</td>
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</table>

### Gross Observation

| BODY AS A WHOLE | The animal is presented thin and dehydrated. |
| GASTROINTESTINAL TRACT | The mucosa of small and large intestines is thickened, and contents are liquid. |
| LYMPH NODES | Nodes associated with the gastrointestinal tract are prominent to enlarged. |
| THYMUS | The thymus is virtually undetectable, i.e. very small for an animal this age. |

### Gross Diagnosis

1. BODY AS A WHOLE INANITION DEHYDRATION
2. GASTROINTESTINAL TRACT INFLAMMATION ENTEROCOLITIS
3. LYMPH NODE HYPERTROPHY (lymphadenopathy - paracolic, mesenteric)
4. THYMUS ATROPHY

### Gross Comments

Numerous tissues are collected to fulfill biospecimen requests (lung trachea, heart, eyes, parotid salivary gland, spleen, axillary and mesenteric lymph nodes, kidneys, bone marrow); stomach is saved in formalin (gastric pH=1.0).
### Gross Necropsy Report

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<tr>
<td>Sex</td>
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<tr>
<td>Age</td>
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<td>Weight (KG)</td>
<td>1.022</td>
<td>Time Performed 10:15 AM</td>
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#### Gross Observation
- **BODY AS A WHOLE**: The SIV inoculated animal is presented in good flesh.
- **LYMPH NODES**: Mesenteric nodes are prominent.
- **SPLEEN**: The spleen is moderately enlarged.

#### Gross Diagnosis
1. **SPLEEN HYPERTROPHY** (splenomegaly)
2. **LYMPH NODE HYPERTROPHY** (lymphadenopathy - mesenteric nodes)

#### Gross Comments
Tissues are collected per project protocol.

#### Measurements
# Gross Necropsy Report

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<tr>
<th>Age</th>
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<th>Time Performed</th>
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</thead>
<tbody>
<tr>
<td>3 mon 7 days</td>
<td>.859</td>
<td>10:00 AM</td>
</tr>
</tbody>
</table>

### Gross Observation
- **BODY AS A WHOLE**: The SIV inoculated animal is presented in good flesh.
- **LYMPH NODES**: Lymph nodes are generally prominent to enlarged.
- **SPLEEN**: The spleen is mildly to moderately enlarged.

### Gross Diagnosis
1. **SPLEEN HYPERTROPHY** (splenomegaly)
2. **LYMPH NODES, GENERALIZED HYPERTROPHY** (lymphadenopathy)

### Gross Comments
Tissues are collected per project protocol.

### Measurements
# Gross Necropsy Report

<table>
<thead>
<tr>
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<tbody>
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<td>F</td>
<td>Death Type</td>
<td>X</td>
<td>Work Performed</td>
<td>07/16/2007</td>
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<tr>
<td>Age</td>
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</table>

**Gross Observation**

<table>
<thead>
<tr>
<th>Gross</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>BODY AS A WHOLE</td>
<td>The SIV inoculated animal is presented thin and dehydrated with a stomach dilated with liquid food.</td>
</tr>
<tr>
<td>SPLEEN</td>
<td>Tha spleen is mildly enlarged.</td>
</tr>
<tr>
<td>THYMUS</td>
<td>The thymus is small for an animal this age.</td>
</tr>
</tbody>
</table>

**Gross Diagnosis**

1. BODY AS A WHOLE INANITION DEHYDRATION
2. SPLEEN HYPERTROPHY (splenomegaly)
3. THYMUS ATROPHY

**Gross Comments**

Tissues are collected per project protocol.

**Measurements**
Gross Necropsy Report

Animal ID: MMU 38125  
Report ID: 15140  
Report Complete: 08/14/2007

Sex: F  
Death Type: X  
Work Performed: 08/14/2007

Age: 4 mon 3 days  
Weight (KG): 1.039  
Time Performed: 12:00 AM

Gross Observation:
- BODY AS A WHOLE: The SIV inoculated animal is presented in good flesh.
- SPLEEN: The spleen is mildly to moderately enlarged.

Gross Diagnosis:
1. SPLEEN HYPERTROPHY (splenomegaly)

Gross Comments:
Tissues are collected per project protocol.

Measurements
Gross Necropsy Report

<table>
<thead>
<tr>
<th>Animal ID</th>
<th>MMU 38128</th>
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<tbody>
<tr>
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<tr>
<td>Sex</td>
<td>M</td>
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<tr>
<td>Death Type</td>
<td>X</td>
</tr>
<tr>
<td>Work Performed</td>
<td>07/26/2007</td>
</tr>
<tr>
<td>Age</td>
<td>3 mon 15 days</td>
</tr>
<tr>
<td>Weight (KG)</td>
<td>1.15</td>
</tr>
<tr>
<td>Time Performed</td>
<td>09:00 AM</td>
</tr>
</tbody>
</table>

**Gross Observation**
- **BODY AS A WHOLE**: The SIV inoculated animal is presented in good flesh.
- **LYMPH NODES**: Submandibular and submental, and to a lesser extent, retropharyngeal lymph nodes are prominent.

**Gross Diagnosis**
- 1 **LYMPH NODE HYPERTROPHY** (lymphadenopathy - submandibular, submental, retropharyngeal)

**Gross Comments**
- Tissues are collected per project protocol.

**Measurements**
Gross Necropsy Report

Sex  F  Death Type  X  Work Performed  08/23/2007
Age  4 mon 12 days  Weight (KG)  1.275  Time Performed  09:00 AM

Gross Observation
- BODY AS A WHOLE: The SIV inoculated animal is presented in good flesh.
- LYMPH NODES: Lymph nodes are generally prominent to enlarged.
- SPLEEN: The spleen is moderately enlarged.

Gross Diagnosis
1. SPLEEN HYPERTROPHY (splenomegaly)
2. LYMPH NODES, GENERALIZED HYPERTROPHY (lymphadenopathy - generalized)

Gross Comments: Tissues are collected per project protocol.

Measurements
# Gross Necropsy Report

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Sex</td>
<td>F</td>
<td>Death Type</td>
<td>X</td>
<td>Work Performed 08/23/2007</td>
</tr>
<tr>
<td>Age</td>
<td>4 mon 12 days</td>
<td>Weight (KG)</td>
<td>1.2</td>
<td>Time Performed 10:00 AM</td>
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</table>

## Gross Observation
- **BODY AS A WHOLE**: The SIV inoculated animal is presented in good flesh.
- **LYMPH NODES**: Lymph nodes are generally prominent to enlarged.
- **SPLEEN**: The spleen is moderately enlarged.

## Gross Diagnosis
1. **LYMPH NODES, GENERALIZED HYPTERTROPHY** (lymphadenopathy - generalized)
2. **SPLEEN HYPTERTROPHY** (splenomegaly)

## Gross Comments
Tissues are collected per project protocol.

## Measurements
## Gross Necropsy Report

<table>
<thead>
<tr>
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<td>01/11/2008</td>
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<tr>
<td>Age</td>
<td>9 mon 0 days</td>
<td>Weight (KG)</td>
<td>.94</td>
<td>Time Performed</td>
<td>04:30 PM</td>
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</tbody>
</table>

**Gross Observation**

- **BODY AS A WHOLE**: The animal is presented markedly thin and severely dehydrated.
- **GASTROINTESTINAL TRACT**: The mucosa of small and large intestines is variably thickened and erythematous, and colon contents are liquid; Trichuris spp. parasites are noted in cecum.
- **LUNG**: The lungs fail to collapse upon opening the chest and are heavy, wet, and variegated various shades of red.
- **LYMPH NODES**: Nodes associated with small and large intestines are prominent to enlarged.
- **THYMUS**: The thymus is virtually non-detectable, i.e. very small for an animal this age.

**Gross Diagnosis**

1. **GASTROINTESTINAL TRACT INFLAMMATION ENTEROCOLITIS**
2. **LYMPH NODE HYPERTROPHY** (lymphadenopathy - mesenteric, paracolic)
3. **LUNGS (BOTH) EDEMA PNEUMONIA, NOS** (probable aspiration pneumonia)
4. **CECUM TRICHURIASIS**
5. **THYMUS ATROPHY**

**Gross Comments**

Colon and ileum are swabbed for bacterial culture, and a truncated set of tissues is saved in formalin, but no histopathology is to be performed at this time.

**Measurements**
**Gross Necropsy Report**

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<tbody>
<tr>
<td>Sex</td>
<td>F</td>
<td>Death Type</td>
<td>X</td>
<td>Work Performed</td>
<td>07/23/2007</td>
</tr>
<tr>
<td>Age</td>
<td>3 mon 11 days</td>
<td>Weight (KG)</td>
<td>1.21</td>
<td>Time Performed</td>
<td>09:00 AM</td>
</tr>
</tbody>
</table>

**Gross Observation**
- BODY AS A WHOLE: The SIV inoculated animal is presented in good flesh.
- LYMPH NODES: Lymph nodes are generally prominent to enlarged.
- SPLEEN: The spleen is moderately enlarged.

**Gross Diagnosis**
1. SPLEEN HYPERTROPHY (splenomegaly)
2. LYMPH NODES, GENERALIZED HYPERTROPHY (lymphadenopathy)

**Gross Comments**
Tissues are collected per project protocol.

**Measurements**
# Gross Necropsy Report

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<td>M</td>
<td>Death Type</td>
<td>X</td>
<td>Work Performed</td>
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</tr>
<tr>
<td>Age</td>
<td>3 mon 12 days</td>
<td>Weight (KG)</td>
<td>1.124</td>
<td>Time Performed</td>
<td>10:00 AM</td>
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</tbody>
</table>

| Gross Observation | | Gross Diagnosis | | Gross Comments | | Measurements |
|-------------------|----------------|------------------|----------------|----------------|----------------|
| BODY AS A WHOLE   | The SIV inoculated animal is presented in good flesh. | 1 SPLEEN HYPERTROPHY (splenomegaly, mild) | Tissues are collected per project protocol. |
| LYMPH NODES       | Lymph nodes are generally within normal limits to prominent to occasionally enlarged. | 2 LYMPH NODES, GENERALIZED HYPERTROPHY (lymphadenopathy, mild) | |
| SPLEEN            | The spleen is mildly enlarged. | | |

Measurements
Final Necropsy Report

Animal ID  MMU 38144  Report ID  18641  Report Complete
Sex  F  Death Type  K  Work Performed  02/21/2008
Age  10 mon 10 days  Weight (KG)  1.14  Time Performed  09:30 AM

Gross Observation  BODY AS A WHOLE  The animal is presented thin and dehydrated.
                 COLON  The colonic mucosa is diffusely thickened with scattered foci of erythema.
                 LYMPH NODES  Paracolic nodes are prominent to enlarged.
                 THYMUS  The thymus is very small for an animal this age.

Gross Diagnosis  1  BODY AS A WHOLE INANITION DEHYDRATION
                 2  COLON INFLAMMATION, DIFFUSE COLITIS
                 3  LYMPH NODE HYPERTROPHY  (lymphadenopathy - paracolic nodes)
                 4  THYMUS ATROPHY

Gross Comments  Several tissues are collected to fulfill biospecimen requests (ovaries, oviducts, abdominal aorta, long bones for marrow, lungs, trachea, eyes), and a truncated sit is saved in formalin. The colon is swabbed for bacterial culture, but no histopathology is to be performed at this time.

Final Observations  CECUM  typhlitis, subacute, diffuse, moderate to severe, with scattered crypt abscesses, crypt hyperplasia, prominent surface "tufting" with occasional erosion/ulceration, and numerous bacterial, as well as trichomonas organisms - inflammation is mixed with a prominent component of neutrophils. slide 3
                 COLON  colitis, subacute, diffuse, moderate to severe, with prominent surface epithelial "tufting" and occasional erosion/ulceration, a significant neutrophilic component in the mixed inflammation (including scattered "crypt abscesses" and epithelial exocytosis of neutrophils), crypt hyperplasia, numerous (mixed) bacteria, and plenty of trichomonads. slide 4
                 DUODENUM  NSL. slide 2
                 ILEUM  hyperplasia, lymphoid, multifocal, mild to moderate. slide 3
                 JEJUNUM  NSL. slide 2
                 LIVER  hepatitis, subacute, multifocal (predominantly portal/peripiliary), very mild. slide 4
                 PANCREAS  NSL. slide 2
                 STOMACH  gastritis, subacute, diffusely superficial, mild, with scattered follicular lymphocytic hyperplasia at the junction of mucosa and submucosa. slide 1

Final Diagnosis  1  COLON AND CECUM, CS INFLAMMATION,  (typhlocolitis)
                 DIFFUSE COLITIS
                 2  COLON AND CECUM, CS TRICHOMONIASIS
                 3  STOMACH INFLAMMATION GASTRITIS, NOS
4 LIVER INFLAMMATION HEPATITIS,NOS (mild)

Final Comments
The prominent lesion in this animal is the typhlocolitis which is diffuse and moderate to severe with numerous bacteria and a prominent population of trichomonas organisms. While trichomonds are not generally considered pathogenic in these animals, large numbers suggest a significantly compromised (immunocompromised?) animal.

Measurements
Gross Necropsy Report

Animal ID: MMU 38152
Report ID: 16882
Sex: F
Death Type: K
Work Performed: 11/14/2007
Age: 7 mon 2 days
Weight (KG): 1.07
Time Performed: 10:30 AM

Gross Observation
- BODY AS A WHOLE: The animal is presented thin and dehydrated with a mildly distended abdomen.
- GASTROINTESTINAL TRACT: The mucosa of small, and to a lesser extent large, intestine is thickened, and contents are soft to liquid.
- LYMPH NODES: Nodes associated with the gastrointestinal tract, particularly mesenteric nodes, are prominent to enlarged.
- THYMUS: The thymus, though present, is small for an animal this age.

Gross Diagnosis
1. BODY AS A WHOLE INANITION DEHYDRATION
2. GASTROINTESTINAL TRACT INFLAMMATION ENTEROCOLITIS
3. LYMPH NODE HYPERTROPHY (lymphadenopathy - mesenteric and paracolic)
4. THYMUS ATROPHY

Gross Comments: Numerous tissues are collected to fulfill biospecimen requests (lung trachea, heart, eyes, parotid salivary gland, spleen, axillary and mesenteric lymph nodes, kidneys, bone marrow); stomach is saved in formalin (gastric pH=1.0).

Measurements
Gross Necropsy Report

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<tbody>
<tr>
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<td>M</td>
<td>Death Type</td>
<td>D</td>
<td>Work Performed</td>
<td>06/27/2007</td>
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<tr>
<td>Age</td>
<td>2 mon 14 days</td>
<td>Weight (KG)</td>
<td>.58</td>
<td>Time Performed</td>
<td>11:50 AM</td>
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</table>

Gross Observation

- BODY AS A WHOLE
  - The animal is presented markedly thin and severely dehydrated and in a state of advanced autolysis.
- THYMUS
  - The thymus is small for an animal this age.

Gross Diagnosis

1. BODY AS A WHOLE
   - INANITION
   - DEHYDRATION
2. BODY AS A WHOLE
3. THYMUS ATROPHY

Gross Comments

The peritoneum is swabbed for bacterial culture, but no tissues are saved.

Measurements
Gross Necropsy Report

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<td>Work Performed</td>
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<tr>
<td>Age</td>
<td>6 mon 6 days</td>
<td>Weight (KG)</td>
<td>1.08</td>
<td>Time Performed</td>
<td>11:30 AM</td>
</tr>
</tbody>
</table>

**Gross Observation**

- **COLON**: Diffusely the wall of the large intestine is moderately thickened. A moderate amount of thick liquid green contents is present in the cecum and large intestine.
- **SKIN**: Light brown moist fecal material present on skin of perianal region and ventral tail.
- **THYMUS**: The thymus is mildly reduced from expected size in the anterior mediastinum.

**Gross Diagnosis**

1. COLON AND CECUM, CS INFLAMMATION, DIFFUSE LOOSE STOOL
2. THYMUS INVOLUTION, mild

**Gross Comments**

A thickened wall of the large intestine is consistent with clinical diagnosis of colitis. The small and large intestine were swabbed for bacterial culture. The results of microbiology and histopathology will be presented in the final necropsy report.

**Measurements**
# Gross Necropsy Report

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<tbody>
<tr>
<td>Sex</td>
<td>M</td>
<td>Death Type</td>
<td>K</td>
<td>Work Performed</td>
<td>06/27/2007</td>
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<tr>
<td>Age</td>
<td>2 mon 8 days</td>
<td>Weight (KG)</td>
<td>.9</td>
<td>Time Performed</td>
<td>07:00 AM</td>
</tr>
</tbody>
</table>

**Gross Observation**

BODY AS A WHOLE

The animal is presented in good flesh.

**Gross Diagnosis**

1. BODY AS A WHOLE NO REMARKABLE FINDINGS

**Gross Comments**

Tissues are collected per project protocol - none are saved for CNPRC histopathology.

**Measurements**
# Gross Necropsy Report

<table>
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<tr>
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<th>MMU 38224</th>
<th>Report ID</th>
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<td>Death Type</td>
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<td>Work Performed</td>
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<tr>
<td>Age</td>
<td>9 mon 17 days</td>
<td>Weight (KG)</td>
<td>1.06</td>
<td>Time Performed</td>
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</table>

**Gross Observation**

- **BODY AS A WHOLE**: The animal is presented markedly thin and severely dehydrated.
- **GASTROINTESTINAL TRACT**: The mucosa throughout the GIT is thickened, and contents are scant and liquid.
- **LYMPH NODES**: Lymph nodes associated with the GIT are generally prominent to enlarged.
- **THYMUS**: The thymus is very small for an animal this age.

**Gross Diagnosis**

1. **BODY AS A WHOLE INANITION DEHYDRATION**
2. **GASTROINTESTINAL TRACT INFLAMMATION, DIFFUSE ENTEROCOLITIS** (agastroenterocolitis)
3. **LYMPH NODES, GENERALIZED HYPERTROPHY** (lymphadenopathy)
4. **THYMUS ATROPHY**

**Gross Comments**

Several tissues are collected to fulfill biospecimen requests (long bones, aorta, eyes, head/brain, ovaries, blood) and a truncated set is saved in formalin. The colon is swabbed for bacterial culture.

**Measurements**
Gross Necropsy Report

Animal ID: MMU 38230
Sex: F
Age: 2 mon 29 days
Report ID: 14760
Work Performed: 07/20/2007

Weight (KG): .4
Time Performed: 02:15 PM

Gross Observation

- BODY AS A WHOLE: The infant is presented markedly thin and severely dehydrated and in a state of advanced autolysis.
- GASTROINTESTINAL TRACT: The gastrointestinal tract is virtually empty of contents.
- THYMUS: The thymus is small for an animal this age.

Gross Diagnosis

1. BODY AS A WHOLE INANITION (parental neglect)
2. GASTROINTESTINAL TRACT ABNORMAL APPEARANCE (empty)
3. THYMUS ATROPHY

Gross Comments: The peritoneum is swabbed for bacterial culture - no tissues are saved.

Measurements
Gross Necropsy Report

Sex  M  Death Type  K  Work Performed  09/26/2007
Age  4 mon 27 days  Weight (KG)  1.07  Time Performed  11:00 AM

Gross Observation

<table>
<thead>
<tr>
<th>Gross Observation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>COLON</td>
<td>There was thick liquid contents throughout the entire length of the large intestine.</td>
</tr>
<tr>
<td>THYMUS</td>
<td>The thymus is moderately reduced from expected size in the anterior mediastinum.</td>
</tr>
</tbody>
</table>

Gross Diagnosis

1. COLON AND CECUM, CS INFLAMMATION, DIFFUSE LOOSE STOOL
2. THYMUS ATROPHY, DISUSE

Gross Comments

The finding of liquid contents throughout the large intestine is consistent with a clinical diagnosis of colitis. Thymic atrophy was probably secondary to the stress of chronic colitis. A variety of tissues were collected for the biospecimen request program and a variety of tissues were fixe din 10% formalin. Histopathology results will be presented in the final necropsy report.

Measurements
Final Necropsy Report

Animal ID  MMU 38303  Report ID  18441  Report Complete  02/07/2008
Sex  F  Death Type  K  Work Performed  02/07/2008
Age  9 mon 8 days  Weight (KG)  1.22  Time Performed  10:30 AM

Final Observations

<table>
<thead>
<tr>
<th>BODY AS A WHOLE</th>
<th>The animal is presented thin and dehydrated.</th>
</tr>
</thead>
<tbody>
<tr>
<td>GASTROINTESTINAL TRACT</td>
<td>The mucosa throughout the GIT is thickened, and contents are scant and liquid.</td>
</tr>
<tr>
<td>LYMPH NODES</td>
<td>Lymph nodes associated with the GIT are prominent to enlarged.</td>
</tr>
<tr>
<td>THYMUS</td>
<td>The thymus is small for an animal this age.</td>
</tr>
</tbody>
</table>

Final Diagnosis

1. BODY AS A WHOLE INANITION DEHYDRATION
2. GASTROINTESTINAL TRACT (gastroenterocolitis) INFLAMMATION, DIFFUSE ENTEROCOLITIS
3. LYMPH NODE HYPERTROPHY (lymphadenopathy)
4. THYMUS ATROPHY

Final Comments

Several tissues are collected to fulfill biospecimen requests (long bones for marrow, abdominal aorta, ovaries, eyes, head/brain, blood), and a truncated set is saved in formalin, but no histopathology is to be performed at this time. The colon is swabbed for bacterial culture.

Measurements
Gross Necropsy Report

Sex M  Death Type K  Work Performed 06/25/2007
Age 1 mon 23 days  Weight (KG) .596  Time Performed 12:00 PM

Gross Observation

<table>
<thead>
<tr>
<th>Organ</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BODY AS A WHOLE</td>
<td>Diffusely, the subcutis has a sticky, tachy consistency and the skeletal muscle is a maroon-reddish color; both features consistent with dehydration.</td>
</tr>
<tr>
<td>BRAIN</td>
<td>Diffuse there is a prominent vascular pattern over the meningeal surface of the brain.</td>
</tr>
<tr>
<td>COLON</td>
<td>The large intestine is distended with clear fluid.</td>
</tr>
<tr>
<td>KIDNEY</td>
<td>Diffusely and bilaterally the cortex is a pale light brown color.</td>
</tr>
<tr>
<td>THYMUS</td>
<td>The thymus is markedly reduced in size in the anterior mediastinum.</td>
</tr>
</tbody>
</table>

Gross Diagnosis

1  GASTROINTESTINAL TRACT INFLAMMATION
   LOOSE STOOL
2  BODY AS A WHOLE INANITION
   DEHYDRATION
3  THYMUS ATROPHY, DISUSE
4  KIDNEY NEPHROSIS (T-71000)
5  BRAIN CONGESTION

Gross Comments

Gastrointestinal tract dysfunction was evidenced by the presence of colonic distention with clear fluid possibly due to an inflammatory process. Secondary to the alimentary tract lesion there was probable stress-induced premature thymic involution, systemic dehydration with subsequent renal hypoperfusion resulting in nephrosis.

Measurements
Gross Necropsy Report

Animal ID: MMU 38337  Report ID: 20221  Report Complete: 05/19/2008
Sex: F  Death Type: K  Work Performed: 03/03/2008
Age: 9 mon 28 days  Weight (KG): 1.52  Time Performed: 11:00 AM

**Gross Observation**

- **BODY AS A WHOLE**
  The animal is presented thin and dehydrated.
- **COLON**
  The colonic mucosa is thickened, and contents are soft to liquid.
- **LYMPH NODES**
  Paracolic nodes are prominent to enlarged.
- **THYMUS**
  The thymus is small for an animal this age.

**Gross Diagnosis**

1. BODY AS A WHOLE INANITION DEHYDRATION
2. COLON INFLAMMATION COLITIS
3. LYMPH NODE HYPERTROPHY (lymphadenopathy - paracolic)
4. THYMUS ATROPHY

**Gross Comments**

Tiss are collected to fulfill biospecimen requests -no histopathology.
## Final Necropsy Report

<table>
<thead>
<tr>
<th>Animal ID</th>
<th>MMU 38347</th>
<th>Report ID</th>
<th>18321</th>
<th>Report Complete 02/01/2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>F</td>
<td>Death Type</td>
<td>K</td>
<td>Work Performed 02/01/2008</td>
</tr>
<tr>
<td>Age</td>
<td>8 mon 23 days</td>
<td>Weight (KG)</td>
<td>1.5</td>
<td>Time Performed 10:00 AM</td>
</tr>
</tbody>
</table>

### Final Observations

- **BODY AS A WHOLE**: The animal is presented in good flesh.
- **COLON**: The colonic mucosa is thickened and variably erythematous, and contents are soft to liquid.
- **LYMPH NODES**: Nodes associated with gastrointestinal tract, particularly paracolic and mesenteric, are prominent to enlarged.

### Final Diagnosis

1. **COLON INFLAMMATION, DIFFUSE COLITIS**
2. **LYMPH NODE HYPERTROPHY** (lymphadenopathy)

### Final Comments

Several tissues are collected to fulfill biospecimen requests (head with brain, eyes, long bones, ovaries, dorsal aorta, blood), but none are saved for CNPRC histopathology.

### Measurements
# Gross Necropsy Report

<table>
<thead>
<tr>
<th>Gross Observation</th>
<th>Gastrointestinal Tract</th>
<th>The contents is within normal limits of amount and appearance.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gastrointestinal Tract</td>
<td>Gingiva</td>
<td>Dental formula: all teeth are deciduous—4 upper and 4 lower incisors, 2 upper and 2 lower canines, 4 upper and 4 lower pre-molars.</td>
</tr>
<tr>
<td>Heart</td>
<td>Heart</td>
<td>The inside and outside diameter of the left ventricle midway between the apex and base is 7 and 19 mm respectively.</td>
</tr>
<tr>
<td>Skin</td>
<td>Skin</td>
<td>A tattoo on the right medial thigh reads 38362. There is a large laceration 3.5 cmm long, on the lateral aspect of the left upper forearm resulting in exposure of the skeletal muscle. There are also smaller lacerations on the left forelimb and the left foot. The subcutis has a sticky tacky consistency.</td>
</tr>
<tr>
<td>Thymus</td>
<td>Thymus</td>
<td>The thymus is reduced from expected size in the anterior mediastinum.</td>
</tr>
<tr>
<td>Urinary Bladder</td>
<td>Urinary Bladder</td>
<td>Clear light yellow sample of urine tested with bililabstix—results: glucose, ketone, and bilirubin are all negative, blood small, pH 7, protein 2+.</td>
</tr>
</tbody>
</table>

## Gross Diagnosis

<table>
<thead>
<tr>
<th>Gross Diagnosis</th>
<th>1</th>
<th>Skin Appendage Traumatic Abnormality</th>
<th>Lacerations, multifocal</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Body As A Whole Lesion Dehydration</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Thymus Atrophy</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Gross Comments

The cutaneous lacerations appeared to be of recent occurrence and there was extensive exposure of the underlying skeletal muscle of the upper left forelimb. There may have been a pre-existing stress, possibly exacerbated by dehydration, as evidenced by thymic atrophy. The results of histopathology will be presented in the final necropsy report.
Gross Necropsy Report

Sex  F  Death Type  K  Work Performed 12/22/2007
Age  7 mon 12 days  Weight (KG) .725  Time Performed 08:00 PM

Gross Observation

EYE  Bilaterally the eyes are markedly sunken.

GASTROINTESTINAL  A small amount of contents is present throughout and the contents throughout the large intestine in liquid consistency.

HEART  The internal and external diameter of the left left ventricle midway between the apex and base is 5 and 15 mm respectively.

SKIN  A tattoo on the right medial thigh reads 38363. Multifocally a moderate amount of dried dark green fecal material is adherent to the skin and hair of the perianal region and the ventral tail. The subcutis has a sticky tachy consistency.

THYMUS  Thy thymus is reduced from expected size in the anterior mediastinum.

URINARY BLADDER  A sample of urine was drawn by cysticentesis; bililabstix results: glucose, bilirubin, ketione, and blood are all negative, pH 6, protein trace.

Gross Diagnosis

1  COLON INFLAMMATION, DIFFUSE TRICHURIS
2  BODY AS A WHOLE INANITION DEHYDRATION
3  THYMUS ATROPHY

Gross Comments

The finding of liquid contents throughout the entire large intestine is consistent with a clinical diagnosis of colitis. Thymic atrophy is probably secondary to the stress of idarrhea and debility. The results of microbiology [small and large intestine] and histopathology will be presented in the final necropsy report.

Measurements
Gross Necropsy Report

Animal ID: MMU 38369  
Report ID: 18863  
Report Complete: 02/29/2008

Sex: F  
Death Type: K  
Work Performed: 02/29/2008

Age: 9 mon 17 days  
Weight (KG): .748  
Time Performed: 11:00 AM

Gross Observation
- BODY AS A WHOLE: The animal is presented markedly thin and severely dehydrated.
- COLON: The colonic mucosa is diffusely thickened and erythematous, and contents are liquid and gas.
- LYMPH NODES: Paracolic and gastric nodes are prominent to enlarged.
- THYMUS: The thymus is virtually undetectable, i.e. very small for an animal this age.

Gross Diagnosis
1. BODY AS A WHOLE INANITION DEHYDRATION
2. COLON INFLAMMATION, DIFFUSE COLITIS
3. LYMPH NODE HYPERTROPHY (lymphadenopathy - paracolic, gastric)
4. THYMUS ATROPHY

Gross Comments: Tissues are collected to fulfill biospecimen requests (ovaries, uterine tubes, urine, blood, abdominal aorta, eyes), and a truncated set is saved in formalin, but no histopathology is to be performed at this time.

Measurements
Gross Necropsy Report

Animal ID  MMU 38396  Report ID 18101  Report Complete 01/17/2008
Sex  M  Death Type  K  Work Performed 01/17/2008
Age  8 mon 0 days  Weight (KG) 1.22  Time Performed 09:45 AM

Gross Observation

<table>
<thead>
<tr>
<th>Organ</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BRAIN</td>
<td>Diffusely the brain is a red congested color with prominent vascular pattern over the meningeal surface; the meningeal surface is moist and glistening.</td>
</tr>
<tr>
<td>COLON</td>
<td>Diffusely the wall of the colon is moderately thickened.</td>
</tr>
<tr>
<td>EYE</td>
<td>Bilaterally the eyes are markedly sunken.</td>
</tr>
<tr>
<td>GASTROINTESTINAL TRACT</td>
<td>Contents in the stomach is within normal limits of appearance and amount; throughout the the large intestine there is a small to moderate amount of liquid green contents.</td>
</tr>
<tr>
<td>KIDNEY</td>
<td>Bilaterally the cortex is a moderately pale light brown color.</td>
</tr>
<tr>
<td>SKIN</td>
<td>A tattoo on the right medial thigh reads 38396.</td>
</tr>
<tr>
<td>THYMUS</td>
<td>The thymus is moderately reduced from expected size in the anterior mediastinum.</td>
</tr>
<tr>
<td>URINARY BLADDER</td>
<td>The bladder contains approximately 1 cc. of yellow clear urine; bililabstix results on a sample drawn by cysticentesis: glucose, bilirubin, ketone, and blood all negative, pH 6.5, protein trace.</td>
</tr>
</tbody>
</table>

Gross Diagnosis

1. COLON AND CECUM, CS INFLAMMATION, DIFFUSE
2. BODY AS A WHOLE INANITION DEHYDRATION
3. THYMUS ATROPHY
4. KIDNEY NEPHROSIS (T-71000)

Gross Comments

The finding of colonic liquid contents and a thickened wall is consistent with clinical diagnosis of colitis. Thymic atrophy is probably secondary to the stress of recurring colitis. The results of microbiology [small and large intestine] and histopathology will be presented in the final necropsy report.

Measurements
Gross Necropsy Report

Animal ID  MMU 38411  Report ID  18981  Report Complete  03/06/2008
Sex  M  Death Type  K  Work Performed  03/06/2008
Age  9 mon 17 days  Weight (KG)  1.385  Time Performed  11:30 AM

Gross Observation

<table>
<thead>
<tr>
<th>Diagnosis</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BODY AS A WHOLE</td>
<td>The animal is presented in good flesh to slightly thin.</td>
</tr>
<tr>
<td>GASTROINTESTINAL TRACT</td>
<td>The mucosa of colon and small intestines is thickened, and variably erythematous with a single focus of erosion/ulceration in mid-colon - colon contents are liquid.</td>
</tr>
<tr>
<td>LYMPH NODES</td>
<td>Nodes associated with the GIT, mainly mesenteric and paracolic nodes, are prominent to enlarged.</td>
</tr>
</tbody>
</table>

Gross Diagnosis

1  BODY AS A WHOLE INANITION DIARRHEA
2  GASTROINTESTINAL TRACT INFLAMMATION ENTEROCOLITIS
3  LYMPH NODE HYPERTROPHY (lymphadenopathy - mesenteric, paracolic nodes)

Gross Comments

Multiple tissues are collected to fulfill biospecime requests (testes, epididymides, seminal vesicles, prostate, trachea, lungs, head/brain, blood, abdominal aorta, long bones/marrow, submandibular/parotid/sublingual salivary glands), and a truncated set is saved in formalin, but no histopathology is to be performed at this time.

Measurements
Gross Necropsy Report

Sex F  Death Type D  Work Performed 12/10/2007
Age 6 mon 20 days  Weight (KG) .57  Time Performed 10:15 AM

Gross Observation
- BODY AS A WHOLE: The animal is presented markedly thin and severely dehydrated.
- GASTROINTESTINAL TRACT: The gastrointestinal tract contains very little other than mucus.
- THYMUS: The thymus is very small for an animal this age.

Gross Diagnosis
1. BODY AS A WHOLE INANITION DEHYDRATION
2. THYMUS ATROPHY

Gross Comments
Peritoneum and colon are swabbed for bacterial culture - no tissues are saved.

Measurements
# Gross Necropsy Report

<table>
<thead>
<tr>
<th>Animal ID</th>
<th>MMU 38425</th>
<th>Report ID</th>
<th>18162</th>
<th>Report Complete</th>
<th>01/22/2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>M</td>
<td>Death Type</td>
<td>K</td>
<td>Work Performed</td>
<td>01/22/2008</td>
</tr>
<tr>
<td>Age</td>
<td>8 mon 0 days</td>
<td>Weight (KG)</td>
<td>1</td>
<td>Time Performed</td>
<td>11:15 AM</td>
</tr>
</tbody>
</table>

### Gross Observation

- **BODY AS A WHOLE**
  - This animal is thin.

- **HEART**
  - The internal and external diameter of the left ventricle at the midpoint between the apex and base is 5 and 15 mm. respectively.

- **SKIN**
  - A tattoo on the right medial thigh reads 38425. A small amount of dry dark green fecal material is adherent to the skin of the perianal region. The haircoat is dull and dry. There are two subcutaneous red contusions in the frontal region of the skull bilaterally.

- **THYMUS**
  - The thymus is marked reduced in the anterior mediastinum.

### Gross Diagnosis

1. **BODY AS A WHOLE INANITION DEHYDRATION**
2. **THYMUS ATROPHY**

### Gross Comments

The finding of dehydration is consistent with the clinical diagnosis of dehydration due to diarrhea. Thymic atrophy was attributed to the stress of chronic or recurring diarrhea. The results of microbiology [small and large intestine] and histopathology will be presented in the final necropsy report.

### Measurements
# Final Necropsy Report

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>M</td>
<td>Death Type</td>
<td>ND</td>
<td>Work Performed</td>
<td>06/18/2007</td>
</tr>
<tr>
<td>Age</td>
<td>25 days</td>
<td>Weight (KG)</td>
<td>.5</td>
<td>Time Performed</td>
<td>02:30 PM</td>
</tr>
</tbody>
</table>

## Final Observations

- **BODY AS A WHOLE**: The large infant is presented in good flesh.
- **LUNG**: The lungs are diffusely dark red-purple.
- **THYMUS**: The thymus is small for an animal this age.

## Final Diagnosis

1. BODY AS A WHOLE DYSTOCIA
2. LUNGS (BOTH) ABNORMAL APPEARANCE PNEUMONIA, NOS
3. THYMUS ATROPHY

## Final Comments

A truncated set of tissues is saved in formalin.

## Measurements
# Gross Necropsy Report

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>F</td>
<td>Death Type</td>
<td>K</td>
<td>Work Performed</td>
<td>11/27/2007</td>
</tr>
<tr>
<td>Age</td>
<td>6 mon 3 days</td>
<td>Weight (KG)</td>
<td>.97</td>
<td>Time Performed</td>
<td>09:55 AM</td>
</tr>
</tbody>
</table>

## Gross Observation

<table>
<thead>
<tr>
<th>organ</th>
<th>description</th>
</tr>
</thead>
<tbody>
<tr>
<td>EYE</td>
<td>Bilaterally the eyes are moderately sunken.</td>
</tr>
<tr>
<td>GASTROINTESTINAL TRACT</td>
<td>The stomach is empty. A small amount of green tenacious contents is present in the duodenum, jejunum, and proximal ileum, the diastal ileum contains a moderate amount of green granular soft contents. Throughout the cecum and colon there is a small amount of thick, turbid, liquid, green contents. Diffusely the wall of the large intestine is moderately thickened.</td>
</tr>
<tr>
<td>LIVER</td>
<td>The gall bladder contains a moderate amount of thick green tenacious bile.</td>
</tr>
<tr>
<td>SKIN</td>
<td>A tattoo on the right medial thigh reads 38434. A moderate amount of moist and dry green fecal material is adhered to the skin and matted hair of the perianal region and the ventral tail.</td>
</tr>
<tr>
<td>SPLEEN</td>
<td>The spleen is mildly enlarged measuring 3.8 cm cm long and has a mildly granular cut surface.</td>
</tr>
<tr>
<td>URINARY BLADDER</td>
<td>The lumen contains approximatelt 1/4 cc of light yellow clear urine; billilabstix results on a sample drawn by cysticentesis: glucose, bilirubin, ketone all negative, blood large of 3+, pH 6, protein trace.</td>
</tr>
</tbody>
</table>

## Gross Diagnosis

1. COLON AND CECUM, CS INFLAMMATION, DIFFUSE LOOSE STOOL

## Gross Comments

The small and large intestine are swabbed for microbiology. The finding of liquid contents throughout the colon with accompanying thickening of the wall of this organ is consistent with the clinical diagnosis of colitis. Selected tissues were collected for the biospecimen request program; a variety of tissues are fixed in 10% formalin for diagnostic pathology. The results of microbiology and histopathology will be presented in the final necropsy report.

## Measurements
Gross Necropsy Report

Sex  M  Death Type  M  Work Performed  06/05/2007
Age  7 days  Weight (KG) .38  Time Performed  12:00 AM

Gross Observation

<table>
<thead>
<tr>
<th>Gross Observation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BODY AS A WHOLE</td>
<td>Diffusely the subcutis had a sticky tacky consistency.</td>
</tr>
<tr>
<td>LUNG</td>
<td>Multifocally the lung was consolidated as evidenced by firmness upon palpation.</td>
</tr>
<tr>
<td>THYMUS</td>
<td>The thymus was reduced from expected size in the anterior mediastinum.</td>
</tr>
</tbody>
</table>

Gross Diagnosis

1. LUNG INFLAMMATION, MULTIFOCAL
2. BODY AS A WHOLE DEPLETION DEHYDRATION
3. THYMUS ATROPHY

Gross Comments

Pneumonia was evidenced grossly as multifocal consolidation of pulmonary parenchyma. Thymic atrophy may have occurred secondary to the stress of pneumonia and dehydration.

Measurements
### Gross Necropsy Report

<table>
<thead>
<tr>
<th>Animal ID</th>
<th>MMU 38494</th>
<th>Report ID</th>
<th>18622</th>
<th>Report Complete</th>
<th>Work Performed</th>
<th>02/20/2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>F</td>
<td>Death Type</td>
<td>K</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>8 mon 10 days</td>
<td>Weight (KG)</td>
<td>1.09</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Gross Observation
- **BODY AS A WHOLE**: The animal is presented markedly thin and severely dehydrated.
- **BRAIN**: Meningeal and surface cerebral vessels are congested, and the brain is "wet" (increased CSF).
- **THYMUS**: The thymus is very small for an animal this age.

#### Gross Diagnosis
1. **BODY AS A WHOLE INANITION DEHYDRATION**
2. **MENINGES CONGESTION** (possible meningitis)
3. **THYMUS ATROPHY**

#### Gross Comments
Meninges and peritoneum are swabbed for bacterial culture, and a full set of tissues is saved in formalin.

#### Measurements
Gross Necropsy Report

Sex         F           Death Type  K       Work Performed 08/28/2007
Age         2 mon 16 days   Weight (KG)  

Gross Observation
NERVE
The right brachial plexus is surrounded by red brown edematous tissue.

SKIN
Mult ifocally on the right wrist there linear transverse abrasions and ulcerations covered by dark red brown scabs. There is a linear red raised scar on the dorsal right forearm.

Gross Diagnosis
1 BRACHIAL PLEXUS EDEMA
2 SKIN OF DORSAL AREA OF WRIST ULCERATION

Gross Comments
The ulceration of the skin of the right wrist and a scar on the dorsal right forearm as well as the accompanying edema surrounding the right brachial plexus is consistent with trauma. The perineural edema could account for the neurologic deficit seen clinically. The spleen was swabbed for bacterial culture. The results of microbiology and histopathology will be presented in the final necropsy report.

Measurements
Gross Necropsy Report

Age: 15 days  |  Weight (KG): .66  |  Time Performed: 11:00 AM

Gross Observation
- BODY AS A WHOLE: The animal is presented in good flesh.
- BRAIN: The lateral ventricles of the brain are slightly larger than expected, particularly on the left side. There is a very small, roughly 0.2 cm diameter, clear fluid filled cyst on the midline of the meninges.
- THYMUS: The thymus is slightly smaller than expected for an animal this age.

Gross Diagnosis
1. LATERAL VENTRICLE DILATATION
2. THYMUS ATROPHY
3. MENINGES CYST

Gross Comments: Tissues are collected to fulfill biospecimen requests, and the meningeal cyst is photographed. Only the cyst is saved in formalin.

Measurements
## Gross Necropsy Report

<table>
<thead>
<tr>
<th>Animal ID</th>
<th>Report ID</th>
<th>Report Complete</th>
<th>Sex</th>
<th>Death Type</th>
<th>Work Performed</th>
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</thead>
<tbody>
<tr>
<td>MMU 38550</td>
<td>15122</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 mon 17 days</td>
<td>.465</td>
<td>02:00 PM</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Gross Observation
- **BODY AS A WHOLE**: The infant is presented markedly thin and dehydrated.
- **LYMPH NODES**: Popliteal lymph nodes in the left leg are enlarged.
- **SKELETAL MUSCLE**: Areas of muscle in the lateral right thigh and posterior left thigh are firm and discolored pale tan.
- **THYMUS**: The thymus is very small for an animal this age.

### Gross Diagnosis
1. **BODY AS A WHOLE INANITION DEHYDRATION**
2. **MUSCLE OF HIP AND THIGH NECROSIS**
3. **LYMPH NODE HYPERTROPHY** (lymphadenopathy - popliteal, left)
4. **THYMUS ATROPHY**

### Gross Comments
Tissues are collected to fulfill multiple biospecimen requests (kidneys, lungs, trachea), and a truncated set is saved in formalin, but no histopathology is to be performed at this time.
Gross Necropsy Report

Sex | F | Death Type | K | Work Performed 12/03/2007
Age | 4 mon 27 days | Weight (KG) | .76 | Time Performed 10:30 AM

Gross Observation

<table>
<thead>
<tr>
<th>Gross Observation</th>
<th>Gross Observation Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>BODY AS A WHOLE</td>
<td>The animal is presented thin and dehydrated with a moderately distended abdomen.</td>
</tr>
<tr>
<td>LYMPH NODES</td>
<td>Lymph nodes are generally prominent to enlarged.</td>
</tr>
<tr>
<td>STOMACH</td>
<td>The stomach is mildly to moderately dilated with liquid food and gas.</td>
</tr>
<tr>
<td>THYMUS</td>
<td>The thymus is very small for an animal this age.</td>
</tr>
</tbody>
</table>

Gross Diagnosis

1. BODY AS A WHOLE INANITION DEHYDRATION
2. STOMACH DILATATION
3. LYMPH NODES, GENERALIZED HYPERTROPHY (lymphadenopathy - generalized)
4. THYMUS ATROPHY

Gross Comments

Tissues are collected to fulfill biospecimen requests (ovaries, uterine tubes, kidneys, lungs, trachea, whole head) and a truncated set is saved in formalin, but no histopathology is to be performed at this time. The small intestine is swabbed for bacterial culture.

Measurements
# Gross Necropsy Report

<table>
<thead>
<tr>
<th>Animal ID</th>
<th>MMU 38571</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
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<tr>
<td>Age</td>
<td>3 mon 17 days</td>
</tr>
<tr>
<td>Weight (KG)</td>
<td>0.72</td>
</tr>
<tr>
<td>Report ID</td>
<td>16461</td>
</tr>
<tr>
<td>Report Complete</td>
<td>10/24/2007</td>
</tr>
<tr>
<td>Work Performed</td>
<td>10/24/2007</td>
</tr>
<tr>
<td>Gross Observation</td>
<td>BRAIN</td>
</tr>
<tr>
<td></td>
<td>The brain is a severely congested red color with pronounced vascular patern on the meningeal surface.</td>
</tr>
<tr>
<td></td>
<td>COLON</td>
</tr>
<tr>
<td></td>
<td>The mucosa of the proximal colon and the rectum is a congested red color; red mucinous material covers the rectal mucosa.</td>
</tr>
<tr>
<td></td>
<td>GASTROINTESTINAL TRACT</td>
</tr>
<tr>
<td></td>
<td>there is no contents throughout the tract.</td>
</tr>
<tr>
<td></td>
<td>GINGIVA</td>
</tr>
<tr>
<td></td>
<td>Dental formula: all teeth are deciduous-4upper and 4 lower incisors, 2 upper and 2 lower canines, 2 upper and 2 lower premolars</td>
</tr>
<tr>
<td></td>
<td>SKIN</td>
</tr>
<tr>
<td></td>
<td>A tattoo on the right medial thigh reads 38571. The perianal skin is moist and hyperemic. A small amount of brown fecal material is adhered to the ventral tail. There is dark red contusion on the chin measuring approximately 1 cm in diameter. The subcutis has a sticky tachy consistency.</td>
</tr>
<tr>
<td></td>
<td>THYMUS</td>
</tr>
<tr>
<td></td>
<td>The thymus is markedly reduced from expected size in the anterior mediastinum.</td>
</tr>
<tr>
<td>Gross Diagnosis</td>
<td>1 BODY AS A WHOLE LESION Dehydration</td>
</tr>
<tr>
<td></td>
<td>2 THYMUS INVOLUTION</td>
</tr>
<tr>
<td></td>
<td>3 GASTROINTESTINAL TRACT LESION no contents</td>
</tr>
<tr>
<td>Gross Comments</td>
<td>The finding of an empty g.i. tract in an infant is highly significant and most probably contributed to morbidity and mortality by causing dehydration and electrolyte imbalance. Stress mostly likely resulted in pre-mature thymic involution. The following sites are swabbed for bacterial culture: small intestine, large intestine, and brain. The results of microbiology and histopathology will be presented in the final necropsy report.</td>
</tr>
</tbody>
</table>

## Measurements
Gross Necropsy Report

<table>
<thead>
<tr>
<th>Animal ID</th>
<th>Report ID</th>
<th>Report Complete</th>
</tr>
</thead>
<tbody>
<tr>
<td>MMU 38632</td>
<td>17582</td>
<td>12/21/2007</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sex</th>
<th>Death Type</th>
<th>Work Performed</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>K</td>
<td>12/21/2007</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age</th>
<th>Weight (KG)</th>
<th>Time Performed</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 mon 10 days</td>
<td>.67</td>
<td>12:20 PM</td>
</tr>
</tbody>
</table>

### Gross Observation

- **GASTROINTESTINAL TRACT**: The contents throughout is within normal limits of appearance and amount.
- **GINGIVA**: Dental formula: 4 UPPER AND 4 LOWER DECIDUOUS INCISORS, 2 UPPER AND 2 LOWER DECIDUOUS CANINES, 2 LOWER ERUPTED FIRST DECIDUOUS PRE-MOLARS, 2 UPPER PARTIALLY ERUPTED FIRST PRE-MOLARS.
- **HEART**: The inside and outside diameter of the left ventricle midway between the apex and base is 5 and 12 mm. respectively.
- **SKIN**: A tattoo on the right medial thigh reads 38632. There is alopecia of approximately 50% of the back with multiple small tufts of remaining hair.
- **THYMUS**: The thymus is mildly reduced from expected size in the anterior mediastinum.

### Gross Diagnosis

1. **THYMUS ATROPHY** mild
2. **SKIN OF BACK ALOPECIA**

### Gross Comments

It is uncertain as to the cause of this animal’s clinical condition. The slightly atrophied thymus suggests acute recent stress. Alopecia over the back may be indicative of a stressful situation possibly due to hair picking or a primary or secondary skin abnormality. The results of histopathology will be presented in the final necropsy report.
# Gross Necropsy Report

<table>
<thead>
<tr>
<th>Animal ID</th>
<th>MMU 38670</th>
<th>Report ID</th>
<th>18901</th>
<th>Report Complete</th>
<th>03/04/2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>M</td>
<td>Death Type</td>
<td>D</td>
<td>Work Performed</td>
<td>03/04/2008</td>
</tr>
<tr>
<td>Age</td>
<td>7 days</td>
<td>Weight (KG)</td>
<td>.274</td>
<td>Time Performed</td>
<td>01:30 PM</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gross Observation</th>
<th>BODY AS A WHOLE</th>
<th>The infant is presented thin.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>LUNG</td>
<td>The lungs are diffusely mottled with dark red discolorition.</td>
</tr>
<tr>
<td></td>
<td>THYMUS</td>
<td>The thymus is small for an animal this age.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gross Diagnosis</th>
<th>BODY AS A WHOLE INANITION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>LUNGS (BOTH) CONGESTION</td>
</tr>
<tr>
<td>3</td>
<td>THYMUS ATROPHY</td>
</tr>
<tr>
<td>(possible pneumonia)</td>
<td></td>
</tr>
</tbody>
</table>

**Gross Comments**

The lungs are swabbed for bacterial culture, and a full set of tissues is saved in formalin, but no histopathology is to be performed at this time.
Gross Necropsy Report

Animal ID: MMU 38671  
Report ID: 18902  
Report Complete: 03/04/2008

Sex: U  
Death Type: D  
Work Performed: 03/04/2008

Age: 3 days  
Weight (KG): .6  
Time Performed: 02:00 PM

Gross Observation

<table>
<thead>
<tr>
<th>Gross Observation</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>BODY AS A WHOLE</td>
<td>The animal is presented in good flesh.</td>
</tr>
<tr>
<td>LUNG</td>
<td>The lungs are diffusely mottled with dark red discoloration.</td>
</tr>
</tbody>
</table>

Gross Diagnosis

<table>
<thead>
<tr>
<th>Diagnosis</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 LUNGS (BOTH) CONGESTION</td>
<td>(possible pneumonia)</td>
</tr>
</tbody>
</table>

Gross Comments

Except for pulmonary congestion, this animal appears within normal limits. One wonders about parental neglect as a cause of mortality. A full set of tissues is saved in formalin, but no histopathology is to be performed at this time.

Measurements
Gross Necropsy Report

Animal ID  MMU  38703  Report ID  19581  Report Complete  04/04/2008
Sex  U  Death Type  D  Work Performed  04/04/2008
Age  25 days  Weight (KG)  .42  Time Performed  12:00 AM

Gross Observation

<table>
<thead>
<tr>
<th>Gross Observation</th>
<th>Diagnosis</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>BODY AS A WHOLE</td>
<td>BODY AS A WHOLE INANITION DEHYDRATION</td>
<td>The animal is presented emaciated and severely dehydrated.</td>
</tr>
<tr>
<td>THYMUS</td>
<td>THYMUS ATROPHY</td>
<td>The thymus is very small for an animal this age.</td>
</tr>
</tbody>
</table>

Gross Comments

The lungs/pleural cavity are swabbed for bacterial culture - no tissues are saved.
# Gross Necropsy Report

<table>
<thead>
<tr>
<th>Animal ID</th>
<th>MMU 38755</th>
<th>Report ID</th>
<th>19325</th>
<th>Report Complete</th>
<th>Sex</th>
<th>F</th>
<th>Death Type</th>
<th>D</th>
<th>Work Performed</th>
<th>03/25/2008</th>
<th>Age</th>
<th>10 days</th>
<th>Weight (KG)</th>
<th>.68</th>
<th>Time Performed</th>
<th>04:00 PM</th>
</tr>
</thead>
</table>

**Gross Observation**
- **BODY AS A WHOLE**: The animal is presented markedly thin and severely dehydrated and in a state of early autolysis.
- **GASTROINTESTINAL TRACT**: The gastrointestinal tract is virtually empty of contents.
- **THYMUS**: The thymus is very small for an animal this age.

**Gross Diagnosis**
1. **BODY AS A WHOLE INANITION DEHYDRATION**
2. **THYMUS ATROPHY**

**Gross Comments**
The severe inanition and dehydration, the empty gastrointestinal tract, and the thymic atrophy all suggest parental neglect as the cause of this animal's demise. No tissues are saved.

**Measurements**
# Gross Necropsy Report

<table>
<thead>
<tr>
<th>Animal ID</th>
<th>MMU 38764</th>
<th>Report ID</th>
<th>19281</th>
<th>Report Complete</th>
<th>03/24/2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>M</td>
<td>Death Type</td>
<td>D</td>
<td>Work Performed</td>
<td>03/24/2008</td>
</tr>
<tr>
<td>Age</td>
<td>7 days</td>
<td>Weight (KG)</td>
<td>.42</td>
<td>Time Performed</td>
<td>02:00 PM</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gross Observation</th>
<th>BODY AS A WHOLE</th>
<th>The animal is presented in good flesh, but all internal organs are soft and dark red.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>THYMUS</td>
<td>The thymus is very small for an animal this age.</td>
</tr>
</tbody>
</table>

**Gross Diagnosis**

- 1. BODY AS A WHOLE AUTOLYSIS
- 2. THYMUS ATROPHY

**Gross Comments**

The peritoneum is swabbed for bacterial culture, but no tissues are saved.

**Measurements**
# Gross Necropsy Report

<table>
<thead>
<tr>
<th>Animal ID</th>
<th>MMU 38781</th>
<th>Report ID</th>
<th>19761</th>
<th>Report Complete</th>
<th>04/22/2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>F</td>
<td>Death Type</td>
<td>X</td>
<td>Work Performed</td>
<td>04/22/2008</td>
</tr>
<tr>
<td>Age</td>
<td>1 mon 2 days</td>
<td>Weight (KG)</td>
<td>.84</td>
<td>Time Performed</td>
<td>09:00 AM</td>
</tr>
</tbody>
</table>

**Gross Observation**
- BODY AS A WHOLE: The animal is presented thin.
- SPLEEN: The spleen is mildly enlarged.

**Gross Diagnosis**
1. SPLEEN HYPERTROPHY (splenomegaly, mild)

**Gross Comments**
Tissues are collected per project protocol.

**Measurements**
### Gross Necropsy Report

<table>
<thead>
<tr>
<th>Animal ID</th>
<th>MMU 38784</th>
<th>Report ID</th>
<th>19762</th>
<th>Report Complete 04/22/2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>M</td>
<td>Death Type</td>
<td>X</td>
<td>Work Performed 04/22/2008</td>
</tr>
<tr>
<td>Age</td>
<td>1 mon 2 days</td>
<td>Weight (KG)</td>
<td>.8</td>
<td>Time Performed 10:00 AM</td>
</tr>
</tbody>
</table>

#### Gross Observation
BODY AS A WHOLE The animal is presented thin.

#### Gross Diagnosis
1 BODY AS A WHOLE NO REMARKABLE FINDINGS

#### Gross Comments
Tissues are collected per project protocol.
Gross Necropsy Report

Animal ID: MMU 38785  
Report ID: 19841  
Report Complete: 04/24/2008

Sex: M  
Death Type: X  
Work Performed: 04/24/2008

Age: 1 mon 4 days  
Weight (KG): .923  
Time Performed: 09:00 AM

Gross Observation: BODY AS A WHOLE  
The infant is presented in good flesh.

Gross Diagnosis: 1  
BODY AS A WHOLE NO REMARKABLE FINDINGS

Gross Comments: Tissues are harvested per project protocol.

Measurements
Gross Necropsy Report

**Animal ID**  MMU 38788  
**Report ID**  19401  
**Report Complete**

**Sex**  M  
**Death Type**  D  
**Work Performed**  03/27/2008  
**Age**  6 days  
**Weight (KG)**  .455  
**Time Performed**  02:00 PM

**Gross Observation**

<table>
<thead>
<tr>
<th>Observation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BODY AS A WHOLE</td>
<td>The infant is presented markedly thin and severely dehydrated.</td>
</tr>
<tr>
<td>GASTROINTESTINAL TRACT</td>
<td>The gastrointestinal tract is virtually devoid of contents.</td>
</tr>
<tr>
<td>THYMUS</td>
<td>The thymus is very small for an animal this age.</td>
</tr>
</tbody>
</table>

**Gross Diagnosis**

1. BODY AS A WHOLE INANITION DEHYDRATION
2. GASTROINTESTINAL TRACT ABNORMAL APPEARANCE (the GIT is virtually empty of contents)
3. THYMUS ATROPHY

**Gross Comments**
The empty GIT, thymic atrophy, and marked inanition/dehydration together suggest parental neglect. A truncated set of tissues is saved for histopathology.

**Measurements**
# Gross Necropsy Report

<table>
<thead>
<tr>
<th>Animal ID</th>
<th>Report ID</th>
<th>Report Complete</th>
</tr>
</thead>
<tbody>
<tr>
<td>MMU 38793</td>
<td>19842</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sex</th>
<th>Death Type</th>
<th>Work Performed</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>X</td>
<td>04/24/2008</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age</th>
<th>Weight (KG)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 mon 3 days</td>
<td>0.693</td>
</tr>
</tbody>
</table>

**Gross Observation**

BODY AS A WHOLE The infant is presented in good flesh.

**Gross Diagnosis**

1 BODY AS A WHOLE NO REMARKABLE FINDINGS

**Gross Comments**

Tissues are collected per project protocol.

**Measurements**
# Gross Necropsy Report

<table>
<thead>
<tr>
<th>Animal ID</th>
<th>MMU</th>
<th>38820</th>
<th>Report ID</th>
<th>19447</th>
<th>Report Complete</th>
<th>03/31/2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>M</td>
<td></td>
<td>Death Type</td>
<td>D</td>
<td>Work Performed</td>
<td>03/31/2008</td>
</tr>
<tr>
<td>Age</td>
<td>7 days</td>
<td></td>
<td>Weight (KG)</td>
<td>.375</td>
<td>Time Performed</td>
<td>03:15 PM</td>
</tr>
</tbody>
</table>

**Gross Observation**
- **BODY AS A WHOLE**: The infant is presented severely thin and markedly dehydrated and in a state of advanced autolysis.
- **THYMUS**: The thymus is very small for an animal this age.

**Gross Diagnosis**
1. BODY AS A WHOLE INANITION DEHYDRATION
2. BODY AS A WHOLE AUTOLYSIS
3. THYMUS ATROPHY

**Gross Comments**
No tissues are saved.

**Measurements**
Gross Necropsy Report

<table>
<thead>
<tr>
<th>Animal ID</th>
<th>MMU 38840</th>
<th>Report ID</th>
<th>19361</th>
<th>Report Complete</th>
<th>03/26/2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>M</td>
<td>Death Type</td>
<td>X</td>
<td>Work Performed</td>
<td>03/26/2008</td>
</tr>
<tr>
<td>Age</td>
<td>0 days</td>
<td>Weight (KG)</td>
<td></td>
<td>Time Performed</td>
<td>01:30 PM</td>
</tr>
</tbody>
</table>

Gross Observation

- BODY AS A WHOLE: The infant is presented in good flesh.
- THYMUS: The thymus is very small for an animal this age.

Gross Diagnosis

1. THYMUS ATROPHY

Gross Comments

The brain is perfused and collected for the investigator – no other tissues are saved.

Measurements
Gross Necropsy Report

Animal ID  MMU  38851  Report ID  19441  Report Complete  
Sex  M  Death Type  K  Work Performed  03/31/2008  
Age  4 days  Weight (KG)  .5  Time Performed  04:00 PM

Gross Observation

<table>
<thead>
<tr>
<th>Body Area</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BODY AS A WHOLE</td>
<td>The animal is presented markedly thin and dehydrated.</td>
</tr>
<tr>
<td>COLON</td>
<td>The colon is &quot;kinked&quot; distally and the anus is imperforate; the colon is moderately dilated proximal to the distally &quot;kinked&quot; segment, and the mucosa is erythematous.</td>
</tr>
<tr>
<td>SKIN</td>
<td>The skin of the prepuce is devoid of an external opening.</td>
</tr>
<tr>
<td>STOMACH</td>
<td>The gastric mucosa is streaked with erythema.</td>
</tr>
<tr>
<td>THYMUS</td>
<td>The thymus is small for an animal this age.</td>
</tr>
</tbody>
</table>

Gross Diagnosis

1. BODY AS A WHOLE INANITION DEHYDRATION
2. ANUS IMPERFORATION, CONGENITAL
3. COLON DILATATION
4. STOMACH INFLAMMATION GASTRITIS,NOS
5. PREPUCE OF PENIS IMPERFORATION, CONGENITAL
6. THYMUS ATROPHY

Gross Comments

Photos are taken of the dilated colon, and a truncated set of tissues is saved in formalin for histopathology.

Measurements
# Gross Necropsy Report

<table>
<thead>
<tr>
<th>Animal ID</th>
<th>MMU 38896</th>
<th>Report ID</th>
<th>19981</th>
<th>Report Complete</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>M</td>
<td>Death Type</td>
<td>X</td>
<td>Work Performed 05/05/2008</td>
</tr>
<tr>
<td>Age</td>
<td>1 mon 3 days</td>
<td>Weight (KG)</td>
<td>.85</td>
<td>Time Performed 10:30 AM</td>
</tr>
</tbody>
</table>

**Gross Observation**
- BODY AS A WHOLE: The infant is presented in good flesh.
- LYMPH NODES: Some lymph nodes display pinpoint foci of erythema.

**Gross Diagnosis**
1. LYMPH NODE HEMORRHAGE, PETECHIAL

**Gross Comments**
Tissues are collected per project protocol.

**Measurements**
# Gross Necropsy Report

<table>
<thead>
<tr>
<th>Animal ID</th>
<th>Report ID</th>
<th>Report Complete</th>
</tr>
</thead>
<tbody>
<tr>
<td>MMU 38898</td>
<td>20041</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sex</th>
<th>Death Type</th>
<th>Work Performed</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>X</td>
<td>05/06/2008</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age</th>
<th>Weight (KG)</th>
<th>Time Performed</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 mon 4 days</td>
<td>.64</td>
<td>10:30 AM</td>
</tr>
</tbody>
</table>

**Gross Observation**

BODY AS A WHOLE

The infant is presented in good flesh.

**Gross Diagnosis**

1 BODY AS A WHOLE NO REMARKABLE FINDINGS

**Gross Comments**

Tissues are collected per project protocol.

**Measurements**
Gross Necropsy Report

Animal ID  MMU 39058  
Sex  U  
Age  3 days  
Weight (KG)  .45  

Report ID  19763  
Report Complete  
Death Type  D  
Work Performed  04/22/2008  
Time Performed  11:00 AM  

Gross Observation

BODY AS A WHOLE  
The animal is presented thin and dehydrated.  
GASTROINTESTINAL TRACT  
The gastrointestinal tract is relatively empty of contents.  
THYMUS  
The thymus is small for an animal this age.  

Gross Diagnosis

1  BODY AS A WHOLE INANITION DEHYDRATION  

2  THYMUS ATROPHY  

Gross Comments

A full set of tissues is saved in formalin, but no histopathology is to be performed at this time.
# Gross Necropsy Report

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>F</td>
<td>Death Type</td>
<td>D</td>
<td>Work Performed</td>
<td>04/22/2008</td>
</tr>
<tr>
<td>Age</td>
<td>3 days</td>
<td>Weight (KG)</td>
<td>0.45</td>
<td>Time Performed</td>
<td>01:50 PM</td>
</tr>
</tbody>
</table>

**Gross Observation**

- **BODY AS A WHOLE**: The animal is presented markedly thin and dehydrated with abrasions on chin and heels.
- **GASTROINTESTINAL TRACT**: The gastrointestinal tract is virtually empty of contents.
- **THYMUS**: The thymus is very small for an animal this age.

**Gross Diagnosis**

1. BODY AS A WHOLE INANITION DEHYDRATION
2. THYMUS ATROPHY

**Gross Comments**

A full set of tissues is saved in formalin, but no histopathology is to be performed at this time. This animal likely suffered from parental neglect.

**Measurements**
# Gross Necropsy Report

<table>
<thead>
<tr>
<th>Animal ID</th>
<th>MMU 39098</th>
<th>Report ID</th>
<th>19921</th>
<th>Report Complete</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>M</td>
<td>Death Type</td>
<td>K</td>
<td>Work Performed 04/26/2008</td>
</tr>
<tr>
<td>Age</td>
<td>3 days</td>
<td>Weight (KG)</td>
<td>.65</td>
<td>Time Performed 04:30 PM</td>
</tr>
</tbody>
</table>

**Gross Observation**

- **BODY AS A WHOLE**: The infant it presented thin and mildly dehydrated.
- **LUNG**: The lungs fail to collapse upon opening the chest, and they are diffusely mottled with dark red discoloration.
- **THYMUS**: The thymus is very small for an animal this age.

**Gross Diagnosis**

1. **BODY AS A WHOLE INANITION DEHYDRATION**
2. **LUNGS (BOTH) INFLAMMATION, DIFFUSE PNEUMONIA, NOS**
3. **THYMUS ATROPHY**

**Gross Comments**
The lungs are swabbed for bacterial culture, and a complete set if tissues is saved in formalin for limited histopathology.

**Measurements**
# Gross Necropsy Report

<table>
<thead>
<tr>
<th>Animal ID</th>
<th>Report ID</th>
<th>Report Complete</th>
</tr>
</thead>
<tbody>
<tr>
<td>MMU 39131</td>
<td>20342</td>
<td>05/23/2008</td>
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<table>
<thead>
<tr>
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<th>Death Type</th>
<th>Work Performed</th>
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<tbody>
<tr>
<td>M</td>
<td>K</td>
<td>05/23/2008</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>Age</th>
<th>Weight (KG)</th>
<th>Time Performed</th>
</tr>
</thead>
<tbody>
<tr>
<td>26 days</td>
<td>.678</td>
<td>11:00 AM</td>
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</table>

## Gross Observation
- **BODY AS A WHOLE**: The infant is presented thin with labored breathing.
- **LUNG**: Several areas of dark purple atelectasis are noted in lung parenchyma.
- **THYMUS**: The thymus is small for an animal this age.

## Gross Diagnosis
1. BODY AS A WHOLE INANITION
2. LUNGS (BOTH) ATELECTASIS
3. THYMUS ATROPHY

## Gross Comments
Several tissues are collected to fulfill biospecimen requests (head with brain/pituitary, eyes, lungs, trachea, abdominal aorta, long bones for marrow). A truncated set of tissues is saved in formalin, but no histopathology is to be performed at this time.

## Measurements
## Gross Necropsy Report

<table>
<thead>
<tr>
<th>Animal ID</th>
<th>MMU 39168</th>
<th>Report ID</th>
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<tbody>
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</tr>
<tr>
<td>Age</td>
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<td>Weight (KG)</td>
<td>.432</td>
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<td>07:00 AM</td>
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</table>

**Gross Observation**
BODY AS A WHOLE  The infant is presented thin.

**Gross Diagnosis**
1  BODY AS A WHOLE  INANITION

**Gross Comments**
Tissues are collected per project protocol  -  no tissues are saved for CNPRC histopathology.

**Measurements**
Gross Necropsy Report

<table>
<thead>
<tr>
<th></th>
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<th></th>
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<tbody>
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<tr>
<td>Age</td>
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<td>Weight (KG)</td>
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</tbody>
</table>

Gross Observation  BODY AS A WHOLE  The infant, previously injected with radioactive tracers, is presented thin.

Gross Diagnosis  1  BODY AS A WHOLE PERFUSION  (brain perfusion)

Gross Comments  The brain is perfused and collected for the investigator - no other tissues are saved.

Measurements
# Gross Necropsy Report

<table>
<thead>
<tr>
<th>Animal ID</th>
<th>Report ID</th>
<th>Report Complete</th>
<th>Sex</th>
<th>Death Type</th>
<th>Work Performed</th>
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<td>23 days</td>
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</table>

**Gross Observation**: BODY AS A WHOLE
- The infant is presented in good flesh.

**Gross Diagnosis**: 1 BODY AS A WHOLE PERFUSION
- (brain perfusion)

**Gross Comments**: The brain is perfused and collected for the investigator - no other tissues are saved.

**Measurements**
# Gross Necropsy Report

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<th>MCY 39215</th>
<th>Report ID</th>
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<td>F</td>
<td>Death Type</td>
<td>K</td>
<td>Work Performed</td>
</tr>
<tr>
<td>Age</td>
<td>1 days</td>
<td>Weight (KG)</td>
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<td>Time Performed</td>
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</table>

**Gross Observation**

<table>
<thead>
<tr>
<th>Gross Observation</th>
<th>Detailed Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADRENAL GLAND</td>
<td>The adrenal glands are smaller than those typically seen in an infant.</td>
</tr>
<tr>
<td>BODY AS A WHOLE</td>
<td>The infant is presented thin with contracted limbs and a forshortened, barrel-shaped torso; the sutures of the skull appear to be prematurely fused.</td>
</tr>
<tr>
<td>THYMUS</td>
<td>The thymus is slightly smaller than expected in an animal this age.</td>
</tr>
</tbody>
</table>

**Gross Diagnosis**

1. BODY AS A WHOLE ABNORMAL APPEARANCE
2. THYMUS ATROPHY
3. ADRENAL GLAND ATROPHY

**Gross Comments**

The ovaries and uterus are collected to fulfill a biospecimen request. A truncated set of tissues is saved in formalin, including the carcass. A piece of liver is frozen for possible genetic analysis. Blood is also saved.

**Measurements**