From: [redacted]
To:
Subject: RE: [redacted]
Date: Friday, October 23, 2020 10:43:58 PM

From: [redacted]
Sent: Friday, June 28, 2019 11:11:07 AM
To: [redacted]
Cc: [redacted]
Subject: [redacted]

Hi all,
A quick update on events since yesterday. [redacted] headcap fell off during bandage cage. He went through a procedure late afternoon to have a temporary pad sutured on covering his skull. He recovered well last night in the lab and was back to the colony around 10:30 am today. He is in the recovery cage with food and water. He will stay there until tomorrow morning. If no major issues developed then, I will put him back to a prepared single-house cage. We are working out logistics to conduct a recap surgery ASAP.

I will check on him late afternoon again. Meanwhile if you notice anything abnormal, please text or call me. [redacted] will send out his med routine soon.

There were many people involved to make [redacted] alive and many are working to improve his condition. I appreciated your help.

[redacted]

ASU Department of Animal Care and Technologies

INDIVIDUAL CHART NHP-Marmoset

Animal #/ID Avid# [redacted]
Protocol # [redacted]
Name: [redacted]
Sex: Male
DOA: 5/6/2013
DOB: 5/1/2012
Vendor: [redacted]

Date	Procedure/Treatment/
7/3/19 cont'd	(0.5 mg/kg → 0.03 mL) SC, syringe fed ~ 1ml of nutrical and ~ 6ml 50% dextrose, Continue syringe feedings BID PRN and buprenorphine/metoclopramide PRN [redacted]
7/3/19 7:00PM	Hunched and sitting on perch in front of heat lamp, Grip seems OK but moving very little, [redacted]
7/3/19 8:00PM	Found lying on box in cage, appears moribund and barely responsive to stimuli, Contacted PI and AV - given permission to euthanize, Administed 40 mg/kg ketamine (0.13 mL) IM and 200 mg/kg euthanasia solution (0.17 mL) intracardiac + performed B/L thoracotomy. [redacted]
7/5/19	Gross necropsy - discolored area of bone on (R) side of skull as noted prior to surgery, skull is soft/pliable overall. No gross brain lesions noted, long bones appear WNL. No other gross abnormalities detected, 2 sections of bone (containing (R) side lesion, and section from opposite side of skull), liver, and kidney placed in formalin for histopathology. [redacted]
8/9/19	Histopathology results - apparent osteomyelitis w/in skull lesion, both sections of skull have fibrosis, Mild kidney lesions, possible renal disease that may have contributed to fibrosis of skull. [redacted]

[redacted]

[redacted]

Subject: FW: marmoset follow-up

From: [redacted]
Sent: Friday, July 5, 2019 8:00 AM
To: [redacted]
Cc: [redacted]
Subject: RE: marmoset follow-up

Hello, [redacted]

Thank you for the update, though of course it is not the outcome we had hoped would take place. I think everything possible was done, and am grateful for all the time and thought that was given to the animal by everyone involved.

[redacted]

From: [redacted]
Sent: Friday, July 05, 2019 7:29 AM
To: [redacted]
Cc: [redacted]
Subject: marmoset follow-up

[redacted],
I am following up on the marmoset that lost its head cap last Thursday. A temporary bandage was put in place for several days, and then surgery was performed on Tuesday to place a new head cap. Surgery and recovery was uneventful. On Wednesday morning, the marmoset had somewhat reduced activity and a reduced appetite, but was otherwise normal, which is typical of marmosets post-surgically. However, by Thursday evening, the marmoset's condition worsened and, with approval from the PI, we euthanized it. We currently do not know the reason for the crash in the animal's health, but, being an older animal, the surgery might have been physiologically hard on him. This marmoset has been a challenge keeping its weight up, and this is common among older marmosets, so there might be an underlying cause. A necropsy will be performed today.

[redacted]

[redacted]
Department of Animal Care and Technologies
[redacted]
Arizona State University

[redacted]
Tempe, AZ 85287-2204
p: [redacted] **f:** [redacted] **c:** [redacted]
email: [redacted]

From: [redacted]
To: [redacted]
Subject: FW: Reporting: Common Marmoset, [redacted]
Date: Friday, August 9, 2019 11:54:26 AM

From: [redacted]
Sent: Friday, 09 August 2019 18:54:19 (UTC+00:00) Monrovia, Reykjavik
To: [redacted]
Cc: [redacted]
Subject: Re: Reporting: Common Marmoset, [redacted]

Thanks, [redacted]. It's good information, though of course the outcome was not we had hoped.

[redacted]

From: [redacted]
Sent: Friday, August 9, 2019 11:46 AM
To: [redacted]
Cc: [redacted]
Subject: Fw: Reporting: Common Marmoset, [redacted]

Hi [redacted],

I'm disseminating the marmoset necropsy results for your interest - the report is attached and my email summary to [redacted] is below. If you have any questions about this, let me know.

Thanks,
[redacted]

From: [redacted]
Sent: Friday, August 9, 2019 11:40 AM
To: [redacted]
Cc: [redacted]
Subject: Reporting: Common Marmoset, [redacted]

Hi [redacted],

[redacted] histopathology results are attached - although the clinical diagnosis is open (there isn't a clear explanation for his rapid decline or progressive weight loss), there is evidence of osteomyelitis within the discolored section of bone, as we had suspected. There was fibrosis

of both sections of bone we submitted, which accounts for its relative softness and was primarily attributed to the surgical procedures, but also some evidence of mild kidney disease that may have contributed to the bone changes. If you have any questions, let us know.

Thanks,

[redacted]

[redacted]

Case No.: G19-2554

Obtained: 07/05, rec'd 07/16/19
Reported: 08/08/19

[redacted]

Patient ID: Common Marmoset

Arizona State University Animal Care
[redacted]
Tempe, AZ 85287

Account #: [redacted]
Telephone: [redacted]
FAX #:
E-mail: [redacted]

HISTORY: This 7-year-old male common marmoset had a head implant surgery performed in 2014. It has had slow progressive weight loss of undetermined cause, no abnormalities noted in blood work or radiographs, and no response to treatment for wasting syndrome/inflammatory bowel disease. The head cap became acutely dislodged during a bandage change, and a circular area of discoloration was noted on the right side of the skull with no apparent blood flow to the area. A head cap replacement surgery was performed, but the animal declined the day following the procedure and was euthanized. The skull appeared soft and pliable. Submitted tissues include the skull lesion surrounding the bone and a bone section from the other side of the skull. Pieces of liver and kidney are also included.

CLINICAL DIAGNOSIS: Open.

GROSS: Received in formalin are four tissues to 1.5 cm. in greatest dimension that are processed in one block following appropriate decalcification.

MICROSCOPIC: **Bone**: Both specimens have periosteal fibrosis and medullary fibrosis, and one specimen has ulceration and necrosis of the overlying epidermis, dermal fibrosis, and bone subtending this region has sequestra associated with mild histiocytic inflammation and associated viable bone has bone resorption. **Kidney**: Mild sclerotic change is in the glomeruli and interstitium, mild multifocal interstitial infiltrates of lymphocytes are noted, and some of the tubules are dilated and contain protein casts. The following tissues are histologically within normal limits: liver.

HISTOPATHOLOGIC DIAGNOSIS:
1. Periosteal and medullary fibrosis, both sections of bone.
2. Bone resorption, sequestra and associated focal osteomyelitis and ulceration of overlying epidermis, one section of bone.
3. Mild nephrosclerosis, chronic interstitial nephritis, and renal tubular necrosis with protein casts, kidney.

COMMENT: Histologic findings in the bone are primarily attributed to the surgical procedures, although one of the sections also has evidence of osteomyelitis associated with ulceration of the overlying epidermis, and this could possibly have been associated with opportunistic bacterial infection. Renal lesions are mild but cumulatively could possibly have been associated with at least some degree of renal disease and could possibly have influenced some of the bone changes.

[redacted], DVM, Dipl. ACVP
E-mail: [redacted]
NZP code: M, 9f, 2, 14; osteomyelitis, head cap implant, nephrosclerosis, euthanasia.