

Animal Type	GAN	Preferred ID	Taxonomy	Sex	Birth Date
Individual	26752287	992278	Elephas maximus indicus/Indian elephant	Female	~ from Jul 01, 1965 to Jul 01, 1966

Aug 23, 2024

Clinical note

Date

Aug 23, 2024

Time

00:00

Note Author

Dominique Keller

Significant

No

Private

No

Active Problems

~

Note Subtype: General

Notes/Comments

Verbal update: Keepers report Tina is doing well, they have not seen any recurrence of the right front carpal stiffness since it was seen one day earlier this week. She is doing well at this time.

P: Update in a few days.

DLK

Animal Care Staff Medical Summary

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Calendar Items

Date	Title	Assigned To	Done
~	~	~	~

Aug 21, 2024

Clinical note

Date

Aug 21, 2024

Time

00:00

Note Author

Dominique Keller

Significant

No

Private

No

Active Problems

~

Note Subtype: General

Notes/Comments

Verbal update: Keepers report that Tina is doing well this morning and that stiffness at the front R foot has largely resolved. They noted she is very feisty this morning and participated well in morning bath and stretching routines.

P: Update in a couple of days.

DLKeller, DVM

Animal Care Staff Medical Summary

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Calendar Items

Date	Title	Assigned To	Done
~	~	~	~

Aug 20, 2024

Clinical note

Date

Aug 20, 2024

Time

00:00

Note Author

Dominique Keller

Significant

No

Private

No

Active Problems

~

Note Subtype: General

Notes/Comments

Verbal and visual update: Keepers report Tina has acute lameness of the right front leg.
Observed Tina in the yard: Bright and alert. Eating food set out for her and moving slowly around the enclosure. There is moderate stiffness at the right carpus that was not present yesterday. Do not appreciate any swellings, but observation is from a distance only. She is placing all 4 feet well, with no favoring of any one foot- weight bearing is even on all 4.

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A: Spoke to keeper who confirmed that what they had seen this morning was acute R carpal stiffness but that Tina seemed to do better with that foot after walking around on it for a little. I had observed her just after a CO2 session, so she was stiffer right after that.

P: No specific treatment today, Tina is on Previcox and if the stiffness persists tomorrow, we can discuss temporary increase in dosage of the NSAID, hydrotherapy, CO2 therapy or other things as warranted.

DLKeller, DVM

Animal Care Staff Medical Summary

~

Calendar Items

Date	Title	Assigned To	Done
~	~	~	~

Aug 19, 2024

Clinical note

Date	Time	Note Author
Aug 19, 2024	00:00	Dominique Keller
Significant	Private	Active Problems
No	No	~

Note Subtype: General

Notes/Comments

Visual recheck:Has completed the course of iodine/A&D combo on the inside of the L rear foot- keepers indicate that the skin is much less raised and friable, but remains very pink. On recheck, this is confirmed- the skin overall in this area is in much better condition, but is still fairly thin and much more erythematous/pink that same area on the inside of the R rear foot. There are two areas of a few mm in diameter where the skin is lifting off.

A: The skin on the inside of the left rear foot is improved in overall condtion, but remains thin and irritated. It is difficult to determine if this is due to continued urine contact or from the ointment that was used. Possible that the iodine topical, while it helped reduce bacterial contamination, was a little irritating to the skin.

P: In order to determine if it the iodine in the ointment was irritating component, but since the area needs some emollient protection from urine contact- script has now been written for A&D ointment only- but to be used twice a day.

P: Recheck in 3-4 days.

Rx: A&D ointment, apply to the affected skin of the inside of the left rear foot twice a day for 14 days.

DLKeller, DVM

Animal Care Staff Medical Summary

~

Calendar Items

Date	Title	Assigned To	Done
~	~	~	~

Prescription/Treatment

Basic Info

Date Written	Aug 02, 2024
Start Date	Aug 19, 2024 00:00
Prescribed By	Dominique Keller
Prescribed For	1 animal
Reason For Treatment	~

Weight Info

Date	Aug 02, 2024
Measurement Value	3,350 kg
Estimate	Yes
Exclude From Reference Intervals	Yes

Animal Type	GAN	Preferred ID	Taxonomy	Sex	Birth Date
Individual	26752287	992278	Elephas maximus indicus/Indian elephant	Female	~ from Jul 01, 1965 to Jul 01, 1966

Treatment Detail

Treatment Item/Drug

Previcox (227 mg Solid > Tablet) (Firocoxib) (MERIAL)

Dose Amount

340.5 mg

Dosage Amount

0.102 mg/kg

Administrated Dose Quantity

1.5 count

Frequency

once a day (sid)

Duration

365days

Delivery Route

Oral (p.o.)

Loading Dose

~

Form of Drug

Tablet

Concentration Of Drug

227 mg

Treatment Response

Clinical Response

~

Adverse Effects

~

Adverse Effects Note:

~

Staff Instructions

Give 340.5 mg [1.5 count] of Previcox, once a day (sid) for 365 days.

Start treatment on Aug 19, 2024

Administration route: Oral (p.o.)

Prescription Notes/Comments

~

Calendar Items

Date	Title	Assigned To	Done
Aug 18, 2025	992278 / Indian elephant / 26752287 Previcox treatment is complete	Dominique Keller	No
Aug 19, 2024	Start Previcox 340.5 mg once a day (sid) 365 days Oral (p.o.) / Indian elephant / 992278 / 26752287	Dominique Keller	No

Dispensing Records

Date Dispensed	Dispensed By	Quantity Dispensed
~	~	~

Administration Records

Administration Date/Time	Administered By	Success	Notes
~	~	~	~

Prescription/Treatment

Basic Info

Date Written

Aug 19, 2024

Start Date

Aug 19, 2024 00:00

Prescribed By

Dominique Keller

Prescribed For

1 animal

Reason For Treatment

~

Weight Info

Date

Aug 19, 2024

Measurement Value

3,350 kg

Estimate

Yes

Exclude From Reference Intervals

Yes

Printed: Aug 31, 2024

Los Angeles Zoo & Botanical Gardens

Page 3 of 132

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Animal Type	GAN	Preferred ID	Taxonomy	Sex	Birth Date
Individual	26752287	992278	Elephas maximus indicus/Indian elephant	Female	~ from Jul 01, 1965 to Jul 01, 1966

Treatment Detail

Treatment Item/Drug

A & D Ointment

Dose Amount

~

Dosage Amount

~

Administrated Dose Quantity

~

Frequency

twice a day (bid)

Duration

14days

Delivery Route

Topical

Loading Dose

~

Form of Drug

Ointment

Concentration Of Drug

~

Treatment Response

Clinical Response

~

Adverse Effects

~

Adverse Effects Note:

~

Staff Instructions

Apply liberally to the affected area of the left rear foot twice a day for 14 days.

Script starts 19 Aug. 2024

Prescription Notes/Comments

~

Calendar Items

Date	Title	Assigned To	Done
Sep 01, 2024	992278 / Indian elephant / 26752287 A & D Ointment treatment is complete	Dominique Keller	No

Dispensing Records

Date Dispensed	Dispensed By	Quantity Dispensed
~	~	~

Administration Records

Administration Date/Time	Administered By	Success	Notes
~	~	~	~

Aug 18, 2024

Clinical note

Date

Aug 18, 2024

Time

00:00

Note Author

Dominique Keller

Significant

No

Private

No

Active Problems

~

Note Subtype: General

Notes/Comments

Unsolicited urine sample dropped off today. Sample analysis results very similar to previous sample from a few days ago, no concerning results though there are fewer crystals than usual.

DLKeller, DVM

Animal Care Staff Medical Summary

~

Calendar Items

Date	Title	Assigned To	Done
~	~	~	~

Sample

Animal Type	GAN	Preferred ID	Taxonomy	Sex	Birth Date
Individual	26752287	992278	Elephas maximus indicus/Indian elephant	Female	~ from Jul 01, 1965 to Jul 01, 1966

Sample Detail

Collection Date/Time

Aug 18, 2024 00:00

Sample Type

Urine

Additives/Preservatives

~

Collection Method

Free Catch

Collected By

Dominique Keller

Reason

~

Exclude from reference intervals

No

Sample Quality

Color

Yellow

Color Intensity

medium

Clarity

Turbid/Cloudy

Degraded

No

Initial Holding Conditions

Initial Holding Temp.

Ambient

Initial Holding Duration

~

Sample History

Date	Sample ID / Sample GSN	Status	Laboratory / Test Order / Test Results
Aug 18, 2024	~/~	Available	LOSANGELE/12/12

Notes

~

Calendar Items

Date	Title	Assigned To	Done
~	~	~	~

Test & Result

Test Request Detail

Date Requested

Aug 18, 2024

Requested By

Dominique Keller

Analysis Start Date & Time

Aug 18, 2024 00:00

Analysis By

Megan Duncan

Analysis Equipment

~

Insufficient Sample

No

Sample Quality

Color

Yellow

Color Intensity

medium

Clarity

Turbid/Cloudy

Consistency

~

Additional Characteristics

~

Degraded

No

Notes/Comments

Sediment: Simple squamous epithelium=0-1/hpf, rare amorphous debris

Animal Type	GAN	Preferred ID	Taxonomy	Sex	Birth Date
Individual	26752287	992278	Elephas maximus indicus/Indian elephant	Female	~ from Jul 01, 1965 to Jul 01, 1966

Test Requests & Test Results						
Test	Primary Result	Expected Results (Based on Best Available Match) Type: Min- Max Mean [Median] N (Animals)	Evaluation	Exclud. from RI	Clinical Finding	Reviewed
Urine Bilirubin [rs]	(-) Negative		~	~	~	No
Urine Urobili. [rs]	Normal 0.2 mg/dL		~	~	~	No
Urine Ketones [rs]	(-) Negative		~	~	~	No
Urine Protein [rs]	Trace		~	~	~	No
Urine Nitrite [rs]	Negative		~	~	~	No
Urine Leuk. [rs]	Negative		~	~	~	No
Urine Glucose [rs]	(-) Negative		~	~	~	No
pH [rs]	8 pH	Global subsp RI: 6.5 - 8.9 7.8 [8.0] N=169 (14)	~	No	~	No
Urine Blood [rs]	Negative		~	~	~	No
Sp Grav (test strip)	1.030 ratio	Global subsp RI: 1.000 - 1.025 1.010 [1.010] N=74 (3)	High	No	~	No
Sp Grav (R)	1.022 ratio	Global subsp RI: 1.004 - 1.028 1.019 [1.018] N=82 (9)	~	No	~	No
Urine Ascorbic [rs]	Normal		~	~	~	No

Sample Detail (GSN: S-TCW24-151899)			
Collection Date/Time	Aug 18, 2024 00:00	Collection Method	Free Catch
Sample Type	Urine	Collected By	Dominique Keller
Anatomical Source/Tissue	~	Reason	~
Additives/Preservatives	~	Exclude from reference intervals	No

Aug 08, 2024

Clinical note		
Date	Time	Note Author
Aug 08, 2024	00:00	Dominique Keller
Significant	Private	Active Problems
No	No	~
Note Subtype: General		
Notes/Comments		
Foot radiographs: All but the LF foot radiographed today.		
Dx: DP views of the RF, PD views of the RH and LH as well as lateral views of the LH and RH are available.Motion artifact present at all but two of the images. Bone density in all images is good. There are no obvious bone fractures noted in any of the digits. P3 of all visible digits are present and intact. The interphalangeal joints of all visible digits appear within normal limits. On the lateral views of both hind feet, the dorsal aspects of the central tarsal bone and the row of T1-T4 are slightly irregular- this is may be normal variation or changes such as bony remodelling.		
Interpretation: We do not have other recent radiographs from Tina to compare to, so this set will be a good reference for those taken at a later date. Motion artifact limits some of the interpretation, though one area to monitor is the possible remodeling at the R and L hind tarsal areas.		
DLKeller, DVM		
Animal Care Staff Medical Summary		
~		

Animal Type	GAN	Preferred ID	Taxonomy	Sex	Birth Date
Individual	26752287	992278	Elephas maximus indicus/Indian elephant	Female	~ from Jul 01, 1965 to Jul 01, 1966

Calendar Items

Date	Title	Assigned To	Done
~	~	~	~

Aug 07, 2024

Clinical note

Date

Aug 07, 2024

Time

00:00

Note Author

Dominique Keller

Significant

No

Private

No

Active Problems

~

Note Subtype: General

Notes/Comments

Nutritionist body condition scoring notes from evaluation today:
"Tina:
Her last score was 4/9 on 3/21/24 (4 and 5 are considered ideal)
Today I scored her at a 4/9 - Her scapula is evident. Crest smooth and forms a ridge down back. Indent from neck to shoulder. Points of hips evident. No ribs visible. No fat deposition at tail head."

Animal Care Staff Medical Summary

~

Calendar Items

Date	Title	Assigned To	Done
~	~	~	~

Aug 01, 2024

Clinical note

Date

Aug 01, 2024

Time

00:00

Note Author

Dominique Keller

Significant

No

Private

No

Active Problems

~

Note Subtype: General

Notes/Comments

Ophthalmologist consult, foot consult, urine collection (opportunistic): Consultant Mike McClure here to recheck elephant feet. Keepers report that Tina spent the night in the Circle yard last night due to some construction things and this is not her usual night location- so she spent most of the night exploring (including picking browse for herself from the perimeter- not chopped) and per camera footage, did not lie down (this is unusual for Tina and may be due to the novelty of being in this yard overnight). Tina was mentally appropriate this morning and did well for all the consults. Keeper consensus is that she seems to be doing overall better with the Previcox than without it.

Ophthalmology report (Dr. Konrade): IOP 25 mmHg OU. Consult notes: Tina's IOP remains stable at 25/25 mmHg OD/OS. She was comfortable and visual OU today. There was an immature cataract OD which is an aging change from last examination.
Dr. Konrade felt that the OD lens (which she had felt was a little subluxated at last exam) was stable. Menace positive OU.

Foot consult notes: Reminder: Tina has a narrow base in the rear and bilateral carpal valgus. These conformational challenges are starting to affect more of her feet now. She also has a relatively large head for her body size which means there is proportionately more weight on her front feet than would be expected for her general size.

Left front foot:
LF foot is most likely Tina's source of the current issues noted with the RF stiffness and reluctance to keep the right front raised for longer periods of time. She has more movement at the LFD2 nail and D1 and D2 digits are taking more of the weight of this foot rather than the D3 (which should be most weight bearing), this is due to the valgal deviation of the carpus. D2 still has the changes initially noted about 2 years ago when a small rock was found embedded in the bottom edge of this nail. This defect is not active at the moment, but noted during exam. D1 and D2 nails have been reshaped as a result of how they are bearing weight now.
Plan for this foot: Continue the PT (stretching) and can incorporate incline slope stretches if desired. Start HoofArmor on this foot at every foot work day (about q 2 weeks) especially at D1 nail face and CO2 therapy at least once a week on this foot (can do twice a week too).

Right front:
RF is most likely having to compensate more now as the changes to the LF are becoming more apparent as Tina ages. This may explain the reduced duration of holding the RF up (as the LF is less able to be stood on for longer periods of time now)- this has improved with the Previcox and in fact, during today's foot work, duration on all the four feet was very good and Tina did not show any signs of discomfort. There are some similar nail changes on this foot as seen on the LF, but not as pronounced, for example, there is much less mobility to the D2 nail than on the LF.

Right rear:
Significant improvement overall from last consultant visit in May 2024 esp. at the medial aspect of the foot where there was delamination of the skin/pad interface. Consultant recommended very careful focal pad height reduction where pad and nail meet at D1 and D2 since the increase in pad height was leading to excess pressure on those nails.

Left rear:
Similar significant improvement overall since last visit per consultant. The D4 nail had a small vertical crack noted at last visit that is nearly resolved now. Consultant recommends similar foot pad height reduction (very slight and to do this gradually) at the D2 nail/pad interface.

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Urine sample (opportunistic): USG wnl, many Ca oxalate crystals (normal).

A: Urine sample shows no abnormalities, concentration is adequate. Since there is consensus that the Previcox is helping overall, will transition this to a chronic script to start at the end of the current trial.

P: Due for foot radiographs in three days.

Rx: Extend Previcox 385.5 mg PO SID for 365 days.
HoofArmor to all 4 feet every two weeks or as needed for 365 days. Focus esp. on D1 nail as she is wearing that face down as she swings to get up from lying down.
Laser therapy can now be added to the LF as well, though its not clear that this therapy at the right foot has made much difference overall per keepers. After this course of laser is complete, will likely not extend.
CO2 therapy, added the LF to be done at least once a week in addition to the current CO2 therapy at the rear feet.

DLKeller, DVM

Animal Care Staff Medical Summary

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Calendar Items

Date	Title	Assigned To	Done
~	~	~	~

Prescription/Treatment

Basic Info

Date Written Aug 01, 2024
Start Date Aug 01, 2024 00:00
Prescribed By Dominique Keller
Prescribed For 1 animal
Reason For Treatment ~

Weight Info

Date Aug 01, 2024
Measurement Value 3,350 kg
Estimate Yes
Exclude From Reference Intervals Yes

Animal Type	GAN	Preferred ID	Taxonomy	Sex	Birth Date
Individual	26752287	992278	Elephas maximus indicus/Indian elephant	Female	~ from Jul 01, 1965 to Jul 01, 1966

Treatment Detail

Treatment Item/Drug

Hoof Armor (Semisolid)

Dose Amount

~

Frequency

every 2 weeks

Form of Drug

Semisolid

Dosage Amount

~

Duration

365days

Concentration Of Drug

~

Administrated Dose Quantity

~

Delivery Route

Topical

Loading Dose

~

Treatment Response

Clinical Response

~

Adverse Effects

~

Adverse Effects Note:

~

Staff Instructions

All four feet: Apply HoofArmor approximately every 2 weeks or as needed to foot pads. Script valid for 365 days. Script starts 1 Aug. 2024

Prescription Notes/Comments

~

Calendar Items

Date	Title	Assigned To	Done
Jul 31, 2025	992278 / Indian elephant / 26752287 Hoof Armor treatment is complete	Dominique Keller	No

Dispensing Records

Date Dispensed	Dispensed By	Quantity Dispensed
~	~	~

Administration Records

Administration Date/Time	Administered By	Success	Notes
~	~	~	~

Prescription/Treatment

Basic Info

Date Written

Aug 01, 2024

Start Date

Aug 01, 2024 00:00

Prescribed By

Dominique Keller

Prescribed For

1 animal

Reason For Treatment

~

Weight Info

Date

Aug 01, 2024

Measurement Value

3,350 kg

Estimate

Yes

Exclude From Reference Intervals

Yes

Animal Type	GAN	Preferred ID	Taxonomy	Sex	Birth Date
Individual	26752287	992278	Elephas maximus indicus/Indian elephant	Female	~ from Jul 01, 1965 to Jul 01, 1966

Treatment Detail

Treatment Item/Drug

Carbon dioxide, transdermal treatment

Dose Amount

~

Dosage Amount

~

Administrated Dose Quantity

~

Frequency

Other

Duration

365days

Delivery Route

Topical

Loading Dose

~

Form of Drug

~

Concentration Of Drug

~

Treatment Response

Clinical Response

~

Adverse Effects

~

Adverse Effects Note:

~

Staff Instructions

The LEFT front foot once to twice a week for 10 min: this is with bag treatment. Make sure to wet skin of feet before doing treatment for best effects. Script is for 365 days. Start 1 Aug. 2024

Prescription Notes/Comments

~

Calendar Items

Date	Title	Assigned To	Done
Jul 31, 2025	992278 / Indian elephant / 26752287 Carbon dioxide, transdermal treatment treatment is complete	Dominique Keller	No

Dispensing Records

Date Dispensed	Dispensed By	Quantity Dispensed
~	~	~

Administration Records

Administration Date/Time	Administered By	Success	Notes
~	~	~	~

Sample

Sample Detail

Collection Date/Time

Aug 01, 2024 00:00

Sample Type

Urine

Additives/Preservatives

~

Collection Method

Free Catch

Collected By

Dominique Keller

Reason

~

Exclude from reference intervals

No

Sample Quality

Color

Yellow

Color Intensity

medium

Clarity

Clear

Degraded

No

Initial Holding Conditions

Initial Holding Temp.

Chilled/Refrigerated

Initial Holding Duration

~

Sample History

Date	Sample ID / Sample GSN	Status	Laboratory / Test Order / Test Results
Aug 01, 2024	~/~	Available	LOSANGELE/11/11

Notes

~

Animal Type	GAN	Preferred ID	Taxonomy	Sex	Birth Date
Individual	26752287	992278	Elephas maximus indicus/Indian elephant	Female	~ from Jul 01, 1965 to Jul 01, 1966

Calendar Items			
Date	Title	Assigned To	Done
~	~	~	~

Test & Result

Test Request Detail		Sample Quality	
Date Requested	Aug 01, 2024	Color	Yellow
Requested By	Dominique Keller	Color Intensity	medium
Analysis Start Date & Time	Aug 02, 2024 00:00	Clarity	Clear
Analysis By	Deanna Rocca	Consistency	~
Analysis Equipment	~	Additional Characteristics	~
Insufficient Sample	No	Degraded	No

Notes/Comments
numerous ca oxalate crystals 0-1 epithelialcell /HPF small amount amorphous debris

Test Requests & Test Results						
Test	Primary Result	Expected Results (Based on Best Available Match) Type: Min- Max Mean [Median] N (Animals)	Evaluation	Excl'd. from RI	Clinical Finding	Reviewed
Urine Bilirubin [rs]	(-) Negative		~	~	~	Yes
Urine Urobili. [rs]	Normal 0.2 mg/dL		~	~	~	Yes
Urine Ketones [rs]	(-) Negative		~	~	~	Yes
Urine Protein [rs]	(+) 30 mg/dL (0.3 g/L)		~	~	~	Yes
Urine Nitrite [rs]	Negative		~	~	~	Yes
Urine Leuk. [rs]	Negative		~	~	~	Yes
Urine Glucose [rs]	(-) Negative		~	~	~	Yes
pH [rs]	8.0 pH	Global subsp RI: 6.5 - 8.9 7.8 [8.0] N=169 (14)	~	No	~	Yes
Urine Blood [rs]	Negative		~	~	~	Yes
Sp Grav (R)	1.026 ratio	Global subsp RI: 1.004 - 1.028 1.019 [1.018] N=82 (9)	~	No	~	Yes
Urine Ascorbic [rs]	Normal		~	~	~	Yes

Sample Detail (GSN: S-TCW24-151763)			
Collection Date/Time	Aug 01, 2024 00:00	Collection Method	Free Catch
Sample Type	Urine	Collected By	Dominique Keller
Anatomical Source/Tissue	~	Reason	~
Additives/Preservatives	~	Exclude from reference intervals	No

Jul 26, 2024

Clinical note

Date	Time	Note Author
Jul 26, 2024	00:00	Dominique Keller

Animal Type	GAN	Preferred ID	Taxonomy	Sex	Birth Date
Individual	26752287	992278	Elephas maximus indicus/Indian elephant	Female	~ from Jul 01, 1965 to Jul 01, 1966

Significant

Private

Active Problems

No

No

~

Note Subtype: General

Notes/Comments

Verbal update: Senior keeper reports that elephant seems to be doing well on the current Previcox dosage- no mouth gaping or other signs noted.

P: Foot consultant will be here next week. Will update in a week or so to see if keepers still feel that the NSAID is making a difference for Tina, in which case it will be converted to a chronic script. If not, we can discuss additional approaches and management. Scheduled for foot radiographs in a couple of weeks.

DLKeller, DVM

Animal Care Staff Medical Summary

~

Calendar Items

Date	Title	Assigned To	Done
~	~	~	~

Jul 22, 2024

Clinical note

Date

Time

Note Author

Jul 22, 2024

00:00

Dominique Keller

Significant

Private

Active Problems

No

No

~

Note Subtype: General

Notes/Comments

Opportunistic urine sample: Unsolicited urine sample dropped off today. Sample analysis results very similar to previous sample from a few days ago, no concerning results.

DLKeller, DVM

Animal Care Staff Medical Summary

~

Calendar Items

Date	Title	Assigned To	Done
~	~	~	~

Clinical note

Date

Time

Note Author

Jul 22, 2024

00:00

Megan Duncan

Significant

Private

Active Problems

No

No

~

Note Subtype: General

Notes/Comments

Tech Note: Administered laser therapy to right cranial foot and carpus

Animal Care Staff Medical Summary

~

Calendar Items

Date	Title	Assigned To	Done
~	~	~	~

Sample

Animal Type	GAN	Preferred ID	Taxonomy	Sex	Birth Date
Individual	26752287	992278	Elephas maximus indicus/Indian elephant	Female	~ from Jul 01, 1965 to Jul 01, 1966

Sample Detail

Collection Date/Time

Jul 22, 2024 00:00

Sample Type

Urine

Additives/Preservatives

~

Collection Method

Free Catch

Collected By

Dominique Keller

Reason

~

Exclude from reference intervals

No

Sample Quality

Color

Yellow

Color Intensity

medium

Clarity

Turbid/Cloudy

Degraded

No

Initial Holding Conditions

Initial Holding Temp.

~

Initial Holding Duration

~

Date	Sample ID / Sample GSN	Status	Laboratory / Test Order / Test Results
Jul 22, 2024	~/~	Available	LOSANGELE/2/2

Notes

~

Date	Title	Assigned To	Done
~	~	~	~

Test & Result

Test Request Detail

Date Requested

Jul 22, 2024

Requested By

Dominique Keller

Analysis Start Date & Time

Jul 22, 2024 00:00

Analysis By

Deanna Rocca

Analysis Equipment

~

Insufficient Sample

No

Sample Quality

Color

Yellow

Color Intensity

medium

Clarity

Turbid/Cloudy

Consistency

~

Additional Characteristics

~

Degraded

No

Notes/Comments

~

Test Requests & Test Results						
Test	Primary Result	Expected Results (Based on Best Available Match) Type: Min- Max Mean [Median] N (Animals)	Evaluation	Excl'd. from RI	Clinical Finding	Reviewed
Sp Grav (R)	1.020 ratio	Global subsp RI: 1.004 - 1.028 1.019 [1.018] N=82 (9)	~	No	~	Yes
Micro findings	Abundant 4+ calcium oxalate crystals. small amount cocci		~	~	~	Yes

Sample Detail (GSN: S-TCW24-151627)

Collection Date/Time

Jul 22, 2024 00:00

Collection Method

Free Catch

Sample Type

Urine

Collected By

Dominique Keller

Anatomical Source/Tissue

~

Reason

~

Additives/Preservatives

~

Exclude from reference intervals

No

Jul 19, 2024

Clinical note

Date	Time	Note Author
Jul 19, 2024	00:00	Dominique Keller
Significant	Private	Active Problems

Animal Type	GAN	Preferred ID	Taxonomy	Sex	Birth Date
Individual	26752287	992278	Elephas maximus indicus/Indian elephant	Female	~ from Jul 01, 1965 to Jul 01, 1966

No

No

~

Note Subtype: General

Notes/Comments

Verbal and visual update: Discussed Tina's ability to keep the right front leg up for treatments- today keeper reported that this has been seen for a while, but was not reported to vet until recently. Today is the last day of the topical for the LR foot medial irritation site.

Today also scheduled for oral exam with bore scope since keepers are seeing refusal of chopped carrots intermittently- however, still eating them well on other days.Today she was taking them with gusto. Other foods are being eaten with no issues.

O: Alert, bright.

N: Mentation is appropriate

Oral: Mucous membranes are pink and moist. Using the bore camera, able to visualize both upper teeth- intact, even occlusal surfaces on both. Ther eare remnants of lower teeth (est. less 1/6 of an intact tooth surface area) on both the left and right, it is more difficult to visualize these since they are far back, but it appears there may be slightly more tooth left on the right side. No inflammation or irritation noted around any of the teeth. No halitosis.

Integ: The medial aspect of the left rear foot is unchanged from prior to start of the Douxo treatment- the area of erythematous skin is unchanged in surface area and is warm to the touch while the rest of the foot and the contralateral foot are not warm. The affected skin is intact, but pink and feels rougher than the same area on the right. Senior keeper notes the affected area is that most impacted by urine splashing, as Tina's stream tends to be directed to the left due to the unevenness of her vulvar folds.

M/S: Foot pads look good on all fours. Did not note any excessive shifting of weight from one foot to another during the session, and Tina seemed comfortable. However, when she lifts her right front leg for treatment, the shoulder seems stiff as does the carpus. The foot and carpus are not swollen or warm and nail condition is good. No issues noted today with duration of hold of this foot up.

A: Upper teeth look to be in good condition at this time, but there is very little left of either lower tooth.

The right shoulder and carpus looked more stiff today, but overall Tina seemed comfortable.

The irritation on the skin of the LR medial foot is static, not improved but not worse. This appears to be from excessive urine contact. This area is cleaned carefully every day but this last topical did not have much of an impact.

P: Keepers are continuing to work on radiograph training so we can image all four feet.

Will switch over to a more durable ointment for the skin on the LR foot- this will be non water soluble emollient with an antimicrobial component.

Will start a trial at low dose Previcox to see if this helps with RF mobility.

Rx: Previcox, 0.1 mg/kg PO SID for 30 days. This dosage can be increased as needed.

10& Povidone-iodine in A&D ointment, apply once a day to LR for 30 days.

DLKeller, DVM

Animal Care Staff Medical Summary

~

Calendar Items

Date	Title	Assigned To	Done
~	~	~	~

Prescription/Treatment

Basic Info

Date WrittenJul 19, 2024

Start DateJul 19, 2024 00:00

Prescribed ByColleen McLaughlin

Prescribed For1 animal

Reason For Treatment~

Weight Info

DateJul 19, 2024

Measurement Value3,350 kg

EstimateYes

Exclude From Reference IntervalsYes

Animal Type	GAN	Preferred ID	Taxonomy	Sex	Birth Date
Individual	26752287	992278	Elephas maximus indicus/Indian elephant	Female	~ from Jul 01, 1965 to Jul 01, 1966

Treatment Detail

Treatment Item/Drug

Previcox (227 mg Solid > Tablet) (Firocoxib) (MERIAL)

Dose Amount

340.5 mg

Dosage Amount

0.102 mg/kg

Administrated Dose Quantity

1.5 count

Frequency

once a day (sid)

Duration

30days

Delivery Route

Oral (p.o.)

Loading Dose

~

Form of Drug

Tablet

Concentration Of Drug

227 mg

Treatment Response

Clinical Response

~

Adverse Effects

~

Adverse Effects Note:

~

Staff Instructions

Give 340.5 mg [1.5 count] of Previcox, once a day (sid) for 30 days.
Start treatment on Jul 19, 2024
Administration route: Oral (p.o.)

Prescription Notes/Comments

~

Calendar Items

Date	Title	Assigned To	Done
Aug 17, 2024	992278 / Indian elephant / 26752287 Previcox treatment is complete	Colleen McLaughlin	No

Dispensing Records

Date Dispensed	Dispensed By	Quantity Dispensed
~	~	~

Administration Records

Administration Date/Time	Administered By	Success	Notes
~	~	~	~

Prescription/Treatment

Basic Info

Date Written

Jul 19, 2024

Start Date

Jul 19, 2024 00:00

Prescribed By

Dominique Keller

Prescribed For

1 animal

Reason For Treatment

~

Weight Info

Date

Jul 19, 2024

Measurement Value

3,350 kg

Estimate

Yes

Exclude From Reference Intervals

Yes

Animal Type	GAN	Preferred ID	Taxonomy	Sex	Birth Date
Individual	26752287	992278	Elephas maximus indicus/Indian elephant	Female	~ from Jul 01, 1965 to Jul 01, 1966

Treatment Detail

Treatment Item/Drug

10% povidone iodine in A&D ointment (Semisolid > Ointment)

Dose Amount

5 ml

Dosage Amount

~

Administrated Dose Quantity

5 ml

Frequency

once a day (sid)

Duration

30days

Delivery Route

Topical

Loading Dose

~

Form of Drug

Ointment

Concentration Of Drug

~

Treatment Response

Clinical Response

~

Adverse Effects

~

Adverse Effects Note:

~

Staff Instructions

Apply liberal amount once a day to the affected area of the inner left rear foot. Script starts 20 July 2024 and is valid for 30 days.

Prescription Notes/Comments

~

Calendar Items

Date	Title	Assigned To	Done
Aug 17, 2024	992278 / Indian elephant / 26752287 10% povidone iodine in A&D ointment treatment is complete	Dominique Keller	No

Dispensing Records

Date Dispensed	Dispensed By	Quantity Dispensed
~	~	~

Administration Records

Administration Date/Time	Administered By	Success	Notes
~	~	~	~

Jul 18, 2024

Clinical note

Date

Jul 18, 2024

Time

00:00

Note Author

Dominique Keller

Significant

No

Private

No

Active Problems

~

Note Subtype: General

Notes/Comments

Blood collection: Keepers brought up blood this afternoon, vet not informed. Scheduled quarterly blood for CBC/Chem/vit A recheck due in August. Urine also collected. We will submit this for opportunistic screening.

Dx:

Urinalysis: USG 1.016. No wbc or rbc. Abundant crystals (normal). Nitrite negative.

Complete blood cell count (Miami): TWBC and hct are within ref. ranges. Mild relative increase in monocytes. Platelets adequate. Fibrinogen increased somewhat over ref. range mean.

Biochemistry panel (Miami): Glucose and BUN are midly increased from ref. ranges.

EPH: Interpretation: The total protein is increased. This may reflect mild patient or sample dehydration. By % TP, the fractions are normal.

ACP: SAA and haptoglobin are not elevated.

A: Urine is appropriately concentrated and there are no indicators of infection. Inflammatory markers (ACP) are low. Overall changes noted above are not too dissimilar to those noted for this animal in the past. There are no indications of severe inflammation.

Animal Type	GAN	Preferred ID	Taxonomy	Sex	Birth Date
Individual	26752287	992278	Elephas maximus indicus/Indian elephant	Female	~ from Jul 01, 1965 to Jul 01, 1966

P: Will be running quarterly blood screening in about 1 month, and will add vit. A recheck since levels were a little low when tested last. This animal will be starting a longer course of NSAIDs soon, so continue close monitoring of electrolytes and renal markers.

DLKeller, DVM

Animal Care Staff Medical Summary

~

Calendar Items

Date	Title	Assigned To	Done
~	~	~	~

Sample

Sample Detail

Collection Date/Time Jul 18, 2024 00:00
Sample Type Plasma
Anatomical Source/Tissue ~
Additives/Preservatives Heparin
Collection Method Phlebotomy
Collected By Dominique Keller
Reason ~
Exclude from reference intervals No

Sample Quality

Color ~
Color Intensity ~
Clarity ~
Additional Characteristics ~
Degraded No

Initial Holding Conditions

Initial Holding Temp. ~
Initial Holding Duration ~

Pre-Sampling Conditions

Fasting Duration < 2 hours
Restraint Type Behavioral
Activity Moderate activity

Sample History

Date	Sample ID / Sample GSN	Status	Laboratory / Test Order / Test Results
Jul 18, 2024	~/~	Available	~/~/~

Notes

~

Calendar Items

Date	Title	Assigned To	Done
~	~	~	~

Sample

Sample Detail

Collection Date/Time Jul 18, 2024 00:00
Sample Type Whole Blood
Anatomical Source/Tissue ~
Additives/Preservatives EDTA
Collection Method Phlebotomy
Collected By Dominique Keller
Reason ~
Exclude from reference intervals No

Sample Quality

Additional Characteristics ~
Degraded No

Initial Holding Conditions

Initial Holding Temp. ~
Initial Holding Duration ~

Pre-Sampling Conditions

Fasting Duration < 2 hours
Restraint Type Behavioral
Activity Moderate activity

Sample History

Date	Sample ID / Sample GSN	Status	Laboratory / Test Order / Test Results
Jul 18, 2024	~/~	Available	LOSANGELE/1/1
Jul 18, 2024	~/~	Available	UMAWLAB/16/14

Animal Type	GAN	Preferred ID	Taxonomy	Sex	Birth Date
Individual	26752287	992278	Elephas maximus indicus/Indian elephant	Female	~ from Jul 01, 1965 to Jul 01, 1966

Notes
~

Calendar Items

Date	Title	Assigned To	Done
~	~	~	~

Sample

Sample Detail

Collection Date/Time	Jul 18, 2024 00:00
Sample Type	Plasma
Anatomical Source/Tissue	~
Additives/Preservatives	EDTA
Collection Method	Phlebotomy
Collected By	Deanna Rocca
Reason	~
Exclude from reference intervals	No

Sample Quality

Color	~
Color Intensity	~
Clarity	~
Additional Characteristics	~
Degraded	No

Pre-Sampling Conditions

Fasting Duration	undetermined
Restraint Type	Behavioral
Activity	Moderate activity

Initial Holding Conditions

Initial Holding Temp.	~
Initial Holding Duration	~

Sample History

Date	Sample ID / Sample GSN	Status	Laboratory / Test Order / Test Results
Jul 18, 2024	~/~	Available	UMAWLAB/1/1

Notes
~

Calendar Items

Date	Title	Assigned To	Done
~	~	~	~

Sample

Sample Detail

Collection Date/Time	Jul 18, 2024 00:00
Sample Type	Serum
Anatomical Source/Tissue	~
Collection Method	Phlebotomy
Collected By	Dominique Keller
Reason	~
Exclude from reference intervals	No

Sample Quality

Color	~
Color Intensity	~
Clarity	~
Additional Characteristics	~
Degraded	No

Pre-Sampling Conditions

Fasting Duration	< 2 hours
Restraint Type	Behavioral
Activity	Moderate activity

Initial Holding Conditions

Initial Holding Temp.	~
Initial Holding Duration	~

Sample History

Date	Sample ID / Sample GSN	Status	Laboratory / Test Order / Test Results
Jul 18, 2024	~/~	Available	UMAWLAB/38/38

Notes
~

Calendar Items

Date	Title	Assigned To	Done
~	~	~	~

Sample

Printed: Aug 31, 2024
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Los Angeles Zoo & Botanical Gardens

Page 18 of 132

Report Start Date
Feb 01, 2024

Medical History Report for All Record Types

Report End Date
Aug 23, 2024

SPECIES

360

Animal Type	GAN	Preferred ID	Taxonomy	Sex	Birth Date
Individual	26752287	992278	Elephas maximus indicus/Indian elephant	Female	~ from Jul 01, 1965 to Jul 01, 1966

Sample Detail

Collection Date/Time

Sample Type

Additives/Preservatives

Collection Method

Collected By

Reason

Exclude from reference intervals

Jul 18, 2024 00:00

Urine

~

Free Catch

Deanna Rocca

~

No

Sample Quality

Color

Color Intensity

Clarity

Degraded

Yellow

medium

Turbid/Cloudy

No

Initial Holding Conditions

Initial Holding Temp.

Initial Holding Duration

~

~

Sample History

Date	Sample ID / Sample GSN	Status	Laboratory / Test Order / Test Results
Jul 18, 2024	~/~	Available	LOSANGELE/11/11

Notes

~

Calendar Items

Date	Title	Assigned To	Done
~	~	~	~

Test & Result

Test Request Detail

Date Requested

Requested By

Analysis Start Date & Time

Analysis By

Analysis Equipment

Insufficient Sample

Jul 18, 2024

Dominique Keller

Jul 19, 2024 00:00

Deanna Rocca

~

No

Sample Quality

Color

Color Intensity

Clarity

Consistency

Additional Characteristics

Degraded

Yellow

medium

Turbid/Cloudy

~

~

No

Notes/Comments

Sediment Exam: Abundant Ca Oxalate crystals - TNTC
small amount amorphous debris.

Animal Type	GAN	Preferred ID	Taxonomy	Sex	Birth Date
Individual	26752287	992278	Elephas maximus indicus/Indian elephant	Female	~ from Jul 01, 1965 to Jul 01, 1966

Test Requests & Test Results						
Test	Primary Result	Expected Results (Based on Best Available Match) Type: Min- Max Mean [Median] N (Animals)	Evaluation	Exclud. from RI	Clinical Finding	Reviewed
Urine Bilirubin [rs]	(-) Negative		~	~	~	No
Urine Urobili. [rs]	Normal 0.2 mg/dL		~	~	~	No
Urine Ketones [rs]	(-) Negative		~	~	~	No
Urine Protein [rs]	Trace		~	~	~	No
Urine Nitrite [rs]	Negative		~	~	~	No
Urine Leuk. [rs]	Negative		~	~	~	No
Urine Glucose [rs]	(-) Negative		~	~	~	No
pH [rs]	8.0 pH	Global subsp RI: 6.5 - 8.9 7.8 [8.0] N=169 (14)	~	No	~	No
Urine Blood [rs]	Negative		~	~	~	No
Sp Grav (R)	1.016 ratio	Global subsp RI: 1.004 - 1.028 1.019 [1.018] N=82 (9)	~	No	~	No
Urine Ascorbic [rs]	Normal		~	~	~	No

Sample Detail (GSN: S-TCW24-151596)			
Collection Date/Time	Jul 18, 2024 00:00	Collection Method	Free Catch
Sample Type	Urine	Collected By	Deanna Rocca
Anatomical Source/Tissue	~	Reason	~
Additives/Preservatives	~	Exclude from reference intervals	No

Test & Result			
Test Request Detail		Sample Quality	
Date Requested	Jul 18, 2024	Color	~
Requested By	Dominique Keller	Color Intensity	~
Laboratory	UMAWLAB	Clarity	~
Analysis Start Date	Jul 18, 2024	Consistency	~
Analysis Equipment	~	Additional Characteristics	~
Insufficient Sample	No	Degraded	No

Notes/Comments

NRBC
NRBC (Absolute) 10
3
/ul

RBC Morphology see comment
...Anisocytosis [1+]
Platelet Count (auto) x 10
3
/µl 160

Platelet Morphology

see
comment

...Large Platelets Present
...Platelet Clumping Present
WBC Morphology see comment
...Reactive lymphocytes [Rare]
...Reactive monocytes [Few]
Case No: 2420797 - Los Angeles Zoo, 992278 Page 1 of 4

Additional Comments
The blood smear was reviewed by Nicole Stacy, DVM, DrMedVet, DACVP. 071924
COMMENT: WBC differential and blood cell morphology as reported. No additional comments.
Platelet count (estimated) Verified on: 07/19/24
Test Level Comment Range Low Range High Units of Measure
Platelet count (est) 615 x 10
3
/ul

Platelet count (estimated) Comments
Due to small platelet size in elephants, the automated platelet count may not be accurate and thus a manual platelet estimate isprovided.

Animal Type	GAN	Preferred ID	Taxonomy	Sex	Birth Date
Individual	26752287	992278	Elephas maximus indicus/Indian elephant	Female	~ from Jul 01, 1965 to Jul 01, 1966

Test Requests & Test Results						
Test	Primary Result	Expected Results (Based on Best Available Match) Type: Min- Max Mean [Median] N (Animals)	Evaluation	Excl'd. from RI	Clinical Finding	Reviewed
WBC	12.3 *10^3 cells/μL	Global subsp RI: 8.1 - 16.4 11.9 [12.0] N=856 (23)	~	No	No	No
RBC [a]	3.21 *10^6 cells/μL	Global subsp RI: 2.19 - 3.67 2.80 [2.79] N=847 (23)	~	No	No	No
HGB [a]	12.6 g/dL	Global subsp RI: 10.0 - 15.4 12.6 [12.5] N=844 (23)	~	No	No	No
HCT [a]	39.7 %	Global subsp RI: 27.0 - 43.5 34.1 [34.0] N=814 (20)	~	No	No	No
MCV	124 fL	Global subsp RI: 106.2 - 146.0 123.2 [120.6] N=744 (18)	~	No	No	No
MCH	39 pg	Global subsp RI: 38.0 - 50.9 45.1 [45.2] N=727 (17)	~	No	No	No
MCHC	32 %	Insufficient data	~	No	~	No
Neutrophil count [a]	18 *10^3 cells/μL	Global subsp RI: 0.00 - 7.44 2.04 [1.72] N=228 (13)	High	No	No	No
Band count [a]	~ *10^3 cells/μL	Global subsp RI: 0.00 - 1.08 0.30 [0.24] N=55 (7)	~	No	No	~
Lymphocyte count [a]	13 *10^3 cells/μL	Global subsp RI: 0.00 - 6.22 1.42 [1.16] N=229 (13)	High	No	No	No
Monocyte count [a]	64 *10^3 cells/μL	Global subsp RI: 0.001 - 6.852 2.135 [2.100] N=431 (15)	High	No	No	No
Eosinophil count [a]	2 *10^3 cells/μL	Global subsp RI: 0.000 - 0.610 0.100 [0.002] N=198 (14)	High	No	No	No
Basophil count [a]	1 *10^3 cells/μL	Global subsp RI: 0.000 - 0.204 0.017 [0.000] N=224 (14)	High	No	No	No
nRBC's	~ /100 WBC	Global subsp RI: 0 - 3 1 [0] N=41 (9)	~	No	No	~
Platelets	160 *10^3 cells/μL	Global subsp RI: 74 - 930 419 [322] N=744 (22)	~	No	No	No
Est. Platelets	615		~	~	~	No

Sample Detail (GSN: S-TCW24-151593-S01)			
Collection Date/Time	Jul 18, 2024 00:00	Collection Method	Phlebotomy
Sample Type	Whole Blood	Collected By	Dominique Keller
Anatomical Source/Tissue	~	Reason	~
Additives/Preservatives	EDTA	Exclude from reference intervals	No

Test & Result			
Test Request Detail		Sample Quality	
Date Requested	Jul 18, 2024	Color	~
Requested By	Dominique Keller	Color Intensity	~
Laboratory	UMAWLAB	Clarity	~
Analysis Start Date	Jul 18, 2024	Consistency	~
Analysis Equipment	~	Additional Characteristics	~
Insufficient Sample	No	Degraded	No

Animal Type	GAN	Preferred ID	Taxonomy	Sex	Birth Date
Individual	26752287	992278	Elephas maximus indicus/Indian elephant	Female	~ from Jul 01, 1965 to Jul 01, 1966

Notes/Comments

Capillary Zone ElectrophoresisComments
The total protein is increased. This may reflect mild patient or sample dehydration. By % TP, the fractions are normal.

SAA levelshave been examined in elephants and it appears that this is a major APP in this species. Clinically abnormal elephantshave been described with levels from 30-300mg/L. As a major APP, this test may provide the best prognostic value in animalsunder treatment or to monitor the progression of a disease process.

As in other species, HP is a minor APP in elephants. Two to three fold increases in thisAPP have been observed in clinically abnormal elephants. To date, the highest observed value in our laboratory hasbeen 9mg/ml. In most species, HP isbelieved to be a preferred marker of chronic inflammation. In contrast to CRP and SAA, the increase in HP isdelayed 4-6 days after stimulus and its expression isprolonged. Aswith other APP, repeated measures should have prognostic value.

Test Requests & Test Results

Test	Primary Result	Expected Results (Based on Best Available Match) Type: Min- Max Mean [Median] N (Animals)	Evaluation	Excl'd. from RI	Clinical Finding	Reviewed
Hemolysis Index	0 mg/dL	Not calculated	~	~	~	No
Lipemia index	0 ratio	Not calculated	~	~	~	No
Glucose	106 mg/dL	Global subsp RI: 55 - 120 86 [85] N=218 (17)	~	No	No	No
BUN	12 mg/dL	Global subsp RI: 5.0 - 15.0 9.7 [9.3] N=221 (17)	~	No	No	No
Creatinine	1.2 mg/dL	Global subsp RI: 1.0 - 1.9 1.3 [1.3] N=201 (15)	~	No	No	No
BUN:Creat ratio	10 ratio	Global subsp RI: 5.1 - 40.4 16.0 [10.8] N=88 (9)	~	No	~	No
Na	130 mmol/L	Global subsp RI: 123 - 139 130 [130] N=217 (16)	~	No	No	No
K	5.0 mmol/L	Global subsp RI: 3.9 - 5.4 4.5 [4.5] N=207 (14)	~	No	No	No
Chloride	92 mmol/L	Global subsp RI: 86 - 96 90 [90] N=200 (14)	~	No	No	No
Mg	2.4 mg/dL	Global subsp RI: 1.60 - 2.97 2.27 [2.30] N=117 (14)	~	No	No	No
Ca	10.4 mg/dL	Global subsp RI: 9.2 - 11.8 10.6 [10.6] N=222 (17)	~	No	No	No
Phos	3.7 mg/dL	Global subsp RI: 3.2 - 6.4 4.8 [4.8] N=213 (16)	~	No	No	No
Ca:Phos ratio	2.8 ratio	Global subsp RI: 1.4 - 3.4 2.4 [2.4] N=44 (8)	~	No	No	No
Total CO2	24 mmol/L	Global subsp RI: 20.0 - 28.6 24.3 [24.0] N=95 (8)	~	No	~	No
Amylase	1,171 U/L	Global subsp RI: 0 - 3,285 1,357 [1,168] N=72 (9)	~	No	No	No
Lipase	<10 U/L	Global subsp RI: 1 - 49 13 [8] N=46 (8)	~	No	No	No
Cholesterol	<50 mg/dL	Global subsp RI: 13 - 65 43 [43] N=57 (14)	~	No	No	No
Uric Acid	<0.5 mg/dL	Global subsp RI: 0.0 - 0.9 0.3 [0.3] N=55 (16)	~	No	No	No
Total Protein	9.0 g/dL	Global subsp RI: 6.7 - 9.5 8.0 [8.0] N=234 (18)	~	No	No	No
Albumin unspecified	3.7 g/dL	Not calculated	~	~	~	No

Animal Type	GAN	Preferred ID	Taxonomy	Sex	Birth Date
Individual	26752287	992278	Elephas maximus indicus/Indian elephant	Female	~ from Jul 01, 1965 to Jul 01, 1966

A:G ratio	0.7 ratio	Global subsp RI: 0.5 - 0.9 0.7 [0.7] N=136 (12)	~	No	No	No
AST	18 U/L	Global subsp RI: 11 - 31 17 [16] N=189 (13)	~	No	No	No
ALT	8 U/L	Global subsp RI: 0 - 14 4 [3] N=161 (14)	~	No	No	No
LDH	311 U/L	Global subsp RI: 215 - 1,063 501 [500] N=74 (10)	~	No	No	No
Creatine Kinase	156 U/L	Global subsp RI: 55 - 303 126 [117] N=177 (11)	~	No	No	No
Alk. Phos.	89 U/L	Global subsp RI: 45 - 165 92 [81] N=212 (17)	~	No	No	No
GGT	<10 U/L	Global subsp RI: 0 - 13 5 [4] N=167 (15)	~	No	No	No
Tot. Bili.	0.3 mg/dL	Global subsp RI: 0.1 - 0.5 0.2 [0.2] N=204 (16)	~	No	No	No
Conj./Direct Bili.	0.3 mg/dL	Global subsp RI: 0.0 - 0.5 0.2 [0.2] N=47 (8)	~	No	No	No
Protein EPH	9.0 g/dL	Not calculated	~	~	~	No
Pre-albumin EPH	0.4 g/dL	Global subsp RI: 0.00 - 0.51 0.11 [0.00] N=47 (9)	~	No	No	No
Albumin EPH	3.10 g/dL	Global subsp RI: 2.56 - 4.67 3.24 [3.20] N=102 (19)	~	No	No	No
α-1 Globulin EPH	0.1 g/dL	Global subsp RI: 0.07 - 1.10 0.67 [0.70] N=102 (16)	~	No	No	No
α-2 Globulin EPH	1.26 g/dL	Global subsp RI: 0.28 - 1.31 0.65 [0.57] N=99 (14)	~	No	No	No
β-1+2 Globulin EPH	2.48 g/dL	Global subsp RI: 0.36 - 2.43 1.46 [1.50] N=60 (12)	High	No	No	No
γ Globulin EPH	1.67 g/dL	Global subsp RI: 0.36 - 3.18 1.78 [1.81] N=95 (16)	~	No	~	No
Amyloid unspecified	0.3 mg/L	Not calculated	~	~	~	No
Haptoglobin	0.83 mg/ml	Global subsp RI: 0.25 - 4.00 1.30 [1.01] N=62 (8)	~	No	~	No

Sample Detail (GSN: S-TCW24-151594)			
Collection Date/Time	Jul 18, 2024 00:00	Collection Method	Phlebotomy
Sample Type	Serum	Collected By	Dominique Keller
Anatomical Source/Tissue	~	Reason	~
Additives/Preservatives	~	Exclude from reference intervals	No

Test & Result

Test Request Detail		Sample Quality	
Date Requested	Jul 18, 2024	Color	~
Requested By	Dominique Keller	Color Intensity	~
Analysis Start Date & Time	Jul 18, 2024 00:00	Clarity	~
Analysis By	Deanna Rocca	Consistency	~
Analysis Equipment	~	Additional Characteristics	~
Insufficient Sample	No	Degraded	No
Notes/Comments			
TP- 9.0 g/dl			

Animal Type	GAN	Preferred ID	Taxonomy	Sex	Birth Date
Individual	26752287	992278	Elephas maximus indicus/Indian elephant	Female	~ from Jul 01, 1965 to Jul 01, 1966

Test Requests & Test Results

Test	Primary Result	Expected Results (Based on Best Available Match) Type: Min- Max Mean [Median] N (Animals)	Evaluation	Excl'd. from RI	Clinical Finding	Reviewed
PCV	41 %	Not calculated	~	~	~	No

Sample Detail (GSN: S-TCW24-151593)

Collection Date/Time	Jul 18, 2024 00:00	Collection Method	Phlebotomy
Sample Type	Whole Blood	Collected By	Dominique Keller
Anatomical Source/Tissue	~	Reason	~
Additives/Preservatives	EDTA	Exclude from reference intervals	No

Test & Result

Test Request Detail

Date Requested	Jul 18, 2024
Requested By	Dominique Keller
Laboratory	UMAWLAB
Analysis Start Date	Jul 18, 2024
Analysis Equipment	~
Insufficient Sample	No

Sample Quality

Color	~
Color Intensity	~
Clarity	~
Consistency	~
Additional Characteristics	~
Degraded	No

Notes/Comments

~

Test Requests & Test Results

Test	Primary Result	Expected Results (Based on Best Available Match) Type: Min- Max Mean [Median] N (Animals)	Evaluation	Excl'd. from RI	Clinical Finding	Reviewed
Fibrinogen	400 mg/dL	Global subsp RI: 139 - 559 315 [319] N=45 (9)	~	No	No	No

Sample Detail (GSN: S-TCW24-151640)

Collection Date/Time	Jul 18, 2024 00:00	Collection Method	Phlebotomy
Sample Type	Plasma	Collected By	Deanna Rocca
Anatomical Source/Tissue	~	Reason	~
Additives/Preservatives	EDTA	Exclude from reference intervals	No

Jul 15, 2024

Clinical note

Date	Time	Note Author
Jul 15, 2024	00:00	Megan Duncan
Significant	Private	Active Problems
No	No	~

Note Subtype: General

Notes/Comments

Tech Note: Administered laser therapy to R cranial carpus and foot for 10:26. Animal held well, would put foot down about every 2 minutes, but would return when prompted.

Animal Care Staff Medical Summary

~

Calendar Items

Date	Title	Assigned To	Done
~	~	~	~

Animal Type	GAN	Preferred ID	Taxonomy	Sex	Birth Date
Individual	26752287	992278	Elephas maximus indicus/Indian elephant	Female	~ from Jul 01, 1965 to Jul 01, 1966

Jul 12, 2024

Clinical note

Date

Jul 12, 2024

Time

00:00

Note Author

Dominique Keller

Significant

No

Private

No

Active Problems

~

Note Subtype: General

Notes/Comments

Visual recheck: Keepers report the mousse topical for the LR foot has been easy to apply, not much change to appearance of skin in that area.

O: Alert, bright.
N: Mentation is appropriate
M/S: Moving around well. The skin of the medial aspect of the LR foot is slightly improved in the area that we are monitoring- appears subjectively less pink though perhaps a little warmer to the touch than the surrounding skin but there is no swelling or apparent tenderness on palpation. Foot pads look good.

A: LR foot skin still appears somewhat irritated, probably from urine splash- does not appear that the topical has made a lot of difference, though there is some improvement.

P: Update in a couple of days.

DLKeller, DVM

Animal Care Staff Medical Summary

~

Calendar Items

Date	Title	Assigned To	Done
~	~	~	~

Prescription/Treatment

Basic Info

Date Written

Jul 12, 2024

Start Date

Jul 12, 2024 00:00

Prescribed By

Dominique Keller

Prescribed For

1 animal

Reason For Treatment

~

Weight Info

Date

Jul 12, 2024

Measurement Value

3,350 kg

Estimate

Yes

Exclude From Reference Intervals

Yes

Animal Type	GAN	Preferred ID	Taxonomy	Sex	Birth Date
Individual	26752287	992278	Elephas maximus indicus/Indian elephant	Female	~ from Jul 01, 1965 to Jul 01, 1966

Treatment Detail

Treatment Item/Drug

Vet One Natural Psyllium Pellets (140000 mg Solid) (psyllium) (VETONE)

Dose Amount

3.5 lb

Frequency

Other

Form of Drug

Solid

Dosage Amount

~

Duration

365days

Concentration Of Drug

140,000 mg

Administrated Dose Quantity

3.5 lb

Delivery Route

Oral (p.o.)

Loading Dose

~

Treatment Response

Clinical Response

~

Adverse Effects

~

Adverse Effects Note:

~

Staff Instructions

Give 3.5 lb (1.6 kg) of Vet One Natural Psyllium Pellets, once a day for 7 days every 3 weeks for 365 days.

Start treatment on Jul 12, 2024

Administration route: Oral (p.o.)

Prescription Notes/Comments

~

Calendar Items

Date	Title	Assigned To	Done
Jul 11, 2025	992278 / Indian elephant / 26752287 Vet One Natural Psyllium Pellets treatment is complete	Dominique Keller	No

Dispensing Records

Date Dispensed	Dispensed By	Quantity Dispensed
~	~	~

Administration Records

Administration Date/Time	Administered By	Success	Notes
~	~	~	~

Jul 09, 2024

Clinical note

Date

Jul 09, 2024

Time

00:00

Note Author

Dominique Keller

Significant

No

Private

No

Active Problems

~

Note Subtype: General

Notes/Comments

Verbal update: Senior keeper reports that Tina is doing well, the new topical for the left rear foot is being tolerated well, the affected skin is still slightly pink. Keeper requested an updated CO2 therapy script- this is now being done 2x week for both rear feet at 10 min/session.

A: We also discussed continuing with preventative medicine- elephants are due in August for routine quarterly blood work, and we can also aim for trunk washes and foot radiographs.

P: Update in a few days.

DLKeller, DVM

Animal Care Staff Medical Summary

~

Calendar Items

Date	Title	Assigned To	Done
~	~	~	~

Animal Type	GAN	Preferred ID	Taxonomy	Sex	Birth Date
Individual	26752287	992278	Elephas maximus indicus/Indian elephant	Female	~ from Jul 01, 1965 to Jul 01, 1966

Prescription/Treatment

Basic Info

Date Written

Jul 09, 2024

Start Date

Jul 09, 2024 00:00

Prescribed By

Dominique Keller

Prescribed For

1 animal

Reason For Treatment

~

Weight Info

Date

Jul 09, 2024

Measurement Value

3,350 kg

Estimate

Yes

Exclude From Reference Intervals

Yes

Treatment Detail

Treatment Item/Drug

Carbon dioxide, transdermal treatment

Dose Amount

~

Frequency

Other

Form of Drug

~

Dosage Amount

~

Duration

60days

Concentration Of Drug

~

Administrated Dose Quantity

~

Delivery Route

Topical

Loading Dose

~

Treatment Response

Clinical Response

~

Adverse Effects

~

Adverse Effects Note:

~

Staff Instructions

Both rear feet twice a week for 10 min: this is with bag treatment. Make sure to wet skin of feet before doing treatment for best effects. Script is for 60 days. Start 10 July 2024.

Prescription Notes/Comments

~

Calendar Items

Date	Title	Assigned To	Done
Sep 06, 2024	992278 / Indian elephant / 26752287 Carbon dioxide, transdermal treatment treatment is complete	Dominique Keller	No

Dispensing Records

Date Dispensed	Dispensed By	Quantity Dispensed
~	~	~

Administration Records

Administration Date/Time	Administered By	Success	Notes
~	~	~	~

Jul 05, 2024

Clinical note

Date

Jul 05, 2024

Time

00:00

Note Author

Dominique Keller

Significant

No

Private

No

Active Problems

~

Note Subtype: General

Notes/Comments

Recheck: Keepers noted a small abrasion on the proximal right thigh yesterday. This morning Tina is having a bath and stretching session out in the Thai yard. Keepers are not noticing previously reported right carpal stiffness as much in the past few days and report that stretch/PT sessions are going well.

Animal Type	GAN	Preferred ID	Taxonomy	Sex	Birth Date
Individual	26752287	992278	Elephas maximus indicus/Indian elephant	Female	~ from Jul 01, 1965 to Jul 01, 1966

O: Alert, bright.
N: Mentation is appropriate
Oral: Mucous membranes are pink and moist.
Integ: The defect noted by keepers is on the upper right thigh, a small abrasion about 1 cm in diameter, there is no frank blood or discharge from the site.
M/S: Observed moving in yard- both the left and the right carpi have equivalent range of motion that does not appear restricted or impaired when walking on flat surfaces of the yard. I do not appreciate any shoulder stiffness on either side.
Noted some diffuse mild erythema on the medial aspect of the left rear foot from the margin of the foot pad proximally about 2 cm. The skin in the area looks pinker than expected, but there are no abrasions and the skin is smooth. No excessive heat, no dimpling on applying pressure. This looks more like superficial irritation, not deep bruising. Possible this is from urine splashing on this zone, as we have seen that before on both rear legs.
Observed stretching/PT session. Tina did not hesitate for any of the stretches, has good ROM on all limbs and can do up to 3 repetitions per stretch without losing ROM.

A: Overall Tina seems to be moving well and is able to do the PT stretches without issue. There appears to be some superficial irritation on the medial aspect of the left rear foot- we have seen some issues previously with urine splashback causing irritation to the feet.
The right thigh lesion is fairly superficial and does not need specific medical treatment.

P: Trial a calming topical leave on product that is formulated to soothe irritated skin and fortify the natural skin barrier. Trial is for 14 days. Update in a few days.

Rx: DouxoS3 Calm mousse, apply once a day to affected area of the left rear foot for 14 days.

DLKeller, DVM

Animal Care Staff Medical Summary

~

Calendar Items

Date	Title	Assigned To	Done
~	~	~	~

Prescription/Treatment

Basic Info

Date Written Jul 05, 2024
Start Date Jul 05, 2024 00:00
Prescribed By Dominique Keller
Prescribed For 1 animal
Reason For Treatment ~

Weight Info

Date Jul 05, 2024
Measurement Value 3,350 kg
Estimate Yes
Exclude From Reference Intervals Yes

Animal Type	GAN	Preferred ID	Taxonomy	Sex	Birth Date
Individual	26752287	992278	Elephas maximus indicus/Indian elephant	Female	~ from Jul 01, 1965 to Jul 01, 1966

Treatment Detail

Treatment Item/Drug

DouxoS3 Calm Mousse

Dose Amount

~

Dosage Amount

~

Administrated Dose Quantity

~

Frequency

once a day (sid)

Duration

14days

Delivery Route

Topical

Loading Dose

~

Form of Drug

~

Concentration Of Drug

~

Treatment Response

Clinical Response

~

Adverse Effects

~

Adverse Effects Note:

~

Staff Instructions

Clean and dry affected area of the left rear foot- apply mousse liberally and rub in. This should be done once a day for 14 days.

Start 6 July 2024

Prescription Notes/Comments

~

Calendar Items

Date	Title	Assigned To	Done
Jul 18, 2024	992278 / Indian elephant / 26752287 DouxoS3 Calm Mousse treatment is complete	Brandon Boren	No

Dispensing Records

Date Dispensed	Dispensed By	Quantity Dispensed
~	~	~

Administration Records

Administration Date/Time	Administered By	Success	Notes
~	~	~	~

Jul 03, 2024

Clinical note

Date

Jul 03, 2024

Time

00:00

Note Author

Lauren Nickerson

Significant

No

Private

No

Active Problems

~

Note Subtype: General

Notes/Comments

Tech Note: Tetanus vaccine booster: Easily administered into right hind leg while P stood in ERD.

SN 3180023A
Exp 30 Dec 2024

Animal Care Staff Medical Summary

~

Calendar Items

Date	Title	Assigned To	Done
~	~	~	~

Prescription/Treatment

Animal Type	GAN	Preferred ID	Taxonomy	Sex	Birth Date
Individual	26752287	992278	Elephas maximus indicus/Indian elephant	Female	~ from Jul 01, 1965 to Jul 01, 1966

Basic Info

Date WrittenJul 02, 2024

Start DateJul 03, 2024 00:00

Prescribed ByDominique Keller

Prescribed For1 animal

Reason For TreatmentPreventative Health

Weight Info

DateJul 02, 2024

Measurement Value3,350 kg

EstimateYes

Exclude From Reference IntervalsYes

Treatment Detail

Treatment Item/DrugTetanus toxoid

Dose Amount1 ml

Dosage Amount0.000 ml/kg

Administrated Dose Quantity1 ml

Frequencyonce

Duration1doses

Delivery RouteInjection, intramuscular (i.m.)

Loading Dose~

Form of Drug ~

Concentration Of Drug

~

Treatment Response

Clinical Response~

Adverse Effects~

Adverse Effects Note:

~

Staff Instructions

Give 1.0 ml IM (intramuscularly) once. Vaccine is to be repeated every two years. Use 22 g 1.5" needle and swab skin with alcohol prior to administering. Script is written for 3 July 2024

Prescription Notes/Comments

SN 3180023A
Exp 30 Dec 2024

Right hind leg. -LN

Calendar Items

Date	Title	Assigned To	Done
~	~	~	~

Dispensing Records

Date Dispensed	Dispensed By	Quantity Dispensed
~	~	~

Administration Records

Administration Date/Time	Administered By	Success	Notes
Jul 03, 2024 09:45	Lauren Nickerson	Complete	~

Jun 27, 2024

Clinical note

DateJun 27, 2024

Time00:00

Note AuthorDominique Keller

SignificantNo

PrivateNo

Active Problems~

Note Subtype: General

Notes/Comments

Rabies vaccine booster: Due every two years. Scheduled for this morning- procedure in ERD went very well. Keepers monitoring what they are thinking is front carpus stiffness (they cannot tell if this is new). Based on gait observation, this may be more of a shoulder issue, as the right carpus seems fairly mobile today. We are working on starting a cold

Animal Type	GAN	Preferred ID	Taxonomy	Sex	Birth Date
Individual	26752287	992278	Elephas maximus indicus/Indian elephant	Female	~ from Jul 01, 1965 to Jul 01, 1966

laser trial for the carpus.

O: Alert, bright. Mentally appropriate. BCS: 4/9.
Gait: Overall moves well, the right carpus does not seem to have limited mobility compared to the left, but keepers say they note tendon tautness with foot presents- so will do another exam in a few days to specifically look at that. I have the impression of slight stiffness in the right shoulder as she moves that leg over sills.

Rx: Received 2 ml Merial Imrab 3 rabies vaccine, IM in the right rear thigh after skin prep with alcohol. Lot: 12679, Exp.:15Dec2024

P: Update in a few days. Plan for tetanus vaccine booster next week. Also continue discussion of current stretching regimen and whether any modifications are needed.

DLKeller, DVM

Animal Care Staff Medical Summary

~

Calendar Items			
Date	Title	Assigned To	Done
~	~	~	~

Prescription/Treatment

Basic Info

Date Written

Jun 21, 2024

Start Date

Jun 27, 2024 00:00

Prescribed By

Dominique Keller

Prescribed For

1 animal

Reason For Treatment

Preventative Health

Weight Info

Date

Jun 21, 2024

Measurement Value

3,350 kg

Estimate

Yes

Exclude From Reference Intervals

Yes

Animal Type	GAN	Preferred ID	Taxonomy	Sex	Birth Date
Individual	26752287	992278	Elephas maximus indicus/Indian elephant	Female	~ from Jul 01, 1965 to Jul 01, 1966

Treatment Detail

Treatment Item/Drug

Imrab 3 (Liquid > Solution) (Rabies virus vaccine (inactivated)) (MERIAL)

Dose Amount

2 ml

Frequency

once

Form of Drug

Solution

Dosage Amount

0.001 ml/kg

Duration

1doses

Concentration Of Drug

~

Administrated Dose Quantity

2 ml

Delivery Route

Injection

Loading Dose

~

Treatment Response

Clinical Response

~

Adverse Effects

~

Adverse Effects Note:

~

Staff Instructions

Give 2.0 ml IM (intramuscularly) once. Vaccine to be administered every two years.
Script is written for 6/27/24

Prescription Notes/Comments

~

Calendar Items

Date	Title	Assigned To	Done
Jun 27, 2024	Start Imrab 3 2.0 ml once 1 doses Injection / Indian elephant / 992278 / 26752287	Dominique Keller	No

Dispensing Records

Date Dispensed	Dispensed By	Quantity Dispensed
~	~	~

Administration Records

Administration Date/Time	Administered By	Success	Notes
Jun 27, 2024 09:17	Dominique Keller	Complete	R rear thigh

Jun 25, 2024

Clinical note

Date

Jun 25, 2024

Significant

No

Note Subtype: General

Time

00:00

Private

No

Note Author

Dominique Keller

Active Problems

~

Notes/Comments

Verbal update: Senior keeper reports that Tina remains very active, just as she was at the end of last week. However, also reported that they feel the right carpus has been more stiff and has less "flex" than previous (seems to have been noticed in the last two weeks). Keepers asked about cold laser therapy (CLT)- elephant already has a stretching routine.

A: We can try the CLT as a trial, can also add in CO2 therapy for that joint as that is supposed to provide analgesia as well. Will start with CLT and see if keepers notice any changes.

Rx: CLT: 4500 J to be delivered to front right carpal area, three times a week for week 1, the twice a week for weeks 3-4, after which we will reassess mobility and keeper thoughts on any changes with treatment.

DLKeller, DVM
DLKeller, DVM

Animal Care Staff Medical Summary

~

Animal Type	GAN	Preferred ID	Taxonomy	Sex	Birth Date
Individual	26752287	992278	Elephas maximus indicus/Indian elephant	Female	~ from Jul 01, 1965 to Jul 01, 1966

Calendar Items

Date	Title	Assigned To	Done
~	~	~	~

Prescription/Treatment

Basic Info

Date Written

Jun 25, 2024

Start Date

Jun 25, 2024 00:00

Prescribed By

Dominique Keller

Prescribed For

1 animal

Reason For Treatment

~

Weight Info

Date

Jun 25, 2024

Measurement Value

3,350 kg

Estimate

Yes

Exclude From Reference Intervals

Yes

Animal Type	GAN	Preferred ID	Taxonomy	Sex	Birth Date
Individual	26752287	992278	Elephas maximus indicus/Indian elephant	Female	~ from Jul 01, 1965 to Jul 01, 1966

Treatment Detail

Treatment Item/Drug

Cold laser therapy

Dose Amount

~

Dosage Amount

~

Administrated Dose Quantity

~

Frequency

Other

Duration

9days

Delivery Route

Topical

Loading Dose

~

Form of Drug

~

Concentration Of Drug

~

Treatment Response

Clinical Response

~

Adverse Effects

~

Adverse Effects Note:

~

Staff Instructions

CLT for right carpal stiffness

Cold laser therapy: Equine setting (medium coat) -> Arthritis/chronic pain setting -> Select fetlock/pastern

Total energy: 4500 J at 12 W on CW setting

Week 1: 3 sessions/ week

Weeks 2-4: 2 sessions/week

For a total of 9 sessions during this trial.

After Week 4, we will re-assess.

Script starts 25 June 2024

Prescription Notes/Comments

~

Calendar Items

Date	Title	Assigned To	Done
Jul 03, 2024	992278 / Indian elephant / 26752287 Cold laser therapy treatment is complete	Dominique Keller	No

Dispensing Records

Date Dispensed	Dispensed By	Quantity Dispensed
~	~	~

Administration Records

Administration Date/Time	Administered By	Success	Notes
~	~	~	~

Jun 21, 2024

Clinical note

Date

Jun 21, 2024

Time

00:00

Note Author

Dominique Keller

Significant

No

Private

No

Active Problems

~

Note Subtype: General

Notes/Comments

Verbal update: Senior keeper reports that Tina seems extremely energetic today, more so than in many weeks- she went into the pool of her own volition and was swimming around, she was very active and does not show any signs of ear discomfort. She had a few days earlier this week in which she was a little slower to move around, but this seems to have passed.
Not on any NSAIDS and doing well.

P: Rabies vaccine- every two year booster- scheduled for next week.

Animal Type	GAN	Preferred ID	Taxonomy	Sex	Birth Date
Individual	26752287	992278	Elephas maximus indicus/Indian elephant	Female	~ from Jul 01, 1965 to Jul 01, 1966

DLKeller, DVM

Animal Care Staff Medical Summary

~

Calendar Items

Date	Title	Assigned To	Done
~	~	~	~

Jun 18, 2024

Clinical note

DateTimeNote Author

Jun 18, 202400:00Dominique Keller

SignificantPrivateActive Problems

NoNo~

Note Subtype: General

Notes/Comments

Verbal update: Senior keeper reports elephant is doing well today..
DLK

Animal Care Staff Medical Summary

~

Calendar Items

Date	Title	Assigned To	Done
~	~	~	~

Jun 17, 2024

Clinical note

DateTimeNote Author

Jun 17, 202400:00Dominique Keller

SignificantPrivateActive Problems

NoNo~

Note Subtype: General

Notes/Comments

Verbal update: Has been off Previcox for a couple of days now and is doing well, does not seem to experiencing any ear discomfort at this time. Keepers report that the desens for annual vaccines is going well and we should be able to schedule these now.

P: Visual recheck in the next few days, begin discussing dates for annual vaccines.

DLKeller, DVM

Animal Care Staff Medical Summary

~

Calendar Items

Date	Title	Assigned To	Done
~	~	~	~

Jun 07, 2024

Clinical note

DateTimeNote Author

Jun 07, 202400:00Dominique Keller

SignificantPrivateActive Problems

NoNo~

Animal Type	GAN	Preferred ID	Taxonomy	Sex	Birth Date
Individual	26752287	992278	Elephas maximus indicus/Indian elephant	Female	~ from Jul 01, 1965 to Jul 01, 1966

Note Subtype: General

Notes/Comments

Visual recheck: Keepers report Tina was holding right pinna out briefly this morning, but this seems to have resolved. They feel she is much more comfortable and is doing very well during their behavior sessions with her.

O: Alert, bright. Ears are in normal position AU. Did very well for her training session this afternoon.

P: Continue routine updates- no ear treatments at this time. Update in a few days.

DLKeller, DVM

Animal Care Staff Medical Summary

~

Calendar Items

Date	Title	Assigned To	Done
~	~	~	~

Jun 05, 2024

Clinical note

Date	Time	Note Author
Jun 05, 2024	00:00	Brandon Boren
Significant	Private	Active Problems
No	No	~

Note Subtype: General

Notes/Comments

SW PK KC. He reports that Tina ios doing better today. HE was able to get long acting medicated ointment in both ears without issue. He believes she seems more comfortable. Will have primary vet follow up later this week. {BB}

Animal Care Staff Medical Summary

~

Calendar Items

Date	Title	Assigned To	Done
~	~	~	~

Jun 03, 2024

Clinical note

Date	Time	Note Author
Jun 03, 2024	00:00	Corinne Mayer
Significant	Private	Active Problems
No	No	~

Note Subtype: General

Notes/Comments

Verbal update: Keepers called at end of day to report that ear flushes are going well They did not perform ear flush yesterday as Tina was not complying with behavioral sessions (likely due to Beastly Ball the night before) but she had a really good session today. Keepers are ready to switch to medicated ear flush; per primary vet DLK this medication is ready for pick up and keepers will pick up tomorrow morning. CCM

Animal Care Staff Medical Summary

~

Calendar Items

Date	Title	Assigned To	Done
~	~	~	~

Jun 02, 2024

Prescription/Treatment

Animal Type	GAN	Preferred ID	Taxonomy	Sex	Birth Date
Individual	26752287	992278	Elephas maximus indicus/Indian elephant	Female	~ from Jul 01, 1965 to Jul 01, 1966

Basic Info

Date Written

May 31, 2024

Start Date

Jun 02, 2024 00:00

Prescribed By

Dominique Keller

Prescribed For

1 animal

Reason For Treatment

~

Weight Info

Date

May 31, 2024

Measurement Value

3,350 kg

Estimate

Yes

Exclude From Reference Intervals

Yes

Treatment Detail

Treatment Item/Drug

Previcox (227 mg Solid > Tablet) (Firocoxib) (MERIAL)

Dose Amount

567.5 mg

Frequency

once a day (sid)

Form of Drug

Tablet

Dosage Amount

0.169 mg/kg

Duration

14days

Concentration Of Drug

227 mg

Administrated Dose Quantity

2.5 count

Delivery Route

Oral (p.o.)

Loading Dose

~

Treatment Response

Clinical Response

~

Adverse Effects

~

Adverse Effects Note:

~

Staff Instructions

Give 567.5 mg [2.5 count] of Previcox, once a day (sid) for 14 days.

Start treatment on Jun 02, 2024

Administration route: Oral (p.o.)

Prescription Notes/Comments

~

Calendar Items

Date	Title	Assigned To	Done
Jun 15, 2024	992278 / Indian elephant / 26752287 Previcox treatment is complete	Dominique Keller	No
Jun 02, 2024	Start Previcox 567.5 mg once a day (sid) 14 days Oral (p.o.) / Indian elephant / 992278 / 26752287	Dominique Keller	No

Dispensing Records

Date Dispensed	Dispensed By	Quantity Dispensed
~	~	~

Administration Records

Administration Date/Time	Administered By	Success	Notes
~	~	~	~

Prescription/Treatment

Animal Type	GAN	Preferred ID	Taxonomy	Sex	Birth Date
Individual	26752287	992278	Elephas maximus indicus/Indian elephant	Female	~ from Jul 01, 1965 to Jul 01, 1966

Basic Info

Date Written

Jun 02, 2024

Start Date

Jun 02, 2024 00:00

Prescribed By

Dominique Keller

Prescribed For

1 animal

Reason For Treatment

~

Weight Info

Date

Jun 02, 2024

Measurement Value

3,350 kg

Estimate

Yes

Exclude From Reference Intervals

Yes

Treatment Detail

Treatment Item/Drug

Florfenicol, Gentamicin, Miconazole, Triamcinolone (2 % (c) Semisolid > Ointment) (Florfenicol; Gentamicin; Miconazole; Triamcinolone)

Dose Amount

15 ml

Frequency

once

Form of Drug

Ointment

Dosage Amount

0.002 ml/kg

Duration

1doses

Concentration Of Drug

2 % (c)

Administrated Dose Quantity

15 ml

Delivery Route

Topical

Loading Dose

~

Treatment Response

Clinical Response

~

Adverse Effects

~

Adverse Effects Note:

~

Staff Instructions

Instill 15 ml (1 syringe) in both the left and right ear canals once after flushing ears with sterile saline.
Script starts 2 June 2024.

Prescription Notes/Comments

~

Calendar Items

Date	Title	Assigned To	Done
~	~	~	~

Dispensing Records

Date Dispensed	Dispensed By	Quantity Dispensed
~	~	~

Administration Records

Administration Date/Time	Administered By	Success	Notes
~	~	~	~

Jun 01, 2024

Clinical note

Date

Jun 01, 2024

Time

00:00

Note Author

Dominique Keller

Significant

No

Private

No

Active Problems

~

Note Subtype: General

Notes/Comments

Verbal update: Keepers report being able to flush both ears successfully this morning with the keto-TRIS solution. Tina has not been holding her ears out and seems comfortable.

P: Next step will be to see if bilateral flushing with this medication continues to be successful, in which case can proceed with the long acting combination otic.

Animal Type	GAN	Preferred ID	Taxonomy	Sex	Birth Date
Individual	26752287	992278	Elephas maximus indicus/Indian elephant	Female	~ from Jul 01, 1965 to Jul 01, 1966

DLKeller, DVM

Animal Care Staff Medical Summary

~

Calendar Items

Date	Title	Assigned To	Done
~	~	~	~

May 31, 2024

Clinical note

DateTimeNote Author

May 31, 202400:00Dominique Keller

SignificantPrivateActive Problems

NoNo~

Note Subtype: General

Notes/Comments

Verbal update: Keeper reports Tina would only allow flush of right ear today and would not present the left ear. She does not appear uncomfortable.

P: Continue working through these challenges to attempt bilateral ear flushes daily if possible.

DLKeller, DVM

Animal Care Staff Medical Summary

~

Calendar Items

Date	Title	Assigned To	Done
~	~	~	~

Prescription/Treatment

Basic Info

Date Written

Start Date

Prescribed By

Prescribed For

Reason For Treatment

May 31, 2024

May 31, 2024 00:00

Dominique Keller

1 animal

~

Weight Info

Date

Measurement Value

Estimate

Exclude From Reference Intervals

May 31, 2024

3,350 kg

Yes

Yes

Printed: Aug 31, 2024

Los Angeles Zoo & Botanical Gardens

Page 40 of 132

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Animal Type	GAN	Preferred ID	Taxonomy	Sex	Birth Date
Individual	26752287	992278	Elephas maximus indicus/Indian elephant	Female	~ from Jul 01, 1965 to Jul 01, 1966

Treatment Detail

Treatment Item/Drug

Saline 0.9% Injection (Liquid > Solution)

Dose Amount

120 ml

Dosage Amount

0.036 ml/kg

Administrated Dose Quantity

120 ml

Frequency

once a day (sid)

Duration

30days

Delivery Route

Injection

Loading Dose

~

Form of Drug

Solution

Concentration Of Drug

~

Treatment Response

Clinical Response

~

Adverse Effects

~

Adverse Effects Note:

~

Staff Instructions

60-120 ml of Saline 0.9% Injection in each ear, once a day (sid) for up to 30 days days. Warm bottle up to body temperature before using.
Start treatment on May 31, 2024

Prescription Notes/Comments

~

Calendar Items

Date	Title	Assigned To	Done
Jun 29, 2024	992278 / Indian elephant / 26752287 Saline 0.9% Injection treatment is complete	Dominique Keller	No

Dispensing Records

Date Dispensed	Dispensed By	Quantity Dispensed
~	~	~

Administration Records

Administration Date/Time	Administered By	Success	Notes
~	~	~	~

Prescription/Treatment

Basic Info

Date Written

May 31, 2024

Start Date

May 31, 2024 00:00

Prescribed By

Dominique Keller

Prescribed For

1 animal

Reason For Treatment

~

Weight Info

Date

May 31, 2024

Measurement Value

3,350 kg

Estimate

Yes

Exclude From Reference Intervals

Yes

Animal Type	GAN	Preferred ID	Taxonomy	Sex	Birth Date
Individual	26752287	992278	Elephas maximus indicus/Indian elephant	Female	~ from Jul 01, 1965 to Jul 01, 1966

Treatment Detail

Treatment Item/Drug

Epi-Otic Advanced (2 mg/ml Liquid > Solution) (Docusate; Salicylic acid) (VIRBAC AH)

Dose Amount

15 ml

Dosage Amount

0.004 ml/kg

Administrated Dose Quantity

15 ml

Frequency

once a day (sid)

Duration

21doses

Delivery Route

Topical

Loading Dose

~

Form of Drug

Solution

Concentration Of Drug

~

Treatment Response

Clinical Response

~

Adverse Effects

~

Adverse Effects Note:

~

Staff Instructions

Both ears: After the last saline flush, instill 15 ml EpiOtic solution into the ear canal with the ear catheter once every day for 21 doses or as needed. **Warm bottle up to body temperature before using.**
Script starts 31 May 2024

Prescription Notes/Comments

Right ear treatment: After the last dilute chlorhexidine flush, instill 30 ml EpiOtic solution into the ear canal with the ear catheter once every other day for 3 doses

Calendar Items

Date	Title	Assigned To	Done
Jun 20, 2024	992278 / Indian elephant / 26752287 Epi-Otic Advanced treatment is complete	Dominique Keller	No

Dispensing Records

Date Dispensed	Dispensed By	Quantity Dispensed
~	~	~

Administration Records

Administration Date/Time	Administered By	Success	Notes
~	~	~	~

Prescription/Treatment

Basic Info

Date Written

May 31, 2024

Start Date

May 31, 2024 00:00

Prescribed By

Dominique Keller

Prescribed For

1 animal

Reason For Treatment

~

Weight Info

Date

May 31, 2024

Measurement Value

3,350 kg

Estimate

Yes

Exclude From Reference Intervals

Yes

Animal Type	GAN	Preferred ID	Taxonomy	Sex	Birth Date
Individual	26752287	992278	Elephas maximus indicus/Indian elephant	Female	~ from Jul 01, 1965 to Jul 01, 1966

Treatment Detail

Treatment Item/Drug

VetraSeb CeraDerm Ketoconazole TRIS Flush (0.1 % (c) Liquid) (Ketoconazole; TRISEDTA) (VETONE)

Dose Amount

15 ml

Dosage Amount

~

Administrated Dose Quantity

15 ml

Frequency

once a day (sid)

Duration

30days

Delivery Route

Topical

Loading Dose

~

Form of Drug

Liquid

Concentration Of Drug

0.1 % (c)

Treatment Response

Clinical Response

~

Adverse Effects

~

Adverse Effects Note:

~

Staff Instructions

After saline flush, instill the VetraSeb ketoconazole flush (15-60 ml) once a day into each ear canal. **Warm bottle up to body temperature before using.** Script is for 30 days. Script starts 31 May 2024.

Prescription Notes/Comments

~

Calendar Items

Dispensing Records

Administration Records

May 30, 2024

Clinical note

Date

May 30, 2024

Time

00:00

Note Author

Dominique Keller

Significant

No

Private

No

Active Problems

~

Note Subtype: General

Notes/Comments

Visual recheck: Tina went into the ERD well for presentation of the left ear first, she allowed several warm saline flushes with 14 Fr red rubber catheter introduced into the ear canal about 2". About four 60 cc flushes were completed, which started with turbid fluid coming out, but running clear by the end of the session. When she was asked to present the right ear, she did come into the ERD but was more reluctant to allow much treatment, and in the end only flushing of the opening of the canal was performed. This seems to be the current pattern of behavior, with only one ear being able to be flushed at a time.

P: Based on current behavior and recent cytology findings confirming there are still significant yeast in the aural canals more consistent cleansing and treatment is needed but will have to proceed in a stepwise fashion. This is the plan that was sent to AC:

1. Try one 60 cc flush with warm saline
2. Then flush with one 60 cc flush with the warm EpiOtic solution (let us know if you need more)
3. Do this every day until we let you know we have a new flush solution that has an anti fungal in it. When that comes in, step 1 would be the same but step 2 would substitute the new anti fungal flush (I'll get you scripts for all of these).
4. Treatment with the long acting ear medication- we should only do this once we have had 3-4 consecutive days of successful flushing with the anti fungal solution. On the day of this medication, we would do one saline flush only then place the meds.
So we might not get to that step 4 until week after next if she cooperates.
If she looks uncomfortable while all this is happening, she can stay on the Previcox if you think she needs it.

P:We will continue regular vets checks throughout this process and assess day by day.

Rx: Previcox script extended to be used if needed based on comfort observations.

Animal Type	GAN	Preferred ID	Taxonomy	Sex	Birth Date
Individual	26752287	992278	Elephas maximus indicus/Indian elephant	Female	~ from Jul 01, 1965 to Jul 01, 1966

DLKeller, DVM

Animal Care Staff Medical Summary

~

Calendar Items

Date	Title	Assigned To	Done
~	~	~	~

May 28, 2024

Clinical note

Date

May 28, 2024

Significant

No

Note Subtype: General

Time

00:00

Private

No

Note Author

Dominique Keller

Active Problems

~

Notes/Comments

Verbal update: Tina has been fairly good about allowing the ear flushes of the external ear canals with the warm saline- today keepers were able to insert catheter a little into the right ear and flushed out some malodorous material. She still seems a little uncomfortable, so will extend the Previcox.

Rx: Previcox script extended for another 5 days.

P: Update in a couple of days

DLKeller, DVM

Animal Care Staff Medical Summary

~

Calendar Items

Date	Title	Assigned To	Done
~	~	~	~

Prescription/Treatment

Basic Info

Date Written

May 28, 2024

Start Date

May 28, 2024 00:00

Prescribed By

Dominique Keller

Prescribed For

1 animal

Reason For Treatment

~

Weight Info

Date

May 28, 2024

Measurement Value

3,350 kg

Estimate

Yes

Exclude From Reference Intervals

Yes

Animal Type	GAN	Preferred ID	Taxonomy	Sex	Birth Date
Individual	26752287	992278	Elephas maximus indicus/Indian elephant	Female	~ from Jul 01, 1965 to Jul 01, 1966

Treatment Detail

Treatment Item/Drug

Previcox (227 mg Solid > Tablet) (Firocoxib) (MERIAL)

Dose Amount

567.5 mg

Dosage Amount

0.169 mg/kg

Administrated Dose Quantity

2.5 count

Frequency

once a day (sid)

Duration

5days

Delivery Route

Oral (p.o.)

Loading Dose

~

Form of Drug

Tablet

Concentration Of Drug

227 mg

Treatment Response

Clinical Response

~

Adverse Effects

~

Adverse Effects Note:

~

Staff Instructions

Give 567.5 mg [2.5 count] of Previcox, once a day (sid) for 5 days.

Start treatment on May 28, 2024

Administration route: Oral (p.o.)

Prescription Notes/Comments

~

Calendar Items

Date	Title	Assigned To	Done
~	~	~	~

Dispensing Records

Date Dispensed	Dispensed By	Quantity Dispensed
~	~	~

Administration Records

Administration Date/Time	Administered By	Success	Notes
~	~	~	~

Sample

Sample Detail

Collection Date/Time

May 28, 2024 00:00

Sample Type

Urine

Additives/Preservatives

~

Collection Method

Free Catch

Collected By

Dominique Keller

Reason

~

Exclude from reference intervals

No

Sample Quality

Color

~

Color Intensity

~

Clarity

~

Degraded

No

Initial Holding Conditions

Initial Holding Temp.

~

Initial Holding Duration

~

Sample History

Date	Sample ID / Sample GSN	Status	Laboratory / Test Order / Test Results
May 28, 2024	~/~	Available	IDEXVTCCT/16/16
May 28, 2024	~/~	Available	LOSANGELE/1/1

Notes

~

Printed: Aug 31, 2024

Los Angeles Zoo & Botanical Gardens

Page 45 of 132

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Animal Type	GAN	Preferred ID	Taxonomy	Sex	Birth Date
Individual	26752287	992278	Elephas maximus indicus/Indian elephant	Female	~ from Jul 01, 1965 to Jul 01, 1966

Calendar Items			
Date	Title	Assigned To	Done
~	~	~	~

Test & Result

Test Request Detail

Date Requested

May 28, 2024

Requested By

Dominique Keller

Laboratory

IDEXVTCCT

Analysis Start Date

May 28, 2024

Analysis Equipment

~

Insufficient Sample

No

Sample Quality

Color

~

Color Intensity

~

Clarity

~

Consistency

~

Additional Characteristics

~

Degraded

No

Notes/Comments

Veterinarian: Keller

Requisition: 237728608

Notes for Protein (urine.random.reagent.strip.IdexxLab.reported):

Result: TRACE

Notes for Urobilinogen (urine.random.reagent.strip.VetscanUA.automated):

Result: NORMAL

Notes for Sediment Evaluation for White Blood Cells (fluid.light microscope.manual):

Result: 0-2 /hpf

Notes for Sediment Evaluation for Red Blood Cells (fluid.light microscope.manual):

Result: 0-2 /hpf

Notes for Sediment Evaluation for Epithelial Cells [type not specified] (urine.light microscope.manual):

Result: RARE (0-1)

Result(s) ZIMS was unable to process: 9445::Urinalysis::UNKNOWN

LabTest: Collection (Test: 9445, Category: Urinalysis, Taxonomy: UNKNOWN)

PrimaryResultValueEntered: FREECATCH

Result(s) ZIMS was unable to process: 9447::Urinalysis::UNKNOWN

LabTest: Color (Test: 9447, Category: Urinalysis, Taxonomy: UNKNOWN)

PrimaryResultValueEntered: Yellow

Result(s) ZIMS was unable to process: 9448::Urinalysis::UNKNOWN

LabTest: Clarity (Test: 9448, Category: Urinalysis, Taxonomy: UNKNOWN)

PrimaryResultValueEntered: CLEAR

Animal Type	GAN	Preferred ID	Taxonomy	Sex	Birth Date
Individual	26752287	992278	Elephas maximus indicus/Indian elephant	Female	~ from Jul 01, 1965 to Jul 01, 1966

Test Requests & Test Results						
Test	Primary Result	Expected Results (Based on Best Available Match) Type: Min- Max Mean [Median] N (Animals)	Evaluation	Excl'd. from RI	Clinical Finding	Reviewed
Unable to Process	See notes for unsupported test results		~	~	~	No
Specific Gravity	1.025 ratio	Global sp RI: 1.003 - 1.030 1.017 [1.018] N=149 (41)	~	No	~	No
pH [rs]	≥9.0 pH	Global subsp RI: 6.5 - 8.9 7.8 [8.0] N=169 (14)	~	No	~	No
Urine Protein	Trace		~	~	~	No
Urine Glucose	Negative		~	~	~	No
Urine Ketones	Negative		~	~	~	No
Urine Blood	Negative		~	~	~	No
Urine Bilirubin	Negative		~	~	~	No
Urine Urobilinogen	Normal		~	~	~	No
Sediment WBC	1-3/hpf		~	~	~	No
Sediment RBC	1-3/hpf		~	~	~	No
Sediment bacteria	Negative [none]		~	~	~	No
Sedi. Unspec. Epi.	< 1/hpf		~	~	~	No
Mucus Description	NONE SEEN		~	~	~	No
Other Casts	NONE SEEN		~	~	~	No
Other Crystals	2+ CALCIUM CARBONATE (6-20)/HPF		~	~	~	No

Sample Detail (GSN: S-TCW24-151084)			
Collection Date/Time	May 28, 2024 00:00	Collection Method	Free Catch
Sample Type	Urine	Collected By	Dominique Keller
Anatomical Source/Tissue	~	Reason	~
Additives/Preservatives	~	Exclude from reference intervals	No

Test & Result			
Test Request Detail		Sample Quality	
Date Requested	May 28, 2024	Color	~
Requested By	Dominique Keller	Color Intensity	~
Analysis Start Date & Time	May 28, 2024 00:00	Clarity	~
Analysis By	Colleen McLaughlin	Consistency	~
Analysis Equipment	~	Additional Characteristics	~
Insufficient Sample	No	Degraded	No
Notes/Comments			
~			

Animal Type	GAN	Preferred ID	Taxonomy	Sex	Birth Date
Individual	26752287	992278	Elephas maximus indicus/Indian elephant	Female	~ from Jul 01, 1965 to Jul 01, 1966

Test Requests & Test Results

Test	Primary Result	Expected Results (Based on Best Available Match) Type: Min- Max Mean [Median] N (Animals)	Evaluation	Excl'd. from RI	Clinical Finding	Reviewed
Sp Grav (R)	1.024 ratio	Global subsp RI: 1.004 - 1.028 1.019 [1.018] N=82 (9)	~	No	~	No

Sample Detail (GSN: S-TCW24-151084-S01)

Collection Date/Time	May 28, 2024 00:00	Collection Method	Free Catch
Sample Type	Urine	Collected By	Dominique Keller
Anatomical Source/Tissue	~	Reason	~
Additives/Preservatives	~	Exclude from reference intervals	No

May 25, 2024

Clinical note

Date	Time	Note	Author
May 25, 2024	00:00		Dominique Keller
Significant	Private	Active Problems	
No	No	~	

Note Subtype: General

Notes/Comments

Ear recheck: Ear recheck in the ERD.

O: Alert, bright. Very engaged with keepers this morning.
AU: Holding right ear pinnaout a little, left ear in normal position. AS: initially reluctant to allow me to touch the opening of the ear canal, but as we worked for a few minutes together and she relaxed with mer, I was able to collect a swab for cytology and for MiDog NGS. This sample was from the very distal aspect of the ear canal, and there was a lot of sand in this area. AD: similar findings and samples collected. The swabs are not malodorous.

Tx: restarting ear treatment protocol, but this time with a little more built in desensitization as Tina seems to be anticipating what we are doign. Today we just flushed some warm saline around the opening of AU ear canals, which was well tolerated and had the effect of rinsing away the superficial sand.

A: It appears that Tina is still having bilateral otitis issues, despite treatment, possibly because we were not able to fully clean and prepare the ears for the treatments prior to applying, so there may be some organic debris in the ear canals, in addition to the medication that was applied. She is more comfortable on the Previcox, but we need to work on a reliable and acceptable ear cleaning protocol for her. Esp. important to be able to remove the solid debris such as sand that gets in the ears (she apparently like to bury her face in the sand piles).

P: Will have keepers work with Tina to gradually increase acceptance of the ear flushes. So for the next 3-5 days just work on the warm saline in the ears, not trying to flush any deeper. Recheck in 3 days.

Dx: Cytology AU (distal ear canals only): Yeast AU, more prevalent in right ear. Cocci numbers much reduced AU from previous.
MiDog NGS AU: Right ear:Staph. succinus (highest number at 6.62%), Acinetobacter pittii, Acinetobacter calcoaceticus-rhizosphaerae, Streptococcus saliviloxodontae. Note also 3% Pseudomonas guariconensis, Lactobacillates sp., Rothia (10%) - these last three not considered clinical pathogens.

2.Fungi: Malassezia caprae (1.09%); Malassezia furfur, Malassezia japonica

L ear: Staphylococcus succinus (8%), Acinetobacter oleivorans-pittii, Corynebacterium lactis, Acinetobacter lactucae. Similar findings for "nonpathogenic" bacteria as right ear.
2.Fungi: Malassezia caprae (1.88%)
Long list of antimicrobial genes listed as well, covering many different antibiotic groups.

Rx: 0.9% NaCl, flush opening of ear canals AU once a day for 5 days. Warm the saline to body temperature before using.

DLK

Animal Care Staff Medical Summary

~

Calendar Items

Date	Title	Assigned To	Done
~	~	~	~

Clinical note

Date	Time	Note	Author
May 25, 2024	00:00		Deanna Rocca

Animal Type	GAN	Preferred ID	Taxonomy	Sex	Birth Date
Individual	26752287	992278	Elephas maximus indicus/Indian elephant	Female	~ from Jul 01, 1965 to Jul 01, 1966

SignificantPrivateActive Problems

NoNo~

Note Subtype: General

Notes/Comments

All-in-One Microbial Test Exotic Animal Report

Patient Name: Tina Health Status: Account #: 100A417 Owner's Name: LA Zoo Ordered by: Dr. Keller Sample ID: Mi232460004155 Breed: Elephant Email: lazoo.hclab@lacity.org Sample Type: Ear, left Age: Hospital: Los Angeles Zoo Received Date: 5/29/2024 Species: Elephant Location: Los Angeles, CA Report Date: 06/01/24

Potential Clinically Relevant Microbes Detected: Listed are those bacteria and fungi detected in the specimen that are of potential clinical relevance. Results from this report should be considered together with additional clinical data gathered by the veterinarian (physical examination, medical history, cytology, etc.) as the microbes detected may or may not be the cause of the clinical condition. For a comprehensive list of all microorganisms detected in this specimen see page 3 of this report. Please consider that even commensals can become pathogenic in certain patients under certain circumstances. Further, novel or extremely rare pathogens may be found on page 3 for your consideration and clinical diagnosis.

1. Bacteria
Species Detected Percentage (%) Cells per Sample
Staphylococcus succinus [1][2] 8.12 8,600,000
Acinetobacter oleivorans-pittii [3] 0.57 600,000
Corynebacterium lactis [4] 0.28 300,000
Acinetobacter lactucae [3] 0.07 75,000

2 Fungi
Species Detected Percentage (%) Cells per Sample
Malassezia caprae [5][6][7] 1.88 8,500

Antibiotic Resistance for Detected Clinically Relevant Microbes The sample was screened for the presence of antibiotic resistance genes and intrinsic resistances of clinically relevant microorganisms. For this analysis more than 90 antibiotic resistance genes were screened. The cautious use of any antibiotic drug is highly recommended. Please follow the guidelines for antimicrobial stewardship in veterinary practice. This table lists antibiotic sensitivities/resistances for the indicated bacteria based on detection of specific antibiotic resistance genes and naturally occurring, or intrinsic, resistance to specific antibiotics previously identified for that organism. Abbreviation Keys: Symbols: Patient Name: Tina Ordered by: Dr. Keller Page 2 of 5Owner's Name: LA Zoo Account #: 100A417

Drug Tiers* Antibiotics

1st Cefazolin F NR NRD NRD Cephalothin NRD NRD NRD Cephalexin F NRD NRD NRD Cefadroxil NRD NR NRD NRD Cefoxitin G NR NRD NRD Penicillin G NRD NRD NRD Penicillin G G NRD NRD NRD Oxacillin G NRD NRD NRD Ampicillin NRD NR NRD NR Amoxicillin NRD NR NRD NR Clavamox NRD NR NRD NR Gentamicin G NR NRD G Tobramycin NRD NR NRD G Neomycin NRD NR NRD G Clindamycin G NR NRD NRD Lincomycin G NRD NRD NRD Doxycycline NR NR NRD NRD Minocycline NR NRD NRD NRD Tetracycline NR NR NRD NRD Sulfonamide NRD NR NRD NRD Trimethoprim-sulfamethoxazole G F NRD F Metronidazole NRD NR NRD NR Cefovecin NRD NR NRD NRD

2nd Cefpodoxime NRD NR NRD NRD Ceftiofur NRD NR NRD NRD Timentin NRD NRD NRD NRD Azithromycin G NR NRD NRD Orbifloxacin NRD F NRD F Chloramphenicol NRD NRD NRD NRD Florfenicol NRD NRD NRD

3rd Amikacin F NR NRD G Rifampin F NRD NRD NRD Imipenem NRD NRD NRD G Levofloxacin G F NRD F Marbofloxacin NRD NRD NRD F Pradofloxacin § NRD F NRD F Enrofloxacin NRD NRD NRD F Ciprofloxacin ¶ G NRD NRD F Ceftazidime NRD NRD NRD G Mupirocin NRD NRD NRD NRD Nitrofurantoin F NRD NRD NRD Colistin NRD NRD NR NRD Ticarcillin NRD NRD NRD NRD Piperacillin-Tazobactam NRD NRD NRD NRD

Total Bacteria Composition Charts below depict the relative abundance of all detected bacterial species. Each color represents a different bacterial species. The larger the coloredsegment is, the more abundant that species is in the specimen. The table below lists top 8 bacterial species detected within the limit of detection. The absolute and relative abundances of each species is shown. Potential clinically relevant microbes are highlighted in red. Total Fungal Composition Charts below depict the relative abundance of all detected fungal species. Each color represents a different fungal species. The larger the colored segment is, the more abundant that species is in the specimen. The table below lists top 8 fungal species detected within the limit of detection. The absolute and relative abundances of each species is shown. Potential clinically relevant microbes are highlighted in red. Patient Name: Tina Ordered by: Dr. Keller Page 3 of 5Owner's Name: LA Zoo Account #: 100A417 Species Detected Percentage (%) Cells per Sample Pseudomonas guariconensis 86.70 92,000,000 Staphylococcus succinus [1][2] 8.12 8,600,000 (o)Lactobacillales sp. 1.47 1,600,000 Rothia sp. 0.61 640,000 Acinetobacter oleivorans-pittii [3] 0.57 600,000 (f)Propionibacteriaceae sp. 0.50 530,000 (c)Clostridia sp. 0.42 440,000 (c)Gammaproteobacteria sp. 0.32 330,000 Species Detected Percentage (%) Cells per Sample Meyerozyma carpophila-guilliermondii 75.75 340,000 Meyerozyma sp. 21.02 95,000 Malassezia caprae [5][6][7] 1.88 8,500 (c)Saccharomycetes sp. 1.29 5,800 Cladosporium sp. 0.05 250

Antimicrobial Resistance Genes Detected The table below lists antimicrobial resistance genes that are detected in this sample. For antibiotics usage guidance, please first refer to the "Antibiotic Resistance" table shown in Page 2. Use this table only as an additionaI resource when needed. Inferring antimicrobial resistance from the resistancegenes detected should be cautious, especially in a mixed microbial population. Patient Name: Tina Ordered by: Dr. Keller Page 4 of 5Owner's Name: LA Zoo Account #: 100A417 AMR_Gene_Detected Resistance_Against Function APH(6)-Id aminoglycoside aminoglycoside phosphotransferase AAC(3)-IIb aminoglycoside aminoglycoside acetyltransferase APH(3'')-Ib aminoglycoside aminoglycoside phosphotransferase aadA aminoglycoside aminoglycoside nucleotidyltransferase AAC(3)-Ia aminoglycoside aminoglycoside acetyltransferase AAC(6')-Ie-APH(2'')-Ia aminoglycoside aminoglycoside acetyltransferase ANT(4')-Ib aminoglycoside Kanamycin nucleotidyltransferase lnuA lincosamide lincosamide nucleotidyltransferase mphC macrolide macrolide phosphotransferase blaZ penam class A beta-lactamase cmx phenicol chloramphenicol exporter ermC streptogramin, macrolide, lincosamide 23S rRNA methyltransferase ermX streptogramin, macrolide, lincosamide ribosomal RNA methyltransferase ermB streptogramin, macrolide, lincosamide ribosomal methylase msrA streptogramin, tetracycline,phenicol, macrolide, lincosamide ABC-F ribosomal protection protein msrD streptogramin, tetracycline,phenicol, macrolide, lincosamide ABC-F ribosomal protection protein sul1 sulfonamide dihydropteroate synthase sul2 sulfonamide dihydropteroate synthase tetL tetracycline tetracycline efflux pump tetK tetracycline tetracycline efflux pump tetWNW tetracycline ribosomal protection protein

References 1. Ehrlich G. D., Hu F. Z., Sotereanos N., Sewicke J., Parvizi J., Nara P.L., Arciola, C. R. What role do periodontal pathogens play in osteoarthritis and periprosthetic joint infections of the knee. (2014) J Appl Biomater Funct Mater 12(1): 13-20 2. Saridomichelakis M.N., Olivry T. An update on the treatment of canine atopic dermatitis. (2016) The Veterinary Journal, 207: 29-37 3. Morrissey I., Moyaert H., de Jong A., El Garch F., Klein U., Ludwig C., Thiry J., Youala, M. Antimicrobial susceptibility monitoring of bacterial pathogens isolated from reiratory tract infections in dogs and cats across Europe: ComPath results. (2016) Veterinary microbiology, 191:44-51 4. de Paula Antunes, J. M. A., Ribeiro, M. G., de Castro Demoner, L., Ramos, J. N., Baio, P. V. P., Simpson-Louredo, L., ... & Mattos-Guaraldi, A. L. (2015). Cutaneous abscess caused by Corynebacterium lactis in a companion dog. Veterinary Microbiology, 178(1-2), 163-166. 5. Greene, Craig E. Infectious Diseases of the Dog and Cat-E-Book. Elsevier Health Sciences, 2013. 6. Carpenter, James W., and Chris Marion. Exotic Animal Formulary-E-Book. Elsevier Health Sciences, 2017. 7. Wallach, Joel D., and William J. Boever. Diseases of exotic animals. Medical and surgical management. WB Saunders Co., 1983. Methods The MiDOG® All-in-One Microbial Test is a targeted, Next-generation DNA sequencing testing service able to identify molecular signatures unique to the identity and character of a specific microorganism. This test relies on safeguarded preservation and transport of collected samples, thorough extraction of DNA from all microbes present in the specimen, select amplification of microbial DNA followed by Next-generation DNA sequencing usingthe latest technologies from Illumina (Illumina, Inc., San Diego, CA). Data handling is done via curated microbial databases to accurately align DNA sequences to ensure precise and accurate (species-level) identification of all bacteria and fungi present in the specimen. When no Bacterial or Fungal Species are Detected: When no bacterial or fungal species

Animal Type	GAN	Preferred ID	Taxonomy	Sex	Birth Date
Individual	26752287	992278	Elephas maximus indicus/Indian elephant	Female	~ from Jul 01, 1965 to Jul 01, 1966

are detected in this test, this result may be due to a very low microbial load and/or low concentration of microbial DNA in the sample provided. In this case, we recommend re-sampling the area of interest and re-submitting specimen for analysis. Phylogenetic Rank Abbreviations If the detected bacterial or fungal taxon could not be identified down to the genus level, the closest phylogenetic rank identified is provided. An abbreviation indicating the level of the rank is displayed aside. The meaning of the abbreviations is shown as:(p) Phylum level, (c) Class level, (o) Order level, and (f) Family level. Disclaimer The information contained in this MiDOG® report is intended only to be factor for use in a diagnosis and treatment regime for the animal patient. As withany diagnosis or treatment regime, you should use clinical discretion with each animal patient based on a complete evaluation of the animal patient, including history, physical presentation and complete laboratory data, including confirmatory tests. All test results should be evaluated in the context of the patients individual clinical presentation. The information in the MiDOG ® report has not been evaluated by the FDA. Customer Support Tel: (833)456-4364 info@midogtest.com www.midogtest.com

Animal Care Staff Medical Summary

~

Calendar Items

Date	Title	Assigned To	Done
~	~	~	~

Clinical note

Date

May 25, 2024

Time

00:00

Note Author

Deanna Rocca

Significant

No

Private

No

Active Problems

~

Note Subtype: General

Notes/Comments

Los Angeles Zoo
CYTOLOGY REQUEST FORM

DATE: 5.25.24 VET: DLK
SPECIES: eLEPHANT ACCESSION: 992278
OTHER ID: Tina

SAMPLE: Ear swab, Right and Left ears
TEST: Cytology
PROCEDURE: Diff- Quick

DESCRIPTION OF SAMPLE AND SPECIAL CONCERNS:

RESULT: Right Ear - Yeast 10-20/HPF (thinner yeast)

Left Ear - Yeast 0-10/HPF (fat yeast)

COMMENT: Very minimal cocci both ears.

ANALYSIS BY: LN DATE: 5.25.24

Animal Care Staff Medical Summary

~

Calendar Items

Date	Title	Assigned To	Done
~	~	~	~

Prescription/Treatment

Basic Info

Date Written

May 25, 2024

Start Date

May 25, 2024 00:00

Prescribed By

Dominique Keller

Prescribed For

1 animal

Reason For Treatment

~

Weight Info

Date

May 25, 2024

Measurement Value

3,350 kg

Estimate

Yes

Exclude From Reference Intervals

Yes

Animal Type	GAN	Preferred ID	Taxonomy	Sex	Birth Date
Individual	26752287	992278	Elephas maximus indicus/Indian elephant	Female	~ from Jul 01, 1965 to Jul 01, 1966

Treatment Detail

Treatment Item/Drug

Saline 0.9% Injection (Liquid > Solution)

Dose Amount

120 ml

Dosage Amount

0.036 ml/kg

Administrated Dose Quantity

120 ml

Frequency

once a day (sid)

Duration

5days

Delivery Route

Injection

Loading Dose

~

Form of Drug

Solution

Concentration Of Drug

~

Treatment Response

Clinical Response

~

Adverse Effects

~

Adverse Effects Note:

~

Staff Instructions

120 ml of Saline 0.9% Injection in each ear, once a day (sid) for 5 days. Use as a rinse for both ears- to cleanse the outside of the ear canal. Warm bottle up to body temperature before using.
Start treatment on May 25, 2024

Prescription Notes/Comments

~

Calendar Items

Date	Title	Assigned To	Done
~	~	~	~

Dispensing Records

Date Dispensed	Dispensed By	Quantity Dispensed
~	~	~

Administration Records

Administration Date/Time	Administered By	Success	Notes
~	~	~	~

May 24, 2024

Clinical note

Date

May 24, 2024

Time

00:00

Note Author

Dominique Keller

Significant

No

Private

No

Active Problems

~

Note Subtype: General

Notes/Comments

Verbal and visual update: Keepers report that Tina looks more comfortable this morning- has had two doses of Previcox. Holding the L ear pinna in mostly normal position and the right pinna out at least some of the time.

P: Due to power outage at time of exam, have rescheduled ear recheck for tomorrow morning.

DLKeller, DVM

Animal Care Staff Medical Summary

~

Calendar Items

Date	Title	Assigned To	Done
~	~	~	~

Animal Type	GAN	Preferred ID	Taxonomy	Sex	Birth Date
Individual	26752287	992278	Elephas maximus indicus/Indian elephant	Female	~ from Jul 01, 1965 to Jul 01, 1966

May 23, 2024

Clinical note

Date	Time	Note Author
May 23, 2024	00:00	Dominique Keller
Significant	Private	Active Problems
No	No	~

Note Subtype: General

Notes/Comments

Verbal update: Keeper reports that Tina is slower today and holding both ears out.

A: Tina may be having a flare up of the otitis, though we treated a week ago with long acting medication.

P: Start Previcox again for possible discomfort, give dose today. Will recheck elephant tomorrow morning.

Rx: Previcox, 567.5 mg PO SID for 5 days.

DLKeller, DVM

Animal Care Staff Medical Summary

~

Calendar Items

Date	Title	Assigned To	Done
~	~	~	~

Prescription/Treatment

Basic Info

Date Written

May 23, 2024

Start Date

May 23, 2024 00:00

Prescribed By

Dominique Keller

Prescribed For

1 animal

Reason For Treatment

~

Weight Info

Date

May 23, 2024

Measurement Value

3,350 kg

Estimate

Yes

Exclude From Reference Intervals

Yes

Animal Type	GAN	Preferred ID	Taxonomy	Sex	Birth Date
Individual	26752287	992278	Elephas maximus indicus/Indian elephant	Female	~ from Jul 01, 1965 to Jul 01, 1966

Treatment Detail

Treatment Item/Drug

Previcox (227 mg Solid > Tablet) (Firocoxib) (MERIAL)

Dose Amount

567.5 mg

Dosage Amount

0.169 mg/kg

Administrated Dose Quantity

2.5 count

Frequency

once a day (sid)

Duration

5days

Delivery Route

Oral (p.o.)

Loading Dose

~

Form of Drug

Tablet

Concentration Of Drug

227 mg

Treatment Response

Clinical Response

~

Adverse Effects

~

Adverse Effects Note:

~

Staff Instructions

Give 567.5 mg [2.5 count] of Previcox, once a day (sid) for 5 days.
Start treatment on May 23, 2024
Administration route: Oral (p.o.)

Prescription Notes/Comments

~

Calendar Items

Dispensing Records

Administration Records

May 17, 2024

Clinical note

Date

May 17, 2024

Time

00:00

Note Author

Dominique Keller

Significant

No

Private

No

Active Problems

~

Note Subtype: General

Notes/Comments

Verbal and visual update: Keepers report that Tina has not been holding either ear pinna out as she had been, for several days now. She seems to be able to hear behavioral requests well and is participating in sessions with keepers. Tomorrow is last day of Previcox.

Ear treatment:Under behavioral restraint, instilled 7 ml of prescribed otic medication in both left and right ear canals. Used the distal rounded end of a 10 Fr polypropylene catheter inserted about 5 cm into the ear canal. This was well tolerated.

A: There seems to have been improvement following the treatment AU with the Simplera, even though the volume was small. Today we followed up with another combination otic with similar profile, in a poloxamer gel which solidifies at body temperature.

P: Whether or not additional otic treatments are needed will be gauged based on behavior and clinical signs. Update in a few days.

DLKeller, DVM

Animal Care Staff Medical Summary

~

Animal Type	GAN	Preferred ID	Taxonomy	Sex	Birth Date
Individual	26752287	992278	Elephas maximus indicus/Indian elephant	Female	~ from Jul 01, 1965 to Jul 01, 1966

Calendar Items

Date	Title	Assigned To	Done
~	~	~	~

Prescription/Treatment

Basic Info

Date Written

May 15, 2024

Start Date

May 17, 2024 00:00

Prescribed By

Dominique Keller

Prescribed For

1 animal

Reason For Treatment

~

Weight Info

Date

May 15, 2024

Measurement Value

3,350 kg

Estimate

Yes

Exclude From Reference Intervals

Yes

Treatment Detail

Treatment Item/Drug

Florfenicol, Gentamicin, Miconazole, Triamcinolone (2 % (c) Semisolid > Ointment) (Florfenicol; Gentamicin; Miconazole; Triamcinolone)

Dose Amount

7 ml

Dosage Amount

0.002 ml/kg

Administrated Dose Quantity

7 ml

Frequency

once

Duration

1doses

Delivery Route

Topical

Loading Dose

~

Form of Drug

Ointment

Concentration Of Drug

2 % (c)

Treatment Response

Clinical Response

~

Adverse Effects

~

Adverse Effects Note:

~

Staff Instructions

Instill 7 ml in both the left and right ear canals once.
Script starts 17 May 2024.

Prescription Notes/Comments

~

Calendar Items

Date	Title	Assigned To	Done
May 17, 2024	Start Florfenicoil'Gentamicin, Miconazole, Triamcinolone 15 ml once 1 doses Topical / Indian elephant / 992278 / 26752287	Dominique Keller	No

Dispensing Records

Date Dispensed	Dispensed By	Quantity Dispensed
~	~	~

Administration Records

Administration Date/Time	Administered By	Success	Notes
May 17, 2024 00:00	Dominique Keller	Complete	~

May 14, 2024

Prescription/Treatment

Animal Type	GAN	Preferred ID	Taxonomy	Sex	Birth Date
Individual	26752287	992278	Elephas maximus indicus/Indian elephant	Female	~ from Jul 01, 1965 to Jul 01, 1966

Basic Info

Date Written

May 11, 2024

Start Date

May 14, 2024 00:00

Prescribed By

Dominique Keller

Prescribed For

1 animal

Reason For Treatment

~

Weight Info

Date

May 11, 2024

Measurement Value

3,350 kg

Estimate

Yes

Exclude From Reference Intervals

Yes

Treatment Detail

Treatment Item/Drug

Previcox (227 mg Solid > Tablet) (Firocoxib) (MERIAL)

Dose Amount

567.5 mg

Frequency

once a day (sid)

Form of Drug

Tablet

Dosage Amount

0.169 mg/kg

Duration

5days

Concentration Of Drug

227 mg

Administrated Dose Quantity

2.5 count

Delivery Route

Oral (p.o.)

Loading Dose

~

Treatment Response

Clinical Response

~

Adverse Effects

~

Adverse Effects Note:

~

Staff Instructions

Give 567.5 mg [2.5 count] of Previcox, once a day (sid) for 5 days.
Start treatment on May 14, 2024
Administration route: Oral (p.o.)

Prescription Notes/Comments

~

Calendar Items

Date	Title	Assigned To	Done
May 14, 2024	Start Previcox 567.5 mg once a day (sid) 5 days Oral (p.o.) / Indian elephant / 992278 / 26752287	Dominique Keller	No

Dispensing Records

Date Dispensed	Dispensed By	Quantity Dispensed
~	~	~

Administration Records

Administration Date/Time	Administered By	Success	Notes
~	~	~	~

May 11, 2024

Clinical note

Date

May 11, 2024

Time

00:00

Note Author

Dominique Keller

Significant

No

Private

No

Active Problems

~

Note Subtype: General

Notes/Comments

Foot consult with Mike McClure, opportunistic urinalysis.

Keeper consult notes (vet not present for entirety of consult due to conflict with other procedures):

Printed: Aug 31, 2024

Los Angeles Zoo & Botanical Gardens

Page 55 of 132

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Animal Type	GAN	Preferred ID	Taxonomy	Sex	Birth Date
Individual	26752287	992278	Elephas maximus indicus/Indian elephant	Female	~ from Jul 01, 1965 to Jul 01, 1966

Left Front Foot

- Pad looks good. Has good flexibility in the center
- D1 is much improved. Some event rings. Would like to see the bottom brought up more but may be a struggle with the button of tissue between the D1 and D2 nails. To combat this should blend the nails together to get them working in unison.
- D5 defect looks a little worse but the overall shape and look of nail is better. Continue to Hoof Armor the face of the nail as well as those that are against the ground when she lays down.
- D3 needs to be brought up consistently in order to decrease movement and the inflammation in the cuticle / nail bed.

Right Front Foot

- Noted delay / slow movement in lifting foot to working window. May be due to the increase in walking in India and soreness of muscles. Continue stretching but do not isolate stretching to just that side.
- Very similar visually to Left Front in pad looking good and wearing of nails.
- Hoof Armor face of D1 and D2 nails in order to protect against scraping the ground when she is laying down.
- D3 having a possible twisting toe and why having cuticle / nail bed swelling.

Right Rear Foot

- Pad looks amazing.
- D5 transition area needs some attention.
- Hoof Armor the medial edge of foot with a light coat to help protect from the moisture and increase growth.

Left Rear Foot

- No need to canker powder the D4 defect. Looks Good.
- D2 Star Defect on underside. Is not of concern currently but monitor.
- Hoof Armor the medial edge as well for same reasons as Right Rear.

Urinalysis (in house): USG 1.028, within sp. ref. ranges

DLKeller, DVM

Animal Care Staff Medical Summary

~

Calendar Items

Date	Title	Assigned To	Done
~	~	~	~

Sample

Sample Detail

Collection Date/Time	May 11, 2024 00:00
Sample Type	Urine
Additives/Preservatives	~
Collection Method	Free Catch
Collected By	Dominique Keller
Reason	~
Exclude from reference intervals	No

Sample Quality

Color	Yellow
Color Intensity	medium
Clarity	Clear
Degraded	No

Initial Holding Conditions

Initial Holding Temp.	Chilled/Refrigerated
Initial Holding Duration	~

Sample History

Date	Sample ID / Sample GSN	Status	Laboratory / Test Order / Test Results
May 11, 2024	~/~	Available	LOSANGELE/12/12

Notes

~

Calendar Items

Date	Title	Assigned To	Done
~	~	~	~

Animal Type	GAN	Preferred ID	Taxonomy	Sex	Birth Date
Individual	26752287	992278	Elephas maximus indicus/Indian elephant	Female	~ from Jul 01, 1965 to Jul 01, 1966

Test & Result

Test Request Detail			Sample Quality		
Date Requested	May 11, 2024		Color	Yellow	
Requested By	Dominique Keller		Color Intensity	medium	
Analysis Start Date & Time	May 12, 2024 00:00		Clarity	Clear	
Analysis By	Megan Duncan		Consistency	~	
Analysis Equipment	~		Additional Characteristics	~	
Insufficient Sample	No		Degraded	No	

Notes/Comments
Sediment: Rare mixed bacteria, 0-1 Simple squamous epithelium/hpf, few amorphous debris.

Test Requests & Test Results						
~~~~~						
Test	Primary Result	Expected Results (Based on Best Available Match) Type: Min- Max   Mean [Median] N (Animals)	Evaluation	Excl'd. from RI	Clinical Finding	Reviewed
Urine Bilirubin [rs]	(-) Negative		~	~	~	Yes
Urine Urobili. [rs]	Normal 0.2 mg/dL		~	~	~	Yes
Urine Ketones [rs]	(-) Negative		~	~	~	Yes
Urine Protein [rs]	Trace		~	~	~	Yes
Urine Nitrite [rs]	Negative		~	~	~	Yes
Urine Leuk. [rs]	Negative		~	~	~	Yes
Urine Glucose [rs]	(-) Negative		~	~	~	Yes
pH [rs]	8 pH	Global subsp RI: 6.5 - 8.9   7.8 [8.0] N=169 (14)	~	No	~	Yes
Urine Blood [rs]	Negative		~	~	~	Yes
Sp Grav (test strip)	1.020 ratio	Global subsp RI: 1.000 - 1.025   1.010 [1.010] N=74 (3)	~	No	~	Yes
Sp Grav (R)	1.028 ratio	Global subsp RI: 1.004 - 1.028   1.019 [1.018] N=82 (9)	~	No	~	Yes
Urine Ascorbic [rs]	Normal		~	~	~	Yes

Sample Detail (GSN: S-TCW24-150908)			
Collection Date/Time	May 11, 2024 00:00	Collection Method	Free Catch
Sample Type	Urine	Collected By	Dominique Keller
Anatomical Source/Tissue	~	Reason	~
Additives/Preservatives	~	Exclude from reference intervals	No

May 10, 2024

Clinical note

Date	Time	Note Author
May 10, 2024	00:00	Dominique Keller
Significant	Private	Active Problems
No	No	~

Animal Type	GAN	Preferred ID	Taxonomy	Sex	Birth Date
Individual	26752287	992278	Elephas maximus indicus/Indian elephant	Female	~ from Jul 01, 1965 to Jul 01, 1966

Note Subtype: General

Notes/Comments

MiDog NGS results from ear swabs interpretation: The results from Dr. Boren's samples from 5/8/24 indicate there is a predominance of a yeast infection in the left and right ears with *Malassezia caprae* detected in high numbers. Also low numbers of various *Corynebacterium sp.* which have limited antibiotic susceptibility. Also low numbers of *Streptococcus sp.* and *Lawsonella*.

A/P: A combination long acting otic preparation including an antifungal should be useful in this situation- she was treated with this yesterday, but since the amounts we had on hand were somewhat low for a large animal, we will order more medication today to be applied as soon as it comes in.

DLKeller, DVM

Animal Care Staff Medical Summary

~

Calendar Items

Date	Title	Assigned To	Done
~	~	~	~

May 09, 2024

Clinical note

Date	Time	Note Author
May 09, 2024	00:00	Dominique Keller
Significant	Private	Active Problems
No	No	~

Note Subtype: General

Notes/Comments

Otic medication application: Today we applied Simplera (combination otic drug, long acting) into both ear canals. Tina still somewhat reluctant to allow easy access to canals, but we were able to get about 60-70% of the 3 ml dose in the right ear canal and about 75% of the 2 ml dose for the left ear. She is otherwise bright and alert, mentally appropriate. There has been no mention of the gaping behavior since this starting the Previcox and diagnosis of the ear infection.

P: Discontinue flushing of ears while we see if the Simplera has any positive effects, continue with the Previcox. Update daily. Foot consultant will be here in 48 h to advise on foot work. Keepers continue to work on rectal desensitization in the ERD.

DLKeller, DVM

Animal Care Staff Medical Summary

~

Calendar Items

Date	Title	Assigned To	Done
~	~	~	~

Prescription/Treatment

Basic Info		Weight Info	
Date Written	May 08, 2024	Date	May 08, 2024
Start Date	May 09, 2024 00:00	Measurement Value	3,350 kg
Prescribed By	Dominique Keller	Estimate	Yes
Prescribed For	1 animal	Exclude From Reference Intervals	Yes
Reason For Treatment	~		

Animal Type	GAN	Preferred ID	Taxonomy	Sex	Birth Date
Individual	26752287	992278	Elephas maximus indicus/Indian elephant	Female	~ from Jul 01, 1965 to Jul 01, 1966

Treatment Detail

Treatment Item/Drug

Simplera (33.6 mg/ml Semisolid > Ointment) (Florfenicol; Mometasone; Terbinafine) (VETOQUIN)

Dose Amount

3 ml

Frequency

once

Form of Drug

Ointment

Dosage Amount

0.001 ml/kg

Duration

1doses

Concentration Of Drug

33.6 mg/ml

Administrated Dose Quantity

3 ml

Delivery Route

Instillation

Loading Dose

~

Treatment Response

Clinical Response

~

Adverse Effects

~

Adverse Effects Note:

~

Staff Instructions

Place 2-3 ml in each of the left and right distal ear canals, once. Script starts 9 May 2024.

Prescription Notes/Comments

~

Calendar Items

Date	Title	Assigned To	Done
~	~	~	~

Dispensing Records

Date Dispensed	Dispensed By	Quantity Dispensed
~	~	~

Administration Records

Administration Date/Time	Administered By	Success	Notes
May 09, 2024 08:45	Dominique Keller	70%	AS: 75% AD: 60-70%

Prescription/Treatment

Basic Info

Date Written

May 08, 2024

Start Date

May 09, 2024 00:00

Prescribed By

Dominique Keller

Prescribed For

1 animal

Reason For Treatment

~

Weight Info

Date

May 08, 2024

Measurement Value

3,350 kg

Estimate

Yes

Exclude From Reference Intervals

Yes

Animal Type	GAN	Preferred ID	Taxonomy	Sex	Birth Date
Individual	26752287	992278	Elephas maximus indicus/Indian elephant	Female	~ from Jul 01, 1965 to Jul 01, 1966

Treatment Detail

Treatment Item/Drug

Previcox (227 mg Solid > Tablet) (Firocoxib) (MERIAL)

Dose Amount

908 mg

Frequency

once a day (sid)

Form of Drug

Tablet

Dosage Amount

0.271 mg/kg

Duration

3days

Concentration Of Drug

227 mg

Administrated Dose Quantity

4 count

Delivery Route

Oral (p.o.)

Loading Dose

~

Treatment Response

Clinical Response

~

Adverse Effects

~

Adverse Effects Note:

~

Staff Instructions

Give 908 mg [4 count] of Previcox, once a day (sid) for 3 days.  
Start treatment on May 09, 2024

OK to give 2 tablets PO in the afternoon of May 8, 2024 to supplement morning dose, then start with 4 tablets PO once a day tomorrow (May 9).

Administration route: Oral (p.o.)

Prescription Notes/Comments

~

Calendar Items

Date	Title	Assigned To	Done
~	~	~	~

Dispensing Records

Date Dispensed	Dispensed By	Quantity Dispensed
~	~	~

Administration Records

Administration Date/Time	Administered By	Success	Notes
~	~	~	~

May 08, 2024

Clinical note

Date

May 08, 2024

Time

00:00

Note Author

Dominique Keller

Significant

No

Private

No

Active Problems

~

Note Subtype: General

Notes/Comments

Ear recheck: This morning Tina was alert and moving well in her stall. Keeper noted that Tina was holding the right pinna out this morning.

Tx: Right ear- keeper was able to introduce 10 Fr. polypropylene cathether in about 12 cm into ear canal for about 90 ml of dilute chlorhexidine flush. There was a small amount of grit and white material on the very tip of the catheter when it was withdrawn. Attempted to place EpiOtic flush into canal but Tina pulled away. Switched to treating the left ear in a similar fashion but Tina pulled away again. Decision was made to try the ear flush later today, so that she gets a break. While it would be good to try to get a visual of the ear canals with otoscope or camera at this time, it does not appear that she will tolerate this at this time.

A: While keepers think that the Previcox is helping with overall comfort (they mentioned seeing her playing with things in the yard), there does appear to be some discomfort on manipulation of the ear canals themselves. Likely this has been building up over some time, and it is possible that the ear infections are related to the gaping behavior seen recently. In order to try to alleviate some of this discomfort, will go ahead and try to instill a steroid/antibiotic compound into at least the distal ear canals tomorrow, that may help reduce inflammation and increase comfort, thus allowing further treatment. We are still waiting for the culture/NGS results and while it would be ideal to wait until they are back to start specific treatment- in this case a different approach is needed.

Rx: Simplerla otic (florfenicol, terbinafine, mometasone), apply 2-3 tubes of solution each (1 vial is 1 ml) into the L and R ear canals once. Start tomorrow.

P: Will give the antibiotic/antifungal/steroid combination a try tomorrow morning.

Animal Type	GAN	Preferred ID	Taxonomy	Sex	Birth Date
Individual	26752287	992278	Elephas maximus indicus/Indian elephant	Female	~ from Jul 01, 1965 to Jul 01, 1966

DLKeller, DVM

Animal Care Staff Medical Summary

~

Calendar Items

Date	Title	Assigned To	Done
~	~	~	~

Prescription/Treatment

Basic Info

Date Written

May 07, 2024

Start Date

May 08, 2024 00:00

Prescribed By

Dominique Keller

Prescribed For

1 animal

Reason For Treatment

~

Weight Info

Date

May 07, 2024

Measurement Value

3,350 kg

Estimate

Yes

Exclude From Reference Intervals

Yes

Treatment Detail

Treatment Item/Drug

Epi-Otic Advanced (2 mg/ml Liquid > Solution) (Docusate; Salicylic acid) (VIRBAC AH)

Dose Amount

15 ml

Dosage Amount

0.004 ml/kg

Administrated Dose Quantity

15 ml

Frequency

once a day (sid)

Duration

7doses

Delivery Route

Topical

Loading Dose

~

Form of Drug

Solution

Concentration Of Drug

2 mg/ml

Treatment Response

Clinical Response

~

Adverse Effects

~

Adverse Effects Note:

~

Staff Instructions

Both ears: After the last dilute chlorhexidine flush, instill 15 ml EpiOtic solution into the ear canal with the ear catheter once every day for 7 doses  
Script starts 8 May 2024

Prescription Notes/Comments

Right ear treatment: After the last dilute chlorhexidine flush, instill 30 ml EpiOtic solution into the ear canal with the ear catheter once every other day for 3 doses

Calendar Items

Date	Title	Assigned To	Done
May 14, 2024	992278 / Indian elephant / 26752287 Epi-Otic Advanced treatment is complete	Dominique Keller	No

Dispensing Records

Date Dispensed	Dispensed By	Quantity Dispensed
~	~	~

Administration Records

Administration Date/Time	Administered By	Success	Notes
~	~	~	~

May 07, 2024

Date	Time	Note Author
------	------	-------------

Animal Type	GAN	Preferred ID	Taxonomy	Sex	Birth Date
Individual	26752287	992278	Elephas maximus indicus/Indian elephant	Female	~ from Jul 01, 1965 to Jul 01, 1966

May 07, 202400:00Dominique Keller

SignificantPrivateActive Problems

NoNo~

Note Subtype: General

Notes/Comments

Visual recheck: Tina is bright and alert this morning- keepers report she was very responsive this morning.

O: Alert, bright.

N: Mentally appropriate

Ophtho: OU clear, no blepharospasm. The OD cataract is noticeable, but not more so than previous.

Aural: Holding the right pinna away from body, whereas the left pinna is in normal position against the head. There is malodor to the flush fluid at the right ear but not the left ear. Keepers report that today, Tina seemed to be able to hear them well (not the case 2 or 3 days ago).

Oral: Mucous membranes are pink and moist.

M/S: Feet not examined today, but there are no gait abnormalities noted when Tina is ambulating.

Tx: Ear flush: Keeper was able to place about 3 cm of the polypropylene catheter into the right ear canal, though Tina did move away so we switched to starting with just using the 60 cc syringe to flush 120 ml of the dilute chlorhexidine solution into the ear- this was well tolerated, though she did clamp down a little. Process was repeated with the left ear, which was tolerated even better (no moving away).

A: From the ear cytology, the right ear has more of an issue than the left ear, which has historically been the case. Subjectively it seems that the Previcox is helping with comfort.

P:The ear flushes have started today, tomorrow will flush again, with slightly different technique (red rubber catheter, warm solution), then try to follow this with EpiOtic. Will wait for MiDog results before determining what topical ear medication is most appropriate and if we need to order anything specific for her as a long acting medication is ideal for this case. Recheck tomorrow morning.

Rxc: EpiOtic, instill 15 ml AU once a day for 7 days.

DLKeller, DVM

Animal Care Staff Medical Summary

~

Calendar Items

Date	Title	Assigned To	Done
~	~	~	~

Prescription/Treatment

Basic Info

Date Written

Start Date

Prescribed By

Prescribed For

Reason For Treatment

May 06, 2024

May 07, 2024 00:00

Brandon Boren

1 animal

~

Weight Info

Date

Measurement Value

Estimate

Exclude From Reference Intervals

May 06, 2024

3,350 kg

Yes

Yes

Animal Type	GAN	Preferred ID	Taxonomy	Sex	Birth Date
Individual	26752287	992278	Elephas maximus indicus/Indian elephant	Female	~ from Jul 01, 1965 to Jul 01, 1966

Treatment Detail

Treatment Item/Drug

Wound Flush (0.2 % (c) Liquid) (Chlorhexidine)

Dose Amount

~

Dosage Amount

~

Administrated Dose Quantity

~

Frequency

every 2 days (q2d)

Duration

14days

Delivery Route

Instillation

Loading Dose

~

Form of Drug

Liquid

Concentration Of Drug

0.2 % (c)

Treatment Response

Clinical Response

~

Adverse Effects

~

Adverse Effects Note:

~

Staff Instructions

Use dilute chlorhexidine solution (25 ml chlorhexidine in 1 L of warm tap water), to flush the left and right ear canals every other day with 10 Fr polypropylene catheter for two weeks. Flush until solution is clear and no further debris is obtained. Perform flushing at least 1-2 hours post previcox administration.  
  
***Make fresh solution every day of use***  
**Recommend warming the flush solution in warm water before flushing. ***  
***The flush catheters can be re-used if they are rinsed after use. The HC can also re-sterilize them- feel free to drop off catheters for sterilizing after about every third use.***

Prescription Notes/Comments

Use dilute chlorhexidine solution (25 ml chlorhexidine in 1 L of warm tap water), to flush the right ear canal every other day with 10 Fr polypropylene catheter for two weeks. Flush until solution is clear and no further debris is obtained. Can also flush left ear canal if needed.  
  
***Make fresh solution every day of use***  
**Recommend warming the flush solution in warm water before flushing. ***  
***The flush catheters can be re-used if they are rinsed after use. The HC can also re-sterilize them- feel free to drop off catheters for sterilizing after about every third use.***

Calendar Items

Dispensing Records

Administration Records

May 06, 2024

Clinical note

Date

May 06, 2024

Time

00:00

Note Author

Brandon Boren

Significant

No

Private

No

Active Problems

~

Note Subtype: General

Notes/Comments

S/O: AK DA called in AM to report that he thinks Tina may have an ear infection. He reports that she was slow to come out yesterday and today. He reports that today she has been holding her right ear out. He also reports that when he stuck his finger in her left ear it had a putrid smell and the right ear did not have any smell but she was clunched down on that ear.  
On presentation iin midmorning Tina is QAR to BAR, she participated in training sessions with out issue. She is eupneic and eating fine. AC Staff aside from slow to respond she is otherwise acting normal. There are 3 1-2 mm skin tags present in mid ventral trunk which are slight pink in color. Did not watch Tina walk much but when she was ambulating she appeared to be walking fine.  
Attempted to collect some diagnostics midmorning but unable to get swabs in ear canal. She did flap her righth ear once during attempt to collect sample but she did not appear to wince.  
Started on firocoxib at 0.17mg/kg PO SID x5d and reattempt sample collection this afternoon.  
  
215PM. Reattempted Sample Collection. Tina remains QAR to BAR. She is still holding right ear out. I was able to get approx 10-12cm down ear canal (AS) with both sample for MiDog NGS and cytology. Sample had putrid odor.

Animal Type	GAN	Preferred ID	Taxonomy	Sex	Birth Date
Individual	26752287	992278	Elephas maximus indicus/Indian elephant	Female	~ from Jul 01, 1965 to Jul 01, 1966

She was still a little clenched with AD canal but able to get about 5-7cm down ear canal. Collected samples for NGS and cytology.

I/h Cytology AS- mix of gram - cocci and rods as well as gram + cocci and rods.  
Cytology AD+-Mostly gram - rods and cocci.  
AU- No yeast or WBCs seen.

A: Suspect bacterial otitis extern AU, based on odor, likely anaerobes part of mix  
P: Looked into topical treatment options. Gentamicin does not appear to be effective against Stretpocci and variable against Staphylocci. Fluoroquinolones not effective against anaerobes. Fluorfenicol seems like the best option.  
Will have AK flush AU with Dilute chlorhex (1-2hrs post firocoxib admin) q48h. Will discuss case with primary vet. Await NGS results. If animal still seems painful or not tolerant of otits treatment, can consider increasing firocoxib or adding on tramadol in the interim. {BB}

Animal Care Staff Medical Summary

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Calendar Items

Date	Title	Assigned To	Done
~	~	~	~

Clinical note

Date	Time	Note Author
May 06, 2024	00:00	Deanna Rocca
Significant	Private	Active Problems
No	No	~

Note Subtype: General

Notes/Comments

Los Angeles Zoo  
CYTOLOGY REQUEST FORM

DATE: 5.6.24 VET: BB/CM  
SPECIES: Elephant ACCESSION: 992278  
OTHER ID: Tina

SAMPLE: Right and Left ear swabs  
TEST: cytology  
PROCEDURE: Gram Stain

Gram Stain Results:

LEFT EAR -  
Good mix of gram negative and positive cocci and rids.  
Gram Positive: 50 % Gram Negative: 50%

Rods: 60 % Rods: 40 %  
Cocci: 30 % Cocci: 70 %

RIGHT EAR:  
Gram negative bacteria = about 95% or more. Equal numbers of cocci to rods.  
Very few gram positive bacteria.  
Gram + cocci and rods are maybe 5% of equal numbers

Comments: No yeast, WBC or epithelial cells observed.

ANALYSIS BY: D.Rocca DATE: 5.6.24

Animal Care Staff Medical Summary

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Calendar Items

Date	Title	Assigned To	Done
~	~	~	~

Clinical note

Date	Time	Note Author
May 06, 2024	00:00	Brandon Boren
Significant	Private	Active Problems
No	No	~



Animal Type	GAN	Preferred ID	Taxonomy	Sex	Birth Date
Individual	26752287	992278	Elephas maximus indicus/Indian elephant	Female	~ from Jul 01, 1965 to Jul 01, 1966

Note Subtype: General

Notes/Comments

All-in-One Microbial Test Exotic Animal Report

Patient Name: 992278 Health Status: Healthy Account #: 100A417 Owner's Name: LA Zoo Ordered by: Dr. Boren Sample ID: MI50037940 Breed: Elephant Email: lazoo.hclab@lacity.org Sample Type: Ear, Left Age: Adult Hospital: Los Angeles Zoo Received Date: 5/8/2024

Potential Clinically Relevant Microbes Detected: Listed are those bacteria and fungi detected in the specimen that are of potential clinical relevance. Results from this report should be considered together with additional clinical data gathered by the veterinarian (physical examination, medical history, cytology, etc.) as the microbes detected may or may not be the cause of the clinical condition. For a comprehensive list of all microorganisms detected in this specimen see page 3 of this report. Please consider that even commensals can become pathogenic in certain patients under certain circumstances. Further, novel or extremely rare pathogens may be found on page 3 for your consideration and clinical diagnosis.

1.Bacteria  
Species Detected Percentage (%) Cells per Sample  
Corynebacterium lactis [1] 2.60 88,000,000  
Streptococcus agalactiae [2] 0.99 34,000,000  
Corynebacterium freneyi [3] 0.17 5,900,000  
Streptococcus equinus-infantarius-lutetiensis [4] 0.17 5,800,000  
Corynebacterium auriscanis [5] 0.15 5,000,000

2. Fungi  
Species Detected Percentage (%) Cells per Sample  
Malassezia caprae [6][7][8] 27.04 1,900  
Acremonium persicinum [3] 0.26 18  
Fusarium sp. [3][6][7] 0.12 8  
Malassezia japonica [6][7][8] 0.09 6  
Candida sake [2][7][9] 0.06 4

Antibiotic Resistance for Detected Clinically Relevant Microbes The sample was screened for the presence of antibiotic resistance genes and intrinsic resistances of clinically relevant microorganisms. For this analysis more than 90 antibiotic resistance genes were screened. The cautious use of any antibiotic drug is highly recommended. Please follow the guidelines for antimicrobial stewardship in veterinary practice. This table lists antibiotic sensitivities/resistances for the indicated bacteria based on detection of specific antibiotic resistance genes and naturally occurring, or intrinsic, resistance to specific antibiotics previously identified for that organism. Abbreviation Keys: Symbols: Patient Name: 992278 Ordered by: Dr. Boren Page 2 of 5Owner's Name: LA Zoo Account #: 100A417

Drug Tiers* Antibiotics 1st

Cefazolin NRD G NRD NRD NRD Cephalothin NRD NRD NRD NRD Cephalexin NRD NRD NRD NRD Cefadroxil NRD NRD NRD NRD Cefoxitin NRD NRD NRD NRD Penicillin NRD G NRD NRD NRD Penicillin G NRD G NRD NRD NRD Oxacillin NRD NRD NRD NRD Ampicillin NRD G NRD NRD NRD Amoxicillin NRD F NRD NRD NRD Clavamox NRD NRD NRD NRD Gentamicin NRD NR NRD NR G Tobramycin NRD NR NRD NR NRD Neomycin NRD NR NRD NR NRD Clindamycin NRD NR NRD NRD NRD Lincomycin NRD NR NRD NRD Doxycycline NRD NR NRD NR NRD Minocycline NRD NR NRD NR NRD Tetracycline NRD NR NRD NR NRD Sulfonamide NRD NRD NRD NRD Trimethoprim- sulfamethoxazole NRD G NRD NRD NRD Metronidazole NRD NRD NRD NRD NR Cefovecin NRD NRD NRD NRD NRD

2nd Cefpodoxime NRD NRD NRD NRD Ceftiofur NRD NRD NRD NRD Timentin NRD NRD NRD NRD Azithromycin NRD NR NRD NRD NRD Orbifloxacin NRD NRD NRD NRD Chloramphenicol NRD NR NRD NRD G Florfenicol NRD NR NRD NRD NRD

3rd Amikacin NRD NR NRD NR G Rifampin NRD NRD NRD NRD Imipenem NRD NRD NRD NRD Levofloxacin NRD G NRD NRD NRD Marbofloxacin NRD NRD NRD NRD Pradofloxacin § NRD NRD NRD NRD Enrofloxacin NRD NRD NRD NRD F Ciprofloxacin ¶ NRD NRD NRD NRD Ceftazidime NRD NR NRD NR NRD Mupirocin NRD NRD NRD NRD Nitrofurantoin NRD NRD NRD NRD Colistin NR NRD NR NR NRD Ticarcillin NRD NRD NRD NRD Piperacillin-Tazobactam NRD NRD NRD NRD NRD

Supplemental Data Total Bacteria Composition Charts below depict the relative abundance of all detected bacterial species. Each color represents a different bacterial species. The larger the coloredsegment is, the more abundant that species is in the specimen. The table below lists top 8 bacterial species detected within the limit of detection. The absolute and relative abundances of each species is shown. Potential clinically relevant microbes are highlighted in red. Total Fungal Composition Charts below depict the relative abundance of all detected fungal species. Each color represents a different fungal species. The larger the colored segment is, the more abundant that species is in the specimen. The table below lists top 8 fungal species detected within the limit of detection. The absolute and relative abundances of each species is shown. Potential clinically relevant microbes are highlighted in red. Patient Name: 992278 Ordered by: Dr. Boren Page 3 of 5Owner's Name: LA Zoo Account #: 100A417 Species Detected Percentage (%) Cells per Sample Corynebacterium ulceribovis 38.32 1,300,000,000 (c)Clostridia sp. 17.62 600,000,000 (c)Bacteroidia sp. 12.48 420,000,000 (o)Bacteroidales sp. 2.89 98,000,000 Corynebacterium lactis [1] 2.60 88,000,000 (f)Microbacteriaceae sp. 2.36 80,000,000 (p)*Saccharibacteria sp. 2.26 77,000,000 (f)Porphyromonadaceae sp. 2.18 74,000,000 Species Detected Percentage (%) Cells per Sample (k)Fungi sp. 27.14 1,900 Malassezia caprae [6][7][8] 27.04 1,900 Neosascochyta sp. 8.33 580 (f)Phaeosphaeriaceae sp. 8.06 560 Cladosporium sp. 5.88 410 (o)Pleosporales sp. 5.18 360 Vishniacozyma victoriae 3.24 220 (f)Didymellaceae sp. 2.36 160

Antimicrobial Resistance Genes Detected The table below lists antimicrobial resistance genes that are detected in this sample. For antibiotics usage guidance, please first refer to the "Antibiotic Resistance" table shown in Page 2. Use this table only as an additioanl resource when needed. Inferring antibiomicrobial resistance from the resistancegenes detected should be cautious, especially in a mixed microbial population. Patient Name: 992278 Ordered by: Dr. Boren Page 4 of 5Owner's Name: LA Zoo Account #: 100A417 AMR_Gene_Detected Resistance_Against Function APH(3'')-Ib aminoglycoside aminoglycoside phosphotransferase ANT(2'')-Ia aminoglycoside aminoglycoside nucleotidyltransferase APH(6)-Id aminoglycoside aminoglycoside phosphotransferase aadA aminoglycoside aminoglycoside nucleotidyltransferase AAC(6'')-Ie-APH(2'')-Ia aminoglycoside aminoglycoside acetyltransferase ANT(4'')-Ib aminoglycoside Kanamycin nucleotidyltransferase lnuA lincosamide lincosamide nucleotidyltransferase mphC macrolide macrolide phosphotransferase mecA monobactam, carbapenem, cephalosporin, cephamycin, penam, penem penicillin-binding protein 2a blaZ penam class A beta-lactamase cmx phenicol chloramphenicol exporter ermX streptogramin, macrolide, lincosamide ribosomal RNA methyltransferase ermC streptogramin, macrolide, lincosamide 23S rRNA methyltransferase msrD streptogramin, tetracycline,phenicol, macrolide, lincosamide ABC-F ribosomal protection protein sul2 sulfonamide dihydropteroate synthase sul1 sulfonamide dihydropteroate synthase tetWNW tetracycline ribosomal protection protein tetK tetracycline tetracycline efflux pump tetL tetracycline tetracycline efflux pump

References 1. de Paula Antunes, J. M. A., Ribeiro, M. G., de Castro Demoner, L., Ramos, J. N., Baio, P. V. P., Simpson-Louredo, L., ... & Mattos-Guaraldi, A. L. (2015). Cutaneous abscess caused by Corynebacterium lactis in a companion dog. Veterinary Microbiology, 178(1-2), 163-166. 2. De Martino, Luisa, et al. An update on microbiological causes of canine otitis externa in Campania Region, Italy. Asian Pacific Journal of Tropical Biomedicine 6.5 (2016): 384-389. 3. Muller and Kirk's small animal Dermatology, 7th edition Elsevier 4. Kaczorek, Edyta, et al. Prevalence of reiratory pathogens detected in dogs with kennel cough in Poland. (2017) Acta Veterinaria Brno 85(4):329-336. 5. Bygott J. M., Malnick H., Shah J.J., Chattaway M.A., Karas J. A. First clinical case of Corynebacterium auriscanis isolated from localized dog bite infection. (2008) Journal of Medical Microbiology, 57: 899-900 6. Greene, Craig E. Infectious Diseases of the Dog and Cat-E-Book. Elsevier Health Sciences, 2013. 7. Carpenter, James W., and Chris Marion. Exotic Animal Formulary-E-Book. Elsevier Health Sciences, 2017. 8. Wallach, Joel D., and William J. Boever. Diseases of exotic animals. Medical and surgical management. WB Saunders Co., 1983. 9. C. Yurayart, Comparative analysis of the frequency, distribution and population sizes of yeasts associated with canine seborrheic dermatitis and healthy skin. (2011) Veterinary Microbiology, vol. 148, pp. 356-62 Methods The MiDOG® All-in-One Microbial Test is a targeted, Next-generation DNA sequencing testing service able to

Animal Type	GAN	Preferred ID	Taxonomy	Sex	Birth Date
Individual	26752287	992278	Elephas maximus indicus/Indian elephant	Female	~ from Jul 01, 1965 to Jul 01, 1966

identify molecular signatures unique to the identity and character of a specific microorganism. This test relies on safeguarded preservation and transport of collected samples, thorough extraction of DNA from all microbes present in the specimen, select amplification of microbial DNA followed by Next-generation DNA sequencing using the latest technologies from Illumina (Illumina, Inc., San Diego, CA). Data handling is done via curated microbial databases to accurately align DNA sequences to ensure precise and accurate (species-level) identification of all bacteria and fungi present in the specimen. When no Bacterial or Fungal Species are Detected: When no bacterial or fungal species are detected in this test, this result may be due to a very low microbial load and/or low concentration of microbial DNA in the sample provided. In this case, we recommend re-sampling the area of interest and re-submitting specimen for analysis. Phylogenetic Rank Abbreviations If the detected bacterial or fungal taxon could not be identified down to the genus level, the closest phylogenetic rank identified is provided. An abbreviation indicating the level of the rank is displayed aside. The meaning of the abbreviations is shown as: (p) Phylum level, (c) Class level, (o) Order level, and (f) Family level. Disclaimer The information contained in this MiDOG® report is intended only to be factor for use in a diagnosis and treatment regime for the animal patient. As with any diagnosis or treatment regime, you should use clinical discretion with each animal patient based on a complete evaluation of the animal patient, including history, physical presentation and complete laboratory data, including confirmatory tests. All test results should be evaluated in the context of the patient's individual clinical presentation. The information in the MiDOG ® report has not been evaluated by the FDA. Customer Support Tel: (833)456-4364 info@midogtest.com www.midogtest.com

Animal Care Staff Medical Summary

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Calendar Items

Date	Title	Assigned To	Done
~	~	~	~

Clinical note

Date	Time	Note Author
May 06, 2024	00:00	Deanna Rocca
Significant	Private	Active Problems
No	No	~

Note Subtype: General

Notes/Comments

All-in-One Microbial Test Exotic Animal Report

Patient Name: 992278 Health Status: Healthy Account #: 100A417 Owner's Name: LA Zoo Ordered by: Dr. Boren Sample ID: MI50037969 Breed: Elephant Email: lazoo.hclab@lacity.org Sample Type: Ear, Right Age: Adult Hospital: Los Angeles Zoo Received Date: 5/8/2024 Species: Elephant Location: Los Angeles, CA Report Date: 05/10/24

Potential Clinically Relevant Microbes Detected: Listed are those bacteria and fungi detected in the specimen that are of potential clinical relevance. Results from this report should be considered together with additional clinical data gathered by the veterinarian (physical examination, medical history, cytology, etc.) as the microbes detected may or may not be the cause of the clinical condition. For a comprehensive list of all microorganisms detected in this specimen see page 3 of this report. Please consider that even commensals can become pathogenic in certain patients under certain circumstances. Further, novel or extremely rare pathogens may be found on page 3 for your consideration and clinical diagnosis.

1.Bacteria  
Species Detected Percentage (%) Cells per Sample  
Corynebacterium lactis [1] 2.03 24,000,000  
Lawsonella clevelandensis [2] 1.06 13,000,000  
Corynebacterium amycolatum [3] 0.77 9,200,000  
Streptococcus urinalis [4][5][6] 0.27 3,200,000  
Corynebacterium auriscanis [7] 0.19 2,300,000

2 Fungi  
Species Detected Percentage (%) Cells per Sample  
Malassezia caprae [4][5][8] 24.85 1,300  
Malassezia japonica [4][5][8] 0.22 12  
Candida sake [4][9][10] 0.13 7  
Fusarium flocciferum-tricinctum [4][8][11] 0.11 6  
Scedosporium apiospermum-boydii [12][13][14] 0.04 2

Antibiotic Resistance for Detected Clinically Relevant Microbes The sample was screened for the presence of antibiotic resistance genes and intrinsic resistances of clinically relevant microorganisms. For this analysis more than 90 antibiotic resistance genes were screened. The cautious use of any antibiotic drug is highly recommended. Please follow the guidelines for antimicrobial stewardship in veterinary practice. This table lists antibiotic sensitivities/resistances for the indicated bacteria based on detection of specific antibiotic resistance genes and naturally occurring, or intrinsic, resistance to specific antibiotics previously identified for that organism. Abbreviation Keys: Symbols: Patient Name: 992278 Ordered by: Dr. Boren Page 2 of 5 Owner's Name: LA Zoo Account #: 100A417

Drug Tiers* Antibiotics 1st

Cefazolin NRD NRD NRD NRD NRD Cephalothin NRD NRD NRD NRD NRD Cephalixin NRD NRD NRD NRD NRD Cefadroxil NRD NRD NRD NRD NRD Cefoxitin NRD NRD NRD NRD NRD Penicillin NRD NRD NRD NRD NRD Penicillin G NRD NRD NRD NRD NRD Oxacillin NRD NRD NRD NRD NRD Ampicillin NRD NRD NRD NRD NRD Amoxicillin NRD NRD NRD NRD NRD Clavamox NRD NRD NRD NRD NRD Gentamicin NRD NRD NR NR G Tobramycin NRD NRD NR NRD NRD Neomycin NRD NRD NR NR NRD Clindamycin NRD NRD NRD NRD NRD Lincomycin NRD NRD NRD NRD NRD Doxycycline NRD NRD NRD NRD NRD Minocycline NRD NRD NRD NRD NRD Tetracycline NRD NRD NRD NRD NRD Sulfonamide NRD NRD NRD NRD NRD Trimethoprim- sulfamethoxazole NRD NRD NRD NRD NRD Metronidazole NRD NRD NRD NRD NR Cefovecin NRD NRD NRD NRD NRD

2nd Cefpodoxime NRD NRD NRD NRD NRD Ceftiofur NRD NRD NRD NRD NRD Timentin NRD NRD NRD NRD NRD Azithromycin NRD NRD NRD NRD NRD Orbifloxacin NRD NRD NRD NRD NRD Chloramphenicol NRD NRD NR NRD G Florfenicol NRD NRD NR NRD NRD

3rd Amikacin NRD NRD NR NR G Rifampin NRD NRD NRD NRD NRD Imipenem NRD NRD NRD NRD NRD Levofloxacin NRD NRD NRD NRD NRD Marbofloxacin NRD NRD NRD NRD NRD Pradofloxacin § NRD NRD NRD NRD NRD Enrofloxacin NRD NRD NRD NRD F Ciprofloxacin ¶ NRD NRD NRD NRD NRD Ceftazidime NRD NRD NRD NR NRD Mupirocin NRD NRD NRD NRD NRD Nitrofurantoin NRD NRD NRD NRD NRD Colistin NR NRD NR NR NRD Ticarcillin NRD NRD NRD NRD NRD Piperacillin-Tazobactam NRD

Animal Type	GAN	Preferred ID	Taxonomy	Sex	Birth Date
Individual	26752287	992278	Elephas maximus indicus/Indian elephant	Female	~ from Jul 01, 1965 to Jul 01, 1966

NRD NRD NRD NRD

Supplemental Data Total Bacteria Composition Charts below depict the relative abundance of all detected bacterial species. Each color represents a different bacterial species. The larger the coloredsegment is, the more abundant that species is in the specimen. The table below lists top 8 bacterial species detected within the limit of detection. The absolute and relative abundances of each species is shown. Potential clinically relevant microbes are highlighted in red. Total Fungal Composition Charts below depict the relative abundance of all detected fungal species. Each color represents a different fungal species. The larger the colored segment is, the more abundant that species is in the specimen. The table below lists top 8 fungal species detected within the limit of detection. The absolute and relative abundances of each species is shown. Potential clinically relevant microbes are highlighted in red. Patient Name: 992278 Ordered by: Dr. Boren Page 3 of 5Owner's Name: LA Zoo Account #: 100A417 Species Detected Percentage (%) Cells per Sample Brachyomonas denitrificans 26.80 320,000,000 (c)Clostridia sp. 25.54 300,000,000 (o)Bacteroidales sp. 7.68 91,000,000 (c)Bacteroidia sp. 5.16 61,000,000 (f)Flavobacteriaceae sp. 4.90 58,000,000 (o)Clostridiales sp. 3.94 47,000,000 (f)Propionibacteriaceae sp. 3.75 45,000,000 (f)Microbacteriaceae sp. 3.45 41,000,000 Species Detected Percentage (%) Cells per Sample Cladosporium sp. 35.68 1,900 Malassezia caprae [4][5][8] 24.85 1,300 Alternaria sp. 14.47 780 (k)Fungi sp. 4.48 240 Holtermanniella takashimae 3.31 180 Alternaria infectoria-rosae 1.42 77 Vishniacozyma victoriae 1.35 73 Neoascochyta sp. 1.31 71

Antimicrobial Resistance Genes Detected The table below lists antimicrobial resistance genes that are detected in this sample. For antibiotics usage guidance, please first refer to the "Antibiotic Resistance" table shown in Page 2. Use this table only as an additioanl resource when needed. Inferring antimicrobrial resistance from the resistancegenes detected should be cautious, espeically in a mixed microbial population. Patient Name: 992278 Ordered by: Dr. Boren Page 4 of 5Owner's Name: LA Zoo Account #: 100A417 AMR_Gene_Detected Resistance_Against Function APH(3'')-Ib aminoglycoside aminoglycoside phosphotransferase AAC(3)-Ia aminoglycoside aminoglycoside acetyltransferase aadA aminoglycoside aminoglycoside nucleotidyltransferase ANT(2'')-Ia aminoglycoside aminoglycoside nucleotidyltransferase APH(6)-Id aminoglycoside aminoglycoside phosphotransferase mphC macrolide macrolide phosphotransferase cmx phenicol chloramphenicol exporter ermB streptogramin, macrolide, lincosamide ribosomal methylase sul1 sulfonamide dihydropteroate synthase sul2 sulfonamide dihydropteroate synthase

References 1. de Paula Antunes, J. M. A., Ribeiro, M. G., de Castro Demoner, L., Ramos, J. N., Baio, P. V. P., Simpson-Louredo, L., ... & Mattos-Guaraldi, A. L. (2015). Cutaneous abscess caused by Corynebacterium lactis in a companion dog. Veterinary Microbiology, 178(1-2), 163-166. 2. Bell, M. E., Bernard, K. A., Harrington, S. M., Patel, N. B., Tucker, T. A., Metcalfe, M. G., & McQuiston, J. R. (2016). Lawsonella clevelandensis gen. nov., sp. nov., a new member of the suborder Corynebacterineae isolated from human abscesses. International journal of systematic and evolutionary microbiology, 66(8), 2929-2935. 3. Aalbaek B., Bemis D.A., Schjaerff M., Kania S. A., Frank L. A., Guardabassi L. Coryneform bacteria associated with canine otitis externa. (2010) Veterinary Microbiology, 145(3-4):292-298 4. Carpenter, James W., and Chris Marion. Exotic Animal Formulary-E-Book. Elsevier Health Sciences, 2017. 5. Wallach, Joel D., and William J. Boever. Diseases of exotic animals. Medical and surgical management. WB Saunders Co., 1983. 6. Ballard, Bonnie, and Ryan Cheek, eds. Exotic animal medicine for the veterinary technician. John Wiley & Sons, 2016. 7. Bygott J. M., Malnick H., Shah J.J., Chattaway M.A., Karas J. A. First clinical case of Corynebacterium auriscanis isolated from localized dog bite infection. (2008) Journal of Medical Microbiology, 57: 899-900 8. Greene, Craig E. Infectious Diseases of the Dog and Cat-E-Book. Elsevier Health Sciences, 2013. 9. De Martino, Luisa, et al. An update on microbiological causes of canine otitis externa in Campania Region, Italy. Asian Pacific Journal of Tropical Biomedicine 6.5 (2016): 384-389. 10. C. Yurayart, Comparative analysis of the frequency, distribution and population sizes of yeasts associated with canine seborrheic dermatitis and healthy skin. (2011) Veterinary Microbiology, vol. 148, pp. 356-62 11. Muller and Kirk's small animal Dermatology, 7th edition Elsevier 12. Bennett, John E., Raphael Dolin, and Martin J. Blaser. Mandell, Douglas, and Bennett's Principles and Practice of Infectious Diseases E-Book. Elsevier health sciences, 2019. 13. Sykes, Jane E., and Craig E. Greene. Infectious Diseases of the Dog and Cat-E-Book. Elsevier Health Sciences, 2013. 14. Williams, Elizabeth S., and Ian K. Barker, eds. Infectious diseases of wild mammals. John Wiley & Sons, 2008. Methods The MiDOG® All-in-One Microbial Test is a targeted, Next-generation DNA sequencing testing service able to identify molecular signatures unique to the identity and character of a specific microorganism. This test relies on safeguarded preservation and transport of collected samples, thorough extraction of DNA from all microbes present in the specimen, select amplification of microbial DNA followed by Next-generation DNA sequencing usingthe latest technologies from Illumina (Illumina, Inc., San Diego, CA). Data handling is done via curated microbial databases to accurately align DNA sequences to ensure precise and accurate (species-level) identification of all bacteria and fungi present in the specimen. When no Bacterial or Fungal Species are Detected: When no bacterial or fungal species are detected in this test, this result may be due to a very low microbial load and/or low concentration of microbial DNA in the sample provided. In this case, we recommend re-sampling the area of interest and re-submitting specimen for analysis. Phylogenetic Rank Abbreviations If the detected bacterial or fungal taxon could not be identified down to the genus level, the closest phylogenetic rank identified is provided. An abbreviation indicating the level of the rank is displayed aside. The meaning of the abbreviations is shown as:(p) Phylum level, (c) Class level, (o) Order level, and (f) Family level. Disclaimer The information contained in this MiDOG® report is intended only to be factor for use in a diagnosis and treatment regime for the animal patient. As withany diagnosis or treatment regime, you should use clinical discretion with each animal patient based on a complete evaluation of the animal patient, including history, physical presentation and complete laboratory data, including confirmatory tests. All test results should be evaluated in the context of the patients individual clinical presentation. The information in the MiDOG ® report has not been evaluated by the FDA. Customer Support Tel: (833)456-4364 info@midogtest.com www.midogtest.com

Animal Care Staff Medical Summary

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Calendar Items

Date	Title	Assigned To	Done
~	~	~	~

Prescription/Treatment

Basic Info

**Date Written** May 06, 2024  
**Start Date** May 06, 2024 00:00  
**Prescribed By** Brandon Boren  
**Prescribed For** 1 animal  
**Reason For Treatment** ~

Weight Info

**Date** May 06, 2024  
**Measurement Value** 3,350 kg  
**Estimate** Yes  
**Exclude From Reference Intervals** Yes

Animal Type	GAN	Preferred ID	Taxonomy	Sex	Birth Date
Individual	26752287	992278	Elephas maximus indicus/Indian elephant	Female	~ from Jul 01, 1965 to Jul 01, 1966

Treatment Detail

Treatment Item/Drug

Previcox (227 mg Solid > Tablet) (Firocoxib) (MERIAL)

Dose Amount

567.5 mg

Dosage Amount

0.169 mg/kg

Administrated Dose Quantity

2.5 count

Frequency

once a day (sid)

Duration

5days

Delivery Route

Oral (p.o.)

Loading Dose

~

Form of Drug

Tablet

Concentration Of Drug

227 mg

Treatment Response

Clinical Response

~

Adverse Effects

~

Adverse Effects Note:

~

Staff Instructions

Give 567.5 mg [2.5 count] of Previcox, once a day (sid) for 5 days.  
Start treatment on May 06, 2024  
Administration route: Oral (p.o.)

Prescription Notes/Comments

~

Calendar Items

Dispensing Records

Administration Records

May 05, 2024

Clinical note

Date

May 05, 2024

Time

00:00

Note Author

Steve Klause

Significant

No

Private

No

Active Problems

~

Note Subtype: General

Notes/Comments

5/5/2024: Sunday: Tina seems much improved today and back to her normal energy level. Interactions, eating, drinking, fecals seek OK. SK

Animal Care Staff Medical Summary

~

Calendar Items

Date	Title	Assigned To	Done
~	~	~	~

May 04, 2024

Clinical note

Date

May 04, 2024

Time

00:00

Note Author

Steve Klause

Animal Type	GAN	Preferred ID	Taxonomy	Sex	Birth Date
Individual	26752287	992278	Elephas maximus indicus/Indian elephant	Female	~ from Jul 01, 1965 to Jul 01, 1966

Significant

Private

Active Problems

No

No

~

Note Subtype: General

Notes/Comments

5/4/2024: Saturday: Tina had one episode of open mouth and trunk holding. She is eating and fecals seem appropriate for number, size, and consistency. She is participating for her commands for foot cleaning etc. She is definitely moving a bit slowly this AM. OK for oral mineral oil this AM. Will get verbal updates today and I will check on her again tomorrow in the AM. SK

Animal Care Staff Medical Summary

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Calendar Items

Date	Title	Assigned To	Done
~	~	~	~

May 02, 2024

Clinical note

Date

Time

Note Author

May 02, 2024

00:00

Jordan Davis-Powell

Significant

Private

Active Problems

No

No

~

Note Subtype: General

Notes/Comments

In AM Tina was given access to India exhibit where her hay was spread around exhibit in various piles on rocks, in grass and in stable grazer in order to increase movement and stimulate foraging behavior. At midday trainers called Tina to other side of exhibit in order to increase movement. In PM she was given access to Thai yard where she was given hay in slow feeder and tree feeder. Pellets were hidden throughout exhibit as well as placed in puzzle feeders, such as the cube, wobble ball and wall ball to increase activity.

Animal Care Staff Medical Summary

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Calendar Items

Date	Title	Assigned To	Done
~	~	~	~

Apr 30, 2024

Clinical note

Date

Time

Note Author

Apr 30, 2024

00:00

Corinne Mayer

Significant

Private

Active Problems

No

No

~

Note Subtype: General

Notes/Comments

Verbal update from AK: Tina is having a great day today and eating hay well. No abnormal behaviors were noted today, normal fecal/urine production. Will continue verbal updates every few days.

CCM

Animal Care Staff Medical Summary

~

Calendar Items

Date	Title	Assigned To	Done
~	~	~	~

Apr 26, 2024

Clinical note

Animal Type	GAN	Preferred ID	Taxonomy	Sex	Birth Date
Individual	26752287	992278	Elephas maximus indicus/Indian elephant	Female	~ from Jul 01, 1965 to Jul 01, 1966

Date

Apr 26, 2024

Time

00:00

Note Author

Dominique Keller

Significant

No

Private

No

Active Problems

~

Note Subtype: General

Notes/Comments

Verbal update: Keeper reports that Tina did very well for all her stretching routines this morning and was very focused. 11 fecal boluses overnight, which is a good number, character normal. No gaping behavior noted. Yesterday keeper reports she was a little slower to interact, but no gaping seen.  
  
A: It does appear that Tina's behavior is subtly different each day, including some mentions of "spacey" behavior or lack of attention when being interacted with. This is not a new comment, but has been seen infrequently in the past few years. This may be an indication of mental or behavioral state changes but since these are not consistent, it has been difficult to correlate them to any specific issue or diagnosis.  
  
P: Continue regular updates. Will not renew omeprazole script when it expires this time, but will monitor behavior to note any changes once off this medication for a few days.  
  
DLKeller, DVM

Animal Care Staff Medical Summary

~

Calendar Items

Date	Title	Assigned To	Done
~	~	~	~

Apr 23, 2024

Clinical note

Date

Apr 23, 2024

Time

00:00

Note Author

Dominique Keller

Significant

No

Private

No

Active Problems

~

Note Subtype: General

Notes/Comments

Nutrition consult with Dr. Sullivan: The results of the vitamin A & E testing suggest vit. E levels are adequate for both elephants, but that levels of A may be a little low.  
  
P: Since the elephant pellets have been reformulated for adequate A levels now, nutritionist recommends rechecking in about a month, as levels may take longer to rise in older animals when feed is adjusted.  
Have informed care team and our nutritionist and asked for recheck blood in June to recheck levels. No recommendation to supplement vit. A at this time.  
  
This note added to the following animals: 992278, 95661

Animal Care Staff Medical Summary

~

Calendar Items

Date	Title	Assigned To	Done
~	~	~	~

Clinical note

Date

Apr 23, 2024

Time

00:00

Note Author

Dominique Keller

Significant

No

Private

No

Active Problems

~

Note Subtype: General

Notes/Comments

Verbal update: Keeper reports normal behavior and fecal bolus appearance and number. Might have seen some gaping this morning. Keeper reports that Tina has been playing with the new sand a lot in the yard, so possible she has ingested some, though none has been seen in the fecals.  
  
P: Continue daily updates.  
  
DLKeller, DVM

Animal Type	GAN	Preferred ID	Taxonomy	Sex	Birth Date
Individual	26752287	992278	Elephas maximus indicus/Indian elephant	Female	~ from Jul 01, 1965 to Jul 01, 1966

Animal Care Staff Medical Summary

~

Calendar Items

Date	Title	Assigned To	Done
~	~	~	~

Apr 21, 2024

Clinical note

Date	Time	Note Author
Apr 21, 2024	00:00	Corinne Mayer
Significant	Private	Active Problems
No	No	~

Note Subtype: General

Notes/Comments

Verbal update from AK: Tina looked good today. She was mouth gaping a little this morning, but this resolved after she drank a large volume of warm water. She is urinating and defecating normally. Urine sample was brought up to AHCC for UA.

UA: 30mg/dL protein, USG was 1.010 g/dL on test strip but 1.022 g/dL on refractometer (normal for this patient). Rare bacteria/amorphous debris, 0-1 squamous epithelial cells/hpf noted on cytology.

This is a high amount of protein for this patient (usually 0) though it falls within expected range for this species. Recommend retest in a few days (was started on resorb and mineral oil yesterday).

CCM

Animal Care Staff Medical Summary

~

Calendar Items

Date	Title	Assigned To	Done
~	~	~	~

Sample

Sample Detail

Collection Date/Time	Apr 21, 2024 00:00
Sample Type	Urine
Additives/Preservatives	~
Collection Method	Free Catch
Collected By	Dominique Keller
Reason	~
Exclude from reference intervals	No

Sample Quality

Color	Yellow
Color Intensity	medium
Clarity	Clear
Degraded	No

Initial Holding Conditions

Initial Holding Temp.	Ambient
Initial Holding Duration	~

Sample History

Date	Sample ID / Sample GSN	Status	Laboratory / Test Order / Test Results
Apr 21, 2024	~/~	Available	LOSANGELE/12/12

Notes

~

Calendar Items

Date	Title	Assigned To	Done
~	~	~	~

Test & Result



Animal Type	GAN	Preferred ID	Taxonomy	Sex	Birth Date
Individual	26752287	992278	Elephas maximus indicus/Indian elephant	Female	~ from Jul 01, 1965 to Jul 01, 1966

Test Request Detail

Date Requested

Requested By

Analysis Start Date & Time

Analysis By

Analysis Equipment

Insufficient Sample

Apr 21, 2024

Dominique Keller

Apr 21, 2024 00:00

Megan Duncan

~

No

Sample Quality

Color

Color Intensity

Clarity

Consistency

Additional Characteristics

Degraded

Yellow

medium

Clear

~

~

No

Notes/Comments

Sediment exam: 0-1 simple squamous epithelial cells. Rare mixed bacteria and amorphous debris.

Test	Primary Result	Expected Results (Based on Best Available Match) Type: Min- Max   Mean [Median] N (Animals)	Evaluation	Excl'd. from RI	Clinical Finding	Reviewed
Urine Bilirubin [rs]	(-) Negative		~	~	~	Yes
Urine Urobili. [rs]	Normal 0.2 mg/dL		~	~	~	Yes
Urine Ketones [rs]	(-) Negative		~	~	~	Yes
Urine Protein [rs]	(+) 30 mg/dL (0.3 g/L)		~	~	~	Yes
Urine Nitrite [rs]	Negative		~	~	~	Yes
Urine Leuk. [rs]	Negative		~	~	~	Yes
Urine Glucose [rs]	(-) Negative		~	~	~	Yes
pH [rs]	8.0 pH	Global subsp RI: 6.5 - 8.9   7.8 [8.0] N=169 (14)	~	No	~	Yes
Urine Blood [rs]	Negative		~	~	~	Yes
Sp Grav (test strip)	1.010 ratio	Global subsp RI: 1.000 - 1.025   1.010 [1.010] N=74 (3)	~	No	~	Yes
Sp Grav (R)	1.022 ratio	Global subsp RI: 1.004 - 1.028   1.019 [1.018] N=82 (9)	~	No	~	Yes
Urine Ascorbic [rs]	Normal		~	~	~	Yes

Sample Detail (GSN: S-TCW24-150667)

Collection Date/Time

Sample Type

Anatomical Source/Tissue

Additives/Preservatives

Apr 21, 2024 00:00

Urine

~

~

Collection Method

Collected By

Reason

Exclude from reference intervals

Free Catch

Dominique Keller

~

No

Apr 20, 2024

Clinical note

Date

Apr 20, 2024

Significant

No

Note Subtype: General

Notes/Comments

Time

00:00

Private

No

Note Author

Jordan Davis-Powell

Active Problems

~



Animal Type	GAN	Preferred ID	Taxonomy	Sex	Birth Date
Individual	26752287	992278	Elephas maximus indicus/Indian elephant	Female	~ from Jul 01, 1965 to Jul 01, 1966

Tina is acting normal today. Ate well and had good amounts of stools (8-9 Boluses).

{JDP}

Animal Care Staff Medical Summary

~

Calendar Items

Date	Title	Assigned To	Done
~	~	~	~

Prescription/Treatment

Basic Info

**Date Written** Apr 19, 2024  
**Start Date** Apr 20, 2024 00:00  
**Prescribed By** Dominique Keller  
**Prescribed For** 1 animal  
**Reason For Treatment** ~

Weight Info

**Date** Apr 19, 2024  
**Measurement Value** 3,350 kg  
**Estimate** Yes  
**Exclude From Reference Intervals** Yes

Treatment Detail

**Treatment Item/Drug** resorb (Liquid)  
**Dose Amount** ~  
**Dosage Amount** ~  
**Administrated Dose Quantity** ~  
**Frequency** twice a day (bid)  
**Duration** 5days  
**Delivery Route** Oral (p.o.)  
**Loading Dose** ~  
**Form of Drug** Liquid  

Concentration Of Drug  
~

Treatment Response

**Clinical Response** ~  
**Adverse Effects** ~  
**Adverse Effects Note:**

~

Staff Instructions

Mix 2 packets of Resorb salt/mineral side only in 1 gallon warm water and offer twice a day for 5 days. Mix fresh daily. Ensure she has access to alternative sources of water.  
Can also try adding the Glucose packet if she will not drink the electrolyte water.  
Start treatment on 20 April, 2024  
Administration route: Oral (p.o.)

Prescription Notes/Comments

~

Calendar Items

Date	Title	Assigned To	Done
~	~	~	~

Dispensing Records

Date Dispensed	Dispensed By	Quantity Dispensed
~	~	~

Administration Records

Administration Date/Time	Administered By	Success	Notes
~	~	~	~

Animal Type	GAN	Preferred ID	Taxonomy	Sex	Birth Date
Individual	26752287	992278	Elephas maximus indicus/Indian elephant	Female	~ from Jul 01, 1965 to Jul 01, 1966

Prescription/Treatment

Basic Info

Date Written

Apr 19, 2024

Start Date

Apr 20, 2024 00:00

Prescribed By

Dominique Keller

Prescribed For

1 animal

Reason For Treatment

~

Weight Info

Date

Apr 19, 2024

Measurement Value

3,350 kg

Estimate

Yes

Exclude From Reference Intervals

Yes

Treatment Detail

Treatment Item/Drug

MINERAL OIL

Dose Amount

1 gal liq (US)

Dosage Amount

~

Administrated Dose Quantity

1 gal liq (US)

Frequency

once a day (sid)

Duration

3days

Delivery Route

Oral (p.o.)

Loading Dose

~

Form of Drug

~

Concentration Of Drug

~

Treatment Response

Clinical Response

~

Adverse Effects

~

Adverse Effects Note:

~

Staff Instructions

Give 1 gal liq (US) of MINERAL OIL, once a day in bran (sid) for 3 days. Give if any abdominal discomfort suspected.

Start treatment on 20 Apr, 2024

Administration route: Oral (p.o.)

Prescription Notes/Comments

~

Calendar Items

Date	Title	Assigned To	Done
~	~	~	~

Dispensing Records

Date Dispensed	Dispensed By	Quantity Dispensed
~	~	~

Administration Records

Administration Date/Time	Administered By	Success	Notes
~	~	~	~

Apr 19, 2024

Clinical note

Date

Apr 19, 2024

Time

00:00

Note Author

Dominique Keller

Significant

No

Private

No

Active Problems

~

Note Subtype: General

Notes/Comments

Verbal update: Keeper reports that Tina is doing well this morning, normal behavior, no gaping. Did leave a little bit of food overnight and had somewhat fewer fecal boluses overnight. Fecals were moist, no sand noted by keeper.

Animal Type	GAN	Preferred ID	Taxonomy	Sex	Birth Date
Individual	26752287	992278	Elephas maximus indicus/Indian elephant	Female	~ from Jul 01, 1965 to Jul 01, 1966

Afternoon addendum (1430): Tina may be moving a little bit more slowly, no gaping or other possible discomfort behaviors, but has only passed one more fecal bolus since this morning, though she has eaten all her diet.

P: Since there are subtle changes, keepers are monitoring. Tina has been actively investing the new sand in the Thai yard, though no one has seen her eat it. Since she seems to be slowing down on fecal production, starting mineral oil in bran today, Resorb tomorrow. Advised to make sure they offer hose water and as much supplemental water as she will take. Update daily.

RX: Mineral oil, 1 gallon PO SID in bran for 3 days to start if behavioral changes are seen tomorrow.  
Resorb in water BID for 5 days.

DLKeller, DVM

Animal Care Staff Medical Summary

~

Calendar Items

Date	Title	Assigned To	Done
~	~	~	~

Biopsy Detail

Submission

Date Submitted Apr 19, 2024  
Submitted By Dominique Keller

Recent History/Observations Note  
Submitted vulvar nodule.

Sample Information

Sample ID/GSN S-TCW24-150663  
Sample Type Tissue  
Anatomical Source/Tissue ~  
Biopsy Collection Date Mar 18, 2024 00:00  
Additives/Preservatives ~  
Collected By  
Status Available

Case Info

Pathology Case Number ~  
Parties to get copy of final report ~  
Responsible Pathologist Michael M. Garner DVM  
Responsible Resident ~

Workflow Notes and Additional Case Comments  
~

Biopsy Preliminary Examination

Biopsy Info

Gross Examination By ~ Report Written Date ~  
Biopsy Tissue/Description  
~

Preliminary Diagnosis

Diagnoses

Diagnosis	Standardized Diagnosis
~	~

Initial Biopsy Comments & Interpretation

~

Samples & Tests

Samples

Sample Type/Anatomical Source	Preservative
Tissue/~	~

Animal Type	GAN	Preferred ID	Taxonomy	Sex	Birth Date
Individual	26752287	992278	Elephas maximus indicus/Indian elephant	Female	~ from Jul 01, 1965 to Jul 01, 1966

Laboratory	Test Name	Result	Evaluation	Status
~	~	~	~	~

Histopathology

Tissue Processing

Tissue Trim Date

~

Trimmed By

~

Tissue Processing Submission Date

~

Tissue Processed Completion Date

~

External Laboratory

Northwest ZooPath - Everson

Reference Number

~

Histopathology Info

Histopathology Report Date

Mar 27, 2024

Histopathology Report By

Dominique Keller

Responsible Pathologist

Michael M. Garner DVM

Histopathology Report

Northwest ZooPath  
654 W. Main St. · Monroe, WA 98272 · Phone (360) 794-0630 · Fax (360) 794-4312 · website [www.zoopath.com](http://www.zoopath.com)

Case No.: G24-1302    Obtained: 03/18, rec'd 03/22/24  
Reported: 03/27/24

Dr. Dominique Keller    Patient ID: Asian Elephant #992278  
Los Angeles Zoo    Account #: CA 204G  
5333 Zoo Dr.    Telephone: (323) 644-6018  
Los Angeles, CA 90027    FAX #: 644-6070  
E-mail: (on file)

HISTORY: This greater than 60-year-old female Asian elephant had a skin nodule on the vulva.

CLINICAL DIAGNOSIS: Open.

GROSS: Received in formalin are two tissues to 6 mm. in greatest dimension representing one biopsy source, and the tissues are processed in one block.

MICROSCOPIC: The submitted specimens are comprised entirely of epidermis. Maturation in the epidermis is orderly, although some of the cells have some mild vacuolar change. No cytopathic effect is noted. Along the external surfaces are some colonies of bacteria.

MICROSCOPIC DIAGNOSIS:     Marked epidermal hyperplasia, vulva.

COMMENT: The prominent epidermal hyperplasia is of undetermined cause. No cytopathic effect is seen. I would be interested in the size of the nodule No dermis is represented, so it is possible that the lesion is not entirely representative. In this regard, if this lesion is not responding to conventional therapy or appears to be progressing, it may be necessary to obtain an excision biopsy that includes the underlying dermis. You may also want to consider freezing a portion of the lesion for any future PCR that may be indicated.

Michael M. Garner, DVM, Dipl. ACVP  
MMG/hc  
E-mail: [mikeg@zoopath.com](mailto:mikeg@zoopath.com)  
NZP Code: M, 9f; marked epidermal hyperplasia, vulva.

Histopathology Diagnosis

Diagnosis	Standardized Diagnosis
~	~

Finalize

Finalization Date

~

Responsible Pathologist

Michael M. Garner DVM

Responsible Resident

~

Final Summary

~

Biopsy Case Info for Husbandry Staff (Husbandry Note)

~

Animal Type	GAN	Preferred ID	Taxonomy	Sex	Birth Date
Individual	26752287	992278	Elephas maximus indicus/Indian elephant	Female	~ from Jul 01, 1965 to Jul 01, 1966

Addendum

Date	Note	Reported By
~	~	~

Audit Trail

~

Apr 18, 2024

Clinical note

Date	Time	Note Author
Apr 18, 2024	00:00	Dominique Keller
Significant	Private	Active Problems
No	No	~

Note Subtype: General

Notes/Comments

Verbal update: keepers report normal fecal character and amount this morning. No gaping behavior, and Tina was interactive and engaged for this morning's bath and foot care session. Took a large amount of water by hose during the session.

A: Tina is doing well. No gaping.

P: Update tomorrow.

DLKeller, DVM

Animal Care Staff Medical Summary

~

Calendar Items

Date	Title	Assigned To	Done
~	~	~	~

Apr 17, 2024

Clinical note

Date	Time	Note Author
Apr 17, 2024	00:00	Dominique Keller
Significant	Private	Active Problems
No	No	~

Note Subtype: General

Notes/Comments

Verbal update: Keepers report that Tina's behavior is normal this morning, they have not seen any gaping behavior.

P: Update again tomorrow, visual in a couple of days.

DLKeller, DVM

Animal Care Staff Medical Summary

~

Calendar Items

Date	Title	Assigned To	Done
~	~	~	~

Apr 16, 2024

Clinical note

Date	Time	Note Author
Apr 16, 2024	00:00	Dominique Keller
Significant	Private	Active Problems
No	No	~

Animal Type	GAN	Preferred ID	Taxonomy	Sex	Birth Date
Individual	26752287	992278	Elephas maximus indicus/Indian elephant	Female	~ from Jul 01, 1965 to Jul 01, 1966

Note Subtype: General

Notes/Comments

Verbal update: Keepers report that Tina is acting normally today and has not demonstrated any gaping this morning. Psyllium script was discontinued as of yesterday, so did not receive any this morning.

P: Update tomorrow.

DLKeller, DVM

Animal Care Staff Medical Summary

~

Calendar Items

Date	Title	Assigned To	Done
~	~	~	~

Prescription/Treatment

Basic Info

Date Written

Apr 13, 2024

Start Date

Apr 16, 2024 00:00

Prescribed By

Dominique Keller

Prescribed For

1 animal

Reason For Treatment

~

Weight Info

Date

Apr 13, 2024

Measurement Value

3,350 kg

Estimate

Yes

Exclude From Reference Intervals

Yes

Animal Type	GAN	Preferred ID	Taxonomy	Sex	Birth Date
Individual	26752287	992278	Elephas maximus indicus/Indian elephant	Female	~ from Jul 01, 1965 to Jul 01, 1966

Treatment Detail

Treatment Item/Drug

Omeprazole

Dose Amount

3,000 mg

Dosage Amount

0.896 mg/kg

Administrated Dose Quantity

3,000 mg

Frequency

once a day (sid)

Duration

14days

Delivery Route

Oral (p.o.)

Loading Dose

~

Form of Drug

~

Concentration Of Drug

~

Treatment Response

Clinical Response

~

Adverse Effects

~

Adverse Effects Note:

~

Staff Instructions

Give 3,000 mg (1 scoop) of Omeprazole, once a day (sid) for 14 days. Provided scoop (loosely packed) is 3000 mg of powder.  
Start treatment on Apr 16, 2024. This is an extension of current script.  
Administration route: Oral (p.o.)

Prescription Notes/Comments

~

Calendar Items

Date	Title	Assigned To	Done
Apr 29, 2024	992278 / Indian elephant / 26752287 Omeprazole treatment is complete	Dominique Keller	No
Apr 16, 2024	Start Omeprazole 3000 mg once a day (sid) 14 days Oral (p.o.) / Indian elephant / 992278 / 26752287	Dominique Keller	No

Dispensing Records

Date Dispensed	Dispensed By	Quantity Dispensed
~	~	~

Administration Records

Administration Date/Time	Administered By	Success	Notes
~	~	~	~

Apr 15, 2024

Clinical note

Date

Apr 15, 2024

Time

00:00

Note Author

Dominique Keller

Significant

No

Private

No

Active Problems

~

Note Subtype: General

Notes/Comments

Visual and verbal update: Keepers report Tina doing some gaping behavior this morning and quieter than usual. Defecated without straining and urinated. Normal looking fecal boluses and keepers report number of boluses is also normal for Tina. This is the first morning in a couple weeks that they have seen the gaping. Today is day 3 of restarting psyllium  
  
O: By the time vets arrived to look at her (about 0815), she was still quiet bujt perking up- it had been about 15 min since she had defecated.  
N: Mentation is appropriate, though she is a little more subdued.  
Optho: OU clear  
M/S: Examined the left rear foot medial foot margin where the skin flap was removed yesterday and from which team submitted the white material yesterday (was most likely necrotic tissue, there is no abscess or purulent discharge at this site). This is the area that keepers are working on to keep clear of urine scald and overgrowth. The tissue still looks somewhat friable and not completely reepithelialized. RRD4 nail defect is minuscule and looks good. LRD4 nail defect still a little open, but looks better.  
  
Tx: Attempted rectal exam: Tina was in her stall, with left rear foot on bars for the exam. Attempted three times to place hand in rectum, but only minimally successful, as Tina moved away and turned around each time.  
  
A: Rectal attempt was not succesful. Elephant is not ready for a rectal exam at this time. Remains unclear why there is intermittent gaping behavior- list of differentials noted before remains the same.

Animal Type	GAN	Preferred ID	Taxonomy	Sex	Birth Date
Individual	26752287	992278	Elephas maximus indicus/Indian elephant	Female	~ from Jul 01, 1965 to Jul 01, 1966

P: Discontinue psyllium for the time being.  
Monitor closely and give vet daily update. If gaping resumes, can trial some flunixin and see what happens with clinical signs.  
Keepers need to now transition the rectal behavior to the ERD (had been doing it from stall door). Vets will come down to work on behavior with elephant team.  
OK to discontinue the canker powder on RR D4 nail.

Dx: Urinalysis: USG 1.024, numerous Ca oxalate crystals (normal, but not usually seen in this number for this elephant- this was a very fresh, end of stream urine sample though). 0-14 wbc/hpf. Trace protein.

DLKeller, DVM

Animal Care Staff Medical Summary

~

Calendar Items

Date	Title	Assigned To	Done
~	~	~	~

Sample

Sample Detail

**Collection Date/Time** Apr 15, 2024 00:00  
**Sample Type** Urine  
**Additives/Preservatives** ~  
**Collection Method** Free Catch  
**Collected By** Dominique Keller  
**Reason** ~  
**Exclude from reference intervals** No

Sample Quality

**Color** Yellow  
**Color Intensity** medium  
**Clarity** Clear  
**Degraded** No

Initial Holding Conditions

**Initial Holding Temp.** ~  
**Initial Holding Duration** ~

Sample History

Date	Sample ID / Sample GSN	Status	Laboratory / Test Order / Test Results
Apr 15, 2024	~/~	Available	LOSANGELE/12/12

Notes

~

Calendar Items

Date	Title	Assigned To	Done
~	~	~	~

Test & Result

Test Request Detail

**Date Requested** Apr 15, 2024  
**Requested By** Dominique Keller  
**Analysis Start Date & Time** Apr 15, 2024 00:00  
**Analysis By** Deanna Rocca  
**Analysis Equipment** ~  
**Insufficient Sample** No

Sample Quality

**Color** Yellow  
**Color Intensity** medium  
**Clarity** Clear  
**Consistency** ~  
**Additional Characteristics** ~  
**Degraded** No

Notes/Comments

Sediment exam: Abundant/TNTC calcium oxylate crystals/HPF  
0-4 WBC/HPF  
0-1 epithelial cell/HPF  
scant to small amount of mixed bacteria and amorphous debris present



Animal Type	GAN	Preferred ID	Taxonomy	Sex	Birth Date
Individual	26752287	992278	Elephas maximus indicus/Indian elephant	Female	~ from Jul 01, 1965 to Jul 01, 1966

Test Requests & Test Results						
Test	Primary Result	Expected Results (Based on Best Available Match) Type: Min- Max   Mean [Median] N (Animals)	Evaluation	Excl'd. from RI	Clinical Finding	Reviewed
Urine Bilirubin [rs]	(-) Negative		~	~	~	Yes
Urine Urobili. [rs]	Normal 1 mg/dL		~	~	~	Yes
Urine Ketones [rs]	(-) Negative		~	~	~	Yes
Urine Protein [rs]	Trace		~	~	~	Yes
Urine Nitrite [rs]	Negative		~	~	~	Yes
Urine Leuk. [rs]	Negative		~	~	~	Yes
Urine Glucose [rs]	(-) Negative		~	~	~	Yes
pH [rs]	8.0 pH	Global subsp RI: 6.5 - 8.9   7.8 [8.0] N=169 (14)	~	No	~	Yes
Urine Blood [rs]	Negative		~	~	~	Yes
Sp Grav (test strip)	1.026 ratio	Global subsp RI: 1.000 - 1.025   1.010 [1.010] N=74 (3)	High	No	~	Yes
Sp Grav (R)	1.024 ratio	Global subsp RI: 1.004 - 1.028   1.019 [1.018] N=82 (9)	~	No	~	Yes
Urine Ascorbic [rs]	Normal		~	~	~	Yes

Sample Detail (GSN: S-TCW24-150618)			
Collection Date/Time	Apr 15, 2024 00:00	Collection Method	Free Catch
Sample Type	Urine	Collected By	Dominique Keller
Anatomical Source/Tissue	~	Reason	~
Additives/Preservatives	~	Exclude from reference intervals	No

Apr 14, 2024

Clinical note		
Date	Time	Note Author
Apr 14, 2024	00:00	Dominique Keller
Significant	Private	Active Problems
No	No	~
Note Subtype: General		
Notes/Comments		
Foot swab culture results review: This site had some necrotic debris- likely what was sent in for culture- this is not an abscess or wound.		
Dx: Culture results: Proteus hauseri, Corynebacterium sp. and E. coli- likely fecal or ground contaminants.		
P: No specific new treatment needed for this site. Continue with regular cleaning and care of feet.		
DLKeller, DVM		
Animal Care Staff Medical Summary		
~		

Animal Type	GAN	Preferred ID	Taxonomy	Sex	Birth Date
Individual	26752287	992278	Elephas maximus indicus/Indian elephant	Female	~ from Jul 01, 1965 to Jul 01, 1966

Calendar Items

Date	Title	Assigned To	Done
~	~	~	~

Clinical note

Date

Apr 14, 2024

Time

00:00

Note Author

Megan Duncan

Significant

No

Private

No

Active Problems

~

Note Subtype: General

Notes/Comments

Tech Note: Elephant keepers (MR + LW) brought up a swab from animals L rear foot that appeared to be purulent material that had not been observed before. Inofrmed vet (DLK) and sample was sent for culture at Idexx as requested.

Animal Care Staff Medical Summary

~

Calendar Items

Date	Title	Assigned To	Done
~	~	~	~

Sample

Sample Detail

Collection Date/Time

Apr 14, 2024 00:00

Sample Type

Tissue

Anatomical Source/Tissue

Left rear foot

Additives/Preservatives

~

Collection Method

Swab

Collected By

Dominique Keller

Reason

~

Exclude from reference intervals

No

Sample Quality

Additional Characteristics

~

Degraded

No

Initial Holding Conditions

Initial Holding Temp.

~

Initial Holding Duration

~

Sample History

Date	Sample ID / Sample GSN	Status	Laboratory / Test Order / Test Results
Apr 14, 2024	~/~	Available	IDEXVTCCT/4/4

Notes

abscess L rear foot medial toe

Calendar Items

Date	Title	Assigned To	Done
~	~	~	~

Test & Result

Test Request Detail

Date Requested

Apr 14, 2024

Requested By

Dominique Keller

Laboratory

IDEXVTCCT

Analysis Start Date

Apr 14, 2024

Analysis Equipment

~

Insufficient Sample

No

Sample Quality

Color

~

Color Intensity

~

Clarity

~

Consistency

~

Additional Characteristics

~

Degraded

No

Printed: Aug 31, 2024

Los Angeles Zoo & Botanical Gardens

Page 82 of 132

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Report Start Date  
Feb 01, 2024

Medical History Report for All Record Types

Report End Date  
Aug 23, 2024

SPECIES  
360

Animal Type	GAN	Preferred ID	Taxonomy	Sex	Birth Date
Individual	26752287	992278	Elephas maximus indicus/Indian elephant	Female	~ from Jul 01, 1965 to Jul 01, 1966

Notes/Comments

**Veterinarian:** Keller  
**Requisition:** 233026035  
**Additional Notes:** Source - ABSCESS  
Site - LEFT REAR FOOT MEDIAL TOE  
Status: FINAL

Isolate 1 MIC Isolate 2 MIC  
Cefotaxime S S  
Amoxicillin R >=32 R 4  
Amoxicillin-Clavulanic Acid R 2 R 8  
Cephalexin R >=64 R >=64  
Cefpodoxime S <=0.25 S 2  
Cefovecin S <=0.5 S 1  
Ceftazidime S <=0.12 S 0.5  
Ceftiofur S <=1 S <=1  
Amikacin S <=2 S <=2  
Gentamicin S <=1 S <=1  
Ciprofloxacin S 0.12 S <=0.06  
Enrofloxacin S 0.5 S <=0.12  
Marbofloxacin S <=0.5 S <=0.5  
Doxycycline R R 1  
Chloramphenicol R 32 S 4  
Trimethoprim/Sulfamethoxazole R >=320 S <=20  
Imipenem / Carbapenem N/I S <=0.25  
Status: FINAL

**Notes for Aerobic Bacteria Culture (unspecified culture media):**  
**Result:** 2+ Proteus hauseri

**Notes for Anaerobic Bacteria Culture:**  
**Result:** No organisms isolated anaerobically

**Notes for Aerobic Bacteria Culture (unspecified culture media):**  
**Result:** 1+ E. coli

**Notes for Aerobic Bacteria Culture (unspecified culture media):**  
**Note:** There are no CLSI guidelines for disc diffusion susceptibility of Corynebacteria to facilitate antibiotic selection, therefore susceptibility testing was not performed. Most Corynebacteria can be treated successfully with aminoglycosides (i.e. Gentamicin, Neomycin, and Amikacin), Florfenicol, or Doxycycline.  
**Result:** 1+ Corynebacterium

**Result information for unmapped results:**

- Source: (Test: 8503, Category: Microbiology, Taxonomy: UNKNOWN): ABSCESS
- Site: (Test: 71873, Category: Microbiology, Taxonomy: UNKNOWN): LEFT REAR FOOT MEDIAL TOE

Animal Type	GAN	Preferred ID	Taxonomy	Sex	Birth Date
Individual	26752287	992278	Elephas maximus indicus/Indian elephant	Female	~ from Jul 01, 1965 to Jul 01, 1966

Test Requests & Test Results						
Test	Primary Result	Expected Results (Based on Best Available Match) Type: Min- Max   Mean [Median] N (Animals)	Evaluation	Excl'd. from RI	Clinical Finding	Reviewed
Aerobic Culture	Taxon Result - Proteus hauseri / Proteus hauseri		~	~	~	Yes
Secondary Result	moderate growth					
Anaerobic Culture	No growth		~	~	~	~
Aerobic Culture	Taxon Result - Escherichia coli / E. coli		~	~	~	Yes
Secondary Result	light growth					
Aerobic Culture	Taxon Result - Corynebacterium / Corynebacterium		~	~	~	Yes
Secondary Result	light growth					

Sample Detail (GSN: S-TCW24-150612)			
Collection Date/Time	Apr 14, 2024 00:00	Collection Method	Swab
Sample Type	Tissue	Collected By	Dominique Keller
Anatomical Source/Tissue	Left rear foot	Reason	~
Additives/Preservatives	~	Exclude from reference intervals	No

Apr 13, 2024

Clinical note

Date	Time	Note Author
Apr 13, 2024	00:00	Dominique Keller
Significant	Private	Active Problems
No	No	~

Note Subtype: General

Notes/Comments

Update: The omeprazole may be making a difference in terms of reduction in gaping and possible discomfort behaviors.

P: Will extend current script for an additional 14 days. Also restarting the regular psyllium cycle of administration.

DLKeller, DVM

Animal Care Staff Medical Summary

~

Calendar Items			
Date	Title	Assigned To	Done
~	~	~	~

Apr 09, 2024

Clinical note

Date	Time	Note Author
Apr 09, 2024	00:00	Dominique Keller
Significant	Private	Active Problems
No	No	~

Note Subtype: General

Notes/Comments

Animal Type	GAN	Preferred ID	Taxonomy	Sex	Birth Date
Individual	26752287	992278	Elephas maximus indicus/Indian elephant	Female	~ from Jul 01, 1965 to Jul 01, 1966

Verbal update: Keepers report that Tina is taking the omeprazole well, and they are not seeing any of the gaping behavior in the mornings at this time.

A/P: Visual in a few days, this will give us a few more days to observe whether there are truly less behavioral signs (i.e. gaping) while on the omeprazole.

DLKeller, DVM

Animal Care Staff Medical Summary

~

Calendar Items

Date	Title	Assigned To	Done
~	~	~	~

Apr 03, 2024

Clinical note

Date

Apr 03, 2024

Significant

No

Note Subtype: General

Notes/Comments

Verbal update: Per keepers, Tina is taking the omeprazole without issue. Reminded keepers to note any behavioral changes or signs of discomfort for review for any patterns or associations. Keeper noted more progress being made for rectal ultrasound. Urine collection- opportunistic.

P: Update in a few days. Transitional cell possible abnormality needs to be monitored closely, and will ask that a repeat sample be sent next week for recheck.

Dx: Urinalysis: USG lower than ref. ranges. mean in ZIMS, no crystals, 0-4 squamous cells, 0-2 transitional epithelial cells, some of which appear binucleated. Sent to IDEXX. IDEXX UA: Confirms USG and notes 1-2/hpf transitional cells. No notes on any abnormal morphology.

DLKeller, DVM

Animal Care Staff Medical Summary

~

Calendar Items

Date	Title	Assigned To	Done
~	~	~	~

Note Author

Dominique Keller

Active Problems

~

Prescription/Treatment

Basic Info

Date Written

Apr 02, 2024

Start Date

Apr 03, 2024 00:00

Prescribed By

Dominique Keller

Prescribed For

1 animal

Reason For Treatment

~

Weight Info

Date

Apr 02, 2024

Measurement Value

3,350 kg

Estimate

Yes

Exclude From Reference Intervals

Yes

Animal Type	GAN	Preferred ID	Taxonomy	Sex	Birth Date
Individual	26752287	992278	Elephas maximus indicus/Indian elephant	Female	~ from Jul 01, 1965 to Jul 01, 1966

Treatment Detail

Treatment Item/Drug

Omeprazole

Dose Amount

3,000 mg

Dosage Amount

0.896 mg/kg

Administrated Dose Quantity

3,000 mg

Frequency

once a day (sid)

Duration

14days

Delivery Route

Oral (p.o.)

Loading Dose

~

Form of Drug

~

Concentration Of Drug

~

Treatment Response

Clinical Response

~

Adverse Effects

~

Adverse Effects Note:

~

Staff Instructions

Give 3,000 mg (1 scoop) of Omeprazole, once a day (sid) for 14 days. Provided scoop (loosely packed) is 3000 mg of powder.  
Start treatment on Apr 03, 2024  
Administration route: Oral (p.o.)

Prescription Notes/Comments

~

Calendar Items

Date	Title	Assigned To	Done
Apr 16, 2024	992278 / Indian elephant / 26752287 Omeprazole treatment is complete	Dominique Keller	No

Dispensing Records

Date Dispensed	Dispensed By	Quantity Dispensed
~	~	~

Administration Records

Administration Date/Time	Administered By	Success	Notes
~	~	~	~

Sample

Sample Detail

Collection Date/Time

Apr 03, 2024 00:00

Sample Type

Urine

Additives/Preservatives

~

Collection Method

Free Catch

Collected By

Dominique Keller

Reason

~

Exclude from reference intervals

No

Sample Quality

Color

Yellow

Color Intensity

light

Clarity

Clear

Degraded

No

Initial Holding Conditions

Initial Holding Temp.

~

Initial Holding Duration

~

Sample History

Date	Sample ID / Sample GSN	Status	Laboratory / Test Order / Test Results
Apr 03, 2024	~/~	Available	LOSANGELE/16/16

Notes

~

Animal Type	GAN	Preferred ID	Taxonomy	Sex	Birth Date
Individual	26752287	992278	Elephas maximus indicus/Indian elephant	Female	~ from Jul 01, 1965 to Jul 01, 1966

Calendar Items			
Date	Title	Assigned To	Done
~	~	~	~

Test & Result

Test Request Detail

Date Requested

Apr 03, 2024

Requested By

Dominique Keller

Analysis Start Date & Time

Apr 03, 2024 00:00

Analysis By

Deanna Rocca

Analysis Equipment

~

Insufficient Sample

No

Sample Quality

Color

Yellow

Color Intensity

light

Clarity

Clear

Consistency

~

Additional Characteristics

~

Degraded

No

Notes/Comments

Sediment Exam : 4 ml of 30 spun for exam.  
0-1 WBC/HPF  
0-4 Suamous epi cell/HPF  
0-2 Transitional epi cell/HPF'  
1 cluster of 6 transitional epithelial cells observed. Some looked like bi-nucleated and several looked like they had globules in the cytoplasm.  
0-1 caudate epithelial cell/HPF  
Urine submitted to IDexx due to the questionable transitional epithelial cells.  
Small amount amorphous debris present.

Animal Type	GAN	Preferred ID	Taxonomy	Sex	Birth Date
Individual	26752287	992278	Elephas maximus indicus/Indian elephant	Female	~ from Jul 01, 1965 to Jul 01, 1966

Test Requests & Test Results						
Test	Primary Result	Expected Results (Based on Best Available Match) Type: Min- Max   Mean [Median] N (Animals)	Evaluation	Excl'd. from RI	Clinical Finding	Reviewed
Urine Bilirubin [rs]	(-) Negative		~	~	~	Yes
Urine Urobili. [rs]	Normal 0.2 mg/dL		~	~	~	Yes
Urine Ketones [rs]	(-) Negative		~	~	~	Yes
Protein	0 mg/dL	Global sp RI: 0 - 180   36 [14] N=86 (27)	~	No	~	Yes
Urine Nitrite [rs]	Negative		~	~	~	Yes
Urine Leuk. [rs]	Negative		~	~	~	Yes
Urine Glucose [rs]	(-) Negative		~	~	~	Yes
pH [rs]	7.5 pH	Global subsp RI: 6.5 - 8.9   7.8 [8.0] N=169 (14)	~	No	~	Yes
Urine Blood [rs]	Negative		~	~	~	Yes
Sp Grav (test strip)	1.005 ratio	Global subsp RI: 1.000 - 1.025   1.010 [1.010] N=74 (3)	~	No	~	Yes
Sp Grav (R)	1.004 ratio	Global subsp RI: 1.004 - 1.028   1.019 [1.018] N=82 (9)	~	No	~	Yes
Urine Ascorbic [rs]	Normal		~	~	~	Yes
Hyaline Casts	Negative [none]		~	~	~	Yes
Granular casts	Negative [none]		~	~	~	Yes
Ca Oxalate Crystals	None seen		~	~	~	Yes
Ca Phos Crystals	None seen		~	~	~	Yes

Sample Detail (GSN: S-TCW24-150469)			
Collection Date/Time	Apr 03, 2024 00:00	Collection Method	Free Catch
Sample Type	Urine	Collected By	Dominique Keller
Anatomical Source/Tissue	~	Reason	~
Additives/Preservatives	~	Exclude from reference intervals	No

Apr 02, 2024

Clinical note		
Date	Time	Note Author
Apr 02, 2024	00:00	Dominique Keller
Significant	Private	Active Problems
No	No	~
Note Subtype: General		
Notes/Comments		
Verbal update: Keeper called mid-day to report that Tina had some mouth gaping and stretching behavior this morning. No straining or tail elevation was noted. Had defecated normal appearing boluses in appropriate amounts overnight. Within about 20 min of the behavior, defecated and urinated- though the fecal boluses are still breaking apart on impact with the ground, they are formed, of normal size, moist and with no sand or foreign material in them. Keepers have not noted a pattern of this apparent discomfort, though possibly it is seen more in the morning than later in the day. There has been no change in diet or how it is offered, appetite remains good and elephant is not on psyllium at this time.		



Animal Type	GAN	Preferred ID	Taxonomy	Sex	Birth Date
Individual	26752287	992278	Elephas maximus indicus/Indian elephant	Female	~ from Jul 01, 1965 to Jul 01, 1966

A: This is similar to what we have seen in the recent past. The timing of the event seems to be earlier in the day, and may or may not be related to defecation or urination. I have asked keepers to try to see if they can document this better in case there is a pattern we are missing. Differentials include GI disorder (ulcers, impaction, ileus, foreign material, GI spasms), urinary tract disorder (recent urinalyses do not support at UTI but calculi, neoplasia other remain on the list), reproductive tract disorder (known hx of uterine leiomyomas, last visualized in 2012). There may be an abdominal mass effect causing compression of the GI or urinary tracts, which could mimic a primary disorder in those systems.

P: Scripting out omeprazole, in case there is some GI discomfort due to GI ulceration. Current course for 14 days, but can be extended. Keepers are making progress with rectal desensitization, so plan is to schedule a rectal ultrasound as soon as elephant is ready behaviorally. Ideally this animal should receive a full reproductive tract evaluation with reproductive consultants, which has been discussed with management recently.

Rx: Omeprazole, 1 mg/kg PO SID for 14 days.

DLKeller, DVM

Animal Care Staff Medical Summary

~

Calendar Items

Date	Title	Assigned To	Done
~	~	~	~

Apr 01, 2024

Clinical note

Date	Time	Note Author
Apr 01, 2024	00:00	Dominique Keller
Significant	Private	Active Problems
No	No	~

Note Subtype: General

Notes/Comments

Vitamin A and E levels (screening at Cornell lab): There have been recent concerns about hypovitaminosis A in rhinoceros and possibly in elephants- due to feed formulation issues (the current feeds for these animals we have are not ones of concern, this was confirmed by nutritionist)  
Vitamin A: 27 ug/L  
Lab interpretation: Serum and plasma vitamin A concentrations in Asian elephants ranged from 10 to 120 ug/L (Shrestha et al, 1998).

Vitamin E: 113 ug/dL  
Lab interpretation: These serum vitamin E concentrations appear to be adequate.  
The range given for serum vitamin E concentrations in Asian elephants in Nepal was 23 to 150 ug/dL with a mean of 77 ug/dL. (Shrestha et al 1998).

A: Levels of vitamins A & E appear to be adequate in this animal.

DLKeller, DVM

Animal Care Staff Medical Summary

~

Calendar Items

Date	Title	Assigned To	Done
~	~	~	~

Sample

Animal Type	GAN	Preferred ID	Taxonomy	Sex	Birth Date
Individual	26752287	992278	Elephas maximus indicus/Indian elephant	Female	~ from Jul 01, 1965 to Jul 01, 1966

Sample Detail

Collection Date/Time

Apr 01, 2024 00:00

Sample Type

Plasma

Anatomical Source/Tissue

~

Additives/Preservatives

Heparin

Collection Method

Phlebotomy

Collected By

Deanna Rocca

Reason

~

Exclude from reference intervals

No

Sample Quality

Color

~

Color Intensity

~

Clarity

~

Additional Characteristics

~

Degraded

No

Pre-Sampling Conditions

Fasting Duration

undetermined

Restraint Type

Behavioral

Activity

Moderate activity

Initial Holding Conditions

Initial Holding Temp.

~

Initial Holding Duration

~

Sample History

Date	Sample ID / Sample GSN	Status	Laboratory / Test Order / Test Results
Apr 01, 2024	~/~	Available	~/~/~
Apr 01, 2024	~/~	In storage	~/~/~

Notes

~

Calendar Items

Date	Title	Assigned To	Done
~	~	~	~

Sample Detail

Collection Date/Time

Apr 01, 2024 00:00

Sample Type

Serum

Anatomical Source/Tissue

~

Collection Method

Phlebotomy

Collected By

Dominique Keller

Reason

~

Exclude from reference intervals

No

Sample Quality

Color

~

Color Intensity

~

Clarity

~

Additional Characteristics

~

Degraded

No

Pre-Sampling Conditions

Fasting Duration

undetermined

Restraint Type

Behavioral

Activity

Moderate activity

Initial Holding Conditions

Initial Holding Temp.

~

Initial Holding Duration

~

Sample History

Date	Sample ID / Sample GSN	Status	Laboratory / Test Order / Test Results
Apr 01, 2024	~/~	Available	CORNELLAB/2/2
Apr 01, 2024	~/~	In storage	~/~/~
Apr 01, 2024	~/~	In storage	~/~/~
Apr 01, 2024	~/~	In storage	~/~/~

Notes

~

Calendar Items

Date	Title	Assigned To	Done
~	~	~	~

Test & Result

Animal Type	GAN	Preferred ID	Taxonomy	Sex	Birth Date
Individual	26752287	992278	Elephas maximus indicus/Indian elephant	Female	~ from Jul 01, 1965 to Jul 01, 1966

Test Request Detail

Date Requested

Apr 01, 2024

Requested By

Dominique Keller

Laboratory

CORNELLAB

Analysis Start Date

Apr 01, 2024

Analysis Equipment

~

Insufficient Sample

No

Sample Quality

Color

~

Color Intensity

~

Clarity

~

Consistency

~

Additional Characteristics

~

Degraded

No

Notes/Comments

Comments: Serum and plasma vitamin A concentrations in Asian elephants ranged from 10 to 120 ug/L (Shrestha et al, 1998).  
  
The range given for serum vitamin E concentrations in Asian elephants in Nepal was 23 to 150 ug/dL with a mean of 77 ug/dL (Shrestha et al 1998).

Test Requests & Test Results

~~

Test	Primary Result	Expected Results (Based on Best Available Match) Type: Min- Max   Mean [Median] N (Animals)	Evaluation	Excl'd. from RI	Clinical Finding	Reviewed
Vit A HPLC-FLD	27 µg/L	Not calculated	~	~	~	Yes
Vit. E HPLC	113 µg/dL	Insufficient data	~	No	~	Yes

Sample Detail (GSN: S-TCW24-150570)

Collection Date/Time

Apr 01, 2024 00:00

Sample Type

Serum

Anatomical Source/Tissue

~

Additives/Preservatives

~

Collection Method

Phlebotomy

Collected By

Dominique Keller

Reason

~

Exclude from reference intervals

No

Mar 28, 2024

Clinical note

Date

Mar 28, 2024

Time

00:00

Note Author

Dominique Keller

Significant

No

Private

No

Active Problems

~

Note Subtype: General

Notes/Comments

Routine urinalysis: USG within species ref. ranges. Rare crystals (normal finding), rare wbc and bacteria- not suggestive of a urinary tract infection, nor of infection in the reproductive tract.  
  
P: Continue routine urinalyses.  
  
DLKeller, DVM

Animal Care Staff Medical Summary

~

Calendar Items

Date	Title	Assigned To	Done
~	~	~	~

Sample

Animal Type	GAN	Preferred ID	Taxonomy	Sex	Birth Date
Individual	26752287	992278	Elephas maximus indicus/Indian elephant	Female	~ from Jul 01, 1965 to Jul 01, 1966

Sample Detail

Collection Date/Time

Mar 28, 2024 00:00

Sample Type

Urine

Additives/Preservatives

~

Collection Method

Free Catch

Collected By

Dominique Keller

Reason

~

Exclude from reference intervals

No

Sample Quality

Color

Yellow

Color Intensity

light

Clarity

Clear

Degraded

No

Initial Holding Conditions

Initial Holding Temp.

~

Initial Holding Duration

~

Sample History

Date	Sample ID / Sample GSN	Status	Laboratory / Test Order / Test Results
Mar 28, 2024	~/~	Available	LOSANGELE/14/14

Notes

~

Calendar Items

Date	Title	Assigned To	Done
~	~	~	~

Test & Result

Test Request Detail

Date Requested

Mar 28, 2024

Requested By

Dominique Keller

Analysis Start Date & Time

Mar 28, 2024 00:00

Analysis By

Deanna Rocca

Analysis Equipment

~

Insufficient Sample

No

Sample Quality

Color

Yellow

Color Intensity

light

Clarity

Clear

Consistency

~

Additional Characteristics

~

Degraded

No

Notes/Comments

Sediment exam - 4 mls spun  
Rare calcium oxylate crystals  
Scant mixed bacteria, primarily cocci  
Rare 0-1 WBC/HPF (2 observed)

Animal Type	GAN	Preferred ID	Taxonomy	Sex	Birth Date
Individual	26752287	992278	Elephas maximus indicus/Indian elephant	Female	~ from Jul 01, 1965 to Jul 01, 1966

Test Requests & Test Results						
Test	Primary Result	Expected Results (Based on Best Available Match) Type: Min- Max   Mean [Median] N (Animals)	Evaluation	Exclud. from RI	Clinical Finding	Reviewed
Urine Bilirubin [rs]	(-) Negative		~	~	~	Yes
Urine Urobili. [rs]	Normal 0.2 mg/dL		~	~	~	Yes
Urine Ketones [rs]	(-) Negative		~	~	~	Yes
Protein	0 mg/dL	Global sp RI: 0 - 180   36 [14] N=86 (27)	~	No	~	Yes
Urine Nitrite [rs]	Negative		~	~	~	Yes
Urine Leuk. [rs]	Negative		~	~	~	Yes
Urine Glucose [rs]	(-) Negative		~	~	~	Yes
pH [rs]	8.0 pH	Global subsp RI: 6.5 - 8.9   7.8 [8.0] N=169 (14)	~	No	~	Yes
Urine Blood [rs]	Negative		~	~	~	Yes
Sp Grav (test strip)	1.015 ratio	Global subsp RI: 1.000 - 1.025   1.010 [1.010] N=74 (3)	~	No	~	Yes
Sp Grav (R)	1.016 ratio	Global subsp RI: 1.004 - 1.028   1.019 [1.018] N=82 (9)	~	No	~	Yes
Urine Ascorbic [rs]	Normal		~	~	~	Yes
Hyaline Casts	Negative [none]		~	~	~	Yes
Granular casts	Negative [none]		~	~	~	Yes
Sample Detail (GSN: S-TCW24-150438)						
Collection Date/Time		Mar 28, 2024 00:00	Collection Method		Free Catch	
Sample Type		Urine	Collected By		Dominique Keller	
Anatomical Source/Tissue		~	Reason		~	
Additives/Preservatives		~	Exclude from reference intervals		No	

Mar 27, 2024

Clinical note		
Date	Time	Note Author
Mar 27, 2024	00:00	Dominique Keller
Significant	Private	Active Problems
No	No	~
Note Subtype: General		
Notes/Comments		
Visual recheck: Tina is doing well- mobility is good, as is attitude. Keepers note that fecal boluses are moist, formed with no sand, though they do tend to fall apart when they hit the ground. Cut up browse is still being offered. Chopped hay particle size could only be increased a very small amount due to limitations of the hay chopper. This has not changed the fecal character per keepers. Keepers have added daily vulvar cleanses with daily hosing and the vinegar douching remains on a weekly schedule. They note more frequent urination. Rectal desensitization continues and progress is being made- but Tina is not back to being ready for a rectal ultrasound yet.		
O: Alert, bright.		

Animal Type	GAN	Preferred ID	Taxonomy	Sex	Birth Date
Individual	26752287	992278	Elephas maximus indicus/Indian elephant	Female	~ from Jul 01, 1965 to Jul 01, 1966

N: mentation is appropriate

Repro: The small vulvar lesion noted on last exam is unchanged in appearance. There is another smaller skin nodule- firm, non-movable, pigmented, approximately 4 mm in diameter, 3 mm tall- that is located just above the original lesion. It is not open and does not appear to have a core. There is no malodor of the vulvar area and the vulvar skin is in good condition.

M/S: On the medial aspect of both rear feet, there has been substantial positive progress with the overgrown tissue and delamination via corrective trimming and scrubbing. The skin of both these areas is much healthier and in better condition than it was even two weeks ago. The nail lesions that were noted by consultant at last visit are all also making positive progress.

A:

- Two small vulvar nodules, one new. Histopath pending on the one examined last week.
- Vulvar malodor much improved with daily cleansing
- M/S changes are positive

P: Update in a few days.

Addendum: Keepers obtained small amount of blood- this is for vitamin A analysis in light of recent information of some vitamin A supplement issues with Mazuri diets, including those for elephants. Our current supply of elephant pellets is from a newly formulated batch that does not have any formulation issues.

Dx: Serum vitamin A (Cornell): Pending

DLKeller, DVM

Animal Care Staff Medical Summary

~

Calendar Items

Date	Title	Assigned To	Done
~	~	~	~

Sample

Sample Detail

Collection Date/Time Mar 27, 2024 00:00

Sample Type Serum

Anatomical Source/Tissue ~

Collection Method Phlebotomy

Collected By Dominique Keller

Reason ~

Exclude from reference intervals No

Sample Quality

Color ~

Color Intensity ~

Clarity ~

Additional Characteristics ~

Degraded No

Initial Holding Conditions

Initial Holding Temp. ~

Initial Holding Duration ~

Pre-Sampling Conditions

Fasting Duration undetermined

Restraint Type Behavioral

Activity Moderate activity

Sample History

Date	Sample ID / Sample GSN	Status	Laboratory / Test Order / Test Results
Mar 27, 2024	~/~	Available	~/~/~
Mar 27, 2024	~/~	In storage	~/~/~

Notes

~

Calendar Items

Date	Title	Assigned To	Done
~	~	~	~

Mar 26, 2024

Clinical note

Date Mar 26, 2024

Time 00:00

Note Author Dominique Keller

Significant Private

Active Problems

No No ~

Animal Type	GAN	Preferred ID	Taxonomy	Sex	Birth Date
Individual	26752287	992278	Elephas maximus indicus/Indian elephant	Female	~ from Jul 01, 1965 to Jul 01, 1966

Note Subtype: General

Notes/Comments

Verbal update: Keepers have noted another firm cutaneous mass effect on the outside of the vulvar folds.

P: Will perform visual exam tomorrow.

DLKeller, DVM

Animal Care Staff Medical Summary

~

Calendar Items

Date	Title	Assigned To	Done
~	~	~	~

Prescription/Treatment

Basic Info

Date Written

Mar 26, 2024

Start Date

Mar 26, 2024 00:00

Prescribed By

Dominique Keller

Prescribed For

1 animal

Reason For Treatment

~

Weight Info

Date

Mar 26, 2024

Measurement Value

3,350 kg

Estimate

Yes

Exclude From Reference Intervals

Yes

Animal Type	GAN	Preferred ID	Taxonomy	Sex	Birth Date
Individual	26752287	992278	Elephas maximus indicus/Indian elephant	Female	~ from Jul 01, 1965 to Jul 01, 1966

Treatment Detail

Treatment Item/Drug

Musher's Secret

Dose Amount

~

Dosage Amount

~

Administrated Dose Quantity

~

Frequency

as needed

Duration

365days

Delivery Route

Topical

Loading Dose

~

Form of Drug

~

Concentration Of Drug

~

Treatment Response

Clinical Response

~

Adverse Effects

~

Adverse Effects Note:

~

Staff Instructions

Apply topically to face abrasions once a day to as needed. Script is valid for 365 days.  
Start March 2024.  
  
Musher's Secret Ointment

Prescription Notes/Comments

~

Calendar Items

Date	Title	Assigned To	Done
Mar 25, 2025	992278 / Indian elephant / 26752287 Musher's Secret treatment is complete	Dominique Keller	No

Dispensing Records

Date Dispensed	Dispensed By	Quantity Dispensed
~	~	~

Administration Records

Administration Date/Time	Administered By	Success	Notes
~	~	~	~

Mar 21, 2024

Clinical note

Date

Mar 21, 2024

Time

00:00

Note Author

Dominique Keller

Significant

No

Private

No

Active Problems

~

Note Subtype: General

Notes/Comments

Body condition scoring, urinalysis: Nutrtionist body conditioned elephants today. Scored this individual at 4/9. Adequate numbers of fecal piles were noted so far today. Tina is on mineral oil at the moment. Nutritionist discussed browse and chopped hay being offered. Keepers are still offering the hay at the original size as they are working on trying to increase the fiber length slightly.  
  
P: More discussion to be had regarding chopped hay size and how browse will be offered. Nutritionist will investigate labs that can run microbiome analyses, as we may want to pursue this.  
  
Dx: Urinalysis: USG 1.106 (same as yesterday). However, no CaCO3 crystals, which is considered unusual.  
  
DLKeller, DVM

Animal Care Staff Medical Summary

~



Animal Type	GAN	Preferred ID	Taxonomy	Sex	Birth Date
Individual	26752287	992278	Elephas maximus indicus/Indian elephant	Female	~ from Jul 01, 1965 to Jul 01, 1966

Calendar Items

Date	Title	Assigned To	Done
~	~	~	~

Sample

Sample Detail

Collection Date/Time

Mar 21, 2024 00:00

Sample Type

Urine

Additives/Preservatives

~

Collection Method

Free Catch

Collected By

Dominique Keller

Reason

~

Exclude from reference intervals

No

Sample Quality

Color

Yellow

Color Intensity

medium

Clarity

Clear

Degraded

No

Initial Holding Conditions

Initial Holding Temp.

~

Initial Holding Duration

~

Sample History

Date	Sample ID / Sample GSN	Status	Laboratory / Test Order / Test Results
Mar 21, 2024	~/~	Available	LOSANGELE/16/16

Notes

~

Calendar Items

Date	Title	Assigned To	Done
~	~	~	~

Test & Result

Test Request Detail

Date Requested

Mar 21, 2024

Requested By

Dominique Keller

Analysis Start Date & Time

Mar 21, 2024 00:00

Analysis By

Deanna Rocca

Analysis Equipment

~

Insufficient Sample

No

Sample Quality

Color

Yellow

Color Intensity

medium

Clarity

Clear

Consistency

~

Additional Characteristics

~

Degraded

No

Notes/Comments

Sediment exam:  
0-2 squam epithelial cells /HPF  
Small amount of amorphous debris.

Animal Type	GAN	Preferred ID	Taxonomy	Sex	Birth Date
Individual	26752287	992278	Elephas maximus indicus/Indian elephant	Female	~ from Jul 01, 1965 to Jul 01, 1966

Test Requests & Test Results						
Test	Primary Result	Expected Results (Based on Best Available Match) Type: Min- Max   Mean [Median] N (Animals)	Evaluation	Excl'd. from RI	Clinical Finding	Reviewed
Urine Bilirubin [rs]	(-) Negative		~	~	~	Yes
Urine Urobili. [rs]	Normal 0.2 mg/dL		~	~	~	Yes
Urine Ketones [rs]	(-) Negative		~	~	~	Yes
Protein	0 mg/dL	Global sp RI: 0 - 180   36 [14] N=86 (27)	~	No	~	Yes
Urine Nitrite [rs]	Negative		~	~	~	Yes
Urine Leuk. [rs]	Negative		~	~	~	Yes
Urine Glucose [rs]	(-) Negative		~	~	~	Yes
pH [rs]	8.0 pH	Global subsp RI: 6.5 - 8.9   7.8 [8.0] N=169 (14)	~	No	~	Yes
Urine Blood [rs]	Negative		~	~	~	Yes
Sp Grav (test strip)	1.010 ratio	Global subsp RI: 1.000 - 1.025   1.010 [1.010] N=74 (3)	~	No	~	Yes
Sp Grav (R)	1.016 ratio	Global subsp RI: 1.004 - 1.028   1.019 [1.018] N=82 (9)	~	No	~	Yes
Urine Ascorbic [rs]	Normal		~	~	~	Yes
Hyaline Casts	Negative [none]		~	~	~	Yes
Granular casts	Negative [none]		~	~	~	Yes
Ca Oxalate Crystals	None seen		~	~	~	Yes
Ca Phos Crystals	None seen		~	~	~	Yes

Sample Detail (GSN: S-TCW24-150371)			
Collection Date/Time	Mar 21, 2024 00:00	Collection Method	Free Catch
Sample Type	Urine	Collected By	Dominique Keller
Anatomical Source/Tissue	~	Reason	~
Additives/Preservatives	~	Exclude from reference intervals	No

Mar 19, 2024

Clinical note		
Date	Time	Note Author
Mar 19, 2024	00:00	Dominique Keller
Significant	Private	Active Problems
No	No	~
Note Subtype: General		
Notes/Comments		
Verbal update: Fecal boluses are moist and appropriately shaped and sized, however, reduced number of piles was seen from overnight and Tina was seen gaping this morning as if in a little discomfort.		
Keepers note the main change in the last 3 days has been how they are administering the psyllium- they have been sprinkling the pellets on food/bran instead of mixing it in- so		

could this be contributing to clinical signs?

Keeper also notes that there is definitely more odor to the vulvar area over past few days.

Collected small urine sample- only enough for a USG, more will be collected tomorrow.

P: Discontinue psyllium at this time, for this course, we may need to reassess how this is given. (reason for change is that when it was mixed with bran, it solidified into a mass that was passed intact through the GI tract.

Start mineral oil therapy again.

Update/recheck tomorrow.

Rx: Mineral oil, 1 gallon PO in bran SID for 5 days.\

Dx: USG: 1.016

DLKeller, DVM

Animal Care Staff Medical Summary

~

Calendar Items

Date	Title	Assigned To	Done
~	~	~	~

Prescription/Treatment

Basic Info

**Date Written** Mar 19, 2024  
**Start Date** Mar 19, 2024 00:00  
**Prescribed By** Dominique Keller  
**Prescribed For** 1 animal  
**Reason For Treatment** ~

Weight Info

**Date** Mar 19, 2024  
**Measurement Value** 3,350 kg  
**Estimate** Yes  
**Exclude From Reference Intervals** Yes

Animal Type	GAN	Preferred ID	Taxonomy	Sex	Birth Date
Individual	26752287	992278	Elephas maximus indicus/Indian elephant	Female	~ from Jul 01, 1965 to Jul 01, 1966

Treatment Detail

Treatment Item/Drug

MINERAL OIL

Dose Amount

1 gal liq (US)

Dosage Amount

~

Administrated Dose Quantity

1 gal liq (US)

Frequency

once a day (sid)

Duration

5days

Delivery Route

Oral (p.o.)

Loading Dose

~

Form of Drug

~

Concentration Of Drug

~

Treatment Response

Clinical Response

~

Adverse Effects

~

Adverse Effects Note:

~

Staff Instructions

Give 1 gal liq (US) of MINERAL OIL, once a day in bran (sid) for 5 days.  
Start treatment on Mar 19, 2024  
Administration route: Oral (p.o.)

Prescription Notes/Comments

~

Calendar Items

Date	Title	Assigned To	Done
~	~	~	~

Dispensing Records

Date Dispensed	Dispensed By	Quantity Dispensed
~	~	~

Administration Records

Administration Date/Time	Administered By	Success	Notes
~	~	~	~

Sample

Sample Detail

Collection Date/Time

Mar 19, 2024 00:00

Sample Type

Urine

Additives/Preservatives

~

Collection Method

Free Catch

Collected By

Dominique Keller

Reason

~

Exclude from reference intervals

No

Sample Quality

Color

Yellow

Color Intensity

light

Clarity

Clear

Degraded

No

Initial Holding Conditions

Initial Holding Temp.

~

Initial Holding Duration

~

Sample History

Date	Sample ID / Sample GSN	Status	Laboratory / Test Order / Test Results
Mar 19, 2024	~/~	Available	LOSANGELE/1/1

Notes

~

Animal Type	GAN	Preferred ID	Taxonomy	Sex	Birth Date
Individual	26752287	992278	Elephas maximus indicus/Indian elephant	Female	~ from Jul 01, 1965 to Jul 01, 1966

Calendar Items			
Date	Title	Assigned To	Done
~	~	~	~

Test & Result

Test Request Detail		Sample Quality	
Date Requested	Mar 19, 2024	Color	Yellow
Requested By	Dominique Keller	Color Intensity	light
Analysis Start Date & Time	Mar 19, 2024 00:00	Clarity	Clear
Analysis By	Deanna Rocca	Consistency	~
Analysis Equipment	~	Additional Characteristics	~
Insufficient Sample	No	Degraded	No
Notes/Comments			
~			

Test Requests & Test Results						
~						
Test	Primary Result	Expected Results (Based on Best Available Match) Type: Min- Max   Mean [Median] N (Animals)	Evaluation	Excl'd. from RI	Clinical Finding	Reviewed
Specific Gravity	1.016 ratio	Global sp RI: 1.003 - 1.030   1.017 [1.018] N=149 (41)	~	No	~	Yes

Sample Detail (GSN: S-TCW24-150362)			
Collection Date/Time	Mar 19, 2024 00:00	Collection Method	Free Catch
Sample Type	Urine	Collected By	Dominique Keller
Anatomical Source/Tissue	~	Reason	~
Additives/Preservatives	~	Exclude from reference intervals	No

Mar 18, 2024

Clinical note

Date	Time	Note Author
Mar 18, 2024	00:00	Dominique Keller
Significant	Private	Active Problems
No	No	~
Note Subtype: General		
Notes/Comments		
<p>Update Vulvar polyp or cyst, blood draw: Keepers found a small nodule on the left vulvar flap yesterday, examined today. Elephant is still receiving once weekly vinegar douches, but very recently (last week or so?) they have seen Tina straining more, and urinating fully but then urinating a little more later, which is unusual. Fecal boluses are moist, subjectively I would say a little smaller than usual and keepers note that the boluses now fall apart when they fall to the ground, which they were not seeing until two weeks ago when they started adding inch long pieces of chopped browse. Their hypothesis is that the browse is changing the integrity of the boluses since the browse is passing through intact. (see more under Plan).</p> <p>O: Alert, bright. BCS: 5/9. N: Mentation is appropriate Repro: On the left vulvar lip, there is an approximately 7 mm diameter cutaneous nodule- when manipulated, the nodule is firm, non-mobile, but the a necrotic core is partially removed (and later placed in formalin). There is a generalized malodor to the area. GI: Fecal boluses are formed, moist and contained pieces of undigested cut browse.</p> <p>A: The straining and interrupted urination is new. Since all recent UA have been clean, with no evidence of UTI, it may be something else is causing clinical signs. A previous reproductive evaluation indicated this animal has uterine leiomyomas, and since exam was over 10 years ago, possible these are now large enough to cause pressure/discomfort affecting urination and defecation. Also due to history of vulvitis, this may be flaring up and causing some discomfort. There appear to be some inflammatory changes on blood work, though they are not pronounced and are nonspecific.</p> <p>P: Fecal boluses: No change to browse, keep offering the same for now. Keepers are going to try to increase the length of the chopped hay fibers to see if this makes a difference to boluses- currently about 1.5 cm long- may be too small to provide interest when being eaten and may be passing through more quickly. Keepers should work on re-establishing the rectal ultrasound behavior, as we should plan to perform a rectal ultrasound as soon as possible, to examine bladder at least and see if there are any other abnormalities. Vulva: No specific treatment for the nodule other than monitoring. Asked keepers to bathe and clean the vulva every day with water, pool baths would be good too. No change to douching regimen for now. Recheck in a couple of days. Continue routine quarterly screening.</p>		

Animal Type	GAN	Preferred ID	Taxonomy	Sex	Birth Date
Individual	26752287	992278	Elephas maximus indicus/Indian elephant	Female	~ from Jul 01, 1965 to Jul 01, 1966

Forwarded mineral panel results to nutritionist- unclear significance of possible low iron.

Dx:Blood drawn by keepers today:  
CBC (UMiami): hct and TWBC are within ZIMS sp. ref. ranges, though monocyte counts are slightly increased as are basophils. Lab reports rare reactive lymphocytes. Fibrinogen is wnl.  
Chemistry panel: Mild hyperglycemia, ALT and bilirubin.  
EPH: Mild changes, but lab suggests this may be normal variation.  
APP: Haptoglobin is somewhat increased (minor ACP in elephant). SAA is low (major APP)  
Mineral panel (CAHFS): Interpretation: Adequate mineral ranges have not been definitively determined for this species. Generally, comments are made by comparing the results in the report with "normal" ranges suggested for similar domestic animal species or through literature searching. Ultimately, proper interpretation of the detected mineral concentrations needs to consider a number of variables including management (e.g., diet), animal (e.g., age or production status), clinical information and, in some cases postmortem findings.  
The detected serum iron seems low. The other detected serum mineral concentrations are unremarkable/non-diagnostic

Histopath on vulvar nodule: Hyperplasia- no evidence of neoplastic changes. Findings are non-specific- it may be that there is more than usual irritation from urine. Additional cleansing of the area is being done now- will monitor if this changes occurrence rate of these benign changes.

DLKeller, DVM

Animal Care Staff Medical Summary

~

Calendar Items

Date	Title	Assigned To	Done
~	~	~	~

Sample

Sample Detail

Collection Date/Time	Mar 18, 2024 00:00
Sample Type	Tissue
Anatomical Source/Tissue	~
Additives/Preservatives	~
Collection Method	~
Collected By	~
Reason	~
Exclude from reference intervals	No

Sample Quality

Additional Characteristics	~
Degraded	No

Initial Holding Conditions

Initial Holding Temp.	~
Initial Holding Duration	~

Sample History

Date	Sample ID / Sample GSN	Status	Laboratory / Test Order / Test Results
Mar 18, 2024	~/~	Available	~/~/~

Notes

~

Calendar Items

Date	Title	Assigned To	Done
~	~	~	~

Sample

Animal Type	GAN	Preferred ID	Taxonomy	Sex	Birth Date
Individual	26752287	992278	Elephas maximus indicus/Indian elephant	Female	~ from Jul 01, 1965 to Jul 01, 1966

Sample Detail

Collection Date/Time

Mar 18, 2024 00:00

Sample Type

Serum

Anatomical Source/Tissue

EAR VEIN

Collection Method

Phlebotomy

Collected By

Dominique Keller

Reason

~

Exclude from reference intervals

No

Sample Quality

Color

~

Color Intensity

~

Clarity

~

Additional Characteristics

~

Degraded

No

Pre-Sampling Conditions

Fasting Duration

undetermined

Restraint Type

Behavioral

Activity

Moderate activity

Initial Holding Conditions

Initial Holding Temp.

~

Initial Holding Duration

~

Sample History

Date	Sample ID / Sample GSN	Status	Laboratory / Test Order / Test Results
Mar 18, 2024	~/~	Available	UMAWLAB/39/39
Mar 18, 2024	~/~	In storage	~/~/~
Mar 18, 2024	~/~	Available	CAHFS DAV/8/8

Notes

Both rtt and royal btt submitted. royal btt for mineral panel.

Calendar Items

Date	Title	Assigned To	Done
~	~	~	~

Sample

Sample Detail

Collection Date/Time

Mar 18, 2024 00:00

Sample Type

Whole Blood

Anatomical Source/Tissue

EAR VEIN

Additives/Preservatives

EDTA

Collection Method

Phlebotomy

Collected By

Dominique Keller

Reason

~

Exclude from reference intervals

No

Sample Quality

Additional Characteristics

~

Degraded

No

Pre-Sampling Conditions

Fasting Duration

undetermined

Restraint Type

Behavioral

Activity

Moderate activity

Initial Holding Conditions

Initial Holding Temp.

~

Initial Holding Duration

~

Sample History

Date	Sample ID / Sample GSN	Status	Laboratory / Test Order / Test Results
Mar 18, 2024	~/~	Available	LOSANGELE/1/1
Mar 18, 2024	~/~	Available	UMAWLAB/16/15

Notes

Both rtt and royal btt submitted. royal btt for mineral panel.

Calendar Items

Date	Title	Assigned To	Done
~	~	~	~

Test & Result

Animal Type	GAN	Preferred ID	Taxonomy	Sex	Birth Date
Individual	26752287	992278	Elephas maximus indicus/Indian elephant	Female	~ from Jul 01, 1965 to Jul 01, 1966

Test Request Detail		Sample Quality	
Date Requested	Mar 18, 2024	Color	~
Requested By	Dominique Keller	Color Intensity	~
Laboratory	UMAWLAB	Clarity	~
Analysis Start Date	Mar 18, 2024	Consistency	~
Analysis Equipment	~	Additional Characteristics	~
Insufficient Sample	No	Degraded	No

Notes/Comments
Fibrinogen - 200 mg/dl
RBC Morphology: Anisocytosis 1+ Targe cells 1+
Platelet Morphology Platelet Clumping present
WBC Morphology Reactive lymphocytes - Rare Reactive monocytes - few
The platelets were observed to be clumped on the blood smear. The count may not be accurate. Gen: Due to small platelet size in elephants, the automated platelet count may not be accurate and thus a manual platelet estimate isprovided.

Test Requests & Test Results						
~~~~~						
Test	Primary Result	Expected Results (Based on Best Available Match) Type: Min- Max Mean [Median] N (Animals)	Evaluation	Excl'd. from RI	Clinical Finding	Reviewed
WBC	10.5 *10^3 cells/μL	Global subsp RI: 8.1 - 16.4 11.9 [12.0] N=856 (23)	~	No	No	Yes
RBC [a]	3.18 *10^6 cells/μL	Global subsp RI: 2.19 - 3.67 2.80 [2.79] N=847 (23)	~	No	No	Yes
HGB [a]	12.5 g/dL	Global subsp RI: 10.0 - 15.4 12.6 [12.5] N=844 (23)	~	No	No	Yes
HCT [a]	41 %	Global subsp RI: 27.0 - 43.5 34.1 [34.0] N=814 (20)	~	No	No	Yes
MCV	121 fL	Global subsp RI: 106.2 - 146.0 123.2 [120.6] N=744 (18)	~	No	No	Yes
MCH	39 pg	Global subsp RI: 38.0 - 50.9 45.1 [45.2] N=727 (17)	~	No	No	Yes
MCHC	32 %	Insufficient data	~	No	~	Yes
Neutrophil count [a]	2.1 *10^3 cells/μL	Global subsp RI: 0.00 - 7.44 2.04 [1.72] N=228 (13)	~	No	No	Yes
Band count [a]	0.21 *10^3 cells/μL	Global subsp RI: 0.00 - 1.08 0.30 [0.24] N=55 (7)	~	No	No	Yes
Lymphocyte count [a]	1.05 *10^3 cells/μL	Global subsp RI: 0.00 - 6.22 1.42 [1.16] N=229 (13)	~	No	No	Yes
Monocyte count [a]	6.83 *10^3 cells/μL	Global subsp RI: 0.001 - 6.852 2.135 [2.100] N=431 (15)	~	No	No	Yes
Eosinophil count [a]	0.10 *10^3 cells/μL	Global subsp RI: 0.000 - 0.610 0.100 [0.002] N=198 (14)	~	No	No	Yes
Basophil count [a]	0.21 *10^3 cells/μL	Global subsp RI: 0.000 - 0.204 0.017 [0.000] N=224 (14)	High	No	No	Yes
nRBC's	~ /100 WBC	Global subsp RI: 0 - 3 1 [0] N=41 (9)	~	No	No	~
Platelets	128 *10^3 cells/μL	Global subsp RI: 74 - 930 419 [322] N=744 (22)	~	No	No	Yes
Est. Platelets	1095		~	~	~	Yes

Animal Type	GAN	Preferred ID	Taxonomy	Sex	Birth Date
Individual	26752287	992278	Elephas maximus indicus/Indian elephant	Female	~ from Jul 01, 1965 to Jul 01, 1966

Sample Detail (GSN: S-TCW24-150355-S01)

Collection Date/Time	Mar 18, 2024 00:00	Collection Method	Phlebotomy
Sample Type	Whole Blood	Collected By	Dominique Keller
Anatomical Source/Tissue	EAR VEIN	Reason	~
Additives/Preservatives	EDTA	Exclude from reference intervals	No

Test & Result

Test Request Detail

Sample Quality

Date Requested	Mar 18, 2024	Color	~
Requested By	Dominique Keller	Color Intensity	~
Laboratory	CAHFS DAV	Clarity	~
Analysis Start Date	Mar 18, 2024	Consistency	~
Analysis Equipment	~	Additional Characteristics	~
Insufficient Sample	No	Degraded	No

Notes/Comments

Adequate mineral ranges have not been definitively determined for this species. Generally, comments are made by comparing the results in the report with "normal" ranges suggested for similar domestic animal species or through literature searching. Ultimately, proper interpretation of the detected mineral concentrations needs to consider a number of variables including management (e.g., diet), animal (e.g., age or production status), clinical information and, in some cases postmortem findings. The detected serum iron seems low. The other detected serum mineral concentrations are unremarkable/non-diagnostic.

Reporting Limit (Rep. Limit): The lowest routinely quantified concentration of an analyte in a sample. The analyte may be detected, but not quantified, at concentrations below the reporting limit. Sample volumes less than requested might result in reporting limits that are higher than those listed.

Test Requests & Test Results

~~~~~

| Test             | Primary Result | Expected Results (Based on Best Available Match)<br>Type: Min- Max   Mean [Median]<br>N (Animals) | Evaluation | Excl'd. from RI | Clinical Finding | Reviewed |
|------------------|----------------|---------------------------------------------------------------------------------------------------|------------|-----------------|------------------|----------|
| Calcium ICPMS    | 100 ppm        | Global sp RI: 91.2 - 117.2   104.2 [104.2] N=1569 (118)                                           | ~          | No              | ~                | Yes      |
| Copper ICPMS     | 1.3 ppm        | Insufficient data                                                                                 | ~          | No              | ~                | Yes      |
| Iron ICPMS       | 0.38 ppm       | Insufficient data                                                                                 | ~          | No              | ~                | Yes      |
| Magnesium ICPMS  | 20 ppm         | Basic Stats: ~ - ~   23 [23] N=17 (7)                                                             | ~          | No              | ~                | Yes      |
| Phosphorus ICPMS | 34 ppm         | Global sp RI: 30 - 70   49 [48] N=1530 (115)                                                      | ~          | No              | ~                | Yes      |
| Potassium ICPMS  | 5.1 mEq/L      | Insufficient data                                                                                 | ~          | No              | ~                | Yes      |
| Sodium ICPMS     | 127 mEq/L      | Insufficient data                                                                                 | ~          | No              | ~                | Yes      |
| Zinc unspecified | 0.6 ppm        | Not calculated                                                                                    | ~          | ~               | ~                | Yes      |

Sample Detail (GSN: S-TCW24-150355-S01)

|                          |                    |                                  |                  |
|--------------------------|--------------------|----------------------------------|------------------|
| Collection Date/Time     | Mar 18, 2024 00:00 | Collection Method                | Phlebotomy       |
| Sample Type              | Serum              | Collected By                     | Dominique Keller |
| Anatomical Source/Tissue | EAR VEIN           | Reason                           | ~                |
| Additives/Preservatives  | ~                  | Exclude from reference intervals | No               |

Test & Result

| Animal Type | GAN      | Preferred ID | Taxonomy                                | Sex    | Birth Date                          |
|-------------|----------|--------------|-----------------------------------------|--------|-------------------------------------|
| Individual  | 26752287 | 992278       | Elephas maximus indicus/Indian elephant | Female | ~ from Jul 01, 1965 to Jul 01, 1966 |

| Test Request Detail                                                                                                                                                                                                                                                                                                                                       | Sample Quality                                                                                                                                                                                                                                                                             |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <div><div>Date Requested</div><div>Mar 18, 2024</div></div> <div><div>Requested By</div><div>Dominique Keller</div></div> <div><div>Laboratory</div><div>UMAWLAB</div></div> <div><div>Analysis Start Date</div><div>Mar 18, 2024</div></div> <div><div>Analysis Equipment</div><div>~</div></div> <div><div>Insufficient Sample</div><div>No</div></div> | <div><div>Color</div><div>~</div></div> <div><div>Color Intensity</div><div>~</div></div> <div><div>Clarity</div><div>~</div></div> <div><div>Consistency</div><div>~</div></div> <div><div>Additional Characteristics</div><div>~</div></div> <div><div>Degraded</div><div>No</div></div> |

Notes/Comments

EPH Interpretation  
Mild changes in some fractions are present. As the A/G ratio is not decreased, this likely reflects a normal variation in this patient. Followup as clinically warranted.

SAA levelshave been examined in elephants and it appears that this is a major APP in this species. Clinically abnormal elephantshave been described with levels from 30-300mg/L. As a major APP, this test may provide the best prognostic value in animalsunder treatment or to monitor the progression of a disease process.

As in other species, HP is a minor APP in elephants. Two to three fold increases in thisAPP have been observed in clinically abnormal elephants. To date, the highest observed value in our laboratory hasbeen 9mg/ml. In most species, HP isbelieved to be a preferred marker of chronic inflammation. In contrast to CRP and SAA, the increase in HP isdelayed 4-6 days after stimulus and its expression isprolonged. Aswith other APP, repeated measures should have prognostic value.

| Test            | Primary Result | Expected Results (Based on Best Available Match)<br>Type: Min- Max   Mean [Median]<br>N (Animals) | Evaluation | Excl'd. from RI | Clinical Finding | Reviewed |
|-----------------|----------------|---------------------------------------------------------------------------------------------------|------------|-----------------|------------------|----------|
| Hemolysis Index | 0 mg/dL        | Not calculated                                                                                    | ~          | ~               | ~                | Yes      |
| Lipemia index   | 0 ratio        | Not calculated                                                                                    | ~          | ~               | ~                | Yes      |
| Glucose         | 111 mg/dL      | Global subsp RI: 55 - 120   86 [85]<br>N=218 (17)                                                 | ~          | No              | No               | Yes      |
| BUN             | 10 mg/dL       | Global subsp RI: 5.0 - 15.0   9.7 [9.3]<br>N=221 (17)                                             | ~          | No              | No               | Yes      |
| Creatinine      | 1.2 mg/dL      | Global subsp RI: 1.0 - 1.9   1.3 [1.3]<br>N=201 (15)                                              | ~          | No              | No               | Yes      |
| BUN:Creat ratio | 8.3 ratio      | Global subsp RI: 5.1 - 40.4   16.0 [10.8]<br>N=88 (9)                                             | ~          | No              | ~                | Yes      |
| Na              | 127 mmol/L     | Global subsp RI: 123 - 139   130 [130]<br>N=217 (16)                                              | ~          | No              | No               | Yes      |
| K               | 4.8 mmol/L     | Global subsp RI: 3.9 - 5.4   4.5 [4.5]<br>N=207 (14)                                              | ~          | No              | No               | Yes      |
| Chloride        | 92 mmol/L      | Global subsp RI: 86 - 96   90 [90]<br>N=200 (14)                                                  | ~          | No              | No               | Yes      |
| Mg              | 2.3 mg/dL      | Global subsp RI: 1.60 - 2.97   2.27 [2.30]<br>N=117 (14)                                          | ~          | No              | No               | Yes      |
| Ca              | 10.5 mg/dL     | Global subsp RI: 9.2 - 11.8   10.6 [10.6]<br>N=222 (17)                                           | ~          | No              | No               | Yes      |
| Phos            | 3.8 mg/dL      | Global subsp RI: 3.2 - 6.4   4.8 [4.8]<br>N=213 (16)                                              | ~          | No              | No               | Yes      |
| Ca:Phos ratio   | 2.8 ratio      | Global subsp RI: 1.4 - 3.4   2.4 [2.4]<br>N=44 (8)                                                | ~          | No              | No               | Yes      |
| Total CO2       | 23 mmol/L      | Global subsp RI: 20.0 - 28.6   24.3 [24.0]<br>N=95 (8)                                            | ~          | No              | ~                | Yes      |
| Amylase         | 825 U/L        | Global subsp RI: 0 - 3,285   1,357 [1,168]<br>N=72 (9)                                            | ~          | No              | No               | Yes      |
| Lipase          | <10 U/L        | Global subsp RI: 1 - 49   13 [8]<br>N=46 (8)                                                      | ~          | No              | No               | Yes      |

| Animal Type | GAN      | Preferred ID | Taxonomy                                | Sex    | Birth Date                          |
|-------------|----------|--------------|-----------------------------------------|--------|-------------------------------------|
| Individual  | 26752287 | 992278       | Elephas maximus indicus/Indian elephant | Female | ~ from Jul 01, 1965 to Jul 01, 1966 |

|                     |            |                                                        |   |    |    |     |
|---------------------|------------|--------------------------------------------------------|---|----|----|-----|
| Cholesterol         | <50 mg/dL  | Global subsp RI: 13 - 65   43 [43]<br>N=57 (14)        | ~ | No | No | Yes |
| Uric Acid           | <.05 mg/dL | Global subsp RI: 0.0 - 0.9   0.3<br>[0.3] N=55 (16)    | ~ | No | No | Yes |
| Total Protein       | 8.4 g/dL   | Global subsp RI: 6.7 - 9.5   8.0<br>[8.0] N=234 (18)   | ~ | No | No | Yes |
| Albumin unspecified | 3.5 g/dL   | Not calculated                                         | ~ | ~  | ~  | Yes |
| A:G ratio           | 0.7 ratio  | Global subsp RI: 0.5 - 0.9   0.7<br>[0.7] N=136 (12)   | ~ | No | No | Yes |
| AST                 | 17 U/L     | Global subsp RI: 11 - 31   17 [16]<br>N=189 (13)       | ~ | No | No | Yes |
| ALT                 | 9 U/L      | Global subsp RI: 0 - 14   4 [3]<br>N=161 (14)          | ~ | No | No | Yes |
| LDH                 | 230 U/L    | Global subsp RI: 215 - 1,063   501<br>[500] N=74 (10)  | ~ | No | No | Yes |
| Creatine Kinase     | 138 U/L    | Global subsp RI: 55 - 303   126<br>[117] N=177 (11)    | ~ | No | No | Yes |
| Alk. Phos.          | 83 U/L     | Global subsp RI: 45 - 165   92 [81]<br>N=212 (17)      | ~ | No | No | Yes |
| GGT                 | <10 U/L    | Global subsp RI: 0 - 13   5 [4]<br>N=167 (15)          | ~ | No | No | Yes |
| Tot. Bili.          | 0.3 mg/dL  | Global subsp RI: 0.1 - 0.5   0.2<br>[0.2] N=204 (16)   | ~ | No | No | Yes |
| Conj./Direct Bili.  | 0.3 mg/dL  | Global subsp RI: 0.0 - 0.5   0.2<br>[0.2] N=47 (8)     | ~ | No | No | Yes |
| Pre-albumin CZE     | 0.3 g/dL   | Global sp RI: 0.18 - 0.42   0.29<br>[0.29] N=48 (5)    | ~ | No | ~  | Yes |
| Albumin CZE         | 3.02 g/dL  | Global sp RI: 2.51 - 3.45   3.07<br>[3.08] N=49 (6)    | ~ | No | ~  | Yes |
| α-1 Globulin CZE    | 0.07 g/dL  | Global sp RI: 0.03 - 0.14   0.07<br>[0.07] N=49 (6)    | ~ | No | ~  | Yes |
| α-2 Globulin CZE    | 1.11 g/dL  | Global sp RI: 0.98 - 1.30   1.12<br>[1.11] N=49 (6)    | ~ | No | ~  | Yes |
| β-1 Globulin CZE    | 0.95 g/dL  | Global sp RI: 0.57 - 0.96   0.75<br>[0.74] N=138 (8)   | ~ | No | ~  | Yes |
| β-2 Globulin CZE    | 1.31 g/dL  | Global sp RI: 0.85 - 1.89   1.28<br>[1.28] N=138 (8)   | ~ | No | ~  | Yes |
| β-1+2 Globulin CZE  | 2.26 g/dL  | Global sp RI: 1.58 - 2.66   2.02<br>[2.04] N=139 (10)  | ~ | No | ~  | Yes |
| γ Globulin CZE      | 1.64 g/dL  | Global sp RI: 1.15 - 2.33   1.64<br>[1.57] N=51 (8)    | ~ | No | ~  | Yes |
| Amyloid unspecified | <0.1 mg/L  | Not calculated                                         | ~ | ~  | ~  | Yes |
| Haptoglobin         | 1.24 mg/ml | Global subsp RI: 0.25 - 4.00   1.30<br>[1.01] N=62 (8) | ~ | No | ~  | Yes |

|                                     |                    |                                  |                  |
|-------------------------------------|--------------------|----------------------------------|------------------|
| Sample Detail (GSN: S-TCW24-150356) |                    |                                  |                  |
| Collection Date/Time                | Mar 18, 2024 00:00 | Collection Method                | Phlebotomy       |
| Sample Type                         | Serum              | Collected By                     | Dominique Keller |
| Anatomical Source/Tissue            | EAR VEIN           | Reason                           | ~                |
| Additives/Preservatives             | ~                  | Exclude from reference intervals | No               |

Test & Result

| Animal Type | GAN      | Preferred ID | Taxonomy                                | Sex    | Birth Date                          |
|-------------|----------|--------------|-----------------------------------------|--------|-------------------------------------|
| Individual  | 26752287 | 992278       | Elephas maximus indicus/Indian elephant | Female | ~ from Jul 01, 1965 to Jul 01, 1966 |

Test Request Detail

Date Requested

Mar 18, 2024

Requested By

Dominique Keller

Analysis Start Date & Time

Mar 18, 2024 00:00

Analysis By

Deanna Rocca

Analysis Equipment

~

Insufficient Sample

No

Sample Quality

Color

~

Color Intensity

~

Clarity

~

Consistency

~

Additional Characteristics

~

Degraded

No

Notes/Comments

TP- 8.8 g/dl

| Test Requests & Test Results |                |                                                                                                |            |                 |                  |          |
|------------------------------|----------------|------------------------------------------------------------------------------------------------|------------|-----------------|------------------|----------|
| Test                         | Primary Result | Expected Results (Based on Best Available Match)<br>Type: Min- Max   Mean [Median] N (Animals) | Evaluation | Excl'd. from RI | Clinical Finding | Reviewed |
| PCV                          | 42 %           | Not calculated                                                                                 | ~          | ~               | ~                | Yes      |

Sample Detail (GSN: S-TCW24-150355)

Collection Date/Time

Mar 18, 2024 00:00

Collection Method

Phlebotomy

Sample Type

Whole Blood

Collected By

Dominique Keller

Anatomical Source/Tissue

EAR VEIN

Reason

~

Additives/Preservatives

EDTA

Exclude from reference intervals

No

Mar 15, 2024

Clinical note

Date

Mar 15, 2024

Time

00:00

Note Author

Dominique Keller

Significant

No

Private

No

Active Problems

~

Note Subtype: General

Notes/Comments

Verbal update: Keeper reports that fecal boluses are moist this morning, though they do see some undigested produce and chopped browse.

P: Nutritionist will be doing BCS for both elephants shortly- scale unavailable at this time. We can reevaluate the diet after BCS is done as this may inform what we plan.

DLKeller, DVM

Animal Care Staff Medical Summary

~

Calendar Items

| Date | Title | Assigned To | Done |
|------|-------|-------------|------|
| ~    | ~     | ~           | ~    |

Mar 14, 2024

Clinical note

Date

Mar 14, 2024

Time

00:00

Note Author

Dominique Keller

Significant

No

Private

No

Active Problems

~

Note Subtype: General

Notes/Comments

Verbal update: Dry feces noted today. Keepers saw dry fecal boluses today, so she was offered and took 10 gallons of warm water this morning and 12 gallons this afternoon. She has been seen urinating and defecating.

P: Reminded keepers that we talked about offering water to Tina on a regular basis from now on. This can be water in a tub, from the hose, "flavored" with a little table salt or

| Animal Type | GAN      | Preferred ID | Taxonomy                                | Sex    | Birth Date                          |
|-------------|----------|--------------|-----------------------------------------|--------|-------------------------------------|
| Individual  | 26752287 | 992278       | Elephas maximus indicus/Indian elephant | Female | ~ from Jul 01, 1965 to Jul 01, 1966 |

Resorb if needed.  
Update tomorrow.

DLKeller, DVM

Animal Care Staff Medical Summary

~

Calendar Items

| Date | Title | Assigned To | Done |
|------|-------|-------------|------|
| ~    | ~     | ~           | ~    |

Mar 12, 2024

Clinical note

Date

Mar 12, 2024

Significant

No

Note Subtype: General

Time

00:00

Private

No

Note Author

Dominique Keller

Active Problems

~

Notes/Comments

Verbal update: Keepers report Tina is doing well, today is day 2 off the NSAID. She is still walking well and is not sensitive to pressure on the areas of the feet (esp. RR foot pad) that were previously sensitive. Keepers have continued to hand chop some browse for her, which she is eating. She also finishes all her food placed in the yards, but tends to leave a little of the hay that is fed to her in her stall. Keepers have noticed that Tina continues to extensively dig in the Circle yard and may still be consuming some of the dirt/DG from the dig sites. She also uses some of it for a "dirt bath" which is appropriate.

P: Continue regular updates, esp. during this transition off the NSAIDs.

DLKeller, DVM

Animal Care Staff Medical Summary

~

Calendar Items

| Date | Title | Assigned To | Done |
|------|-------|-------------|------|
| ~    | ~     | ~           | ~    |

Mar 10, 2024

Clinical note

Date

Mar 10, 2024

Significant

No

Note Subtype: General

Time

00:00

Private

No

Note Author

Dominique Keller

Active Problems

~

Notes/Comments

Urinalysis: USG within ref. ranges, though there are more wbc than usual for this animal.

P: Follow up with additional sample- wbc may be from urine or from reproductive tract.

DLKeller, DVM

Animal Care Staff Medical Summary

~

Calendar Items

| Date | Title | Assigned To | Done |
|------|-------|-------------|------|
| ~    | ~     | ~           | ~    |

Sample

| Animal Type | GAN      | Preferred ID | Taxonomy                                | Sex    | Birth Date                          |
|-------------|----------|--------------|-----------------------------------------|--------|-------------------------------------|
| Individual  | 26752287 | 992278       | Elephas maximus indicus/Indian elephant | Female | ~ from Jul 01, 1965 to Jul 01, 1966 |

Sample Detail

Collection Date/Time

Mar 10, 2024 00:00

Sample Type

Urine

Additives/Preservatives

~

Collection Method

Free Catch

Collected By

Dominique Keller

Reason

~

Exclude from reference intervals

No

Sample Quality

Color

Yellow

Color Intensity

medium

Clarity

Clear

Degraded

No

Initial Holding Conditions

Initial Holding Temp.

~

Initial Holding Duration

~

Sample History

| Date         | Sample ID / Sample GSN | Status    | Laboratory / Test Order / Test Results |
|--------------|------------------------|-----------|----------------------------------------|
| Mar 10, 2024 | ~/~                    | Available | LOSANGELE/16/16                        |

Notes

~

Calendar Items

| Date | Title | Assigned To | Done |
|------|-------|-------------|------|
| ~    | ~     | ~           | ~    |

Test & Result

Test Request Detail

Date Requested

Mar 10, 2024

Requested By

Dominique Keller

Analysis Start Date & Time

Mar 10, 2024 00:00

Analysis By

Deanna Rocca

Analysis Equipment

~

Insufficient Sample

No

Sample Quality

Color

Yellow

Color Intensity

medium

Clarity

Clear

Consistency

~

Additional Characteristics

~

Degraded

No

Notes/Comments

Urinalysis performed on 3.11.24 - 24 hours post collection.  
Sediment exam:  
Multiple mixed cellular clumps comprising of WBC/TNTC with both superficial and transitional epithelial cells  
Several CA oxylate crystals observed  
0-1 Fine granular cast observed on periphery of a mixed cell clump.  
Small amount amorphous debris present.  
DLR

| Animal Type | GAN      | Preferred ID | Taxonomy                                | Sex    | Birth Date                          |
|-------------|----------|--------------|-----------------------------------------|--------|-------------------------------------|
| Individual  | 26752287 | 992278       | Elephas maximus indicus/Indian elephant | Female | ~ from Jul 01, 1965 to Jul 01, 1966 |

| Test Requests & Test Results |                 |                                                                                                   |            |                 |                  |          |
|------------------------------|-----------------|---------------------------------------------------------------------------------------------------|------------|-----------------|------------------|----------|
| Test                         | Primary Result  | Expected Results (Based on Best Available Match)<br>Type: Min- Max   Mean [Median]<br>N (Animals) | Evaluation | Excl'd. from RI | Clinical Finding | Reviewed |
| Urine Bilirubin [rs]         | (-) Negative    |                                                                                                   | ~          | ~               | ~                | Yes      |
| Urine Urobili. [rs]          | Normal 1 mg/dL  |                                                                                                   | ~          | ~               | ~                | Yes      |
| Urine Ketones [rs]           | (-) Negative    |                                                                                                   | ~          | ~               | ~                | Yes      |
| Protein                      | 0 mg/dL         | Global sp RI: 0 - 180   36 [14] N=86 (27)                                                         | ~          | No              | ~                | Yes      |
| Urine Nitrite [rs]           | Negative        |                                                                                                   | ~          | ~               | ~                | Yes      |
| Urine Leuk. [rs]             | Negative        |                                                                                                   | ~          | ~               | ~                | Yes      |
| Urine Glucose [rs]           | (-) Negative    |                                                                                                   | ~          | ~               | ~                | Yes      |
| pH [rs]                      | 8.0 pH          | Global subsp RI: 6.5 - 8.9   7.8 [8.0] N=169 (14)                                                 | ~          | No              | ~                | Yes      |
| Urine Blood [rs]             | Negative        |                                                                                                   | ~          | ~               | ~                | Yes      |
| Sp Grav (test strip)         | 1.020 ratio     | Global subsp RI: 1.000 - 1.025   1.010 [1.010] N=74 (3)                                           | ~          | No              | ~                | Yes      |
| Sp Grav (R)                  | 1.020 ratio     | Global subsp RI: 1.004 - 1.028   1.019 [1.018] N=82 (9)                                           | ~          | No              | ~                | Yes      |
| Urine Ascorbic [rs]          | Normal          |                                                                                                   | ~          | ~               | ~                | Yes      |
| Hyaline Casts                | Negative [none] |                                                                                                   | ~          | ~               | ~                | Yes      |
| Granular casts               | < 1/lpf         |                                                                                                   | ~          | ~               | ~                | Yes      |
| Ca Oxalate Crystals          | Few             |                                                                                                   | ~          | ~               | ~                | Yes      |
| Ca Phos Crystals             | None seen       |                                                                                                   | ~          | ~               | ~                | Yes      |

| Sample Detail (GSN: S-TCW24-150201) |                    |                                  |                  |
|-------------------------------------|--------------------|----------------------------------|------------------|
| Collection Date/Time                | Mar 10, 2024 00:00 | Collection Method                | Free Catch       |
| Sample Type                         | Urine              | Collected By                     | Dominique Keller |
| Anatomical Source/Tissue            | ~                  | Reason                           | ~                |
| Additives/Preservatives             | ~                  | Exclude from reference intervals | No               |

Mar 08, 2024

| Clinical note                                                                                                                                                                                                                                                                                                                                                          |         |                  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|------------------|
| Date                                                                                                                                                                                                                                                                                                                                                                   | Time    | Note Author      |
| Mar 08, 2024                                                                                                                                                                                                                                                                                                                                                           | 00:00   | Dominique Keller |
| Significant                                                                                                                                                                                                                                                                                                                                                            | Private | Active Problems  |
| No                                                                                                                                                                                                                                                                                                                                                                     | No      | ~                |
| Note Subtype: General                                                                                                                                                                                                                                                                                                                                                  |         |                  |
| Notes/Comments                                                                                                                                                                                                                                                                                                                                                         |         |                  |
| Verbal update: Tina continues to do well- keepers mention that she looks very comfortable and is moving around well. Her current firocoxib script ends in 2 days- keepers would like to see how she does off the medication.                                                                                                                                           |         |                  |
| A: We will discontinue the NSAID after end of this trial, however, I cautioned keepers to make sure they are monitoring Tina closely. If there is a decrease in perceived comfort, attitude or mobility- please let vets know as she may need to be on these chronically. I also discussed with the team that we should be trying to more consistently and proactively |         |                  |

| Animal Type | GAN      | Preferred ID | Taxonomy                                | Sex    | Birth Date                          |
|-------------|----------|--------------|-----------------------------------------|--------|-------------------------------------|
| Individual  | 26752287 | 992278       | Elephas maximus indicus/Indian elephant | Female | ~ from Jul 01, 1965 to Jul 01, 1966 |

be adding more options for hydration for Tina- can offer more hose water, more buckets of water, dluted Resorb or other flavored water. Team should be thinking about how to do this on a daily basis.

P: Update in a few days.

DLKeller, DVM

Animal Care Staff Medical Summary

~

Calendar Items

| Date | Title | Assigned To | Done |
|------|-------|-------------|------|
| ~    | ~     | ~           | ~    |

Mar 07, 2024

Clinical note

| Date         | Time    | Note Author      |
|--------------|---------|------------------|
| Mar 07, 2024 | 00:00   | Dominique Keller |
| Significant  | Private | Active Problems  |
| No           | No      | ~                |

Note Subtype: General

Notes/Comments

Verbal update: Tina is back to defecating normally and is taking the Resorb and oil well. She has been very active today and is doing well with all her training and keeper interactions.

P: Update tomorrow.

DLKeller, DVM

Animal Care Staff Medical Summary

~

Calendar Items

| Date | Title | Assigned To | Done |
|------|-------|-------------|------|
| ~    | ~     | ~           | ~    |

Mar 06, 2024

Clinical note

| Date         | Time    | Note Author      |
|--------------|---------|------------------|
| Mar 06, 2024 | 00:00   | Dominique Keller |
| Significant  | Private | Active Problems  |
| No           | No      | ~                |

Note Subtype: General

Notes/Comments

Verbal update: Sand ingestion, reduced fecal output and mouth gaping. Keeper reports at mid-day that Tina has produced fewer than expected fecal boluses overnight and throughout the day, though she is still defecating and was seen urinating. She did not eat all her hay overnight. Keepers saw some mouth gaping and a straining to defecate this morning. She has been seen eating more substrate from Circle yard and keepers suspect she has been digging and eating roots and plants outside of the hot wire basd on disturbed substrate. Prescribed Resorb and mineral oil in bran, which was given immediately. Asked for keeper evaluation of Tina's comfort on the current dosage of firocoxib and all three keepers feel she is more comfortable, and one notes that Tina is no longer sensitive at the RR foot pad as she had been when foot consultant worked with her on 2/25/24.

1330: Visual: Tina is in Thai yard, eating hay with gusto. Keepers note that she produced fecal as soon as she went out into the yard after taking the mineral oil, Resorb and 10 gallons of warm water. The fecal boluses are appropriately shaped and sized. Observed Tina urinate and produce more fecal-at least two of the boluses were connected together by some fibrous material, supporting theory that she has been getting into some of the plant material outside of the exhibit. When it started to rain harder, Tina began applying sand and dirt on her back and came back into the inside enclosure and started eating.

Recap of current history: Tina has not been offered browse consistently in recent period, since it needs to be chopped. Management has authorized the purchase of a wood chipper to chop the browse going forward. This lack of browse in the diet may explain her increased foraging behavior in areas within reach but outside of the hot wire. The increased pica may be nutritional, behavioral, metabolic or a combination of these. Keepers attempted blood draw today and will try a different approach to raise the ear veins better (it was cold this morning) so they can get blood tomorrow. Nutritionist is working on salt supplementation plan in terms of dose and how to offer. Since the loss of conspecific Shaunzi, keepers have increased the time and diversity of interaction with Tina. They incorporate stretching and exercise sessions into the daily routine.

P: Keepers will monitor closely for the rest of the day and offer a second dose of Resorb before end of day.



| Animal Type | GAN      | Preferred ID | Taxonomy                                | Sex    | Birth Date                          |
|-------------|----------|--------------|-----------------------------------------|--------|-------------------------------------|
| Individual  | 26752287 | 992278       | Elephas maximus indicus/Indian elephant | Female | ~ from Jul 01, 1965 to Jul 01, 1966 |

Update tomorrow. Need to ensure that hydration and activity are good.

Rx: Resorb BID PO for 5 days as directed. Keepers give additional water as well after the Resorb.  
Mineral oil, 1 gallon PO in bran SID for 5 days.

DLKeller, DVM

Animal Care Staff Medical Summary

~

| Calendar Items |       |             |      |
|----------------|-------|-------------|------|
| Date           | Title | Assigned To | Done |
| ~              | ~     | ~           | ~    |

Prescription/Treatment

Basic Info

Date Written

Mar 06, 2024

Start Date

Mar 06, 2024 00:00

Prescribed By

Dominique Keller

Prescribed For

1 animal

Reason For Treatment

~

Weight Info

Date

Mar 06, 2024

Measurement Value

3,350 kg

Estimate

Yes

Exclude From Reference Intervals

Yes

| Animal Type | GAN      | Preferred ID | Taxonomy                                | Sex    | Birth Date                          |
|-------------|----------|--------------|-----------------------------------------|--------|-------------------------------------|
| Individual  | 26752287 | 992278       | Elephas maximus indicus/Indian elephant | Female | ~ from Jul 01, 1965 to Jul 01, 1966 |

Treatment Detail

Treatment Item/Drug

resorb (Liquid)

Dose Amount

~

Dosage Amount

~

Administrated Dose Quantity

~

Frequency

twice a day (bid)

Duration

5days

Delivery Route

Oral (p.o.)

Loading Dose

~

Form of Drug

Liquid

Concentration Of Drug

~

Treatment Response

Clinical Response

~

Adverse Effects

~

Adverse Effects Note:

~

Staff Instructions

Mix 2 packets of Resorb salt/mineral side only in 1 gallon warm water and offer twice a day for 5 days. If she consumes it, can increase to 4 packets of Resorb salt/mineral side only in 2 gallons warm water. Mix fresh daily. Ensure he has access to alternative sources of water. Can also try adding the Glucose packet if she will not drink the electrolyte water.  
Start treatment on Mar 6, 2024  
Administration route: Oral (p.o.)

Prescription Notes/Comments

~

Calendar Items

| Date | Title | Assigned To | Done |
|------|-------|-------------|------|
| ~    | ~     | ~           | ~    |

Dispensing Records

| Date Dispensed | Dispensed By | Quantity Dispensed |
|----------------|--------------|--------------------|
| ~              | ~            | ~                  |

Administration Records

| Administration Date/Time | Administered By | Success | Notes |
|--------------------------|-----------------|---------|-------|
| ~                        | ~               | ~       | ~     |

Prescription/Treatment

Basic Info

Date Written

Mar 06, 2024

Start Date

Mar 06, 2024 00:00

Prescribed By

Dominique Keller

Prescribed For

1 animal

Reason For Treatment

~

Weight Info

Date

Mar 06, 2024

Measurement Value

3,350 kg

Estimate

Yes

Exclude From Reference Intervals

Yes

| Animal Type | GAN      | Preferred ID | Taxonomy                                | Sex    | Birth Date                          |
|-------------|----------|--------------|-----------------------------------------|--------|-------------------------------------|
| Individual  | 26752287 | 992278       | Elephas maximus indicus/Indian elephant | Female | ~ from Jul 01, 1965 to Jul 01, 1966 |

Treatment Detail

Treatment Item/Drug

MINERAL OIL

Dose Amount

1 gal liq (US)

Dosage Amount

~

Administrated Dose Quantity

1 gal liq (US)

Frequency

once a day (sid)

Duration

5days

Delivery Route

Oral (p.o.)

Loading Dose

~

Form of Drug

~

Concentration Of Drug

~

Treatment Response

Clinical Response

~

Adverse Effects

~

Adverse Effects Note:

~

Staff Instructions

Give 1 gal liq (US) of MINERAL OIL, once a day in bran (sid) for 5 days.  
Start treatment on Mar 6, 2024  
Administration route: Oral (p.o.)

Prescription Notes/Comments

~

Calendar Items

Dispensing Records

Administration Records

Mar 04, 2024

Clinical note

Date

Mar 04, 2024

Time

00:00

Note Author

Dominique Keller

Significant

No

Private

No

Active Problems

~

Note Subtype: General

Notes/Comments

Verbal update: Keepers report seeing pica today- Tina was seen eating dirt or rocks in a part of the Circle yard- where there has been construction recently.  
  
A: Asked keepers for their insight on why this might be happening now. Also reminded them that quarterly blood work is overdue, but since we have not gotten that yet, will be asking them to add a mineral panel tube to the draw ASAP. Also asked that we review Tina's overall situation with upper management and informed nutritionist of report today. Nutritionist added that we might consider adding salt supplementation since the hay may be deficient. Nutritionist is working on a plan to implement this.  
  
P: Submit mineral panel with screening blood work ASAP. Plan for salt supplementation.  
  
DLKeller, DVM

Animal Care Staff Medical Summary

~

Calendar Items

| Date | Title | Assigned To | Done |
|------|-------|-------------|------|
| ~    | ~     | ~           | ~    |

| Animal Type | GAN      | Preferred ID | Taxonomy                                | Sex    | Birth Date                          |
|-------------|----------|--------------|-----------------------------------------|--------|-------------------------------------|
| Individual  | 26752287 | 992278       | Elephas maximus indicus/Indian elephant | Female | ~ from Jul 01, 1965 to Jul 01, 1966 |

Feb 29, 2024

Clinical note

|              |         |                  |
|--------------|---------|------------------|
| Date         | Time    | Note Author      |
| Feb 29, 2024 | 00:00   | Dominique Keller |
| Significant  | Private | Active Problems  |
| No           | No      | ~                |

Note Subtype: General

Notes/Comments

Verbal update: Keepers report that Tina is doing very well, behavior seems back to normal. She had 13 fecal piles of normal appearing feces overnight and so far today. She continues to drink well from different water sources.

P: Finish the current mineral oil course.  
Update in a couple of days.

DLKeller, DVM

Animal Care Staff Medical Summary

~

Calendar Items

| Date | Title | Assigned To | Done |
|------|-------|-------------|------|
| ~    | ~     | ~           | ~    |

Prescription/Treatment

Basic Info

|                      |                    |
|----------------------|--------------------|
| Date Written         | Feb 28, 2024       |
| Start Date           | Feb 29, 2024 00:00 |
| Prescribed By        | Dominique Keller   |
| Prescribed For       | 1 animal           |
| Reason For Treatment | ~                  |

Weight Info

|                                  |              |
|----------------------------------|--------------|
| Date                             | Feb 28, 2024 |
| Measurement Value                | 3,350 kg     |
| Estimate                         | Yes          |
| Exclude From Reference Intervals | Yes          |

| Animal Type | GAN      | Preferred ID | Taxonomy                                | Sex    | Birth Date                          |
|-------------|----------|--------------|-----------------------------------------|--------|-------------------------------------|
| Individual  | 26752287 | 992278       | Elephas maximus indicus/Indian elephant | Female | ~ from Jul 01, 1965 to Jul 01, 1966 |

Treatment Detail

Treatment Item/Drug

MINERAL OIL

Dose Amount

1 gal liq (US)

Dosage Amount

~

Administrated Dose Quantity

1 gal liq (US)

Frequency

once a day (sid)

Duration

3days

Delivery Route

Oral (p.o.)

Loading Dose

~

Form of Drug

~

Concentration Of Drug

~

Treatment Response

Clinical Response

~

Adverse Effects

~

Adverse Effects Note:

~

Staff Instructions

Give 1 gal liq (US) of MINERAL OIL, once a day in bran (sid) for 3 days.  
Start treatment on Feb 29, 2024  
Administration route: Oral (p.o.)

Prescription Notes/Comments

~

Calendar Items

| Date | Title | Assigned To | Done |
|------|-------|-------------|------|
| ~    | ~     | ~           | ~    |

Dispensing Records

| Date Dispensed | Dispensed By | Quantity Dispensed |
|----------------|--------------|--------------------|
| ~              | ~            | ~                  |

Administration Records

| Administration Date/Time | Administered By | Success | Notes |
|--------------------------|-----------------|---------|-------|
| ~                        | ~               | ~       | ~     |

Feb 28, 2024

Clinical note

Date

Feb 28, 2024

Time

00:00

Note Author

Dominique Keller

Significant

No

Private

No

Active Problems

~

Note Subtype: General

Notes/Comments

Verbal update: Keeper reports that Tina is doing better- has been defecating and eating well (about 7 piles from overnight and this morning). Also taking water and the Resorb well. Still has some abnormal behavior (standing in a spot in her stall that is not her usual, for longer than expected).

P: Update tomorrow.  
Extend mineral oil script.

Rx: Mineral oil script extended 3 days.

DLKeller, DVM

Animal Care Staff Medical Summary

~

Calendar Items

| Date | Title | Assigned To | Done |
|------|-------|-------------|------|
| ~    | ~     | ~           | ~    |

| Animal Type | GAN      | Preferred ID | Taxonomy                                | Sex    | Birth Date                          |
|-------------|----------|--------------|-----------------------------------------|--------|-------------------------------------|
| Individual  | 26752287 | 992278       | Elephas maximus indicus/Indian elephant | Female | ~ from Jul 01, 1965 to Jul 01, 1966 |

Feb 27, 2024

Clinical note

Date

Feb 27, 2024

Time

00:00

Note Author

Megan Duncan

Significant

No

Private

No

Active Problems

~

Note Subtype: General

Notes/Comments

Tech Note: Resorb prescription cloned per vet DLK.

Animal Care Staff Medical Summary

~

Calendar Items

| Date | Title | Assigned To | Done |
|------|-------|-------------|------|
| ~    | ~     | ~           | ~    |

Clinical note

Date

Feb 27, 2024

Time

00:00

Note Author

Dominique Keller

Significant

No

Private

No

Active Problems

~

Note Subtype: General

Notes/Comments

Verbal update: Keepers report that Tina did not pass as much feces overnight as is usual and was doing some mouth gaping this morning. She has been eating and defecating this morning and seems stable.  
  
P: Added Resorb to the treatment regimen. Continue the mineral oil (one more day, but can extend tomorrow if still not back to normal). Update in the morning.  
  
Rx: Resorb, 1 packet made up per directions, once a day for 5 days  
  
DLKeller, DVM

Animal Care Staff Medical Summary

~

Calendar Items

| Date | Title | Assigned To | Done |
|------|-------|-------------|------|
| ~    | ~     | ~           | ~    |

Prescription/Treatment

Basic Info

Date Written

Feb 27, 2024

Start Date

Feb 27, 2024 00:00

Prescribed By

Dominique Keller

Prescribed For

1 animal

Reason For Treatment

~

Weight Info

Date

Feb 27, 2024

Measurement Value

3,350 kg

Estimate

Yes

Exclude From Reference Intervals

Yes

| Animal Type | GAN      | Preferred ID | Taxonomy                                | Sex    | Birth Date                          |
|-------------|----------|--------------|-----------------------------------------|--------|-------------------------------------|
| Individual  | 26752287 | 992278       | Elephas maximus indicus/Indian elephant | Female | ~ from Jul 01, 1965 to Jul 01, 1966 |

Treatment Detail

Treatment Item/Drug

resorb (Liquid)

Dose Amount

~

Dosage Amount

~

Administrated Dose Quantity

~

Frequency

once a day (sid)

Duration

5days

Delivery Route

Oral (p.o.)

Loading Dose

~

Form of Drug

Liquid

Concentration Of Drug

~

Treatment Response

Clinical Response

~

Adverse Effects

~

Adverse Effects Note:

~

Staff Instructions

Mix 2 packets of Resorb salt/mineral side only in 1 gallon warm water and offer once a day (sid) for 5 days. If she consumes it, can increase to 4 packets of Resorb salt/mineral side only in 2 gallons warm water. Mix fresh daily. Ensure he has access to alternative sources of water. Can also try adding the Glucose packet if she will not drink the electrolyte water.  
Start treatment on Feb 27, 2024  
Administration route: Oral (p.o.)

Prescription Notes/Comments

~

Calendar Items

Dispensing Records

Administration Records

Feb 26, 2024

Clinical note

Date

Feb 26, 2024

Time

00:00

Note Author

Dominique Keller

Significant

No

Private

No

Active Problems

~

Note Subtype: General

Notes/Comments

Verbal update: Keeper notes that Tina ate some browse from outside the enclosure (but within reach) today (bamboo) and yesterday. At 1030, they saw some gaping behavior from her, but she defecated without issue and has continued to pass feces. She seems stable. Tina took her first dose of Previcox this morning.  
  
P: Out of an abundance of caution, will prescribe mineral oil for Tina. Update tomorrow.  
  
Rx: Mineral oil, 1 gallon in bran PO SID for 3 days, to start today

Animal Care Staff Medical Summary

~

Calendar Items

| Date | Title | Assigned To | Done |
|------|-------|-------------|------|
| ~    | ~     | ~           | ~    |

| Animal Type | GAN      | Preferred ID | Taxonomy                                | Sex    | Birth Date                          |
|-------------|----------|--------------|-----------------------------------------|--------|-------------------------------------|
| Individual  | 26752287 | 992278       | Elephas maximus indicus/Indian elephant | Female | ~ from Jul 01, 1965 to Jul 01, 1966 |

Prescription/Treatment

Basic Info

Date Written

Feb 25, 2024

Start Date

Feb 26, 2024 00:00

Prescribed By

Dominique Keller

Prescribed For

1 animal

Reason For Treatment

~

Weight Info

Date

Feb 25, 2024

Measurement Value

3,350 kg

Estimate

Yes

Exclude From Reference Intervals

Yes

Treatment Detail

Treatment Item/Drug

Previcox (227 mg Solid > Tablet) (Firocoxib) (MERIAL)

Dose Amount

567.5 mg

Dosage Amount

0.169 mg/kg

Administrated Dose Quantity

2.5 count

Frequency

once a day (sid)

Duration

14days

Delivery Route

Oral (p.o.)

Loading Dose

~

Form of Drug

Tablet

Concentration Of Drug

227 mg

Treatment Response

Clinical Response

~

Adverse Effects

~

Adverse Effects Note:

~

Staff Instructions

Give 567.5 mg [2.5 count] of Previcox, once a day (sid) for 14 days.

Start treatment on Feb 26, 2024

Administration route: Oral (p.o.)

Prescription Notes/Comments

~

Calendar Items

| Date         | Title                                                              | Assigned To      | Done |
|--------------|--------------------------------------------------------------------|------------------|------|
| Mar 10, 2024 | 992278 / Indian elephant / 26752287 Previcox treatment is complete | Dominique Keller | No   |

Dispensing Records

| Date Dispensed | Dispensed By | Quantity Dispensed |
|----------------|--------------|--------------------|
| ~              | ~            | ~                  |

Administration Records

| Administration Date/Time | Administered By | Success | Notes |
|--------------------------|-----------------|---------|-------|
| ~                        | ~               | ~       | ~     |

Prescription/Treatment

Printed: Aug 31, 2024

Los Angeles Zoo & Botanical Gardens

Page 120 of 132

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| Animal Type | GAN      | Preferred ID | Taxonomy                                | Sex    | Birth Date                          |
|-------------|----------|--------------|-----------------------------------------|--------|-------------------------------------|
| Individual  | 26752287 | 992278       | Elephas maximus indicus/Indian elephant | Female | ~ from Jul 01, 1965 to Jul 01, 1966 |

Basic Info

Date WrittenFeb 26, 2024

Start DateFeb 26, 2024 00:00

Prescribed ByDominique Keller

Prescribed For1 animal

Reason For Treatment~

Weight Info

DateFeb 26, 2024

Measurement Value3,350 kg

EstimateYes

Exclude From Reference IntervalsYes

Treatment Detail

Treatment Item/DrugMINERAL OIL

Dose Amount1 gal liq (US)

Dosage Amount~

Administrated Dose Quantity1 gal liq (US)

Frequencyonce a day (sid)

Duration3days

Delivery RouteOral (p.o.)

Loading Dose~

Form of Drug ~

Concentration Of Drug

~

Treatment Response

Clinical Response~

Adverse Effects~

Adverse Effects Note:

~

Staff Instructions

Give 1 gal liq (US) of MINERAL OIL, once a day in bran (sid) for 3 days.

Start treatment on Feb 26, 2024

Administration route: Oral (p.o.)

Prescription Notes/Comments

~

Calendar Items

| Date | Title | Assigned To | Done |
|------|-------|-------------|------|
| ~    | ~     | ~           | ~    |

Dispensing Records

| Date Dispensed | Dispensed By | Quantity Dispensed |
|----------------|--------------|--------------------|
| ~              | ~            | ~                  |

Administration Records

| Administration Date/Time | Administered By | Success | Notes |
|--------------------------|-----------------|---------|-------|
| ~                        | ~               | ~       | ~     |

Feb 25, 2024

Clinical note

DateFeb 25, 2024

Time00:00

Note AuthorDominique Keller

SignificantNo

PrivateNo

Active Problems~

Note Subtype: General

Notes/Comments

Foot consultant visit: Overall Tina did extremely well for the foot consult today, however, there were notable changes from the last visit a couple of months ago. Tina has longstanding conformational abnormalities (carpal valgus bilaterally) and a narrow based stance in the rear legs with wide hips (resulting in a V shaped appearance from behind). These changes in addition to enclosure preferences (she chooses to be indoors more when it is raining for example) may finally be causing some more chronic foot and nail changes including:

| Animal Type | GAN      | Preferred ID | Taxonomy                                | Sex    | Birth Date                          |
|-------------|----------|--------------|-----------------------------------------|--------|-------------------------------------|
| Individual  | 26752287 | 992278       | Elephas maximus indicus/Indian elephant | Female | ~ from Jul 01, 1965 to Jul 01, 1966 |

- Notable reduction in duration of holding up the RF foot for footwork, suggesting that the LF foot has more pronounced OA changes than have been exhibited until now. Duration at last foot consult was much longer than what we saw today
- Symmetrical nail defects on both front D5 still active
- Symmetrical nail defects on both rear D4 (visible nail no. 3) as Tina bears more weight on this nail than the D3s
- Reduction in foot pad thickness at the RR on the medial aspect with sensitivity when palpated (likely secondary to FL OA)
- Improvements on the medial aspect of both rear feet where there has been tissue necrosis and hyperplasia from chronic urine splashing and soaking into tissues

A: Age-related and conformational changes seem to finally be catching up to this elephant, who has historically had relatively minor foot defects. There are positive changes on the skin of both rear feet at the areas that have been treated for urine soaking- the tissue looks much healthier, though more healing still needs to continue to remodel the tissue in these areas.

Fecals continue to be appropriately shaped and sized, on the diet of chopped hay.

P:

- Begin NSAID trial, as analgesics are now warranted based on behavior seen during the foot consult. Esp. monitor the LF foot for OA signs.
- Hoof Armor to all 4 feet weekly for the time being as the pads are still thinner than ideal and nails still long despite regular foot care (chronic issue). Use the HoofArmor on the medial aspects of the rear feet to provide some protection from the urine splashing/soaking
- Schedule foot radiographs
- Reminder that quarterly blood draw still outstanding
- Quarterly screening UA done today
- Continue weekly updates
- Schedule ophthalmology recheck (overdue)

Tx: All nails shortened to help reduce weight bearing, keepers instructed to keep doing this on regular schedule and monitor foot pad thickness for any "islands" of pad that can be placing undue pressure in focal areas- these may need to have their thickness reduced slightly. HoofArmor applied to all four feet.

Dx: Urinalysis: free catch collected. USG above mean ref. ranges. crystals present in moderate no. (appropriate)

Rx: Firocoxib, 0.17 mg/kg PO SID for 14 days, can adjust dosage based on evaluation of behavior/perceived comfort level  
HoofArmor, Apply topically to affected foot pad and nails of all 4 feet, once a week, or as needed. Script is valid for 365 days.

DLKeller, DVM

Animal Care Staff Medical Summary

~

Calendar Items

| Date | Title | Assigned To | Done |
|------|-------|-------------|------|
| ~    | ~     | ~           | ~    |

Prescription/Treatment

Basic Info

**Date Written** Feb 25, 2024  
**Start Date** Feb 25, 2024 00:00  
**Prescribed By** Dominique Keller  
**Prescribed For** 1 animal  
**Reason For Treatment** ~

Weight Info

**Date** Feb 25, 2024  
**Measurement Value** 3,350 kg  
**Estimate** Yes  
**Exclude From Reference Intervals** Yes

| Animal Type | GAN      | Preferred ID | Taxonomy                                | Sex    | Birth Date                          |
|-------------|----------|--------------|-----------------------------------------|--------|-------------------------------------|
| Individual  | 26752287 | 992278       | Elephas maximus indicus/Indian elephant | Female | ~ from Jul 01, 1965 to Jul 01, 1966 |

Treatment Detail

Treatment Item/Drug

Hoof Armor (Semisolid)

Dose Amount

~

Dosage Amount

~

Administrated Dose Quantity

~

Frequency

once a week (q7d)

Duration

365days

Delivery Route

Topical

Loading Dose

~

Form of Drug

Semisolid

Concentration Of Drug

~

Treatment Response

Clinical Response

~

Adverse Effects

~

Adverse Effects Note:

~

Staff Instructions

Apply topically to affected foot pad and nails of all 4 feet, once a week, or as needed. Script is valid for 365 days.  
Script starts 25 Feb. 2024

Prescription Notes/Comments

~

Calendar Items

Dispensing Records

Administration Records

Sample

Sample Detail

Collection Date/Time

Feb 25, 2024 00:00

Sample Type

Urine

Additives/Preservatives

~

Collection Method

Free Catch

Collected By

Dominique Keller

Reason

~

Exclude from reference intervals

No

Sample Quality

Color

Yellow

Color Intensity

medium

Clarity

Turbid/Cloudy

Degraded

No

Initial Holding Conditions

Initial Holding Temp.

~

Initial Holding Duration

~

Sample History

Notes

~

Calendar Items

| Animal Type | GAN      | Preferred ID | Taxonomy                                | Sex    | Birth Date                          |
|-------------|----------|--------------|-----------------------------------------|--------|-------------------------------------|
| Individual  | 26752287 | 992278       | Elephas maximus indicus/Indian elephant | Female | ~ from Jul 01, 1965 to Jul 01, 1966 |

Test & Result

|                            |                    |                            |               |
|----------------------------|--------------------|----------------------------|---------------|
| Test Request Detail        |                    | Sample Quality             |               |
| Date Requested             | Feb 25, 2024       | Color                      | Yellow        |
| Requested By               | Dominique Keller   | Color Intensity            | medium        |
| Analysis Start Date & Time | Feb 25, 2024 00:00 | Clarity                    | Turbid/Cloudy |
| Analysis By                | Deanna Rocca       | Consistency                | ~             |
| Analysis Equipment         | ~                  | Additional Characteristics | ~             |
| Insufficient Sample        | No                 | Degraded                   | No            |

|                                                                                                                                                                                                                              |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Notes/Comments                                                                                                                                                                                                               |
| Sediment exam - 1-numerous calcium oxalate crystals observed. The fields that are numerous are not necessarily TNTC but they cannot be counted as they are clumped together and I cannot decipher how many there are.<br>DLR |

| Test Requests & Test Results |                  |                                                                                                   |            |                 |                  |          |
|------------------------------|------------------|---------------------------------------------------------------------------------------------------|------------|-----------------|------------------|----------|
| Test                         | Primary Result   | Expected Results (Based on Best Available Match)<br>Type: Min- Max   Mean [Median]<br>N (Animals) | Evaluation | Excl'd. from RI | Clinical Finding | Reviewed |
| Urine Bilirubin [rs]         | (-) Negative     |                                                                                                   | ~          | ~               | ~                | Yes      |
| Urine Urobili. [rs]          | Normal 0.2 mg/dL |                                                                                                   | ~          | ~               | ~                | Yes      |
| Urine Ketones [rs]           | (-) Negative     |                                                                                                   | ~          | ~               | ~                | Yes      |
| Protein                      | 0 mg/dL          | Global sp RI: 0 - 180   36 [14] N=86 (27)                                                         | ~          | No              | ~                | Yes      |
| Urine Nitrite [rs]           | Negative         |                                                                                                   | ~          | ~               | ~                | Yes      |
| Urine Leuk. [rs]             | Negative         |                                                                                                   | ~          | ~               | ~                | Yes      |
| Urine Glucose [rs]           | (-) Negative     |                                                                                                   | ~          | ~               | ~                | Yes      |
| pH [rs]                      | 8.0 pH           | Global subsp RI: 6.5 - 8.9   7.8 [8.0] N=169 (14)                                                 | ~          | No              | ~                | Yes      |
| Urine Blood [rs]             | Negative         |                                                                                                   | ~          | ~               | ~                | Yes      |
| Sp Grav (test strip)         | 1.020 ratio      | Global subsp RI: 1.000 - 1.025   1.010 [1.010] N=74 (3)                                           | ~          | No              | ~                | Yes      |
| Sp Grav (R)                  | 1.022 ratio      | Global subsp RI: 1.004 - 1.028   1.019 [1.018] N=82 (9)                                           | ~          | No              | ~                | Yes      |
| Urine Ascorbic [rs]          | Normal           |                                                                                                   | ~          | ~               | ~                | Yes      |
| Hyaline Casts                | Negative [none]  |                                                                                                   | ~          | ~               | ~                | Yes      |
| Granular casts               | Negative [none]  |                                                                                                   | ~          | ~               | ~                | Yes      |
| Ca Oxalate Crystals          | Moderate         |                                                                                                   | ~          | ~               | ~                | Yes      |
| Ca Phos Crystals             | None seen        |                                                                                                   | ~          | ~               | ~                | Yes      |

|                                     |                    |                                  |                  |
|-------------------------------------|--------------------|----------------------------------|------------------|
| Sample Detail (GSN: S-TCW24-150051) |                    |                                  |                  |
| Collection Date/Time                | Feb 25, 2024 00:00 | Collection Method                | Free Catch       |
| Sample Type                         | Urine              | Collected By                     | Dominique Keller |
| Anatomical Source/Tissue            | ~                  | Reason                           | ~                |
| Additives/Preservatives             | ~                  | Exclude from reference intervals | No               |

| Animal Type | GAN      | Preferred ID | Taxonomy                                | Sex    | Birth Date                          |
|-------------|----------|--------------|-----------------------------------------|--------|-------------------------------------|
| Individual  | 26752287 | 992278       | Elephas maximus indicus/Indian elephant | Female | ~ from Jul 01, 1965 to Jul 01, 1966 |

Feb 21, 2024

Clinical note

| Date         | Time    | Note Author      |
|--------------|---------|------------------|
| Feb 21, 2024 | 00:00   | Dominique Keller |
| Significant  | Private | Active Problems  |
| No           | No      | ~                |

Note Subtype: General

Notes/Comments

Visual recheck: Has finished the current course of Canker powder for the rear foot nail defects, keepers would like to extend. Keepers report Tina is doing well, her overall attitude is good, she's been very engaged with training, though they do struggle to go to 15 min with the CO2 in bag treatments for her feet.

Restraint: Behavioral.

O: BCS: 5/9  
N: mentation is appropriate  
MS: Both front D5 nails have defects on the underside of the nails with accompanying vertical defects in the face of the nail that are less than 1 cm long. The defects on the underside of the nails are somewhat soft, less than 1 cm in diameter and have no malodorous discharge. The nail faces are solid and there is no excessive warmth at the cuticles. At the rear feet, the D3 nails (visible nails, actually Digit 4)- have similar issues to the D5 on the front feet. The inside margins of the rear feet where there has been some chronic irritation look much better today- there is little irritation left and the hyperkeratosis is nearly resolved.  
GI: There were over 5 piles of formed, moist, appropriately sized fecal boluses. Did not appreciate any large plant pieces or sand.

P: OK to go to 10 min CO2 bag sessions for feet, and repeat throughout the week for a total of 20 min.  
Continue the Canker powder application to the rear nail defects as they are still soft and a little moist. Foot consultant will be here to work on feet in a few days.

Rx: extended Canker powder script for 90 days

DLKeller, DVM

Animal Care Staff Medical Summary

~

Calendar Items

| Date | Title | Assigned To | Done |
|------|-------|-------------|------|
| ~    | ~     | ~           | ~    |

Feb 20, 2024

Prescription/Treatment

Basic Info

|                      |                    |
|----------------------|--------------------|
| Date Written         | Feb 20, 2024       |
| Start Date           | Feb 20, 2024 00:00 |
| Prescribed By        | Dominique Keller   |
| Prescribed For       | 1 animal           |
| Reason For Treatment | ~                  |

Weight Info

|                                  |              |
|----------------------------------|--------------|
| Date                             | Feb 20, 2024 |
| Measurement Value                | 3,350 kg     |
| Estimate                         | Yes          |
| Exclude From Reference Intervals | Yes          |

| Animal Type | GAN      | Preferred ID | Taxonomy                                | Sex    | Birth Date                          |
|-------------|----------|--------------|-----------------------------------------|--------|-------------------------------------|
| Individual  | 26752287 | 992278       | Elephas maximus indicus/Indian elephant | Female | ~ from Jul 01, 1965 to Jul 01, 1966 |

Treatment Detail

Treatment Item/Drug

Horse Canker Powder (1 % (c) Solid > Powder) (Ketoconazole; Metronidazole)

Dose Amount

~

Frequency

once a day (sid)

Form of Drug

Powder

Dosage Amount

~

Duration

90days

Concentration Of Drug

1 % (c)

Administrated Dose Quantity

~

Delivery Route

Topical

Loading Dose

~

Treatment Response

Clinical Response

~

Adverse Effects

~

Adverse Effects Note:

~

Staff Instructions

Apply Canker Powder to the LR outer nail defect once a day. Script is valid for 90 days. Pack the powder well into the full defect.

Script starts 20 Feb. 2024

Prescription Notes/Comments

~

Calendar Items

| Date         | Title                                                                         | Assigned To      | Done |
|--------------|-------------------------------------------------------------------------------|------------------|------|
| May 19, 2024 | 992278 / Indian elephant / 26752287 Horse Canker Powder treatment is complete | Dominique Keller | No   |

Dispensing Records

| Date Dispensed | Dispensed By | Quantity Dispensed |
|----------------|--------------|--------------------|
| ~              | ~            | ~                  |

Administration Records

| Administration Date/Time | Administered By | Success | Notes |
|--------------------------|-----------------|---------|-------|
| ~                        | ~               | ~       | ~     |

Feb 12, 2024

Clinical note

Date

Feb 12, 2024

Time

00:00

Note Author

Dominique Keller

Significant

No

Private

No

Active Problems

~

Note Subtype: General

Notes/Comments

Verbal update: Tina is doing very well today and has been acting "normally" for the past week at least.

P: Update in a couple of days.

DLKeller, DVM

Animal Care Staff Medical Summary

~

Calendar Items

| Date | Title | Assigned To | Done |
|------|-------|-------------|------|
| ~    | ~     | ~           | ~    |

Prescription/Treatment

| Animal Type | GAN      | Preferred ID | Taxonomy                                | Sex    | Birth Date                          |
|-------------|----------|--------------|-----------------------------------------|--------|-------------------------------------|
| Individual  | 26752287 | 992278       | Elephas maximus indicus/Indian elephant | Female | ~ from Jul 01, 1965 to Jul 01, 1966 |

Basic Info

Date Written

Feb 12, 2024

Start Date

Feb 12, 2024 00:00

Prescribed By

Dominique Keller

Prescribed For

1 animal

Reason For Treatment

~

Weight Info

Date

Feb 12, 2024

Measurement Value

3,350 kg

Estimate

Yes

Exclude From Reference Intervals

Yes

Treatment Detail

Treatment Item/Drug

Silver Honey Spray Gel (Semisolid)

Dose Amount

~

Frequency

once a day (sid)

Form of Drug

Semisolid

Dosage Amount

~

Duration

14days

Concentration Of Drug

~

Administrated Dose Quantity

~

Delivery Route

Topical

Loading Dose

~

Treatment Response

Clinical Response

~

Adverse Effects

~

Adverse Effects Note:

~

Staff Instructions

Apply topically to affected areas of both rear feet once a day for 14 days. Product should coat the area well.

Apply after cleaning feet, and if doing CO2 therapy, after the CO2 therapy.

Script starts 12 Feb. 2024.

Prescription Notes/Comments

~

Calendar Items

| Date         | Title                                                                            | Assigned To      | Done |
|--------------|----------------------------------------------------------------------------------|------------------|------|
| Feb 25, 2024 | 992278 / Indian elephant / 26752287 Silver Honey Spray Gel treatment is complete | Dominique Keller | No   |

Dispensing Records

| Date Dispensed | Dispensed By | Quantity Dispensed |
|----------------|--------------|--------------------|
| ~              | ~            | ~                  |

Administration Records

| Administration Date/Time | Administered By | Success | Notes |
|--------------------------|-----------------|---------|-------|
| ~                        | ~               | ~       | ~     |

Prescription/Treatment

| Animal Type | GAN      | Preferred ID | Taxonomy                                | Sex    | Birth Date                          |
|-------------|----------|--------------|-----------------------------------------|--------|-------------------------------------|
| Individual  | 26752287 | 992278       | Elephas maximus indicus/Indian elephant | Female | ~ from Jul 01, 1965 to Jul 01, 1966 |

Basic Info

Date Written

Feb 12, 2024

Start Date

Feb 12, 2024 00:00

Prescribed By

Dominique Keller

Prescribed For

4 animals

Reason For Treatment

~

Treatment Detail

Treatment Item/Drug

A & D Ointment

Dose Amount

~

Frequency

as needed

Form of Drug

Ointment

Dosage Amount

~

Duration

365days

Concentration Of Drug

Administrated Dose Quantity

~

Delivery Route

Topical

Loading Dose

~

Treatment Response

Clinical Response

~

Adverse Effects

~

Adverse Effects Note:

~

Staff Instructions

Apply A&D Ointment topically to the cuticles/nails as needed. Frequency of treatment will vary depending on need. Script is for elephant herd and is valid for 365 days. Start 12 Feb. 2022

Prescription Notes/Comments

~

Calendar Items

| Date         | Title                                                                         | Assigned To      | Done |
|--------------|-------------------------------------------------------------------------------|------------------|------|
| Feb 10, 2025 | 95661 / Indian elephant / MIG12-29858671 A & D Ointment treatment is complete | Dominique Keller | No   |

Dispensing Records

| Date Dispensed | Dispensed By | Quantity Dispensed |
|----------------|--------------|--------------------|
| ~              | ~            | ~                  |

Administration Records

| Administration Date/Time | Administered By | Success | Notes |
|--------------------------|-----------------|---------|-------|
| ~                        | ~               | ~       | ~     |

Feb 10, 2024

Clinical note

Date

Feb 10, 2024

Time

00:00

Note Author

Brandon Boren

Significant

No

Private

No

Active Problems

~

Note Subtype: General

Notes/Comments

Update from Snr KC: "Just a quick update on Tina. Today was Day 5 of 5 for Bran/Mineral Oil. She ate 100% of last night's diet and 100% of today's diet. She was VERY energetic this AM and was very engaged in training, stretching and public demonstration. Bolices were great, peed just out of reach so we couldn't get a sample, and I believe had an overall great day." {BB}

Animal Care Staff Medical Summary



| Animal Type | GAN      | Preferred ID | Taxonomy                                | Sex    | Birth Date                          |
|-------------|----------|--------------|-----------------------------------------|--------|-------------------------------------|
| Individual  | 26752287 | 992278       | Elephas maximus indicus/Indian elephant | Female | ~ from Jul 01, 1965 to Jul 01, 1966 |

~

Calendar Items

| Date | Title | Assigned To | Done |
|------|-------|-------------|------|
| ~    | ~     | ~           | ~    |

Prescription/Treatment

Basic Info

Date Written

Feb 09, 2024

Start Date

Feb 10, 2024 00:00

Prescribed By

Dominique Keller

Prescribed For

1 animal

Reason For Treatment

~

Weight Info

Date

Feb 09, 2024

Measurement Value

3,350 kg

Estimate

Yes

Exclude From Reference Intervals

Yes

Treatment Detail

Treatment Item/Drug

Horse Canker Powder (1 % (c) Solid > Powder) (Ketoconazole; Metronidazole)

Dose Amount

~

Dosage Amount

~

Administrated Dose Quantity

~

Frequency

once a day (sid)

Duration

7days

Delivery Route

Topical

Loading Dose

~

Form of Drug

Powder

Concentration Of Drug

1 % (c)

~

Treatment Response

Clinical Response

~

Adverse Effects

~

Adverse Effects Note:

~

Staff Instructions

Apply Canker Powder to the LR outer nail defect once a day for 7 days. Pack the powder well into the full defect.

Script starts 10 Feb. 2024

Prescription Notes/Comments

~

Calendar Items

| Date         | Title                                                                         | Assigned To      | Done |
|--------------|-------------------------------------------------------------------------------|------------------|------|
| Feb 16, 2024 | 992278 / Indian elephant / 26752287 Horse Canker Powder treatment is complete | Dominique Keller | No   |

Dispensing Records

| Date Dispensed | Dispensed By | Quantity Dispensed |
|----------------|--------------|--------------------|
| ~              | ~            | ~                  |

Administration Records

| Administration Date/Time | Administered By | Success | Notes |
|--------------------------|-----------------|---------|-------|
| ~                        | ~               | ~       | ~     |

Feb 09, 2024

Clinical note

| Date         | Time  | Note Author      |
|--------------|-------|------------------|
| Feb 09, 2024 | 00:00 | Dominique Keller |

| Animal Type | GAN      | Preferred ID | Taxonomy                                | Sex    | Birth Date                          |
|-------------|----------|--------------|-----------------------------------------|--------|-------------------------------------|
| Individual  | 26752287 | 992278       | Elephas maximus indicus/Indian elephant | Female | ~ from Jul 01, 1965 to Jul 01, 1966 |

Significant  
No

Private  
No

Active Problems  
~

Note Subtype: General

Notes/Comments

Visual and verbal update: Keepers report that she is doing much better and seems to be eating more normally (left about 10 lb of hay from overnight). Fecals in stall this morning are copious and moist, slightly smaller than her usual and a little darker.

O: Alert, bright. BCS: 5/9.

N: mentation appears appropriate

Oral: Mucous membranes are pink and moist, no halitosis or lesions. Both upper teeth on L and R side look good- not able to visualize mandibular teeth without scope.

Integ: The skin on the dorsum looks good today. She has been receiving mineral oil topically

M/S: The skin defects on the medial aspect of the both rear feet look much better- no irritation and the skin is smoothing out. The vertical defects in the D4 (visible) nails are relatively stable- though the left one is a little more open at the bottom of the nail and very moist (we have had rain for several consecutive days). There is no discharge or malodor to either of these defects.

A: Recommended that we apply Canker powder to the LR nail defect once a day for a few days to help dry it out a little- this is a short term treatment only. They are to continue the CO2 therapy as they have been.

P: Update in a couple of days. Keepers are to try for blood and urine this coming week.

Rx: Canker powder topically to LR outer nail defect once a day for 7 days.

DLKeller, DVM

Animal Care Staff Medical Summary

~

Calendar Items

| Date | Title | Assigned To | Done |
|------|-------|-------------|------|
| ~    | ~     | ~           | ~    |

Feb 08, 2024

Clinical note

Date  
Feb 08, 2024

Time  
00:00

Note Author  
Dominique Keller

Significant  
No

Private  
No

Active Problems  
~

Note Subtype: General

Notes/Comments

Verbal update: Keepers report that Tina's appetite is almost back to normal (she ate 90% of her overnight diet and 100% of the morning diet today).

P: Update tomorrow,

DLKeller, DVM

Animal Care Staff Medical Summary

~

Calendar Items

| Date | Title | Assigned To | Done |
|------|-------|-------------|------|
| ~    | ~     | ~           | ~    |

Feb 07, 2024

Clinical note

Date  
Feb 07, 2024

Time  
00:00

Note Author  
Brandon Boren

| Animal Type | GAN      | Preferred ID | Taxonomy                                | Sex    | Birth Date                          |
|-------------|----------|--------------|-----------------------------------------|--------|-------------------------------------|
| Individual  | 26752287 | 992278       | Elephas maximus indicus/Indian elephant | Female | ~ from Jul 01, 1965 to Jul 01, 1966 |

Significant

Private

Active Problems

No

No

~

Note Subtype: General

Notes/Comments

Update: Tina ate roughly 70 percent of her PM diet. Much improved over yesterdays lack of eating. She received the Oil/Bran mix last night and defecated a lot throughout the night. We will continue to monitor and keep you all posted. Attitude is great. Urine looks normal. No straining. Participating and engaging as she normally would. Vet to follow up tomorrow. {BB}

Animal Care Staff Medical Summary

~

Calendar Items

| Date | Title | Assigned To | Done |
|------|-------|-------------|------|
| ~    | ~     | ~           | ~    |

Feb 06, 2024

Clinical note

Date

Time

Note Author

Feb 06, 2024

00:00

Dominique Keller

Significant

Private

Active Problems

No

No

~

Note Subtype: General

Notes/Comments

Verbal update: Keeper reports that Tina did not finish all her food overnight, this is unusual. Also only produced two piles of fecal overnight, also unusual. Keepers are seeing copious urination and they do see her drinking well.

A: Possible that the inclement weather has affected appetite or if Tina has been getting into browse she is not officially fed out (keepers think no). I reminded keeper that we are overdue for January blood work and urine. Keeper indicated they will be working on this as soon as possible.

P: Update tomorrow on appetite and defecation. Start prophylactic mineral oil in case of GI motility issue.

Rx: Mineral oil, 1 gallon in bran, once a day for 5 days.

Animal Care Staff Medical Summary

~

Calendar Items

| Date | Title | Assigned To | Done |
|------|-------|-------------|------|
| ~    | ~     | ~           | ~    |

Prescription/Treatment

| Basic Info           |                    | Weight Info                      |              |
|----------------------|--------------------|----------------------------------|--------------|
| Date Written         | Feb 06, 2024       | Date                             | Feb 06, 2024 |
| Start Date           | Feb 06, 2024 00:00 | Measurement Value                | 3,350 kg     |
| Prescribed By        | Dominique Keller   | Estimate                         | Yes          |
| Prescribed For       | 1 animal           | Exclude From Reference Intervals | Yes          |
| Reason For Treatment | ~                  |                                  |              |

| Animal Type | GAN      | Preferred ID | Taxonomy                                | Sex    | Birth Date                          |
|-------------|----------|--------------|-----------------------------------------|--------|-------------------------------------|
| Individual  | 26752287 | 992278       | Elephas maximus indicus/Indian elephant | Female | ~ from Jul 01, 1965 to Jul 01, 1966 |

Treatment Detail

Treatment Item/Drug

MINERAL OIL

Dose Amount

1 gal liq (US)

Dosage Amount

~

Administrated Dose Quantity

1 gal liq (US)

Frequency

once a day (sid)

Duration

5days

Delivery Route

Oral (p.o.)

Loading Dose

~

Form of Drug

~

Concentration Of Drug

~

Treatment Response

Clinical Response

~

Adverse Effects

~

Adverse Effects Note:

~

Staff Instructions

Give 1 gal liq (US) of MINERAL OIL, once a day in bran (sid) for 5 days.  
Start treatment on Feb 06, 2024  
Administration route: Oral (p.o.)

Prescription Notes/Comments

~

Calendar Items

| Date | Title | Assigned To | Done |
|------|-------|-------------|------|
| ~    | ~     | ~           | ~    |

Dispensing Records

| Date Dispensed | Dispensed By | Quantity Dispensed |
|----------------|--------------|--------------------|
| ~              | ~            | ~                  |

Administration Records

| Administration Date/Time | Administered By | Success | Notes |
|--------------------------|-----------------|---------|-------|
| ~                        | ~               | ~       | ~     |