

**Report Details - EON-390203**

ICSR:	2068095
Type Of Submission:	Followup
Report Version:	FPSR.FDA.PETF.V.V1
Type Of Report:	Adverse Event (a symptom, reaction or disease associated with the product)
Reporting Type:	Voluntary
Report Submission Date:	2019-06-11 14:43:13 EDT
Initial Report Date:	02/25/2019
Parent ICSR:	2063135
Follow-up Report to FDA Request:	Yes

Reported Problem:	Problem Description:	Eating BEG diet - 2 other dogs in household diagnosed with DCM [B6] and [B6] - already reported) RDVM screened this dog with NT-proBNP which was elevated so we evaluated at Tufts 2/20/19 Probable ARVC/diet-associated DCM but no arrhythmia detected (enlarged right ventricle, reduced contractility) Changing diet to Royal Canin Early Cardiac and will re-evaluate in 3 months. Low plasma and whole blood taurine levels - started taurine supplement 3/1/2019 Troponin [B6] hg/mL [B6]
	Date Problem Started:	02/20/2019
	Concurrent Medical Problem:	Yes
	Pre Existing Conditions:	<b>B6</b>
	Outcome to Date:	Stable

Product Information:	Product Name:	Wellness CORE Grain-Free Ocean Whitefish dry Wellness Core grain free turkey, chicken liver, and turkey liver formula canned Wellness Core Hearty Cuts grain-free in gravy chicken and turkey recipe
	Product Type:	Pet Food
	Lot Number:	
	Product Use Information:	Description: Please see diet history for more info (and also see [B6] [B6] diet history for exact diets)
	Manufacturer /Distributor Information:	
	Purchase Location Information:	

Animal Information:	Name:	[B6]
	Type Of Species:	Dog
	Type Of Breed:	Bulldog
	Gender:	Female
	Reproductive Status:	Neutered
	Weight:	24.2 Kilogram
	Age:	[B6] Years
	Assessment of Prior Health:	Good
	Number of Animals Given the Product:	6
	Number of Animals Reacted:	4
	Owner Information:	Owner Information provided: Yes
Contact:	Name: [B6]	
	Phone: [B6]	

		<b>Email:</b> B6
	<b>Address:</b>	<b>B6</b> United States
<b>Healthcare Professional Information:</b>	<b>Practice Name:</b>	Tufts Cummings School of Veterinary Medicine
	<b>Contact Name:</b>	Lisa Freeman
	<b>Phone:</b>	(508) 887-4523
	<b>Email:</b>	lisa.freeman@tufts.edu
	<b>Address:</b>	200 Westboro Rd North Grafton Massachusetts 01536 United States
<b>Sender Information:</b>	<b>Name:</b>	Lisa Freeman
	<b>Address:</b>	200 Westboro Rd North Grafton Massachusetts 01536 United States
	<b>Contact Phone:</b>	5088874523
	<b>Contact Email:</b>	lisa.freeman@tufts.edu
	<b>Permission To Contact Sender:</b>	Yes
	<b>Preferred Method Of Contact:</b>	Email
<b>Additional Documents:</b>	<b>Attachment:</b>	Follow-up med records pt 2.pdf
	<b>Description:</b>	Med records
	<b>Type:</b>	Medical Records
	<b>Attachment:</b>	Follow-up med records pt 1.pdf
	<b>Description:</b>	Med records
	<b>Type:</b>	Medical Records

Client: **B6**  
 Patient: **B6**

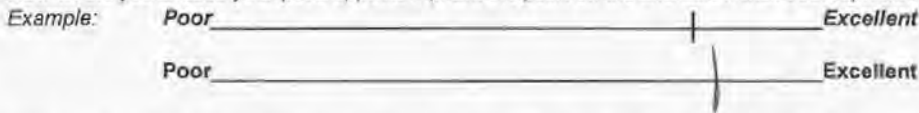
Diet hx 5/8/2019

# **B6**

**CARDIOLOGY DIET HISTORY FORM**  
 Please answer the following questions about your pet

Pet's name: **B6** Owner's name: **B6** Today's date: **5/8/19**

1. How would you assess your pet's appetite? (mark the point on the line below that best represents your pet's appetite)



2. Have you noticed a change in your pet's appetite over the last 1-2 weeks? (check all that apply)  
 Eats about the same amount as usual     Eats less than usual     Eats more than usual  
 Seems to prefer different foods than usual     Other \_\_\_\_\_

3. Over the last few weeks, has your pet (check one)  
 Lost weight     Gained weight     Stayed about the same weight     Don't know

1. Please list below ALL pet foods, people food, treats, snack, dental chews, rawhides, and any other food item that your pet currently eats and that you have fed in the last 2 years.

Please provide enough detail that we could go to the store and buy the exact same food - examples are shown in the table

Food (include specific product and flavor)	Form	Amount	How often?	Dates fed
Nutro Grain Free Chicken, Lentil, & Sweet Potato Adult	dry	1 1/2 cup	2x/day	Jan 2016-present
85% lean hamburger	microwaved	3 oz	1x/week	June -Aug 2016
Pupperoni original beef flavor	treat	1/2	1x/day	Sept 2016-present
Rawhide	treat	6 inch twist	1x/week	Dec 2018-present
Royal Canin Cardiac	dry	1 1/2 cup	2x/day	FEB 2019-PRES

\*Any additional diet information can be listed on the back of this sheet

2. Do you give any dietary supplements to your pet (for example: vitamins, glucosamine, fatty acids, or any other supplements)?  Yes  No If yes, please list which ones and give brands and amounts:

	Brand/Concentration	Amount per day
Taurine	Nova 1500	2x
Carnitine		
Antioxidants		
Multivitamin		
Fish oil		
Coenzyme Q10		
Other (please list)		
Example: Vitamin C	Nature's Bounty	500 mg tablets - 1 per day

3. How do you administer pills to your pet?  
 I do not give any medications  
 I put them directly in my pet's mouth without food  
 I put them in my pet's dog/cat food  
 I put them in a Pill Pocket or similar product  
 I put them in foods (list foods): \_\_\_\_\_

Client: **B6**  
Patient: **B6**

**Idexx NT-proBNP 5/8/2019**

IDEXX Reference Laboratories

Client: **B6** Patient: **B6**

Client: **B6**  
Patient: **B6**  
Species: CANINE  
Breed: ENGLISH\_BULLDOG  
Gender: FEMALE S/PAYED  
Age: 6Y

Date: **B6**  
Requisition #: 14  
Accession #: **B6**  
Ordered by: **B6**

IDEXX VetConnect 1-888-433-9967  
TUFTS UNIVERSITY  
200 WESTBORO RD  
NORTH GRAFTON, Massachusetts 01536  
508-839-5395  
Account #: **B6**

**CARDIOPET proBNP - CANINE**

Test	Result	Reference Range	Unit	Manual	Blot
CARDIOPET proBNP - CANINE	<b>B6</b>	0 - 900 pmol/L	HIGH		<b>B6</b>

Comments:  
**B6**

Please note: Complete interpretive comments for all concentrations of CardioPET proBNP are available in the online directory of services. Serum specimens received at room temperature may have decreased NT-proBNP concentrations.

Client: **B6**  
Patient: **B6**

**Troponin 5/31/2019**



**Gastrointestinal Laboratory**  
**Dr. J.M. Steiner**  
**Department of Small Animal Clinical Sciences**  
**Texas A&M University**  
**4474 TAMU**  
**College Station, TX 77843-4474**



Website User ID: **B6**

GI Lab Assigned Clinic ID: 23523

**B6**  
Tufts Cummings School of Vet Med - Cardiology/Nutrition  
200 Westboro Road  
North Grafton, MA 01536  
USA

Phone: 508 887 4696

Fax:  
Animal Name: **B6**  
Owner Name:

Species: Canine

Date Received: May 30, 2019

Tufts Cummings School of Vet Med -  
Cardiology/Nutrition Tracking Number:  
438993

GI Lab Accession: **B6**

Test	Result	Reference Interval	Assay Date
Ultra-Sensitive Troponin I Fasting	<b>B6</b> $\mu\text{g/ml}$	$<0.06$	<b>B6</b>

**B6**

Comments:

**GI Lab Contact Information**

Phone: (979) 862-2861  
Fax: (979) 862-2864

Email: [gilab@cvm.tamu.edu](mailto:gilab@cvm.tamu.edu)  
[vetmed.tamu.edu/gilab](mailto:vetmed.tamu.edu/gilab)

B6

Patient ID: B6  
B6 Canine  
B6 Years Old Female (Spayed) English Bulldog  
Brown/White

### Cardiology Appointment Report

Date: 5/8/2019

**Attending Cardiologist:**

John E. Rush DVM, MS, DACVIM (Cardiology), DACVECC

B6

**Cardiology Resident:**

B6

**Cardiology Technician:**

B6

Student: B6 v20

**Presenting Complaint:** 3 month recheck DCM study  
Hx BNP of B6 at rDVM. Possible ARVC but no hx of arrhythmia.

**Concurrent Diseases:**

Chronic enteritis

**General Medical History:**

O reports doing well at home.

B6

**Diet and Supplements:**

RC Cardiac diet  
Now Taurine 500 mg BID

**Cardiovascular History:**

Prior CHF diagnosis? N  
Prior heart murmur? N  
Prior ATE? N  
Prior arrhythmia? N  
Monitoring respiratory rate and effort at home? Y, 30-40 breaths/min when resting  
Cough? N  
Shortness of breath or difficulty breathing? N

Syncope or collapse? N  
Sudden onset lameness? N  
Exercise intolerance? N

**Current Medications Pertinent to CV System:**

None

**Cardiac Physical Examination:**

**B6**

**Muscle condition:**

- Normal
- Mild muscle loss
- Moderate cachexia
- Marked cachexia

**Cardiovascular Physical Exam:**

**Murmur Grade:**

- None
- I/VI
- II/VI
- III/VI
- IV/VI
- V/VI
- VI/VI

**Jugular vein:**

- Bottom 1/3 of the neck
- Middle 1/3 of the neck
- 1/2 way up the neck
- Top 2/3 of the neck

**Arterial pulses:**

- Weak
- Fair
- Good
- Strong
- Bounding
- Pulse deficits
- Pulsus paradoxus
- Other:

**Arrhythmia:**

- None
- Sinus arrhythmia
- Premature beats
- Bradycardia
- Tachycardia

**Gallop:**

- Yes
- No
- Intermittent
- Pronounced
- Other:

**Pulmonary assessments:**

- Eupneic
- Mild dyspnea
- Marked dyspnea
- Normal BV sounds
- Pulmonary crackles
- Wheezes
- Upper airway stridor

**Abdominal exam:**

- Normal
- Hepatomegaly
- Mild ascites
- Marked ascites

- Abdominal distension

**Problems:**

History of possible early ARVC

**Diagnostic plan:**

- Echocardiogram
- Chemistry profile
- ECG
- Renal profile
- Blood pressure
- Dialysis profile
- Thoracic radiographs
- NT-proBNP
- Troponin I
- Other tests: bloodwork for DCM study

**B6**

**Assessment and recommendations:**

Echocardiogram reveals stable to possibly mildly improved systolic function. There is still RH dilation consistent with ARVC, but no arrhythmia was documented today. No cardiac medications are clearly indicated based on today's exam, but recommend continuing to supplement with taurine. Recheck echo in 3 and 6 months for the DCM study.

**Final Diagnosis:**

Mild cardiac changes that may be consistent with early arrhythmogenic right ventricular cardiomegaly (ARVC) or associated with nutritional cardiomyopathy - stable to slightly improved from appointment in February 2019

**Heart Failure Classification Score:**

**ISACHC Classification:**

- Ia
- Ib
- II
- IIIa
- IIIb

**ACVIM Classification:**

- A
- B1
- B2
- C
- D



M-Mode

IVSd

LVIDd

LVPWd

IVSs

LVIDs

LVPWs

EDV(Teich)

ESV(Teich)

EF(Teich)

%FS

SV(Teich)

Ao Diam

LA Diam

LA/Ao

Max LA

TAPSE

EPSS

B6

cm  
cm  
cm  
cm  
cm  
cm  
ml  
ml  
%  
%  
ml  
cm  
cm  
cm  
cm

M-Mode Normalized

IVSdN

LVIDdN

LVPWdN

IVSsN

LVIDsN

LVPWsN

Ao Diam N

LA Diam N

B6

{0.290 - 0.520}  
{1.350 - 1.730}  
{0.330 - 0.530} !  
{0.430 - 0.710}  
{0.790 - 1.140}  
{0.530 - 0.780} !  
{0.680 - 0.890} !  
{0.640 - 0.900}

2D

SA LA

Ao Diam

SA LA / Ao Diam

IVSd

LVIDd

LVPWd

EDV(Teich)

IVSs

LVIDs

LVPWs

ESV(Teich)

EF(Teich)

%FS

SV(Teich)

LVLd A4C

LVEDV MOD A4C

LVLs A4C

LVESV MOD A4C

B6

cm  
cm  
  
cm  
cm  
cm  
ml  
cm  
cm  
ml  
%  
%  
ml  
cm  
ml  
cm  
ml

LVEF MOD A4C  
SV MOD A4C

B6

%  
ml

Doppler

MV E Vel

MV DecT

MV Dec Slope

MV A Vel

MV E/A Ratio

E'

E/E'

A'

S'

AV Vmax

AV maxPG

PV Vmax

PV maxPG

B6

m/s

ms

m/s

m/s

m/s

m/s

m/s

m/s

mmHg

m/s

mmHg

Foster Hospital for Small Animals  
55 Willard Street  
North Grafton, MA 01536  
Telephone (508) 839-5395  
Fax (508) 839-7951  
<http://vetmed.tufts.edu/>

## Discharge Instructions

### Patient

Name: B6

Species: Canine

Brown/White Female (Spayed) English

Bulldog

Birthdate: B6

### Owner

Name: B6

Address: B6

Patient ID: B6

### Attending Cardiologist:

John E. Rush DVM, MS, DACVIM (Cardiology), DACVECC

B6

### Cardiology Resident:

B6

### Cardiology Technician:

B6

Student: B6 V20

Date: B6

### Diagnoses:

Mild cardiac changes that may be consistent with early arrhythmogenic right ventricular cardiomegaly (ARVC) or associated with nutritional cardiomyopathy - stable to slightly improved from appointment in February 2019

### Clinical Findings:

Thank you for bringing B6 in for her three month recheck as a part of the DCM study. You report that B6 has been doing well at home and that you have been giving her Taurine supplement twice a day. Her respiratory rate has been normal and she has had a good energy level at home.

During the appointment today, we performed a recheck echocardiogram (ultrasound of the heart). On the echocardiogram, the structural changes to B6 heart that we had previously seen in February were still present, but are stable to slightly improved. We also used electrocardiogram (EKG) to assess B6 heart rhythm and did not see any arrhythmias. Based on B6 echocardiogram and EKG today, we still do not think that B6 needs any medication at this point. Please continue to give her Taurine supplement twice daily.

We drew a blood sample from B6 for the DCM study and will contact you once we have the results back.

### Monitoring at Home:

Please continue to watch B6 at home for any signs such as increased respiratory rate or effort, exercise intolerance or episodes of collapse. If you see any of these signs, please contact a veterinarian.

### Diet Suggestions:

Please continue to feed Bella the Royal Canin Cardiac diet.

**Exercise Recommendations:**

B6 may continue her normal exercise at home.

**Recommended Medications:**

Please continue to give B6 her Taurine supplement (500 mg by mouth twice daily).

**Recheck Visits:** We would like to see B6 for a recheck appointment in 3 months. At this visit we will want to check breathing effort and heart function, do a blood test for the DOM study, and perform a recheck echocardiogram. B6 will contact you to schedule this appointment once the troponin results are back in a week or so.

Thank you for entrusting us with B6 care. She is a wonderful dog! Please contact our Cardiology liaison at (508)-887-4696 or email us at [cardiovet@tufts.edu](mailto:cardiovet@tufts.edu) for scheduling and non-emergent questions or concerns.

Please visit our HeartSmart website for more information  
<http://vet.tufts.edu/heartsmart/>

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**Prescription Refill Disclaimer:**

*For the safety and well-being of our patients, your pet must have had an examination by one of our veterinarians within the past year in order to obtain prescription medications.*

**Ordering Food:**

*Please check with your primary veterinarian to purchase the recommended diet(s). If you wish to purchase your food from us, please call 7-10 days in advance (508-887-4629) to ensure the food is in stock. Alternatively, veterinary diets can be ordered from online retailers with a prescription/veterinary approval.*

**Clinical Trials:**

*Clinical trials are studies in which our veterinary doctors work with you and your pet to investigate a specific disease process or a promising new test or treatment. Please see our website: [vet.tufts.edu/cvnc/clinical-studies](http://vet.tufts.edu/cvnc/clinical-studies)*

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Case: B6

Owner: B6

Discharge Instructions

**From:** Jones, Jennifer L </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=0F6CA12EAA9348959A4CBB1E829AF244-JENNIFER.JO>  
**To:** Jones, Jennifer L  
**Sent:** 3/15/2019 11:18:01 AM  
**Subject:** 02-MRx summary cc-255

**B6** 8 yr MI Border Collie

5/11/2017-annual exam, no concerns à Gr IV/VI murmur, apparently sire died of heart disease (sudden death during a walk-possible cardiac event), 4Dx neg,

5/19 to cardio: new murmur,

7/6: labs Glob **B6**

BNP: **B6**

Rads: cardiomeg w/ inc LA area

8/2: murmur dx 3 months ago, eats Origin dry kibble Adult w/ cooked hamburger SID

PE: **B6**

Echo: LV dil, MV thick, Aortic root normal to mild dec, LA mod dil, RH mild dil, **B6**

ECG-nsr

BP **B6**

Dx DVD w/ LA enl

Tx: **B6**

12/28/2017 no diet change,

Echo: LV dil (smaller than last echo on most msr), MV thick, RH mild dil, PA < Aorta, **B6**

**B6**

ECG-nsr

BP 160

7/2/2018: unchanged diet

Labs: nsf

Echo: hyperdynamic LV contractile fxn, vol overloaded LV, LA mod-mark enl, MV thick, PA slt > Aorta, RH wnl, +3 MR, tr to +1 TR, tr PI

ECG-nsr w/ infreq isolated unifocal APC

7/31 labs: BUN elev

9/16 or 9/18 labs: BUN **B6**

12/18 occ cough when barking, getting furo daily, more PU/PD w/ furo; on Origin Senior dry kibble, Fit and Trim Dry, occ ground hamburger, more relaxed breathing on furo; on **B6**

Echo: normal LV thick w/ mild hypokinesis, LV mark dil, LA mark enl, MV thick, PA sl > Aorta, RH wnl, +3 MR, tr to +1 TR, tr PI

ECG-nsr

BNP hi (illegible #)

Tx: recc diet change

Hx-blurry legibility-

### Jennifer L. A. Jones, DVM

Veterinary Medical Officer

U.S. Food & Drug Administration

Center for Veterinary Medicine

Office of Research

Veterinary Laboratory Investigation and Response Network (Vet-LIRN)

8401 Muirkirk Road, G704

Laurel, Maryland 20708

new tel: 240-402-5421

fax: 301-210-4685

e-mail: [jennifer.jones@fda.hhs.gov](mailto:jennifer.jones@fda.hhs.gov)

Web: <http://www.fda.gov/AnimalVeterinary/ScienceResearch/ucm247334.htm>



**From:** Jones, Jennifer L </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=0F6CA12EAA9348959A4CBB1E829AF244-JENNIFER.JO>  
**To:** Jones, Jennifer L  
**Sent:** 3/15/2019 11:47:22 AM  
**Subject:** 03-MRx summary cc-256

**B6** 8 yr FS Pit Bull Cross

Mild cough à dx hypoT4

11/26 to rDVM: progression of signs w/ dyspnea, loud breathing, lethargy, inappetance; adopted 4 yr ago, originally from **B6**, historically been a "Loud breather"

Dx CHF w/ suspected DCM

**B6** to ER: diet is Earthborn Meadow Feast GR at least 4 years, 1 mo hx cough, appears nauseous

**B6**  
AFAST/TFAST: sign hypokinesia, D severe chamber enl;

Labs: **B6**

**B6**

BNP **B6** (# illegible)

Echo: done-

Tx: **B6**

**B6** duller than day before, BP 122

ECG-sinus tachy

Tx: **B6**

Labs: **B6**

**B6** episode tachypnea, dyspnea, resolved w/ furo, O2; sustained tachycardia, **B6**

ALT **B6** AST **B6** Chol **B6**

T4 **B6**

Tx: O2 cage, furo, unasyn, **B6** SID, Entyce

**B6** mod-sev cachexia, discharged

**B6**

**Jennifer L. A. Jones, DVM**

Veterinary Medical Officer  
U.S. Food & Drug Administration  
Center for Veterinary Medicine  
Office of Research  
Veterinary Laboratory Investigation and Response Network (Vet-LIRN)  
8401 Muirkirk Road, G704  
Laurel, Maryland 20708  
new tel: 240-402-5421  
fax: 301-210-4685  
e-mail: [jennifer.jones@fda.hhs.gov](mailto:jennifer.jones@fda.hhs.gov)  
Web: <http://www.fda.gov/AnimalVeterinary/ScienceResearch/ucm247334.htm>



Foster Hospital for Small Animals

55 Willard Street  
North Grafton, MA 01536  
(508) 839-5395

All Medical Records

Client:

B6

Address:

Home Phone:  
Work Phone:  
Cell Phone:

B6

Patient:

B6

Breed:

Pomeranian

DOB:

B6

Species: Canine

Sex: Male  
(Neutered)

Referring Information

B6

Client:

B6

Patient:

Initial Complaint:

Scanned Record

Client: **B6**  
Patient: **B6**

**Initial Complaint:**

New **B6**

SOAP Text Jan 9 2018 10:24AM **B6**

**Subjective**

PATIENT VISIT (INTERNAL MEDICINE)

History:

**B6** is a 10.5 yr old MN Pomeranian that presented for evaluation of coughing secondary to a collapsing trachea. No V/D, occasional sneezing but no discharge. Has trouble jumping onto surfaces due to luxating patellas. Good appetite, no lethargy. No prev illness aside from luxating patella and alopecia (which as since resolved)

**B6**

Other pets in house?: 4 otherother dogs, 1 pom, 3 new

Indoor/outdoor?: both

Travel history: no

Acquired from: breeder in **B6**

Vaccine history: UTD

Medication history:

**B6**

Dietary history:

Type of food: for your health grain free

Amount per feeding: free choice

Feedings per day:

Exam:

Subjective

BAR, MM pink, CRT < 2 sec

Objective

T: **B6** P **B6** R: panting

**B6**

H/L: NMA, SSP. Panting and honking cough heard during exam. No crackles or wheezing ausculted

**B6**



Client:  
Patient:

**B6**

**B6**

Assessment:

**B6**

Plan:

- 1.
- 2.
- 3.
- 4.

**B6**

**B6**

Completed by:

**B6**

**Initial Complaint:**

Recheck, Collapsing Trachea, Breating Issues, Discussion about Further Procedures.

SOAP Text Feb 8 2018 1:00PM -

**B6**

**Subjective**

PATIENT VISIT (INTERNAL MEDICINE)

History:

Since last visit, he was worsE so medications were increased. Initially after the increased of pred saw a mild improvements. Last weekend had a really bad labored breathing and honking episode all weekend. Eating fine no v/d. No episodes of collapse or blue. not PU/PD, pants more with pred.

PREVIOUS MED HX

**B6**

1/9/18 - 1st visit at Tufts, medications adjusted

**B6**

1/22/18  
2/5/18 -

**B6**

Client:  
Patient:

**B6**

Other pets in house?: 4 other dogs

Indoor/outdoor?:indoors

Travel history:none

Vaccine history: UTD vax

Medication history:

**B6**

Dietary history:

Type of food: earth born grain free

Amount per feeding: handful of dry food (1/2 cup)

Feedings per day: BID

Exam:

Subjective

BAR, pink mm CRT < 2s, euhydrated

Objective

**B6**

H/L: difficult to assess heart, coughing and panting, lungs bilaterally clear difficult to hear anything other than pant.

NMA SSP

**B6**

Assessment:

1. coughing r/o collapsing trachea least likely cardiac disease (cardiomegaly pushing up on trachea) or CHF vs. bronchitis vs. pneumonia

Plan:

**B6**

Client:  
Patient:

**B6**

**B6**

Completed by:

**B6**

**B6**

**Initial Complaint:**

Chronic cough (worsening), suspected lower airway disease, tracheal collapse

SOAP Text

**B6**

10:58AM -

**B6**

**Subjective**

NEW VISIT (ER)

Doctor:

**B6**

Student:

**B6**

Presenting complaint: Respiratory distress

Referral visit? No

Diagnostics completed prior to visit

**HISTORY:**

Signalment: 11 yo MC Pomeranian

Current history:

**B6**

Prior medical history:

**B6**

Current medications:

**B6**

Diet:

Vaccination status/flea & tick preventative use:

Travel history:

**EXAM:**

S: 11 yo MC Pomeranian

O: Wt - 4.06kg T: 100.2 P: 100 R: pant

BCS(1-9): 5/9

MCS:

**B6**

Hydration: Euhydrated

**B6**

C/V: II/VI left sided heart murmur, sinus arrhythmia, strong, synchronous femoral pulses

**B6**

Client:  
Patient:

**B6**

NEURO: CN intact, mentally appropriate, full neuro exam not performed  
Pain Present(YorN)? N Pain Score(0-4):  
RECTAL: Not performed

ASSESSMENT:

A1: Coughing: r/o collapsing trachea vs. lower airway disease (pulmonary hypertension vs. pneumonia) vs. CHF  
A2: Heart murmur: r/o chronic valvular disease

PLAN:

**B6**

Diagnostics completed:

**B6**

-Echocardiogram: No evidence of PHT, valvular disease or CHF

Diagnostics pending:

Client communication:

Discussed with owners it is possible there is more going on causing **B6** difficulty breathing than just his collapsing **B6**. We believe we hear a new heart murmur in him so would recommend working him up for cardiac causes of coughing (CHF) as well as lower airway disease (PHT, pneumonia). We recommended **B6**

**B6** **B6**  
**B6**

Deposit & estimate status: **B6**

Resuscitation code (if admitting to ICU): n/a

SOAP approved (DVM to sign): **B6**, DVM

SOAP Text **B6** 6:45AM - Clinician, Unassigned FHSA

5/15/18

CASE ABSTRACT

**B6** is a 11 yr MN Pomeranian who presented to the ER yesterday **B6** for increased respiratory effort. **B6** history of a collapsing trachea managed with hydrocodone, terbutaline, flovent, and temaril P. For one week he had more trouble breathing at night.

SUBJECTIVE:

Client: **B6**  
Patient:

**B6**

Overnight update: Panting all night with no effort. Ate 1/4 can RC low fat well last night. Vitals and eliminations WNL.

OBJECTIVE:

**B6**

CV: Grade II/VI systolic left apical murmur, normal sinus rhythm, femoral pulses strong and synchronous.

**B6**

DIAGNOSTICS COMPLETED

**B6**

CXR - Persistent mild diffuse bronchial pattern may be consistent with chronic bronchitis given clinical signs. There is no evidence of tracheal/mainstem bronchial collapse. However, given reported clinical signs, tracheal fluoroscopy and/or tracheoscopy are recommended to further evaluate a dynamic airways disease. Suspected left cardiomegaly without evidence of cardiac decompensation. If a heart murmur is newly detected or worsened in intensity, consider cardiac consultation.

Echocardiogram - No evidence of PHT, mild degenerative valvular disease, cough not suspected to be cardiac in origin.

**B6**

ASSESSMENT

A1: Increased respiratory effort, harsh lung sounds, worsening cough - chronic bronchitis vs collapsing trachea vs lower airway disease vs pneumonia

A2: Grade II/VI left apical systolic murmur - DMVD, compensated

A3: **B6**

A4: **B6** **B6**

**B6**

Client: **B6**  
Patient:

**B6**

CLINICAL IMPRESSION (Summary)

**B6** does not settle down while he is hospitalized and continues to pant and stress himself into needed **B6** for a honking cough/bark. He otherwise seems comfortable and is eating well. The next step in further workup for his respiratory effort is evaluation of his upper and lower airways via bronchoscopy.

PLAN:

**B6**

DIAGNOSTICS:

**B6**

TREATMENT:

**B6**

NUTRITION (calculate RER, think of specific nutritional needs for patient)

**B6**

FLUID PLAN

Water available at all times, no IVF

MEDICATIONS

**B6**

CREATED BY: **B6**  
REVIEWED BY:

SOAP Text **B6** 7:49AM - Clinician, Unassigned FHSA

**B6**

CASE ABSTRACT

**B6** is a 11 yr MN Pomeranian who presented to the ER **B6** for increased respiratory effort. First presented to our internal medicine service in January, he has a history of a collapsing trachea managed with **B6**

**B6** For one week he had more trouble breathing at night. He was hospitalized for

Client: **B6**  
Patient: **B6**

**B6** performed yesterday **B6** and kept overnight to monitor temperature and breathing rate after anesthesia.

**SUBJECTIVE:**

BAR, honking bark when he visualizes other dogs. Did not tire with walking outside. MM pink and moist, CRT < 2 sec, euhydrated.

Overnight update: After bronchoscopy yesterday, was hyperventilating and hyperthermic, so was placed in O2 cage in ER for temperature management. Within the hour was back to breathing easier and temp decreased to 99.8 F. Around 9 pm, panting noticed to be extreme, ICU Dr gave **B6** and another dose again around 10:30 pm. Some slight effort and mild cough noted around 2 am. Otherwise panting with no effort overnight, eating RC low fat well.

**OBJECTIVE:**

**B6**

CV: Grade II/VI systolic left apical murmur, normal sinus rhythm, femoral pulses strong and synchronous. Very difficult to auscult heart today due to panting.

**B6**

**DIAGNOSTICS COMPLETED**

**B6**

Tracheobronchoscopy - mild inflammation of airways, mucus plugs in lower airways. Tracheal collapse grade IV/IV when coughing but only grade I/IV for mainstem bronchi and visualised bronchi. Grade I/IV tracheal collapse between coughing episodes.

**B6**

**B6**

CXR - Persistent mild diffuse bronchial pattern may be consistent with chronic bronchitis given clinical signs. There is no evidence of tracheal/mainstem bronchial collapse. However, given reported clinical signs, tracheal fluoroscopy and/or tracheoscopy are recommended to further evaluate a dynamic airways disease. Suspected left cardiomegaly without

Client: **B6**  
Patient:

evidence of cardiac decompensation. If a heart murmur is newly detected or worsened in intensity, consider cardiac consultation.

Echocardiogram - No evidence of PHT, mild degenerative valvular disease, cough not suspected to be cardiac in origin.

**B6**

ASSESSMENT

A1: Increased respiratory effort, harsh lung sounds, worsening cough - chronic bronchitis vs collapsing trachea vs lower airway disease vs pneumonia

A2: Grade II/VI left apical systolic murmur - DMVD, compensated

**B6**

CLINICAL IMPRESSION (Summary)

**B6** continues to be stressed in hospital. He seems to be breathing adequately, the same as prior to bronchoscopy, so he will be discharged today.

PLAN:

**B6**

DIAGNOSTICS:

**B6**

TREATMENT:

**B6**

NUTRITION (calculate RER, think of specific nutritional needs for patient)

RER = 221 kcal, MER = 354 kcal



Client: **B6**  
Patient: **B6**

RC Low fat - 1/2 can BID (345 kcal/can)

**FLUID PLAN**

Water available at all times, no IVF

**MEDICATIONS**

**B6**

CREATED BY: **B6**  
REVIEWED BY: **B6**

**Initial Complaint:**

Recheck, Coughing Returned

**SOAP Text Aug 13 2018 11:06AM - Clinician, Unassigned FHSA**

**Subjective**

PATIENT VISIT (INTERNAL MEDICINE)

**History:**

**B6** is an 11 yr MN Pomeranian who presented today for return of cough with increased frequency of cough. Patient has a history of chronic cough, tracheal collapse (grade IV/IV tracheal collapse when coughing, but grade I/IV between coughing episodes) and bacterial pneumonia diagnosed in May 2018. Patient was treated with 8 week course of **B6** beginning 5/21. O reports that the cough gradually returned once the antibiotics were d/c on 7/16. The cough is not associated with activity and has been constant. **B6** was started on **B6** again approximately 2 weeks ago, after his cough had returned. Since re-starting therapy with **B6** the cough has not resolved. He also has a 1 month history of limping in the front limbs with no associated trauma or known cause. Patient

**B6**

**Current Medications:**

**B6**

**Exam:**

Subjective: BAR, anxious and panting

**Objective**

**B6**

Client: **B6**  
Patient:

**B6**

H/L: bilaterally harsh bronchovesicular sounds, no crackles or wheezes heard, harsh tracheal turbulence, honking cough, panting, no murmurs or arrhythmias heard, synchronous and strong femoral pulses

**B6**

Diagnostics completed:

CXR - Intrathoracic tracheal collapse visible, consistent with previous diagnosis of dynamic tracheal collapse. Mild diffuse bronchial pattern present is unchanged since last CXR in May, may be consistent with chronic bronchitis. There is no evidence of pneumonia or pulmonary edema. No evidence of pulmonary decompensation.

CBC - Pending

Assessment:

A1: Increased respiratory effort, harsh lung sounds, return of cough - dynamic tracheal collapse vs chronic bronchitis vs infectious pneumonia

A2: History of Grade II/VI left apical systolic murmur - compensated

**B6**

Plan:

**B6**

Prescriptions:

**B6**

Completed by: **B6**  
Reviewed by:

**Initial Complaint:**

Drop Off Lab Sample

SOAP Text **B6** 10:15AM **B6**

**Initial Complaint:**

Emergency

SOAP Text **B6** 2:16PM **B6**

Subjective

Client:  
Patient:

**B6**

NEW VISIT (ER)

Doctor:  
Student:

**B6**

**B6**

Presenting complaint: difficulty breathing, worsening cough

Referral visit? no

Diagnostics completed prior to visit: none

HISTORY:

Signalment **B6** is an 11yo MN Pomeranian who presented to Tufts ER on **B6** for worsening cough. Current history: Last seen at Tufts on **B6** Been doing well since seeing Tufts. This morning he had a "goose" honk cough, slightly different than his usual cough. It sounded gurgly. He was trouble breathing, harsh breathing, lots of abdominal movements, panting. Did not eat earlier this morning. Was being lethargic. Went home at lunch and he seemed to be doing better. He ate and was breathing better but if he got excited he would start coughing again (same cough as in morning). Up until today, his cough has been a lot better.

Has 4 other dogs, all fine. Doesn't bring **B6** to dog parks or kennels.

Prior medical history: Patient has a history of chronic cough, tracheal collapse (grade IV/IV tracheal collapse when coughing, but grade I/IV between coughing episodes) and bacterial pneumonia diagnosed in May 2018. Patient was treated with 8 week course of **B6** beginning 5/21. O reports that the cough gradually returned once the antibiotics were d/c on 7/16. Started on **B6** again which did not resolve the cough. Seen by Tufts IM on **B6** rads suggestive of chronic bronchitis. Started on **B6**

Current medications:

**B6**

Diet: Dry food (Earth Borne) 1 "handful" BID

**B6**

Travel history: None

EXAM:

**B6**

**B6**

H/L: bilaterally harsh lung sounds, no crackles or wheezes heard, harsh tracheal turbulence, honking cough, panting, no murmurs or arrhythmias heard, synchronous and strong femoral pulses

**B6**

Client: **B6**  
Patient: **B6**

ASSESSMENT:

A1: Worsening cough and harsh lung sounds - r/o aspiration pneumonia vs. chronic bronchitis vs. other lung disease

**B6**

A4: Hx of tracheal collapse

PLAN:

CXR  
CBC  
IVC placement

**B6**

Diagnostics completed:

CXR - interstitial pattern in caudaldorsal right lung field, concern for pneumonia (full report pending)

**B6**

Diagnostics pending: N/A

Client communication:

- Let owner know we consulted with IM on this case because they have a history with **B6**. Recommended performing CXR and a CBC to rule out aspiration pneumonia since his cough did get acutely worse. Wanted to rule this out before changing any medications. Owner OK with CXR and CBC.
- Based on the CXR, we are concerned about pneumonia. Recommend admitting **B6** into the hospital for treatment and monitoring over night. He will be transferred to IM in the morning for further work-up (trans-tracheal wash).

Deposit & estimate status **B6**

Resuscitation code (if admitting to ICU): **B6**

SOAP approved (DVM to sign) **B6** DVM

SOAP Text **B6** 7:30AM **B6**

**Subjective**

CASE ABSTRACT

**B6** an 11 yr MN Pomeranian who presented to Tufts ER on **B6** for worsening cough and difficulty breathing. The O noticed he had a "goose" honk cough that had gurgling sounds (different than his usual cough) that had become acutely worse. He was having trouble breathing with a lot of abdominal movements and panting. Did not eat earlier this yesterday **B6** was hospitalized and placed in oxygen overnight.

Pertinent history: Dx'd with dynamic tracheal collapse and bacterial pneumonia in in May 2018 and treated with 8 week course of **B6** beginning 5/21. After discontinuing the **B6** his cough returned **B6** was off of **B6** or 2-3 weeks (still coughing) **B6** was started again on **B6** for an additional 2 weeks. No improvement

Client: **B6**  
Patient: **B6**

was noted after restarting **B6**. Last seen at Tufts on **B6** for increased cough and respiratory effort. CXR's on **B6** showed intrathoracic tracheal collapse visible, consistent with previous diagnosis of dynamic tracheal collapse as well as mild diffuse bronchial pattern present is unchanged since last CXR in May. CBC and fecal **B6** was within normal limits. Was started on **B6** at this time. History of Grade II/VI left apical systolic murmur. Up until **B6** his cough had been doing a lot better.

Current medications:

**B6**

SUBJECTIVE:  
BAR, friendly

**B6**

OBJECTIVE:

**B6**

CV: no murmurs or arrhythmias heard (auscultation of heart was difficult due to harsh respiratory sounds), synchronous and strong femoral pulse  
Resp: bilaterally harsh bronchovesicular sounds, no crackles or wheezes heard, harsh tracheal turbulence, honking cough, panting, increased expiratory effort

**B6**

DIAGNOSTICS COMPLETED

8/21

1. CXR - interstitial pattern in caudaldorsal right lung field, concern for pneumonia (full report pending)

**B6**

ASSESSMENT

A1: Coughing and increased respiratory effort - r/o dynamic airway collapse vs tracheitis vs chronic bronchitis vs bronchopneumonia vs infectious bronchopneumonia

**B6**

A6: History of Grade II/VI left apical systolic murmur - r/o MDV vs. endocarditis vs other

Client: **B6**  
Patient:

PLAN:

**B6**

DIAGNOSTICS:

**B6**

NUTRITION

RER = 198 cal/day

MEDICATIONS

**B6**

CREATED BY: **B6**

REVIEWED BY:

SOAP Text **B6** 6:55AM **B6**

**Subjective**

CASE ABSTRACT

**B6** is an 11 yr MN Pomeranian who presented to Tufts ER on **B6** for acutely worsening cough and difficulty breathing. The O noticed he had a "goose" honk cough that had gurgling sounds (different than his usual cough) that had become acutely worse. He was having trouble breathing with a lot of abdominal movements and panting. Did not eat earlier this yesterday. **B6** was hospitalized and placed in oxygen overnight. He was started on a course of antibiotics on 8/1. **B6** after receiving a TTW that was sent for culture & sens. **B6** had a few episodes of hypoxemia during recovery from ax, and was placed in O again for monitoring overnight.

Pertinent history: Dx'd with dynamic tracheal collapse in 2/2018 and bacterial pneumonia in 5/2018. He was treated with an 8 week course of **B6** beginning 5/21. After discontinuing the **B6** his cough returned. **B6** was off of **B6** for 2-3 weeks (still coughing). **B6** was started again on 8/1 for an additional 2 weeks. No improvement was noted after restarting **B6**. Last seen at Tufts on **B6** for increased cough and respiratory effort. CXR's on **B6** showed intrathoracic tracheal collapse visible, consistent with previous diagnosis of dynamic tracheal collapse as well as mild diffuse bronchial pattern present is unchanged since last CXR in May. CBC and fecal **B6** was within normal limits. Was started on **B6** at this time. History of Grade II/VI left apical systolic murmur. Up until **B6** his cough had been doing a lot better.

Current medications:

**B6**

Client: **B6**  
Patient:

**B6**

SUBJECTIVE:  
BAR, friendly.

**B6**

OBJECTIVE:

**B6**

CV: no murmurs or arrhythmias heard, synchronous and strong femoral pulse  
Resp: bilaterally harsh bronchovesicular sounds, no crackles or wheezes heard, harsh tracheal turbulence, panting, moderately increased expiratory effort at rest

**B6**

8/21

1. CXR - interstitial pattern in caudaldorsal right lung field, concern for pneumonia (full report pending)

**B6**

8/22

**B6**

ASSESSMENT

A1: Coughing and increased respiratory effort - r/o dynamic airway collapse vs tracheitis vs chronic bronchitis vs infectious bronchopneumonia

**B6**

A7: History of Grade II/VI left apical systolic murmur - r/o MDV DIAGNOSED ON ECHO

PLAN:

**B6**

Client: **B6**  
Patient: **B6**

**B6**

DIAGNOSTICS:

NUTRITION  
RER = 198 cal/day

MEDICATIONS

**B6**

CREATED BY: **B6**  
REVIEWED BY: **B6**

Initial Complaint:  
Recheck rads

SOAP Text Sep 6 2018 11:36AM **B6**

**Subjective**

EXAM, GENERAL

**B6** is an 11 yr MN Pomeranian presenting today for a recheck exam. Presented to Tufts ER on **B6** for acutely worsening cough and difficulty breathing. Chest radiographs revealed interstitial pattern in the caudodorsal right lung field. a TTW cytology and culture was submitted. Prescribed **B6** awaiting the culture , then on just **B6** once culture results were received.

O report he is doing well at home with current meds. No V/D/C/S. Occasional cough still present but does not go into resp distress.

Current meds:

**B6**

Subjective (S) - BAR, MM pink, CRT < 2 sec

Objective (O)

**B6**

CV: no murmurs or arrhythmias heard, synchronous and strong femoral pulse



Client: **B6**  
Patient:

Resp: panting throughout exam, no obvious crackles or wheezes, coughed once in exam room non productive

**B6**

Assessment (A)

A1: Coughing and increased respiratory effort - r/o dynamic airway collapse vs tracheitis vs chronic bronchitis vs infectious bronchopneumonia - RESPONDS WELL TO ABX

**B6**

A7: History of Grade II/VI left apical systolic murmur - r/o MDV DIAGNOSED ON ECHO

Plan (P)

**B6**

SOAP completed by: **B6**

Addendum - later in the day after faculty reviewed rads, report reads as below

The previously described interstitial to alveolar pulmonary pattern in the right hemithorax is markedly improved, however, there remains a subtle patchy region in the right cranioventral lung. Within the left cranial lung field, there is a patchy region of increased soft tissue opacity that blurs to obscures vascular margins, consistent with an interstitial to alveolar pattern.

**Initial Complaint:**

Emergency

SOAP Text: **B6** 12:04PM - **B6**

**Subjective**

NEW VISIT (ER)

Doctor: **B6**  
Student:

Presenting complaint: Straining to urinate, hematuria

Referral visit?

Diagnostics completed prior to visit

Client: **B6**  
Patient: **B6**

HISTORY:

**B6** is an 11 y/o MN Pomeranian that is presenting to the Tufts EF **B6** for evaluation of stranguria that began this morning. O noticed that **B6** was dribbling urine this morning and not producing his normal volume of urine despite attempts to urinate. When asked, O did not report that he was straining however. O also reported that she observed a small amount of red tinged urine at the tip of his prepuce. In addition, in the past week **B6** has had two accidents where he peed in the house, which is very unusual for him. O reported that his last normal urination was yesterday and that he pooped normally this morning at 2am. O reports previous hx of collapsing trachea, pneumonia and luxating patellas which have been managed here in the past. Currently on **B6** for the pneumonia, which is resolving per owner, as well as **B6** or anxiety. No previous urinary issues reported. Eating/drinking normally, no vomiting or diarrhea. O reports that he seems anxious despite the **B6**

Current medications (recieved all medications this morning) **B6**

**B6**

EXAM:

**B6**

C/V: Grad II/VI systolic murmur, normal sinus arrhythmia ausculted, FPSS  
RESP: Panting, Increased bronchovesicular sounds bilaterally, no increased effort noted

**B6**

ASSESSMENT:

**B6**  
A2: Grade I/IV tracheal collapse

Client:  
Patient:

**B6**

**B6**

A4: Grade II/VI systolic murmur r/o DMVD vs DCM vs other

**B6**

PLAN:

**B6**

Diagnostics completed:

**B6**

Diagnostics pending:

UA

Culture

Client communication:

**B6**

Deposit & estimate status:

Resuscitation code (if admitting to ICU):

SOAP approved (DVM to sign): **B6** DVM

**Initial Complaint:**

**B6**

SOAP Text **B6** 3:35PM **B6**

**Subjective**

PATIENT VISIT (INTERNAL MEDICINE)

**History:**

Overall, **B6** has declined in the last few months. He has a several month history of weight loss and is noticed to be losing muscle. In the last 4-5 months, he has been progressively weak and ataxic in the hindlimbs. He has increased thirst in the last few weeks, despite tapering dose of prednisone. He has had large volume urinary accidents in the house since mid September, which is abnormal for him. His appetite is inconsistent and he is often anorexic in the mornings, which is new for him. His diet has not changed. He is defecating less frequently. Overall, his respiratory signs

Client: **B6**  
Patient:

have improved with no coughing or difficulty breathing.

Previous visits - rDVM:

**B6**

Tufts visits - 2018

Date	Presenting complaint	Diagnostics	Medications
<b>B6</b>			
<b>B6</b>	<b>B6</b>	<u>CXR</u> - mild diffuse bronchial pattern (chronic bronchitis), left cardiomegaly <b>B6</b>	<b>B6</b>
<b>B6</b>	<b>B6</b>	None	<b>B6</b>
		<b>B6</b>	<b>B6</b>

Client: **B6**  
Patient:

			<b>B6</b>
<b>B6</b>	<b>B6</b>	<b>B6</b>	
9/6/18	Recheck exam	CXR: The previously described interstitial to alveolar pulmonary pattern in the right hemithorax is markedly improved, however, there remains a subtle patchy region in the right cranioventral lung. Within the left cranial lung field, there is a patchy region of increased soft tissue opacity that blurs to obscures vascular margins, consistent with an interstitial to alveolar pattern.	<b>B6</b>
<b>B6</b>	<b>B6</b>	<b>B6</b>	

Other pets in house?: multiple other dogs

Indoor/outdoor?: both

Travel history: None

Acquired from: breeder in **B6**

**B6**

Medication history:

**B6**

Dietary history:

Type of food: Earthborn Grain Free dry food (has been on this diet his whole life)

Amount per feeding: free choice

Feedings per day: BID

Client:  
Patient:

**B6**

---

**Exam:**

**Subjective**

Thin body condition, significant muscle atrophy, ataxic in hindlimbs

**Objective**

**B6**

H/L: Grade II/VI left systolic murmur, good to fair femoral pulses. Normal bronchovesicular sounds. Panting but overall eupneic

**B6**

**Diagnostics:**

**B6**

**Assessment:**

**B6**

Client: **B6**  
Patient: **B6**

A11. Grade II/VI systolic heart murmur - DMVD

**B6**

Plan:

**B6**

Completed by **B6**, DVM

**Initial Complaint:**

Drop Off IM Gen Med, admit to A ward, new diabetic

SOAP Text **B6** 9:30AM **B6**

**Subjective**

CASE ABSTRACT

Overall, **B6** has declined in the last few months. He has a several month history of weight loss and is noticed to be losing muscle. In the last 4-5 months, he has been progressively weak and ataxic in the hindlimbs. He has increased thirst in the last few weeks, despite tapering dose of **B6**. He has had large volume urinary accidents in the house since mid September, which is abnormal for him. His appetite is inconsistent and he is often anorexic in the mornings, which is new for him. His diet has not changed. He is defecating less frequently. Overall, his respiratory signs have improved with no coughing or difficulty breathing.

Previous visits - rDVM:

**B6**

Tufts visits - 2018

Date	Presenting complaint	Diagnostics	Medications
------	----------------------	-------------	-------------

**B6**

Client:  
Patient:

**B6**

**B6**

**B6**

Recheck  
exam

**B6**

**B6**



Client:  
Patient:

**B6**

**B6**

Medication history:

**B6**

Dietary history:

Type of food: Earthborn Grain Free dry food (has been on this diet his whole life)

SUBJECTIVE:

BAR. mm pink and moist. CRT <2sec

OBJECTIVE:

**B6**

CV: Grade II/VI left systolic murmur, NSR, femoral pulses good and synchronous.

Resp: Normal BV sounds in all fields. Eupneic.

**B6**

DIAGNOSTICS COMPLETED

**B6**

**B6**

Client: **B6**  
Patient:

applicable, please update daily)

**B6**

A11. Grade II/VI systolic heart murmur - DMVD

**B6**

CLINICAL IMPRESSION (Summary)

PLAN:

Diagnostics:

- CXR
- AUS -> on board for Fri

Treatment:

**B6**

Nutrition: (calculate RER, think of specific nutritional needs for patient)

**B6**

Fluid Plan:

**B6**

Medications:

**B6**

CREATED BY:

**B6**

REVIEWED BY:

\*\*Addendum\*\*

**B6**

Client: **B6**  
Patient: **B6**

**B6**

- Mild generalized cardiomegaly static compared to the previous study, progressive compared to the 2016 study. No evidence of cardiac decompensation. Echocardiography can be considered for further evaluation as clinically indicated.

**B6**

SOAP Text **B6** 6:40AM - Clinician, Unassigned FHSA

**Subjective**

CASE ABSTRACT

**B6** 11yo NM Pomeranian, presented to Internal Medicine for a UTI recheck urinalysis and culture on **B6**. Bloodwork (CBC/chem) was also performed at that time. Upon further review, it was recognized that **B6** was diabetic, anemic, and had elevated liver enzymes. He was admitted on **B6** for further diagnostics and initial insulin dosing. He was diagnosed with collapsing trachea in 2016 and has a history of chronic bronchitis and recurrent pneumonia. He was diagnosed with a UTI on 9/16/18.

Overall, **B6** has declined in the last few months. He has a several month history of weight loss and is noticed to be losing muscle. In the last 4-5 months, he has been progressively weak and ataxic in the hindlimbs. He has increased thirst in the last few weeks, despite tapering dose of **B6**. He has had large volume urinary accidents in the house since mid September, which is abnormal for him. His appetite is inconsistent and he is often anorexic in the mornings, which is new for him. His diet has not changed. He is defecating less frequently. Overall, his respiratory signs have improved with no coughing or difficulty breathing.

SUBJECTIVE: BAR. mm pink, moist. CRT <2sec

Overnight update: **B6** was stable overnight. His BG has still been **B6** every 12 hours. He has been eating very well and urinating a lot (prev. noted PU/PD). He has not defecated since being in the hospital.

OBJECTIVE:

**B6**

CV: Grade II/VI left systolic murmur, NSR, femoral pulses good and synchronous.

Resp: Increased BV sounds in all fields. Mild-moderate effort.

**B6**

Client: **B6**  
Patient:

Pain present(YorN)? N Pain Score(0-4):

DIAGNOSTICS COMPLETED

**B6**

**B6**

**B6**

Thoracic radiographs:

**B6**

- Mild generalized cardiomegaly static compared to the previous study, progressive compared to the 2016 study. No evidence of cardiac decompensation. Echocardiography can be considered for further evaluation as clinically indicated.

**B6**

**B6**

**B6**

A11. Grade II/VI systolic heart murmur - DMVD

**B6**

Client: **B6**  
Patient:

**B6**

PLAN:  
Diagnostics:

**B6**

Treatment:

**B6**

Fluid Plan:

**B6**

Medications:

**B6**

CREATED BY: **B6**  
REVIEWED BY:

**\*\*ADDENDUM\*\***

**B6** vomited once around 10:30 this morning. **B6** was started at 1mg/kg IV q24h.

**B6**

AUS:

**B6**

Client: **B6**  
Patient:

SOAP Text **B6** 6:56AM - Clinician, Unassigned FHSA

**Subjective**

CASE ABSTRACT

**B6**

**B6**

SUBJECTIVE: BAR. mm pink, moist. CRT <2sec

**B6**

OBJECTIVE:

**B6**

CV: Grade II/VI left systolic murmur, NSR, femoral pulses good and synchronous.

Resp: Increased BV sounds in all fields. Mild effort.

**B6**

DIAGNOSTICS COMPLETED

10/2/18

**B6**

Client: **B6**  
Patient: **B6**

Urine culture: pending

**B6**

Bloodwork:

10am  
2pm  
6pm

**B6**

**B6**

- Mild generalized cardiomegaly static compared to the previous study, progressive compared to the 2016 study. No evidence of cardiac decompensation. Echocardiography can be considered for further evaluation as clinically indicated.

**B6**

**B6**

AUS:

**B6**

**B6**

ASSESSMENT (Start with current problems (prioritize in list of importance), include historical problems; characterize if applicable, please update daily)

**B6**

Client: **B6**  
Patient:

**B6**

A14. Grade II/VI systolic heart murmur - DMVD

**B6**

CLINICAL IMPRESSION (Summary)

**B6** has been doing very well considering his bloodwork abnormalities. It seems as though his BG is coming down, last night it ranged **B6**. We are hoping the **B6** is getting his infections under control. We plan to recheck bloodwork today to see if any values have improved.

PLAN:

Diagnostics:

**B6**

Treatment:

**B6**

Nutrition: (calculate RER, think of specific nutritional needs for patient)

**B6**

Fluid Plan:

**B6**

Medications:

**B6**

CREATED BY: **B6**  
REVIEWED BY:

**Initial Complaint:**

IM 2 Recheck Gen Med - check BG, exam



Client:  
Patient:

**B6**

SOAP Text Oct 12 2018 2:31PM -

**B6**

**Subjective**

PATIENT VISIT (INTERNAL MEDICINE)

History:

**B6**

Medication history:

**B6**

Exam:

Subjective - BAR. mm pink, moist. CRT <2sec.

Objective

**B6**

CV: Grade II/VI left systolic murmur, NSR, femoral pulses good and synchronous.

**B6**

Assessment:

**B6**

Client: **B6**  
Patient:

**B6**

A14. Grade II/VI systolic heart murmur - DMVD - stable

**B6**

Plan:

**B6**

Completed by: **B6**  
Reviewed by:

**Initial Complaint:**

Drop Off IM Gen Med: glucose curve, recheck bloodwork, UA and culture

SOAP Text Oct 19 2018 7:58AM **B6**

**Subjective 10/19/18**

EXAM, GENERAL

Subjective (S)

11 YO MN Pomeranian presented for recheck CBC/Chem/UA/UC and BG curve. O reports doing well at home.

Medication history:

**B6**

Previous visits - rDVM:

**B6**

Client: **B6**  
Patient:

12/28/17 – No longer responding to medications

Tufts visits - 2018

Date	Presenting complaint	Diagnostics	Medications
------	----------------------	-------------	-------------

**B6**

Client:  
Patient:

**B6**

**B6**

**B6**

**B6**

10/12/18

-Continue plan, no changes

Objective (O)

**B6**

Client:  
Patient:

**B6**

Pain Present (YorN)?N Pain Score(0-4):

Assessment (A)

**B6**

A14. Grade II/VI systolic heart murmur - DMVD - stable

**B6**

DIAGNOSTICS:

**B6**

Plan (P)

-Medications:

**B6**

SOAP completed by:  
SOAP reviewed by: €

**B6**

Client:  
Patient:

**B6**

**Initial Complaint:**

heart failure, DCM

SOAP Text

**B6**

2:44PM

**B6**

**Subjective**

NEW VISIT (ER)

Doctor:

**B6**

Student:

Presenting complaint:

**B6**

Referral visit? N

Diagnostics completed prior to visit: last seen by IM 10/19/18

**HISTORY:**

Signalment: 11 yo MN Pomeranian

Current history:

**B6**

presented for a sudden onset of weakness and ataxia. He ate normally this morning, got

**B6**

**B6**

okay. O came back from errands and found him sitting in urine, difficulty walking (ataxic) when she moved him, staring in space with neck extended, responsive to O when she put him down and called him. Found soft stool in house, unlike him. Was restless (getting up and down) in car, possibly regurgitating (no gagging or throwing up). No c/s/v/d, normal e/d/u/d this past week. Activity level and behavior normal until this event.

Prior medical history:

-last appointment with IM 10/19 to recheck CBC/Chem/UA/BG curve (dx **B6** at beginning of October 2018)

**B6**

grade II/VI murmur

**B6**

Current medications:

**B6**

Diet: dry

Vaccination status/flea & tick preventative use: UTD

Travel history: none

EXAM:

**B6**

Client:  
Patient:

**B6**

**B6**

Hydration: adequate

**B6**

C/V: Grade II/VI murmur appreciated L>R, no arrhythmias, peripheral pulses strong

RESP: increased respiratory effort with some abdominal component, will cough when exerted, slightly increased BV sounds bilaterally, no crackles

**B6**

ASSESSMENT:

**B6**

A6: Grade II/IV murmur: mitral valve disease

**B6**

Diagnostics completed:

Client: **B6**  
Patient: **B6**

**B6**

Diagnostics pending: none

Client communication:

**B6**

Deposit & estimate status: **B6**

Resuscitation code (if admitting to ICU) **B6**

SOAP approved (DVM to sign) **B6** BVSc

EXAM, GENERAL

Subjective (S)

Objective (O)

T: HR: RR: BW:

BCS(1-9):

MCS(normal,mild,moderate,severe):

EENT:

PLN:

H/L:

Abd:

UG:

MSI:

Neuro:

Pain Present (YorN)? Pain Score(0-4):

Assessment (A)

A1:

A2:

Plan (P)

SOAP completed by:

SOAP reviewed by:

SOAP Text Oct 22 2018 7:09AM **B6**



Client:  
Patient:

**B6**

**Subjective**

CASE ABSTRACT

Doctor:

Student:

**B6**

Presenting complaint:

**B6**

Referral visit? N

Diagnostics completed prior to visit: last seen by

**B6**

Signalment: 11 yo MN Pomeranian

Current history:

**B6**

**B6**

presented Friday for a sudden onset of weakness and ataxia. He ate normally this morning, got okay. O came back from errands and found him sitting in urine, difficulty walking (ataxic) when she moved him, staring in space with neck extended, responsive to O when she put him down and called him. Found soft stool in house, unlike him. Was restless (getting up and down) in car, possibly regurgitating (no gagging or throwing up). No c/s/v/d, normal e/d/u/d this past week. Activity level and behavior normal until this event.

Prior medical history:

-last appointment with IM 10/19 to recheck CBC/Chem/UA/BG curve (dx **B6** at beginning of October 2018)

**B6**

Current medications:

**B6**

Diet: dry

Vaccination status/flea & tick preventative use: UTD

Travel history: none

SUBJECTIVE: Adequate

Overnight Update: Patient has been eating and receiving his insulin overnight. No seizure-like activity witnessed. Vitals within normal limits, urinating okay. Patient still appears extremely lethargic with increased resp effort. Vomited food containing dose of pred in it - redosed.

**B6**

Client: **B6**  
Patient:

OBJECTIVE:

**B6**

C/V: Grade II/VI murmur appreciated L>R, no arrhythmias, synchronous to femoral pulses bilaterally  
RESP: Increased respiratory effort with some abdominal component, will cough when exerted, Increased bronchovesicular sounds (harsh sounding) bilaterally, more so dorsally. No crackles appreciated.

**B6**

DIAGNOSTICS COMPLETED

5/14/18

- Cardio consult: Early compensated DMVD with a normal LA. Cough not suspected to be cardiac in origin.

10/3/18

1. TXR Conclusions:

**B6**

**B6**

Client:  
Patient:

**B6**

**B6**

**B6**

**B6**

Client:  
Patient:

**B6**

PLAN:

**B6**

TREATMENT:

**B6**

FLUID PLAN- none, euhydrated and eating.

MEDICATIONS

**B6**

Created by:  
Reviewed by:

**B6**

Addendum 6 pm

-Added

**B6**

- TXR:

**B6**

- Cardio consult: DCM , persistent MVD,

**B6**

Client:  
Patient:

**B6**

SOAP Text Oct 23 2018 7:10AM - Clinician, Unassigned FHSA

CASE ABSTRACT

Doctor:

Student: **B6**

Presenting complaint: **B6**

Referral visit? N

Diagnostics completed prior to visit: last seen by IM 10/19/18

Signalment: 11 yo MN Pomeranian

Current history: **B6** presented Friday for a sudden onset of weakness and ataxia. He ate normally this morning, got **B6** okay. O came back from errands and found him sitting in urine, difficulty walking (ataxic) when she moved him, staring in space with neck extended, responsive to O when she put him down and called him. Found soft stool in house, unlike him. Was restless (getting up and down) in car, possibly regurgitating (no gagging or throwing up). No c/s/v/d, normal e/d/u/d this past week. Activity level and behavior normal until this event.

Prior medical history:

**B6**

Current medications:

**B6**

Diet: dry

Vaccination status/flea & tick preventative use: UTD

Travel history: none

SUBJECTIVE: Adequate

**B6**

**B6**

Client:  
Patient:

**B6**

OBJECTIVE:

**B6**

C/V: Grade II/VI murmur appreciated L>R, no arrhythmias. Femoral pulses good bilaterally.

**B6**

DIAGNOSTICS COMPLETED

5/14/18

- Cardio consult: Early compensated DMVD with a normal LA. Cough not suspected to be cardiac in origin.

**B6**

- Mild generalized cardiomegaly static compared to the previous study, progressive compared to the 2016 study. No evidence of cardiac decompensation. Echocardiography can be considered for further evaluation as clinically indicated.

**B6**

**B6**

**B6**

Client:  
Patient:

**B6**

**B6**

**B6**

**B6**

1. Echo:

- DMVD with now markedly decreased contractile function and moderately enlarged LA r/o diet related
- Soft tissue opacity within the LV walls r/o papillary muscle vs. mass

**B6**

4. Enrolled in DCM study

ASSESSMENT (Start with current problems (prioritize in list of importance), include historical problems; characterize if applicable, please update daily)

- CHF secondary DCM - suspect acquired DCM secondary to grain free/boutique diet  
MVD with left atrium enlargement

**B6**

Historical problems

**B6**

Client:  
Patient:

**B6**

**B6**

**B6**

PLAN:

DIAGNOSTICS:

**B6**

TREATMENT:

NUTRITION (calculate RER, think of specific nutritional needs for patient)

RER = based on ideal weight of 5 kg = 234 kcal/day - feeding RC cardiac diet in hospital ~ 1/2 cup BID

FLUID PLAN- none

MEDICATIONS

**B6**

Follow up plan

**B6**

Created by:  
Reviewed by:

**B6**

Addendum

- Cardio recommended increasing cardiac meds **B6**. Effort significantly improved in the evening **B6**

SOAP Text Oct 24 2018 7:16AM - Clinician, Unassigned FHSA

**Subjective**

CASE ABSTRACT



Client:  
Patient:

**B6**

Doctor:

Student:

**B6**

Presenting complaint:

**B6**

Referral visit? N

Diagnostics completed prior to visit: last seen by IM 10/19/18

Signalment: 11 yo MN Pomeranian

Current history:

**B6**

presented

**B6**

for a sudden onset of weakness and ataxia. He ate normally that morning, got **B6** okay. O came back from errands and found him sitting in urine, difficulty walking (ataxic) when she moved him, staring in space with neck extended, responsive to O when she put him down and called him. Found soft stool in house, unlike him. Was restless (getting up and down) in car, possibly regurgitating (no gagging or throwing up). No c/s/v/d, normal e/d/u/d this past week. Activity level and behavior normal until this event.

Prior medical history:

-last appointment with IM 10/19 to recheck CBC/Chem/UA/BG curve (dx **B6** at beginning of October 2018)

Historical problems

**B6**

Current medications:

**B6**

Diet: dry

Vaccination status/flea & tick preventative use: UTD

Travel history: none

SUBJECTIVE: Hydration - adequate

OVERNIGHT UPDATE: Patient did well overnight, off of O2. Vitals are within normal limits. Did not eat last night as per vital notes but tech saw him nibble a few bites of his food (also ate a few bites from me via finger this morning). Walked outside and urinated.

OBJECTIVE:

**B6**

Client: **B6**  
Patient:

C/V: Grade II/VI murmur appreciated L>R, no arrhythmias. Femoral pulses strong bilaterally  
RESP: Increased bronchovesicular sounds, no crackles or wheezes bilaterally. Increased respiratory effort with some abdominal component, will cough when exerted.

**B6**

DIAGNOSTICS COMPLETED

5/14/18

- Cardio consult: Early compensated DMVD with a normal LA. Cough not suspected to be cardiac in origin.

**B6**

- Mild generalized cardiomegaly static compared to the previous study, progressive compared to the 2016 study. No evidence of cardiac decompensation. Echocardiography can be considered for further evaluation as clinically indicated.

**B6**

**B6**

**B6**

Client: **B6**  
Patient: **B6**

-BG Curve: **B6** (given at 4:30 am)- NPH 2U Q 12h

**B6**

**B6**

**B6**

1. Echo:

- DMVD with now markedly decreased contractile function and moderately enlarged LA r/o diet related
- Soft tissue opacity within the LV walls r/o papillary muscle vs. mass
- Recommended starting **B6**

2. CBC:

**B6**

3. TXR: pulmonary edema, official report pending

4. Enrolled in DCM study

**B6**

**B6**

ASSESSMENT (Start with current problems (prioritize in list of importance), include historical problems; characterize if applicable, please update daily)

- CHF secondary DCM - suspect acquired DCM secondary to grain free/boutique diet  
MVD with left atrium enlargement
- Dyspnea: r/o secondary to CHF vs bronchitis vs non-cardiogenic pulmonary edema

**B6**

CLINICAL IMPRESSION (Summary): Patient looks much more comfortable today with decreased respiratory effort than yesterday. Was off of the O2 cage overnight. Patient's appetite doesn't seem that great but is nibbling some food on/off. Patient went for a walk overnight and urinated which is improved from yesterday. His BUN and Creat have been climbing up since last Chemistry so renal profile is indicated.

Client: **B6**  
Patient: **B6**

DIAGNOSTICS:

**B6**

TREATMENT:

NUTRITION (calculate RER, think of specific nutritional needs for patient)

RER = based on ideal weight of 5 kg = 234 kcal/day - feeding RC cardiac diet in hospital ~ 1/2 cup BID

FLUID PLAN

None

MEDICATIONS

**B6**

CREATED BY: **B6**  
REVIEWED BY: **B6**

Addendum

**B6**

SOAP Text Oct 25 2018 7:03AM - Clinician, Unassigned FHSA

Subjective CASE ABSTRACT

Doctor:

Student: **B6**

Presenting complaint **B6**

Referral visit? N

Diagnostics completed prior to visit: last seen by IM 10/19/18

Client:  
Patient:

**B6**

Signalment: 11 yo MN Pomeranian

Current history **B6** presented **B6** for a sudden onset of weakness and ataxia. He ate normally that morning, got **B6** okay. O came back from errands and found him sitting in urine, difficulty walking (ataxic) when she moved him, staring in space with neck extended, responsive to O when she put him down and called him. Found soft stool in house, unlike him. Was restless (getting up and down) in car, possibly regurgitating (no gagging or throwing up). No c/s/v/d, normal e/d/u/d this past week. Activity level and behavior normal until this event.

Prior medical history:

-last appointment with IM 10/19 to recheck CBC/Chem/UA/BG curve (dx **B6** at begining of October 2018)

Historical problems

**B6**

Current medications:

**B6**

Diet: dry

Vaccination status/flea & tick preventative use: UTD

Travel history: none

SUBJECTIVE: Hydration - adequate. Friendly, nervous

OVERNIGHT UPDATE: Patient was on O2 overnight (43%) and still had mild-moderate respiratory effort. Regurgitated some food during echo recheck yesterday evening. Patient doesn't appear to be as interested in his food overnight (waxing and waning appetite) - last decent meal was 8pm of last night. Drinking water okay. Vitals for the most part were WNL, however tachypnic at some points during the night. Walking a little bit when going outside, urinating okay. Back on O2 yesterday afternoon due to increased RE.

OBJECTIVE:

**B6**

Client:  
Patient:

**B6**

**B6**

**B6**

- Cardio consult: Early compensated DMVD with a normal LA. Cough not suspected to be cardiac in origin.

**B6**

- Mild generalized cardiomegaly static compared to the previous study, progressive compared to the 2016 study. No evidence of cardiac decompensation. Echocardiography can be considered for further evaluation as clinically indicated.

**B6**

**B6**

10/19/18

**B6**

10/21/18

Client:  
Patient:

**B6**

**B6**

10/22/18

1. Echo:

- DMVD with now markedly decreased contractile function and moderately enlarged LA r/o diet related
- Soft tissue opacity within the LV walls r/o papillary muscle vs. mass

**B6**

3. TXR: pulmonary edema, official report pending

4. Enrolled in DCM study

**B6**

1. Recheck Echo: LA enlargement, still no PH.

**B6**

ASSESSMENT (Start with current problems (prioritize in list of importance), include historical problems; characterize if applicable, please update daily)

A1: CHF secondary DCM - suspect acquired DCM secondary to grain free/boutique diet  
MVD with left atrium enlargement

A2: Dyspnea: r/o secondary to CHF vs bronchitis vs non-cardiogenic pulmonary edema

A3: Weakness/Ataxia: r/o secondary to DCM and decreased cardiac output vs progression of bronchitis and tracheal collapse

**B6**

CLINICAL IMPRESSION (Summary): Patient is experiencing an increase in respiratory effort this morning even after being on O2 (43%) overnight. Back on O2 yesterday afternoon. Appetite has been waxing and waning for the last few hours. However, appears to be doing better at walking. Appetite may improve at home, however patient must stay in hospital until respiratory effort is at a reasonable plane. Repeat rads today to re-evaluate the lungs. Consider starting antibiotics if no improvement in RE.

DIAGNOSTICS:

**B6**

Client: **B6**  
Patient: **B6**

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TREATMENT:

NUTRITION (calculate RER, think of specific nutritional needs for patient)

RER = based on ideal weight of 5 kg = 234 kcal/day - feeding RC cardiac diet in hospital ~ 1/2 cup BID

FLUID PLAN

None

MEDICATIONS

**B6**

CREATED BY: **B6**<sup>9</sup>  
REVIEWED BY: **B6**

Addendum

**B6**

SOAP Text **B6** 5:56AM - Clinician, Unassigned FHSA

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CASE ABSTRACT

Doctor:

Student: **B6**

Presenting complaint: **B6**

Referral visit? N

Diagnostics completed prior to visit: last seen by IM 10/19/18

Signalment: 11 yo MN Pomeranian

Current history: **B6** presented **B6** for a sudden onset of weakness and ataxia. He ate normally that morning, got **B6** okay. O came back from errands and found him sitting in urine, difficulty walking (ataxic) when she moved him, staring in space with neck extended, responsive to O when she put him down and called him. Found soft stool in house, unlike him. Was restless (getting up and down) in car, possibly regurgitating (no gagging or throwing up). No c/s/v/d, normal e/d/u/d this past week. Activity level and behavior normal until this event.

Prior medical history:

-last appointment with IM 10/19 to recheck CBC/Chem/UA/BG curve (dx **B6** at beginning of October 2018)

Historical problems

**B6**



Client:  
Patient:

**B6**

Current medications:

**B6**

Diet: dry

**B6**

SUBJECTIVE:

**B6**

OVERNIGHT UPDATE: Patient on O2 overnight. Mostly mild effort overnight. Patient had 1/2 cup chicken, less interested in water. Was BAR during the night, but tolerates open door for a little bit before respiratory effort increases. Urinating normally, no BM noted.

OBJECTIVE:

**B6**

C/V: Grade II/VI murmur appreciated L>R, no arrhythmias. Femoral pulses good bilaterally

**B6**

DIAGNOSTICS COMPLETED

**B6**

- Cardio consult: Early compensated DMVD with a normal LA. Cough not suspected to be cardiac in origin.

**B6**

- Mild generalized cardiomegaly static compared to the previous study, progressive compared to the 2016 study. No

Client:  
Patient:

**B6**

evidence of cardiac decompensation. Echocardiography can be considered for further evaluation as clinically indicated.

**B6**

**B6**

**B6**

**B6**

1. Echo:

- DMVD with now markedly decreased contractile function and moderately enlarged LA r/o diet related

**B6**

**B6**

Client: **B6**  
Patient:

10/24/18:

1. Recheck Echo: LA enlargement, still no PH: **B6**

10/25/18:

1. Recheck TXR: Mild improvement of pulmonary edema. Mild interstitial pattern appreciated (possible pneumonia?).

**B6**

ASSESSMENT

- CHF secondary DCM - suspect acquired DCM secondary to grain free/boutique diet  
MVD with left atrium enlargement
- Dyspnea: r/o secondary to CHF vs interstitial pulmonary disease (PTE, pulmonary fibrosis)
- Pulmonary edema -r/o cardiogenic vs noncardiogenic (
- Interstitial pulmonary pattern: r/o redistribution of pulmonary edema vs pneumonia (hospital acquired, given lack of interstitial pattern on **B6**)
- Vomiting
- Weakness/Ataxia: r/o secondary to DCM and decreased cardiac output vs progression of bronchitis and tracheal collapse

**B6**

**B6**

Client:  
Patient:

**B6**

5.

**B6**

TREATMENT:

NUTRITION (calculate RER, think of specific nutritional needs for patient)

RER = based on ideal weight of 5 kg = 234 kcal/day - feeding RC cardiac diet in hospital ~ 1/2 cup BID

FLUID PLAN

None, offer water to face q 4h

MEDICATIONS

Owner Meds

**B6**

Dispensed in hospital

**B6**

- Recheck with cardio in 10-14 days. Recheck UA and culture at this time.
- Recheck with the cardiology service in 3 months (1/22/19) - FOR DCM STUDY
- Recheck with the cardiology service in 6 months (4/22/19) - FOR DCM STUDY

CREATED BY:  
REVIEWED BY:

**B6**

SOAP Text:

**B6**

8:56AM

**B6**

ICU DAILY SOAP:

**B6**

11 yo MN Pomeranian, day 7 of hospitalization for DCM

**B6**

Current history:

**B6**

for sudden onset of weakness and ataxia. Cardio consult diagnosed DCM (on grain free diet). Chest x-rays (repeat during stay) revealed interstitial pattern (edema vs pneumonia vs PTE vs fibrosis). Persistent increased RR/RE and decreased oxygenation (confirmed on arterial blood gaz).

Prior medical history:

**B6**

Client:  
Patient:

**B6**

**B6**

SUBJECTIVE: Hydration - adequate. Friendly, nervous

OVERNIGHT UPDATE: Patient not on O2 overnight with persistent but stable mild effort overnight.

OBJECTIVE:

**B6**

C/V: Grade II/VI murmur appreciated, no arrhythmias. Femoral pulses good bilaterally

**B6**

DIAGNOSTICS COMPLETED

**B6**

- Cardio consult: Early compensated DMVD with a normal LA. Cough not suspected to be cardiac in origin.

**B6**

**B6**

Client: **B6**  
Patient:

**B6**

10/19/18

**B6**

10/21/18

**B6**

10/22/18

1. Echo:

- DMVD with now markedly decreased contractile function and moderately enlarged LA r/o diet related
- Soft tissue opacity within the LV walls r/o papillary muscle vs. mass

**B6**

4. Enrolled in DCM study

**B6**

**B6**

**B6**

**B6**

Client: **B6**  
Patient:

**B6**

ASSESSMENT

- CHF secondary DCM - suspect acquired DCM secondary to grain free/boutique diet  
MVD with left atrium enlargement
- Dyspnea with interstitial pattern: r/o secondary to CHF vs interstitial pulmonary disease (PTE, pulmonary fibrosis)
- Weakness/Ataxia: r/o secondary to DCM and decreased cardiac output vs progression of bronchitis and tracheal collapse

**B6**

PLAN

**B6**

- Recheck with the cardiology service in 3 months (1/22/19) - FOR DCM STUDY
- Recheck with the cardiology service in 6 months (4/22/19) - FOR DCM STUDY

CREATED BY: **B6**

Client:  
Patient:

**B6**

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**Disposition/Recommendations**

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Client:  
Patient:

**B6**

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Client: **B6**  
 Patient: **B6**



**Foster Hospital for Small Animals**

55 Willard Street  
 North Grafton, MA 01536  
 (508) 839-5395

Client: **B6**  
 Veterinarian:  
 Patient ID: **B6**  
 Visit ID:

Patient: **B6**  
 Species: Canine  
 Breed: Pomeranian  
 Sex: Male (Neutered)  
 Age: **B6** Years Old

**Lab Results Report**

**CBC, Comprehensive, Sm Animal** 5/14/2018 4:02:12 PM Accession ID: **B6**

Test	Results	Reference Range	Units
WBC (ADVIA)	<b>B6</b>	4.4 - 15.1	K/uL
RBC(ADVIA)		5.8 - 8.5	M/uL
HGB(ADVIA)		13.3 - 20.5	g/dL
HCT(ADVIA)		39 - 55	%
MCV(ADVIA)		64.5 - 77.5	fL
MCH(ADVIA)		21.3 - 25.9	pg
MCHC(ADVIA)		31.9 - 34.3	g/dL
RDW (ADVIA)		11.9 - 15.2	
PLT(ADVIA)		173 - 486	K/uL
MPV (ADVIA)		8.29 - 13.2	fL
PLTCRT		0.129 - 0.403	%
RETIC(ADVIA)		0.2 - 1.6	%
RETICS (ABS) ADVIA		14.7 - 113.7	K/uL

**CBC, Comprehensive, Sm Animal** 5/14/2018 4:02:28 PM Accession ID: **B6**

Test	Results	Reference Range	Units
GLUCOSE	<b>B6</b>	67 - 135	mg/dL
UREA		8 - 30	mg/dL
CREATININE		0.6 - 2	mg/dL
PHOSPHORUS		2.6 - 7.2	mg/dL
CALCIUM2		9.4 - 11.3	mg/dL
MAGNESIUM 2+		1.8 - 3	mEq/L



68/223

**B6**

Printed Sunday, November 11, 2018

Client: **B6**  
 Patient: **B6**

T. PROTEIN	<b>B6</b>	5.5 - 7.8	g/dL
ALBUMIN		2.8 - 4	g/dL
GLOBULINS		2.3 - 4.2	g/dL
A/G RATIO		0.7 - 1.6	
SODIUM		140 - 150	mEq/L
CHLORIDE		106 - 116	mEq/L
POTASSIUM		3.7 - 5.4	mEq/L
ICO2 (BICARB)		14 - 28	mEq/L
AGAP		8 - 19	
NA/K		29 - 40	
T BILIRUBIN		0.1 - 0.3	mg/dL
D.BILIRUBIN		0 - 0.1	mg/dL
I BILIRUBIN		0 - 0.2	mg/dL
ALK PHOS		12 - 127	U/L
GGT		0 - 10	U/L
ALT		14 - 86	U/L
AST		9 - 54	U/L
CK		22 - 422	U/L
CHOLESTEROL		82 - 355	mg/dL
TRIGLYCERIDES		30 - 338	mg/dl
AMYLASE	409 - 1250	U/L	
OSMOLALITY (CALCULATED)	291 - 315	mmol/L	
COMMENTS (CHEMISTRY)	0 - 0		

Slight hemolysis, Slight lipemia

**CBC, Comprehensive, Sm Animal**    5/14/2018 4:02:08 PM    Accession ID: **B6**

Test	Results	Reference Range	Units
SEGS%	<b>B6</b>	43 - 86	%
L YMPHS%		7 - 47	%
MONOS%		1 - 15	%
NRBC		0 - 1	/100 WBC
SEGS (AB)ADVIA		2.8 - 11.5	K/uL
L YMPHS (ABS)ADVIA		1 - 4.8	K/uL
MONOS (ABS)ADVIA		0.1 - 1.5	K/uL
WBC MORPHOLOGY		0 - 0	
Occasional reactive lymphocytes			
TARGET		0 - 0	

**CBC, Comprehensive, Sm Animal**    5/14/2018 4:02:15 PM    Accession ID: **B6**

Test	Results	Reference Range	Units
U COLLECT		0 - 0	
Urine - Catheterization			



Client: **B6**  
Patient: **B6**

U COLOR		0 - 0	
U TURBIDITY		0 - 0	
U SG		0 - 0	
U PH		0 - 0	
U PROTEIN		0 - 0	
U GLUCOSE		0 - 0	
U KETONES		0 - 0	
U BILIRUBIN		0 - 0	
U HEME PROTEIN		0 - 0	
U WBC		0 - 0	/hpf
U RBC		0 - 0	/hpf
U BACTERIA		0 - 0	/hpf
U CRYSTALS		0 - 0	/hpf
U TRANSITIONAL		0 - 0	/hpf
0-5, Transitional cell clumping present			
U FAT	<b>B6</b>	0 - 0	/hpf

**CBC, Comprehensive, Sm Animal**    5/15/2018 3:39:00 PM    Accession ID: **B6**

Test	Results	Reference Range	Units
		0 - 0	

AP results  
CYTOLOGY REPORT



Cytologic Interpretation:  
Suppurative inflammation with probable epithelial hyperplasia

Comments:  
This inflammation may be due to infectious or noninfectious causes. Intercellular bacteria are not noted; those bacteria present are frequently associated with the squamous epithelial cells which may represent oropharyngeal contamination during acquisition of this fluid however aspiration pneumonia cannot be ruled out. Culture and sensitivity, if not yet already requested is recommended. The epithelial cells are most consistent with a hyperplastic population which would suggest some chronicity to the current respiratory issues.

Client: **B6**  
Patient: **B6**

Electronically Signed by 5/15/2018@7:06 PM

**B6** DVM  
Diplomate ACVP (Clinical Pathology)

0 - 0

AP results  
CYTOLOGY REPORT

**B6**

Cytologic Interpretation:  
Suppurative inflammation with probable epithelial hyperplasia

Comments:  
This inflammation may be due to infectious or noninfectious causes. Intercellular bacteria are not noted; those bacteria present are frequently associated with the squamous epithelial cells which may represent oropharyngeal contamination during acquisition of this fluid however aspiration pneumonia cannot be ruled out. Culture and sensitivity, if not yet already requested is recommended. The epithelial cells are most consistent with a hyperplastic population which would suggest some chronicity to the current respiratory issues.

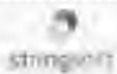
Electronically Signed by 5/15/2018@7:06 PM

**B6** DVM  
Diplomate ACVP (Clinical Pathology)

0 - 0

AP results  
CYTOLOGY REPORT

**B6**



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**B6**

Printed Sunday, November 11, 2018

Client: **B6**  
Patient: **B6**

**B6**

Cytologic Interpretation:  
Suppurative inflammation with probable epithelial hyperplasia

Comments:  
This inflammation may be due to infectious or noninfectious causes. Intercellular bacteria are not noted; those bacteria present are frequently associated with the squamous epithelial cells which may represent oropharyngeal contamination during acquisition of this fluid however aspiration pneumonia cannot be ruled out. Culture and sensitivity, if not yet already requested is recommended. The epithelial cells are most consistent with a hyperplastic population which would suggest some chronicity to the current respiratory issues.

Electronically Signed by 5/15/2018@7:06 PM

**B6** DVM  
Diplomate ACVP (Clinical Pathology)

**CBC, Comprehensive, Sm Animal** 8/13/2018 12:51:08 PM Accession ID: **B6**

Test	Results	Reference Range	Units
WBC (ADVIA)	<b>B6</b>	4.4 - 15.1	K/uL
RBC(ADVIA)		5.8 - 8.5	M/uL
HGB(ADVIA)		13.3 - 20.5	g/dL
HCT(ADVIA)		39 - 55	%
MCV(ADVIA)		64.5 - 77.5	fL
MCH(ADVIA)		21.3 - 25.9	pg
MCHC(ADVIA)		31.9 - 34.3	g/dL
RDW (ADVIA)		11.9 - 15.2	
COMMENTS (HEMATOLOGY)		0 - 0	

>25 platelets/100x field (estimated count of >500,000/ul)

**CBC, Comprehensive, Sm Animal** 8/13/2018 12:51:09 PM Accession ID: **B6**

Test	Results	Reference Range	Units
SEGS%	<b>B6</b>	43 - 86	%
LYMPHS%		7 - 47	%
MONOS%		1 - 15	%
EOS%		0 - 16	%
SEGS (AB)ADVIA		2.8 - 11.5	K/ul
LYMPHS (ABS)ADVIA		1 - 4.8	K/uL
MONOS (ABS)ADVIA		0.1 - 1.5	K/uL
EOS (ABS)ADVIA		0 - 1.4	K/uL
WBC MORPHOLOGY		0 - 0	

No Morphologic Abnormalities

TARGET **B6** 0 - 0

**CBC, Comprehensive, Sm Animal** 8/14/2018 10:16:00 AM Accession ID: **B6**

Test	Results	Reference Range	Units
FECAL CENTRIFUGATION	<b>B6</b>	0 - 0	



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**B6**

Printed Sunday, November 11, 2018

Client: **B6**  
Patient: **B6**

**CBC, Comprehensive, Sm Animal**    **8/21/2018 5:17:12 PM**    **Accession ID: B6**

Test	Results	Reference Range	Units
WBC (ADVIA)	<b>B6</b>	4.4 - 15.1	K/uL
RBC(ADVIA)		5.8 - 8.5	M/uL
HGB(ADVIA)		13.3 - 20.5	g/dL
HCT(ADVIA)		39 - 55	%
MCV(ADVIA)		64.5 - 77.5	fL
MCH(ADVIA)		21.3 - 25.9	pg
MCHC(ADVIA)		31.9 - 34.3	g/dL
RDW (ADVIA)		11.9 - 15.2	
PLT(ADVIA)		173 - 486	K/uL
MPV (ADVIA)		8.29 - 13.2	fL
PLTCRT		0.129 - 0.403	%
RETIC(ADVIA)		0.2 - 1.6	%
RETICS (ABS) ADVIA		14.7 - 113.7	K/uL

**CBC, Comprehensive, Sm Animal**    **B6**    **5:17:09 PM**    **Accession ID: B6**

Test	Results	Reference Range	Units	
SEGS%	<b>B6</b>	43 - 86	%	
LYMPHS%		7 - 47	%	
MONOS%		1 - 15	%	
BANDS %		0 - 3	%	
SEGS (AB)ADVIA		2.8 - 11.5	K/uL	
LYMPHS (ABS)ADVIA		1 - 4.8	K/uL	
MONOS (ABS)ADVIA		0.1 - 1.5	K/uL	
BANDS (ABS) ADVIA		0 - 0.3	K/uL	
TOXIC CHANGE		0 - 0		
RBC MORPHOLOGY		0 - 0		
No morphologic abnormalities				

**CBC, Comprehensive, Sm Animal**    **B6**    **2:22:00 PM**    **Accession ID: B6**

Test	Results	Reference Range	Units
		0 - 0	

AP results  
CYTOLOGY REPORT

**B6**



Client: **B6**  
Patient:

**B6**

Cytologic Interpretation:  
Neutrophilic inflammation

Comments:  
The squamous cells could be present due to oropharyngeal contamination during sampling or aspiration. The findings are not typical of aspiration pneumonia, as only low numbers of bacteria are present. As the bacteria are extracellular, these could represent contaminating microorganisms rather than an infection.

Electronically Signed by: **B6** @2:17 PM  
**B6**, DVM, PhD, pathologist  
Diplomate ACVP (Clinical Pathology)

0 - 0

AP results  
CYTOLOGY REPORT

**B6**

Cytologic Interpretation:  
Neutrophilic inflammation

Comments:  
The squamous cells could be present due to oropharyngeal contamination during sampling or aspiration. The findings are not typical of aspiration pneumonia, as only low numbers of bacteria are present. As the bacteria are extracellular, these could represent contaminating microorganisms rather than an infection.

Electronically Signed by: **B6** @2:17 PM  
**B6**, DVM, PhD, pathologist  
Diplomate ACVP (Clinical Pathology)

0 - 0

AP results  
CYTOLOGY REPORT

**B6**



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**B6**

Printed Sunday, November 11, 2018



Client: **B6**  
Patient: **B6**

**B6**

Cytologic Interpretation:  
Neutrophilic inflammation

Comments:  
The squamous cells could be present due to oropharyngeal contamination during sampling or aspiration. The findings are not typical of aspiration pneumonia, as only low numbers of bacteria are present. As the bacteria are extracellular, these could represent contaminating microorganisms rather than an infection.

Electronically Signed by: **B6** 12:17 PM  
**B6** DVM, PhD, pathologist  
Diplomate ACVP (Clinical Pathology)

**CBC, Comprehensive, Sm Animal** 9/16/2018 1:54:17 PM Accession ID: **B6**

Test	Results	Reference Range	Units
U COLLECT	<b>B6</b>	0 - 0	
U COLOR		0 - 0	
U TURBIDITY		0 - 0	
U SG		0 - 0	
U PH		0 - 0	
U PROTEIN		0 - 0	
U GLUCOSE		0 - 0	
U KETONES		0 - 0	
U BILIRUBIN		0 - 0	

Negative  
Bilirubin up to 2+ may be normal highly concentrated urine.

U HEME PROTEIN	<b>B6</b>	0 - 0	
U WBC		0 - 0	/hpf
U RBC		0 - 0	/hpf
U BACTERIA		0 - 0	/hpf
U CRYSTALS		0 - 0	/hpf
U TRANSITIONAL		0 - 0	/hpf
U FAT		0 - 0	/hpf
U DEBRIS		0 - 0	/hpf
COMMENTS (URINALYSIS)		0 - 0	

Less than 1 ml urine submitted, Protein may be increased due to the presence of heme proteins

**CBC, Comprehensive, Sm Animal** 9/16/2018 1:54:01 PM Accession ID: **B6**

Test	Results	Reference Range	Units
U COLLECT	<b>B6</b>	0 - 0	
URINE CULTURE 24HR		0 - 0	

culture to be sent to Idexx for identification and sensitivity

**CBC, Comprehensive, Sm Animal** 10/2/2018 4:22:12 PM Accession ID: **B6**

Test	Results	Reference Range	Units
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Client: **B6**  
Patient:

WBC (ADVIA)	<b>B6</b>	4.4 - 15.1	K/uL
RBC(ADVIA)		5.8 - 8.5	M/uL
HGB(ADVIA)		13.3 - 20.5	g/dL
HCT(ADVIA)		39 - 55	%
MCV(ADVIA)		64.5 - 77.5	fL
MCH(ADVIA)		21.3 - 25.9	pg
MCHC(ADVIA)		31.9 - 34.3	g/dL
RDW (ADVIA)		11.9 - 15.2	
PLT(ADVIA)		173 - 486	K/uL
MPV (ADVIA)		8.29 - 13.2	fL
PLTCRT		0.129 - 0.403	%
RETIC(ADVIA)		0.2 - 1.6	%
RETICS (ABS) ADVIA		14.7 - 113.7	K/uL

**CBC, Comprehensive, Sm Animal** 12:28 PM Accession ID: **B6**

Test	Results	Reference Range	Units	
GLUCOSE	<b>B6</b>	67 - 135	mg/dL	
UREA		8 - 30	mg/dL	
CREATININE		0.6 - 2	mg/dL	
PHOSPHORUS		2.6 - 7.2	mg/dL	
CALCIUM2		9.4 - 11.3	mg/dL	
MAGNESIUM 2+		1.8 - 3	mEq/L	
T. PROTEIN		5.5 - 7.8	g/dL	
ALBUMIN		2.8 - 4	g/dL	
GLOBULINS		2.3 - 4.2	g/dL	
A/G RATIO		0.7 - 1.6		
SODIUM		140 - 150	mEq/L	
CHLORIDE		106 - 116	mEq/L	
POTASSIUM		3.7 - 5.4	mEq/L	
ICO2 (BICARB)		14 - 28	mEq/L	
AGAP		8 - 19		
NA/K		29 - 40		
T BILIRUBIN		0.1 - 0.3	mg/dL	
D.BILIRUBIN		0 - 0.1	mg/dL	
I BILIRUBIN		0 - 0.2	mg/dL	
ALK PHOS		12 - 127	U/L	
6594 Result(s) verified				
GGT		0 - 10	U/L	
ALT		14 - 86	U/L	
AST		9 - 54	U/L	
CK	22 - 422	U/L		

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**B6**



Printed Sunday, November 11, 2018

Client: **B6**  
 Patient: **B6**

CHOLESTEROL	<b>B6</b>	82 - 355	mg/dL
TRIGLYCERIDES		30 - 338	mg/dl
AMYLASE		409 - 1250	U/L
OSMOLALITY (CALCULATED)		291 - 315	mmol/L
COMMENTS (CHEMISTRY)		0 - 0	

**CBC, Comprehensive, Sm Animal**      **B6**      4:22:13 PM      Accession ID: **B6**

Test	Results	Reference Range	Units
SEGS%	<b>B6</b>	43 - 86	%
LYMPHS%		7 - 47	%
MONOS%		1 - 15	%
NRBC		0 - 1	/100 WBC
SEGS (AB)ADVIA		2.8 - 11.5	K/uL
LYMPHS (ABS)ADVIA		1 - 4.8	K/uL
MONOS (ABS)ADVIA		0.1 - 1.5	K/uL
TOXIC CHANGE		0 - 0	
ANISOCYTOSIS		0 - 0	
TARGET		0 - 0	
H-J BODIES		0 - 0	
POLYCHROMASIA		0 - 0	
SCHISTOCYTES		0 - 0	
SPHEROCYTES		0 - 0	

**CBC, Comprehensive, Sm Animal**      **B6**      22:14 PM      Accession ID: **B6**

Test	Results	Reference Range	Units
U COLLECT	<b>B6</b>	0 - 0	
U COLOR		0 - 0	
U TURBIDITY		0 - 0	
U SG		0 - 0	
U PH		0 - 0	
U PROTEIN		0 - 0	
U GLUCOSE		0 - 0	
U KETONES		0 - 0	
U BILIRUBIN		0 - 0	
Negative			
Bilirubin up to 2+ may be normal highly concentrated urine.			
U HEME PROTEIN	<b>B6</b>	0 - 0	
U WBC		0 - 0	/hpf
U RBC		0 - 0	/hpf
U BACTERIA		0 - 0	/hpf
U CRYSTALS		0 - 0	/hpf
U FAT		0 - 0	/hpf



Client: **B6**

Patient:

**CBC, Comprehensive, Sm Animal** **B6** 4:22:01 PM Accession ID: **B6**

Test	Results	Reference Range	Units
U COLLECT	<b>B6</b>	0 - 0	
URINE CULTURE 24HR		0 - 0	

culture to be sent to Idexx for identification and sensitivity

**CBC, Comprehensive, Sm Animal** **B6** 0:11:31 AM Accession ID: **B6**

Test	Results	Reference Range	Units
Blood Glucose (Glucometer) - FHSA	<b>B6</b>	0 - 0	mg/dl

**CBC, Comprehensive, Sm Animal** **B6** 2:01:53 PM Accession ID: **B6**

Test	Results	Reference Range	Units
Blood Glucose (Glucometer) - FHSA	<b>B6</b>	0 - 0	mg/dl

**CBC, Comprehensive, Sm Animal** **B6** 5:56:33 PM Accession ID: **B6**

Test	Results	Reference Range	Units
TS (FHSA)	<b>B6</b>	0 - 0	g/dl
PCV **	<b>B6</b>	0 - 0	%
TS (FHSA)	<b>B6</b>	0 - 0	g/dl

**CBC, Comprehensive, Sm Animal** **B6** 5:56:51 PM Accession ID: **B6**

Test	Results	Reference Range	Units
Blood Glucose (Glucometer) - FHSA	<b>B6</b>	0 - 0	mg/dl

**CBC, Comprehensive, Sm Animal** **B6** 5:40:09 AM Accession ID: **B6**

Test	Results	Reference Range	Units
Blood Glucose (Glucometer) - FHSA	<b>B6</b>	0 - 0	mg/dl

**CBC, Comprehensive, Sm Animal** **B6** 9:31:51 AM Accession ID: **B6**

Test	Results	Reference Range	Units
Blood Glucose (Glucometer) - FHSA	<b>B6</b>	0 - 0	mg/dl

**CBC, Comprehensive, Sm Animal** **B6** 2:00:46 PM Accession ID: **B6**

Test	Results	Reference Range	Units
Blood Glucose (Glucometer) - FHSA	<b>B6</b>	0 - 0	mg/dl

**CBC, Comprehensive, Sm Animal** **B6** 5:59:23 PM Accession ID: **B6**

Test	Results	Reference Range	Units
Blood Glucose (Glucometer) - FHSA	<b>B6</b>	0 - 0	mg/dl

**CBC, Comprehensive, Sm Animal** **B6** 9:29:25 PM Accession ID: **B6**

Test	Results	Reference Range	Units
Blood Glucose (Glucometer) - FHSA	<b>B6</b>	0 - 0	mg/dl

**CBC, Comprehensive, Sm Animal** **B6** 2:15:55 AM Accession ID: **B6**

Test	Results	Reference Range	Units
Blood Glucose (Glucometer) - FHSA	<b>B6</b>	0 - 0	mg/dl

**CBC, Comprehensive, Sm Animal** **B6** 2:04:37 AM Accession ID: 389231

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**B6**



Printed Sunday, November 11, 2018

Client: **B6**  
 Patient: **B6**

Test	Results	Reference Range	Units
Blood Glucose (Glucometer) - FHSA	<b>B6</b>	0 - 0	mg/dl

**CBC, Comprehensive, Sm Animal**      **B6**      10:31:19 AM      Accession ID: **B6**

Test	Results	Reference Range	Units
Blood Glucose (Glucometer) - FHSA	<b>B6</b>	0 - 0	mg/dl

**CBC, Comprehensive, Sm Animal**      **B6**      10:31:13 AM      Accession ID: **B6**

Test	Results	Reference Range	Units
WBC (ADVIA)	<b>B6</b>	4.4 - 15.1	K/uL
RBC(ADVIA)		5.8 - 8.5	M/uL
HGB(ADVIA)		13.3 - 20.5	g/dL
HCT(ADVIA)		39 - 55	%
MCV(ADVIA)		64.5 - 77.5	fL
MCH(ADVIA)		21.3 - 25.9	pg
MCHC(ADVIA)		31.9 - 34.3	g/dL
RDW (ADVIA)		11.9 - 15.2	
PLT(ADVIA)		173 - 486	K/uL
MPV (ADVIA)		8.29 - 13.2	fL
PLTCRT		0.129 - 0.403	%
RETIC(ADVIA)		0.2 - 1.6	%
RETICS (ABS) ADVIA		14.7 - 113.7	K/uL
COMMENTS (HEMATOLOGY)		0 - 0	

**CBC, Comprehensive, Sm Animal**      **B6**      10:31:27 AM      Accession ID: **B6**

Test	Results	Reference Range	Units
GLUCOSE	<b>B6</b>	67 - 135	mg/dL
UREA		8 - 30	mg/dL
CREATININE		0.6 - 2	mg/dL
PHOSPHORUS		2.6 - 7.2	mg/dL
CALCIUM2		9.4 - 11.3	mg/dL
MAGNESIUM 2+		1.8 - 3	mEq/L
T. PROTEIN		5.5 - 7.8	g/dL
ALBUMIN		2.8 - 4	g/dL
GLOBULINS		2.3 - 4.2	g/dL
A/G RATIO		0.7 - 1.6	
SODIUM		140 - 150	mEq/L
CHLORIDE		106 - 116	mEq/L
POTASSIUM		3.7 - 5.4	mEq/L
tCO2 (BICARB)		14 - 28	mEq/L
AGAP		8 - 19	
NA/K		29 - 40	
T BILIRUBIN		0.1 - 0.3	mg/dL



Client: **B6**  
 Patient:

D.BILIRUBIN	<b>B6</b>	0 - 0.1	mg/dL
I BILIRUBIN		0 - 0.2	mg/dL
ALK PHOS		12 - 127	U/L
4518 QNS to verify results			
GGT		0 - 10	U/L
ALT		14 - 86	U/L
AST		9 - 54	U/L
CK		22 - 422	U/L
CHOLESTEROL		82 - 355	mg/dL
TRIGLYCERIDES		30 - 338	mg/dl
AMYLASE		409 - 1250	U/L
OSMOLALITY (CALCULATED)		291 - 315	mmol/L

**CBC, Comprehensive, Sm Animal**    **B6**    10:31:13 AM    Accession ID: **B6**

Test	Results	Reference Range	Units
SEGS%	<b>B6</b>	43 - 86	%
LYMPHS%		7 - 47	%
MONOS%		1 - 15	%
BANDS %		0 - 3	%
NRBC		0 - 1	/100 WBC
SEGS (AB)ADVIA		2.8 - 11.5	K/uL
LYMPHS (ABS)ADVIA		1 - 4.8	K/uL
MONOS (ABS)ADVIA		0.1 - 1.5	K/uL
BANDS (ABS) ADVIA		0 - 0.3	K/uL
TOXIC CHANGE		0 - 0	
ANISOCYTOSIS		0 - 0	
H-J BODIES		0 - 0	
POIKILOCYTOSIS		0 - 0	
POLYCHROMASIA		0 - 0	

**CBC, Comprehensive, Sm Animal**    **B6**    2:16:36 PM    Accession ID: **B6**

Test	Results	Reference Range	Units
Blood Glucose (Glucometer) - FHSA	<b>B6</b>	0 - 0	mg/dl

**CBC, Comprehensive, Sm Animal**    **B6**    4:58:01 PM    Accession ID: **B6**

Test	Results	Reference Range	Units
	<b>B6</b>	0 - 0	mg/dl
		0 - 0	mg/dl
		0 - 0	mg/dl

**CBC, Comprehensive, Sm Animal**    **B6**    2:51:01 PM    Accession ID: **B6**

Test	Results	Reference Range	Units
Blood Glucose (Glucometer) - FHSA	<b>B6</b>	0 - 0	mg/dl



Client: **B6**  
 Patient: **B6**

**CBC, Comprehensive, Sm Animal**    10/19/2018 8:21:06 AM    Accession ID: **B6**

Test	Results	Reference Range	Units
Blood Glucose (Glucometer) - FHSA	<b>B6</b>	0 - 0	mg/dl

**CBC, Comprehensive, Sm Animal**    10/19/2018 8:28:13 AM    Accession ID: **B6**

Test	Results	Reference Range	Units
WBC (ADVIA)	<b>B6</b>	4.4 - 15.1	K/uL
RBC(ADVIA)		5.8 - 8.5	M/uL
HGB(ADVIA)		13.3 - 20.5	g/dL
HCT(ADVIA)		39 - 55	%
MCV(ADVIA)		64.5 - 77.5	fL
MCH(ADVIA)		21.3 - 25.9	pg
MCHC(ADVIA)		31.9 - 34.3	g/dL
RDW (ADVIA)		11.9 - 15.2	
PLT(ADVIA)		173 - 486	K/uL
MPV (ADVIA)		8.29 - 13.2	fL
PLTCRT		0.129 - 0.403	%
RETIC(ADVIA)		0.2 - 1.6	%
RETICS (ABS) ADVIA		14.7 - 113.7	K/uL
COMMENTS (HEMATOLOGY)		0 - 0	

**CBC, Comprehensive, Sm Animal**    10/19/2018 8:28:28 AM    Accession ID: **B6**

Test	Results	Reference Range	Units
GLUCOSE	<b>B6</b>	67 - 135	mg/dL
UREA		8 - 30	mg/dL
CREATININE		0.6 - 2	mg/dL
PHOSPHORUS		2.6 - 7.2	mg/dL
CALCIUM2		9.4 - 11.3	mg/dL
MAGNESIUM 2+		1.8 - 3	mEq/L
T. PROTEIN		5.5 - 7.8	g/dL
ALBUMIN		2.8 - 4	g/dL
GLOBULINS		2.3 - 4.2	g/dL
A/G RATIO		0.7 - 1.6	
SODIUM		140 - 150	mEq/L
CHLORIDE		106 - 116	mEq/L
POTASSIUM		3.7 - 5.4	mEq/L
iCO2 (BICARB)		14 - 28	mEq/L
AGAP		8 - 19	
NA/K		29 - 40	
T BILIRUBIN		0.1 - 0.3	mg/dL
D.BILIRUBIN		0 - 0.1	mg/dL
I BILIRUBIN	0 - 0.2	mg/dL	



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**B6**

Printed Sunday, November 11, 2018

Client: **B6**  
 Patient:

ALK PHOS		12 - 127	U/L
1916 Result(s) verified			
GGT	<b>B6</b>	0 - 10	U/L
ALT		14 - 86	U/L
AST		9 - 54	U/L
CK		22 - 422	U/L
CHOLESTEROL		82 - 355	mg/dL
TRIGLYCERIDES		30 - 338	mg/dl
AMYLASE		409 - 1250	U/L
OSMOLALITY (CALCULATED)		291 - 315	mmol/L
COMMENTS (CHEMISTRY)		0 - 0	

**CBC, Comprehensive, Sm Animal**    10/19/2018 8:28:12 AM    Accession ID: **B6**

Test	Results	Reference Range	Units
SEGS%	<b>B6</b>	43 - 86	%
LYMPHS%		7 - 47	%
MONOS%		1 - 15	%
BANDS %		0 - 3	%
NRBC		0 - 1	/100 WBC
SEGS (AB)ADVIA		2.8 - 11.5	K/ul
LYMPHS (ABS)ADVIA		1 - 4.8	K/uL
MONOS (ABS)ADVIA		0.1 - 1.5	K/uL
BANDS (ABS) ADVIA		0 - 0.3	K/uL
WBC MORPHOLOGY		0 - 0	
Occasional reactive lymphocytes			
ANISOCYTOSIS		0 - 0	
H-J BODIES		0 - 0	
POLYCHROMASIA		0 - 0	

**CBC, Comprehensive, Sm Animal**    10/19/2018 8:48:16 AM    Accession ID: **B6**

Test	Results	Reference Range	Units
U COLLECT		0 - 0	
Urine - Catheterization			
U COLOR	<b>B6</b>	0 - 0	
U TURBIDITY		0 - 0	
U SG		0 - 0	
U PH		0 - 0	
U PROTEIN		0 - 0	
U GLUCOSE		0 - 0	
U KETONES		0 - 0	
U BILIRUBIN		0 - 0	
Negative			





Client: **B6**  
Patient: **B6**

Bilirubin up to 2+ may be normal highly concentrated urine.

U HEME PROTEIN	<b>B6</b>	0 - 0	
U WBC		0 - 0	/hpf
U RBC		0 - 0	/hpf
U BACTERIA		0 - 0	/hpf
U CRYSTALS		0 - 0	/hpf
U TRANSITIONAL		0 - 0	/hpf
U FAT		0 - 0	/hpf
U DEBRIS		0 - 0	/hpf

**CBC, Comprehensive, Sm Animal** 10/19/2018 8:48:00 AM Accession ID: **B6**

Test	Results	Reference Range	Units
URINE CULTURE 48HR		0 - 0	
no growth-negative urine culture			

**CBC, Comprehensive, Sm Animal** 10/19/2018 8:48:01 AM Accession ID: **B6**

Test	Results	Reference Range	Units
U COLLECT	<b>B6</b>	0 - 0	
Urine - Catheterization			
URINE CULTURE 24HR		0 - 0	

**CBC, Comprehensive, Sm Animal** 10/19/2018 10:00:13 AM Accession ID: **B6**

Test	Results	Reference Range	Units
Blood Glucose (Glucometer) - FHSA	<b>B6</b>	0 - 0	mg/dl

**CBC, Comprehensive, Sm Animal** 10/19/2018 12:03:04 PM Accession ID: **B6**

Test	Results	Reference Range	Units
Blood Glucose (Glucometer) - FHSA	<b>B6</b>	0 - 0	mg/dl

**CBC, Comprehensive, Sm Animal** 10/19/2018 2:08:11 PM Accession ID: **B6**

Test	Results	Reference Range	Units
Blood Glucose (Glucometer) - FHSA	<b>B6</b>	0 - 0	mg/dl

**CBC, Comprehensive, Sm Animal** 10/21/2018 5:12:25 PM Accession ID: **B6**

Test	Results	Reference Range	Units
SO2%	<b>B6</b>	94 - 100	%
HCT (POC)		38 - 48	%
HB (POC)		12.6 - 16	g/dL
NA (POC)		140 - 154	mmol/L
K (POC)		3.6 - 4.8	mmol/L
CL(POC)		109 - 120	mmol/L
CA (ionized)		1.17 - 1.38	mmol/L
MG (POC)		0.1 - 0.4	mmol/L
GLUCOSE (POC)		80 - 120	mg/dL
LACTATE		0 - 2	mmol/L

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**B6**



Printed Sunday, November 11, 2018

Client: **B6**  
 Patient: **B6**

BUN (POC)	<b>B6</b>	12 - 28	mg/dL
CREAT (POC)		0.2 - 2.1	mg/dL
TCO2 (POC)		0 - 0	mmol/L
nCA		0 - 0	mmol/L
nMG		0 - 0	mmol/L
GAP		0 - 0	mmol/L
CA/MG		0 - 0	mol/mol
BEeef		0 - 0	mmol/L
BEb		0 - 0	mmol/L
A		0 - 0	mmHg
NOVA SAMPLE		0 - 0	
FiO2		0 - 0	%
PCO2		36 - 44	mmHg
PO2		80 - 100	mmHg
PH		7.337 - 7.467	
PCO2		36 - 44	mmHg
PO2		80 - 100	mmHg
HCO3	18 - 24	mmol/L	

**CBC, Comprehensive, Sm Animal**    **B6**    5:20:56 PM    Accession ID: **B6**

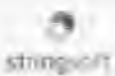
Test	Results	Reference Range	Units
TS (FHSA)	<b>B6</b>	0 - 0	g/dl
PCV **		0 - 0	%
TS (FHSA)		0 - 0	g/dl

**CBC, Comprehensive, Sm Animal**    **B6**    1:50:12 PM    Accession ID: **B6**

Test	Results	Reference Range	Units
WBC (ADVIA)	<b>B6</b>	4.4 - 15.1	K/uL
RBC(ADVIA)		5.8 - 8.5	M/uL
HGB(ADVIA)		13.3 - 20.5	g/dL
HCT(ADVIA)		39 - 55	%
MCV(ADVIA)		64.5 - 77.5	fL
MCH(ADVIA)		21.3 - 25.9	pg
MCHC(ADVIA)		31.9 - 34.3	g/dL
RDW (ADVIA)		11.9 - 15.2	
PLT(ADVIA)		173 - 486	K/uL
MPV (ADVIA)		8.29 - 13.2	fL
PLTCRT		0.129 - 0.403	%
RETIC(ADVIA)		0.2 - 1.6	%
RETICS (ABS) ADVIA		14.7 - 113.7	K/uL

**CBC, Comprehensive, Sm Animal**    **B6**    1:50:10 PM    Accession ID: **B6**

Test	Results	Reference Range	Units
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84/223

**B6**

Printed Sunday, November 11, 2018

Client: **B6**  
 Patient: **B6**

SEGS%	<b>B6</b>	43 - 86	%
LYMPHS%		7 - 47	%
MONOS%		1 - 15	%
NRBC		0 - 1	/100 WBC
SEGS (AB)ADVIA		2.8 - 11.5	K/uL
LYMPHS (ABS)ADVIA		1 - 4.8	K/uL
MONOS (ABS)ADVIA		0.1 - 1.5	K/uL
WBC MORPHOLOGY		0 - 0	
Occasional reactive lymphocytes			
H-J BODIES		0 - 0	
POIKILOCYTOSIS		0 - 0	
POLYCHROMASIA		0 - 0	

**CBC, Comprehensive, Sm Animal**      8:15:55 PM      Accession ID: **B6**

Test	Results	Reference Range	Units
TS (FHSA)	<b>B6</b>	0 - 0	g/dL
Lactate (FHSA) *		0 - 0	mmol/L
BG (FHSA)		0 - 0	g/dL
TS (FHSA)		0 - 0	g/dL
PCV		0 - 0	%

**CBC, Comprehensive, Sm Animal**      **B6** 5:47:49 PM      Accession ID: **B6**

Test	Results	Reference Range	Units
Troponin I (i-STAT) Cardiology - FHSA	<b>B6</b>	0 - 0.08	ng/ml

**CBC, Comprehensive, Sm Animal**      **B6** 7:52:14 AM      Accession ID: **B6**

Test	Results	Reference Range	Units
UREA	<b>B6</b>	8 - 30	mg/dL
CREATININE		0.6 - 2	mg/dL
PHOSPHORUS		2.6 - 7.2	mg/dL
CALCIUM2		9.4 - 11.3	mg/dL
MAGNESIUM 2+		1.8 - 3	mEq/L
T. PROTEIN		5.5 - 7.8	g/dL
ALBUMIN		2.8 - 4	g/dL
GLOBULINS		2.3 - 4.2	g/dL
A/G RATIO		0.7 - 1.6	
SODIUM		140 - 150	mEq/L
CHLORIDE		106 - 116	mEq/L
POTASSIUM		3.7 - 5.4	mEq/L
tCO2 (BICARB)		14 - 28	mEq/L
AGAP		8 - 19	
CHOLESTEROL		82 - 355	mg/dL



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**B6**

Printed Sunday, November 11, 2018

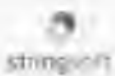
Client: **B6**  
 Patient: **B6**

CBC, Comprehensive, Sm Animal		<b>B6</b>	7:55:35 AM	Accession ID: <b>B6</b>
Test	Results	Reference Range	Units	
TS (FHSA)	<b>B6</b>	0 - 0	g/dl	
PCV **		0 - 0	%	
TS (FHSA)		0 - 0	g/dl	

CBC, Comprehensive, Sm Animal		<b>B6</b>	10:43 PM	Accession ID: <b>B6</b>
Test	Results	Reference Range	Units	
AGAP (i-STAT)	<b>B6</b>	8 - 25	mmol/L	
AGAP (i-STAT)		8 - 25	mmol/L	
Hb		12 - 17	g/dL	
Hb		12 - 17	g/dL	
HCT		35 - 50	%	
HCT		35 - 50	%	
Creat		0.5 - 1.3		
Creat		0.5 - 1.3		
BUN		10 - 26	mg/dL	
BUN		10 - 26	mg/dL	
K+		3.4 - 4.9	mEq/L	
Glucose (i-STAT)		60 - 115	mg/dL	
Glucose (i-STAT)		60 - 115	mg/dL	
iCa		1.12 - 1.4	mmol/L	
TCO2		17 - 25	mmol/L	
TCO2		17 - 25	mmol/L	
iCa		1.12 - 1.4	mmol/L	
iCa		1.12 - 1.4	mmol/L	
Cl-		106 - 127	mEq/L	
Cl-		106 - 127	mEq/L	
K+	3.4 - 4.9	mEq/L		
K+	3.4 - 4.9	mEq/L		
Na *	142 - 150	mEq/L		
Na *	142 - 150	mEq/L		

CBC, Comprehensive, Sm Animal		<b>B6</b>	8:14:24 PM	Accession ID: <b>B6</b>
Test	Results	Reference Range	Units	
TS (FHSA)	<b>B6</b>	0 - 0	g/dl	
PCV **		0 - 0	%	
TS (FHSA)		0 - 0	g/dl	

CBC, Comprehensive, Sm Animal		<b>B6</b>	8:48:45 AM	Accession ID: <b>B6</b>
Test	Results	Reference Range	Units	
AGAP (i-STAT)	<b>B6</b>	8 - 25	mmol/L	
AGAP (i-STAT)		8 - 25	mmol/L	



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**B6**

Printed Sunday, November 11, 2018

Client: **B6**  
 Patient: **B6**

Hb		12 - 17	g/dL
Hb		12 - 17	g/dL
HCT		35 - 50	%
HCT		35 - 50	%
Creat		0.5 - 1.3	
Creat		0.5 - 1.3	
BUN		10 - 26	mg/dL
BUN		10 - 26	mg/dL
K+		3.4 - 4.9	mEq/L
Glucose (i-STAT)		60 - 115	mg/dL
Glucose (i-STAT)		60 - 115	mg/dL
iCa		1.12 - 1.4	mmol/L
TCO2		17 - 25	mmol/L
TCO2		17 - 25	mmol/L
iCa		1.12 - 1.4	mmol/L
iCa		1.12 - 1.4	mmol/L
Cl-		106 - 127	mEq/L
Cl-		106 - 127	mEq/L
K+		3.4 - 4.9	mEq/L
K+		3.4 - 4.9	mEq/L
Na *		142 - 150	mEq/L
Na *		142 - 150	mEq/L

**B6**

**CBC, Comprehensive, Sm Animal**      **B6**      3:49:47 AM      Accession ID: **B6**

Test	Results	Reference Range	Units
TS (FHSA)		0 - 0	g/dl
PCV **	<b>B6</b>	0 - 0	%
TS (FHSA)		0 - 0	g/dl

**CBC, Comprehensive, Sm Animal**      **B6**      15:21 PM      Accession ID: **B6**

Test	Results	Reference Range	Units
AGAP (i-STAT)		8 - 25	mmol/L
AGAP (i-STAT)		8 - 25	mmol/L
Hb		12 - 17	g/dL
Hb		12 - 17	g/dL
HCT		35 - 50	%
HCT		35 - 50	%
Creat		0.5 - 1.3	
Creat		0.5 - 1.3	
BUN		10 - 26	mg/dL
BUN		10 - 26	mg/dL
K+		3.4 - 4.9	mEq/L

**B6**



Client: **B6**  
 Patient: **B6**

Glucose (i-STAT)	<b>B6</b>	60 - 130	mg/dL
Glucose (i-STAT)		60 - 130	mg/dL
iCa		1.12 - 1.4	mmol/L
TCO2		17 - 25	mmol/L
TCO2		17 - 25	mmol/L
iCa		1.12 - 1.4	mmol/L
iCa		1.12 - 1.4	mmol/L
Cl-		106 - 127	mEq/L
Cl-		106 - 127	mEq/L
K+		3.4 - 4.9	mEq/L
K+		3.4 - 4.9	mEq/L
Na *		142 - 150	mEq/L
Na *		142 - 150	mEq/L

**CBC, Comprehensive, Sm Animal**      **B6**      1:20:51 PM      Accession ID: **B6**

Test	Results	Reference Range	Units
TS (FHSA)	<b>B6</b>	0 - 0	g/dl
PCV **		0 - 0	%
TS (FHSA)		0 - 0	g/dl

**CBC, Comprehensive, Sm Animal**      10/26/2018 10:36:25 AM      Accession ID: **B6**

Test	Results	Reference Range	Units
SO2%	<b>B6</b>	94 - 100	%
HCT (POC)		38 - 48	%
HB (POC)		12.6 - 16	g/dL
NA (POC)		140 - 154	mmol/L
K (POC)		3.6 - 4.8	mmol/L
CL(POC)		109 - 120	mmol/L
CA (ionized)		1.17 - 1.38	mmol/L
MG (POC)		0.1 - 0.4	mmol/L
GLUCOSE (POC)		80 - 120	mg/dL
LACTATE		0 - 2	mmol/L
BUN (POC)		12 - 28	mg/dL
CREAT (POC)		0.2 - 2.1	mg/dL
TCO2 (POC)		0 - 0	mmol/L
nCA		0 - 0	mmol/L
nMG		0 - 0	mmol/L
GAP		0 - 0	mmol/L
CA/MG		0 - 0	mol/mol
BEeef		0 - 0	mmol/L
BEb		0 - 0	mmol/L
A		0 - 0	mmHg

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**B6**



Printed Sunday, November 11, 2018

Client: **B6**  
 Patient: **B6**

NOVA SAMPLE	<b>B6</b>	0 - 0	
FiO2		0 - 0	%
PCO2		36 - 44	mmHg
PO2		80 - 100	mmHg
PH		7.337 - 7.467	
PCO2		36 - 44	mmHg
PO2		80 - 100	mmHg
HCO3		18 - 24	mmol/L

CBC, Comprehensive, Sm Animal			
	<b>B6</b>	10:43:15 AM	Accession ID: <b>B6</b>
Test	Results	Reference Range	Units
TS (FHSA)	<b>B6</b>	0 - 0	g/dl
PCV **		0 - 0	%
TS (FHSA)		0 - 0	g/dl

CBC, Comprehensive, Sm Animal			
	<b>B6</b>	2:11:05 PM	Accession ID: <b>B6</b>
Test	Results	Reference Range	Units
TEG R	<b>B6</b>	2 - 7	min
TEG K TIME		1 - 4	mm
TEG ANGLE		48 - 77	degrees
TEG MA		45 - 64	mm
TEG G		3.9 - 8.4	Kd/sec
TEG LY30		0 - 3	%

CBC, Comprehensive, Sm Animal			
		10/2/2018 4:22:00 PM	Accession ID: <b>B6</b>
Test	Results	Reference Range	Units
CBC Review		0 - 0	

See comment.

Marked inflammationRegenerative anemia with low normal protein; rule out blood loss, although scattered schistocytes are present thus a component of fragmentation may be present concurrently. Increased MPV and microscopically observed macroplatelets suggests increased turnover or regeneration associated with inflammation or potential low level compensated consumption. **B6** VM PhD DACVP

CBC, Comprehensive, Sm Animal			
	<b>B6</b>	7:28:34 PM	Accession ID: <b>B6</b>
Test	Results	Reference Range	Units
Blood Glucose (Glucometer) - FHSA	<b>B6</b>	0 - 0	mg/dl

CBC, Comprehensive, Sm Animal			
	<b>B6</b>	7:51:50 AM	Accession ID: <b>B6</b>
Test	Results	Reference Range	Units
Blood Glucose (Glucometer) - FHSA	<b>B6</b>	0 - 0	mg/dl



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**B6**

Printed Sunday, November 11, 2018

Client:  
Patient:

**B6**

**B6**

**B6**

**B6**

**B6**





Client:  
Patient:

**B6**

**B6**

**B6**

Client:  
Patient:

**B6**

**B6**

**B6**

Client:  
Patient

**B6**

**B6**

**B6**

Client:  
Patient:

**B6**

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Client:  
Patient:

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Client:  
Patient:

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Client:  
Patient:

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**B6**



Client:  
Patient:

**B6**

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Client:  
Patient:

**B6**

**B6**

**B6**

Client: **B6**  
Patient:

**B6**

**B6**

TUFTS UNIVERSITY  
300 WESTBORD ROAD  
GRAFTON, MA 01536

Owner: **B6**  
Patient:  
Species:

**B6**

**B6**

**B6**

MYCOPLASMA CULTURE	
Test	Result
SOURCE	<b>B6</b>
STATUS	
COMPLETED CULTURE RESULTS	<b>B6</b>
<b>B6</b>	

**B6**

FINAL REPORT

PAGE 1 OF 1

Client:  
Patient:

**B6**

**B6**

**B6**

TUFTS UNIVERSITY  
320 WESTBORD ROAD  
GRANTON, MA 01934

**B6**

**B6**

**B6**

**B6**

**AEROBIC CULTURE**

TEST	RESULT
SCIENCE	ITW
STATUS	FINAL
COMPLETED CULTURE RESULTS	

**B6**

**B6**

**SUSCEPTIBILITY**

TEST	RESULT
ORGANISM	
PENICILLIN G	
AMOXICILIN	
AMOXICILAV ACID	
OXACILLIN	
CEPHALEXIN	
CEFDIOXAN	
CEFPODOXIME	

**B6**

**B6**

FINAL REPORT - CONTINUED ON NEXT PAGE  
PAGE 1

Client:  
Patient:

**B6**

**B6**

**B6**

**B6**

FINAL REPORT

PAGE 2 OF 2

Client:  
Patient:

**B6**

**B6**

**B6**

Client:  
Patient:

**B6**

**B6**

Tulane University Cummings School of Veterinary Medicine  
ANESTHESIA RECORD

**B6**

**B6**

Client:  
Patient:

**B6**

**B6**

Tufts Cummings School of Veterinary Medicine SA Anesthesia MRI/CT/Medicine Checklist

**B6**

**B6**



Client: **B6**  
Patient:

**IDEXX Aerobic Culture 8/22/18**

**B6**

Client:  
Patient:

**B6**

IDEXX Aerobic Culture 8/22/18

**B6**

Client:  
Patient:

**B6**

**IDEXX Aerobic & Anaerobic Culture 8/18/18**

**B6**

Client:  
Patient:

**B6**

**IDEXX Aerobic & Anaerobic Culture 8/18/18**

**B6**

Client:  
Patient:

**B6**

**IDEXX Mycoplasma Culture (transtracheal wash) 8/22/2018**

**B6**

**B6**

Client:  
Patient:

**B6**

**Lab Results IDEXX Urine cult & Suscep 9/18/18**

**B6**

Client:  
Patient:

**B6**

Lab Results IDEXX Urine cult & Suscep 9/18/18

**B6**

Client:  
Patient:

**B6**

**IDEXX Urine Cult & Suscep 9/18/18**

**B6**



Client:  
Patient:

**B6**

**IDEXX Urine Cult & Suscep 9/18/18**

**B6**

Client:  
Patient:

**B6**

**B6**

**Tufts**  
UNIVERSITY

Cummings School  
of Veterinary Medicine



 FAXED  
11/6/20 9/26

**B6**

2013 Number (only for C-V)

Do not change without the practitioner's indication. For substitution in above box in accordance with the law.

Client:  
Patient:

**B6**

**IDEXX Urine Cult & Suscep 10/3/18**

**B6**

**B6**

**B6**

**B6**

Client:  
Patient:

**B6**

**IDEXX Urine Cult & Suscep 10/3/18**

**B6**

Client:  
Patient:

**B6**

Lab Results IDEXX CARDIOPET proBNP 10/23/18

**B6**

Client:  
Patient:

**B6**

**Vitals Results**

0:30:14 AM  
00:41 PM  
10:58:19 AM  
10:58:21 AM  
10:58:22 AM  
1:03:11 PM  
1:03:36 PM  
1:08:41 PM  
1:08:42 PM  
1:08:43 PM  
1:08:44 PM  
1:08:45 PM  
1:08:46 PM  
1:08:47 PM  
1:08:48 PM  
1:48:43 PM  
1:48:50 PM  
1:52:29 PM  
1:52:35 PM  
5:01:35 PM  
5:55:47 PM  
5:58:06 PM  
8:45:58 PM  
9:41:46 PM  
11:16:59 PM  
11:30:28 PM  
1:06:46 AM  
1:06:57 AM  
1:53:33 AM  
3:19:08 AM  
5:17:00 AM  
5:45:48 AM  
5:45:49 AM  
5:45:50 AM  
5:45:51 AM

**B6**

**B6**

Client:  
Patient:

**B6**

**Vitals Results**

6:45:52 AM  
6:45:53 AM  
6:45:54 AM  
9:34:50 AM  
9:34:57 AM  
9:39:53 AM  
11:44:31 AM  
1:23:59 PM  
1:24:16 PM  
1:36:21 PM  
3:59:50 PM  
4:10:37 PM  
4:22:11 PM  
4:30:51 PM  
5:01:21 PM  
7:09:50 PM  
7:09:59 PM  
  
7:14:13 PM  
7:14:22 PM  
8:03:40 PM  
9:13:08 PM  
9:21:37 PM  
9:52:24 PM  
  
10:30:14 PM  
11:19:18 PM  
1:46:33 AM  
1:46:52 AM  
1:49:25 AM  
3:31:45 AM  
3:34:45 AM  
  
5:34:39 AM  
6:02:56 AM  
  
7:49:47 AM  
7:49:58 AM  
7:50:07 AM  
7:50:28 AM  
7:50:52 AM  
9:10:28 AM

**B6**

**B6**

Client:  
Patient:

**B6**

**Vitals Results**

9:11:50 AM  
10:59:40 AM  
11:07:08 AM  
1:24:19 PM  
1:24:20 PM  
1:24:21 PM  
5:27:41 PM  
8:41:33 PM  
8:41:59 PM  
8:43:04 PM  
8:45:51 PM  
8:45:58 PM  
8:46:18 PM  
9:27:26 PM  
10:07:16 PM  
11:35:58 PM  
11:37:13 PM  
11:37:22 PM  
1:26:46 AM  
1:26:56 AM  
1:28:09 AM  
3:35:52 AM  
3:42:22 AM  
3:42:30 AM  
3:42:43 AM  
3:42:57 AM  
5:53:36 AM  
7:30:53 AM  
7:31:18 AM  
7:31:31 AM  
9:09:43 AM  
12:13:35 PM  
  
12:41:28 PM

**B6**

**B6**



Client:  
Patient:

**B6**

**Vitals Results**

1:59:04 PM  
3:50:41 PM  
3:51:24 PM  
5:55:42 PM  
5:55:50 PM  
5:56:11 PM  
5:56:21 PM  
6:00:29 PM  
6:01:31 PM  
6:42:39 PM  
8:13:09 PM  
8:14:49 PM  
8:15:03 PM  
9:15:34 PM  
9:17:57 PM  
9:52:31 PM  
9:52:38 PM  
10:39:17 PM  
10:39:38 PM  
11:20:25 PM  
11:42:05 PM  
12:45:33 AM  
1:15:47 AM  
1:41:49 AM  
2:50:27 AM  
3:18:47 AM  
3:49:45 AM  
  
4:48:46 AM  
4:51:31 AM  
5:08:25 AM  
  
5:12:52 AM  
  
5:13:12 AM  
5:57:58 AM  
6:52:39 AM  
6:55:49 AM  
6:55:58 AM  
6:56:15 AM  
9:00:33 AM

**B6**

**B6**

Client: **B6**  
Patient:

**Vitals Results**

9:01:16 AM  
9:02:36 AM  
9:13:03 AM  
11:09:37 AM  
11:09:47 AM  
11:14:35 AM  
11:14:49 AM  
11:48:23 AM  
11:48:31 AM  
12:54:22 PM  
12:54:36 PM  
1:34:02 PM  
1:48:03 PM  
2:55:41 PM  
3:44:36 PM  
9:18:29 PM  
9:53:54 AM  
10:11:53 AM  
10:13:28 AM  
10:22:08 AM  
10:22:09 AM  
10:22:10 AM  
10:22:11 AM  
10:28:38 AM  
10:28:39 AM  
10:28:40 AM  
10:38:04 AM  
10:38:05 AM  
10:51:40 AM  
11:00:15 AM  
2:01:38 PM  
2:04:10 PM  
2:04:11 PM  
2:04:12 PM  
2:04:13 PM  
2:10:16 PM  
3:15:29 PM  
3:15:37 PM

**B6**

**B6**

Client:  
Patient:

**B6**

**Vitals Results**

3:16:14 PM

5:15:03 PM

5:19:19 PM

5:22:41 PM

5:22:42 PM

5:22:43 PM

5:22:44 PM

7:12:28 PM

7:12:29 PM

7:13:07 PM

7:24:20 PM

7:24:28 PM

7:24:34 PM

7:24:43 PM

11:10:54 PM

11:10:55 PM

11:12:15 PM

11:12:21 PM

11:37:04 PM

**B6**

3:08:59 AM

3:09:00 AM

3:10:41 AM

3:10:48 AM

3:41:40 AM

5:31:55 AM

5:39:37 AM

5:39:38 AM

5:39:39 AM

5:39:40 AM

5:40:19 AM

5:40:20 AM

5:40:21 AM

5:40:22 AM

5:40:23 AM

5:40:24 AM

5:40:25 AM

5:55:46 AM

5:55:54 AM

5:56:02 AM

**B6**

Client:  
Patient:

**B6**

**Vitals Results**

5:56:15 AM  
5:56:30 AM  
7:17:42 AM  
10:40:52 AM  
11:02:35 AM  
11:09:05 AM  
11:47:37 AM  
11:48:32 AM  
1:06:04 PM  
1:06:24 PM  
1:54:11 PM  
1:54:16 PM  
3:22:25 PM  
3:22:26 PM  
3:22:53 PM  
3:30:38 PM  
3:30:49 PM  
4:00:39 PM  
5:59:38 PM  
5:08:32 PM  
5:08:33 PM  
5:08:34 PM  
5:08:35 PM  
5:11:21 PM  
7:49:25 PM  
7:49:26 PM  
7:49:46 PM  
7:49:55 PM  
7:58:02 PM  
7:58:11 PM  
9:12:28 PM  
9:12:40 PM  
9:29:04 PM  
10:12:57 PM  
11:12:50 PM  
11:12:51 PM  
11:13:08 PM  
11:13:16 PM  
11:46:11 PM  
11:46:40 PM

**B6**

**B6**

Client:  
Patient:

**B6**

**Vitals Results**

12:25:14 AM  
1:32:08 AM  
1:32:09 AM  
1:32:32 AM  
2:16:10 AM  
3:22:16 AM  
3:22:17 AM  
3:22:40 AM  
3:22:50 AM  
3:45:10 AM  
  
3:47:08 AM  
5:11:55 AM  
5:15:33 AM  
5:21:23 AM  
6:00:16 AM  
6:04:07 AM  
6:04:08 AM  
6:04:09 AM  
6:04:10 AM  
6:32:32 AM  
6:32:47 AM  
6:33:06 AM  
6:33:19 AM  
6:56:24 AM  
6:56:25 AM  
6:56:26 AM  
6:56:27 AM  
6:56:28 AM  
6:56:29 AM  
6:56:30 AM  
8:06:50 AM  
8:07:05 AM  
8:07:21 AM  
9:04:10 AM  
9:04:21 AM  
11:13:08 AM  
11:17:46 AM  
11:17:47 AM  
11:36:45 AM  
11:36:56 AM

**B6**

**B6**

Client:  
Patient:

**B6**

**Vitals Results**

29:56 PM  
30:02 PM  
25:38 PM  
25:39 PM  
25:55 PM  
26:10 PM  
58:53 PM  
7:59:54 AM  
8:00:02 AM  
  
9:12:20 AM  
9:14:48 AM  
9:28:53 AM  
9:30:53 AM  
:07:17 PM  
:11:56 PM  
:13:55 PM  
:24:16 PM  
:24:17 PM  
:24:18 PM  
:24:19 PM  
:46:41 PM  
5:03:42 PM  
5:15:07 PM  
5:18:06 PM  
7:01:01 PM  
7:02:14 PM  
7:04:25 PM  
7:10:54 PM  
7:10:55 PM  
7:10:56 PM  
7:10:57 PM  
7:13:49 PM  
7:13:50 PM  
7:14:02 PM  
8:13:18 PM  
9:12:03 PM  
1:21:52 PM  
1:26:30 PM  
1:26:31 PM

**B6**

**B6**

Client:  
Patient:

**B6**

**Vitals Results**

12:40:01 AM  
1:38:26 AM  
1:38:39 AM  
2:05:38 AM  
3:37:22 AM  
4:33:29 AM  
4:36:13 AM  
4:36:14 AM  
4:54:35 AM  
5:25:45 AM  
5:25:56 AM  
6:46:45 AM  
7:01:47 AM  
7:09:46 AM  
7:09:47 AM  
7:09:48 AM  
7:09:50 AM  
7:09:51 AM  
7:09:52 AM  
7:52:52 AM  
7:53:09 AM  
7:53:22 AM  
7:53:35 AM  
7:57:53 AM  
8:07:53 AM  
8:28:22 AM  
8:28:23 AM  
8:28:24 AM  
8:28:25 AM  
8:29:25 AM  
  
8:48:26 AM  
11:07:36 AM  
11:24:53 AM  
12:03:33 PM  
1:49:24 PM  
1:49:31 PM  
3:09:46 PM  
3:10:02 PM  
4:03:35 PM

**B6**

**B6**

Client:  
Patient:

**B6**

**Vitals Results**

4:58:29 PM  
5:00:42 PM  
6:21:27 PM  
6:21:35 PM  
6:25:47 PM  
7:00:19 PM  
8:02:17 PM  
8:02:34 PM  
8:21:48 PM  
8:30:42 PM  
8:30:59 PM  
8:31:00 PM  
8:31:01 PM  
8:31:02 PM  
8:57:04 PM  
9:08:48 PM  
9:30:19 PM  
10:01:40 PM  
10:02:12 PM  
10:53:12 PM  
11:36:48 PM  
11:56:58 PM  
12:55:08 AM  
12:55:22 AM  
1:40:49 AM  
1:43:04 AM  
1:48:43 AM  
3:01:14 AM  
3:17:04 AM  
3:20:21 AM  
3:26:46 AM  
4:00:23 AM  
5:06:50 AM  
5:30:55 AM  
5:31:08 AM  
5:50:49 AM  
6:30:28 AM  
7:52:57 AM  
8:01:00 AM  
8:35:30 AM

**B6**

**B6**



Client:  
Patient:

**B6**

**Vitals Results**

8:40:19 AM  
8:40:20 AM  
8:40:21 AM  
9:19:56 AM  
9:56:16 AM  
9:57:33 AM  
11:43:06 AM  
11:43:35 AM  
11:49:01 AM  
12:43:09 PM  
12:43:27 PM  
12:43:48 PM  
1:40:35 PM  
1:42:35 PM  
1:58:55 PM  
1:59:03 PM  
3:22:57 PM  
3:23:25 PM  
3:51:53 PM  
4:09:10 PM  
4:09:52 PM  
4:10:15 PM  
  
5:56:05 PM  
5:57:34 PM  
5:58:05 PM  
6:01:39 PM  
6:01:50 PM  
7:03:39 PM  
7:13:51 PM  
7:14:24 PM  
7:23:30 PM  
7:33:57 PM  
7:34:52 PM  
7:46:33 PM  
7:46:43 PM  
7:53:51 PM  
7:53:52 PM  
7:53:53 PM  
7:53:54 PM  
8:34:10 PM

**B6**

**B6**

Client:  
Patient:

**B6**

**Vitals Results**

8:34:20 PM  
8:57:29 PM  
9:17:14 PM  
10:00:32 PM  
10:01:16 PM  
10:02:02 PM  
10:46:06 PM  
10:46:59 PM  
11:47:06 PM  
1:00:48 AM  
1:37:27 AM  
1:38:29 AM  
1:46:12 AM  
1:46:22 AM  
2:54:50 AM  
3:17:58 AM  
3:18:58 AM  
3:56:43 AM  
4:54:34 AM  
4:55:27 AM  
5:13:12 AM  
5:51:10 AM  
5:51:19 AM  
6:22:49 AM  
7:16:33 AM  
7:16:34 AM  
7:16:35 AM  
7:16:37 AM  
7:16:38 AM  
7:16:39 AM  
7:36:21 AM  
7:36:29 AM  
7:53:36 AM  
7:54:20 AM  
8:22:40 AM  
  
8:48:05 AM  
8:54:28 AM  
9:00:20 AM  
9:30:09 AM  
9:53:56 AM

**B6**

**B6**

Client:  
Patient:

**B6**

**Vitals Results**

9:54:06 AM  
10:07:32 AM  
10:18:35 AM  
10:49:35 AM  
11:28:27 AM  
  
11:35:10 AM  
11:37:54 AM  
11:41:14 AM  
11:54:09 AM  
11:54:21 AM  
1:04:24 PM  
1:53:38 PM  
1:54:01 PM  
1:59:22 PM  
  
2:55:14 PM  
3:44:10 PM  
3:44:16 PM  
**B6** 3:56:49 PM  
  
4:03:51 PM  
4:58:04 PM  
  
4:59:02 PM  
5:24:09 PM  
5:24:16 PM  
  
5:50:53 PM  
5:51:36 PM  
5:55:21 PM  
  
7:03:06 PM  
7:04:09 PM  
7:15:42 PM  
7:28:38 PM  
7:51:56 PM  
7:55:50 PM  
7:55:51 PM

**B6**

Client: **B6**  
Patient:

**Vitals Results**

<b>B6</b>	7:55:52 PM	
	7:55:53 PM	
	7:56:37 PM	
	9:15:20 PM	
	9:15:35 PM	
	9:26:14 PM	
	9:30:46 PM	
	9:53:58 PM	
	9:57:30 PM	
	9:57:45 PM	
	10:54:25 PM	
	10:55:22 PM	
	11:09:12 PM	
	11:30:55 PM	
	11:48:03 PM	
	11:53:04 PM	
	12:58:42 AM	
	12:58:59 AM	
	1:31:15 AM	
	1:31:47 AM	
	1:31:58 AM	
	1:54:56 AM	
	1:55:16 AM	
	2:45:47 AM	
	2:47:54 AM	
	3:36:45 AM	
	3:37:44 AM	
	3:43:30 AM	
	4:51:34 AM	
	4:52:20 AM	
	5:18:24 AM	
	5:18:49 AM	
	5:29:57 AM	
	5:31:06 AM	
	5:36:23 AM	
	5:36:54 AM	
	6:23:36 AM	
	6:49:04 AM	

**B6**

Client: **B6**  
Patient:

**Vitals Results**

7:03:36 AM  
7:03:37 AM  
7:03:38 AM  
7:03:40 AM  
7:03:41 AM  
7:03:42 AM  
7:56:24 AM  
8:07:22 AM  
8:12:14 AM  
8:17:55 AM  
  
8:29:22 AM  
  
8:33:21 AM  
8:33:46 AM  
9:08:19 AM  
9:11:04 AM  
9:11:15 AM  
**B6** 9:12:01 AM  
9:12:02 AM  
9:12:03 AM  
9:12:04 AM  
9:50:52 AM  
9:51:09 AM  
9:51:44 AM  
9:56:25 AM  
9:56:36 AM  
9:56:42 AM  
  
11:18:20 AM  
11:24:28 AM  
12:00:39 PM  
12:01:11 PM  
1:05:52 PM  
1:09:01 PM  
1:09:14 PM  
1:54:18 PM

**B6**

Client:  
Patient:

**B6**

**Vitals Results**

1:55:07 PM  
2:51:08 PM  
2:51:58 PM  
3:31:51 PM  
3:33:26 PM  
  
3:57:04 PM  
5:03:58 PM  
5:34:35 PM  
5:37:38 PM  
5:37:57 PM  
5:42:21 PM  
5:46:12 PM  
5:55:22 PM  
6:07:16 PM  
  
7:07:11 PM  
7:10:01 PM  
7:29:31 PM  
7:29:41 PM  
  
7:33:07 PM  
  
7:38:26 PM  
7:46:40 PM  
7:46:48 PM  
7:46:49 PM  
7:46:50 PM  
7:46:51 PM  
9:01:00 PM  
9:01:38 PM  
9:12:37 PM  
9:55:55 PM  
9:56:03 PM  
10:41:57 PM  
  
10:42:14 PM  
10:50:19 PM  
10:50:25 PM  
11:38:32 PM

**B6**

**B6**

Client:  
Patient:

**B6**

**Vitals Results**

11:38:56 PM  
12:58:17 AM  
1:01:14 AM  
2:06:47 AM  
2:06:59 AM  
  
2:07:30 AM  
2:09:30 AM  
2:12:04 AM  
2:59:48 AM  
2:59:58 AM  
3:48:25 AM  
3:48:47 AM  
4:45:33 AM  
4:45:42 AM  
5:49:34 AM  
5:49:51 AM  
5:51:35 AM  
5:54:17 AM  
5:55:00 AM  
6:48:02 AM  
6:48:40 AM  
8:02:36 AM  
8:09:46 AM  
8:13:01 AM  
8:14:11 AM  
  
8:22:39 AM  
8:22:51 AM  
8:24:50 AM  
  
8:24:51 AM  
8:24:52 AM  
8:24:53 AM  
  
8:59:37 AM  
9:07:13 AM  
9:08:15 AM  
10:31:44 AM  
10:32:05 AM

**B6**

**B6**

Client:  
Patient:

**B6**

**Vitals Results**

10:32:28 AM  
11:09:42 AM  
12:09:20 PM  
12:21:55 PM  
2:07:34 PM  
2:09:42 PM  
2:58:26 PM  
3:34:36 PM  
3:34:51 PM  
5:10:55 PM  
5:30:59 PM  
5:33:28 PM  
5:34:14 PM  
5:57:57 PM  
6:53:26 PM  
7:25:11 PM  
7:32:14 PM  
7:32:15 PM  
7:32:16 PM  
7:32:17 PM  
7:47:47 PM  
8:00:31 PM  
8:00:48 PM  
9:01:26 PM  
9:37:56 PM  
9:53:46 PM  
9:59:59 PM  
10:52:04 PM  
11:56:48 PM  
12:00:43 AM  
12:06:57 AM  
12:07:26 AM  
12:52:32 AM  
1:08:21 AM  
1:52:50 AM  
4:22:15 AM  
4:50:01 AM  
5:40:22 AM  
5:57:07 AM  
6:06:03 AM  
6:13:19 AM

**B6**

**B6**



Client: **B6**  
Patient:

**Vitals Results**

<b>B6</b>	6:14:11 AM	<b>B6</b>
	7:14:10 AM	
	7:35:56 AM	
	7:42:35 AM	
	7:42:56 AM	
	7:44:02 AM	
	7:52:03 AM	
	8:08:52 AM	
	8:13:20 AM	
	8:13:21 AM	
	8:13:22 AM	
	8:13:23 AM	
	9:00:01 AM	
	9:46:31 AM	
	11:02:26 AM	
11:59:05 AM		

**Patient History**

<b>B6</b>	02:15 PM	Appointment	<b>B6</b>
	10:22 AM	UserForm	
	10:30 AM	Vitals	
	10:59 AM	UserForm	
	10:59 AM	Prescription	
	11:26 AM	Purchase	
	11:26 AM	Deleted Reason	
	11:26 AM	Purchase	
	11:46 AM	Appointment	
	09:19 AM	Appointment	
	01:00 PM	Vitals	
	01:36 PM	UserForm	
	01:39 PM	UserForm	
	02:48 PM	Purchase	
	02:54 PM	Purchase	
02:55 PM	Treatment		
02:53 PM	Prescription		

Client: **B6**  
Patient:

**Patient History**

10:58 AM	Vitals
10:58 AM	Vitals
10:58 AM	Vitals
11:27 AM	UserForm
11:30 AM	Treatment
11:57 AM	Purchase
11:57 AM	Treatment
01:05 PM	UserForm
01:09 PM	UserForm
03:04 PM	Purchase
03:04 PM	Purchase
03:10 PM	Treatment
04:00 PM	Purchase
04:01 PM	Purchase
04:01 PM	Purchase
04:02 PM	Treatment
04:03 PM	Vitals
04:03 PM	Purchase
04:03 PM	Treatment
04:03 PM	Vitals
04:03 PM	Treatment
04:08 PM	Purchase
04:08 PM	Purchase
04:08 PM	Treatment
04:08 PM	Vitals
04:08 PM	Vitals
04:08 PM	Vitals
04:08 PM	Vitals
04:08 PM	Vitals
04:08 PM	Vitals
04:08 PM	Vitals
04:08 PM	Vitals
04:48 PM	Treatment
04:48 PM	Vitals
04:48 PM	Treatment
04:48 PM	Vitals

**B6**

**B6**

Client:  
Patient:

**B6**

**Patient History**

04:52 PM	Treatment
04:52 PM	Vitals
04:52 PM	Vitals
05:58 PM	Treatment
06:01 PM	Treatment
06:01 PM	Vitals
06:55 PM	Treatment
06:55 PM	Vitals
06:58 PM	Treatment
06:58 PM	Treatment
06:58 PM	Vitals
07:04 PM	Purchase
07:46 PM	Treatment
08:45 PM	Vitals
09:41 PM	Treatment
09:41 PM	Vitals
11:11 PM	Treatment
11:11 PM	Treatment
11:16 PM	Treatment
11:16 PM	Vitals
11:30 PM	Treatment
11:30 PM	Vitals
01:06 AM	Treatment
01:06 AM	Vitals
01:06 AM	Treatment
01:06 AM	Vitals
01:53 AM	Treatment
01:53 AM	Vitals
03:19 AM	Treatment
03:19 AM	Treatment
03:19 AM	Treatment
03:19 AM	Vitals
04:07 AM	Purchase
05:16 AM	Treatment
05:17 AM	Vitals
05:20 AM	Treatment
06:35 AM	Treatment
06:45 AM	Vitals
06:45 AM	Vitals
06:45 AM	Vitals
06:45 AM	Vitals
06:45 AM	Vitals
06:45 AM	Vitals
06:45 AM	Vitals

**B6**

**B6**

Client: **B6**  
Patient:

**Patient History**

06:45 AM	Vitals
06:45 AM	Vitals
07:47 AM	Treatment
07:47 AM	Treatment
07:47 AM	Treatment
07:47 AM	Treatment
08:15 AM	Treatment
08:15 AM	Treatment
08:40 AM	Prescription
09:33 AM	Prescription
09:34 AM	Treatment
09:34 AM	Vitals
09:34 AM	Treatment
09:34 AM	Vitals
09:39 AM	Treatment
09:39 AM	Treatment
09:39 AM	Vitals
10:07 AM	Treatment
10:24 AM	Purchase
11:08 AM	Treatment
11:22 AM	Treatment
11:33 AM	Purchase
11:44 AM	Treatment
11:44 AM	Vitals
11:45 AM	Treatment
01:23 PM	Treatment
01:23 PM	Vitals
01:24 PM	Treatment
01:24 PM	Vitals
01:36 PM	Vitals
01:40 PM	UserForm
03:36 PM	Purchase
03:36 PM	Purchase
03:38 PM	Purchase
03:40 PM	Purchase
03:41 PM	Purchase
03:59 PM	Vitals
04:09 PM	Purchase
04:09 PM	Purchase
04:10 PM	Vitals
04:10 PM	Vitals
04:13 PM	Purchase
04:13 PM	Purchase
04:13 PM	Purchase
04:22 PM	Treatment
04:22 PM	Vitals

**B6**

**B6**

Client:  
Patient:

**B6**

**Patient History**

04:30 PM	Vitals
05:01 PM	Treatment
05:01 PM	Vitals
05:05 PM	Treatment
05:05 PM	Treatment
07:09 PM	Treatment
07:09 PM	Vitals
07:09 PM	Treatment
07:09 PM	Vitals
07:14 PM	Treatment
07:14 PM	Treatment
07:14 PM	Vitals
07:14 PM	Treatment
07:14 PM	Vitals
07:17 PM	Treatment
07:17 PM	Treatment
07:20 PM	Treatment
08:03 PM	Vitals
09:03 PM	Treatment
09:13 PM	Vitals
09:21 PM	Treatment
09:21 PM	Vitals
09:21 PM	Vitals
09:23 PM	Vitals
09:52 PM	Vitals
10:07 PM	Treatment
10:13 PM	Vitals
10:30 PM	Vitals
11:01 PM	Treatment
11:19 PM	Treatment
11:19 PM	Vitals
11:23 PM	Treatment
01:46 AM	Treatment
01:46 AM	Vitals
01:46 AM	Treatment
01:46 AM	Vitals
01:49 AM	Treatment
01:49 AM	Vitals
03:31 AM	Treatment
03:31 AM	Treatment
03:31 AM	Vitals
03:34 AM	Treatment
03:34 AM	Vitals
04:07 AM	Purchase

**B6**

**B6**

Client: **B6**  
Patient:

**Patient History**

05:34 AM	Treatment
05:34 AM	Vitals
06:02 AM	Vitals
07:17 AM	Treatment
07:17 AM	Treatment
07:17 AM	Treatment
07:48 AM	Treatment
07:49 AM	Treatment
07:49 AM	Vitals
07:49 AM	Treatment
07:49 AM	Vitals
07:50 AM	Treatment
07:50 AM	Vitals
07:50 AM	Treatment
07:50 AM	Vitals
07:50 AM	Vitals
08:09 AM	Prescription
08:14 AM	Treatment
09:10 AM	Treatment
09:10 AM	Vitals
09:11 AM	Treatment
09:11 AM	Vitals
09:12 AM	UserForm
10:59 AM	Treatment
10:59 AM	Treatment
10:59 AM	Vitals
10:59 AM	Treatment
06:44 PM	Prescription
06:47 PM	Purchase
02:15 PM	Prescription
11:02 AM	Prescription
04:35 PM	Prescription
04:35 PM	Purchase
12:54 PM	Appointment
04:57 PM	Prescription
05:00 PM	Purchase
11:07 AM	Vitals
11:46 AM	UserForm

**B6**

**B6**

Client:  
Patient:

**B6**

**Patient History**

11:53 AM	Treatment
12:24 PM	UserForm
12:27 PM	Purchase
12:27 PM	Treatment
12:51 PM	Purchase
01:06 PM	Purchase
01:09 PM	Prescription
01:09 PM	Purchase
10:15 AM	Email
10:15 AM	Purchase
10:16 AM	Purchase
01:24 PM	Vitals
01:24 PM	Vitals
01:24 PM	Vitals
04:04 PM	UserForm
05:17 PM	Purchase
05:27 PM	Vitals
05:30 PM	Purchase
05:37 PM	Purchase
07:18 PM	Treatment
07:22 PM	UserForm
07:26 PM	Prescription
07:46 PM	Deleted Reason
07:46 PM	Deleted Reason
07:47 PM	Treatment
07:49 PM	Deleted Reason
08:41 PM	Treatment
08:41 PM	Vitals
08:41 PM	Treatment
08:41 PM	Vitals
08:43 PM	Treatment
08:43 PM	Vitals
08:45 PM	Treatment
08:45 PM	Vitals
08:45 PM	Treatment
08:45 PM	Vitals
08:46 PM	Treatment
08:46 PM	Vitals
08:53 PM	Purchase
08:53 PM	Purchase
09:27 PM	Treatment
09:27 PM	Vitals

**B6**

**B6**

Client: **B6**  
Patient:

**Patient History**

09:29 PM Treatment  
10:07 PM Treatment  
10:07 PM Vitals  
11:35 PM Treatment  
11:35 PM Vitals  
11:37 PM Treatment  
11:37 PM Vitals  
11:37 PM Treatment  
11:37 PM Vitals  
01:26 AM Treatment  
01:26 AM Vitals  
01:26 AM Treatment  
01:26 AM Vitals  
01:27 AM Purchase  
01:28 AM Vitals  
01:28 AM Purchase  
03:35 AM Treatment  
03:35 AM Vitals  
03:42 AM Treatment  
03:42 AM Vitals  
03:42 AM Treatment  
03:42 AM Vitals  
03:42 AM Treatment  
03:42 AM Vitals  
03:42 AM Vitals  
05:53 AM Treatment  
05:53 AM Vitals  
05:55 AM Treatment  
  
07:30 AM Treatment  
07:30 AM Treatment  
07:30 AM Vitals  
07:31 AM Treatment  
07:31 AM Vitals  
07:31 AM Treatment  
07:31 AM Vitals  
08:14 AM Purchase  
08:27 AM Purchase  
09:09 AM Treatment  
09:09 AM Vitals  
09:16 AM Purchase  
10:19 AM Purchase  
10:46 AM Prescription  
11:08 AM Prescription  
  
12:08 PM Purchase  
12:13 PM Vitals

**B6**

**B6**



Client: **B6**  
Patient:

**Patient History**

12:23 PM	Purchase
12:24 PM	Purchase
12:24 PM	Purchase
12:24 PM	Purchase
12:24 PM	Purchase
12:39 PM	Purchase
12:39 PM	Purchase
12:41 PM	Treatment
12:41 PM	Treatment
12:41 PM	Vitals
01:45 PM	Treatment
01:54 PM	UserForm
01:59 PM	Treatment
01:59 PM	Vitals
02:19 PM	Prescription
02:21 PM	Prescription
03:32 PM	Treatment
03:50 PM	Treatment
03:50 PM	Vitals
03:51 PM	Treatment
03:51 PM	Vitals
05:55 PM	Treatment
05:55 PM	Vitals
05:55 PM	Treatment
05:55 PM	Vitals
05:56 PM	Treatment
05:56 PM	Vitals
05:56 PM	Treatment
05:56 PM	Vitals
06:00 PM	Vitals
06:01 PM	Treatment
06:01 PM	Vitals
06:07 PM	Treatment
06:42 PM	Treatment
06:42 PM	Vitals
08:13 PM	Treatment
08:13 PM	Vitals
08:14 PM	Treatment
08:14 PM	Vitals
08:15 PM	Treatment
08:15 PM	Vitals
08:16 PM	Purchase
08:16 PM	Purchase

**B6**

**B6**

Client: **B6**  
Patient:

**Patient History**

	9:15 PM	Treatment	
	9:15 PM	Vitals	
	9:17 PM	Treatment	
	9:17 PM	Vitals	
	9:52 PM	Treatment	
	9:52 PM	Treatment	
	9:52 PM	Vitals	
	9:52 PM	Treatment	
	9:52 PM	Vitals	
	10:38 PM	Treatment	
	10:39 PM	Treatment	
	10:39 PM	Vitals	
	10:39 PM	Treatment	
	10:39 PM	Vitals	
	10:40 PM	Treatment	
	1:20 PM	Treatment	
	1:20 PM	Vitals	
	1:42 PM	Treatment	
	1:42 PM	Vitals	
	2:43 AM	Treatment	
	2:45 AM	Treatment	
	2:45 AM	Vitals	
	1:15 AM	Treatment	
<b>B6</b>	1:15 AM	Vitals	<b>B6</b>
	1:41 AM	Treatment	
	1:41 AM	Vitals	
	2:50 AM	Treatment	
	2:50 AM	Vitals	
	3:18 AM	Treatment	
	3:18 AM	Vitals	
	3:49 AM	Treatment	
	3:49 AM	Vitals	
	4:48 AM	Vitals	
	4:51 AM	Treatment	
	4:51 AM	Vitals	
	5:08 AM	Treatment	
	5:08 AM	Vitals	
	5:12 AM	Treatment	
	5:12 AM	Vitals	
	5:13 AM	Treatment	
	5:13 AM	Vitals	
	5:18 AM	Treatment	
	5:57 AM	Treatment	
	5:57 AM	Vitals	

Client: **B6**  
Patient:

**Patient History**

06:52 AM	Treatment
06:52 AM	Vitals
06:55 AM	Treatment
06:55 AM	Vitals
06:55 AM	Treatment
06:55 AM	Vitals
06:56 AM	Treatment
06:56 AM	Vitals
08:14 AM	Purchase
08:15 AM	Prescription
09:00 AM	Treatment
09:00 AM	Vitals
09:01 AM	Treatment
09:01 AM	Vitals
09:02 AM	Treatment
09:02 AM	Vitals
09:07 AM	Treatment
09:13 AM	Treatment
09:13 AM	Vitals
09:59 AM	Prescription
09:59 AM	Prescription
10:12 AM	Purchase
11:09 AM	Treatment
11:09 AM	Vitals
11:09 AM	Treatment
11:09 AM	Vitals
11:14 AM	Treatment
11:14 AM	Vitals
11:14 AM	Treatment
11:14 AM	Treatment
11:14 AM	Vitals
11:48 AM	Treatment
11:48 AM	Vitals
11:48 AM	Treatment
11:48 AM	Vitals
12:54 PM	Treatment
12:54 PM	Vitals
12:54 PM	Treatment
12:54 PM	Vitals
01:34 PM	Vitals
01:48 PM	Treatment
01:48 PM	Vitals
01:50 PM	Prescription
01:52 PM	Prescription
01:52 PM	Purchase
01:55 PM	Treatment

**B6**

**B6**

Client:  
Patient:

**B6**

**Patient History**

02:54 PM	Treatment
02:55 PM	Treatment
02:55 PM	Vitals
03:44 PM	Treatment
03:44 PM	Vitals
05:16 PM	Email
06:21 PM	Prescription
06:22 PM	Purchase
02:26 PM	Appointment
11:41 AM	UserForm
11:42 AM	UserForm
11:44 AM	Prescription
11:54 AM	Purchase
12:18 PM	Prescription
12:18 PM	Purchase
01:00 PM	Prescription
01:15 PM	Purchase
01:15 PM	Treatment
01:25 PM	Prescription
01:20 PM	UserForm
01:22 PM	Purchase
01:23 PM	Purchase
01:38 PM	Treatment
01:40 PM	Purchase
01:52 PM	UserForm
01:53 PM	Purchase
01:54 PM	Purchase
04:17 AM	Email
06:51 PM	Prescription
08:32 AM	Purchase
10:14 AM	Appointment
12:06 PM	UserForm
04:14 PM	Appointment
04:19 PM	Purchase
04:20 PM	Purchase
04:20 PM	Purchase
04:21 PM	Purchase
04:21 PM	Purchase
04:36 PM	Purchase

**B6**

**B6**

Client:  
Patient:

**B6**

**Patient History**

09:17 PM	Appointment
09:18 PM	Vitals
08:16 AM	Purchase
09:11 AM	Appointment
09:27 AM	UserForm
09:52 AM	Purchase
09:52 AM	Purchase
09:53 AM	Treatment
09:53 AM	Vitals
09:54 AM	Treatment
09:56 AM	Prescription
10:11 AM	Treatment
10:11 AM	Labwork
10:11 AM	Treatment
10:11 AM	Vitals
10:13 AM	Vitals
10:13 AM	Purchase
10:15 AM	Purchase
10:18 AM	Purchase
10:22 AM	Treatment
10:22 AM	Vitals
10:22 AM	Vitals
10:22 AM	Vitals
10:22 AM	Vitals
10:28 AM	Treatment
10:28 AM	Vitals
10:28 AM	Vitals
10:28 AM	Vitals
10:38 AM	Treatment
10:38 AM	Vitals
10:38 AM	Vitals
10:51 AM	Treatment
10:51 AM	Vitals
1:00 AM	Treatment
1:00 AM	Treatment
1:00 AM	Vitals
1:23 AM	Prescription

**B6**

**B6**

Client:  
Patient:

**B6**

**Patient History**

11:28 AM	Prescription
11:44 AM	Treatment
11:55 AM	UserForm
11:57 AM	Prescription
12:42 PM	Purchase
12:42 PM	Treatment
02:01 PM	Treatment
02:01 PM	Vitals
02:01 PM	Treatment
02:02 PM	Labwork
02:04 PM	Treatment
02:04 PM	Vitals
02:04 PM	Vitals
02:04 PM	Vitals
02:04 PM	Vitals
02:10 PM	Vitals
02:33 PM	Appointment
03:15 PM	Treatment
03:15 PM	Vitals
03:15 PM	Treatment
03:15 PM	Vitals
03:16 PM	Treatment
03:16 PM	Vitals
03:21 PM	Treatment
04:25 PM	UserForm
05:14 PM	Treatment
05:15 PM	Vitals
05:56 PM	Labwork
05:57 PM	Labwork
05:59 PM	Prescription
06:06 PM	UserForm
06:19 PM	Treatment
06:19 PM	Vitals
06:22 PM	Treatment
06:22 PM	Vitals
06:22 PM	Vitals
06:22 PM	Vitals

**B6**

**B6**

Client: **B6**  
Patient:

**Patient History**

06:22 PM	Vitals
07:12 PM	Treatment
07:12 PM	Vitals
07:12 PM	Vitals
07:13 PM	Treatment
07:13 PM	Vitals
07:13 PM	Treatment
07:18 PM	Treatment
07:24 PM	Treatment
07:24 PM	Vitals
07:24 PM	Treatment
07:24 PM	Vitals
07:24 PM	Treatment
07:24 PM	Vitals
07:24 PM	Treatment
07:24 PM	Vitals
09:13 PM	Purchase
11:10 PM	Treatment
11:10 PM	Vitals
11:10 PM	Vitals
11:12 PM	Treatment
11:12 PM	Vitals
11:12 PM	Treatment
11:12 PM	Vitals
11:37 PM	Treatment
11:37 PM	Vitals
01:13 AM	Treatment
03:08 AM	Treatment
03:08 AM	Treatment
03:08 AM	Vitals
03:08 AM	Vitals
03:10 AM	Treatment
03:10 AM	Vitals
03:10 AM	Treatment
03:10 AM	Vitals
03:41 AM	Treatment
03:41 AM	Vitals
05:31 AM	Vitals
05:39 AM	Treatment
05:39 AM	Treatment
05:39 AM	Vitals

**B6**

**B6**

Client: **B6**  
Patient:

**Patient History**

05:39 AM	Vitals
05:39 AM	Vitals
05:39 AM	Vitals
05:40 AM	Labwork
06:40 AM	Vitals
06:40 AM	Vitals
06:40 AM	Vitals
06:40 AM	Vitals
06:40 AM	Vitals
06:40 AM	Vitals
06:40 AM	Vitals
06:40 AM	Vitals
06:40 AM	Vitals
06:40 AM	Vitals
06:40 AM	Vitals
06:40 AM	Vitals
06:40 AM	Vitals
06:40 AM	Vitals
06:40 AM	Vitals
06:55 AM	Treatment
06:55 AM	Vitals
06:55 AM	Treatment
06:55 AM	Vitals
06:56 AM	Treatment
06:56 AM	Vitals
06:56 AM	Treatment
06:56 AM	Vitals
06:56 AM	Treatment
06:56 AM	Vitals
06:56 AM	Treatment
06:56 AM	Vitals
07:17 AM	Treatment
07:17 AM	Vitals
07:31 AM	Treatment
07:52 AM	Treatment
09:00 AM	Treatment
09:09 AM	Purchase
09:11 AM	Purchase
09:11 AM	Purchase
09:31 AM	Treatment
09:31 AM	Labwork
10:40 AM	Vitals
10:58 AM	Prescription
10:58 AM	Prescription
11:02 AM	Treatment
11:02 AM	Vitals
11:09 AM	Treatment
11:09 AM	Vitals
11:47 AM	Treatment
11:47 AM	Vitals
11:47 AM	Treatment
11:48 AM	Treatment
11:48 AM	Vitals

**B6**

**B6**



Client:  
Patient:

**B6**

**Patient History**

01:06 PM	Treatment
01:06 PM	Vitals
01:06 PM	Treatment
01:06 PM	Vitals
01:54 PM	Treatment
01:54 PM	Treatment
01:54 PM	Vitals
01:54 PM	Vitals
02:00 PM	Treatment
02:00 PM	Labwork
03:22 PM	Treatment
03:22 PM	Vitals
03:22 PM	Vitals
03:22 PM	Treatment
03:22 PM	Vitals
03:30 PM	Treatment
03:30 PM	Vitals
03:30 PM	Treatment
03:30 PM	Vitals
04:00 PM	Treatment
04:00 PM	Vitals
04:46 PM	Treatment
05:07 PM	Purchase
05:07 PM	Treatment
05:59 PM	Treatment
05:59 PM	Labwork
05:59 PM	Treatment
05:59 PM	Vitals
06:08 PM	Treatment
06:08 PM	Vitals
06:08 PM	Vitals
06:08 PM	Vitals
06:08 PM	Vitals
06:11 PM	Treatment
06:11 PM	Vitals
07:49 PM	Treatment
07:49 PM	Vitals
07:49 PM	Vitals
07:49 PM	Treatment
07:49 PM	Vitals
07:49 PM	Treatment

**B6**

**B6**

Client:  
Patient:

**B6**

**Patient History**

07:49 PM	Vitals
07:58 PM	Treatment
07:58 PM	Treatment
07:58 PM	Vitals
07:58 PM	Treatment
07:58 PM	Treatment
07:58 PM	Vitals
09:12 PM	Treatment
09:12 PM	Vitals
09:12 PM	Treatment
09:12 PM	Vitals
09:13 PM	Purchase
09:25 PM	Treatment
09:29 PM	Treatment
09:29 PM	Vitals
09:29 PM	Treatment
09:29 PM	Labwork
10:12 PM	Treatment
10:12 PM	Vitals
11:12 PM	Treatment
11:12 PM	Vitals
11:12 PM	Vitals
11:13 PM	Treatment
11:13 PM	Vitals
11:13 PM	Treatment
11:13 PM	Vitals
11:46 PM	Treatment
11:46 PM	Vitals
11:46 PM	Vitals
12:25 AM	Treatment
12:25 AM	Vitals
01:18 AM	Treatment
01:20 AM	Treatment
01:32 AM	Treatment
01:32 AM	Vitals
01:32 AM	Vitals
01:32 AM	Treatment
01:32 AM	Vitals
02:15 AM	Treatment
02:16 AM	Labwork
02:16 AM	Treatment
02:16 AM	Vitals

**B6**

**B6**

Client:  
Patient:

**B6**

**Patient History**

03:22 AM	Treatment
03:22 AM	Vitals
03:22 AM	Vitals
03:22 AM	Treatment
03:22 AM	Vitals
03:22 AM	Treatment
03:22 AM	Vitals
03:45 AM	Treatment
03:45 AM	Vitals
03:47 AM	Treatment
03:47 AM	Vitals
05:11 AM	Treatment
05:11 AM	Vitals
05:15 AM	Treatment
05:15 AM	Vitals
05:21 AM	Treatment
05:21 AM	Vitals
05:59 AM	Treatment
06:00 AM	Treatment
06:00 AM	Vitals
06:04 AM	Treatment
06:04 AM	Vitals
06:04 AM	Vitals
06:04 AM	Vitals
06:04 AM	Vitals
06:04 AM	Treatment
06:04 AM	Labwork
06:32 AM	Treatment
06:32 AM	Vitals
06:32 AM	Treatment
06:32 AM	Vitals
06:33 AM	Treatment
06:33 AM	Vitals
06:33 AM	Treatment
06:33 AM	Vitals
06:56 AM	Vitals
06:56 AM	Vitals
06:56 AM	Vitals
06:56 AM	Vitals
06:56 AM	Vitals
06:56 AM	Vitals
06:56 AM	Vitals
06:56 AM	Vitals
06:56 AM	Vitals

**B6**

**B6**

Client:  
Patient:

**B6**

**Patient History**

06:56 AM	Vitals
08:06 AM	Treatment
08:06 AM	Vitals
08:07 AM	Treatment
08:07 AM	Vitals
08:07 AM	Treatment
08:07 AM	Vitals
08:08 AM	Treatment
08:08 AM	Treatment
08:13 AM	Treatment
08:24 AM	Prescription
09:03 AM	Treatment
09:04 AM	Treatment
09:04 AM	Vitals
09:04 AM	Treatment
09:04 AM	Vitals
09:11 AM	Purchase
09:11 AM	Purchase
10:03 AM	Purchase
10:10 AM	Prescription
10:31 AM	Treatment
10:31 AM	Labwork
10:31 AM	Treatment
10:31 AM	Purchase
10:31 AM	Purchase
11:13 AM	Treatment
11:13 AM	Vitals
11:17 AM	Treatment
11:17 AM	Vitals
11:17 AM	Vitals
11:35 AM	Treatment
11:36 AM	Treatment
11:36 AM	Treatment
11:36 AM	Vitals
11:36 AM	Treatment
11:36 AM	Vitals
12:11 PM	Purchase
01:29 PM	Treatment
01:29 PM	Vitals
01:30 PM	Treatment
01:30 PM	Vitals
02:16 PM	Treatment

**B6**

**B6**

Client: **B6**  
Patient:

**Patient History**

02:16 PM	Treatment
02:16 PM	Labwork
02:25 PM	Treatment
02:36 PM	Prescription
02:37 PM	Prescription
02:37 PM	Prescription
02:38 PM	Prescription
03:25 PM	Treatment
03:25 PM	Vitals
03:25 PM	Vitals
03:25 PM	Treatment
03:25 PM	Vitals
03:26 PM	Treatment
03:26 PM	Vitals
03:27 PM	Purchase
03:27 PM	Deleted Reason
03:28 PM	Prescription
03:28 PM	Prescription
03:29 PM	Prescription
03:58 PM	Treatment
03:58 PM	Vitals
04:24 PM	Purchase
05:02 PM	Treatment
05:02 PM	Treatment
06:05 PM	Appointment
01:01 PM	Purchase
02:51 PM	Labwork
03:02 PM	Purchase
03:12 PM	Appointment
03:12 PM	Appointment
03:50 PM	UserForm
12:41 PM	Email
07:59 AM	Purchase
07:59 AM	Purchase
07:59 AM	Vitals
08:00 AM	Vitals

**B6**

**B6**

Client:  
Patient:

**B6**

**Patient History**

08:21 AM	Labwork
08:21 AM	Treatment
08:27 AM	Purchase
08:28 AM	Purchase
08:42 AM	Treatment
08:48 AM	Purchase
08:48 AM	Purchase
08:49 AM	Treatment
08:51 AM	Treatment
09:12 AM	Treatment
09:12 AM	Vitals
09:14 AM	Treatment
09:14 AM	Vitals
09:18 AM	Purchase
09:28 AM	Treatment
09:28 AM	Vitals
09:30 AM	Treatment
09:30 AM	Vitals
10:00 AM	Labwork
10:00 AM	Treatment
11:37 AM	Prescription
12:03 PM	Labwork
12:03 PM	Treatment
12:13 PM	Treatment
01:07 PM	Treatment
01:07 PM	Treatment
01:07 PM	Vitals
01:11 PM	Treatment
01:11 PM	Vitals
02:08 PM	Labwork
02:08 PM	Treatment
02:49 PM	UserForm
03:13 PM	Treatment
03:13 PM	Vitals
03:15 PM	Prescription
04:07 PM	Prescription
07:36 PM	Email
02:44 PM	Vitals
02:44 PM	Vitals
02:44 PM	Vitals
02:44 PM	Vitals
02:57 PM	Purchase
04:24 PM	UserForm

**B6**

**B6**

Client:  
Patient:

**B6**

**Patient History**

04:24 PM	UserForm
04:46 PM	Vitals
04:46 PM	Purchase
05:03 PM	Treatment
05:03 PM	Treatment
05:03 PM	Vitals
05:04 PM	Purchase
05:04 PM	Purchase
05:12 PM	Purchase
05:15 PM	Treatment
05:15 PM	Vitals
05:21 PM	Labwork
06:18 PM	Treatment
06:18 PM	Vitals
07:01 PM	Treatment
07:01 PM	Vitals
07:02 PM	Treatment
07:02 PM	Vitals
07:02 PM	Treatment
07:04 PM	Treatment
07:04 PM	Vitals
07:10 PM	Treatment
07:10 PM	Treatment
07:10 PM	Vitals
07:10 PM	Vitals
07:10 PM	Vitals
07:10 PM	Vitals
07:13 PM	Treatment
07:13 PM	Vitals
07:13 PM	Vitals
07:14 PM	Treatment
07:14 PM	Vitals
08:13 PM	Treatment
08:13 PM	Vitals
09:12 PM	Treatment
09:12 PM	Vitals
11:21 PM	Treatment
11:21 PM	Vitals
11:25 PM	Treatment
11:26 PM	Treatment
11:26 PM	Vitals

**B6**

**B6**

Client: **B6**  
Patient:

**Patient History**

11:26 PM Vitals  
12:40 AM Treatment  
12:40 AM Vitals  
01:38 AM Treatment  
01:38 AM Vitals  
01:38 AM Treatment  
01:38 AM Vitals  
02:05 AM Treatment  
02:05 AM Vitals  
03:37 AM Treatment  
03:37 AM Vitals  
04:33 AM Treatment  
04:33 AM Vitals  
04:36 AM Treatment  
  
04:36 AM Treatment  
04:36 AM Vitals  
04:36 AM Vitals  
04:54 AM Treatment  
04:54 AM Vitals  
05:04 AM Purchase  
05:25 AM Treatment  
05:25 AM Treatment  
05:25 AM Vitals  
05:25 AM Treatment  
05:25 AM Vitals  
06:46 AM Treatment  
06:46 AM Vitals  
07:01 AM Treatment  
07:01 AM Vitals  
07:09 AM Vitals  
07:09 AM Vitals  
07:09 AM Vitals  
  
07:09 AM Vitals  
07:09 AM Vitals  
  
07:09 AM Vitals  
07:09 AM Vitals  
07:09 AM Vitals  
07:52 AM Treatment  
07:52 AM Vitals  
07:53 AM Treatment  
07:53 AM Vitals  
07:53 AM Vitals  
07:53 AM Treatment  
07:53 AM Vitals  
07:57 AM Treatment  
07:57 AM Vitals  
07:58 AM Treatment

**B6**

**B6**



Client:  
Patient:

**B6**

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**Patient History**

07:58 AM	Treatment
08:07 AM	Treatment
08:07 AM	Vitals
08:28 AM	Treatment
08:28 AM	Vitals
08:28 AM	Vitals
08:28 AM	Vitals
08:28 AM	Vitals
08:28 AM	Vitals
08:29 AM	Vitals
08:48 AM	Treatment
08:48 AM	Vitals
10:04 AM	Prescription
10:21 AM	Purchase
11:07 AM	Treatment
11:07 AM	Vitals
11:08 AM	Treatment
11:24 AM	Treatment
11:24 AM	Vitals
11:26 AM	Prescription
11:34 AM	Treatment
12:03 PM	Treatment
12:03 PM	Vitals
12:05 PM	Treatment
12:30 PM	UserForm
12:44 PM	UserForm
01:49 PM	Treatment
01:49 PM	Treatment
01:49 PM	Vitals
01:49 PM	Treatment
01:49 PM	Vitals
01:50 PM	Purchase
01:55 PM	Labwork
02:01 PM	Purchase
03:09 PM	Treatment
03:09 PM	Vitals

**B6**

Client:  
Patient:

**B6**

**Patient History**

03:10 PM	Treatment
03:10 PM	Vitals
03:25 PM	Purchase
03:26 PM	Treatment
03:53 PM	UserForm
04:03 PM	Treatment
04:03 PM	Vitals
04:58 PM	Treatment
04:58 PM	Vitals
05:00 PM	Vitals
05:06 PM	Purchase
05:06 PM	Purchase
05:46 PM	Prescription
05:48 PM	Purchase
05:48 PM	Purchase
05:48 PM	Treatment
06:04 PM	Prescription
06:21 PM	Treatment
06:21 PM	Vitals
06:21 PM	Treatment
06:21 PM	Vitals
06:22 PM	Treatment
06:25 PM	Treatment
06:25 PM	Vitals
06:45 PM	Treatment
07:00 PM	Treatment
07:00 PM	Vitals
07:40 PM	Purchase
08:02 PM	Treatment
08:02 PM	Vitals
08:02 PM	Treatment
08:02 PM	Vitals
08:21 PM	Treatment
08:21 PM	Treatment
08:21 PM	Treatment
08:21 PM	Vitals
08:22 PM	Treatment
08:22 PM	Treatment
08:30 PM	Treatment
08:30 PM	Vitals
08:30 PM	Treatment

**B6**

**B6**

Client:  
Patient:

**B6**

**Patient History**

08:30 PM	Vitals
08:30 PM	Vitals
08:30 PM	Vitals
08:30 PM	Vitals
08:57 PM	Treatment
08:57 PM	Vitals
09:08 PM	Treatment
09:08 PM	Treatment
09:08 PM	Vitals
09:30 PM	Treatment
09:30 PM	Vitals
10:01 PM	Treatment
10:01 PM	Vitals
10:02 PM	Vitals
10:53 PM	Treatment
10:53 PM	Vitals
11:36 PM	Treatment
11:36 PM	Vitals
11:56 PM	Treatment
11:56 PM	Vitals
12:55 AM	Treatment
12:55 AM	Vitals
12:55 AM	Treatment
12:55 AM	Vitals
01:40 AM	Treatment
01:40 AM	Treatment
01:40 AM	Vitals
01:43 AM	Treatment
01:43 AM	Vitals
01:48 AM	Treatment
01:48 AM	Vitals
03:01 AM	Treatment
03:01 AM	Vitals
03:17 AM	Treatment
03:17 AM	Vitals
03:20 AM	Treatment
03:20 AM	Vitals
03:20 AM	Treatment
03:26 AM	Vitals
04:00 AM	Vitals
04:25 AM	Treatment
05:04 AM	Purchase

**B6**

**B6**

Client: **B6**  
Patient:

**Patient History**

05:06 AM	Treatment
05:06 AM	Vitals
05:30 AM	Treatment
05:30 AM	Vitals
05:31 AM	Treatment
05:31 AM	Treatment
05:31 AM	Vitals
05:50 AM	Treatment
05:50 AM	Vitals
06:30 AM	Treatment
06:30 AM	Vitals
06:58 AM	Deleted Reason
07:01 AM	Purchase
07:50 AM	Treatment
07:52 AM	Purchase
07:52 AM	Treatment
07:52 AM	Vitals
07:55 AM	Labwork
08:00 AM	Treatment
08:01 AM	Treatment
08:01 AM	Vitals
08:03 AM	Treatment
08:03 AM	Treatment
08:10 AM	Treatment
08:35 AM	Treatment
08:35 AM	Treatment
08:35 AM	Vitals
08:40 AM	Treatment
08:40 AM	Vitals
08:40 AM	Vitals
08:40 AM	Vitals
09:19 AM	Treatment
09:19 AM	Vitals
09:20 AM	Treatment
09:56 AM	Treatment
09:56 AM	Vitals
09:57 AM	Treatment
09:57 AM	Vitals

**B6**

**B6**

Client:  
Patient:

**B6**

**Patient History**

10:02 AM	Prescription
11:43 AM	Treatment
11:43 AM	Vitals
11:43 AM	Treatment
11:43 AM	Vitals
11:48 AM	Treatment
11:49 AM	Treatment
11:49 AM	Vitals
11:49 AM	Treatment
12:43 PM	Treatment
12:43 PM	Vitals
12:43 PM	Treatment
12:43 PM	Vitals
12:43 PM	Treatment
12:43 PM	Vitals
01:32 PM	Treatment
01:40 PM	Treatment
01:40 PM	Vitals
01:42 PM	Treatment
01:42 PM	Vitals
01:58 PM	Treatment
01:58 PM	Vitals
01:59 PM	Treatment
01:59 PM	Vitals
01:59 PM	Vitals
03:22 PM	Treatment
03:22 PM	Vitals
03:23 PM	Treatment
03:23 PM	Vitals
03:26 PM	Treatment
03:51 PM	Vitals
04:09 PM	Treatment
04:09 PM	Vitals
04:09 PM	Treatment
04:09 PM	Vitals
04:10 PM	Treatment
04:10 PM	Vitals
05:06 PM	Purchase
05:06 PM	Purchase
05:38 PM	UserForm
05:56 PM	Treatment

**B6**

**B6**

Client: **B6**  
Patient:

**Patient History**

05:56 PM Vitals  
05:56 PM Treatment  
05:57 PM Treatment  
05:57 PM Vitals  
05:58 PM Treatment  
05:58 PM Vitals  
06:01 PM Treatment  
06:01 PM Vitals  
06:01 PM Treatment  
  
06:01 PM Vitals  
07:03 PM Vitals  
07:13 PM Treatment  
  
07:13 PM Treatment  
  
07:13 PM Vitals  
07:14 PM Treatment  
07:14 PM Vitals  
07:14 PM Treatment  
07:23 PM Treatment  
  
07:23 PM Treatment  
07:23 PM Vitals  
07:23 PM Treatment  
  
07:23 PM Treatment  
  
07:33 PM Treatment  
07:33 PM Vitals  
07:34 PM Treatment  
07:34 PM Vitals  
07:46 PM Treatment  
  
07:46 PM Vitals  
07:46 PM Treatment  
07:46 PM Vitals  
07:53 PM Treatment  
  
07:53 PM Vitals  
  
07:53 PM Vitals  
  
07:53 PM Vitals  
07:53 PM Vitals  
08:11 PM Labwork  
08:14 PM Labwork  
08:34 PM Treatment  
  
08:34 PM Vitals

**B6**

**B6**

Client:  
Patient:

**B6**

**Patient History**

08:34 PM	Treatment
08:34 PM	Vitals
08:57 PM	Treatment
08:57 PM	Vitals
09:17 PM	Treatment
09:17 PM	Treatment
09:17 PM	Vitals
10:00 PM	Treatment
10:00 PM	Vitals
10:01 PM	Treatment
10:01 PM	Vitals
10:02 PM	Treatment
10:02 PM	Vitals
10:46 PM	Treatment
10:46 PM	Vitals
10:46 PM	Treatment
10:46 PM	Vitals
11:14 PM	Treatment
11:23 PM	Treatment
11:47 PM	Treatment
11:47 PM	Vitals
01:00 AM	Treatment
01:00 AM	Vitals
01:37 AM	Treatment
01:37 AM	Treatment
01:37 AM	Vitals
01:38 AM	Treatment
01:38 AM	Vitals
01:46 AM	Treatment
01:46 AM	Vitals
01:46 AM	Treatment
01:46 AM	Vitals
02:54 AM	Treatment
02:54 AM	Vitals
03:07 AM	Treatment
03:17 AM	Treatment
03:17 AM	Vitals
03:18 AM	Treatment
03:18 AM	Vitals
03:26 AM	Treatment
03:56 AM	Treatment
03:56 AM	Vitals
04:54 AM	Treatment
04:54 AM	Vitals
04:55 AM	Treatment

**B6**

**B6**

Client: **B6**  
Patient:

**Patient History**

04:55 AM Vitals  
05:04 AM Purchase  
05:13 AM Treatment  
05:13 AM Treatment  
05:13 AM Vitals  
05:51 AM Treatment  
05:51 AM Vitals  
05:51 AM Treatment  
  
05:51 AM Vitals  
06:22 AM Treatment  
06:22 AM Vitals  
07:16 AM Vitals  
07:16 AM Vitals  
07:16 AM Vitals  
07:16 AM Vitals  
07:16 AM Vitals  
  
07:16 AM Vitals  
07:16 AM Vitals  
  
07:36 AM Treatment  
07:36 AM Treatment  
07:36 AM Vitals  
07:36 AM Vitals  
07:53 AM Treatment  
  
07:53 AM Treatment  
07:53 AM Vitals  
07:54 AM Treatment  
07:54 AM Vitals  
08:08 AM Treatment  
08:08 AM Treatment  
  
08:22 AM Vitals  
  
08:48 AM Vitals  
08:48 AM Vitals  
08:49 AM Labwork  
08:50 AM Labwork  
08:54 AM Vitals  
09:00 AM Treatment  
09:00 AM Vitals  
09:30 AM Treatment  
09:30 AM Vitals  
09:53 AM Treatment  
09:53 AM Vitals  
09:54 AM Treatment  
09:54 AM Vitals  
09:54 AM Treatment

**B6**

**B6**



Client: **B6**  
Patient:

**Patient History**

10:07 AM	Treatment
10:07 AM	Vitals
10:18 AM	Treatment
10:18 AM	Vitals
10:49 AM	Treatment
10:49 AM	Vitals
11:08 AM	Treatment
11:22 AM	Prescription
11:28 AM	Treatment
11:28 AM	Vitals
11:35 AM	Treatment
11:35 AM	Vitals
11:37 AM	Treatment
11:37 AM	Vitals
11:37 AM	Vitals
11:41 AM	Vitals
11:54 AM	Treatment
11:54 AM	Vitals
11:54 AM	Treatment
11:54 AM	Vitals
01:04 PM	Treatment
01:04 PM	Vitals
01:42 PM	Treatment
01:53 PM	Treatment
01:53 PM	Vitals
01:54 PM	Treatment
01:54 PM	Vitals
01:59 PM	Vitals
02:55 PM	Treatment
02:55 PM	Vitals
03:41 PM	Treatment
03:44 PM	Treatment
03:44 PM	Vitals
03:44 PM	Treatment
03:44 PM	Vitals
03:56 PM	Vitals
04:03 PM	Treatment
04:03 PM	Vitals
04:58 PM	Vitals
04:59 PM	Treatment
04:59 PM	Vitals

**B6**

**B6**

Client:  
Patient:

**B6**

**Patient History**

05:06 PM	Purchase
05:06 PM	Purchase
05:20 PM	Treatment
05:24 PM	Treatment
05:24 PM	Vitals
05:24 PM	Treatment
05:24 PM	Vitals
05:50 PM	Treatment
05:50 PM	Vitals
05:51 PM	Treatment
05:51 PM	Vitals
05:55 PM	Treatment
05:55 PM	Vitals
07:03 PM	Treatment
07:03 PM	Vitals
07:04 PM	Treatment
07:04 PM	Vitals
07:12 PM	Treatment
07:15 PM	Treatment
07:15 PM	Vitals
07:26 PM	Treatment
07:26 PM	Treatment
07:26 PM	Treatment
07:26 PM	Treatment
07:28 PM	Treatment
07:28 PM	Vitals
07:51 PM	Treatment
07:51 PM	Vitals
07:54 PM	Treatment
07:55 PM	Vitals
07:55 PM	Vitals
07:55 PM	Vitals
07:55 PM	Vitals
07:56 PM	Treatment

**B6**

**B6**

Client:  
Patient:

**B6**

**Patient History**

07:56 PM	Vitals
09:15 PM	Treatment
09:15 PM	Vitals
09:15 PM	Treatment
09:15 PM	Vitals
09:26 PM	Treatment
09:26 PM	Treatment
09:26 PM	Vitals
09:30 PM	Treatment
09:30 PM	Vitals
09:53 PM	Treatment
09:53 PM	Vitals
09:57 PM	Treatment
09:57 PM	Vitals
09:57 PM	Treatment
09:57 PM	Vitals
10:54 PM	Treatment
10:54 PM	Vitals
10:55 PM	Treatment
10:55 PM	Vitals
11:09 PM	Vitals
11:30 PM	Treatment
11:30 PM	Treatment
11:30 PM	Vitals
11:48 PM	Treatment
11:48 PM	Vitals
11:53 PM	Treatment
11:53 PM	Vitals
12:58 AM	Treatment
12:58 AM	Vitals
12:58 AM	Treatment
12:58 AM	Vitals
01:31 AM	Treatment
01:31 AM	Vitals
01:31 AM	Treatment
01:31 AM	Vitals
01:31 AM	Treatment
01:31 AM	Vitals
01:32 AM	Treatment
01:54 AM	Treatment
01:54 AM	Vitals

**B6**

**B6**

Client:  
Patient:

**B6**

**Patient History**

01:55 AM	Treatment
01:55 AM	Vitals
02:45 AM	Treatment
02:45 AM	Vitals
02:47 AM	Treatment
02:47 AM	Vitals
03:31 AM	Treatment
03:36 AM	Treatment
03:36 AM	Treatment
03:36 AM	Vitals
03:37 AM	Treatment
03:37 AM	Vitals
03:39 AM	Prescription
03:43 AM	Treatment
03:43 AM	Treatment
03:43 AM	Vitals
04:51 AM	Treatment
04:51 AM	Vitals
04:52 AM	Treatment
04:52 AM	Vitals
05:04 AM	Purchase
05:18 AM	Treatment
05:18 AM	Vitals
05:18 AM	Treatment
05:18 AM	Treatment
05:18 AM	Vitals
05:29 AM	Treatment
05:29 AM	Vitals
05:31 AM	Treatment
05:31 AM	Vitals
05:36 AM	Treatment
05:36 AM	Vitals
05:36 AM	Treatment
05:36 AM	Vitals
06:23 AM	Treatment
06:23 AM	Vitals
06:49 AM	Treatment
06:49 AM	Vitals
06:50 AM	Purchase
06:50 AM	Purchase
07:03 AM	Vitals

**B6**

**B6**

Client:  
Patient:

**B6**

**Patient History**

07:03 AM	Vitals
07:03 AM	Vitals
07:03 AM	Vitals
07:03 AM	Vitals
07:03 AM	Vitals
07:03 AM	Vitals
07:56 AM	Vitals
07:56 AM	Vitals
08:01 AM	UserForm
08:01 AM	Prescription
08:07 AM	Treatment
08:07 AM	Vitals
08:07 AM	Treatment
08:12 AM	Treatment
08:12 AM	Vitals
08:17 AM	Vitals
08:17 AM	Vitals
08:26 AM	Treatment
08:26 AM	Treatment
08:29 AM	Treatment
08:29 AM	Vitals
08:30 AM	Treatment
08:31 AM	Prescription
08:33 AM	Treatment
08:33 AM	Vitals
08:33 AM	Treatment
08:33 AM	Vitals
09:03 AM	Purchase
09:08 AM	Treatment
09:08 AM	Vitals
09:11 AM	Treatment
09:11 AM	Vitals
09:11 AM	Vitals
09:12 AM	Treatment
09:12 AM	Vitals
09:12 AM	Vitals

**B6**

**B6**

Client: **B6**  
Patient:

**Patient History**

09:12 AM	Vitals
09:12 AM	Vitals
09:39 AM	Purchase
09:40 AM	Treatment
09:50 AM	Treatment
09:50 AM	Vitals
09:51 AM	Treatment
09:51 AM	Vitals
09:51 AM	Treatment
09:51 AM	Vitals
09:56 AM	Treatment
09:56 AM	Treatment
09:56 AM	Vitals
09:56 AM	Treatment
09:56 AM	Vitals
09:56 AM	Treatment
09:56 AM	Vitals
10:38 AM	Prescription
11:18 AM	Treatment
11:18 AM	Vitals
11:24 AM	Treatment
11:24 AM	Vitals
11:40 AM	Treatment
11:40 AM	Treatment
11:40 AM	Treatment
11:40 AM	Treatment
11:42 AM	Treatment
12:00 PM	Treatment
12:00 PM	Vitals
12:01 PM	Treatment
12:01 PM	Vitals
12:15 PM	Prescription
01:05 PM	Treatment
01:05 PM	Vitals
01:06 PM	Treatment
01:08 PM	Treatment
01:09 PM	Treatment
01:09 PM	Vitals

**B6**

**B6**

Client:  
Patient:

**B6**

**Patient History**

01:09 PM	Treatment
01:09 PM	Vitals
01:09 PM	Treatment
01:15 PM	Labwork
01:20 PM	Labwork
01:54 PM	Treatment
01:54 PM	Vitals
01:55 PM	Treatment
01:55 PM	Vitals
02:51 PM	Treatment
02:51 PM	Vitals
02:51 PM	Treatment
02:51 PM	Vitals
03:30 PM	Treatment
03:31 PM	Treatment
03:31 PM	Vitals
03:33 PM	Vitals
03:57 PM	Treatment
03:57 PM	Vitals
05:03 PM	Treatment
05:03 PM	Vitals
05:06 PM	Purchase
05:06 PM	Purchase
05:34 PM	Treatment
05:34 PM	Vitals
05:37 PM	Treatment
05:37 PM	Vitals
05:37 PM	Treatment
05:37 PM	Vitals
05:40 PM	Treatment
05:42 PM	Treatment
05:42 PM	Vitals
05:46 PM	Vitals
05:55 PM	Treatment
05:55 PM	Vitals
06:07 PM	Vitals
06:07 PM	Treatment
07:07 PM	Treatment
07:07 PM	Vitals
07:10 PM	Treatment
07:10 PM	Treatment

**B6**

**B6**

Client: **B6**  
Patient:

**Patient History**

07:10 PM	Vitals
07:22 PM	Treatment
07:29 PM	Treatment
07:29 PM	Treatment
07:29 PM	Treatment
07:29 PM	Vitals
07:29 PM	Treatment
07:29 PM	Vitals
07:33 PM	Vitals
07:36 PM	Prescription
07:38 PM	Treatment
07:38 PM	Vitals
07:46 PM	Treatment
07:46 PM	Treatment
07:46 PM	Vitals
07:46 PM	Treatment
07:46 PM	Vitals
07:46 PM	Vitals
07:46 PM	Vitals
07:46 PM	Vitals
07:46 PM	Vitals
07:46 PM	Vitals
09:01 PM	Treatment
09:01 PM	Vitals
09:01 PM	Treatment
09:01 PM	Vitals
09:12 PM	Treatment
09:12 PM	Treatment
09:12 PM	Vitals
09:55 PM	Treatment
09:55 PM	Vitals
09:56 PM	Treatment
09:56 PM	Vitals
10:41 PM	Vitals
10:42 PM	Vitals

**B6**

**B6**



Client:  
Patient:

**B6**

**Patient History**

10:50 PM	Treatment
10:50 PM	Vitals
10:50 PM	Treatment
10:50 PM	Vitals
11:38 PM	Treatment
11:38 PM	Vitals
11:38 PM	Treatment
11:38 PM	Vitals
11:39 PM	Treatment
12:58 AM	Treatment
12:58 AM	Vitals
01:01 AM	Treatment
01:01 AM	Treatment
01:01 AM	Vitals
02:06 AM	Treatment
02:06 AM	Vitals
02:06 AM	Treatment
02:06 AM	Treatment
02:06 AM	Vitals
02:07 AM	Treatment
02:07 AM	Vitals
02:09 AM	Treatment
02:09 AM	Vitals
02:12 AM	Treatment
02:12 AM	Vitals
02:59 AM	Treatment
02:59 AM	Vitals
02:59 AM	Treatment
02:59 AM	Vitals
03:07 AM	Treatment
03:11 AM	Treatment
03:48 AM	Treatment
03:48 AM	Vitals
03:48 AM	Treatment
03:48 AM	Treatment
03:48 AM	Treatment
03:48 AM	Vitals
04:45 AM	Treatment
04:45 AM	Vitals
04:45 AM	Treatment
04:45 AM	Vitals

**B6**

**B6**

Client: **B6**  
Patient:

**Patient History**

05:04 AM	Purchase
05:25 AM	Treatment
05:49 AM	Treatment
05:49 AM	Vitals
05:49 AM	Treatment
05:49 AM	Vitals
05:51 AM	Treatment
05:51 AM	Vitals
05:54 AM	Vitals
05:54 AM	Treatment
05:55 AM	Treatment
05:55 AM	Vitals
06:48 AM	Treatment
06:48 AM	Vitals
06:48 AM	Treatment
06:48 AM	Vitals
07:55 AM	Treatment
08:02 AM	Vitals
08:09 AM	Treatment
08:09 AM	Vitals
08:13 AM	Treatment
08:13 AM	Vitals
08:14 AM	Treatment
08:14 AM	Vitals
08:22 AM	Treatment
08:22 AM	Vitals
08:22 AM	Treatment
08:22 AM	Vitals
08:24 AM	Treatment
08:24 AM	Vitals
08:24 AM	Vitals
08:24 AM	Vitals
08:24 AM	Vitals
08:34 AM	Prescription
08:59 AM	Treatment
08:59 AM	Vitals
09:01 AM	Deleted Reason

**B6**

**B6**

Client:  
Patient:

**B6**

**Patient History**

09:01 AM	Purchase
09:07 AM	Treatment
09:07 AM	Vitals
09:08 AM	Treatment
09:08 AM	Vitals
09:08 AM	Treatment
09:09 AM	Treatment
09:09 AM	Treatment
10:31 AM	Vitals
10:32 AM	Treatment
10:32 AM	Vitals
10:32 AM	Treatment
10:32 AM	Vitals
10:36 AM	Purchase
10:43 AM	Labwork
11:09 AM	Treatment
11:09 AM	Vitals
12:08 PM	Treatment
12:09 PM	Treatment
12:09 PM	Vitals
12:21 PM	Treatment
12:21 PM	Vitals
12:22 PM	Treatment
12:22 PM	Treatment
12:22 PM	Treatment
12:22 PM	Treatment
01:50 PM	Prescription
02:00 PM	UserForm
02:07 PM	Vitals
02:09 PM	Vitals
02:10 PM	Treatment
02:11 PM	Purchase
02:38 PM	Purchase
02:38 PM	Treatment
02:46 PM	UserForm
02:51 PM	Treatment
02:58 PM	Treatment
02:58 PM	Vitals
03:34 PM	Treatment
03:34 PM	Vitals
03:34 PM	Treatment
03:34 PM	Treatment
03:34 PM	Vitals

**B6**

**B6**

Client: **B6**  
Patient:

**Patient History**

05:06 PM Purchase  
05:06 PM Purchase  
05:10 PM Treatment  
05:10 PM Treatment  
05:10 PM Vitals  
05:30 PM Vitals  
05:33 PM Treatment  
05:33 PM Vitals  
05:34 PM Treatment  
05:34 PM Vitals  
05:57 PM Treatment  
05:57 PM Vitals  
06:53 PM Treatment  
06:53 PM Vitals  
07:14 PM Treatment  
07:25 PM Treatment  
07:25 PM Vitals  
07:25 PM Treatment  
  
07:28 PM Labwork  
07:28 PM Treatment  
  
07:31 PM Treatment  
  
**B6** 07:32 PM Treatment  
07:32 PM Treatment  
  
07:32 PM Vitals  
07:32 PM Vitals  
07:32 PM Vitals  
07:32 PM Vitals  
07:47 PM Treatment  
  
07:47 PM Vitals  
07:47 PM Vitals  
08:00 PM Treatment  
08:00 PM Vitals  
08:00 PM Treatment  
08:00 PM Vitals  
09:01 PM Treatment  
09:01 PM Vitals  
09:01 PM Treatment  
09:37 PM Treatment  
09:37 PM Treatment  
09:37 PM Vitals  
09:53 PM Treatment  
09:53 PM Vitals  
09:59 PM Vitals  
10:00 PM Treatment

**B6**

Client: **B6**  
Patient:

**Patient History**

	10:52 PM	Treatment	
	10:52 PM	Vitals	
	11:38 AM	Treatment	
	11:56 PM	Treatment	
	11:56 PM	Vitals	
	12:00 AM	Vitals	
	12:06 AM	Treatment	
	12:06 AM	Vitals	
	12:07 AM	Treatment	
	12:07 AM	Vitals	
	12:52 AM	Treatment	
	12:52 AM	Vitals	
	01:06 AM	Treatment	
	01:06 AM	Treatment	
	01:08 AM	Treatment	
	01:08 AM	Vitals	
	01:52 AM	Treatment	
	01:52 AM	Vitals	
	04:22 AM	Treatment	
	04:22 AM	Treatment	
	04:22 AM	Treatment	
	04:22 AM	Vitals	
	04:22 AM	Treatment	
<b>B6</b>	04:50 AM	Treatment	
	04:50 AM	Vitals	
	05:04 AM	Purchase	
	05:30 AM	Treatment	
	05:38 AM	Treatment	
	05:40 AM	Treatment	
	05:40 AM	Vitals	
	05:57 AM	Treatment	
	05:57 AM	Vitals	
	06:06 AM	Treatment	
	06:06 AM	Vitals	
	06:13 AM	Treatment	
	06:13 AM	Vitals	
	06:14 AM	Vitals	
	06:14 AM	Treatment	
	07:14 AM	Treatment	
	07:14 AM	Vitals	
	07:14 AM	Treatment	
	07:35 AM	Treatment	
	07:35 AM	Vitals	
	07:39 AM	Treatment	
	07:39 AM	Treatment	
	07:42 AM	Treatment	
	07:42 AM	Vitals	

**B6**

Client:  
Patient:

**B6**

**Patient History**

07:42 AM	Vitals
07:44 AM	Treatment
07:44 AM	Vitals
07:51 AM	Treatment
07:51 AM	Labwork
07:52 AM	Treatment
07:52 AM	Vitals
08:08 AM	Treatment
08:08 AM	Vitals
08:13 AM	Treatment
08:13 AM	Vitals
08:13 AM	Vitals
08:13 AM	Vitals
08:13 AM	Vitals
08:48 AM	Treatment
08:51 AM	Prescription
08:52 AM	Treatment
08:52 AM	Prescription
08:57 AM	Purchase
09:00 AM	Treatment
09:00 AM	Vitals
09:01 AM	Prescription
09:03 AM	Purchase
09:46 AM	Treatment
09:46 AM	Vitals
11:02 AM	Treatment
11:02 AM	Vitals
11:38 AM	Treatment
11:59 AM	Treatment
11:59 AM	Vitals
12:26 PM	Treatment
12:26 PM	Treatment

**B6**

**B6**

1

















































**Cummings**  
**Veterinary Medical Center**  
AT TUFTS UNIVERSITY

Forster Hospital for Small Animals  
55 Willard Street  
North Grafton, MA 01516  
Telephone (508) 829-5339  
Fax (508) 829-7953  
<http://vetmed.tufts.edu/>

**B6**

**B6**

Male (Neutered)  
Canine Feline/Canine Tax

**B6**

1/9/2018

Dear **B6**

Thank you for referring **B6** with their pet **B6** presented for evaluation of a cough likely

**B6**

If you have any questions, or concerns, please contact us at 508-852-4988.

Thank you,

**B6**

**B6**

**B6**

**B6**

**Notice of Patient Admit**

**B6**

Case #: **B6**

**B6**

**Cummings**  
**Veterinary Medical Center**  
AT TUFTS UNIVERSITY

Evans Hospital for Small Animals  
55 Willard Street  
North Grafton, MA 01536  
Telephone: (508) 839-5395  
Fax: (508) 839-7351  
<http://www.tufts.edu/evans>

**B6**

**B6**

**Daily Update From the Internal Medicine Service**

**B6**

**B6**

**B6**

**B6**



**B6**

**B6**

8/14/2018

**B6**

**Cummings**  
**Veterinary Medical Center**  
AT TUFTS UNIVERSITY

Foster Hospital for Small Animals  
55 Willard Street  
North Grafton, MA 01524  
Telephone (508) 839-5335  
Fax (508) 839-7951  
<http://vetmed.tufts.edu/>  
Referring Vet Direct Line 508-887-6989

**Notice of Patient Admit**

**B6**

**B6**

**B6**

8/24/2018

**B6**

**Cummings**  
**Veterinary Medical Center**  
AT TUFTS UNIVERSITY

Forster Hospital for Small Animals  
55 Willard Street  
North Grafton, MA 01526  
Telephone (508) 829-5339  
Fax (508) 829-7953  
<http://vetmed.tufts.edu/>

**B6**

**B6**

9/1/2018

**B6**

**Cummings**  
**Veterinary Medical Center**  
AT TUFTS UNIVERSITY

Forster Hospital for Small Animals  
55 Willard Street  
North Grafton, MA 01526  
Telephone (508) 829-5339  
Fax (508) 829-7963  
<http://vetmed.tufts.edu/>

**B6**

**B6**

9/1/2018

**B6**

**B6**

**B6**

10/16/2018

**B6**

Thank you.

**B6**

**Cummings**  
**Veterinary Medical Center**  
AT TUFTS UNIVERSITY

Forster Hospital for Small Animals  
55 Willard Street  
North Grafton, MA 01526  
Telephone (508) 829-5339  
Fax (508) 829-7953  
<http://vetmed.tufts.edu/>

**B6**

**B6**

Male (Neutered)

Color: Fawn/Golden Tan

**B6**

10/9/2018

**B6**



Thank you.

**B6**

**Cummings**  
**Veterinary Medical Center**  
AT TUFTS UNIVERSITY

Forster Hospital for Small Animals  
55 Willard Street  
North Grafton, MA 01526  
Telephone (508) 829-5339  
Fax (508) 829-7953  
<http://vetmed.tufts.edu/>

**B6**

**B6**

09/13/2018

Dear Dr.

B6

**B6**

**Cummings**  
**Veterinary Medical Center**  
AT TUFTS UNIVERSITY

Forster Hospital for Small Animals  
55 Willard Street  
North Grafton, MA 01526  
Telephone (508) 829-5339  
Fax (508) 829-7953  
<http://vetmed.tufts.edu/>

**B6**

**B6**

Male (Neutered)

Canine Companion Tax

**B6**

00/13/2018

**B6**

**Cummings**  
**Veterinary Medical Center**  
AT TUFTS UNIVERSITY

Foster Hospital for Small Animals  
35 Willard Street  
North Grafton, MA 01524  
Telephone (508) 839-5335  
Fax (508) 839-7951  
<http://vetmed.tufts.edu/>  
Referring Vet Direct Line: 508-887-6988

**Notice of Patient Admit**

**B6**

**Notice of Patient Admit**

Date: 10/21/2018 2:33:46 PM

Case #: **B6**

Referring Doctor: **B6**

Clinical Issue: **B6**

Patient Name: **B6**

Dear Dr. **B6**

**B6**

**From:** Rotstein, David </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=0A3B17EBFCF14A6CB8E94F322906BADD-DROTSTEI>  
**To:** Carey, Lauren; Ceric, Olgica; Glover, Mark; Jones, Jennifer L; Nemser, Sarah; Palmer, Lee Anne; Peloquin, Sarah; Queen, Jackie L; Rotstein, David  
**Sent:** 9/12/2018 12:11:03 PM  
**Subject:** DCM case-also fed Rachel Ray-FW: Nature's Variety Instinct Raw Boost Chicken dry: Lisa Freeman - EON-365022  
**Attachments:** 2054861-report.pdf; 2054861-attachments.zip

David Rotstein, DVM, MPVM, Dipl. ACVP  
CVM Vet-LIRN Liaison  
CVM OSC/DC/CERT  
7519 Standish Place  
240-506-6763 (BB)



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**From:** PFR Event <pfpreventcreation@fda.hhs.gov>  
**Sent:** Wednesday, September 12, 2018 8:09 AM  
**To:** Cleary, Michael \* <Michael.Cleary@fda.hhs.gov>; HQ Pet Food Report Notification <HQPetFoodReportNotification@fda.hhs.gov> [B6]  
**Subject:** Nature's Variety Instinct Raw Boost Chicken dry: Lisa Freeman - EON-365022

A PFR Report has been received and PFR Event [EON-365022] has been created in the EON System.

A "PDF" report by name "2054861-report.pdf" is attached to this email notification for your reference. Please note that all documents received in the report are compressed into a zip file by name "2054861-attachments.zip" and is attached to this email notification.

Below is the summary of the report:

**EON Key:** EON-365022  
**ICSR #:** 2054861  
**EON Title:** PFR Event created for Nature's Variety Instinct Raw Boost Chicken dry, Rachel Ray Nutrish Chicken and Veggie dry; 2054861

<b>AE Date</b>	[B6]	<b>Number Fed/Exposed</b>	1
<b>Best By Date</b>		<b>Number Reacted</b>	1

<b>Animal Species</b>	Dog	<b>Outcome to Date</b>	Stable
<b>Breed</b>	Great Dane		
<b>Age</b>	6 Years		
<b>District Involved</b>	PFR-New England DO		

**Product information**

**Individual Case Safety Report Number:** 2054861

**Product Group:** Pet Food

**Product Name:** Nature's Variety Instinct Raw Boost Chicken dry, Rachel Ray Nutrish Chicken and Veggie dry

**Description:** DCM and CHF. Owner was feeding Natures Variety until ~1/8/18 then switched to Rachel Ray. Presented to ER for coughing [B6] - DCM and CHF diagnosed (with atrial fibrillation). Taurine not measured and diet not changed. Re-evaluated [B6] and no improvement. Whole blood taurine pending and owner is switching diet. Owner does not have the Nature's Variety but will hold onto the Rachel Ray. She is happy to answer any additional questions

**Submission Type:** Initial

**Report Type:** Adverse Event (a symptom, reaction or disease associated with the product)

**Outcome of reaction/event at the time of last observation:** Stable

**Number of Animals Treated With Product:** 1

**Number of Animals Reacted With Product:** 1

Product Name	Lot Number or ID	Best By Date
Nature's Variety Instinct Raw Boost Chicken dry		
Rachel Ray Nutrish Chicken and Veggie dry		

**Sender information**

Lisa Freeman  
 200 Westboro Rd  
 North Grafton, MA 01536  
 USA

**Owner information**

[B6] USA

To view this PFR Event, please click the link below:

<https://eon.fda.gov/eon//browse/EON-365022>

To view the PFR Event Report, please click the link below:

<https://eon.fda.gov/eon//EventCustomDetailsAction!viewReport.jspa?decorator=none&e=0&issueType=12&issuelid=381781>

=====

This email and attached document are being provided to you in your capacity as a Commissioned Official with the U.S. Department of Health and Human Services as authorized by law. You are being provided with this information pursuant to your signed Acceptance of Commission.

This email message is intended for the exclusive use of the recipient(s) named above. It may contain information that is protected, privileged, or confidential. Any dissemination, distribution, or copying is strictly prohibited.

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Failure to adhere to the above provisions could result in removal from the approved distribution list. If you think you received this email in error, please send an email to [FDAReportableFoods@fda.hhs.gov](mailto:FDAReportableFoods@fda.hhs.gov) immediately.



Report Details - EON-365022							
ICSR:	2054861						
Type Of Submission:	Initial						
Report Version:	FPSR.FDA.PETF.V.V1						
Type Of Report:	Adverse Event (a symptom, reaction or disease associated with the product)						
Reporting Type:	Voluntary						
Report Submission Date:	2018-09-12 08:00:29 EDT						
Reported Problem:	<b>Problem Description:</b> DCM and CHF. Owner was feeding Natures Variety until ~1/8/18 then switched to Rachel Ray. Presented to ER for coughing. <b>B6</b> DCM and CHF diagnosed (with atrial fibrillation). Taurine not measured and diet not changed. Re-evaluated <b>B6</b> and no improvement. Whole blood taurine pending and owner is switching diet. Owner does not have the Nature's Variety but will hold onto the Rachel Ray. She is happy to answer any additional questions						
	<b>Date Problem Started:</b> <b>B6</b>						
	<b>Concurrent Medical Problem:</b> No						
	<b>Outcome to Date:</b> Stable						
Product Information:	<b>Product Name:</b> Rachel Ray Nutrish Chicken and Veggie dry						
	<b>Product Type:</b> Pet Food						
	<b>Lot Number:</b>						
	<b>Package Type:</b> BAG						
	<b>Product Use Information:</b> <table border="1"> <tr> <td><b>Description:</b></td> <td>Fed from 1/8/18 to present.</td> </tr> <tr> <td><b>First Exposure Date:</b></td> <td>01/08/2018</td> </tr> <tr> <td><b>Last Exposure Date:</b></td> <td>09/12/2018</td> </tr> </table>	<b>Description:</b>	Fed from 1/8/18 to present.	<b>First Exposure Date:</b>	01/08/2018	<b>Last Exposure Date:</b>	09/12/2018
	<b>Description:</b>	Fed from 1/8/18 to present.					
	<b>First Exposure Date:</b>	01/08/2018					
	<b>Last Exposure Date:</b>	09/12/2018					
	<b>Manufacturer /Distributor Information:</b>						
	<b>Purchase Location Information:</b>						
	<b>Product Name:</b> Nature's Variety Instinct Raw Boost Chicken dry						
	<b>Product Type:</b> Pet Food						
	<b>Lot Number:</b>						
	<b>Package Type:</b> BAG						
<b>Possess Opened Product:</b> No							
<b>Product Use Information:</b> <table border="1"> <tr> <td><b>Description:</b></td> <td>Fed from 14 months of age until ~1/8/18</td> </tr> <tr> <td><b>Perceived Relatedness to Adverse Event:</b></td> <td>Possibly related</td> </tr> </table>	<b>Description:</b>	Fed from 14 months of age until ~1/8/18	<b>Perceived Relatedness to Adverse Event:</b>	Possibly related			
<b>Description:</b>	Fed from 14 months of age until ~1/8/18						
<b>Perceived Relatedness to Adverse Event:</b>	Possibly related						
<b>Manufacturer /Distributor Information:</b>							
<b>Purchase Location Information:</b>							
Animal Information:	<b>Name:</b> <b>B6</b>						
	<b>Type Of Species:</b> Dog						
	<b>Type Of Breed:</b> Great Dane						
	<b>Gender:</b> Male						
	<b>Reproductive Status:</b> Neutered						
	<b>Weight:</b> 71 Kilogram						
	<b>Age:</b> 6 Years						
<b>Assessment of Prior Health:</b> Excellent							

	Number of Animals Given the Product:	1												
	Number of Animals Reacted:	1												
	Owner Information:	<table border="1"> <tr> <td>Owner Information provided:</td> <td>Yes</td> </tr> <tr> <td>Contact: Name:</td> <td>B6</td> </tr> <tr> <td>Phone:</td> <td></td> </tr> <tr> <td>Email:</td> <td></td> </tr> <tr> <td>Address:</td> <td>B6</td> </tr> <tr> <td></td> <td>United States</td> </tr> </table>	Owner Information provided:	Yes	Contact: Name:	B6	Phone:		Email:		Address:	B6		United States
Owner Information provided:	Yes													
Contact: Name:	B6													
Phone:														
Email:														
Address:	B6													
	United States													
	Healthcare Professional Information:	<table border="1"> <tr> <td>Practice Name:</td> <td>Tufts Cummings School of Veterinary Medicine</td> </tr> <tr> <td>Contact: Name:</td> <td>Lisa Freeman</td> </tr> <tr> <td>Phone:</td> <td>(508) 887-4523</td> </tr> <tr> <td>Email:</td> <td>lisa.freeman@tufts.edu</td> </tr> <tr> <td>Address:</td> <td>200 Westboro Rd North Grafton Massachusetts 01536 United States</td> </tr> </table>	Practice Name:	Tufts Cummings School of Veterinary Medicine	Contact: Name:	Lisa Freeman	Phone:	(508) 887-4523	Email:	lisa.freeman@tufts.edu	Address:	200 Westboro Rd North Grafton Massachusetts 01536 United States		
Practice Name:	Tufts Cummings School of Veterinary Medicine													
Contact: Name:	Lisa Freeman													
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Email:	lisa.freeman@tufts.edu													
Address:	200 Westboro Rd North Grafton Massachusetts 01536 United States													
Sender Information:	Name:	Lisa Freeman												
	Address:	200 Westboro Rd North Grafton Massachusetts 01536 United States												
	Contact: Phone:	5088874523												
	Email:	lisa.freeman@tufts.edu												
	Permission To Contact Sender:	Yes												
	Preferred Method Of Contact:	Email												
Additional Documents:	Attachment:	cardio report B6 .pdf												
	Description:	Cardio report												
	Type:	Echocardiogram												
	Attachment:	discharge report B6 .pdf												
	Description:	Discharge report												
	Type:	Medical Records												
	Attachment:	diet history B6 .pdf												
	Description:	Diet history												
	Type:	Medical Records												
	Attachment:	cardiology report B6 .pdf												
	Description:	Cardio report												
	Type:	Echocardiogram												
	Attachment:	bnp.pdf												
	Description:	NT-proBNP												
	Type:	Laboratory Report												

Client: B6  
Patient: B6  
Species: CANINE  
Breed: GREAT\_DANE  
Gender: MALE NEUTERED  
Age: 5Y

Date: 02/21/2018  
Requisition #: 366233  
Accession #: B6  
Ordered by: B6

IDEXX VetConnect 1-888-433-9987

TUFTS UNIVERSITY  
200 WESTBORO RD  
NORTH GRAFTON, Massachusetts 01536-1828  
508-839-7936

Account: B6

CARDIOPET proBNP - CANINE

Test	Result	Reference Range	Low	Normal	High
CARDIOPET proBNP - CANINE	B6	0 - 900 pmol/L			HIGH

Comments:

1. **B6**

Please note: Complete interpretive comments for all concentrations of Cardiotest proBNP are available in the online directory of services. Serum specimens received at room temperature may have decreased NT-proBNP concentrations.

# Cummings Veterinary Medical Center

AT TUFTS UNIVERSITY  
Cardiology Liaison: 508-887-4696

**B6**

Patient ID: **B6**  
**B6** Canine  
**B6** Years Old Male (Neutered) Great  
Dane  
Black BW: Weight(lbs) 0.00

## Cardiology Inpatient

Date: **B6**  
Weight: Weight(lbs) 0.00

### Attending Cardiologist:

John E. Rush DVM, MS, DACVIM (Cardiology), DACVECC

**B6**

### Cardiology Resident:

**B6**

### Thoracic radiographs available for review?

- Yes - in SS  
 Yes - in PACS  
 No

### Presenting complaint and important concurrent diseases:

History of gagging/coughing. Tachycardia and irregular heart rhythm appreciated at referring veterinarian. No history of exercise intolerance or syncope.

Current medications and doses: Salmon oil

Key indication for consultation: Irregular heart rhythm, pulse deficits, tachycardia

### Questions to be answered from the Consult:

Evidence of DCM vs other? Evidence of CHF?

Is your consult time-sensitive? (e.g., anesthesia today, owner waiting, trying to get biopsy today)

- Yes (explain)  
 No

**\*STOP - remainder of form to be filled out by Cardiology\***

### Physical Examination

**B6**

**Muscle condition:**

- Normal
- Mild muscle loss
- Moderate cachexia
- Marked cachexia

**Cardiovascular Physical Exam**

**Murmur Grade:**

- None
- I/VI
- II/VI
- III/VI
- IV/VI
- V/VI
- VI/VI

Murmur location/description: systolic left apical

**Jugular vein:**

- Bottom 1/3 of neck
- Middle 1/3 of neck
- Top 2/3 of neck

**Arterial pulses:**

- Weak
- Fair
- Good
- Strong
- Bounding
- Pulse deficits
- Pulsus paradoxus
- Other (describe):

**Arrhythmia:**

- None
- Sinus arrhythmia
- Premature beats
- Bradycardia
- Tachycardia, irregular

**Gallop:**

- Yes
- No
- Intermittent
- Pronounced
- Other:

**Pulmonary assessments:**

- Eupneic
- Mild dyspnea
- Marked dyspnea
- Normal BV sounds
- Pulmonary Crackles
- Wheezes
- Upper airway stridor
- Other auscultatory findings:

**Abdominal exam:**

- Normal
- Hepatomegaly
- Abdominal distension
- Mild ascites

**Echocardiogram Findings:**

**B6**

# B6

## Assessment and recommendations:

Echocardiogram reveals severe DCM with moderate secondary LAE, and EKG reveals atrial fibrillation with rapid ventricular response rate. Changes are consistent with CHF being the cause for reported cough. Recommend treating with  and consider addition of an ACE inhibitor when eating and not azotemic. Recommend treating atrial fibrillation with extended release  and low dose of . Recommend hospitalization for monitoring with telemetry and titration of medication doses. Recommend submitting baseline blood work if not done recently, and ideally an NTproBNP. Recheck renal value  level 6-8 hours post pill, and ECG in 7-10 days. Recheck echo/fluid check in ~3 months, or sooner if clinical sign occur such as increased RR/RE, cough, collapse, or exercise intolerance.

Addendum: Overnight telemetry showed relatively frequent VPCs, couplets with R on T morphology, and occasional non sustained ventricular tachycardia. Recommend stopping  and adding  at  mg PO BID for 7 days, then SID.

## Treatment plan:

# B6

## Final Diagnosis:

DCM, CHF

Atrial fibrillation with rapid ventricular response rate

## Heart Failure Classification Score:

ISACHC Classification:

- Ia
- Ib
- II

- IIIa
- IIIb

ACVIM CHF Classification:

- A
- B1
- B2

- C
- D

2D

- SA LA
- Ao Diam
- SA LA / Ao Diam
- IVSd
- LVIDd
- LVPWd
- EDV(Teich)
- IVSs
- LVIDs
- LVPWs
- ESV(Teich)
- EF(Teich)
- %FS
- SV(Teich)

B6

- cm
- cm
- 
- cm
- cm
- cm
- ml
- cm
- cm
- cm
- ml
- %
- %
- ml

M-Mode

- IVSd
- LVIDd
- LVPWd
- IVSs
- LVIDs
- LVPWs
- %FS
- Ao Diam
- LA Diam
- LA/Ao
- Max LA

B6

- cm
- cm
- cm
- cm
- cm
- cm
- %
- cm
- cm
- 
- cm

Doppler

- MR Vmax
- MR maxPG
- MV E Vel
- PV Vmax
- PV maxPG
- AV Vmax
- AV maxPG
- TR Vmax
- TR maxPG

B6

- m/s
- mmHg
- m/s
- m/s
- mmHg
- m/s
- mmHg
- m/s
- mmHg

# Cummings Veterinary Medical Center

AT TUFTS UNIVERSITY

Cardiology Liaison: 508-887-4696

**B6**

Patient ID: B6

B6

Canine

B6 Years Old Male (Neutered) Great Dane  
Black

## Cardiology Appointment Report

Date: B6

### Attending Cardiologist:

John E. Rush DVM, MS, DACVIM (Cardiology), DACVECC

**B6**

### Cardiology Resident:

B6

### Cardiology Technician:

**B6**

Student: B6 V19

**Presenting Complaint:** Recheck for DCM & atrial fibrillation diagnosed Feb 2018

### Concurrent Diseases:

None

### General Medical History:

Diagnosed DCM feb 2018

Doing well in general, good energy level, seems to have good tolerance for exercise. Eating well, drinking well. Some diarrhea in car on way over, other than that nothing.

Cough has diminished over time, but coughs approximately once or twice a day. Rarely gives an extra dose of B6 maybe "once a month"

### Diet and Supplements:

Rachel Ray Nutrish "Real Chicken & Veggies" flavor 3 cups BID

1/3cup + 1/2cup chicken broth +/- chicken a day

Salmon Oil

### Cardiovascular History:

Prior CHF diagnosis? yes

Prior heart murmur? yes

Prior ATE? no

Prior arrhythmia? yes



Monitoring respiratory rate and effort at home? yes  
Cough? yes  
Shortness of breath or difficulty breathing?  
Syncope or collapse? no  
Sudden onset lameness? no  
Exercise intolerance? mild

**Current Medications Pertinent to CV System:**

**B6**

**Cardiac Physical Examination:**

**B6**

**Muscle condition:**

- |  |  |
|--|--|
| <input checked="" type="checkbox"/> Normal | <input type="checkbox"/> Moderate cachexia |
| <input type="checkbox"/> Mild muscle loss  | <input type="checkbox"/> Marked cachexia   |

**Cardiovascular Physical Exam:**

**Murmur Grade:**

- |  |                                |
|--|--------------------------------|
| <input type="checkbox"/> None              | <input type="checkbox"/> IV/VI |
| <input type="checkbox"/> I/VI              | <input type="checkbox"/> V/VI  |
| <input type="checkbox"/> II/VI             | <input type="checkbox"/> VI/VI |
| <input checked="" type="checkbox"/> III/VI |                                |

**B6**

**Jugular vein:**

- Bottom 1/3 of the neck
- Middle 1/3 of the neck

- 1/2 way up the neck
- Top 2/3 of the neck

**Arterial pulses:**

- Weak
- Fair
- Good
- Strong

- Bounding
- Pulse deficits
- Pulsus paradoxus
- Other:

**Arrhythmia:**

- None
- Sinus arrhythmia
- Irregularly irregular

- Bradycardia
- Tachycardia

**Gallop:**

- Yes
- No
- Intermittent

- Pronounced
- Other:

**Pulmonary assessments:**

- Eupneic
- Mild dyspnea
- Marked dyspnea
- Normal BV sounds

- Pulmonary crackles
- Wheezes
- Upper airway stridor

**Abdominal exam:**

- Normal
- Hepatomegaly
- Abdominal distension

- Mild ascites
- Marked ascites

**Problems:**

Prior diagnosis DCM, Atrial fibrillation

**Diagnostic plan:**

- Echocardiogram
- Chemistry profile
- ECG
- Renal profile
- Blood pressure

- Dialysis profile
- Thoracic radiographs
- NT-proBNP
- Troponin I
- Other tests

**B6**

# B6

## Assessment and recommendations:

Echocardiogram reveals DCM with similar LA size and progression in LV cavity size (r/o disease progression v contribution from slower heart rate today compared to last exam). Ventricular arrhythmia appears well controlled, but atrial fibrillation ventricular response rate was rapid today. Recommend increasing  if well tolerated. Owner to send Kardia ECG in 10 days. Chem 21 submitted today to assess kidney and liver function. Taurine submitted via  Recheck edho in 4-6 months, or sooner if clinical sign occur such as increased RR/RE, cough, collapse, or exercise intolerance.

## Final Diagnosis:

DCM, history of CHF  
Atrial fibrillation with rapid ventricular response rate

## Heart Failure Classification Score:

### ISACHC Classification:

- |  |                               |
|--|-------------------------------|
| <input type="checkbox"/> Ia            | <input type="checkbox"/> IIIa |
| <input type="checkbox"/> Ib            | <input type="checkbox"/> IIIb |
| <input checked="" type="checkbox"/> II |                               |

### ACVIM Classification:

- |                             |                                       |
|-----------------------------|---------------------------------------|
| <input type="checkbox"/> A  | <input checked="" type="checkbox"/> C |
| <input type="checkbox"/> B1 | <input type="checkbox"/> D            |
| <input type="checkbox"/> B2 |                                       |

### M-Mode

IVSd	<input type="text" value="B6"/>	cm
LVIDd		cm
LVPWd		cm
IVSs		cm
LVIDs		cm
LVPWs		cm
%FS		%
Ao Diam		cm
LA Diam		cm
LA/Ao		
Max LA		cm

### M-Mode Normalized

IVSdN	<input type="text" value="B6"/>	{0.29 - 0.52}
LVIDdN		{1.35 - 1.73}!
LVPWdN		{0.33 - 0.53}!
IVSsN		{0.43 - 0.71}!
LVIDsN		{0.79 - 1.14}!
LVPWsN		{0.53 - 0.78}!
Ao Diam N		{0.68 - 0.89}

LA Diam N

(0.64 - 0.90) !

2D

SA LA

cm

Ao Diam

cm

SA LA / Ao Diam

IVSd

cm

LVIDd

cm

LVPWd

cm

EDV(Teich)

ml

IVSs

cm

LVIDs

cm

LVPWs

cm

ESV(Teich)

ml

EF(Teich)

%

%FS

%

SV(Teich)

ml

LVld LAX

cm

LVAd LAX

cm

LVEDV A-L LAX

ml

LVEDV MOD LAX

ml

LVLs LAX

cm

LVA<sub>s</sub> LAX

cm

LVESV A-L LAX

ml

LVESV MOD LAX

ml

HR

BPM

EF A-L LAX

%

LVEF MOD LAX

%

SV A-L LAX

ml

SV MOD LAX

ml

CO A-L LAX

l/min

CO MOD LAX

l/min

B6

Doppler

MR Vmax

m/s

MR maxPG

mmHg

PV Vmax

m/s

PV maxPG

mmHg

AV Vmax

m/s

AV maxPG

mmHg

B6

**CARDIOLOGY DIET HISTORY FORM**  
Please answer the following questions about your pet

Pet's name: B6 Owner's name: B6 Today's date: 9/10/18

- How would you assess your pet's appetite? On a scale of 1-10 with 1 being poor and 10 being excellent: \_\_\_\_\_
- Have you noticed a change in your pet's appetite over the last 1-2 weeks? (check all that apply)  
 Eats about the same amount as usual     Eats less than usual     Eats more than usual  
 Seems to prefer different foods than usual     Other \_\_\_\_\_
- Over the last few weeks, has your pet (check one)  
 Lost weight     Gained weight     Stayed about the same weight     Don't know
- Please list below ALL pet foods, people food, treats, snack, dental chews, rawhides, and any other food item that your pet currently eats. Please include the brand, specific product, and flavor so we know exactly what you pet is eating.

**Food (include specific product and flavor)      Form      Amount      How often?      Fed since**  
Examples are shown in the table – please provide enough detail that we could go to the store and buy the exact same food

Food (include specific product and flavor)	Form	Amount	How often?	Fed since
Nutro Grain Free Chicken, Lentil, & Sweet Potato Adult	dry	1 1/2 cup	2x/day	Jan 2018
85% lean hamburger	microwaved	3 oz	1x/week	Jan 2015
Pupperoni original beef flavor	treat	1/2	1x/day	Aug 2015
Rawhide	treat	6 inch twist	1x/week	Dec 2015
Blue Seal Natural 26	dry			puppy-14 mos
Nature's Variety Instinct Raw Boost chicken	dry			14 mos until 1/8/18
Rachel Ray Nutrish Chicken and Veggies	dry			1/8/18-present
Cooked chicken or broth		1/3-1/2 cup per meal		
Occasional peanut butter or sweet potato homemade treats				

**\*Any additional diet information can be listed at the bottom of this sheet**

- Do you give any dietary supplements to your pet (for example: vitamins, glucosamine, fatty acids, or any other supplements)?  Yes  No If yes, please list which ones and give brands and amounts:  

	Brand/Concentration	Amount per day
Taurine	<input type="radio"/> Yes <input checked="" type="radio"/> No _____	_____
Carnitine	<input type="radio"/> Yes <input checked="" type="radio"/> No _____	_____
Antioxidants	<input type="radio"/> Yes <input checked="" type="radio"/> No _____	_____
Multivitamin	<input type="radio"/> Yes <input checked="" type="radio"/> No _____	_____
Fish oil	<input type="radio"/> Yes <input checked="" type="radio"/> No _____	_____
Coenzyme Q10	<input type="radio"/> Yes <input checked="" type="radio"/> No _____	_____
Other (please list):		
Example: Vitamin C	Nature's Bounty	500 mg tablets – 1 per day
_____	_____	_____
_____	_____	_____
_____	_____	_____

- How do you administer pills to your pet?  
 I do not give any medications     I put them directly in my pet's mouth without food  
 I put them in my pet's dog/cat food     I put them in a Pill Pocket or similar product  
 I put them in foods (list foods): \_\_\_\_\_

**Additional diet or supplement information:** \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**Information below to be completed by the veterinarian:**  
 Current body weight: \_\_\_\_\_ kg      Current body condition score (1-9): \_\_\_\_/9  
 Muscle Condition Score:    normal muscle  mild muscle loss  moderate muscle loss  severe muscle loss

### Discharge Instructions

**Patient**

Name: B6

Species: Canine

Black Male (Neutered) Great Dane

Birthdate: B6

**Owner**

Name: B6

Address: B6

Patient ID: B6

**Attending Cardiologist:**

John E. Rush DVM, MS, DACVIM (Cardiology), DACVECC

B6

**Cardiology Resident:**

B6

Student: B6 /18

**Cardiology Technician:**

B6

Admit Date: B6 11:16:58 AM

Discharge Date: B6

**Diagnoses:**

Dilated cardiomyopathy (DCM) with congestive heart failure

Atrial fibrillation and ventricular arrhythmias

**Case summary:**

Thank you for bringing B6 to tufts for evaluation of his coughing and irregular heart rhythm. B6 has been diagnosed with a primary heart muscle disease called dilated cardiomyopathy (DCM). This disease is more common in large and giant breed dogs and is characterized by thinning of the walls of the heart, reduced cardiac pump function, and enlargement of the upper chambers of the heart. Many dogs with DCM will also have significant arrhythmias which can be life-threatening and also require medical management. The heart enlargement has now progressed to the point of congestive heart failure, meaning that fluid is backing up into the lungs and causing cough. Unfortunately this is a progressive disease and we cannot reverse the changes to the heart muscle, however we can use cardiac medications and some changes to the diet to make B6 comfortable and have him breathing easier.

**Diagnostic test results and findings:**

Chest radiograph (x-ray) findings: The heart was enlarged and there was fluid in the lungs.

Echocardiogram findings: All chambers of the heart are enlarged and the contractile function is reduced.

ECG findings: The ECG showed atrial fibrillation with rapid ventricular response rate. Additionally there were some ventricular arrhythmias (ventricular premature beats and ventricular tachycardia).

Labwork findings: The kidney values and urinalysis are within normal limits. He has slightly elevated bilirubin, and elevated AST but the rest of his liver values are normal and these values have decreased during his stay.

**Monitoring at home:**

- o We would like you to monitor your dog's breathing rate and effort at home, ideally during sleep or at a time of rest. The doses of drugs will be adjusted based on the breathing rate and effort.
- o In general, most dogs with heart failure that is well controlled have a breathing rate at rest of less than 35 breaths per minute. In addition, the breathing effort, noted by the amount of belly wall motion used for each breath, is fairly minimal if heart failure is controlled.
- o An increase in breathing rate or effort will usually mean that you should give an extra dose of **B6**. If difficulty breathing is not improved by within 30-60 minutes after giving extra **B6**, then we recommend that a recheck exam be scheduled and/or that your dog be evaluated by an emergency clinic.
- o There are instructions for monitoring breathing, and a form to help keep track of breathing rate and drug doses, on the Tufts HeartSmart web site (<http://vet.tufts.edu/heartsmart/at-home-monitoring/>).
- o We also want you to watch for weakness or collapse, a reduction in appetite, worsening cough, or distention of the belly as these findings indicate that we should do a recheck examination.
- o If you have any concerns, please call or have your dog evaluated by a veterinarian. Our emergency clinic is open 24 hours/day.
- o You may want to explore the option of purchasing an Alivecor/Kardia at home ECG monitoring device. This would allow you to get an ECG and send it to us via email.

**Recommended Medications:**

**B6**

**Diet suggestions:**

Dogs with heart failure accumulate more fluid in their body if they eat large amounts of sodium (salt). Sodium can be found in all foods, but some foods are lower in sodium than others. Many pet treats, people foods, and supplements used to give pills often have more sodium than is desirable - a sheet that has suggestions for low sodium treats can be found on the HeartSmart web site (<http://vet.tufts.edu/heartsmart/diet/>)

Your dog's usual diet may also have more sodium than recommended - we want him to continue to eat his normal diet for the first 7 to 14 days so we can make sure he is tolerating medications well, but after that time we would recommend slowly introducing one of the lower sodium diets on the HeartSmart list (25% of the new diet and 75% old diet for 2-3 days, then 50:50, etc.). Hopefully you can find a diet on the list that your dog likes to eat. Alternatively, you can research the amount of sodium in the diet to ensure that the sodium content is similar to those on the list.

#### **Exercise Recommendations:**

For the first 7 to 10 days after starting medications for heart failure we recommend very limited activity. Leash walking only is ideal, and short walks to start. Once the heart failure is better controlled, then slightly longer walks are acceptable. However, if you find that B6 is lagging behind or needs to stop on a walk then this was too long a walk and shorter walks are advised in the future. Repetitive or strenuous high energy activities (repetitive ball chasing, running fast off-leash, etc.) are generally not advised.

#### **Recheck Visits:**

A recheck visit is recommended in 1-2 weeks to check kidney values, electrolytes, and liver values. An ECG is also recommended at that time. This can be done with us or with your primary care veterinarian. If you have any concerns are how things are going then we would prefer for B6 to come here for that recheck.

A recheck echocardiogram is recommended in 3-4 months, or sooner if you have any concerns. Please call or email to schedule this appointment.

Thank you for entrusting us with B6 care. He is such a sweet boy. Please contact our Cardiology liaison, B6 at B6 or email us at [cardiovet@tufts.edu](mailto:cardiovet@tufts.edu) for scheduling and non-emergent questions or concerns.

Please visit our HeartSmart website for more information  
<http://vet.tufts.edu/heartsmart/>

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#### **Prescription Refill Disclaimer:**

*For the safety and well-being of our patients, your pet must have had an examination by one of our veterinarians within the past year in order to obtain prescription medications.*

#### **Ordering Food:**

*Please check with your primary veterinarian to purchase the recommended diet(s). If you wish to purchase your food from us, please call 7-10 days in advance (508-887-4629) to ensure the food is in stock. Alternatively, veterinary diets can be ordered from online retailers with a prescription/veterinary approval.*

#### **Clinical Trials:**

*Clinical trials are studies in which our veterinary doctors work with you and your pet to investigate a specific disease process or a promising new test or treatment. Please see our website: [vet.tufts.edu/cvmc/clinical-studies](http://vet.tufts.edu/cvmc/clinical-studies)*

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Case: B6

Owner: B6

Discharge Instructions



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**From:** Freeman, Lisa <Lisa.Freeman@tufts.edu>  
**To:** Jones, Jennifer L  
**Sent:** 9/12/2018 12:01:30 PM  
**Subject:** B6  
**Attachments:** discharge report 9-10-18.pdf; natures variety.pdf; profile 9-10-18.pdf; rachel ray.pdf; radiology report 2-20-18.pdf; rdvm records.pdf; soap.pdf

Hi Jen

I just submitted a report on this dog but it didn't allow me to attach all the records. Here are the rest

Taurine is pending

Thanks

Lisa

Lisa M. Freeman, DVM, PhD, DACVN  
Board Certified Veterinary Nutritionist™  
Professor  
Cummings School of Veterinary Medicine  
Friedman School of Nutrition Science and Policy  
Tufts Clinical and Translational Science Institute  
Tufts University  
[www.petfoodology.org](http://www.petfoodology.org)

## Discharge Instructions

### Patient

Name: B6

Species: Canine

Black Male (Neutered) Great Dane

Birthdate: B6

### Owner

Name: B6

Address: B6

Patient ID: B6

### Attending Cardiologist:

John E. Rush DVM, MS, DACVIM (Cardiology), DACVECC

B6

### Cardiology Resident:

B6

### Cardiovet Technician:

B6

Student: B6 V19

Date: 9/10/2018

### Diagnoses:

Dilated cardiomyopathy (DCM) with congestive heart failure - currently well controlled with medications

Atrial fibrillation and ventricular arrhythmias - improved with medications

### Case summary:

Thank you for bringing B6 to Tufts to recheck his heart and evaluate how he is doing. We are so glad to see that he has been doing well at home! His echocardiogram shows that his heart is still markedly enlarged, as we expect to see in the progression of DCM. However, we did not see any free fluid currently around the lungs or heart. B6 EKG continues to show atrial fibrillation (as we would expect), but fewer ventricular arrhythmias than the last time, which is good news. However, his heart rate is still higher than ideal so we would like to increase his B6 dose to control this (see below).

We pulled blood today to assess organ function and measure taurine levels. We will call you tomorrow regarding liver and kidney values. We will also call you in about a week with the taurine values. If B6 taurine is low we will want to add a taurine supplement. If you have not heard from us with these results in 2 weeks then please feel free to give us a call.

### Monitoring at home:

- We would like you to monitor your dog's breathing rate and effort at home, ideally during sleep or at a time of rest. The doses of drugs will be adjusted based on the breathing rate and effort.
- In general, most dogs with heart failure that is well controlled have a breathing rate at rest of less than 35 breaths per minute. In addition, the breathing effort, noted by the amount of belly wall motion used for each breath, is fairly minimal if heart failure is controlled.
- An increase in breathing rate or effort will usually mean that you should give an extra dose of B6 if difficulty breathing is not improved by within 30-60 minutes after giving extra B6 then we recommend that a recheck exam be scheduled and/or that your dog be evaluated by an emergency clinic.

- We also want you to watch for weakness or collapse, a reduction in appetite, worsening cough, or distention of the belly as these findings indicate that we should do a recheck examination.
- If you have any concerns, please call or have your dog evaluated by a veterinarian. Our emergency clinic is open 24 hours/day.

#### Recommended Medications:

# B6

#### Diet suggestions:

Dogs with heart failure accumulate more fluid in their body if they eat large amounts of sodium (salt). Sodium can be found in all foods, but some foods are lower in sodium than others. Many pet treats, people foods, and supplements used to give pills often have more sodium than is desirable- a sheet that has suggestions for low sodium treats can be found on the HeartSmart web site (<http://vet.tufts.edu/heartsmart/diet/>)

As per Dr. Lisa Freeman's recommendation, we suggest seeing if B6 likes the Purina Proplan Adult Weight Maintenance. This will help balance B6 dietary and cardiac needs. If he does not like this food we can come up with some more good options for him.

#### Exercise Recommendations:

When on walks, if you find that B6 is lagging behind or needs to stop on a walk then this was too long a walk and shorter walks are advised in the future. Repetitive or strenuous high energy activities (repetitive ball chasing, running fast off-leash, etc.) are generally not advised.

#### Recheck Visits:

Please email us an ECG in 10-14 days so we can see how B6 heart rate is on the higher dose of B6

A recheck echocardiogram is recommended in ~4-6 months, or sooner if you have any concerns. Please call or email to schedule this appointment.

Thank you for entrusting us with B6 care. He is such a good boy. Please call 508 839 5395 or email us at [cardiovet@tufts.edu](mailto:cardiovet@tufts.edu) for scheduling and non-emergent questions or concerns.

Please visit our HeartSmart website for more information

<http://vet.tufts.edu/heartsmart/>

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#### Prescription Refill Disclaimer:

*For the safety and well-being of our patients, your pet must have had an examination by one of our veterinarians within the past year in order to obtain prescription medications.*

#### Ordering Food:

*Please check with your primary veterinarian to purchase the recommended diet(s). If you wish to purchase your food from us, please call 7-10 days in advance (508-887-4629) to ensure the food is in stock. Alternatively, veterinary diets can be ordered from online retailers with a prescription/veterinary approval.*

**Clinical Trials:**

*Clinical trials are studies in which our veterinary doctors work with you and your pet to investigate a specific disease process or a promising new test or treatment. Please see our website: [vet.tufts.edu/cvmc/clinical-studies](http://vet.tufts.edu/cvmc/clinical-studies)*

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Case: B6

Owner: B6

Discharge Instructions

96% 7:10 AM

Instinct by Nature<sup>®</sup>  
<https://www.chewy.com>

Nature's Variety

FEED WHAT'S REAL

Instinct<sup>®</sup>  
THE RAW BRAND<sup>™</sup>

rawBOOST

HIGH-PROTEIN KIBBLE + FREEZE-DRIED RAW

CAGE-FREE CHICKEN IS THE 1<sup>ST</sup> INGREDIENT

GRAIN-FREE RECIPE WITH REAL CHICKEN

ALL LIFE STAGES<sup>®</sup>  
EXCEPT FOR LARGE SIZE PUPPIES

NATURAL NUTRITION FOR DOGS WITH ADDED VITAMINS AND MINERALS. NOURISHURE POUR CHIENS

MADE IN THE USA WITH THE FINEST INGREDIENTS FROM AROUND THE WORLD

NET WT: 21.0 LB (9.5 kg)

video video

Client: **B6**  
 Veterinarian: **B6**  
 Patient ID: **B6**  
 Visit ID: 2497890

Patient: **B6**  
 Species: Canine  
 Breed: Great Dane  
 Sex: Male (Neutered)  
 Age: **B6** Years Old

**Lab Results Report**

Chemistry 21 (Cobas)		9/10/2018 2:16:20 PM	Accession ID: <b>B6</b>
Test	Results	Reference Range	Units
GLUCOSE	<b>B6</b>	67 - 135	mg/dL
UREA		8 - 30	mg/dL
CREATININE		0.6 - 2	mg/dL
PHOSPHORUS		2.6 - 7.2	mg/dL
CALCIUM2		9.4 - 11.3	mg/dL
T. PROTEIN		5.5 - 7.8	g/dL
ALBUMIN		2.8 - 4	g/dL
GLOBULINS		2.3 - 4.2	g/dL
A/G RATIO		0.7 - 1.6	
SODIUM		140 - 150	mEq/L
CHLORIDE		106 - 116	mEq/L
POTASSIUM		3.7 - 5.4	mEq/L
NA/K		29 - 40	
T BILIRUBIN		0.1 - 0.3	mg/dL
D.BILIRUBIN		0 - 0.1	mg/dL
I BILIRUBIN		0 - 0.2	mg/dL
ALK PHOS		12 - 127	U/L
ALT		14 - 86	U/L
AST		9 - 54	U/L
CHOLESTEROL		82 - 355	mg/dL
OSMOLALITY (CALCULATED)	291 - 315	mmol/L	



**Radiology Request & Report**

**Patient**

Name: B6  
Species: Canine  
Black Male (Neutered) Great Dane  
Birthdate: B6

**Owner**

Name: B6  
Address: B6

Patient ID: B6  
Date of request: B6

Attending Clinician: B6 DVM B6 Student:

Date of exam: B6

Patient Location: Ward/Cage:

Weight(lbs) 0.00

- Inpatient
- Outpatient Time:
- Waiting
- Emergency

**Sedation**

- BAG
- OBAG
- 1/2 dose OBAG
- DexDomitor/Butorphanol
- Anesthesia to sedate/anesthetize

Examination Desired: Met check

Presenting Complaint and Clinical Questions you wish to answer:  
Emergency

Pertinent History: Afib diagnosed on 2/17. HR 250 today

**Findings:**

THORAX, THREE VIEWS:

The cardiac silhouette is moderately to markedly generally enlarged. The pulmonary veins are diffusely mildly distended. There is a patchy interstitial pattern throughout the pulmonary parenchyma, most conspicuous in the perihilar and caudodorsal lungs. Increased opacity is additionally noted in the right cranial lung lobe. Thin pleural fissure lines are present. The mediastinum is normal. There are metallic ECG leads superimposed with the thorax. There is incidental multifocal ventral spondylosis deformans and mild unilateral shoulder degenerative joint disease, laterality unknown. There is an impression of reduced abdominal serosal detail, though this may be overestimated by patient size and technique.

**Conclusions:**

- Moderate to marked generalized cardiomegaly and pulmonary vascular and parenchymal changes are



most consistent with decompensated congestive heart failure and cardiogenic pulmonary edema. Right cranial lung lobe opacity is thought to represent additional cardiogenic edema. Given scant pleural effusion and impression of reduced serosal detail, a component of biventricular failure may be present. Echocardiography and follow-up radiographs are recommended.

**Radiologists**

Primary: [B6] DVM

Reviewing:

**Dates**

Reported: [B6]

Finalized:

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**From:** Jones, Jennifer L </o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=0f6ca12eaa9348959a4cbb1e829af244-Jennifer.Jo>  
**To:** 'Freeman, Lisa'  
**Sent:** 9/12/2018 12:12:12 PM  
**Subject:** RE: **B6**

Received. Thanks, Lisa!

Jennifer Jones, DVM  
Veterinary Medical Officer  
Tel: 240-402-5421



**From:** Freeman, Lisa <Lisa.Freeman@tufts.edu>  
**Sent:** Wednesday, September 12, 2018 8:02 AM  
**To:** Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov>  
**Subject:** **B6**

Hi Jen  
I just submitted a report on this dog but it didn't allow me to attach all the records. Here are the rest  
Taurine is pending  
Thanks  
Lisa

Lisa M. Freeman, DVM, PhD, DACVN  
Board Certified Veterinary Nutritionist™  
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Friedman School of Nutrition Science and Policy  
Tufts Clinical and Translational Science Institute  
Tufts University  
[www.petfoodology.org](http://www.petfoodology.org)

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**From:** Freeman, Lisa <Lisa.Freeman@tufts.edu>  
**To:** Peloguin, Sarah  
**Sent:** [REDACTED] 4:03:48 PM  
**Subject:** Update on [REDACTED]

FYI  
Lisa

Lisa M. Freeman, DVM, PhD, DACVN  
Board Certified Veterinary Nutritionist™  
Professor  
Cummings School of Veterinary Medicine  
Friedman School of Nutrition Science and Policy  
Tufts Clinical and Translational Science Institute  
Tufts University  
[www.petfoodology.org](http://www.petfoodology.org)

**From:** [REDACTED]  
**Sent:** [REDACTED]  
**To:** Tufts Veterinary Cardiology Service <cardiovet@tufts.edu>  
**Subject:** [REDACTED]

Thank you for all that you have done for [REDACTED]

He passed away [REDACTED] Our hearts are completely broken.

Thank you again for all that you do to help dogs like our [REDACTED] Because of all your help we were able to have him with us for 8 months after his DCM diagnoses. It was a good eight months.

Sincerely,

[REDACTED]

---

**From:** [redacted] B6  
**To:** Peloquin, Sarah  
**Sent:** [redacted] B6 6:05:45 PM  
**Subject:** Re: Please accept my condolences

Thank you for your condolences.

I was out of town when it happened. My husband brought him to our vet, [redacted] B6 at the [redacted] B6 [redacted] B6 I don't think he even thought to ask for one.

[redacted] B6

On [REDACTED] 1:50 PM, "Peloquin, Sarah" <Sarah.Peloquin@fda.hhs.gov> wrote:

Hello [REDACTED]

Dr. Lisa Freeman told me that [REDACTED] passed away a few days ago. I am so, so sorry to hear this. Please accept my condolences--I know he was a special boy.

I was wondering if an autopsy was done. Please let me know, if you don't mind.

Thank you,

Dr. Peloquin

**Sarah K. Peloquin, DVM**

*Veterinary Medical Officer*

U.S. Food & Drug Administration  
Center for Veterinary Medicine

Veterinary Laboratory Investigation and Response Network  
tel: 240-402-1218

fax: 301-210-4685  
e-mail: sarah.peloquin@fda.hhs.gov



**From:** Jones, Jennifer L </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=0F6CA12EAA9348959A4CBB1E829AF244-JENNIFER.JO>  
**To:** Carey, Lauren  
**Sent:** 7/5/2019 11:13:12 AM  
**Subject:** FW: 800.267-FDA Case Investigation for [B6] (EON-358842)

FYI-correction from the owner.

Jennifer Jones, DVM  
Veterinary Medical Officer  
Tel: 240-402-5421



**From:** [B6]  
**Sent:** Sunday, June 30, 2019 12:28 AM  
**To:** Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov>  
**Subject:** Re: 800.267-FDA Case Investigation for [B6] (EON-358842)

Hi Dr. Jones,

First, [B6] is continuing to recover. I'll be happy to forward her updated records if you would like them.

I did see the recent update released by the FDA. I located our specific complaint in the PDF. There are a couple of errors. My other dog was not on Taste of the Wild "for years." She, thankfully, was only exposed to it for approximately a year. She transitioned only when [B6] went on Adult food. The other error is in regards to the medication: [B6] was discharged with when diagnosed. She was also prescribed Taurine supplement as she was Taurine deficient as well as [B6]

I felt the correction regarding [B6] was important as length of "exposure" may be an important variable.

Best Regards,

[B6]

On Nov 15, 2018, at 12:36 PM, Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov> wrote:

Good morning [B6]

Thank you for sharing the updated medical records. I'm very happy to hear that [B6] is recovering! We are actively investigating the potential connection between the diets and dilated cardiomyopathy. We should have a new web update coming out soon that details the progress of our investigation. The new update will be posted here: <https://www.fda.gov/AnimalVeterinary/NewsEvents/CVMUpdates/default.htm>  
Thank you for the additional information and Happy Thanksgiving,  
Dr. Jones

Jennifer Jones, DVM  
Veterinary Medical Officer  
Tel: 240-402-5421  
<image001.png> <image002.png>

**From:** [B6]  
**Sent:** Wednesday, November 14, 2018 8:42 AM  
**To:** Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov>

**Subject:** Re: 800.267-FDA Case Investigation for [B6] EON-358842)

Good Morning Dr. Jones,

Attached are the most recent reports on [B6] She is recovering!

However, I had a rather disturbing discussion with [B6] from Taste of the Wild. She commented that "The FDA appears to be backing off the issue." Is this true? She also commented that "The FDA only has 150 cases." Again, how can this this possibly be true? I see the dogs at Tufts. I see the dogs online being discussed. Certainly there are more that 150 cases. Dr. Stern has at least 50 dogs just at UCDavis.

I find it distressing that a food manufacturer believes the FDA is "backing off" the issue when in fact, we know this is a very real and serious issue.

Thank You,

[B6]

**From:** Jones, Jennifer L </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=0F6CA12EAA9348959A4CBB1E829AF244-JENNIFER.JO>  
**To:** [REDACTED] B6  
**Sent:** 7/5/2019 11:15:57 AM  
**Subject:** RE: 800.267-FDA Case Investigation for [REDACTED] B6 (EON-358842)

Thank you, [REDACTED] B6  
I'll make sure our records are updated. If you have any recent echocardiogram data for [REDACTED] B6 that you're willing to share, we can add it to her case.

Jennifer Jones, DVM  
Veterinary Medical Officer  
Tel: 240-402-5421



**From:** [REDACTED] B6  
**Sent:** Sunday, June 30, 2019 12:28 AM  
**To:** Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov>  
**Subject:** Re: 800.267-FDA Case Investigation for [REDACTED] B6 (EON-358842)

Hi Dr. Jones,

First, [REDACTED] B6 is continuing to recover. I'll be happy to forward her updated records if you would like them.

I did see the recent update released by the FDA. I located our specific complaint in the PDF. There are a couple of errors. My other dog was not on Taste of the Wild "for years." She, thankfully, was only exposed to it for approximately a year. She transitioned only when [REDACTED] B6 went on Adult food. The other error is in regards to the medication [REDACTED] B6 was discharged with when diagnosed. She was also prescribed Taurine supplement as she was Taurine deficient as well as [REDACTED] B6

I felt the correction regarding [REDACTED] B6 was important as length of "exposure" may be an important variable.

Best Regards,

[REDACTED] B6

On Nov 15, 2018, at 12:36 PM, Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov> wrote:

Good morning [REDACTED] B6

Thank you for sharing the updated medical records. I'm very happy to hear that [REDACTED] B6 is recovering! We are actively investigating the potential connection between the diets and dilated cardiomyopathy. We should have a new web update coming out soon that details the progress of our investigation. The new update will be posted here: <https://www.fda.gov/AnimalVeterinary/NewsEvents/CVMUpdates/default.htm>  
Thank you for the additional information and Happy Thanksgiving,  
Dr. Jones

Jennifer Jones, DVM  
Veterinary Medical Officer  
Tel: 240-402-5421  
<image001.png> <image002.png>



**From:** [REDACTED] **B6**  
**Sent:** Wednesday, November 14, 2018 8:42 AM  
**To:** Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov>  
**Subject:** Re: 800.267-FDA Case Investigation for [REDACTED] **B6** (EON-358842)

Good Morning Dr. Jones,

Attached are the most recent reports on [REDACTED] **B6** She is recovering!

However, I had a rather disturbing discussion with [REDACTED] **B6** from Taste of the Wild. She commented that "The FDA appears to be backing off the issue." Is this true? She also commented that "The FDA only has 150 cases." Again, how can this possibly be true? I see the dogs at Tufts. I see the dogs online being discussed. Certainly there are more than 150 cases. Dr. Stern has at least 50 dogs just at UC Davis.

I find it distressing that a food manufacturer believes the FDA is "backing off" the issue when in fact, we know this is a very real and serious issue.

Thank You,

[REDACTED] **B6**

---

**From:** Jones, Jennifer L </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=0F6CA12EAA9348959A4CBB1E829AF244-JENNIFER.JO>  
**To:** [REDACTED] B6  
**Sent:** 8/5/2019 7:02:39 PM  
**Subject:** RE: 800.267-FDA Case Investigation for [REDACTED] B6 (EON-358842)

Thank you [REDACTED] B6. I look forward to seeing the echo.

Jennifer Jones, DVM  
Veterinary Medical Officer  
Tel: 240-402-5421



**From:** [REDACTED] B6  
**Sent:** Friday, July 05, 2019 1:12 PM  
**To:** Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov>  
**Subject:** Re: 800.267-FDA Case Investigation for [REDACTED] B6 (EON-358842)

Hi Dr. Jones,

Thank you [REDACTED] B6 actually just had her one year check up on July 3rd. They're finalizing the report and will email it to me next week. I'll forward it to you at that time.

To summarize, she's improved over a year ago and remains stable. In fact, we just spayed her and she had no issues while under anesthesia or post op.

I'll send you the echo report as soon as I have it.

Best Regards,

[REDACTED] B6

On Jul 5, 2019, at 7:15 AM, Jones, Jennifer L <[Jennifer.Jones@fda.hhs.gov](mailto:Jennifer.Jones@fda.hhs.gov)> wrote:

Thank you [REDACTED] B6  
I'll make sure our records are updated. If you have any recent echocardiogram data for [REDACTED] B6 that you're willing to share, we can add it to her case.

Jennifer Jones, DVM  
Veterinary Medical Officer  
Tel: 240-402-5421  
<image001.png> <image002.png>

**From:** [REDACTED] B6  
**Sent:** Sunday, June 30, 2019 12:28 AM  
**To:** Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov>  
**Subject:** Re: 800.267-FDA Case Investigation for [REDACTED] B6 (EON-358842)

Hi Dr. Jones,

First, [REDACTED] B6 is continuing to recover. I'll be happy to forward her updated records if you would like them.

I did see the recent update released by the FDA. I located our specific complaint in the PDF. There are a couple of errors. My other dog was not on Taste of the Wild "for years." She, thankfully, was only exposed to it for approximately a year. She transitioned only when [B6] went on Adult food. The other error is in regards to the medication [B6] was discharged with when diagnosed. She was also prescribed Taurine supplement as she was Taurine deficient as well as [B6]

I felt the correction regarding [B6] was important as length of "exposure" may be an important variable.

Best Regards,

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On Nov 15, 2018, at 12:36 PM, Jones, Jennifer L <[Jennifer.Jones@fda.hhs.gov](mailto:Jennifer.Jones@fda.hhs.gov)> wrote:

Good morning [B6]

Thank you for sharing the updated medical records. I'm very happy to hear that [B6] is recovering! We are actively investigating the potential connection between the diets and dilated cardiomyopathy. We should have a new web update coming out soon that details the progress of our investigation. The new update will be posted here: <https://www.fda.gov/AnimalVeterinary/NewsEvents/CVMUpdates/default.htm> Thank you for the additional information and Happy Thanksgiving,  
Dr. Jones

Jennifer Jones, DVM  
Veterinary Medical Officer  
Tel: 240-402-5421  
<[image001.png](#)> <[image002.png](#)>

**From:** [B6]  
**Sent:** Wednesday, November 14, 2018 8:42 AM  
**To:** Jones, Jennifer L <[Jennifer.Jones@fda.hhs.gov](mailto:Jennifer.Jones@fda.hhs.gov)>  
**Subject:** Re: 800.267-FDA Case Investigation for [B6] (EON-358842)

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---

**From:** Jones, Jennifer L </o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=0f6ca12eaa9348959a4cbb1e829af244-Jennifer.Jo>  
**To:** [REDACTED] B6  
**Sent:** 8/6/2019 2:16:41 PM  
**Subject:** RE: 800.267-FDA Case Investigation for [REDACTED] B6 (EON-358842)

Thank you!

Jennifer Jones, DVM  
Veterinary Medical Officer  
Tel: 240-402-5421



**From:** [REDACTED] B6  
**Sent:** Monday, August 05, 2019 5:11 PM  
**To:** Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov>  
**Subject:** Re: 800.267-FDA Case Investigation for [REDACTED] B6 (EON-358842)

My apologies. I meant to send this sooner.

Attached is her echocardiogram from 7/3/2019. Of note, she had surgery on [REDACTED] B6 and did very well under anesthesia.

Regards,

[REDACTED] B6

On Aug 5, 2019, at 3:02 PM, Jones, Jennifer L <[Jennifer.Jones@fda.hhs.gov](mailto:Jennifer.Jones@fda.hhs.gov)> wrote:

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Tel: 240-402-5421  
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Thank You,

**B6**

**B6**

Patient ID: B6  
B6 Canine  
B6 Years Old Female Great Dane  
Blonde

**Cardiology Appointment Report**

**Date:** 9/5/2018

**Attending Cardiologist:**

John E. Rush DVM, MS, DACVIM (Cardiology), DACVECC

**B6**

**Cardiology Resident:**

**B6**

**Cardiology Technician:**

**B6**

**Student:** B6 V19

**Presenting Complaint:**

6/6/18 - MVDysplasia diagnosis, low grade

7/6/18 - CHF, DCM

Here to establish B6 as new veterinarian. Wants an echo and a renal panel today.

**Concurrent Diseases:**

Hx B6

**General Medical History:**

Clinically well, eating, drinking, defecating, urinating. Good energy level.

PU/PD from B6

**Diet and Supplements:**

Purina proplan sensitive skin & stomach Salmon and Rice 2.5 cups BID

2000mg Taurine supplement q8

Hx of feeding grain free (Taste of the Wild pacific, angus freedom) Diet changed 7/8

**Cardiovascular History:**

Prior CHF diagnosis? 7/7/18

Prior heart murmur? Grade II 6/6/18

Prior ATE? no

Prior arrhythmia? no

Monitoring respiratory rate and effort at home? yes  
Cough? Intermittent between 6/6- 7/6  
Shortness of breath or difficulty breathing? no  
Syncope or collapse? no  
Sudden onset lameness? no  
Exercise intolerance? no

**Current Medications Pertinent to CV System:**

**B6**

**Cardiac Physical Examination:**

**B6**

**Muscle condition:**

- |  |  |
|--|--|
| <input checked="" type="checkbox"/> Normal | <input type="checkbox"/> Moderate cachexia |
| <input type="checkbox"/> Mild muscle loss  | <input type="checkbox"/> Marked cachexia   |

**Cardiovascular Physical Exam:**

**Murmur Grade:**

- |  |                                |
|--|--------------------------------|
| <input type="checkbox"/> None                                    | <input type="checkbox"/> IV/VI |
| <input type="checkbox"/> I/VI                                    | <input type="checkbox"/> V/VI  |
| <input checked="" type="checkbox"/> II/VI and mid-systolic click | <input type="checkbox"/> VI/VI |
| <input type="checkbox"/> III/VI                                  |                                |

Murmur location/description: systolic left apex

**Jugular vein:**

- |  |  |
|--|--|
| <input checked="" type="checkbox"/> Bottom 1/3 of the neck | <input type="checkbox"/> 1/2 way up the neck |
| <input type="checkbox"/> Middle 1/3 of the neck            | <input type="checkbox"/> Top 2/3 of the neck |

**Arterial pulses:**

- |                               |   |
|-------------------------------|---|
| <input type="checkbox"/> Weak | <input type="checkbox"/> Bounding         |
| <input type="checkbox"/> Fair | <input type="checkbox"/> Pulse deficits   |
| <input type="checkbox"/> Good | <input type="checkbox"/> Pulsus paradoxus |



Strong

Other:

**Arrhythmia:**

- None
- Sinus arrhythmia
- Premature beats

- Bradycardia
- Tachycardia

**Gallop:**

- Yes
- No
- Intermittent

- Pronounced
- Other: mid systolic click

**Pulmonary assessments:**

- Eupneic
- Mild dyspnea
- Marked dyspnea
- Normal BV sounds

- Pulmonary crackles
- Wheezes
- Upper airway stridor

**Abdominal exam:**

- Normal
- Hepatomegaly
- Abdominal distension

- Mild ascites
- Marked ascites

**Problems:**

MVD  
Hx CHF

**Differential Diagnoses:**

Previous diagnosis MVD

**Diagnostic plan:**

- Echocardiogram
- Chemistry profile
- ECG
- Renal profile
- Blood pressure
- Dialysis profile
- Thoracic radiographs
- NT-proBNP
- Troponin I
- Other tests

**Echocardiogram Findings:**

**General/2-D findings:** The LV cavity is moderately dilated with mildly reduced contractile function. LV walls are subjectively only mildly thin. The LA is mildly to moderately enlarged. The mitral valve is diffusely mildly thickened. The RH appears WNL. The PA is mildly dilated. There is no pericardial or pleural effusion.

B6

**Mitral inflow:**

- Summated
- Normal
- Delayed relaxation
- Pseudonormal
- Restrictive

**ECG findings:**

B6

**Assessment and recommendations:** Today's echocardiogram shows improvement compared to the exam

from July, with improved contractile function and some decrease in the LA size, however LV contractile function is not back to normal at this time. Given the documented taurine deficiency and history of eating a grain free diet, nutritional secondary dilated cardiomyopathy superimposed on pre-existing mitral valve dysplasia is the primary differential. However the acute worsening of LV dilation and contractile function and acute decompensation to CHF between June and July raise concern for another more acute disease process, such as myocarditis complicating the underlying cardiac disease. An NTproBNP was submitted today to obtain a baseline value to allow for further monitoring. B6 seems to be doing very well clinically on her taurine supplementation and current cardiac medications. A renal profile was submitted today to determine whether any modifications to the B6 dose are needed at this time. If NTproBNP value is markedly elevated the addition of B6 may also be considered. Recommend recheck echocardiogram in 2 months to assess for any continued improvement with resolving taurine deficiency.

**Final Diagnosis:** Dilated cardiomyopathy with history of episode of LCHF - suspected taurine deficiency secondary to long term feeding of grain free diet; Suspect mitral valve dysplasia

**Heart Failure Classification Score:**

**ISACHC Classification:**

- Ia
- Ib
- II
- IIIa
- IIIb

**ACVIM Classification:**

- A
- B1
- B2
- C
- D

**M-Mode**

IVSd	B6	cm
LVIDd		cm
LVPWd		cm
IVSs		cm
LVIDs		cm
LVPWs		cm
%FS		%
Ao Diam		cm
LA Diam		cm
LA/Ao		
Max LA		cm
EPSS		cm

**M-Mode Normalized**

IVSdN	B6	(0.29 - 0.52) !
LVIDdN		(1.35 - 1.73) !
LVPWdN		(0.33 - 0.53)
IVSsN		(0.43 - 0.71)
LVIDsN		(0.79 - 1.14) !
LVPWsN		(0.53 - 0.78)
Ao Diam N		(0.68 - 0.89)
LA Diam N		(0.64 - 0.90)

2D

SA LA  
Ao Diam  
SA LA / Ao Diam  
IVSd  
LVIDd  
LVPWd  
EDV(Teich)  
IVSs  
LVIDs  
LVPWs  
ESV(Teich)  
EF(Teich)  
%FS  
SV(Teich)

B6

cm  
cm  
cm  
cm  
ml  
cm  
cm  
cm  
ml  
%  
%  
ml

Doppler

MR Vmax  
MR maxPG  
MV E Vel  
MV DecT  
MV A Vel  
MV E/A Ratio  
PV Vmax  
PV maxPG  
AV Vmax  
AV maxPG

B6

m/s  
mmHg  
m/s  
ms  
m/s  
  
m/s  
mmHg  
m/s  
mmHg

**Follow-up Case Information Uniform Data Entry Form  
Vet-LIRN**

Date (mm/dd/yy)

EON/CC Number:

**PATIENT INFORMATION**

Pet Name

Dog  Cat

Breed

Age in years (if < 6 months, put 0.5)

Gender:  
 M  MN  F  FS

This form serves as a Uniform Data Entry Form to capture additional case specific information not clear from the Consumer Complaint or Medical Records in a standardized manner. Because each follow-up interview made with owners features questions tailored specifically to the case, each box of information contained in this Uniform Data Entry Form may not be completed.

**HISTORY-Additional Comments from Owner**

Owner's Description of What Happened:

Any Health Problems Prior to the Event (e.g. allergies, surgeries):

Sensitive GI tract (e.g. stomach upset when switching foods, eats a lot of grass)  Yes

Changes to the pet's diet prior to illness  Yes  
 Date Diet Change:

**CLINICAL INFORMATION--Additional Comments from Owner on What Happened**

Appetite  Increased  Decreased

Vomiting  Yes

Diarrhea  Yes

Duration of Diarrhea (days)

Blood in Feces  Fresh, Red  
 Coffee Ground  
 Black, Tarry

Water Consumption  Increased  Decreased

Urination  Increased  Decreased

Lethargy  Yes

Other:

**MEDICATIONS-Taken Prior to the Event and Mentioned by Owner**

List medications mentioned by owner (e.g. NSAIDs, steroids, heartworm/flea prevention, antibiotics, etc.)

List probiotics, vitamins, or supplements mentioned by owner:

**Follow-up Case Information Uniform Data Entry Form  
Vet-LIRN**

EON/CC Number: 361,371

Owner:

**B6**

Pet's Name:

**B6**

DIET-Any other foods the owner mentions were given to the animal during this period. (check all that apply)

Commercial Dry Product Use as Part of Diet:  Primary  Secondary  Occasional

List Product Label Name:

**B6** Acana Pork and Squash-Single Ingredient: first fed 2-2.5 years ago, 1 cup BID, measuring cup, last fed July 2018; in July fed to "The Real Meat Company" beef flavor (in between fed him The Honest

Commercial Wet-Canned Product Use as Part of Diet:  Primary  Secondary  Occasional

List Product Label Name:

Commercial Wet-Pouch Product Use as Part of Diet:  Primary  Secondary  Occasional

List Product Label Name:

Commercial-Raw Product Use as Part of Diet:  Primary  Secondary  Occasional

List Product Label Name:

Orijen Freeze Dried Regional Red fed along with the Acana Pork and Squash-fed 1 meal each per day or mixed together at the same time, done for about 1 year (the last year on the Acana food), done for

Homemade-Raw Product Use as Part of Diet:  Primary  Secondary  Occasional

Describe Product Type:

Homemade-Cooked Product Use as Part of Diet:  Primary  Secondary  Occasional

Describe Product Type:

Table Scraps/Human Food (as an occasional contribution to diet) Describe Product Type(s): raw carrots, string beans (now owner adds broccoli, asparagus,

Pet Treat Products Product Use as Part of Diet:  Primary  Secondary  Occasional

Commercial Product Label Name/Lot: Pur Bites Freeze Dried Beef Liver; Canine Granola Fac Date first fed

How Product Administered: Date last fed currently get

Rawhides or Pig Ears Product Label Name/Lot: Date first fed

How Product Administered: Date last fed

Marrow Bones Product Label Name/Lot: Date first fed

How Product Administered: Date last fed

Chicken Jerky Product Label Name/Lot: Date first fed

How Product Administered: Date last fed

Duck Jerky Product Label Name/Lot: Date first fed

How Product Administered: Date last fed

Sweet Potato Jerky or Treats Product Label Name/Lot: Crump's Naturals Dried SP strips with cranberry Date first fed

How Product Administered: Date last fed currently

**Follow-up Case Information Uniform Data Entry Form  
Vet-LIRN**

EON/CC Number: 361,371

Owner:

B6

Pet's Name:

B6

DIET-continued-Any other foods the owner mentions were given to the animal during this period. (check all that apply)

Other Treats    Product Label Name/Lot: Dehydrated apples, sweet potatoes; frozen blueberry    Date first fed:   
How Product Administered:     Date last fed:

ENVIRONMENTAL EXPOSURES-Environmental Exposures Mentioned by the Owner Potentially Affecting the Animal's Overall State of Health Prior to the Event. (check all that apply)

- Indoor     Outdoor     Indoor & Outdoor     Carrion     Rodents     Grapes or Raisins     Nuts
- Plants     Trash     Hunt     Pet Shows     Sporting Events     Pet Recreation Facilities
- Livestock     Poultry     Reptiles     Pet Birds     Small Mammals     Untreated Surface Water
- Anti-freeze     Mushrooms     Heavy Metals     Ticks     Urban     Suburban     Rural

Comments:

B6 was diagnosed with B6 one year, did a C6 wa B6 so didn't treat, then neg, then positive again, he wasn't treated;  
no trauma, hyperthermia, radiation, electric shock, no chemo drug, no human vitamins or pills, no alcohol, no Japanese yew, foxglove, black locust, buttercup, lily of the valley, or gossypol

HOUSEHOLD-Signalment of Additional Animals Given the Product mentioned by the owner.

Animal 1:   Reacted

Animal 2:   Reacted

Animal 3:   Reacted

Comments

Submit

**From:** PFR Event <pfpreventcreation@fda.hhs.gov>  
**To:** Cleary, Michael \*; HQ Pet Food Report Notification; [B6]  
**Sent:** 8/5/2018 1:32:12 AM  
**Subject:** Acana Pork and Squash; [B6] - EON-361371  
**Attachments:** 2053236-report.pdf

A PFR Report has been received and PFR Event [EON-361371] has been created in the EON System.

A "PDF" report by name "2053236-report.pdf" is attached to this email notification for your reference.

Below is the summary of the report:

**EON Key:** EON-361371

**ICSR #:** 2053236

**EON Title:** PFR Event created for Acana Pork and Squash; 2053236

<b>AE Date</b>	04/12/2016	<b>Number Fed/Exposed</b>	2
<b>Best By Date</b>		<b>Number Reacted</b>	1
<b>Animal Species</b>	Dog	<b>Outcome to Date</b>	Unknown
<b>Breed</b>	Retriever - Golden		
<b>Age</b>	4 Years		
<b>District Involved</b>	PFR [B6] DO		

**Product information**

**Individual Case Safety Report Number:** 2053236

**Product Group:** Pet Food

**Product Name:** Acana Pork and Squash

**Description:** This is not an event that suddenly occurred. My dog was diagnosed with dilated cardiomyopathy at 2 years old. I enrolled him in the taurine deficient study done by Dr. Joshua Stern at UC Davis. He was eating Acana Pork & Squash since he was a puppy. His taurine was tested (4-18) and his whole blood is [B6] and plasma [B6]. Since his taurine level is low, I was told to supplement him with taurine and take him off the current dog food. I was told his food could cause taurine deficient dilated cardiomyopathy. He will be re-tested in the upcoming months. It is not know at this time if the dog food contributed to his disease or caused it. The study is still on going.

**Submission Type:** Initial

**Report Type:** Adverse Event (a symptom, reaction or disease associated with the product)

**Outcome of reaction/event at the time of last observation:** Unknown

**Number of Animals Treated With Product:** 2

**Number of Animals Reacted With Product:** 1

Product Name	Lot Number or ID	Best By Date
Acana Pork and Squash		

**Sender information**

**B6**

USA

To view this PFR Event, please click the link below:

<https://eon.fda.gov/eon//browse/EON-361371>

To view the PFR Event Report, please click the link below:

<https://eon.fda.gov/eon//EventCustomDetailsAction!viewReport.jsps?decorator=none&e=0&issueType=12&issueId=378105>

=====

This email and attached document are being provided to you in your capacity as a Commissioned Official with the U.S. Department of Health and Human Services as authorized by law. You are being provided with this information pursuant to your signed Acceptance of Commission.

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Failure to adhere to the above provisions could result in removal from the approved distribution list. If you think you received this email in error, please send an email to [FDAREportableFoods@fda.hhs.gov](mailto:FDAREportableFoods@fda.hhs.gov) immediately.



**Report Details - EON-361371**

<b>ICSR:</b>	2053236
<b>Type Of Submission:</b>	Initial
<b>Report Version:</b>	FPSR.FDA.PETF.V.V1
<b>Type Of Report:</b>	Adverse Event (a symptom, reaction or disease associated with the product)
<b>Reporting Type:</b>	Voluntary
<b>Report Submission Date:</b>	2018-08-04 21:25:50 EDT
<b>Reporter is the Animal Owner:</b>	Yes

<b>Reported Problem:</b>	<b>Problem Description:</b>	This is not an event that suddenly occurred. My dog was diagnosed with dilated cardiomyopathy at 2 years old. I enrolled him in the taurine deficient study done by Dr. Joshua Stern at UC Davis. He was eating Acana Pork & Squash since he was a puppy. His taurine was tested (4-18) and his whole blood is <b>B6</b> and plasma <b>B6</b> . Since his taurine level is low, I was told to supplement him with taurine and take him off the current dog food. I was told his food could cause taurine deficient dilated cardiomyopathy. He will be re-tested in the upcoming months. It is not know at this time if the dog food contributed to his disease or caused it. The study is still on going.
	<b>Date Problem Started:</b>	04/12/2016
	<b>Concurrent Medical Problem:</b>	No
	<b>Outcome to Date:</b>	Unknown

<b>Product Information:</b>	<b>Product Name:</b>	Acana Pork and Squash	
	<b>Product Type:</b>	Pet Food	
	<b>Lot Number:</b>		
	<b>Package Type:</b>	BAG	
	<b>Package Size:</b>	25 Pound	
	<b>Purchase Date:</b>	05/29/2018	
	<b>Number Purchased:</b>	1	
	<b>Possess Unopened Product:</b>	No	
	<b>Possess Opened Product:</b>	No	
	<b>Storage Conditions:</b>	The product is stored in it's original bag and then placed in a air tight container.	
	<b>Product Use Information:</b>	<b>Description:</b>	The product was feed 2xs per day.
		<b>Last Exposure Date:</b>	07/15/2018
		<b>Product Use Stopped After the Onset of the Adverse Event:</b>	Yes
		<b>Adverse Event Abate After Product Stop:</b>	Unknown
<b>Product Use Started Again:</b>		No	
<b>Perceived Relatedness to Adverse Event:</b>		Possibly related	
<b>Other Foods or Products Given to the Animal During This Time Period:</b>		Yes	
<b>Manufacturer /Distributor Information:</b>			

	<b>Purchase Location Information:</b>	<b>Name:</b>	Pet Valu	
		<b>Address:</b>	<b>B6</b> United States	
<b>Animal Information:</b>	<b>Name:</b>	<b>B6</b>		
	<b>Type Of Species:</b>	Dog		
	<b>Type Of Breed:</b>	Retriever - Golden		
	<b>Gender:</b>	Male		
	<b>Reproductive Status:</b>	Neutered		
	<b>Weight:</b>	67 Pound		
	<b>Age:</b>	4 Years		
	<b>Assessment of Prior Health:</b>	Excellent		
	<b>Number of Animals Given the Product:</b>	2		
	<b>Number of Animals Reacted:</b>	1		
	<b>Owner Information:</b>			
	<b>Healthcare Professional Information:</b>	<b>Practice Name:</b>	<b>B6</b>	
		<b>Contact:</b>	<b>Name:</b>	<b>B6</b>
		<b>Phone:</b>		
	<b>Address:</b>	<b>B6</b> United States		
	<b>Type of Veterinarian:</b>	Referred veterinarian		
	<b>Date First Seen:</b>	04/19/2016		
	<b>Permission to Release Records to FDA:</b>	Yes		
<b>Sender Information:</b>	<b>Name:</b>	<b>B6</b>		
	<b>Address:</b>	<b>B6</b> United States		
	<b>Contact:</b>	<b>Phone:</b>	<b>B6</b>	
		<b>Email:</b>		
	<b>Permission To Contact Sender:</b>	Yes		
	<b>Preferred Method Of Contact:</b>	Email		
<b>Reported to Other Parties:</b>	Store/Place of Purchase Manufacturer			
<b>Additional Documents:</b>				

---

**From:** Jones, Jennifer L </o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=0f6ca12eaa9348959a4cbb1e829af244-Jennifer.Jo>  
**To:** [REDACTED] **B6**  
**Sent:** 8/7/2018 8:18:14 PM  
**Subject:** 800.267-FDA Case Investigation for [REDACTED] **B6** (EON-361371)  
**Attachments:** 03-Vet-LIRN-Network ProceduresOwners-12.22.2015.pdf

Good afternoon [REDACTED] **B6**

Thank you for submitting your consumer complaint to FDA. I'm sorry to hear about [REDACTED] **B6** illness.

As part of our investigation, we'd like to request:

- **Full Medical Records**
  - Please contact your veterinarian (primary veterinarian and cardiologist/specialist) and ask them to email (preferred) or fax (301-210-4685) a copy of [REDACTED] **B6** entire medical history (not just this event).
- **After we review the records, we may request a Phone interview** about [REDACTED] **B6** diet and environmental exposures
  - The interview will help us better understand the details in your case.
- **We would like to collect the leftover food. How much is available?**

I attached a copy of our Vet-LIRN network procedures. The procedures describe how Vet-LIRN operates and how owners help with our case investigations.

**Please respond to this email so that we can initiate our investigation.**

Thank you kindly,

Dr. Jones

**Jennifer L. A. Jones, DVM**

Veterinary Medical Officer  
U.S. Food & Drug Administration  
Center for Veterinary Medicine  
Office of Research  
Veterinary Laboratory Investigation and Response Network (Vet-LIRN)  
8401 Muirkirk Road, G704  
Laurel, Maryland 20708  
new tel: 240-402-5421  
fax: 301-210-4685  
e-mail: [jennifer.jones@fda.hhs.gov](mailto:jennifer.jones@fda.hhs.gov)  
Web: <http://www.fda.gov/AnimalVeterinary/ScienceResearch/ucm247334.htm>





## **Network Procedures for Veterinary Laboratory Investigation and Response Network Case Investigations**

### **Network Procedures for Owners**

The purpose of this Network Procedure is to help you, the owner, understand how the Veterinary Laboratory Investigation and Response Network (Vet-LIRN) Program Office conducts case investigations (follow up to consumer complaints).

The following items are explained below:

- General Introduction
- Billing
- Step by Step Process
- Types of Services and Tests

#### **1. General Introduction:**

##### **1.1. What is the goal of the case investigation?**

The goal of the case investigation is to determine if the product is causing your pet's illness. Our case investigation MAY NOT provide a definitive diagnosis for your pet's illness, although we may rule out several other potential reasons for your pet's illness.

##### **1.2. What is the focus of a case investigation?**

Most case investigations focus on diagnostic samples (such as blood, urine or tissue from the pet), although we occasionally request and test pet food samples.

##### **1.3. What is my veterinarian's role during the case investigation?**

Your veterinarian helps our investigation into FDA- regulated products by providing information about your pet's medical history and by obtaining any diagnostic samples like blood, urine or tissue.

##### **1.4. What will Vet-LIRN ask of me during a case investigation?**

We may ask that your veterinarian perform certain tests or services or provide diagnostic samples to FDA or a Vet-LIRN cooperating laboratory.



## Network Procedures for Veterinary Laboratory Investigation and Response Network Case Investigations

### 1.5. Will Vet-LIRN pay for tests or services requested?

Yes, we will pay veterinarians or laboratories *for tests or services requested by Vet-LIRN* and approved through our government purchasing system. We cannot, however, reimburse owners for tests already performed or not specifically requested by Vet-LIRN. We recommend that you discuss with your veterinarian which tests and services will be billed to you and which will be covered by Vet-LIRN. For instance, Vet-LIRN may request that your veterinarian perform a urinalysis on your pet while he or she is hospitalized. Vet-LIRN will pay for the collection and testing of the sample, but would not cover the cost of your pet's stay in the hospital.

### 1.6. Is the information received in the consumer complaint confidential?

Generally, the information received in the consumer complaint is not kept confidential. In most cases, only protected personal information (such as names and addresses) is withheld in an effort to prevent the complaint from being traced back to the individual who submitted it.

## 2. Billing:

### 2.1. Will Vet-LIRN pay for bills related to the case investigation?

Vet-LIRN will cover the cost of services and testing that we specifically request. You should understand that Vet-LIRN *CANNOT* reimburse owners for any veterinary bills. Services *MUST* be pre-authorized and paid directly to the veterinarian.

### 2.2. Will Vet-LIRN pay for testing that was not requested by Vet-LIRN?

No, we will only pay for testing that we request and authorize.

### 2.3. Will Vet-LIRN pay for treatments or private cremation?

No, we cannot pay for treatment or cremation.



## **Network Procedures for Veterinary Laboratory Investigation and Response Network Case Investigations**

### **2.4. If I allow my veterinarian to submit my pet's body for testing, will I be able to have back his or her remains?**

Each Vet-LIRN member laboratory has its own procedures for handling remains. Some Vet-LIRN member laboratories offer private cremation services for a fee payable directly to the laboratory. We advise you to discuss directly with the member laboratory the possibilities and costs for obtaining your pet's remains after examination are complete.

### **3. Step by Step Process:**

#### **Vet-LIRN will do the following during a case investigation:**

- 3.1. Assign a case number which **MUST** be included in all correspondences
- 3.2. Discuss the case with you and your veterinarian
- 3.3. Request medical records from your veterinarian
- 3.4. Coordinate with your veterinarian and you to obtain and submit samples for testing
- 3.5. Provide results to your veterinarian who will discuss the results with you.

#### **Vet-LIRN requests that:**

- 3.6. Any follow-up veterinary visits related to the investigation are reported to Vet-LIRN
- 3.7. Additional laboratory reports are reported to Vet-LIRN by your veterinarian.

### **4. Types of Services and Tests:**

#### **4.1. What may a veterinary examination include once the case investigation is started?**

A veterinary examination may include:

- an office visit and physical examination to assess your animals current health
- collection of clinical samples from your animal (blood, urine, feces).

#### **4.2. Will your animal be tested more than once?**



## **Network Procedures for Veterinary Laboratory Investigation and Response Network Case Investigations**

It is possible that Vet-LIRN may request additional tests or examinations depending on results from initial testing.

### **4.3. Will Vet-LIRN need to conduct a necropsy in the event of an animal death?**

Yes, if you are willing, we may request that your veterinarian or another Vet-LIRN cooperating laboratory to conduct a necropsy to collect samples for testing. The samples collected may be tested right away or may be held for future testing or archiving. If the veterinarian completes the necropsy then the remains will be handled according to the veterinarian's normal procedures. If a Vet-LIRN cooperative laboratory completes the necropsy the remains are usually disposed of by that laboratory. Vet-LIRN cannot pay for private cremation. You are welcome to discuss normal procedures with the laboratory.

### **4.4. Will Vet-LIRN ask for a food sample?**

Our main focus is on testing diagnostic tissue or fluid samples from the animal, but we may need to test the food. Please hold all food samples once the consumer complaint is submitted. If needed, we will make arrangements to collect the food.

### **4.5. What are some general tests that Vet-LIRN may request?**

General tests that we may request include, but are not limited to:

- Hematology
- Microbial cultures
- Urinalysis
- Fecal examination
- Necropsy/Histology/Toxicology

### **4.6. Will I get results from Vet-LIRN requested tests?**

Results of testing on your animal's diagnostic tissue or fluid samples will be forwarded to your veterinarian who will be asked to share the results with you.

---

**From:** [REDACTED] B6  
**To:** Jones, Jennifer L  
**Sent:** 8/7/2018 8:35:28 PM  
**Subject:** Re: 800.267-FDA Case Investigation for [REDACTED] B6 (EON-361371)

Hi

I have some questions before we go forward, can you please contact me at [REDACTED] B6

Thanks

[REDACTED] B6

-----Original Message-----

**From:** Jones, Jennifer L  
**Date:** 8/7/2018 4:20:07 PM  
**To:** [REDACTED] B6  
**Subject:** 800.267-FDA Case Investigation for [REDACTED] B6 (EON-361371)

Good afternoon [REDACTED] B6

Thank you for submitting your consumer complaint to FDA. I'm sorry to hear about [REDACTED] B6 illness.

As part of our investigation, we'd like to request:

- **Full Medical Records**
  - Please contact your veterinarian (primary veterinarian and cardiologist/specialist) and ask them to email (preferred) or fax (301-210-4685) a copy of [REDACTED] B6 **entire** medical history (not just this event).
- **After we review the records, we may request a Phone interview** about [REDACTED] B6 diet and environmental exposures
  - The interview will help us better understand the details in your case.

**We would like to collect the leftover food. How much is available?**

I attached a copy of our Vet-LIRN network procedures. The procedures describe how Vet-LIRN operates and how owners help with our case investigations.

**Please respond to this email so that we can initiate our investigation.**

Thank you kindly,

Dr. Jones

Jennifer L. A. Jones, DVM



Veterinary Medical Officer  
U.S. Food & Drug Administration  
Center for Veterinary Medicine  
Office of Research  
Veterinary Laboratory Investigation and Response Network (Vet-LIRN)  
8401 Muirkirk Road, G704  
Laurel, Maryland 20708  
new tel: 240-402-5421

fax: 301-210-4685  
e-mail: [jennifer.jones@fda.hhs.gov](mailto:jennifer.jones@fda.hhs.gov)

Web: <http://www.fda.gov/AnimalVeterinary/ScienceResearch/ucm247334.htm>



**Report Details - EON-358522**

ICSR: 2051557  
 Type Of Submission: Initial  
 Report Version: FPSR.FDA.PETF.V.V1  
 Type Of Report: Adverse Event (a symptom, reaction or disease associated with the product)  
 Reporting Type: Voluntary  
 Report Submission Date: 2018-07-09 08:50:19 EDT

**Reported Problem:**  
**Problem Description:** DCM and CHF Taurine not measured  
**Date Problem Started:** 06/29/2018  
**Concurrent Medical Problem:** No  
**Outcome to Date:** Stable

**Product Information:**  
**Product Name:** Halo grain-free dry food (exact variety unknown)  
**Product Type:** Pet Food  
**Lot Number:**  
**Package Type:** BAG  
**Product Use Information:**  
**Manufacturer /Distributor Information:**  
**Purchase Location Information:**

**Animal Information:**  
**Name:** B6  
**Type Of Species:** Dog  
**Type Of Breed:** Great Dane  
**Gender:** Male  
**Reproductive Status:** Neutered  
**Weight:** 64 Kilogram  
**Age:** B6 Years  
**Assessment of Prior Health:** Unknown  
**Number of Animals Reacted:** 1  
**Owner Information:**  
**Owner Information provided:** Yes  
**Contact:** Name: B6  
 Phone: B6  
**Address:** B6  
 United States  
**Healthcare Professional Information:**  
**Practice Name:** Tufts Cummings School of Veterinary Medicine  
**Contact:** Name: Lisa Freeman  
 Phone: (508) 887-4523  
 Email: lisa.freeman@tufts.edu  
**Address:** 200 Westboro Rd  
 North Grafton  
 Massachusetts  
 01536  
 United States

<b>Sender Information:</b>	<b>Name:</b>	Lisa Freeman	
	<b>Address:</b>	200 Westboro Rd North Grafton Massachusetts 01536 United States	
	<b>Contact:</b>	<b>Phone:</b>	5088874523
		<b>Email:</b>	lisa.freeman@tufts.edu
	<b>Permission To Contact Sender:</b>	Yes	
	<b>Preferred Method Of Contact:</b>	Email	
<b>Reported to Other Parties:</b>	None		

**Additional Documents:**

**From:** Reimschuessel, Renate </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=4C00C47AE2794134B2906D6B9252FCF6-RREIMSCH>  
**To:** Jones, Jennifer L; Peloquin, Sarah  
**Sent:** 8/25/2018 11:28:23 AM  
**Subject:** FW: 800.267-FDA Case Investigation for [B6] (EON-358522)

fyi

Renate Reimschuessel V.M.D. Ph.D. Vet-LIRN  
Phone 1-240-402-5404  
Fax 301-210-4685  
<http://www.fda.gov/AnimalVeterinary/ScienceResearch/ucm247334.htm>

**From:** Freeman, Lisa [mailto:Lisa.Freeman@tufts.edu]  
**Sent:** Friday, August 24, 2018 5:44 PM  
**To:** Reimschuessel, Renate <Renate.Reimschuessel@fda.hhs.gov>  
**Cc:** Freeman, Lisa <Lisa.Freeman@tufts.edu>  
**Subject:** RE: 800.267-FDA Case Investigation for [B6] (EON-358522)

Hi Renate

Sorry for the delay on this – I didn't want to contact the owner too soon since [B6] died [B6]. I just spoke to the owner and she's fine to have you contact her

[B6]

She has some of the food still available and will hold it until you contact her.

Please let me know if you need additional information. I can't remember if I already sent you all of his medical records. If not, let me know and I'll send

Thanks

Lisa

Lisa M. Freeman, DVM, PhD, DACVN  
Board Certified Veterinary Nutritionist™  
Professor  
Cummings School of Veterinary Medicine  
Friedman School of Nutrition Science and Policy  
Tufts Clinical and Translational Science Institute  
Tufts University  
[www.petfoodology.org](http://www.petfoodology.org)

**From:** Reimschuessel, Renate <Renate.Reimschuessel@fda.hhs.gov>  
**Sent:** Tuesday, July 17, 2018 11:44 AM  
**To:** Freeman, Lisa <lisa.freeman@tufts.edu>  
**Subject:** 800.267-FDA Case Investigation for [B6] (EON-358522)

Dear Dr. Freeman,

Thank you for submitting your consumer complaint to FDA. I'm sorry to hear about [B6] illness.

As part of our investigation, we'd like to request:

- **Full Medical Records**
  - Please email (preferred) or fax (301-210-4685) a copy of [B6] **entire** medical history (not just this event), including any referral diagnostics.
- **Phone interview** about [B6] diet and environmental exposures
  - Please confirm permission to contact the owner.

- o The interview generally lasts 30 minutes.

I attached a copy of our Vet-LIRN network procedures. The procedures describe how Vet-LIRN operates and how veterinarians help with our case investigations.

**Please respond to this email so that we can initiate our investigation.**

Thank you kindly,  
Dr. Reimschuessel

Renate Reimschuessel V.M.D. Ph.D.

Director: Vet-LIRN

*(Veterinary Laboratory Investigation and Response Network)*

Center For Veterinary Medicine, FDA,

8401 Muirkirk Road, Laurel, MD 20708

*Phone 1-240-402-5404 Fax 301-210-4685*

*EMAIL : [renate.reimschuessel@fda.hhs.gov](mailto:renate.reimschuessel@fda.hhs.gov)*

Vet-LIRN

<http://www.fda.gov/AnimalVeterinary/ScienceResearch/ucm247334.htm>

Phish-Pharm

<http://www.fda.gov/AnimalVeterinary/ScienceResearch/ToolsResources/Phish-Pharm/default.htm>

Aquaculture

<http://www.fda.gov/AnimalVeterinary/ScienceResearch/ResearchAreas/ucm130892.htm>

**From:** Reimschuessel, Renate </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=4C00C47AE2794134B2906D6B9252FCF6-RREIMSCH>  
**To:** Jones, Jennifer L; Peloquin, Sarah  
**Sent:** 8/25/2018 11:29:38 AM  
**Subject:** FW: 800.267-FDA Case Investigation for [B6] (EON-358522)  
**Attachments:** [B6] cardio appt; [B6] pdf; [B6] cardio consult; [B6] pdf; [B6] discharge; [B6] pdf; [B6] discharge; [B6] pdf; [B6] ECG; [B6] pdf; [B6] lab; [B6] pdf; [B6] profile; [B6] pdf; [B6] RDVM records.pdf; [B6] taurine.pdf

Renate Reimschuessel V.M.D. Ph.D. Vet-LIRN  
*Phone 1-240-402-5404*  
Fax 301-210-4685  
<http://www.fda.gov/AnimalVeterinary/ScienceResearch/ucm247334.htm>

**From:** Freeman, Lisa [mailto:Lisa.Freeman@tufts.edu]  
**Sent:** Friday, August 24, 2018 5:48 PM  
**To:** Reimschuessel, Renate <Renate.Reimschuessel@fda.hhs.gov>  
**Subject:** RE: 800.267-FDA Case Investigation for [B6] (EON-358522)

Sorry – I see you do need records  
Here they are  
Lisa

Lisa M. Freeman, DVM, PhD, DACVN  
Board Certified Veterinary Nutritionist™  
Professor  
Cummings School of Veterinary Medicine  
Friedman School of Nutrition Science and Policy  
Tufts Clinical and Translational Science Institute  
Tufts University  
[www.petfoodology.org](http://www.petfoodology.org)

**From:** Reimschuessel, Renate <Renate.Reimschuessel@fda.hhs.gov>  
**Sent:** Tuesday, July 17, 2018 11:44 AM  
**To:** Freeman, Lisa <lisa.freeman@tufts.edu>  
**Subject:** 800.267-FDA Case Investigation for [B6] (EON-358522)

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- **Full Medical Records**
  - Please email (preferred) or fax (301-210-4685) a copy of [B6] **entire** medical history (not just this event), including any referral diagnostics.
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  - Please confirm permission to contact the owner.
  - The interview generally lasts 30 minutes.

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**Please respond to this email so that we can initiate our investigation.**

Thank you kindly,  
Dr. Reimschuessel

Renate Reimschuessel V.M.D. Ph.D.  
Director: Vet-LIRN

*(Veterinary Laboratory Investigation and Response Network)*  
Center For Veterinary Medicine, FDA,  
8401 Muirkirk Road, Laurel, MD 20708  
*Phone 1-240-402-5404 Fax 301-210-4685*  
*EMAIL : [renate.reimschuessel@fda.hhs.gov](mailto:renate.reimschuessel@fda.hhs.gov)*

Vet-LIRN

<http://www.fda.gov/AnimalVeterinary/ScienceResearch/ucm247334.htm>

Phish-Pharm

<http://www.fda.gov/AnimalVeterinary/ScienceResearch/ToolsResources/Phish-Pharm/default.htm>

Aquaculture

<http://www.fda.gov/AnimalVeterinary/ScienceResearch/ResearchAreas/ucm130892.htm>

B6

Patient ID: B6

B6

Canine

B6 Years Old Male (Neutered) Great Dane  
Harlequin

### Cardiology Appointment Report

Date: B6

**Attending Cardiologist:**

John E. Rush DVM, MS, DACVIM (Cardiology), DACVECC

B6

**Cardiology Resident:**

B6

**Cardiology Technician:**

B6

Student: B6 V19

**Presenting Complaint:** Recheck after hospitalization for CHF and atrial fibrillation. Owner having trouble getting B6 to eat anything. Ate the first two days home from the hospital. Anorexia started yesterday. RR has been around 40bpm.

DCM

Afib

CHF

**General Medical History:** Presented last friday for DCM and CHF with pleural and peritoneal effusion.

Improved on B6 in the hospital, sent home on B6

**Diet and Supplements:** Hill's Ideal Balance- not eating well at all

**Cardiovascular History:**

Prior CHF diagnosis? Y

Prior ATE? N

Prior arrhythmia? Y

Cough? N

Shortness of breath or difficulty breathing? Y/N

Syncope or collapse? N

Sudden onset lameness? N, difficulty on steps

Exercise intolerance? self-limiting, not running around



Prior heart murmur? N

**Current Medications Pertinent to CV System:**

**B6**

**Cardiac Physical Examination:**

**B6**

**Muscle condition:**

- |   |   |
|---|---|
| <input type="checkbox"/> Normal           | <input checked="" type="checkbox"/> Moderate cachexia |
| <input type="checkbox"/> Mild muscle loss | <input type="checkbox"/> Marked cachexia              |

**Cardiovascular Physical Exam:**

**Murmur Grade: hard to assess**

- |   |                                |
|---|--------------------------------|
| <input type="checkbox"/> None             | <input type="checkbox"/> IV/VI |
| <input type="checkbox"/> I/VI             | <input type="checkbox"/> V/VI  |
| <input checked="" type="checkbox"/> II/VI | <input type="checkbox"/> VI/VI |
| <input type="checkbox"/> III/VI           |                                |

**Murmur location/description: systolic left apical**

**Jugular vein:**

- |  |  |
|--|--|
| <input type="checkbox"/> Bottom 1/3 of neck            | <input type="checkbox"/> Top 2/3 <sup>rd</sup> of neck |
| <input checked="" type="checkbox"/> Middle 1/3 of neck |  |

**Arterial pulses:**

- Weak
- Fair
- Good
- Strong

- Bounding
- Pulse deficits
- Pulsus paradoxus
- Other:

**Arrhythmia: afib**

- None
- Sinus arrhythmia
- Premature beats

- Bradycardia
- Tachycardia, irregular

**Gallop:**

- Yes
- No
- Intermittent

- Pronounced
- Other:

**Pulmonary assessments: wheezes?**

- Eupneic
- Mild dyspnea
- Marked dyspnea
- Normal BV sounds

- Pulmonary crackles
- Wheezes
- Upper airway stridor

**Abdominal exam:**

- Normal
- Hepatomegaly
- Abdominal distension

- Ascites
- Marked ascites

**Problems:**

Afib  
DCM  
CHF

**Diagnostic plan:**

- Echocardiogram/fluid check
- Chemistry profile
- ECG
- Renal profile
- Blood pressure

- Dialysis profile
- Thoracic radiographs
- NT-proBNP
- Troponin I
- Other tests:

**Echocardiogram Findings:**

**B6**

**Assessment and recommendations:**

Patient is dyspneic, lethargic, and overall appears worse than at discharge last week. Discussed options with owners (radiographs, blood work, abdominocentesis, admit for CHF therapy) v abdominocentesis and adjust home medications v adjust home medications without abdominocentesis v euthanasia due to poor long term prognosis. Ultimately blood work was submitted and abdominocentesis was performed (3.2 L straw colored fluid). Recommend increasing:

**B6** Recheck renal values and fluid check on Monday. If

persistent rapid AF ventricular response rate when CHF is better controlled then recommend increasing dose of  given at beginning of exam, and  given after abdomino-centesis.

**Final Diagnosis:**

DCM, CHF (ascites, presumed pulmonary edema)

Atrial fibrillation

**Heart Failure Classification Score:**

ISACHC Classification:

- |                             |   |
|-----------------------------|---|
| <input type="checkbox"/> Ia | <input checked="" type="checkbox"/> IIIa to |
| <input type="checkbox"/> Ib | <input checked="" type="checkbox"/> IIIb    |
| <input type="checkbox"/> II |   |

ACVIM Classification:

- |                             |                                       |
|-----------------------------|---------------------------------------|
| <input type="checkbox"/> A  | <input checked="" type="checkbox"/> C |
| <input type="checkbox"/> B1 | <input type="checkbox"/> D            |
| <input type="checkbox"/> B2 |                                       |

# Cummings Veterinary Medical Center

AT TUFTS UNIVERSITY  
Cardiology Liaison: 508-887-4696

**B6**

Patient ID: B6

B6 Canine

B6 Years Old Male (Neutered) Great  
Dane

Harlequin BW: Weight (kg) 72.20

## Cardiology Inpatient

Date: B6

Weight: Weight (kg) 72.20

### Attending Cardiologist:

John E. Rush DVM, MS, DACVIM (Cardiology), DACVECC

**B6**

### Cardiology Resident:

**B6**

### Thoracic radiographs available for review?

- Yes - in SS
- Yes - in PACS
- No

### Presenting complaint and important concurrent diseases: DCM/a-fib referral

P is presenting for DCM and a fib. O says that about a week ago, P noticed that he started coughing after eating some food. O noticed that a few days ago he started acting lethargic and not really acting himself. This morning he seemed to get worse, had some labored breathing. O is not sure if P ate today. P is still drinking normally and urinating and defecating.

### Prior medical history:

B6

### Diet:

Halo dry food grain free once daily

**\*STOP - remainder of form to be filled out by Cardiology\***

**B6**

Mild muscle loss

Marked cachexia

**Cardiovascular Physical Exam**

**Murmur Grade:**

None

I/VI

II/VI

III/VI

IV/VI

V/VI

VI/VI

**B6**

**Jugular vein:**

Bottom 1/3 of neck

Middle 1/3 of neck

Top 2/3 of neck

**Arterial pulses:**

Weak

Fair

Good

Strong

Bounding

Pulse deficits

Pulsus paradoxus

Other (describe):

**Arrhythmia:**

None

Sinus arrhythmia

Premature beats

Bradycardia

Tachycardia, irregular - sounds typical of atrial fibrillation

**Gallop:**

Yes

No

Intermittent

Pronounced

Other:

**Pulmonary assessments:**

Eupneic

Mild to moderate dyspnea

Marked dyspnea

Normal BV sounds

Pulmonary Crackles

Wheezes

Upper airway stridor

Other auscultatory findings:

**Abdominal exam:**

Normal

Hepatomegaly

Abdominal distension

Mild ascites

**Echocardiogram Findings:**

**B6**

# B6

**Assessment and recommendations:**

Echocardiogram reveals advanced DMVD with resulting effusions and suspected pulmonary edema, and atrial fibrillation. Recommend

B6

B6

B6

Recheck renal values and electrolytes today or tomorrow. Recheck blood work, ECG, fluid check in 1-2 weeks. Taurine whole blood submitted under

B6

Recommend changing diet to a standard protein, non grain free, main stream brand.

**Treatment plan:**

# B6

**Final Diagnosis:**

DCM, CHF (suspect biventricular)

Atrial fibrillation

The DCM may have a nutritional contribution

**Heart Failure Classification Score:**

ISACHC Classification:

Ia

Bi

II

IIIa

IIIb

ACVIM CHF Classification:

A

B1

B2

C

D

**M-Mode**

IVSd

LVIDd

LVPWd

IVSs

LVIDs

LVPWs

%FS

Ao Diam

LA Diam

LA/Ao

Max LA

EPSS

B6

om

om

om

om

om

om

%

om

om

om

om

om

M-Mode Normalized

IVSdN  
LVIDdN  
LVPWdN  
IVSsN  
LVIDsN  
LVPWsN  
Ao Diam N  
LA Diam N

B6

{0.29 - 0.52}  
{1.35 - 1.73}!  
{0.33 - 0.53}  
{0.43 - 0.71}!  
{0.79 - 1.14}!  
{0.53 - 0.78}!  
{0.68 - 0.89}  
{0.64 - 0.90}!

2D

SA LA  
Ao Diam  
SA LA / Ao Diam  
IVSd  
LVIDd  
LVPWd  
EDV(Teich)  
IVSs  
LVIDs  
LVPWs  
ESV(Teich)  
EF(Teich)  
%FS  
SV(Teich)  
LVld LAX  
LVAd LAX  
LVEDV A-L LAX  
LVEDV MOD LAX  
LVls LAX  
LVAs LAX  
LVESV A-L LAX  
LVESV MOD LAX  
HR  
EF A-L LAX  
LVEF MOD LAX  
SV A-L LAX  
SV MOD LAX  
CO A-L LAX  
CO MOD LAX

B6

cm  
cm  
  
cm  
cm  
cm  
ml  
cm  
cm  
cm  
ml  
%  
%  
ml  
cm  
cm  
ml  
ml  
cm  
cm  
ml  
ml  
BPM  
%  
%  
ml  
ml  
l/min  
l/min

Doppler

MR Vmax  
MR maxPG  
E'  
PV Vmax  
PV maxPG  
AV Vmax  
AV maxPG

m/s  
mmHg  
m/s  
m/s  
mmHg  
m/s  
mmHg

TR Vmax  
TR maxPG

**B6**

m/s  
mmHg



### Discharge Instructions

**Patient**

Name: B6

Species: Canine

Breed: Harlequin Male (Neutered) Great Dane

Birthdate: B6

**Owner**

Name: B6

Address: B6

Patient ID: B6

**Attending Cardiologist:**

John E. Rush DVM, MS, DACVIM (Cardiology), DACVECC

B6

**Cardiology Resident:**

B6

Student: B6 V19

**Cardiology Technician:**

B6

Admit Date: B6 6:13:24 PM

Discharge Date: B6

**Diagnoses:**

Dilated cardiomyopathy (DCM) with congestive heart failure

Atrial fibrillation

**Case summary:**

Thank you for bringing B6 to the Tufts ER. On presentation B6 was found to have fluid buildup around his lungs and in his belly along with an abnormal heart rhythm. Some of the fluid was removed from his chest and he was treated overnight with cardiac medications. Today he seems to be feeling much better!

B6 has been diagnosed with a primary heart muscle disease called dilated cardiomyopathy (DCM). This disease is more common in large and giant breed dogs and is characterized by thinning of the walls of the heart, reduced cardiac pump function, and enlargement of the upper chambers of the heart. Many dogs with DCM will also have significant arrhythmias which can be life-threatening and also require medical management. The heart enlargement has now progressed to the point of congestive heart failure, meaning that fluid is backing up into the lungs or belly. Unfortunately this is a progressive disease and we cannot reverse the changes to the heart muscle, however we can use cardiac medications and some changes to the diet to make your dog comfortable and have him breathing easier.

There has been some recent association between some grain-free diets and DCM in dogs. Some patients treated with taurine supplementation and a change in diet have showed improvements in their DCM; however these breeds were normally atypical DCM breeds. We suspect that B6 has DCM associated with his breed predilection for the disease, but would like to supplement him with B6 in the chance that it might improve his heart.

### Monitoring at home:

- o We would like you to monitor **B6** breathing rate and effort at home, ideally during sleep or at a time of rest. The doses of drugs will be adjusted based on the breathing rate and effort.
- o In general, most dogs with heart failure that is well controlled have a breathing rate at rest of less than 35 to 40 breaths per minute. In addition, the breathing effort, noted by the amount of belly wall motion used for each breath, is fairly minimal if heart failure is controlled.
- o An increase in breathing rate or effort will usually mean that you should give an extra dose of **B6** (**Lasix**). If difficulty breathing is not improved by within 30-60 minutes after giving extra **B6** then we recommend that a recheck exam be scheduled and/or that your dog be evaluated by an emergency clinic. There are instructions for monitoring breathing, and a form to help keep track of breathing rate and drug doses, on the Tufts HeartSmart web site (<http://vet.tufts.edu/heartsmart/at-home-monitoring/>).
- o We also want you to watch for weakness or collapse, a reduction in appetite, worsening cough, or distention of the belly as these findings indicate that we should do a recheck examination.
- o You can use a floppy tape measure to monitor the size of **B6** belly, and if it starts to get bigger please let us know.
- o If you have any concerns, please call or have **B6** evaluated by a veterinarian. Our emergency clinic is open 24 hours/day.

# B6

**Diet suggestions:**

Dogs with heart failure accumulate more fluid in their body if they eat large amounts of sodium (salt). Sodium can be found in all foods, but some foods are lower in sodium than others. Many pet treats, people foods, and supplements used to give pills often have more sodium than is desirable - a sheet that has suggestions for low sodium treats can be found on the HeartSmart web site (<http://vet.tufts.edu/heartsmart/diet/>)

We recommend switching B6 to a diet that is not billed as "grain-free", since there is a correlation between some grain-free diets and some forms of heart disease (typically dilated cardiomyopathy). We recommend feeding a standard protein maintenance diet from a major company such as Purina, Hills, or Royal Canin. The heartsmart website has lists of some over-the-counter diets that are good for cardiac disease.

**Exercise Recommendations:**

For the first 7 to 10 days after starting medications for heart failure we recommend very limited activity. Leash walking only is ideal, and short walks to start. Once the heart failure is better controlled, then slightly longer walks are acceptable. However, if you find that B6 is lagging behind or needs to stop on a walk then this was too long a walk and shorter walks are advised in the future. Repetitive or strenuous high energy activities (repetitive ball chasing, running fast off-leash, etc.) are generally not advised at this stage of heart failure.

**Recheck Visits:**

A recheck visit has been scheduled for next B6 at 3pm with our Cardiology Service. At this visit we will check B6 breathing effort, do a blood test to recheck kidney values, check for fluid buildup around his lungs, and check an ECG. A recheck echocardiogram is recommended in 3-4 months as long as B6 is doing well at home.

Thank you for entrusting us with B6 care - he is such a gentle giant. Please contact our Cardiology liaison, B6 B6 at (508)-887-4696 or email us at [cardiovet@tufts.edu](mailto:cardiovet@tufts.edu) for scheduling and non-emergent questions or concerns.

Please visit our HeartSmart website for more information

<http://vet.tufts.edu/heartsmart/>

**Prescription Refill Disclaimer:**

*For the safety and well-being of our patients, your pet must have had an examination by one of our veterinarians within the past year in order to obtain prescription medications.*

**Ordering Food:**

*Please check with your primary veterinarian to purchase the recommended diet(s). If you wish to purchase your food from us, please call 7-10 days in advance (508-887-4629) to ensure the food is in stock. Alternatively, veterinary diets can be ordered from online retailers with a prescription/veterinary approval.*

**Clinical Trials:**

*Clinical trials are studies in which our veterinary doctors work with you and your pet to investigate a specific disease process or a promising new test or treatment. Please see our website: [vet.tufts.edu/cvm/clinical-studies](http://vet.tufts.edu/cvm/clinical-studies)*

Case: B6

Owner: B6

Discharge Instructions

### Discharge Instructions

**Patient**

Name: B6

Species: Canine

Breed: Harlequin Male (Neutered) Great Dane

Birthdate: B6

**Owner**

Name: B6

Address: B6

Patient ID: B6

**Attending Cardiologist:**

John E. Rush DVM, MS, DACVIM (Cardiology), DACVECC

B6

**Cardiology Resident:**

B6

Student: B6 V19

**Cardiology Technician:**

B6

Date: B6

**Diagnoses:**

- o Dilated cardiomyopathy (DCM) with congestive heart failure
- o Atrial Fibrillation
- o Abdominal effusion (ascites)
- o Suspected pulmonary edema

**Clinical findings:**

Thank you for bringing B6 in for evaluation of his congestive heart failure due to DCM. You reported noticing some increased respiratory rate and effort. Additionally, B6 appetite has decreased over the past few days and he is currently refusing to eat. On physical exam, B6 was depressed and had increased respiratory rate and effort. He had an elevated heart rate with atrial fibrillation (an abnormal heart rhythm). His abdomen was distended and a fluid wave was palpated.

We performed blood work to evaluate B6 kidney and liver values. His kidney values are mildly elevated which can be due to the B6 or due to the fluid buildup. We want to monitor these values over time and may have to make adjustments to the medications as elevated kidney values can cause a decrease in appetite.

We flashed B6 abdomen and chest with an ultrasound probe and found free fluid in abdomen and suspected fluid within the lungs (pulmonary edema). The only way to diagnose pulmonary edema is to take chest radiographs (x-rays). We were able to remove more than three liters of fluid from the abdominal cavity; we are hoping that this will help to alleviate some of B6 discomfort. We added another diuretic medication, B6 to his regimen and increased the dose of B6 (see below). We are hoping this change in medications will control B6 symptoms.

### Monitoring at home:

- We would like you to monitor **B6** breathing rate and effort at home, ideally during sleep or at a time of rest. The doses of drugs will be adjusted based on the breathing rate and effort.
- In general, most dogs with heart failure that is well controlled have a breathing rate at rest of less than 30 breaths per minute. In addition, the breathing effort, noted by the amount of belly wall motion used for each breath, is fairly minimal if heart failure is controlled.
- *An increase in breathing rate or effort will usually mean that you should give an extra dose of **B6*** If difficulty breathing is not improved by within 30-60 minutes after giving extra **B6** then we recommend that a recheck exam be scheduled and/or that your dog be evaluated by an emergency clinic.
- There are instructions for monitoring breathing, and a form to help keep track of breathing rate and drug doses, on the Tufts HeartSmart web site (<http://vet.tufts.edu/heartsmart/at-home-monitoring/>).
- We also want you to watch for weakness or collapse, a reduction in appetite, worsening cough, or distention of the belly as these findings indicate that we should do a recheck examination.
- We sent you home with a "**B6** tape measure" that you can use at home to monitor the size of his belly. If it starts to get bigger please let us know.
- If you have any concerns, please call or have your dog evaluated by a veterinarian. Our emergency clinic is open 24 hours/day.

# B6

**Diet suggestions:**

Dogs with heart failure accumulate more fluid in their body if they eat large amounts of sodium (salt). Sodium can be found in all foods, but some foods are lower in sodium than others. Many pet treats, people foods, and supplements used to give pills often have more sodium than is desirable- a sheet that has suggestions for low sodium treats can be found on the HeartSmart web site (<http://vet.tufts.edu/heartsmart/diet/>)

We have sent you home with a couple cans of dog food that you can use at home to tempt B6 to eat.

**Exercise Recommendations:**

For the first 7 to 10 days after starting medications for heart failure we recommend very limited activity. Leash walking only is ideal, and short walks to start. Once the heart failure is better controlled, then slightly longer walks are acceptable. However, if you find that B6 is lagging behind or needs to stop on a walk then this was too long a walk and shorter walks are advised in the future. Repetitive or strenuous high energy activities (repetitive ball chasing, running fast off-leash, etc.) are generally not advised at this stage of heart failure.

**Recheck Visits:**

A recheck visit is scheduled for B6 at 3pm on B6 with B6. At this visit we will want to check breathing effort and heart function, do a blood test, and probably recheck a blood pressure. A recheck echocardiogram (heart ultrasound) is recommended in 6 to 9 months.

Thank you for entrusting us with B6 care. He is such a sweet boy. Please contact our Cardiology liaison, B6 at (508)-887-4696 or email us at [cardiovet@tufts.edu](mailto:cardiovet@tufts.edu) for scheduling and non-emergent questions or concerns.

Please visit our HeartSmart website for more information

<http://vet.tufts.edu/heartsmart/>

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*Please check with your primary veterinarian to purchase the recommended diet(s). If you wish to purchase your food from us, please call 7-10 days in advance (508-887-4629) to ensure the food is in stock. Alternatively, veterinary diets can be ordered from online retailers with a prescription/veterinary approval.*

**Clinical Trials:**

*Clinical trials are studies in which our veterinary doctors work with you and your pet to investigate a specific disease process or a promising new test or treatment. Please see our website: [vet.tufts.edu/cvmc/clinical-studies](http://vet.tufts.edu/cvmc/clinical-studies)*

---

Case: B6

Owner: B6

Discharge Instructions

ID: \_\_\_\_\_ Name: \_\_\_\_\_

25 mm/s  
10 mm/mV

**B6**

EKG 6 lead

B6

Name: \_\_\_\_\_

25 mm/s  
10 mm/mV

**B6**



ID: \_\_\_\_\_ Name: \_\_\_\_\_ ID# \_\_\_\_\_

10 mm/s  
10 mm/mV

**B6**

10) \_\_\_\_\_ Name \_\_\_\_\_ 10) \_\_\_\_\_ Name \_\_\_\_\_

25 mm/s  
10 mm/mV

50 mm/s  
10 mm/mV

**B6**

ID: \_\_\_\_\_ Name: \_\_\_\_\_

25 mm/s  
10 mm/mV

**B6**

V1 V2 V3 V4 V5 V6

ID: \_\_\_\_\_ Na

Rate 222  
PR 50  
QRSD 95  
QT 252  
QTc 484

--Axis--  
P .57

**B6**

Species: Canine Patient ID: **B6**  
Breed: Great Dane Sex: Male City: **B6**  
Weight kg: 73.00 Home Phone: **B6**  
Date of Birth: **B6** Call Phone: **B6**  
Color: Harlequin Ref Facility: **B6** \*\*NO RDVM\*\*  
Check-in Date: **B6** 6:13:24 PM Ref Phone: ( ) -

**B6**

### Sample Profile

Patient ID: **B6**  
 Patient Name:  
 Analyzed: **B6** 07:48:20 PM  
 Analyzer ID: **B6**  
 Sample Type: Venous  
 Panel: Critical Care  
 Operator: 123456  
 Releaser: auto

**B6**  
 RA... Canine  
 B6 07:44 PM  
 NOVH RECHECK PANEL-ICU  
 Lithium Heparin

RequiredFields

Optional Fields

Measured

Test	Value	Units	Reference Range	Flags
pH			-	
pCO2		mmHg	-	
pO2		mmHg	-	
SO2%			-	
Hct		%	-	
Hb		g/dL	-	
Na+		mmol/L	-	
K+	<b>B6</b>	mmol/L	-	
Cl-		mmol/L	-	
Ca++		mmol/L	-	
Mg++		mmol/L	-	
Glu		mg/dL	-	
Lac		mmol/L	-	
BUN		mg/dL	-	
Creat		mg/dL	-	
TCO2		mmol/L	-	

Calculated

Test	Value	Units	Reference Range	Flags
nCa		mmol/L	-	
nMg		mmol/L	-	
Gap		mmol/L	-	
Ca++/Mg++		mol/mol	-	
BUN/Creat		mg/mg	-	
BE-ecf		mmol/L	-	
BE-b		mmol/L	-	
SBC	<b>B6</b>	mmol/L	-	
HCO3-		mmol/L	-	
P50		mmHg	-	
O2Cap		mL/dL	-	
O2Ct		mL/dL	-	
A		mmHg	-	
Osm		mOsm/kg	-	

49/7



Client:  
 Veterinarian: **B6**  
 Patient ID:  
 Visit ID:

Patient: **B6**  
 Species: Canine  
 Breed: Great Dane  
 Sex: Male (Neutered)  
 Age: **B6** years Old

**Lab Results Report**

Chemistry 21 (Cobas)		<b>B6</b>	4:56:20 PM	Accession ID: <b>B6</b>
Test	Results	Reference Range	Units	
GLUCOSE	<b>B6</b>	67 - 135	mg/dL	
UREA		8 - 30	mg/dL	
CREATININE		0.6 - 2	mg/dL	
PHOSPHORUS		2.6 - 7.2	mg/dL	
CALCIUM2		9.4 - 11.3	mg/dL	
T. PROTEIN		5.5 - 7.8	g/dL	
ALBUMIN		2.8 - 4	g/dL	
GLOBULINS		2.3 - 4.2	g/dL	
A/G RATIO		0.7 - 1.6		
SODIUM		140 - 150	mEq/L	
CHLORIDE		106 - 116	mEq/L	
POTASSIUM		3.7 - 5.4	mEq/L	
NA/K		29 - 40		
T BILIRUBIN		0.1 - 0.3	mg/dL	
D.BILIRUBIN		0 - 0.1	mg/dL	
I BILIRUBIN		0 - 0.2	mg/dL	
ALK PHOS		12 - 127	U/L	
ALT		14 - 86	U/L	
AST		9 - 54	U/L	
CHOLESTEROL		82 - 355	mg/dL	
OSMOLALITY (CALCULATED)	291 - 315	mmol/L		

Patient History Report: B6 B6

Clinic:  
**B6**

Patient: **B6**  
ID: **B6**  
Tag:  
Species: Canine, Great Dane  
Sex: male/neutered  
Age: 4 yrs, DOB: **B6**  
Weight: 67.2 Kg  
Color: Merle  
Last visit: **B6**  
Referred By:

**B6**

Medical Record Entries:  
B6 4:18 PM

Examination Recheck (Brief) - PATIENT WAS SEEN IN: **B6**

PRESENTING COMPLAINT: Tachycardia

HISTORY:  
B6 4y MI Great Dane, presented as a transfer for evaluation of tachycardia. For the past week, B6 has been intermittently coughing/vomiting clear liquid that occasionally contains kibble. MO has been intermittently feeding him kibble by dropping it over him while he's in a kennel and thought these episodes were secondary to him breathing in kibble occasionally. Today, B6 was much more lethargic than usual and was having difficulty getting up and down stairs. He was brought to an rDVM, where an irregular, fast heart rhythm was auscultated and he was transferred to B6 for continued evaluation.  
B6 has a history of tail B6 MO reports no other health issues, no current medications.  
B6 is fed a grain-free diet (Halo).

SUBJECTIVE:  
QAR, anxious, clinically euhydrated

**B6**

H/L: Irregular heart rhythm, intermittent dropped pulses; harsh BV sounds bilaterally; normal resp effort/panting

**B6**



DIAGNOSTICS COMPLETED:

ECG: tachycardia, concern for absent/buried P waves, irregular R-R interval  
TFAST: Pleural fluid, minimal left ventricular contractility, enlarged left atrium  
AFAST: Peritoneal fluid

ASSESSMENT:

Concern for DCM +/- a-fib  
Peritoncal and pleural effusion

CLIENT COMMUNICATION:

Informed owner of concern for DCM. Strongly recommend a cardiology consultation. Offered treatment here, but ultimately will need follow up with cardiology. Discussed risk of sudden cardiac arrest. We've been seeing an association between grain-free diets and DCM, so may discuss submitting blood for a taurine level. If taurine deficient, may be able to reverse illness. There is a high likelihood that this is genetic, which will require lifetime treatment with medications. MO elected to transfer to Tufts for further workup.

FINANCIAL COMMUNICATION:

[B6]

rDVM COMMUNICATION (minimum of every 72hrs or after major event):

Initial rDVM or most recent contact: [B6]

PLAN:

[B6]

DISCHARGE PLAN:

Transfer to Tufts [B6] IVC in place

Attending Clinician [B6] DVM [B6] (DVM)

19280

**Sample Submission Form**

Amino Acid Laboratory  
 University of California, Davis  
 1020 Vet Med 3B  
 1089 Veterinary Medicine Drive  
 Davis, CA 95616  
 Tel: (530)752-5058, Fax: (530)752-4698

UC CUSTOMERS ONLY:  
 Non-federal funds ID/Account Number  
 to bill: \_\_\_\_\_

<http://www.vetmed.ucdavis.edu/vmb/aal/aal.html>

Vet/Tech Contact:           B6            
 Company Name: Tufts Cummings School of Vet Med - Clinical Pathology Laboratory  
 Address: 200 Westboro Road  
           North Grafton, MA 01536  
 Email: clinpath@tufts.edu  
 Tel: 508-887-4669 Fax: 508-839-7936

Billing Contact:           B6           TAX ID: \_\_\_\_\_  
 Email:           B6           Tel:           B6          

Patient Name:           B6            
 Species: Canine  
 Owner's Name:           B6          

Sample Type:  Plasma  Whole Blood  Urine  Food  Other: \_\_\_\_\_  
 Test Items:  Taurine  Complete Amino Acid  Other: \_\_\_\_\_

Taurine Results (nmol/ml)  
 Plasma: \_\_\_\_\_ Whole Blood:           B6           Urine: \_\_\_\_\_ Food: \_\_\_\_\_

**Reference Ranges (nmol/ml)**

	Plasma		Whole Blood	
	Normal Range	No Known Risk for Taurine Deficiency	Normal Range	No Known Risk for Taurine Deficiency
Cat	80-120	>40	300-600	>200
Dog	100-120	>40	200-350	>150

**B6**  
 B6 pat. Race  
 B6 11:16 AM  
 SHIP w ICE PACKS, TAURINE  
 (WHOLE BLOOD)  
 Lithium Heparin

---

**From:** Peloquin, Sarah </o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=8607f880df2b494aa639e6d9a3874132-Sarah.Peloq>  
**To:** [REDACTED] B6  
**Sent:** 8/27/2018 1:39:38 PM  
**Subject:** 800.267 FDA Case Investigation for [REDACTED] B6 (EON-358522)

Good morning [REDACTED] B6

I have received medical records from Dr. Lisa Freeman for [REDACTED] B6 case. I'm so, so sorry for your loss.

Did [REDACTED] B6 see a primary veterinarian prior to his diagnosis? If so, please ask them to email (preferred) or fax (301-210-4685) a copy of [REDACTED] B6 *entire medical history*.

After I receive full records, I will review them in their entirety and may request a phone interview with you.

Please let me know if you have any questions.

Thanks,

Dr. Peloquin

**Sarah K. Peloquin, DVM**  
*Veterinary Medical Officer*

U.S. Food & Drug Administration  
Center for Veterinary Medicine  
Office of Research  
tel: 240-402-1218  
fax: 301-210-4685  
e-mail: sarah.peloquin@fda.hhs.gov



---

**From:** Rotstein, David </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS /CN=0A3B17EBFCF14A6CB8E94F322906BADD-DROTSTEI>  
**To:** Palmer, Lee Anne; Carey, Lauren; Queen, Jackie L; Ceric, Olgica; Jones, Jennifer L; Nemser, Sarah; Glover, Mark  
**Sent:** 7/13/2018 1:13:48 PM  
**Subject:** Fwd: Earthborn Holistic grain free: [B6] - EON-359060  
**Attachments:** 2051931-report.pdf

---

**From:** PFR Event <pfreventcreation@fda.hhs.gov>  
**Date:** July 12, 2018 at 8:20:24 PM EDT  
**To:** Cleary, Michael \* <Michael.Cleary@fda.hhs.gov>, HQ Pet Food Report Notification <HQPetFoodReportNotification@fda.hhs.gov>, [B6] [B6]  
**Subject:** Earthborn Holistic grain free: Patricia Engler - EON-359060

A PFR Report has been received and PFR Event [EON-359060] has been created in the EON System.

A "PDF" report by name "2051931-report.pdf" is attached to this email notification for your reference.

Below is the summary of the report:

**EON Key:** EON-359060

**ICSR #:** 2051931

**EON Title:** PFR Event created for Earthborn Holistic grain free bison lamb pacific; 2051931

<b>AE Date</b>	[B6]	<b>Number Fed/Exposed</b>	5
<b>Best By Date</b>		<b>Number Reacted</b>	4
<b>Animal Species</b>	Dog	<b>Outcome to Date</b>	Died Euthanized
<b>Breed</b>	Setter - Gordon		
<b>Age</b>	[B6] Years		
<b>District Involved</b>	PFR-Denver DO		

**Product information**

**Individual Case Safety Report Number:** 2051931

**Product Group:** Pet Food

**Product Name:** Earthborn Holistic grain free, bison, lamb, pacific

**Description:** B6 was diagnosed with Taurine Deficit Dilated Cardiomyopathy after attempts to save in him in the ER and hospital stay of 4 days he went into he went into congestive heart failure and was euthanized. He exhibited symptoms of Taurine deficit however was treated for individual symptoms until he collapsed and he had an echo cardiogram which showed the DCM. His mother and sister started to show Taurine deficit symptoms at the same time. Their dog food was switched immediately and placed on Taurine and l carnitine supplements. They all had been on grain free food their whole lives. In hindsight and knowing now what I've learned all too late for B6 I believe two of my other dogs also suffered from this but it wasn't known at the time the possible cause.

**Submission Type:** Initial

**Report Type:** Both

**Outcome of reaction/event at the time of last observation:** Died Euthanized

**Number of Animals Treated With Product:** 5

**Number of Animals Reacted With Product:** 4

Product Name	Lot Number or ID	Best By Date
Earthborn Holistic grain free, bison, lamb, pacific		

**Sender information**

**B6**

USA

To view this PFR Event, please click the link below:

<https://eon.fda.gov/eon//browse/EON-359060>

To view the PFR Event Report, please click the link below:

<https://eon.fda.gov/eon//EventCustomDetailsAction!viewReport.jspx?decorator=none&e=0&issueType=12&issueId=375684>

-----  
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**Report Details - EON-359060**

ICSR:	2051931
Type Of Submission:	Initial
Report Version:	FPSR.FDA.PETF.V.V1
Type Of Report:	Both
Reporting Type:	Voluntary
Report Submission Date:	2018-07-12 20:13:10 EDT
Reporter is the Animal Owner:	Yes

<b>Reported Problem:</b>	<b>Problem Description:</b>	<b>B6</b> was diagnosed with Taurine Deficit Dilated Cardiomyopathy after attempts to save in him in the ER and hospital stay of 4 days he went into he went into congestive heart failure and was euthanized. He exhibited symptoms of Taurine deficit however was treated for individual symptoms until he collapsed and he had an echo cardiogram which showed the DCM. His mother and sister started to show Taurine deficit symptoms at the same time. Their dog food was switched immediately and placed on Taurine and L carnitine supplements. They all had been on grain free food their whole lives. In hindsight and knowing now what I've learned all too late for <b>B6</b> I believe two of my other dogs also suffered from this but it wasn't known at the time the possible cause.
	<b>Date Problem Started:</b>	<b>B6</b>
	<b>Concurrent Medical Problem:</b>	No
	<b>Outcome to Date:</b>	Died Euthanized
	<b>Date of Death:</b>	<b>B6</b>

<b>Product Information:</b>	<b>Product Name:</b>	Earthborn Holistic grain free, bison, lamb, pacific		
	<b>Product Type:</b>	Pet Food		
	<b>Lot Number:</b>			
	<b>Package Type:</b>	BAG		
	<b>Package Size:</b>	28 Pound		
	<b>Purchase Date:</b>	02/08/2018		
	<b>Number Purchased:</b>	3		
	<b>Possess Unopened Product:</b>	No		
	<b>Possess Opened Product:</b>	No		
	<b>Storage Conditions:</b>	Until opened stored in metal container after opening open product stored in cupboard in orig pkg.		
	<b>Product Use Information:</b>	<b>Description:</b>	2 times a day per recommended feeding instructions for weight	
		<b>First Exposure Date:</b>	02/08/2018	
		<b>Last Exposure Date:</b>	<b>B6</b>	
		<b>Time Interval between Product Use and Adverse Event:</b>	6 Years	
		<b>Product Use Stopped After the Onset of the Adverse Event:</b>	Yes	
<b>Adverse Event Abate After Product Stop:</b>		Not Applicable		
<b>Product Use Started Again:</b>		No		
<b>Perceived</b>	Definitely related			

		Relatedness to Adverse Event:	
		Other Foods or Products Given to the Animal During This Time Period:	Yes
	Manufacturer /Distributor Information:		
	Purchase Location Information:	Name:	B6
		Address:	B6 United States
Animal Information:	Name:	B6	
	Type Of Species:	Dog	
	Type Of Breed:	Setter - Gordon	
	Gender:	Male	
	Reproductive Status:	Intact	
	Weight:	80 Pound	
	Age:	B6 Years	
	Assessment of Prior Health:	Excellent	
	Number of Animals Given the Product:	5	
	Number of Animals Reacted:	4	
	Owner Information:		
	Healthcare Professional Information:	Practice Name:	B6
		Contact: Name:	B6
		Phone:	B6
		Email:	
		Address:	B6 United States
		Type of Veterinarian:	Referred veterinarian
		Date First Seen:	B6
		Permission to Release Records to FDA:	Yes
Sender Information:	Name:	B6	
	Address:	B6 United States	
	Contact: Phone:	B6	
	Email:		
	Reporter Wants to Remain Anonymous:	No	
	Permission To Contact	Yes	



	<b>Sender:</b>	
	<b>Preferred Method Of Contact:</b>	Email
	<b>Reported to Other Parties:</b>	Other Store/Place of Purchase

**Additional Documents:**

---

**From:** [B6]  
**To:** Reimschuessel, Renate  
**Sent:** 7/17/2018 5:11:31 PM  
**Subject:** [B6] records  
**Attachments:** [B6] 20180717 111003.pdf

Records for [B6] from [B6]



**B6**

**B6**

**B6**

03/24/2016

SOAP

Wellness exam

Provider:

**B6**

**B6**

**O: B6 Physical Examination**

**BCS:** 5/9 ideal, ribs palpated without excess fat, waist observed behind ribs when viewed from above, abdominal tuck when viewed from the side. **DG:** 2/4 **B6**

**B6**

**PLN:** Normal **M/S:** Normal **GI/Abd:** Normal **H/L:** No murmurs or arrhythmias, femoral pulse strong and synchronous, breathing eupneic with normal bronchovesicular sounds **Neuro:** Normal **Rectal:** not performed

**A:** in good health

**P:** nothing needed at this time.

**Note**

Rx **B6** and cough tabs

Provider: **B6**

O CI stating **B6** has started coughing now and **B6** was just seen for kennel cough.

Ok per DR CA to RX **B6** sig 1 cap BID and cough tabs #40qty

sig 1 tab every 6-8 hours as needed for coughing - **B6**



**B6**

**B6**

**B6**

**B6**

**B6**

# Anesthesia Log

**B6**

Client:  
Patient

**B6**

Procedure(s):  
Abdominal Exploratory Surgery

Medical Alert Info:

Doctor:

**B6**

D.V.M

Laser Level

Anesthesia Tech

**B6**

Anesthesia:

**B6**

Recovery:

Time							
HR							
RR							
MM							
CRT							
Ambulatory							
Alert							
Temperature							
OK TGH?							
Initials							

ER Drugs:	Dose	mg	ml	Route	Time
Atropine					
Epinephrine					
Lidocaine					
Dopamine					

Comments:

**B6**

**B6**

**B6**

**B6**

**Surgery** — Abdominal Exploratory Surgery

**Provider:** **B6**

**Pre-Op Classification: Minimal Risk**

**B6**

**Mortality Information:**

**Post-Surgery Notes:** Uneventful recovery. Will start with water in 12 hours and food in 24 hours post surgery. Gave **B6** IM post surgery. Continue fluids until discharge. See treatment plan and hospital notes for specifics.

**B6**



**B6**

**B6**

**B6**

**B6**

**B6**

**B6**

**B6**

**B6**

**O:** **B6** **Physical Examination**

**B6**

stretching out, looking at belly **H/L:** No murmurs or arrhythmias, femoral pulse strong and synchronous, breathing eupneic with normal bronchovesicular sounds **Neuro:** Normal **Rectal:** not performed

**B6**

**B6**

**B6**

**B6**

**B6**

**B6**

**B6**

**B6**

**O** **B6** **Physical Examination**

**B6**

Normal **H/L**: No murmurs or arrhythmias, femoral pulse strong and synchronous, breathing eupneic with normal bronchovesicular sounds **Neuro**: Normal **Rectal**: not performed

**BCS**: 5/9 ideal, ribs palpated without excess fat, waist observed

**B6**

**B6**

**B6**

behind ribs when viewed from above, abdominal tuck when viewed from the side.

**B6**

**B6**

**B6**

**B6**

**B6**

**O** **B6** **Physical Examination**

**B6**

Normal **GI/Abd:** Normal **H/L:** No murmurs or arrhythmias, femoral pulse strong and synchronous, breathing eupneic with normal bronchovesicular sounds **Neuro:** Normal **Rectal:** not performed

**BCS:** 5/9 ideal, ribs palpated without excess fat, waist observed behind ribs when viewed from above, abdominal tuck when viewed from the side.

**DG:** **B6**

**B6**

**Hydration status:** Normal, no MM dryness or skin tenting

**A:** appears healthy

**P:** RV sq RH  
DHPP sq RS  
Bord sq LS  
cc: vax rxn

10/02/2014

Service

**B6**

QTY: 1.00

Provider

**B6**

**B6**

**B6**

**B6**

**B6**

**B6**

**B6**

**B6**

**B6**



# Anesthesia Log Continued

B6

Client: Patient **B6**

**Monitoring:**

B6

**Monitoring:**

Time								
HR								
RR								
MM								
CRT								
BP								
SpO2								
Iso Rate								
Sevo Rate								
O2 Flow Rate								

**Monitoring:**

Time								
HR								
RR								
MM								
CRT								
BP								
SpO2								
Iso Rate								
Sevo Rate								
O2 Flow Rate								

**Recovery:**

Time								
HR								
RR								
MM								
CRT								
Ambulatory								
Alert								
Temperature								
OK TGH?								
Initials								

**Comments:**

**B6**

Anesthesia Log

**B6**

Client: **B6**  
Patient: **B6**  
DOB: **B6**  
Wt: 76 lbs.

Procedure(s):  
GI Foreign body

Medical Alert Info:

Doctor: **B6** D.V.M

Laser Level

Anesthesia Tech: **B6**

Anesthesia:

**B6**

Recovery:

Time							
HR							
RR							
MM							
CRT							
Ambulatory							
Alert							
Temperature							
OK TGH?							
Initials							

ER Drugs:	Dose	mg	ml	Route	Time
Atropine					
Epinephrine					
Lidocaine					
Dopamine					

Comments:

**B6**

**B6**

**B6**

**B6**

Surgery

GI Foreign body

Provider:

**B6**

**B6**

**B6**

**B6**

**B6**

**B6**

**B6**

**B6**

**B6**

**B6**

**C B6 Physical Examination**

**B6**

**PLN:** Normal **M/S:** Normal **GI/Abd:** Normal **H/L:** No murmurs or arrhythmias, femoral pulse strong and synchronous, breathing eupneic with normal bronchovesicular sounds **Neuro:** Normal **Rectal:** not performed

**A:** In good health

**P:** 6mo bordetella

**B6**

**B6**

**B6**

**B6**

B6

DOB: B6

B6

Sex: M

Species: Canine Breed: Gordon Setter Weight: 76 lbs.

ID: H

Urinalysis (in-house)

**B6**

**B6**

**B6**

**B6**

**B6**



**B6**

**B6**

**B6**

**B6**

**B6**

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**B6**

**B6**

# Anesthesia Log

**B6**

Client: **B6**  
Patient: **B6**  
DOB: **B6**  
Wt: 76 lbs.

Procedure(s):  
GI Exploratory

Medical Alert Info:

Doctor: **B6** D.V.M

Laser Level

Anesthesia Tech: **B6**

## Anesthesia:

**B6**

## Recovery:

Time							
HR							
RR							
MM							
CRT							
Ambulatory							
Alert							
Temperature							
OK TGH?							
Initials							

ER Drugs:	Dose	mg	ml	Route	Time
Atropine					
Epinephrine					
Lidocaine					
Dopamine					

## Comments:

**B6** **B6**



**B6**

**B6**

**B6**

**B6**

Surgery

GI Exploratory Surgery

Provider:

**B6**

**B6**

**B6**

**B6**

**B6**

**Mortality Information:**

**B6**

**B6**

**B6**

**B6**

**B6**

**B6**

**B6**

**B6**

**B6**

QTY: 1.00

Provider: **B6**

Information for **B6**  
Page 34 of 31

**B6**

**B6**

**B6**

**B6**

**B6**

# Anesthesia Log

**B6**

Client: **B6**  
Patient: **B6**  
DOB: **B6**  
Wt: 76 lbs.

Procedure(s):  
Gastro enterotomy for GIFB (rock)

Medical Alert Info:

Doctor: **B6** D.V.M

Laser Level

Anesthesia Tech: **B6**

Anesthesia:

**B6**

### Recovery:

Time	9:30p						
HR	150						
RR	42						
MM	lt pk						
CRT	< 2 sec						
Ambulatory	No						
Alert	No						
Temperature	100.6						
OK TGH?							
Initials	saj						

ER Drugs:	Dose	mg	ml	Route	Time
Atropine					
Epinephrine					
Lidocaine					
Dopamine					

### Comments:

**B6**

**B6**

**B6**

**B6**

**B6**

**Surgery** GastroIntestinal Exploratory  
Pre-Op Classification: Minimal Risk

**Provider:** **B6**

**B6**

**B6**

**B6**

**B6**

**B6**



B6

B6

ID: H

### I-Stat Results

DOB: B6

Sex: M

Species: Canine

Breed: Gordon Setter

Weight: 76 lbs.

B6

Normal Values:

**B6**

**B6**

**B6**

**B6**

**B6**

SOAP

**B6**

Provider:

**B6**

**B6**

**B6**

**B6**

**B6**

**B6**

**B6**

**B6**

**B6**

**B6**

**B6**

**B6**

**B6**

**B6**

**B6**

**B6**

**B6**

**B6**

SOAP

Exam: Dog Fight

Provider:

**B6**

**B6**

**B6**

**B6**

**B6**

**B6**

**B6**

**B6**

**B6**

**B6**

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**B6**

**B6**

**B6**

**B6**

**B6**

**B6**

**B6**

**B6**

**B6**

B6

DOB: B6

B6

ID: H

Sex: M

Species: Canine

Breed: Gordon Setter

Weight: 76 lbs.

# Fecal Analysis

Date Sample Collected: 10/07/2011

Method of Flotation

Centrifugation

Direct

Abnormalities

**B6**

Problem: Diarrhea

How long has it been a problem? Since Monday

Straining?  Yes  No

Frequency

Blood?  Yes  No

Mucus?  Yes  No

If this is a fecal test, the consistency of the fecal matter:  1. Watery  2. Cow Pie  3. Soft Ice Cream

Brand of Food: Earthborn Holistic

Change in food or dietary indiscretion: "Got in the trash etc."

Eating and Drinking normal?  Yes  No

Activity normal?  Yes  No

Vomiting?  Yes  No

Do you already have an appointment?  Yes  No

On Any Medication: None

Dose:

**B6**

**B6**

**B6**

**B6**

**B6**

**B6**

**B6**

For any questions on **B6** health, please call **B6**

---

**From:** [REDACTED] B6  
**To:** Jones, Jennifer L  
**Sent:** 7/30/2018 4:11:19 PM  
**Subject:** RE: 800.267-FDA Case Investigation for [REDACTED] B6 (EON-359060)

Dr. Jones,

Thank you I'll contact [REDACTED] B6 again. [REDACTED] B6 was initially seen there before going to the [REDACTED] B6 that night.

I am assuming that you have [REDACTED] B6 records and the echo done by [REDACTED] B6 [REDACTED] B6. If it is only the ER report then you'll need the Internal Med. report. Please let me know if those are specifically missing.

[REDACTED] B6

I

[REDACTED] B6

---

**From:** Jones, Jennifer L [mailto:Jennifer.Jones@fda.hhs.gov]  
**Sent:** Monday, July 30, 2018 7:25 AM  
**To:** [REDACTED] B6  
**Subject:** RE: 800.267-FDA Case Investigation for [REDACTED] B6 (EON-359060)

Thank you, [REDACTED] B6 I received records from [REDACTED] B6 and [REDACTED] B6 only.

Jennifer Jones, DVM  
Veterinary Medical Officer  
Tel: 240-402-5421



**From:** [REDACTED] B6  
**Sent:** Monday, July 30, 2018 8:30 AM  
**To:** Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov>  
**Subject:** RE: 800.267-FDA Case Investigation for [REDACTED] B6 (EON-359060)

Dr. Jones,

I am checking in to see if you have received all of [REDACTED] B6 records. The clinics would be [REDACTED] B6 [REDACTED] B6 and [REDACTED] B6

[REDACTED] B6

B6

---

**From:** Reimschuessel, Renate [mailto:Renate.Reimschuessel@fda.hhs.gov]  
**Sent:** Tuesday, July 17, 2018 12:00 PM  
**To:** B6  
**Cc:** Jones, Jennifer L  
**Subject:** RE: 800.267-FDA Case Investigation for B6 (EON-359060)

Dear B6

Thank you for your prompt response.

Dr. Jones will be handling your case and will contact you regarding the interview. She normally reviews the medical records prior to conducting the interview.

Again, thank you

Best Regards

Dr. Reimschuessel

---

**From:** B6 [mailto:B6]  
**Sent:** Tuesday, July 17, 2018 1:07 PM  
**To:** Reimschuessel, Renate <Renate.Reimschuessel@fda.hhs.gov>  
**Subject:** RE: 800.267-FDA Case Investigation for B6 (EON-359060)

Dr. Reimschuessel,

I am available for phone interviews at 7:30 a.m. B6 time( 8:30 ET) 7/18, 7/20, 7/23( pretty much most days). My hours are pretty flexible as I am retired so I can usually accommodate other possible options that fit your schedule.

I have cc'd you on the medical record requests that I already sent this morning.

If you would be kind enough to send questions you will be asking me in advance, then I can be prepared with answers if that is allowed.

Sincerely,

B6

B6

---

**From:** Reimschuessel, Renate [mailto:Renate.Reimschuessel@fda.hhs.gov]  
**Sent:** Tuesday, July 17, 2018 9:56 AM  
**To:** B6  
**Subject:** 800.267-FDA Case Investigation for B6 (EON-359060)

Dear B6

Thank you for submitting your consumer complaint to FDA. I'm sorry to hear about B6 illness.

As part of our investigation, we'd like to request:

- **Full Medical Records**
  - Please contact your veterinarian and ask them to email (preferred) or

fax (301-210-4685) a copy of **B6** entire medical history (not just this event).

- **Phone interview** about **B6** diet and environmental exposures
  - Please email 3 dates with times when you are available to speak for 30 minutes. My normal office hours are 6:30am to 3:30pm eastern.
  - The interview will help us better understand the details in your case.

I attached a copy of our Vet-LIRN network procedures. The procedures describe how Vet-LIRN operates and how owners help with our case investigations.

**Please respond to this email so that we can initiate our investigation.**

Thank you kindly,  
Dr. Reimschuessel

Renate Reimschuessel V.M.D. Ph.D.

Director: Vet-LIRN

*(Veterinary Laboratory Investigation and Response Network)*

Center For Veterinary Medicine, FDA,

8401 Muirkirk Road, Laurel, MD 20708

**Phone 1- 240-402-5404** Fax 301-210-4685

**EMAIL :** [renate.reimschuessel@fda.hhs.gov](mailto:renate.reimschuessel@fda.hhs.gov)

Vet-LIRN

<http://www.fda.gov/AnimalVeterinary/ScienceResearch/ucm247334.htm>

Phish-Pharm

<http://www.fda.gov/AnimalVeterinary/ScienceResearch/ToolsResources/Phish-Pharm/default.htm>

Aquaculture

<http://www.fda.gov/AnimalVeterinary/ScienceResearch/ResearchAreas/ucm130892.htm>



---

**From:** [REDACTED] **B6**  
**To:** Reimschuessel, Renate  
**CC:** Jones, Jennifer L  
**Sent:** 8/6/2018 4:27:53 PM  
**Subject:** Records for [REDACTED] **B6**  
**Attachments:** [REDACTED] **B6** Rads. [REDACTED] **B6**.pdf; [REDACTED] **B6**.html; [REDACTED] **B6**.2.html; [REDACTED] **B6**.html

Please find attached the records for [REDACTED] **B6**. Let us know if you need anything else.

Thanks!

[REDACTED] **B6**

**B6**

Date: **B6**

Patient: **B6**

**Findings:** Four abdominal radiographs are available.

**B6**

Please feel free to email or call with any questions or concerns.  
Thank you,

**B6**

**B6** DVM, Diplomate ACVR

**B6**

Patient Chart

Printed: 08-06-18 at 10:23a

CLIENT INFORMATION

Name  
Address **B6**  
Phone **B6** Balance 0.00

PATIENT INFORMATION

Name **B6** Species Canine  
Sex Male Breed Gordon Setter  
Deceased **B6** Age **B6**  
ID **B6** Rabies  
Color Black and Tan Weight 77.40 lbs  
Reminded (none) Codes D

**B6**

**B6** weight history (in lbs)  
**B6** 77.40

MEDICAL HISTORY

Date	By	Code	Description	Qty (Variance)	Photo
<b>B6</b>	<b>B6</b>		CLIECOM Client Communication		
<b>B6</b>	<b>B6</b>		at 8:29a: O called to let us know that P past away this weekend.		
<b>B6</b>	<b>B6</b>		CLIECOM Client Communication		
<b>B6</b>	<b>B6</b>		at 5:36p: printed scvim report, attached file, forwarded to <b>B6</b>		
<b>B6</b>	<b>B6</b>		<b>B6</b>	-4	
<b>B6</b>	<b>B6</b>		CLIECOM Client Communication		
<b>B6</b>	<b>B6</b>		at 9:12a: Pc from O. Update: Has not eaten. Some improvement but other medical issues are cropping up ie joint discomfort, high wbc and bacteria counts. Note to <b>B6</b>		
<b>B6</b>	<b>B6</b>		CLIECOM Client Communication		
<b>B6</b>	<b>B6</b>		at 8:55a: P is currently at <b>B6</b> no need to follow up		
<b>B6</b>	<b>B6</b>		at 3:58p: P diagnosed w/ BPH at <b>B6</b> <b>B6</b> rec neuter while on meds. rec recheck ultrasound in 6 months to monitor nodules on spleen, scvim called O while here, P has heart disease, given 6m-1y left, will cancel neuter		

Date	By	Code	Description	Qty (Variance)	Photo
[B6]	[B6]	GI4444	RC GI Low Fat Canine 13.6oz can	6	
			CHARGES CHARGES DONE [B6] (per tablet)	4	
			Give 1 tablet by mouth every 24 hours.		
			Give 1 & 1/2 tablets by mouth every 12 hours for 5 days. Please give with food.	15	
			[B6]		
			CPL111 In Hospital Pancreatic Lipase Snap	3.50	
			IVLSO Requisition [B6]		

Test	Result	Flag	Normal Range		Measure
			Low	High	
ProCyte_Dxi [B6]	11:06a				
RBC	[B6]		5.65	8.87	M/μL
HCT	[B6]		37.3	61.7	%
HGB	[B6]		13.1	20.5	g/dL
MCV	[B6]		61.6	73.5	fL
MCH	[B6]		21.2	25.9	pg
MCHC	[B6]		32.0	37.9	g/dL
RDW	[B6]		13.6	21.7	%
%RETIC	[B6]				%
RETIC	[B6]		10.0	110.0	K/μL
WBC	[B6]		5.05	16.76	K/μL
%NEU	[B6]				%
%LYM	[B6]				%
%MONO	[B6]				%
%EOS	[B6]				%
%BASO	[B6]				%
NEU	[B6]		2.95	11.64	K/μL
BAND	[B6]				
LYM	[B6]		1.05	5.10	K/μL
MCNO	[B6]		0.16	1.12	K/μL
EOS	[B6]		0.06	1.23	K/μL
BASO	[B6]		0.00	0.10	K/μL
PLT	[B6]		148	484	K/μL
MPV	[B6]		8.7	13.2	fL
PDW	[B6]		9.1	19.4	fL
PCT	[B6]		0.14	0.46	%
Test	Result	Flag	Normal Range		Measure
Catalyst_One [B6]	11:14a				
GLU	[B6]		74	143	mg/dL
CREA	[B6]		0.5	1.8	mg/dL
BUN	[B6]		7	27	mg/dL
BUN/CREA	[B6]				
PHOS	[B6]		2.5	6.8	mg/dL
CA	[B6]		7.9	12.0	mg/dL
TP	[B6]		5.2	8.2	g/dL
ALB	[B6]		2.3	4.0	g/dL
GLOB	[B6]		2.5	4.5	g/dL
ALB/GLOB	[B6]				
ALT	[B6]		10	125	U/L
ALKP	[B6]		23	212	U/L

Date	By	Code	Description	Qty (Variance)	Photo
	[redacted]			0 11	U/L
	[redacted]			0.0 0.9	mg/dL
	[redacted]			110 320	mg/dL
	[redacted]			500 1500	U/L
	[redacted]			200 1800	U/L
	[redacted]			144 160	mmol/L
	[redacted]			3.5 5.8	mmol/L
	[redacted]			109 122	mmol/L
	[redacted]				mmol/kg
	[redacted]		Temp IVLS:20180314_110249_383.pdf		
	[redacted]	RADCON	Radiology Consult with review		
	[redacted]	414	Technician Time/min		
	[redacted]	330	Radiographs - 2 views with Interpretation	5	
	[redacted]	5117	In Hospital: [redacted] CBC/Chem17/Lytes		
	[redacted]	0002	Medical Waste and Supply Fee		
	[redacted]	SICKEXAM	Medical Condition Exam		

Age: 6y Weight: 77.40 Temp: 103.60 Pulse: 140.00

**SUBJECTIVE SECTION**

Vomited the meal he ate this morning...O. has been monitoring temp at home, and found it varying from 103 to 105.  
 Will not eat now, but did drink water.

**OBJECTIVE SECTION**

T- 103.8  
 Mildly painful abdomen  
 Lungs, heart, wnl  
 mm.pink, CRT > 2.0  
 Blood work, wnl  
 X-ray, gas fill I. intestine. Took one X-ray at 10 am, noting large gas-filled colon...bladder appeared distended. Took outside for walk, and urinated, taking a long time and urinating in a pulsating manner. Rectal palpation...prostate did not feel enlarged.  
 X-rays taken at 3 PM, showing normal food material in s. intestine, and still showing gas in I. intestine. I would expect bladder to be small, but still showing possible bladder enlargement, mass?

**ASSESSMENT SECTION**

NOTES

[redacted]

**PLAN SECTION**

NOTES

Send X-rays to [redacted]  
 [redacted]  
 2331 Emergency Fee: During Hours

**From:** Jones, Jennifer L </o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=0f6ca12eaa9348959a4cbb1e829af244-Jennifer.Jo>  
**To:** Rotstein, David; Palmer, Lee Anne; Carey, Lauren; Queen, Jackie L; Glover, Mark  
**CC:** Ceric, Olgica; Nemser, Sarah; Peloquin, Sarah; 'Reimschuessel, Renate (Renate.Reimschuessel@fda.hhs.gov)'  
**Sent:** 8/7/2018 2:41:45 PM  
**Subject:** RE: 800.267-EON-359060- [B6] Earthborn Holistic grain free  
**Attachments:** EON-359060-owner interview-8.7.2018.pdf

Owner interview. No food left. NFA.

[B6] was fed this diet solely for 7 years.

Jennifer Jones, DVM  
Veterinary Medical Officer  
Tel: 240-402-5421



**From:** Jones, Jennifer L  
**Sent:** Monday, July 30, 2018 11:28 AM  
**To:** Rotstein, David <David.Rotstein@fda.hhs.gov>; Palmer, Lee Anne <LeeAnne.Palmer@fda.hhs.gov>; Carey, Lauren <Lauren.Carey@fda.hhs.gov>; Queen, Jackie L <Jackie.Queen@fda.hhs.gov>; Glover, Mark <Mark.Glover@fda.hhs.gov>  
**Cc:** Ceric, Olgica <Olgica.Ceric@fda.hhs.gov>; Nemser, Sarah <Sarah.Nemser@fda.hhs.gov>; Peloquin, Sarah <Sarah.Peloquin@fda.hhs.gov>; 'Reimschuessel, Renate (Renate.Reimschuessel@fda.hhs.gov)' <Renate.Reimschuessel@fda.hhs.gov>  
**Subject:** RE: 800.267-EON-359060- [B6] Earthborn Holistic grain free

History of different GF foods fed per MRx.-Acana, Nat Balance, etc. Looks like myocarditis in 1 of 2 dogs, possible familial DCM (grandmother died of syncope and cardiomegaly)  
Interview pending

[B6] 11 yr FS Gordon Setter-genetic grandmother of [B6] (below)

Presented [B6] 3 syncopal episodes (1/15, 1/21), on Incurin & Cranberry/Vit C supplement, recumbent, dyspnea, tachycardia, vomited, possible tremors/mm contractions

PE: pale/muddy mm, RR 44, obtunded, lipoma cranial L lateral abdomen

[B6]

[B6]

X-Rad: globoid heart silhouette, scalloped edge of lung lobe cranial and ventral, r/o pleural effusion, note says "discussed significance about pericardial effusion"

Euthanized

Prior MHx: [B6]

[B6]

[B6] 7 yr M Gordon Setter

Presented [B6] fever, stranguria, hematuria à lethargy, inappetance, vomiting, soft stool, pant à rDVM: 103F, tense abdomen

Abd Rads: gastroenteritis, Labs & cPL: wnl à T; [B6]

To specialist/ER [B6]

[B6]

Culture; FNA of prostate = BPH; Dog became lame w/ rapid femoral pulse and collapse after AUS à non pain med responsive

[B6] Echo: DCM; X-rad: enlarged cardiac silhouette; MAP 81

Tx: [B6]

**B6** Re-echo: poor heart function

**B6** Recheck-cough, dyspnea, hiding, mod lethargy, never travelled to South

PE: 70 rpm, diffuse crackles, RE 1/3

Rads: sev. Cardiomegaly, diffuse broncho-interstitial pattern

Euthanized

Prior MHx: ate Earthborn 9/2011, wildlife exposure (elk & deer through backyard, will catch voles on occ), travels for pet shows, several **B6** 9/2012 ate Acana; 2/2014 eating Earthborn food again;

Jennifer Jones, DVM  
Veterinary Medical Officer  
Tel: 240-402-5421



**From:** Rotstein, David

**Sent:** Friday, July 13, 2018 9:14 AM

**To:** Palmer, Lee Anne <LeeAnne.Palmer@fda.hhs.gov>; Carey, Lauren <Lauren.Carey@fda.hhs.gov>; Queen, Jackie L <Jackie.Queen@fda.hhs.gov>; Ceric, Olgica <Olgica.Ceric@fda.hhs.gov>; Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov>; Nemser, Sarah <Sarah.Nemser@fda.hhs.gov>; Glover, Mark <Mark.Glover@fda.hhs.gov>

**Subject:** Fwd: Earthborn Holistic grain free: **B6** - EON-359060

---

**From:** PFR Event <pfpreventcreation@fda.hhs.gov>

**Date:** July 12, 2018 at 8:20:24 PM EDT

**To:** Cleary, Michael \* <Michael.Cleary@fda.hhs.gov>, HQ Pet Food Report Notification

<HQPetFoodReportNotification@fda.hhs.gov>, **B6** **B6**

**Subject:** Earthborn Holistic grain free: Patricia Engler - EON-359060

A PFR Report has been received and PFR Event [EON-359060] has been created in the EON System.

A "PDF" report by name "2051931-report.pdf" is attached to this email notification for your reference.

Below is the summary of the report:

**EON Key:** EON-359060

**ICSR #:** 2051931

**EON Title:** PFR Event created for Earthborn Holistic grain free bison lamb pacific; 2051931

<b>AE Date</b>	<b>B6</b>	<b>Number Fed/Exposed</b>	5
<b>Best By Date</b>		<b>Number Reacted</b>	4
<b>Animal Species</b>	Dog	<b>Outcome to Date</b>	Died Euthanized
<b>Breed</b>	Setter - Gordon		

Age	B6 Years		
District Involved	PFR-Denver DO		

**Product information**

**Individual Case Safety Report Number:** 2051931

**Product Group:** Pet Food

**Product Name:** Earthborn Holistic grain free, bison, lamb, pacific

**Description:** B6 was diagnosed with Taurine Deficit Dilated Cardiomyopathy after attempts to save in him in the ER and hospital stay of 4 days he went into he went into congestive heart failure and was euthanized. He exhibited symptoms of Taurine deficit however was treated for individual symptoms until he collapsed and he had an echo cardiogram which showed the DCM. His mother and sister started to show Taurine deficit symptoms at the same time. Their dog food was switched immediately and placed on Taurine and l carnitine supplements. They all had been on grain free food their whole lives. In hindsight and knowing now what I've learned all too late for B6 I believe two of my other dogs also suffered from this but it wasn't known at the time the possible cause.

**Submission Type:** Initial

**Report Type:** Both

**Outcome of reaction/event at the time of last observation:** Died Euthanized

**Number of Animals Treated With Product:** 5

**Number of Animals Reacted With Product:** 4

Product Name	Lot Number or ID	Best By Date
Earthborn Holistic grain free, bison, lamb, pacific		

**Sender information**

B6

USA

22

To view this PFR Event, please click the link below:

<https://eon.fda.gov/eon//browse/EON-359060>

To view the PFR Event Report, please click the link below:

<https://eon.fda.gov/eon//EventCustomDetailsAction!viewReport.jspx?decorator=none&e=0&issueType=12&issueId=375684>



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Failure to adhere to the above provisions could result in removal from the approved distribution list. If you think you received this email in error, please send an email to [FDAREportableFoods@fda.hhs.gov](mailto:FDAREportableFoods@fda.hhs.gov) immediately.

**Follow-up Case Information Uniform Data Entry Form  
Vet-LIRN**

Date (mm/dd/yy)

EON/CC Number:

**PATIENT INFORMATION**

Pet Name

Dog  Cat

Breed

Age in years (if < 6 months, put 0.5)

Gender:  
 M  MN  F  FS

This form serves as a Uniform Data Entry Form to capture additional case specific information not clear from the Consumer Complaint or Medical Records in a standardized manner. Because each follow-up interview made with owners features questions tailored specifically to the case, each box of information contained in this Uniform Data Entry Form may not be completed.

**HISTORY-Additional Comments from Owner**

Owner's Description of What Happened:

Any Health Problems Prior to the Event (e.g. allergies, surgeries):

Sensitive GI tract (e.g. stomach upset when switching foods, eats a lot of grass)  Yes

Changes to the pet's diet prior to illness  Yes

Date Diet Change:

**CLINICAL INFORMATION--Additional Comments from Owner on What Happened**

Appetite  Increased  Decreased

Vomiting  Yes

Diarrhea  Yes

Duration of Diarrhea (days)

Blood in Feces  Fresh,Red  
 Coffee Ground  
 Black,Tarry

Water Consumption  Increased  Decreased

Urination  Increased  Decreased

Lethargy  Yes

Other:

**MEDICATIONS-Taken Prior to the Event and Mentioned by Owner**

List medications mentioned by owner (e.g. NSAIDs, steroids, heartworm/flea prevention, antibiotics, etc.)

List probiotics, vitamins, or supplements mentioned by owner:

**Follow-up Case Information Uniform Data Entry Form  
Vet-LIRN**

EON/CC Number: 359,060

Owner: **B6**

Pet's Name: **B6**

DIET-Any other foods the owner mentions were given to the animal during this period. (check all that apply)

Commercial Dry Product Use as Part of Diet:  Primary  Secondary  Occasional

List Product Label Name:

Earthborn Holistic-3 flavors-Bison, Fish, or Lamb-would rotate b/w 3 proteins **B6** got 2 cups BID, **B6** mom/Sister-got 3.5 cups total/day but fed BID, measuring cup **B6** was fed it-got 10 years;

Commercial Wet-Canned Product Use as Part of Diet:  Primary  Secondary  Occasional

List Product Label Name:

Commercial Wet-Pouch Product Use as Part of Diet:  Primary  Secondary  Occasional

List Product Label Name:

Commercial-Raw Product Use as Part of Diet:  Primary  Secondary  Occasional

List Product Label Name:

Homemade-Raw Product Use as Part of Diet:  Primary  Secondary  Occasional

Describe Product Type:

Homemade-Cooked Product Use as Part of Diet:  Primary  Secondary  Occasional

Describe Product Type:

Table Scraps/Human Food (as an occasional contribution to diet) Describe Product Type(s): strawberries, blueberries, pineapple, goats milk yogurt

Pet Treat Products Product Use as Part of Diet:  Primary  Secondary  Occasional

Commercial Product Label Name/Lot: Biscuit-Grain Free Cookies-Molasses, Peanut butter Date first fed

How Product Administered: only when go into crates/kennels, esst'lly SID Date last fed

Rawhides or Pig Ears Product Label Name/Lot: Date first fed

How Product Administered: Date last fed

Marrow Bones Product Label Name/Lot: Date first fed

How Product Administered: Date last fed

Chicken Jerky Product Label Name/Lot: Date first fed

How Product Administered: Date last fed

Duck Jerky Product Label Name/Lot: Date first fed

How Product Administered: Date last fed

Sweet Potato Jerky or Treats Product Label Name/Lot: Date first fed

How Product Administered: Date last fed

**Follow-up Case Information Uniform Data Entry Form  
Vet-LIRN**

EON/CC Number:

Owner:

Pet's Name:

**DIET-continued-Any other foods the owner mentions were given to the animal during this period. (check all that apply)**

Other Treats  
Product Label Name/Lot:  Date first fed   
How Product Administered:  Date last fed

**ENVIRONMENTAL EXPOSURES-Environmental Exposures Mentioned by the Owner Potentially Affecting the Animal's Overall State of Health Prior to the Event. (check all that apply)**

- Indoor     Outdoor     Indoor & Outdoor     Carrion     Rodents     Grapes or Raisins     Nuts
- Plants     Trash     Hunt     Pet Shows     Sporting Events     Pet Recreation Facilities
- Livestock     Poultry     Reptiles     Pet Birds     Small Mammals     Untreated Surface Water
- Anti-freeze     Mushrooms     Heavy Metals     Ticks     Urban     Suburban     Rural

Comments:  
dogs can go out as much as they want, fenced; indoor w/ owner, cleans poop daily; only on Heartgard if a dog show in an area w/ heartworms; checked on them-mountain lion/bear country but not supervised all the time; **B6** did have to wear a muzzle and would eat rocks; in owner trained for hunting, they'd be around poultry but only at that time; when competing in hunting competition would get a quail but most of the time not; few pigeons owner had were kept in the garage; never went to dog parks;  
owner used to use chicken fertilizer for the yard but not anymore; if she did fertilize they'd be gone for 3 days then return home; no trauma or hyperthermia, no irradiation or electric shock, no chemo drugs or alcohol; sometimes dogs got Fish Oil pills; no Taxus plants, foxglove, black locust, buttercup, lily-of-the-valley, gossypol;  
**B6**: all 3 dogs; off Earthborn food for 2 months-now on cooked meats and add to

**HOUSEHOLD-Signalment of Additional Animals Given the Product mentioned by the owner.**

- Animal 1   Reacted
- Animal 2   Reacted
- Animal 3   Reacted

Comments

**From:** Jones, Jennifer L </o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=0f6ca12eaa9348959a4cbb1e829af244-Jennifer.Jo>  
**To:** Rotstein, David; Palmer, Lee Anne; Carey, Lauren; Queen, Jackie L; Glover, Mark  
**CC:** Ceric, Olgica; Nemser, Sarah; Peloquin, Sarah; 'Reimschuessel, Renate (Renate.Reimschuessel@fda.hhs.gov)'  
**Sent:** 8/7/2018 2:51:12 PM  
**Subject:** RE: 800.267-EON-359060- [B6] Earthborn Holistic grain free  
**Attachments:** [B6] Rads. AMC.pdf; [B6] .html; [B6] 2.html; [B6] 3.html

Also-updated MRx:

[B6] 7 yr M Gordon Setter

Presented [B6] T 103.6F, vomited food, temp varied from 103 to 105F, inappetant now;

[B6]

Tx: [B6]

[B6] fever, stranguria, hematuria à lethargy, inappetance, vomiting, soft stool, pant à To specialist/ER [B6]

[B6]

[B6]

Culture; FNA of prostate = BPH; Dog became lame w/ rapid femoral pulse and collapse after AUS à non pain med responsive

[B6] Echo: DCM; X-rad: enlarged cardiac silhouette; MAP 81

Tx: [B6]

[B6] Re-echo: poor heart function

[B6] Recheck-cough, dyspnea, hiding, mod lethargy, never travelled to South

PE: 70 rpm, diffuse crackles, RE 1/3

Rads: sev. Cardiomegaly, diffuse broncho-interstitial pattern

Euthanized

Prior MHx: ate Earthborn 9/2011, wildlife exposure (elk & deer through backyard, will catch voles on occ), travels for pet shows, [B6] 9/2012 ate Acana; 2/2014 eating Earthborn food again;

Jennifer Jones, DVM  
Veterinary Medical Officer  
Tel: 240-402-5421



**From:** Jones, Jennifer L

**Sent:** Monday, July 30, 2018 11:28 AM

**To:** Rotstein, David <David.Rotstein@fda.hhs.gov>; Palmer, Lee Anne <LeeAnne.Palmer@fda.hhs.gov>; Carey, Lauren <Lauren.Carey@fda.hhs.gov>; Queen, Jackie L <Jackie.Queen@fda.hhs.gov>; Glover, Mark <Mark.Glover@fda.hhs.gov>

**Cc:** Ceric, Olgica <Olgica.Ceric@fda.hhs.gov>; Nemser, Sarah <Sarah.Nemser@fda.hhs.gov>; Peloquin, Sarah <Sarah.Peloquin@fda.hhs.gov>; 'Reimschuessel, Renate (Renate.Reimschuessel@fda.hhs.gov)' <Renate.Reimschuessel@fda.hhs.gov>

**Subject:** RE: 800.267-EON-359060- [B6] Earthborn Holistic grain free

History of different GF foods fed per MRx.-Acana, Nat Balance, etc. Looks like myocarditis in 1 of 2 dogs, possible familial DCM (grandmother died of syncope and cardiomegaly)

Interview pending

[B6] 1 yr FS Gordon Setter-genetic grandmother of [B6] below)

Presented **B6** 3 syncopal episodes (1/15, 1/21), on Incurin & Cranberry/Vit C supplement, recumbent, dyspnea, tachycardia, vomited, possible tremors/mm contractions  
PE: pale/muddy mm, RR 44, obtunded, lipoma cranial L lateral abdomen

**B6**

X-Rad: globoid heart silhouette, scalloped edge of lung lobe cranial and ventral, r/o pleural effusion, note says "discussed significance about pericardial effusion"  
Euthanized

Prior MHx: **B6**

**B6**

**B6** 7 yr M Gordon Setter

Presented **B6** fever, stranguria, hematuria à lethargy, inappetance, vomiting, soft stool, pant à rDVM: 103F, tense abdomen

Abd Rads: gastroenteritis, Labs & cPL: wnl à Tx **B6**

To specialist/ER: **B6**

**B6**

Culture; FNA of prostate = BPH; Dog became lame w/ rapid femoral pulse and collapse after AUS à non pain med responsive

**B6** Echo: DCM; X-rad: enlarged cardiac silhouette; MAP 81

Tx: **B6**

**B6** Re-echo: poor heart function

**B6** Recheck-cough, dyspnea, hiding, mod lethargy, never travelled to South

PE: 70 rpm, diffuse crackles, RE 1/3

Rads: sev. Cardiomegaly, diffuse broncho-interstitial pattern

Euthanized

Prior MHx: ate Earthborn 9/2011, wildlife exposure (elk & deer through backyard, will catch voles on occ), travels for pet shows; **B6** 9/2012 ate Acana; 2/2014 eating Earthborn food again;

Jennifer Jones, DVM  
Veterinary Medical Officer  
Tel: 240-402-5421



From: Rotstein, David

Sent: Friday, July 13, 2018 9:14 AM

To: Palmer, Lee Anne <LeeAnne.Palmer@fda.hhs.gov>; Carey, Lauren <Lauren.Carey@fda.hhs.gov>; Queen, Jackie L <Jackie.Queen@fda.hhs.gov>; Ceric, Olgica <Olgica.Ceric@fda.hhs.gov>; Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov>; Nemser, Sarah <Sarah.Nemser@fda.hhs.gov>; Glover, Mark <Mark.Glover@fda.hhs.gov>

Subject: Fwd: Earthborn Holistic grain free: **B6** - EON-359060

From: PFR Event <pfpreventcreation@fda.hhs.gov>

Date: July 12, 2018 at 8:20:24 PM EDT

To: Cleary, Michael \* <Michael.Cleary@fda.hhs.gov>, HQ Pet Food Report Notification

<HQPetFoodReportNotification@fda.hhs.gov> **B6** **B6**

Subject: Earthborn Holistic grain free: Patricia Engler - EON-359060

A PFR Report has been received and PFR Event [EON-359060] has been created in the EON System.

A "PDF" report by name "2051931-report.pdf" is attached to this email notification for your reference.

Below is the summary of the report:

**EON Key:** EON-359060

**ICSR #:** 2051931

**EON Title:** PFR Event created for Earthborn Holistic grain free bison lamb pacific; 2051931

<b>AE Date</b>	B6	<b>Number Fed/Exposed</b>	5
<b>Best By Date</b>		<b>Number Reacted</b>	4
<b>Animal Species</b>	Dog	<b>Outcome to Date</b>	Died Euthanized
<b>Breed</b>	Setter - Gordon		
<b>Age</b>	6.5 Years		
<b>District Involved</b>	PFR B6 DO		

**Product information**

**Individual Case Safety Report Number:** 2051931

**Product Group:** Pet Food

**Product Name:** Earthborn Holistic grain free, bison, lamb, pacific

**Description:** B6 was diagnosed with Taurine Deficit Dilated Cardiomyopathy after attempts to save in him in the ER and hospital stay of 4 days he went into he went into congestive heart failure and was euthanized. He exhibited symptoms of Taurine deficit however was treated for individual symptoms until he collapsed and he had an echo cardiogram which showed the DCM. His mother and sister started to show Taurine deficit symptoms at the same time. Their dog food was switched immediately and placed on Taurine and l carnitine supplements. They all had been on grain free food their whole lives. In hindsight and knowing now what I've learned all too late for B6 I believe two of my other dogs also suffered from this but it wasn't known at the time the possible cause.

**Submission Type:** Initial

**Report Type:** Both

**Outcome of reaction/event at the time of last observation:** Died Euthanized

**Number of Animals Treated With Product:** 5

**Number of Animals Reacted With Product:** 4

<b>Product Name</b>	<b>Lot Number or ID</b>	<b>Best By Date</b>
Earthborn Holistic grain free, bison, lamb, pacific		

**Sender information**

**B6**

USA

To view this PFR Event, please click the link below:

<https://eon.fda.gov/eon//browse/EON-359060>

To view the PFR Event Report, please click the link below:

<https://eon.fda.gov/eon//EventCustomDetailsAction!viewReport.jspa?decorator=none&e=0&issueType=12&issueId=375684>

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**B6**

Date: **B6**

Patient: **B6**

**Findings:** Four abdominal radiographs are available.

**B6**

**Conclusion:** Prostate enlargement is likely benign hyperplasia and/or prostatitis. Neoplasia cannot be entirely excluded.

Otherwise unremarkable normal abdomen. Gastroenteritis, pancreatitis and other systemic disease cannot be ruled out.

**B6**

Please feel free to email or call with any questions or concerns.  
Thank you,

**B6**

**B6** DVM, Diplomate ACVR

**B6**

Patient Chart

Printed: 08-06-18 at 10:23a

CLIENT INFORMATION

Name  
Address

**B6**

Phone

Balance 0.00

PATIENT INFORMATION

Name

**B6**

Species Canine

Sex

Male

Breed

Gordon Setter

Deceased

**B6**

Age

**B6**

ID

**B6**

Rabies

Color

Black and Tan

Weight

77.40 lbs

Reminded

(none)

Codes

D

**B6**

**B6** weight history (in lbs)

**B6** 77.40

MEDICAL HISTORY

Date	By	Code	Description	Qty (Variance)	Photo
------	----	------	-------------	----------------	-------

<b>B6</b>	<b>B6</b>		CLIECOM Client Communication at 8:29a: O called to let us know that P past away this weekend.		
-----------	-----------	--	--	--	--

<b>B6</b>	<b>B6</b>		CLIECOM Client Communication at 5:36p: printed <b>B6</b> report, attached file, forwarded to <b>B6</b>		
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<b>B6</b>	<b>B6</b>		<b>B6</b> (per tablet)	-4	
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<b>B6</b>	<b>B6</b>		CLIECOM Client Communication at 9:12a: Pc from O. Update: Has not eaten. Some improvement but other medical issues are cropping up ie joint discomfort, high wbc and bacteria counts. Note to <b>B6</b>		
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<b>B6</b>	<b>B6</b>		CLIECOM Client Communication at 8:55a: P is currently at <b>B6</b> no need to follow up. at 3:58p: P diagnosed w/ BPH at <b>B6</b> on <b>B6</b> rec neuter while on meds. rec recheck ultrasound in 6 months to monitor nodules on spleen, scvim called O while here, P has heart disease, given 6m-1y left, will cancel neuter		
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Date	By	Code	Description	Qty (Variance)	Photo
		GI4444	RC GI Low Fat Canine 13.6oz can	6	
			CHARGES, CHARGES DONE (per tablet)	4	
			Give 1 tablet by mouth every 24 hours.		
			Give 1 & 1/2 tablets by mouth every 12 hours for 5 days. Please give with food.	15	
		CPL111	In Hospital Pancreatic Lipase Snap	3.50	
		IVLSO	Requisition		

Test	Result	Flag	Normal Range		Measure
			Low	High	
ProCyte Dx	111.06a				
RBC			5.65	8.87	M/ $\mu$ L
HCT			37.3	61.7	%
HGB			13.1	20.5	g/dL
MCV			61.6	73.5	fL
MCH			21.2	25.9	pg
MCHC			32.0	37.9	g/dL
RDW			13.6	21.7	%
%RETIC					%
RETIC			10.0	110.0	K/ $\mu$ L
WBC			5.05	16.76	K/ $\mu$ L
%NEU					%
%LYM					%
%MONO					%
%EOS					%
%BASO					%
NEU			2.95	11.64	K/ $\mu$ L
BAND					
LYM			1.05	5.10	K/ $\mu$ L
MCNO			0.16	1.12	K/ $\mu$ L
EOS			0.06	1.23	K/ $\mu$ L
BASO			0.00	0.10	K/ $\mu$ L
PLT			148	484	K/ $\mu$ L
MPV			8.7	13.2	fL
PDW			9.1	19.4	fL
PCT			0.14	0.46	%
Test	Result	Flag	Normal Range		Measure
			Low	High	
Catalyst One	11:14a				
GLU			74	143	mg/dL
CREA			0.5	1.8	mg/dL
BUN			7	27	mg/dL
BUN/CREA					
PHOS			2.5	6.8	mg/dL
CA			7.9	12.0	mg/dL
TP			5.2	8.2	g/dL
ALB			2.3	4.0	g/dL
GLOB			2.5	4.5	g/dL
ALB/GLOB					
ALT			10	125	U/L
ALKP			23	212	U/L

Date	By	Code	Description	Qty (Variance)	Photo
GGT	[B6]	0	11	U/L	
TBIL	[B6]	0.0	0.9	mg/dL	
CHOL	[B6]	110	320	mg/dL	
AMYL	[B6]	500	1500	U/L	
LIPA	[B6]	200	1800	U/L	
Na	[B6]	144	160	mmol/L	
K	[B6]	3.5	5.8	mmol/L	
Na/K	[B6]				
Cl	[B6]	109	122	mmol/L	
Osm Calc	[B6]			mmol/kg	
			TempIVLSI20180314_110249_383.pdf		
		RADCON	Radiology Consult with review		
		414	Technician Time/min		
		330	Radiographs- 2 views with Interpretation	5	
		5117	In Hospital IDEXX CBC/Chem17/Lytes		
		0002	Medical Waste and Supply Fee		
		SICKEXAM	Medical Condition Exam		

Age: 6y Weight: 77.40 Temp: 103.60 Pulse: 140.00

**SUBJECTIVE SECTION**

Vomited the meal he ate this morning...O. has been monitoring temp at home, and found it varying from 103 to 105.  
Will not eat now, but did drink water.

**OBJECTIVE SECTION**

T- 103.8  
Mildly painful abdomen  
Lungs, heart, wnl  
mm.pink, CRT > 2.0  
Blood work, wnl  
X-ray, gas fill I. intestine. Took one X-ray at 10 am, noting large gas-filled colon..bladder appeared distended. Took outside for walk, and urinated, taking a long time and urinating in a pulsating manner. Rectal palpation...prostate did not feel enlarged.  
X-rays taken at 3 PM, showing normal food material in s. intestine, and still showing gas in I. intestine. I would expect bladder to be small, but still showing possible bladder enlargement, mass?

**ASSESSMENT SECTION**

NOTES

[B6]

**PLAN SECTION**

NOTES

[B6]  
2331 Emergency Fee: During Hours

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**From:** [REDACTED] B6  
**To:** Jones, Jennifer L  
**Sent:** 8/2/2018 5:44:51 PM  
**Subject:** FW: [REDACTED] B6 Medical records Case No 800.267-FDA  
**Attachments:** [REDACTED] B6 PDF

Dr. Jones,

I have forward [REDACTED] B6 records I believe you are missing. Also, a [REDACTED] B6 may also be sending copies. He apologized for not sending sooner and was going to attend to it today.

I am looking forward to speaking with you on Tues, 8/7 at 9:3-ET/7:30 Mt

Best regards,

[REDACTED] B6

[REDACTED] B6

**From:** [REDACTED] B6 [mailto:[REDACTED] B6]  
**Sent:** Wednesday, August 01, 2018 3:25 PM  
**To:** [REDACTED] B6  
**Subject:** [REDACTED] B6

**B6**

Patient Chart

Printed: 08-01-18 at 3:24p

CLIENT INFORMATION

Name  
Address

**B6**

Phone

Balance 0.00

PATIENT INFORMATION

Name

**B6**

Species Canine

Sex

Male

Breed Gordon Setter

Deceased

**B6**

Age

**B6**

ID

956000002491964

Rabies

Color

Black and Tan

Weight

77.40 lbs

Reminded

(none)

Codes

D

**B6**

**B6** weight history (in lbs)

**B6** 77.40

MEDICAL HISTORY

Date	By	Code	Description	Qty (Variance)	Photo
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**B6**

**B6** CLIECOM Client Communication  
**B6** **B6** at 8:29a: O called to let us know that P past away this weekend.

**B6** CLIECOM Client Communication  
**B6** **B6** at 5:36p: printed **B6** report, attached file, forwarded to **B6**

**B6** 1000C **B6** (per tablet) -4

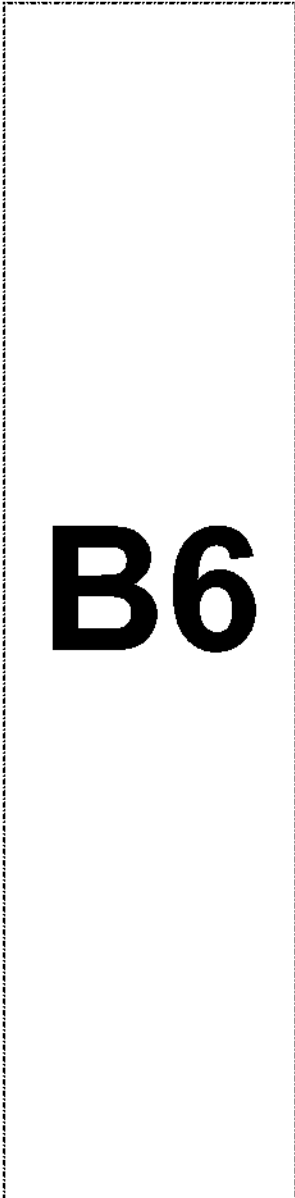
**B6** CLIECOM Client Communication  
**B6** **B6** at 9:12a:  
Pc from O. Update: Has not eaten. Some improvement but other medical issues are cropping up ie joint discomfort, high wbc and bacteria counts. Note to **B6**.

**B6** CLIECOM Client Communication  
**B6** **B6** at 8:55a: P is currently a **B6** no need to follow up.  
**B6** **B6** at 3:58p: P diagnosed w/ BPH at **B6**, on **B6**, rec neuter while on meds, rec recheck ultrasound in 6 months to monitor nodules on spleen, **B6** called O while here, P has heart disease, given 6m-1y left, will cancel neuter

Date	By	Code	Description	Qty (Variance)	Photo
<b>B6</b>	<b>B6</b>	GI4444	RC GI Low Fat Canine 13.6oz can	6	
			<del>CHARGES.CHARGES.DONE</del> <b>B6</b> (per tablet) Give 1 tablet by mouth every 24 hours.	4	
			<b>B6</b> Give 1 & 1/2 tablets by mouth every 12 hours for 5 days. Please give with food.	15	
			<b>B6</b> CPL111 In Hospital Pancreatic Lipase Snap IVLSO Requisition <b>B6</b>	3.50	

Test	Result	Flag	Normal Range		Measure	
			Low	High		
ProCyte Dx	<b>B6</b> 11:06a					
RBC	<b>B6</b>		5.65	8.87	M/ $\mu$ L	
HCT			37.3	61.7	%	
HGB			13.1	20.5	g/dL	
MCV			61.6	73.5	fL	
MCH			21.2	25.9	pg	
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RDW			13.6	21.7	%	
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RETIC				10.0	110.0	K/ $\mu$ L
WBC				5.05	16.76	K/ $\mu$ L
%NEU					%	
%LYM					%	
%MONO					%	
%EOS					%	
%BASO					%	
NEU				2.95	11.64	K/ $\mu$ L
BAND						
LYM				1.05	5.10	K/ $\mu$ L
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EOS				0.06	1.23	K/ $\mu$ L
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PLT			148	484	K/ $\mu$ L	
MPV			8.7	13.2	fL	
PDW			9.1	19.4	fL	
PCT			0.14	0.46	%	

Test	Result	Flag	Normal Range		Measure	
			Low	High		
Catalyst_One	<b>B6</b> 11:14a					
GLU	<b>B6</b>		74	143	mg/dL	
CREA			0.5	1.8	mg/dL	
BUN			7	27	mg/dL	
BUN/CREA						
PHOS				2.5	6.8	mg/dL
CA				7.9	12.0	mg/dL
TP				5.2	8.2	g/dL
ALB				2.3	4.0	g/dL
GLOB				2.5	4.5	g/dL
ALB/GLOB						
ALT			10	125	U/L	
ALKP			23	212	U/L	



Date	By	Code	Description	Qty (Variance)	Photo
	<b>B6</b>		GGT	0 11	U/L
		TBIL	0.0 0.9	mg/dL	
		CHOL	110 320	mg/dL	
		AMYL	500 1500	U/L	
		LIPA	200 1800	U/L	
		Na	144 160	mmol/L	
		K	3.5 5.8	mmol/L	
		Na/K			
		Cl	109 122	mmol/L	
		Osm Calc		mmol/kg	
			Temp\VLS\20180314_110249_383.pdf		
		RADCON	Radiology Consult with review		
	<b>B6</b>	414	Technician Time/min		5
		330	Radiographs- 2 views with Interpretation		
		5117	In Hospital <b>B6</b> CBC/Chem17/Lytes		
		0002	Medical Waste and Supply Fee		
		SICKEXAM	Medical Condition Exam		

**B6**

**B6**

Age: 6y Weight: 77.40 Temp: 103.60 Pulse: 140.00

**SUBJECTIVE SECTION**

Vomited the meal he ate this morning...O. has been monitoring temp at home, and found it varying form 103 to 105.  
 Will not eat now, but did drink water.

**OBJECTIVE SECTION**

T- 103.8  
 Mildly painful abdomen  
 Lungs, heart, wnl  
 mm. pink, CRT > 2.0  
 Blood work. wnl  
 X-ray. gas fill l. intestine. Took one X-ray at 10 am, noting large gas-filled colon...bladder appeared distended. Took outside for walk, and urinated, taking a long time and urinating in a pulsating manner.  
 Rectal palpation...prostate did not feel enlarged.  
 X-rays taken at 3 PM, showing normal food material in s. intestine, and still showing gas in l. intestine.  
 I would expect bladder to be small, but still showing possible bladder enlargement, mass?

**ASSESSMENT SECTION**

NOTES

**B6**

**PLAN SECTION**

NOTES

Send X-rays to **B6**  
**B6**  
 2331 Emergency Fee: During Hours



Date	By	Code	Description	Qty (Variance)	Photo
[B6]	[B6]	[B6]	APPT\$ Appointment notes for [B6]		
	[B6] [B6] at 10:06a: exam, p has a temp of 105 degrees, vomited this morning, soft stool, stomach gurgling per o				
01-02-18	[B6]		CLIECOM Client Communication		
[B6]					

---

**From:** [REDACTED] **B6**  
**To:** Jones, Jennifer L  
**Sent:** 8/7/2018 2:45:01 PM  
**Subject:** Thank you

Dr. Jones,

Thank you for your time today and information. I hope you are successful in finding answers for our dogs. Here is the title to the FB group I spoke about, Taurine-Deficient Dilated Cardiomyopathy. A [REDACTED] **B6** is the administrator of it. She is the one who contacted me directly asking about taurine testing on [REDACTED] **B6**. She is compiling her own information as are others in the group.

Best regards,

[REDACTED] **B6**

**B6**

**Report Details - EON-359300**

ICSR:	2052094
Type Of Submission:	Initial
Report Version:	FPSR.FDA.PETF.V.V1
Type Of Report:	Adverse Event (a symptom, reaction or disease associated with the product)
Reporting Type:	Voluntary
Report Submission Date:	2018-07-15 23:22:32 EDT
Reporter is the Animal Owner:	Yes

<b>Reported Problem:</b>	<b>Problem Description:</b>	My very young 10-year-old female mixed breed dog collapsed while taking our walk. After rushing her to the vet and getting a sonogram they found out she had DCM. After being diagnosed she collapsed at home and died suddenly the night that I found out that she had DCM. She was an extremely healthy, vibrant, playful and in perfect shape. She had absolutely no signs of DCM or heart issues and did not have a heart murmur. After doing further research on dog food and possible link to Grain free food I was devastated. All of my dogs have been out on a grain free food for years. I am actively taking my other dogs in proactively to get a sonogram of their heart. To be sure they too don't have this devastating disease. My gut feeling says the dog food and diet definitely has something to do with her sudden death. All of her other blood work came back perfect but I did not know anything about Taurine levels, and possible problems with Earthborn meadowfeast grain free food. I have now switched the rest of the dogs to a different dog food which is not grain free. We are now feeding them FROMM CLASSIC.
	<b>Date Problem Started:</b>	B6
	<b>Concurrent Medical Problem:</b>	No
	<b>Outcome to Date:</b>	Died Naturally
	<b>Date of Death:</b>	B6

<b>Product Information:</b>	<b>Product Name:</b>	Earthborn meadowfeast		
	<b>Product Type:</b>	Pet Food		
	<b>Lot Number:</b>			
	<b>Package Type:</b>	BAG		
	<b>Package Size:</b>	28 Pound		
	<b>Purchase Date:</b>	01/01/2009		
	<b>Number Purchased:</b>	1		
	<b>Possess Unopened Product:</b>	No		
	<b>Possess Opened Product:</b>	No		
	<b>Storage Conditions:</b>	Stored in bag then into sealed container		
	<b>Product Use Information:</b>	<b>Description:</b>	Daily dog food fed twice daily	
		<b>First Exposure Date:</b>	01/01/2009	
<b>Last Exposure Date:</b>		B6		
<b>Time Interval between Product Use and Adverse Event:</b>		9 Years		
<b>Product Use Stopped After the Onset of the Adverse Event:</b>		Yes		
<b>Adverse Event</b>		Not Applicable		

		Abate After Product Stop:	
		Product Use Started Again:	No
		Perceived Relatedness to Adverse Event:	Definitely related
		Other Foods or Products Given to the Animal During This Time Period:	No
	Manufacturer /Distributor Information:		
	Purchase Location Information:	Name:	B6
		Address:	United States
Animal Information:	Name:	B6	
	Type Of Species:	Dog	
	Type Of Breed:	Mixed (Dog)	
	Gender:	Female	
	Reproductive Status:	Neutered	
	Weight:	42 Pound	
	Age:	10 Years	
	Assessment of Prior Health:	Excellent	
	Number of Animals Given the Product:	4	
	Number of Animals Reacted:	1	
	Owner Information:		
	Healthcare Professional Information:	Practice Name:	B6
		Contact: Name:	B6
		Phone:	B6
		Address:	B6
			United States
		Type of Veterinarian:	Primary/regular veterinarian
		Date First Seen:	B6
		Permission to Release Records to FDA:	Yes
Sender Information:	Name:	B6	
	Address:	B6	
		United States	
	Contact: Phone:	B6	
	Email:	B6	
	Reporter Wants to Remain Anonymous:	No	

	<b>Permission To Contact Sender:</b>	Yes
	<b>Preferred Method Of Contact:</b>	Email
	<b>Reported to Other Parties:</b>	None

**Additional Documents:**

EON-359594

**B6**

pages including cover: 46

#26123

**B6**

Owner's Name

Address

Home Phone

Animal's Name

**B6**

Species:  Dog  Cat  Other

Breed

Golden Retriever

Sex

M

Neutered

Yes

No

Birthdate

**B6**

Color or Markings

Golden

Allergies

No

**B6**

DATE ACTIVE	DATE RESOLVED	NO.	MASTER PROBLEMS	MEDICATION
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**B6**

**B6**

Date	For	Qty	Description	Price	Discount	Price
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**B6**

Reminders for: **B6** (Weight: 76.9 lbs - 7y) Last done

**B6**

Visit us on the web at **B6** to find out how to have your medications and nutritional products shipped directly to you from our online partner VetSource.



**B6**

Name: **B6**

Exam: Transthoracic Echocardiogram

MRN: 232480

DOB: **B6**

Performed By: **B6**  
(Cardiology)

Study Date: 07/12/2018 10:23 AM

Age: 7 yrs  
Gender: Male

Weight: 78 lb

**B6**

Presenting concern/Case History

Presents for recheck echocardiogram/taurine level. Patient is included in UC Davis Golden Retriever Taurine study as well as Lifetime Golden Retriever Study. Initially diagnosed with mild systolic dysfunction/DCM in Aug 2017, taurine deficiency identified at that time, pet was initially

S = Subjective (complaint/history)  
O = Objective (exam)  
A = Assessment (diagnosis, R/O)  
P = Plan (action/C.E.)

# PROGRESS NOTES

Name **B6** Pet # ( ) Birthdate **B6** File # Page 30

DATE	SOAP	CODE	CHARGE
------	------	------	--------

**B6**


S = Subjective (complaint/history)  
O = Objective (exam)  
A = Assessment (diagnosis, R/O)  
P = Plan (action/C.E.)

# PROGRESS NOTES

Name: **B6** Pet # ( ) Birthdate: **B6** File # Page 29

DATE	SOAP	CODE	CHARGE
<b>B6</b>			

**B6**

**Consult Date:** 04-11-2018

**Patient Details**

**B6** Male Neutered  
Canine Golden Retriever

**Client Details**

**B6**

**B6**

**Referring Vet Details**

**B6**

**History**

**B6** is here today for a blood draw (purple top tube) for DNA

Thank you for your trust in the care of this patient. Please call if you have any questions or concerns.

**B6**

**B6**

RECORDS FROM  
CARDIO EXAM/EVALUATION AND PAPERWORK FOR  
ADMISSION INTO DR. STERN'S Golden Retriever/Jammerdog/UCDAMS/  
DCM Study (UCDAMS).

Vet/Tech Contact:

**B6**

Company Name:

Address:

**B6**

Email:

**B6**

Tel:

fax:

**B6**

Billing Contact:

*N/A*

TAX ID:

Email:

Tel:

Patient Name:

**B6**

Species:

*Golden Retriever*

Owner's Name:

**B6**

**B6**

Sample Type:

Plasma

Whole Blood

Urine

Food

Other: \_\_\_\_\_

Test Items:

Taurine

Complete Amino Acid

Other: \_\_\_\_\_

Taurine Results (nmol/ml)

Plasma: \_\_\_\_\_

Whole Blood:

**B6**

Urine: \_\_\_\_\_

Food: \_\_\_\_\_

Reference Ranges (nmol/ml)

	Plasma		Whole Blood	
	Normal Range	No Known Risk for Taurine Deficiency	Normal Range	No Known Risk for Taurine Deficiency
Cat	80-120	>40	300-600	>200
Dog	60-120	>40	200-350	>150

**B6**

Forms to complete (attached to this email):

Consent Form (if able to contact client and obtain data and DNA)

Diet History Form

Information to attach:

Pedigree information (A 3 generation pedigree or link to pedigree information if possible)

Cardiologist form

Whole blood or plasma taurine results

Any other relevant test results (optional)

**B6** has a 3 generation pedigree as was requested by GRLS. Will get when I return to **B6** at end of April

Diagnosics and sample collection to be sent by FedEx:

Echocardiogram reports for this pet (all available). If possible - A CD or thumb drive of the DICOM image studies that match the echo reports (we may wish to load the images and make comparative measurements in the future). *Only 2nd study*

3 mL of whole blood in a tube with EDTA, no need to refrigerate. We can send additional shipping labels if needed. *wanting for label here*

**B6**

For more information or if you have any questions regarding the case submission - email Joshua Stern at [sternj@vetmed.ucdavis.edu](mailto:sternj@vetmed.ucdavis.edu)

## Owner Informed Consent Form

**Title of clinical trial:** *Developing a genetic library for congenital and acquired heart disease.*

**Investigator(s):** *Dr. Joshua Stern 530-752-2475, [jsstern@ucdavis.edu](mailto:jsstern@ucdavis.edu)*

***Why is my pet being invited to take part in this clinical trial?***

DNA samples are needed from dogs, cats and horses with and without heart disease. Your patient may have been diagnosed with heart disease or may be requested to serve as a normal control sample.

***Why is this clinical trial being done?***

Dr. Stern is a veterinary cardiologist and geneticist that studies inherited heart disease and the impact that genetics plays in response to heart medication. This study allows us to collect genetic samples for use in future studies to identify important mutations and the role that genetics may play in disease diagnosis and treatment.

***What will my time commitment be if I choose to enroll my pet?***

You are only being asked for permission to obtain a small blood sample (2ml) from your pet. In many instances this will be drawn at the same time other tests are being performed on your patient as indicated by your clinician. If no other blood is required for your pet's visit a small needle will be used to collect this blood sample from a vein.

***If I choose to enroll my pet in this clinical trial, what will happen to my dog?***

- \* A small blood sample will be obtained from a vein and that sample will be retained by the cardiac genetics laboratory for use in future genetic studies.

***What happens if I do not want to enroll my dog in this clinical trial?***

Participation in this study is voluntary; refusal to participate will not have any effect on your animal's future medical care.

***What happens if I choose to enroll my pet, but I change my mind later?***

You can remove your pet from the study at any time and it will not affect the medical care of your dog.

Please note that we will not remove any data from the trial database that has already been collected if you choose to remove your pet from the study.

***If I choose to enroll my pet what are my responsibilities?***

There is no cost or benefit to your dog for participating in this study.

***Will being in this trial help my pet or other pets in any way?***

We cannot promise any benefits to your dog or other animals from your taking part in this clinical trial; however, possible benefits include better understanding of genetic disease process and mechanisms for predicting patients response to medical therapy.

***Could this trial hurt my pet?***

Other than minor discomfort and trivial bruising or swelling associated with drawing blood, there is no risk associated with your dog, cat or horse's participation.

**What happens to the information collected for the clinical trial?**

All client and animal details, and information obtained from the study will be considered confidential and will be used for research purposes. We will limit the use and/or disclosure of your information or that of your dog to people who have a need to review this information.

The blood taken from your dog for this study will become the property of the University of California. The specimens may be used in research and may be shared with other organizations. The specimens could lead to discoveries or inventions that may be of value to the University of California or to other organizations. Under state law, you do not have any right to money or other compensation stemming from products that may be developed from the specimens.

We may publish the results of this research. However, we will keep your name, the name of your dog, and other identifying information confidential.

**What about cost?**

There is no cost or cost benefit to you for participation.

The results of this study, including specimens collected, may have commercial value to the sponsors, the University of California-Davis, and/or the researchers. You will have no legal or financial interest in any commercial development resulting from the research, or from the information or materials collected.

**Who can I talk to if I have questions?**

If you have questions, concerns, complaints, or think the study has negatively affected your dog, please contact the investigator. This research has been reviewed and approved by the Institutional Animal Care and Use Committee (IACUC) and the Clinical Trials Review Board (CTRB). You may talk to 530-752-2364 or [iacuc-staff@ucdavis.edu](mailto:iacuc-staff@ucdavis.edu) if you cannot reach the investigator.

By signing below I agree to permit my pet B6 (insert name) to participate in this clinical study and undergo the procedure described to me above.

By signing below, I understand the statements in this informed consent document and that a signed and dated copy of the consent form will be given to me.

B6  
Signature of Owner

4/4/18  
Date

B6  
Printed Name of Owner

\_\_\_\_\_  
Signature of Person Obtaining Consent

\_\_\_\_\_  
Date

\_\_\_\_\_  
Printed Name of Person Obtaining Consent



Do not staple



### Diet History Form® Nutrition Support Service

Veterinary Medical Teaching Hospital  
One Shields Ave, Davis, CA 95616-8747  
Ph: 530-752-7892 / Fax: 530-752-7901  
Email: nssvetmed@ucdavis.edu

↓ TO BE COMPLETED BY CLIENT ↓

Pet name:	<h1>B6</h1>	DATE: 4/4/18
Owner name:		VMTH ID Number, if current or previous patient:
Owner email:		
Owner phone:		
Reason for consult:		Current weight: 76.9 kg or lb
<input type="checkbox"/> I'd like an appointment to bring my pet to UC Davis		Ideal weight: 74 kg or lb
<input checked="" type="checkbox"/> I'd like to work through my veterinarian		

1. Is your pet housed?  Indoor  Outdoor  Both  Outside mainly for walks or exercise

2. Please describe pet's activity level (i.e. type, duration & frequency):

B6

# B6

3. Do you have other pets?  Yes  No If yes, please list:

4. Is your pet fed in the presence of other animals?  Yes  No If yes, please describe:

5. Is food left out for your pet during the day or taken away after the meal?

*HE has nothing left. Licks anything. No food left out*

6. Does your pet have access to other unmonitored food sources (i.e. food from a neighbor, cat food, etc.)?  Yes  No If yes, please describe:

7. Who typically feeds your pet? *Me mostly*

8. How do you store your pet's food? *Small plastic container either in a closet or in a drawer of pantry*

9. Please list your pet's current and past medical problems, if any, and whether they have resolved:

*Only current with torsion + dam. Test will be at next echo otherwise very healthy + active*

**DIET HISTORY FORM**

10. Please list all medications your pet is currently receiving and any administered over the past three months (note those that are current):

*TRICOR 1000 mg twice a day*  
*Le-Ram: 100 mg - max strength - twice a day*

11. How do you administer medications and supplements to your pet? If foods such as peanut butter or Pill Pockets are used, please estimate amounts fed per day.

*Pet whole pills in food -*

12. Diet(s) that the pet is eating now

- ALL foods, snacks, and treats your pet **currently** eats, human foods included.
- Separate out each ingredient in a home-cooked diet (each ingredient on its own line).
- Specify if human food items are measured before or after cooking. *Examples in italics.*

Brand name	Food/Variety	Form/how cooked	Amount *per meal*	# of meals per day	Fed since
<i>X Brand</i>	<i>Chicken breast, skinless, boneless</i>	<i>baked</i>	<i>50 grams after cooking</i>	<i>3 times per week</i>	<i>May 2014</i>
<i>X Brand</i>	<i>Lamb &amp; Rice Adult Dog</i>	<i>dry</i>	<i>1 1/2 cups</i>	<i>Twice a day</i>	<i>June 2012</i>

**B6**

Additional supplements your pet receives now (i.e. herbal product, fish oil, vitamin or mineral, etc.)

Brand name	Supplement	Form	Amount	# per day	Fed since
<i>X Brand</i>	<i>anti-Ulcerant</i>	<i>tablet</i>	<i>1 tablet</i>	<i>2 times per day</i>	<i>May 2011</i>

**B6**

13. Diet(s) that the pet ate in the past

- ALL foods, snacks, treats, and supplements your pet has received **in the past**.
- Indicate the approximate time period when they were fed. *Example in italics.*

Brand Name	Product/Variety	Form	From	To	Reason stopped
<i>X Brand</i>	<i>Kitten formula</i>	<i>canine</i>	<i>June 2011</i>	<i>March 2012</i>	<i>Became an adult</i>
<i>Fido mms</i>	<i>Lamb &amp; Lentils</i>	<i>dry</i>	<i>1/14</i>	<i>8/17</i>	<i>peanut lentils</i>
<i>Fido mms</i>	<i>Salmon &amp; Potato</i>	<i>dry</i>	<i>8/17</i>	<i>1/18</i>	<i>would not disclose animal protein</i>

**DIET HISTORY FORM**

14. Has your pet experienced any of the following: No

Recent involuntary or unintended weight change:

weight gain OR  weight loss How much? \_\_\_\_\_ kg or lb.

Over what time period? \_\_\_\_\_

Vomiting: \_\_\_\_\_ times/day \_\_\_\_\_ times/week Over what time period? \_\_\_\_\_

Diarrhea: \_\_\_\_\_ times/day \_\_\_\_\_ times/week Over what time period? \_\_\_\_\_

15. Have you observed changes in any of the following: No

Urination OR  Drinking What was the specific change? \_\_\_\_\_

Since when? \_\_\_\_\_

Defecation What was the specific change? \_\_\_\_\_

Since when? \_\_\_\_\_

16. Does your pet have a good appetite? Typically:  Yes  No Currently:  Yes  No

Since when? always good

17. Does your pet have?  allergies OR difficulty  chewing  swallowing

If so, please describe: No

18. Pet dietary preferences and restrictions: (What ingredients will/can your pet eat?) - all

Please fill out this section if a home-cooked diet formulation is requested. If diet formulation is needed due to an adverse reaction to food(s), please provide us with some options of protein and carbohydrate sources that are both palatable AND tolerated by your pet. This should be determined prior to submitting this request.

If you have specific personal preferences or have found that your pet does not tolerate specific foods, please let us know: No

Protein sources

Carbohydrate sources

ground beef

pork

barley

potato, white

chicken

salmon\*

millet

quinoa

cottage cheese

tofu ?

oatmeal

rice, brown

crab

tuna\*

pasta

rice, white

egg

turkey

green peas

tapioca

lamb

whitefish

potato, sweet

polenta (corn)

other: \_\_\_\_\_

\*These ingredients may contain high levels of mercury - not recommended for long-term feeding.

Please read the FAQ and review the recipe template on our website prior to submitting this request. Consult with your veterinarian regarding any specific needs of your pet and the urgency of this request. Urgent requests may incur added fees.

CARDIOLOGIST FORM FOR GOLDEN RETRIEVER TAURINE STUDY

Client Information:

Owner Name:

B6

Email:

May we contact this owner for more information? (YES/NO)

Dog Details:

Registered Name:

Which KC?:

Call name:

B6

Registration number:

Breed:

Golden Retriever

Sex: M

Date of Birth:

B6

Clinic Details:

Cardiologist Name:

B6

Clinic Phone Number:

B6

Fax number:

B6

Visit One:

B6

Echo date:

8/12/07

(Please attach or send echo report and images)

Diagnosis:

see attached

#1 - #3

Initial Taurine Level (Whole blood/Plasma):

174

(Please attach report)

Diet Brand: Praxis Lamb & Lentil

Quantity fed & frequency:

2 cups 1 AM + 1 PM

How long has the dog been eating this diet if known?:

Four Years

50.4 calcd 70 Praxis Salmon

Medications and dosage at time of evaluation:

None

a la dog fill Jan. from Aug. visit.

Medications prescribed at visit:

None - send another echo

would be needed in 6 mo.

Recheck date (if necessary):

3/08

3 mL blood sample in EDTA for DNA sent?

Consent form filled out by owner?

Any comments?

Has there been any recent GI upset?

Was T4 tested? (if yes, please include results):

Thank you very much for your time and effort in contributing to this study.

CARDIOLOGIST FORM FOR GOLDEN RETRIEVER TAURINE STUDY

Visit Two (if already completed): Have all been

**B5, B6**

Echo date: \_\_\_\_\_ (Please attach or send echo report and images)

Diagnosis: \_\_\_\_\_

Final Taurine Level (Whole blood/Plasma): \_\_\_\_\_ (Please attach report)

Diet Brand: Farnam Quantity fed & frequency: 1 cup AM 1 cup PM

Any changes in medications? added Taurine - 1000mg in AM

+ 1000 in PM, provided 3/9 per Dr. Marcher

added to Conarture (max strength 1500mg) on 4/4/18

Any comments? \_\_\_\_\_

In January, I added Instant Goats milk  
Proportions: 1 full scoop in AM + 1 in PM  
In March I added chicken <sup>uncooked</sup> gizzards to  
his food - about 6 large pieces.

Thank you very much for your time and effort in contributing to this study.

# B6

Owner	Pet Name	Species	Breed	Sex	Par Age	Chart
B6	B6	Canine	Golden Retriever	CM	6Y	N
Test Requested	Results	Reference Range	Units			
<b>TAURINE</b>						
Taurine						
Normal Values (nmol/ml)						
	Normal Range	Critical Level				
Cat: Plasma	80-120	Less than 40				
Whole Blood	300-600	Less than 200				
Dog: Plasma	60-120	Less than 40				
Whole Blood	200-350	Less than 150				
BLOOD EDTA						
174 mmol/L						
TEST PERFORMED AT						
B6						

B6

TAURINE - B6 nmol/ml

# B6

**DIAGNOSIS:**

1. Overall normal cardiac chamber size and normal morphology of the heart; reduced fractional shortening can be normal for some dogs, although can be an indication of hypothyroidism and occult dilated cardiomyopathy. However, this could potentially be normal for this particular patient.

**COMMENTS:**

Further work up could include running certain cardiac biomarkers such as a Troponin C and a Pro BNP as well as a full thyroid panel to ensure that there is no evidence of hypothyroidism that could result in a depressed contractility. A 24 hour Holter exam could be done in order to evaluate for the presence of ventricular premature contractions (none seen on today's echocardiogram) as there can be an increased number of VPCs per 24 hours in dogs with occult dilated cardiomyopathy. In the event that there is elevation of the Troponin C/cardiac biomarkers or any indication of increased ventricular premature contractions, then we can certainly start taurine and L-carnitine supplementation. **It is certainly reasonable to choose to monitor both the taurine level and the echocardiogram and recheck both in 6 months or ultimately supplement and recheck an echocardiogram in 6 months.** The dose of taurine is 1 to 3 g per dog per 24 hours and the dose of L-carnitine is 1 g per dog BID to TID. It should be noted that the cardiac morphology in this patient is still normal and that the exam is currently inconclusive as there is still some evidence of an abnormality noted.

**B6**

**B6**

# B6

**Breed:** Golden Retriever  
**Sex:** Male neutered  
**DOB/Age:** 7 years  
**Weight:** 73.4 lbs.

**HISTORY:** **B6** has a generally healthy history. This dog is enrolled in the Golden Retriever Lifetime Study and as part of the blood work, they had a taurine level done which came back low at **B6** with a low normal of 200; although, the critical value is  $< 150$ . The owner was interested in pursuing an echocardiogram to assess for any evidence of dilated cardiomyopathy. The patient auscultates normally.

**EXAM:** The left atrium was normal in size and there was no evidence of any thrombi or smoke within the atrium. The left ventricle was normal in size in diastole and systole. The left ventricular free wall and septal wall were normal size. The myocardium was homogenous with no focal masses or infarcts. The mitral valve was normal thickness and demonstrated normal motion. The right atrium and right ventricle were appropriate in size as compared with the left heart. Contractility was subjectively mildly depressed and fractional shortening was reduced with an average value of 22%. The EPSS was normal at 0.8 cm. The mitral valve inflows were normal. The left and right ventricular outflow tracts were normal in appearance with no evidence of stenotic lesions. The tricuspid valve, aortic valve and pulmonic valve were smooth and normal thickness. Aortic flows and pulmonic flows were normal in velocity. There was no evidence of mitral or tricuspid regurgitation. There was no evidence of pleural or pericardial effusion nor any masses. The EKG demonstrated a normal sinus rhythm.

# B6



B6

Subject: B6

From: B6  
To: B6

Date: Thursday, April 12, 2018, 6:07:47 AM EDT

Additional info from cardiologist in: B6

Sent from my iPad

Begin forwarded message:

From: Medical Records B6  
Date: March 29, 2018 at 8:30:09 PM EDT  
To: B6  
Subject: B6

Hi B6

Wanted to let you know that I just heard back from Dr. Stern. He will be sending me the paperwork to enroll B6 and knows the sample is on it's way to the lab there.

He said he typically supplements taurine and L-carnitine simultaneously so you can add L-carnitine (1500mg 2-3 times daily). He recommends a recheck echo in 4 months from when supplements are started, and add Pimobendan at that time if not improved. If this is true taurine deficiency cardiomyopathy he said the vast majority will improve in 4 months and normalize in 8mo. If that is not the case then we have to worry about primary disease. Hope that makes sense! Let me know if any questions and we will go from there. Have a great weekend

B6

**B6**

3/28/18  
whole blood fauna:

From: [redacted] **B6**

[redacted] **B6**

Subject: [redacted]  
Date: Yesterday at 6:54 PM

To: [redacted] **B6**

**B6**

Please find attached the clinical summary for [redacted] **B6**

[redacted] **B6** has been evaluated by [redacted] **B6**

This report has been generated to provide you with the medical information required to continue with your assessment for this patient.

Please contact us should you require more information.

Thank you for this referral,

**B6**

# B6

**Consult Date:** 03-09-2018

**Patient Details**

Duffy - Male Neutered

Canine Golden Retriever

7 years 3 months

# B6

**Referring Vet Details**

**B6**

**History**

**B6** presents today for a cardiac evaluation and taurine level. **B6** in the 3000 Goldens Against Cancer study. Last October, he had an echocardiogram in **B6** which showed a mildly elevated left ventricle with decreased function. His taurine level, at that time, was low. **B6** Owners have since changed his diet from FROMM Lamb and Lentil to Farmina, with a higher amount of taurine. He has been doing well at home, with no cough or labored breathing, normal appetite and exercise tolerance. He does pant heavily but typically after walks or playing.

No current medications.

Current body weight: 75.6 lb

**Physical Exam**

Mucous Membranes: Pink

CRT: Normal

Heart rate: 90; respiratory sinus arrhythmia

Murmur: None

Respiratory rate: Pant

Lung auscultation: Lungs auscult clear bilaterally

Respiratory effort: Normal rate and effort

Abdomen: Normal palpation, non-painful

**Diagnostic Result**

Echocardiogram-CompleteDiagnostic (Ref: US10998-DR6911)

**Outcome**

Moderate decline in LV myocardial function. LVFS 21%. Moderate LV dilation. LVIDd 5.86cm. Increased EPSS 1.10cm. Trace mitral regurgitation detected with color flow Doppler. No left atrial enlargement. LA:Ao 1.28. No tricuspid regurgitation detected with color flow Doppler. No right atrial enlargement. Normal pulmonic and aortic outflow velocities.

# B6

**Patient Details**

**B6**

**Client Details**

**B6**

LVID:  
LVPW:  
FS%

**B6**

Left Atr:  
Aorta (L):  
LA/Ao (L):

**B6**

**\*\*Doppler Measurements\*\***

Aortic Flow:  
Aortic Flow:  
MV EPSS: 1.1:  
Pulmonic Flow:  
Pulmonic Flow:

**B6**

ECG - Echocardiogram Extended rhythm ECG (Ref: US10398-DR6912)

**Outcome**

A respiratory sinus arrhythmia was noted during the echocardiogram. No ectopic beats, tachy or bradyarrhythmias were noted.

Doppler Blood Pressure (Ref: US10398-DR6913)

**Outcome**

Non-invasive Doppler blood pressure measurement performed on the antebrachium using a # 8 cuff.

Three successive readings performed:

**B6**

Mild stress, sternal recumbency.

**Assessments**

Suspect early dilated cardiomyopathy; cannot rule out taurine-deficiency as a contributing factor.

**Plans**

**B6** today's echocardiogram documents a decline in LV myocardial function in addition to dilation of the left ventricle. Compared to the study done previously, there is approximately 1cm increase in both LV dimensions (systolic and diastolic). The function remains decreased although unchanged overall (20%). This information is concerning for true early DCM, whether it is due to something dietary or hereditary/primary remains to be seen. We did discuss different ultrasonographers make it hard to compare directly, however the change is significant. We submitted blood for a taurine level today and results are pending. At this point we have recommended supplementing the taurine at home (1000mg twice daily) regardless of the results. We will contact you in approximately 2 weeks when the results are available.

We also discussed the use of **B6** in these cases, and the results of the PROTECT study. Given unchanged systolic function and a normal LA dimension, I have not instituted this today. We will revisit in the future depending on progression. In the interim, a normal LA translates to a relatively low current risk for onset of congestive heart failure at this time.

Reassessment is recommended in 6 months. If issues arise in the interim (labored breathing, collapse episodes, etc) we recommended **B6** as a local option or the summer.

The owner is aware of the need to seek urgent medical attention if onset of a cough, labored breathing, or exercise intolerance. We request a cardiology recheck in 6 months, sooner if problems arise.

Thank you for your trust in the care of this patient. Please call if you have any questions or concerns.

**Patient Details**

**B6**

**Client Details**

**B6**

**B6**



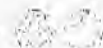
## Researchers getting closer to understanding dietary taurine and heart disease in dogs

Canine Health | Study Participant News



September 19th, 2017

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### Link between taurine deficiency and heart disease first discovered in cats

In 1987, a remarkable article was published in the prestigious journal, *Science*. Veterinarians in the School of Veterinary Medicine at University of California, Davis, reported that a deficiency of taurine, an amino acid, was responsible for the development of dilated cardiomyopathy (DCM), a form of heart muscle disease, in cats.

The veterinary community was stunned; not only because this was a new report of a dietary nutrient and heart disease, but that the disease was reversible when taurine was added to the diet of affected cats. This makes perfect sense because taurine is an amino acid that is abundant in meat so carnivores (like cats) never developed the ability to make their own taurine and must get it from their diet. Adjustments to commercial cat diets soon followed, and since publication of the article 30 years ago, dilated cardiomyopathy in domestic cats has almost completely disappeared.

As omnivores, the story for dogs isn't quite so elegant.

Soon after the Science article was published, there was a flurry of research looking for a similar link between nutrition and DCM in other species, including dogs. However, it quickly became apparent to veterinary cardiologists that DCM in dogs was not going to have a tidy resolution.

Throughout the late 1980s and continuing through the 1990s, many veterinary cardiologists looked at a variety of nutrients, including taurine, in their canine patients with dilated cardiomyopathy. Scattered reports of taurine deficient dogs with heart disease appeared in the veterinary literature, but the vast majority of dogs with DCM had normal taurine levels. However, recent reports in golden retrievers have veterinary cardiologists revisiting taurine and DCM in this breed.

### **Dilated cardiomyopathy in dogs – the basics**

The heart is a complicated organ with lots of moving parts. The heart has valves that help direct the flow of blood into and out of the heart; muscle that contracts to pump blood throughout the body; and blood vessels that supply the heart with nutrients and remove wastes. A variety of diseases can affect any of these parts. Cardiomyopathies are a group of diseases that affect the heart muscle, and DCM is one form of this type of problem.

In DCM, the heart muscle weakens. This weakening can happen for a variety of reasons, but regardless of the underlying cause, the end result is a thinning of the walls of the heart. The heart becomes more like a flabby balloon than a powerful, muscular organ. The heart simply cannot pump blood efficiently, and lots of blood remains in the heart with each beat. At first, the body can try to compensate for poor blood flow, but eventually these mechanisms are overwhelmed, and the patient develops heart failure. Medications can help control the heart failure, but therapy can't stop the relentless progression of the disease.

There are many causes of DCM. While DCM is classically thought of as an inherited disease of the heart muscle, there are many causes of heart chamber dilation and reduced heart function that can mimic DCM.

Other causes of cardiomyopathy include toxicity associated with the chemotherapeutic agent doxorubicin, and deficiencies of the nutrients taurine and carnitine.

### **Taurine deficiency and DCM in dogs**

Unfortunately, many dog breeds with high incidence of DCM, such as the Doberman pinscher, didn't have documented taurine deficiency but rather an inherited form of this disease. However, in some breeds, a link to taurine deficiency was discovered.

In the mid-1990s, the cardiology group at University of California, Davis, spearheaded a large, multi-center study looking at DCM in American cocker spaniels. They documented low taurine levels in many of their study dogs, and they found that once taurine was supplemented in the diet, heart function improved, sometimes significantly.

In 2003, researchers reported that some Newfoundland dogs had reversible DCM associated with taurine deficiency, and in 2005, another team published a report on a family of golden retrievers with taurine-deficiency and reversible DCM. Based on these reports, veterinary cardiologists recommended that taurine levels be tested in dogs diagnosed with cardiomyopathy, particularly if they were a breed not usually associated with the disease, or were an American cocker spaniel, Newfoundland or golden retriever.

As cardiologists continued to document cases of DCM associated with low blood taurine levels, they continued to search for a common thread that tied these cases together. In many cases, diet was believed to play a major role in the disease.



## **The role of diet in taurine deficiency and DCM**

It was logical for veterinary cardiologists to focus on diet as the root cause of DCM related to taurine deficiency. For many dogs with DCM, common dietary trends emerged that strongly correlated with the disease.

"Diet plays a huge role in this condition," said Dr. Josh Stern, a Morris Animal Foundation-funded researcher, owner of a Golden Retriever Lifetime Study participant (Lira, Hero #203), and veterinary cardiologist studying this disease. "Home-cooked diets have been implicated in this problem, as well as small batch, boutique dog foods."

Other studies have linked high fiber, lamb and rice meal, and very-low-protein diets to the condition.

Dr. Stern said veterinary cardiologists were trained to measure taurine levels in dogs diagnosed with DCM if they weren't a breed known to have a genetic link to the disease, such as Doberman pinschers or boxers. However, a recent upswing in the number of DCM cases in dogs has put veterinarians on the alert for the disease. In addition, one breed appears to have a big surge in this problem – golden retrievers.

### **Taurine deficiency and DCM in golden retrievers – an emerging problem?**

A recent surge in the number of golden retrievers diagnosed with taurine deficiency and DCM has many golden retriever owners and breeders concerned. Although taurine deficiency DCM has been reported in the breed, some cardiologists are seeing more golden retrievers with the disease than normal.

This perceived uptick in cases spurred Dr. Stern to look more closely at this phenomenon. As a veterinary cardiologist and golden retriever owner, this disease hits close to home.

Dr. Stern has been collecting blood samples and cardiac ultrasound data from golden retrievers both with and without the disease. Although diet plays a role in the golden retrievers, Dr. Stern suspects genetic factors might be involved in increasing the risk of this conditions within the golden retrievers breed.

"I suspect that golden retrievers might have something in their genetic make-up that makes them less efficient at making taurine," said Dr. Stern. "Couple that with certain diets, and you've given them a double hit. If you feed them a diet that has fewer building blocks for taurine or a food component that inhibits this synthesis, they pop up with DCM."

Dr. Stern is gathering data and hopes to publish his initial findings soon. His hope is that he can offer scientifically based guidelines for golden retriever owners regarding diet and DCM in this breed. Dr. Stern will be drawing blood samples for taurine measurement at the upcoming Golden Retriever Club of America National Specialty, and hopes to add to his already impressive database.

### **What's next?**

The good news is that DCM secondary to taurine deficiency has a very good long-term prognosis. Taurine supplementation often reverses the heart muscle abnormalities, and many dogs can be completely weaned off heart medications.

Veterinary cardiologists are spreading the word about taurine and DCM in dogs, and researchers such as Dr. Stern are piecing together data to get a clearer picture about this problem. Identifying a genetic abnormality associated with the disease could lead to a diagnostic test which might identify at risk dogs.

Getting the word out to owners also is important. Knowing breed dispositions for disease helps both owners and their veterinary health care team make the best decisions for each patient.

## Is the Golden Retriever Lifetime Study looking at taurine-deficient dilated cardiomyopathy?

Taurine is not currently measured routinely in enrolled dogs. However, banked samples are available to researchers, and the study team continually monitors disease information as it's received. If you think your dog is at risk or clinically affected, please work with your family veterinarian to determine what's best for your dog.

Morris Animal Foundation has been a leader in canine heart disease research for more than 50 years. Beginning with our first grant to define what a normal canine electrocardiogram looks like to our most recent grants identifying genetic markers for heart disease, the Foundation has been deeply committed to advancing cardiovascular research in dogs. Read about our latest research grants as well as our history of heart disease research.

Learn more about Dr. Stern's research and submit samples to his laboratory for taurine measurement.

[Previous Story](#)

[Next Story](#)

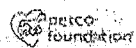
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S = Subjective (complaint/history)  
O = Objective (exam)  
A = Assessment (diagnosis, R/O)  
P = Plan (action/C.E.)

# PROGRESS NOTES

Name **B6** Pet # ( ) Birthdate **B6** File # Page **28**

DATE	SOAP	CODE	CHARGE
<b>B6</b>			

S = Subjective (complaint/history)  
O = Objective (exam)  
A = Assessment (diagnosis, R/O)  
P = Plan (action/C.E.)

# PROGRESS NOTES

Name \_\_\_\_\_

**B6**

Pet # (\_\_\_\_\_) Birthdate \_\_\_\_\_

**B6**

File # \_\_\_\_\_

Page \_\_\_\_\_

(22)

DATE

SOAP

**B6**

# B6

Reference Number  
MEEB05154458Doctor  
B6Client  
B6Pat. Name  
B6Received  
10/03/2017Species  
CanineBreed  
Golden RetrieverSex  
CMChart #  
094-000424A05Pet Age  
6YReported  
10/03/2017 04:50 AM

## Complete Blood Count

Test Procedure	Results	Adult Reference Range	Alert	Units
WBC	<b>B6</b>	4.0-15.5		10 <sup>3</sup> /μL
RBC		4.8-9.3		10 <sup>6</sup> /μL
HGB		12.1-20.3		g/dL
HCT		36-60		%
MCV		58-79		fL
MCH		19-28		pg
MCHC		30-38		g/dL
Platelet Count		170-400		10 <sup>3</sup> /μL
Platelet Estimate				
Neutrophils		60-77		%
Bands		0-3		%
Lymphocytes		12-30		%
Monocytes		3-10		%
Eosinophils		2-10		%
Basophils		0-1		%
Absolute Neutrophils		2060-10600		/μL
Absolute Lymphocytes		690-4500		/μL
Absolute Monocytes		0-840		/μL
Absolute Eosinophils	0-1200		/μL	
Absolute Basophils	0-150		/μL	

## Heartworm Antigen

Test Procedure	Results	Adult Reference Range	Alert	Units
HEARTWORM ANTIGEN	<b>B6</b>			

### • Comments

- Negative for adult heartworm antigen (mature female heartworms). Infection occurring sooner than 5 to 7 months prior to testing may not be detected.

## Ova and Parasites With Centrifugation

Test Procedure	Results	Adult Reference Range	Alert	Units
Ova & Parasite	<b>B6</b>			

## Superchem

Test Procedure	Results	Adult Reference Range	Alert	Units
Total Protein	<b>B6</b>	5.0-7.4		g/dL
Albumin		2.7-4.4		g/dL
Globulin		1.6-3.6		g/dL
A/G Ratio		0.8-2.0		
AST (SGOT)		15-66		IU/L
ALT (SGPT)		12-118		IU/L
ALK Phosphatase		5-131		IU/L
GGT		1-12		IU/L
Total Bilirubin		0.1-0.3		mg/dL
BUN		6-31		mg/dL
Creatinine		0.5-1.6		mg/dL
BUN/Creatinine Ratio		4-27		
Phosphorus		2.5-6.0		mg/dL
Glucose		70-130		mg/dL
Calcium		8.9-11.4		mg/dL
Corrected Calcium				
Magnesium		1.5-2.5		mEq/L
Sodium		135-154		mEq/L
Potassium		3.6-6.5		mEq/L
NA/K Ratio		27-38		
Chloride		102-120		mEq/L
Cholesterol		92-324		mg/dL
Triglyceride		28-291		mg/dL
Amylase		290-1125		IU/L
PrecisionPSL	24-140		U/L	

### • Comments

- Pancreatitis is unlikely, but a normal PrecisionPSL result does not completely exclude pancreatitis as a cause for gastrointestinal signs.

CPK	<b>B6</b>	59-895	LOW	IU/L
-----	-----------	--------	-----	------

## Total T4

Test Procedure	Results	Adult Reference Range	Alert	Units
T4	<b>B6</b>	0.8-3.5		μg/dL

### • Comments

- The Total T4 result is less than 1.0 mcg/dl. A Free-T4 by equilibrium dialysis may be helpful in supporting the diagnosis of hypothyroidism in patients demonstrating clinical signs compatible with hypothyroidism. Please contact Customer Service for this additional testing.

## Urinalysis-Complete

Test Procedure	Results	Adult Reference Range	Alert	Units
Collection Method				

### • Comments

• ~~Comments~~  
• NOT Stated

Color			
Appearance			
Specific Gravity	<b>B6</b>	1.015-1.050	
pH		5.5-7.0	HIGH
Protein		Negative	HIGH

• ~~Comments~~  
• Microalbuminuria testing is recommended (if sediment is inactive) to help determine the clinical significance of proteinuria.

Glucose-Strip		Negative	
Ketones		Negative	
Bilirubin		Neg To 1+	
Occult Blood		Negative	
WBC	<b>B6</b>	0-3	HPF
RBC		0-3	HPF
Casts		Hyaline 0-3	HPF
Struvite Crystals			HPF
Bacteria		None Seen	HIGH

• ~~Comments~~  
• Culture is the preferred test for verifying viable bacteriuria.

SQUAMOUS EPITHELIA	<b>B6</b>	0-3	HPF
--------------------	-----------	-----	-----

B6

B6

B6

B6

Accession No. B6  
Received 10/02/2017  
Reported 10/05/2017 09:59 AM

Owner	Pet Name	Species	Breed	Sex	Pet Age	Chart#
B6		Canine	Golden Retriever	CM	8Y	N
Test Requested	Results	Reference Range	Units			
<b>TROPONIN</b>						
Troponin	B6	0.03-0.11	ng/mL			
NO REFERENCE RANGE						
Test performed at	B6					

B6

B6  
PAGE 1 OF 1

B6

B6

Accession No. B6  
Received 10/02/2017  
Reported 10/03/2017 08:30 AM

Owner	Pet Name	Species	Breed	Sex	Pet Age	Chart#
B6		Canine	Golden Retriever	CM	6Y	N
Test Requested	Results	Reference Range	Units			
ANTECH CARDIO BNP-CANINE	B6	0.0-6.0	pg/mL			
Cardio BNP-Canine						
Cardiac compromise (CHF) is unlikely to be present in this patient.						

B6



S = Subjective (complaint/history)  
O = Objective (exam)  
A = Assessment (diagnosis, R/O)  
P = Plan (action/C.E.)

# PROGRESS NOTES

Name **B6** Pet # ( ) Birthdate **B6** File # Page 26

DATE	SOAP	CODE	CHARGE
<h1>B6</h1>			

S = Subjective (complaint/history)  
O = Objective (exam)  
A = Assessment (diagnosis, R/O)  
P = Plan (action/C.E.)

# PROGRESS NOTES

Name **B6** Pet # ( ) Birthdate **B6** File # Page **25**

DATE	SOAP	CODE	CHANGES
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**B6**

# B6

**Date of Exam:** 9/12/17  
**Invoice:** 9623  
**Doctor:**  
**Hospital:**  
**Phone #:**

# B6

**Patient's Name:** B6  
**Breed:** Golden Retriever  
**Sex:** Male neutered  
**DOB/Age:** 7 years  
**Weight:** 73.4 lbs.

**HISTORY:** B6 has a generally healthy history. This dog is enrolled in the Golden Retriever Lifetime Study and as part of the blood work, they had a taurine level done which came back low at B6 with a low normal of 200; although, the critical value is < 150. The owner was interested in pursuing an echocardiogram to assess for any evidence of dilated cardiomyopathy. The patient auscultates normally.

**EXAM:** The left atrium was normal in size and there was no evidence of any thrombi or smoke within the atrium. The left ventricle was normal in size in diastole and systole. The left ventricular free wall and septal wall were normal size. The myocardium was homogenous with no focal masses or infarcts. The mitral valve was normal thickness and demonstrated normal motion. The right atrium and right ventricle were appropriate in size as compared with the left heart. Contractility was subjectively mildly depressed and fractional shortening was reduced with an average value of 22%. The EPSS was normal at 0.8 cm. The mitral valve inflows were normal. The left and right ventricular outflow tracts were normal in appearance with no evidence of stenotic lesions. The tricuspid valve, aortic valve and pulmonic valve were smooth and normal thickness. Aortic flows and pulmonic flows were normal in velocity. There was no evidence of mitral or tricuspid regurgitation. There was no evidence of pleural or pericardial effusion nor any masses. The EKG demonstrated a normal sinus rhythm.

# B6

# B6

## Canine Echocardiographic Parameters

# B6

**DIAGNOSIS:** 1. Overall normal cardiac chamber size and normal morphology of the heart; reduced fractional shortening can be normal for some dogs; although can be an indication of hypothyroidism and occult dilated cardiomyopathy. However, this could potentially be normal for this particular patient.

**COMMENTS:** Further work up could include running certain cardiac biomarkers such as a Troponin C and a Pro BNP as well as a full thyroid panel to ensure that there is no evidence of hypothyroidism that could result in a depressed contractility. A 24 hour Holter exam could be done in order to evaluate for the presence of ventricular premature contractions (none seen on today's echocardiogram) as there can be an increased number of VPCs per 24 hours in dogs with occult dilated cardiomyopathy. In the event that there is elevation of the Troponin C/cardiac biomarkers or any indication of increased ventricular premature contractions, then we can certainly start taurine and L-carnitine supplementation. **It is certainly reasonable to choose to monitor both the taurine level and the echocardiogram and recheck both in 6 months or ultimately supplement and recheck an echocardiogram in 6 months.** The dose of taurine is 1 to 3 g per dog per 24 hours and the dose of L-carnitine is 1 g per dog BID to TID. It should be noted that the cardiac morphology in this patient is still normal and that the exam is currently inconclusive as there is still some evidence of an abnormality noted.

# B6

# B6

**B6**

**B6**

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# PROGRESS NOTES

Name **B6** Pet # ( ) Birthdate **B6** File # Page 25

DATE	SOAP	<i>Antib</i>	CODE	CHARGE
<h1>B6</h1>				

S = Subjective (complaint/history)  
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A = Assessment (diagnosis, R/O)  
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# PROGRESS NOTES

Name: **B6** Pet # ( ) Birthdate: **B6** File # Page 23

DATE	SOAP
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**B6**

B5

B6

B6

B6

Accession No. B6  
Received 08/08/2017  
Reported 08/11/2017 12:13 PM

Owner	Pet Name	Species	Breed	Sex	Pet Age	Chart#
B6		Canine	Golden Retriever	CM	6Y	N

Test Requested	Results	Reference Range	Units
----------------	---------	-----------------	-------

TAURINE

Taurine

Normal Values (nmols/ml)

	Normal Range	Critical Level
Cat Plasma	60-120	Less than 40
Whole Blood	300-600	Less than 200
Dog Plasma	60-120	Less than 40
Whole Blood	200-350	Less than 150

BLOOD, EDTA

B6 nmol/ml

TEST PERFORMED AT

B6





SCHOOL OF VETERINARY MEDICINE  
DEPARTMENT OF MEDICINE & EPIDEMIOLOGY  
UNIVERSITY OF CALIFORNIA  
(530) 752-1363  
FAX (530) 752-0414

ONE SHIELDS AVENUE  
DAVIS, CALIFORNIA 95616-8734

June 28, 2017

### Taurine-deficient Dilated Cardiomyopathy (DCM) in Golden Retrievers

In the wake of many Golden Retrievers being diagnosed with taurine-deficient DCM, we have started to collect information to better understand the condition and help the Golden Retriever community. Unfortunately, many owners have identified concerns and proceeded with supplementation or diet change without first obtaining appropriate diagnostic criteria. This approach has led to more confusion and an inability to definitively say whether some dogs have an inherited cardiomyopathy or a nutritionally derived heart disease. This makes a huge difference in the prognosis and outcome for these dogs and their possible continuation in the breeding pool. Please review the following steps regarding evaluation of taurine-deficient DCM. Our group has put this together to help get to the bottom of this issue as fast and as medically appropriate as possible.

1. If you believe your dog is at risk for taurine deficient Dilated Cardiomyopathy (DCM) and wish to have taurine levels tested - please request a whole-blood taurine level be submitted (lithium heparin tube) for analysis. The laboratory that I recommend can be found here: <http://www.vetmed.ucdavis.edu/vmb/labs/aal/>
2. If you believe your dog is showing signs of DCM already - please seek an appointment with a board certified cardiologist to have an echocardiogram and taurine testing obtained simultaneously - do not change foods, do not supplement prior to the appointment.
3. If you receive taurine test results that come back as low - please seek an appointment with a board certified cardiologist to have an echocardiogram performed to determine if your pet needs cardiac medications and the appropriate supplements to be used (DO NOT SUPPLEMENT OR CHANGE FOODS UNTIL YOU HAVE THE CARDIOLOGY EVALUATION COMPLETED). If you live in close to UC Davis, we can arrange research-funded cardiology evaluations for your dog if you contact us via [sterngenetics@ucdavis.edu](mailto:sterngenetics@ucdavis.edu).
4. If you receive cardiologist confirmed DCM results, please take an image of the food bag, ingredient list and lot number. Please also request a copy of the images from the echocardiogram from your cardiologist (ensure that you have full DICOM image copies on a CD). Please complete a full diet history form found at this link ([http://www.vetmed.ucdavis.edu/vmth/small\\_animal/nutrition/forms.cfm](http://www.vetmed.ucdavis.edu/vmth/small_animal/nutrition/forms.cfm)). Please email the image of food bag, a 3-generation pedigree, diet history form, copies of the taurine level results and medical record to [sterngenetics@ucdavis.edu](mailto:sterngenetics@ucdavis.edu). A member of our laboratory team will contact you to discuss our thoughts and possibly request additional information, food samples or blood samples for further testing.
5. If you have any questions on how to proceed please email Dr. Stern at [sterngenetics@ucdavis.edu](mailto:sterngenetics@ucdavis.edu).

Kind Regards,

Joshua A Stern, DVM, PhD, DACVIM

Joshua Stern, DVM, PhD, Diplomate ACVIM (Cardiology)  
Associate Professor of Cardiology  
School of Veterinary Medicine, Department of Medicine and Epidemiology,  
University of California, 2108 Tupper Hall, 258 CCAH  
Davis, CA, 95616. Tel: (530) 752-2475: Email: [jstern@ucdavis.edu](mailto:jstern@ucdavis.edu)

B6

B6

B6

B6

Accession No. B6  
Received 08/08/2017  
Reported 08/11/2017 12:13 PM

Owner	Pet Name	Species	Breed	Sex	Pet Age	Chart#
B6		Canine	Golden Retriever	CM	6Y	N
Test Requested	Results	Reference Range	Units			

TAURINE

Taurine

Normal Values (nmols/ml)

Normal Range

Critical Level

Cat Plasma 60-120  
Whole Blood 300-600

Less than 40  
Less than 200

Dog Plasma 60-120  
Whole Blood 200-350

Less than 40  
Less than 150

BLOOD EDTA

B6 nmol/mL

TEST PERFORMED AT

B6

S = Subjective (complaint/history)  
O = Objective (exam)  
A = Assessment (diagnosis, R/O)  
P = Plan (action/C.E.)

# PROGRESS NOTES

Name

**B6**

Pet # ( )

Birthdate

**B6**

File #

Page

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DATE

SOAP

CODE

CHARGE

**B6**

**B6**

to: \_\_\_\_\_

re: \_\_\_\_\_

attn: \_\_\_\_\_

**B6**

pages including cover: ~~46~~ 32

part 2

S = Subjective (complaint/history)  
O = Objective (exam)  
A = Assessment (diagnosis, R/O)  
P = Plan (action/C.E.)

# PROGRESS NOTES

Name

**B6**

Pet # ( ) Birthdate

**B6**

File #

Page

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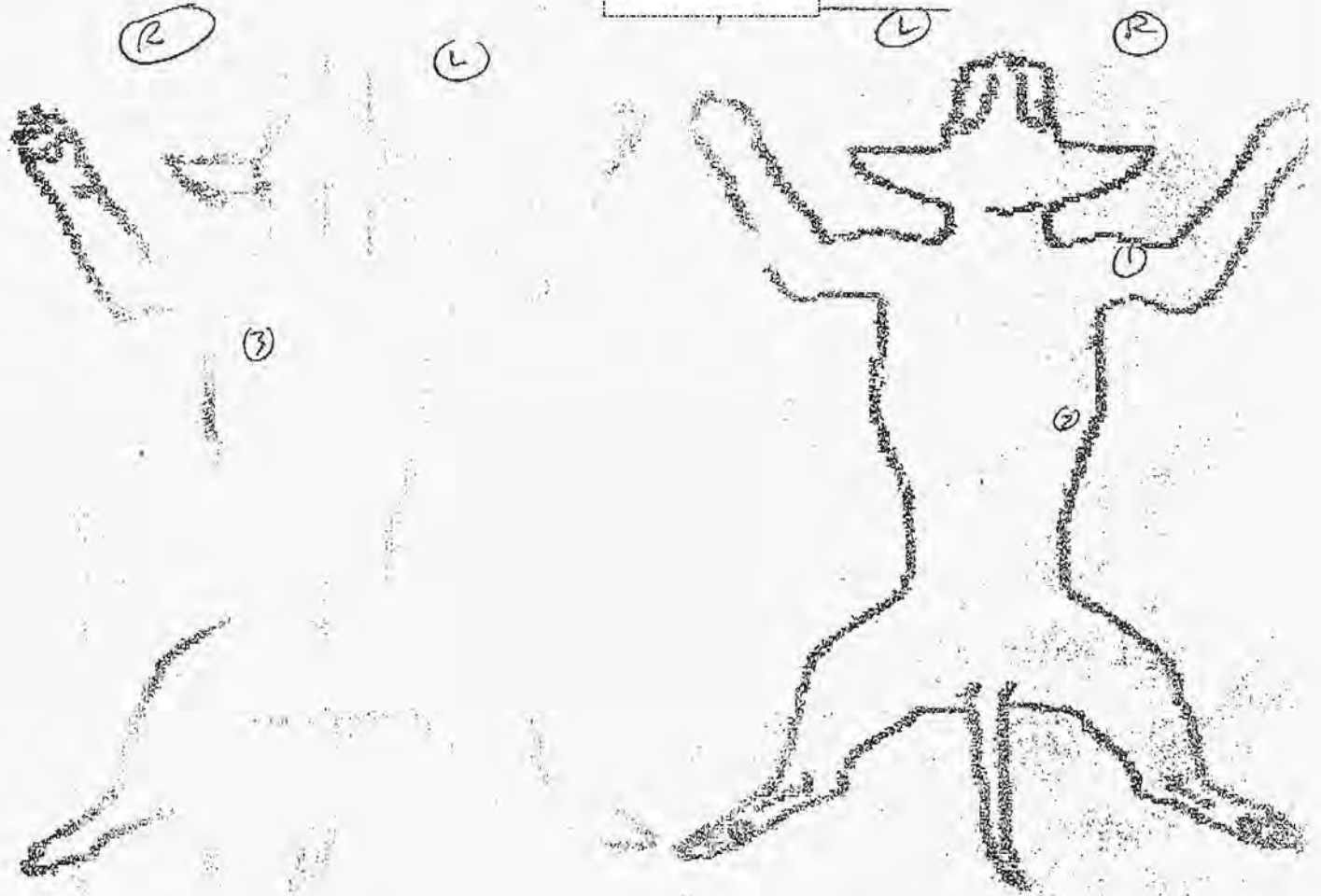
DATE

SOAP

**B6**

# Lesion Chart

**B6**



Lesion	Date	Site	Diagnosis	Cytology/ Biopsy Result	Dr. Name
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					

**B6**



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# PROGRESS NOTES

Name **B6** Pet # ( ) Birthdate **B6** File # Page **19**

DATE	SOAP	CODE	CHARGE
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**B6**



S = Subjective (complaint/history)  
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A = Assessment (diagnosis, R/O)  
P = Plan (action/C.E.)

# PROGRESS NOTES

Name **B6** Pet # ( ) Birthdate **B6** File # Page **(12)**

DATE	SOAP	<b>B6</b>		CODE	CHARGE
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**B6**

Annual Visit  
 (4)

**B6**

Reference Number  
 MEEAS7879908  
 Species  
 Canine

Breed  
 Golden Retriever

Doctor  
 Client  
**B6**  
 Pet Name  
 Sex  
 CM  
 Chart #  
 094-000424A04  
 Pet Age  
 5Y

Received  
 10/04/2016  
 Reported  
 10/04/2016 05:07 AM

**Complete Blood Count**

Test Procedure	Results	Adult Reference Range	Alert	Units
WBC	<b>B6</b>	4.0-15.5		10 <sup>3</sup> /μL
RBC		4.8-9.3		10 <sup>6</sup> /μL
Hemoglobin		13.1-20.3		g/dL
Hematocrit		36-60		%
MCV		58-79		fL
MCH		19-28		pg
MCHC		30-38		g/dL
Platelet Count		170-400		10 <sup>3</sup> /μL
Platelet EST		Adequate		
Neutrophils		60-77		LOW %
Bands		0-3		%
Lymphocytes		12-30		HIGH %
Monocytes		3-10		LOW %
Eosinophils		2-10		%
Basophils		0-1		%
Absolute Neutrophils		2060-10600		/uL
Absolute Bands		0-300		/uL
Absolute Lymphocytes		690-4500		/uL
Absolute Monocytes	0-840		/uL	
Absolute Eosinophils	0-1200		/uL	
Absolute Basophils	0-150		/uL	

**Heartworm Antigen**

Test Procedure	Results	Adult Reference Range	Alert	Units
Occult Heartworm Antigen	<b>B6</b>			

**Comments**  
 There were no measurable amounts of adult female heartworm antigen in this sample. Adult *Dirofilaria immitis* antigens will not be detected for 5 to 7 months following exposure to early larval stages.

**Ova and Parasites With Centrifugation**

Test Procedure	Results	Adult Reference Range	Alert	Units
Ova and Parasite	<b>B6</b>			

**Superchem**

Test Procedure	Results	Adult Reference Range	Alert	Units
Total Protein	<b>B6</b>	5.0-7.4		g/dL
Albumin		2.7-4.4		g/dL
Globulin		1.6-3.6		g/dL
A/G Ratio		0.8-2.0		Ratio
AST (SGOT)		15-66		U/L
ALT (SGPT)		12-118		U/L
Alk Phosphatase		5-131		U/L
GGT		1-12		U/L
Total Bilirubin		0.1-0.3		mg/dL
Urea Nitrogen		6-31		mg/dL
Creatinine		0.5-1.6		mg/dL
BUN/Creatinine Ratio		4-27		Ratio
Phosphorus		2.5-6.0		mg/dL
Glucose		70-138		mg/dL
Calcium		8.9-11.4		mg/dL
Corrected Calcium				
Magnesium		1.5-2.5		mEq/L
Sodium		139-154		mEq/L
Potassium		3.6-5.5		mEq/L
Na/K Ratio				
Chloride	102-120		mEq/L	
Cholesterol	92-324		mg/dL	
Triglycerides	29-291		mg/dL	
Amylase	290-1125		U/L	
PrecisionPSL	24-140		U/L	

**Comments**  
 Pancreatitis is unlikely, but a normal PrecisionPSL result does not completely exclude pancreatitis as a cause for gastrointestinal signs.

CPK	<b>B6</b>	59-895		U/L
-----	-----------	--------	--	-----

**Total T4**

Test Procedure	Results	Adult Reference Range	Alert	Units
T4	<b>B6</b>	0.8-3.5		ug/dL

**Urinalysis**

Test Procedure	Results	Adult Reference Range	Alert	Units
Collection Method				

**Comments**  
 Not stated

Color	<b>B6</b>			
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S = Subjective (complaint/history)  
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# PROGRESS NOTES

Name **B6** Pet # ( ) Birthdate **B6** File # Page 17

DATE	SOAP	CODE	CHARGE
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**B6**

25/1/21

S = Subjective (complaint/history)  
O = Objective (exam)  
A = Assessment (diagnosis, R/O)  
P = Plan (action/C.E.)

# PROGRESS NOTES

Name **B6** Pet # ( ) Birthdate **B6** File # Page **16**

DATE	SOAP	CODE	CHARGE
<b>B6</b>			

S  
A  
P

S = Subjective (complaint/history)  
O = Objective (exam)  
A = Assessment (diagnosis, R/O)  
P = Plan (action/C.E.)

# PROGRESS NOTES

Name **B6** Pet # ( ) Birthdate **B6** File # Page **15**

DATE	SOAP	CODE	CHARGE
<b>B6</b>			

S = Subjective (complaint/history)  
O = Objective (exam)  
A = Assessment (diagnosis, R/O)  
P = Plan (action/C.E.)

# PROGRESS NOTES

Name **B6** Pet # ( ) Birthdate **B6** File # Page **14**

DATE

SOAP

CODE CHARGE

**B6**

S = Subjective (complaint/history)  
O = Objective (exam)  
A = Assessment (diagnosis, R/O)  
P = Plan (action/C.E.)

# PROGRESS NOTES

Name **B6** Pet # ( ) Birthdate **B6** File # Page **13**

DATE	SOAP	CODE	CHARGE
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**B6**


S = Subjective (complaint/history)  
O = Objective (exam)  
A = Assessment (diagnosis, R/O)  
P = Plan (action/C.E.)

# PROGRESS NOTES

Name

**B6**

Pet # ( ) Birthdate

**B6**

File #

Page

12

DATE

SOAP

CODE

CHARGE

**B6**



VISIT (2)

Patient Info:  
 Name: B6  
 Chart No: 094-000424  
 Owner: B6  
 Doctor:

Species: Canine  
 Breed: Golden Retriever  
 Age: 3Y  
 Sex: CM

Hospital: 0:  
**B6**

Accession No	Doctor	Owner	Pet Name
	B6		B6

Test	Results	Adult Reference Range
Total Protein		5.0-7.4
Albumin		2.7-4.4
Globulin		1.6-3.6
A/G Ratio		0.8-2.0
AST (SGOT)		15-86
ALT (SGPT)		12-118
Alk Phosphatase		5-131
GGTP		1-12
Total Bilirubin		0.1-0.3
Urea Nitrogen		6-31
Creatinine		0.5-1.6
BUN/Creatinine Ratio	<b>B6</b>	4-27
Phosphorus		2.5-6.0
Glucose		70-138 <small>LOW</small>
Calcium		8.9-11.4
Magnesium		1.5-2.5
Sodium		139-154
Potassium		3.6-5.5
Na/K Ratio		
Chloride		102-120
Cholesterol		92-324
Triglycerides		29-291
Amylase		290-1125
Lipase		77-695
CPK		59-895
Comment:		
Hemolysis 1+ No significant interference.		

WBC		4.0-15.5
RBC		4.8-9.3
Hemoglobin		12.1-20.3
Hematocrit	<b>B6</b>	36-60
MCV		58-79
MCH		19-28
MCHC		30-38
Platelet Count		170-400
Platelet EST		ADEQUATE

Neutrophils		55 2060-10600
Bands		0 0-300
Lymphocytes	<b>B6</b>	39 690-4500
Monocytes		2 0-840
Eosinophils		4 0-1200
Basophils		0 0-150

T4	<b>B6</b>	0.8-3.5	<b>B6</b>
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**B6**

**B6**

Accession No. **B6**  
Received 04/05/2014  
Reported 04/05/2014 03:33 AM

Owner	Pet Name	Species	Breed	Sex	Pet Age	Chart#
<b>B6</b>		Canine		U	N/A	
Test Requested	Results	Reference Range	Units			
<b>OVA AND PARASITES WITH CENTRIFUGATION</b>						
Ova & Parasite	<b>B6</b>					

S = Subjective (complaint/history)  
O = Objective (exam)  
A = Assessment (diagnosis, R/O)  
P = Plan (action/C.E.)

# PROGRESS NOTES

Name **B6** Pet # ( ) Birthdate **B6** File # Page 11

DATE	SOAP	CODE	CHARGE
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**B6**

S = Subjective (complaint/history)  
O = Objective (exam)  
A = Assessment (diagnosis, R/O)  
P = Plan (action/C.E.)

# PROGRESS NOTES

Name **B6** Pet # ( ) Birthdate **B6** File # Page **1**

DATE	SOAP	CODE	CHARGE
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**B6**

VISIT \* ①

**B6**

**B6**

Accession No. **B6**  
 Received 10/08/2013  
 Reported 10/08/2013 07:01 AM

Owner: **B6** Pet Name: Species: Canine Breed: Golden Retriever Sex: CM Pet Age: 2Y Chart#: 094-000424

Superchem				CBC				
Tests	Results	Ref. Range	Units	Tests	Results	Ref. Range	Units	
Total Protein	6.0	<b>B6</b>	g/dL	WBC	<b>B6</b>	4.0-15.5	10 <sup>3</sup> /μL	
Albumin	3.6		g/dL	RBC		4.8-9.3	10 <sup>6</sup> /μL	
Globulin	2.4		g/dL	Hemoglobin		12.1-20.3	g/dL	
A/G Ratio	1.5		Ratio	Hematocrit		36-60	%	
AST (SGOT)	32		U/L	MCV		58-79	fL	
ALT (SGPT)	31		U/L	MCH		19-28	pg	
Alk Phosphatase	24		U/L	MCHC		30-38	g/dL	
GGTP	5		U/L	Platelet Count		170-400	10 <sup>3</sup> /μL	
Total Bilirubin	0.3		mg/dL	Platelet EST		Adequate		
Urea Nitrogen	15		mg/dL	Differential		%		
Creatinine	1.0		mg/dL	Neutrophils		55	2060-10600	/μL
BUN/Creatinine Ratio	15		Ratio	Bands		0	0-300	/μL
Phosphorus	4.0		mg/dL	Lymphocytes		38	690-4500	/μL
Glucose	82		mg/dL	Monocytes		2	0-840	/μL
Calcium	10.2		mg/dL	Eosinophils		5	0-1200	/μL
Magnesium	1.5		mEq/L	Basophils	0	0-150	/μL	
Sodium	146		mEq/L					
Potassium	4.3		mEq/L					
Na/K Ratio	34							
Chloride	111		mEq/L					
Cholesterol	236	mg/dL						
Triglycerides	52	mg/dL						
Amylase	443	U/L						
Lipase	262	U/L						
CPK	467	U/L						
Comment	Hemolysis 1+ No significant interference.							

Test Requested	Results	Reference Range	Units
TOTAL T4	<b>B6</b>	0.8-3.5	ug/dL
T4	<b>B6</b>		
Note new Canine reference range			

URINALYSIS	
Collection Method	Not stated
Color	*Clear
Appearance	1.015-1.050
Specific Gravity	5.5-7.0
pH	Neg
Protein	Neg
Microalbuminuria testing is recommended (is inactive) to help determine the clinical significance of proteinuria.	<b>B6</b>
Glucose	Neg
Ketone	Neg
Bilirubin	Neg To 1+
Blood	Neg
WBC	0-3
RBC	0-3
	HPF
	HPF

S = Subjective (complaint/history)  
O = Objective (exam)  
A = Assessment (diagnosis, R/O)  
P = Plan (action/C.E.)

# PROGRESS NOTES

Name **B6** Pet # ( ) Birthdate **B6** File # Page **14**

DATE	SOAP	CODE	CHARGE
<h1>B6</h1>			

S = Subjective (complaint/history)  
O = Objective (exam)  
A = Assessment (diagnosis, R/O)  
P = Plan (action/C.E.)

# PROGRESS NOTES

Name **B6** Pet # ( ) Birthdate **B6** File # Page 9

DATE

SOAP

CODE

CHARGE

**B6**

*Ref. baseline*

**B6**

**B6**

Accession No **B6**  
Received 10/15/2012  
Reported 10/16/2012 02:35 AM

Owner **B6** Pet Name \_\_\_\_\_ Species Canine Breed Golden Retriever Sex CM Pet Age 1Y Chart# 094-0424

Superchem				CBC			
Tests	Results	Ref. Range	Units	Tests	Results	Ref. Range	Units
Total Protein	<b>B6</b>	6.0-7.4	g/dL	WBC	<b>B6</b>	4.0-15.6	10 <sup>3</sup> /uL
Albumin		2.7-4.4	g/dL	RBC		4.8-9.3	10 <sup>6</sup> /uL
Globulin		1.6-3.6	g/dL	Hemoglobin		12.1-20.3	g/dL
A/G Ratio		0.8-2.0	Ratio	Hematocrit		38-60	%
AST (SGOT)		15-66	U/L	MCV		58-79	fL
ALT (SGPT)		12-118	U/L	MCH		19-28	pg
Alk Phosphatase		5-131	U/L	MCHC		30-38	g/dL
GGTP		1-12	U/L	Platelet Count		170-400	10 <sup>3</sup> /uL
Total Bilirubin		0.1-0.3	mg/dL	Platelet EST		Adequate	
Urea Nitrogen		6-31	mg/dL	<b>Differential</b>			
Creatinine		0.5-1.6	mg/dL	Neutrophils	48	2060-10600	/uL
BUN/Creatinine Ratio		4-27	Ratio	Bands	0	0-300	/uL
Phosphorus		2.5-6.0	mg/dL	Lymphocytes	43	690-4500	/uL
Glucose		70-138	mg/dL	Monocytes	5	0-840	/uL
Calcium		8.9-11.4	mg/dL	Eosinophils	4	0-1200	/uL
Corrected Calcium				Basophils	0	0-150	/uL
Magnesium		1.5-2.5	mEq/L				
Sodium		139-154	mEq/L				
Potassium		3.6-5.5	mEq/L				
Na/K Ratio							
Chloride	102-120	mEq/L					
Cholesterol	92-324	mg/dL					
Triglycerides	29-291	mg/dL					
Amylase	290-1125	U/L					
Lipase	77-695	U/L					
CPK	59-895	U/L					
Comment	AST may be falsely elevated due to a Hemolysis 2+ and could be below the Normal Range.						

Test Requested	Results	Reference Range	Units
TOTAL T4	<b>B6</b>	0.8-3.5	ug/dL
T4			
Note new Canine reference range			

URINALYSIS				
Collection Method	<b>B6</b>			
Not stated				
Color			*Clear	
Appearance			1.015-1.050	
Specific Gravity			5.5-7.0	
pH			Neg	
Protein			Neg	
Glucose			Neg	
Ketone			Neg To 1+	
Bilirubin			Neg	
Blood			0-3	HPF
WBC			0-3	HPF
RBC				LPF
Casts				HPF
Struvite (MgNH4PO4) Crystals				HPF
Amorphous Phosphate Crystals			HPF	
Bacteria		None	HPF	



Accession No. Doctor Owner Ref Name

B6

Test Requested Results Reference Range Units

Squamous Epithelia

B6

0-3

HPF

HEARTWORM ANTIGEN

Occult Heartworm Antigen

Negative

There were no measurable amounts of adult female heartworm antigen in this sample. Adult Dirofilaria immitis antigens will not be detected for 5 to 7 months following exposure to early larval stages.

OVA AND PARASITES WITH CENTRIFUGATION

Ova & Parasite

B6

S = Subjective (complaint/history)  
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# PROGRESS NOTES

Name

**B6**

Pet # ( ) Birthdate

**B6**

File #

Page

8

**B6**

DATE

SOAP

CODE

CHARGE

**B6**

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# PROGRESS NOTES

Name **B6** Pet # ( ) Birthdate **B6** File # Page **7**

DATE	SOAP	CODE	CHARGE
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**B6**

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# PROGRESS NOTES

Name **B6** Pet # ( ) Birthdate **B6** File # Page 

DATE	SOAP	CODE	CHARGE
<h1>B6</h1>			

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# PROGRESS NOTES

Name **B6** Pet # ( ) Birthdate **B6** File # Page 5

DATE	SOAP	CODE	CHARGE
<h1>B6</h1>			

S = Subjective (complaint/history)  
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# PROGRESS NOTES

Name **B6** Pet # ( ) Birthdate **B6** File # Page **4**

DATE	SOAP	CODE	CHARGE
<b>B6</b>			

S = Subjective (complaint/history)  
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# PROGRESS NOTES

Name **B6** Pet # ( ) Birthdate **B6** File # Page 3

DATE	SOAP	CODE	CHARGE
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**B6**

Client: (26123)

Patient Name: **B6**

Species: Canine

Breed:

Gender:

Weight: 0.0 lbs

Age: 7 Months

Doctor:

**B6**

Test	Results	Reference Interval	LOW	NORMAL	HIGH
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LaserCyte (July 20, 2011 7:15 AM)

RBC		5.50 - 8.50
HCT		37.0 - 55.0
HGB		12.0 - 18.0
MCV		60.0 - 77.0
MCH		18.5 - 30.0
MCHC		30.0 - 37.5
RDW		14.7 - 17.9
%RETIC		
RETIC		
WBC		5.50 - 16.90
%NEU		
%LYM		
%MONO		
%EOS		
%BASO		
NEU		2.00 - 12.00
LYM		0.50 - 4.90
MONO		0.30 - 2.00
EOS		0.10 - 1.49
BASO		0.00 - 0.10
PLT		175 - 500
MPV		
PDW		
PCT		

**B6**

**B6**

RBC Run

WBC Run

**B6**

**B6**



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# PROGRESS NOTES

Name **B6** Pet # ( ) Birthdate **B6** File # Page ②

DATE	SOAP	CODE	CHARGE
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**B6**

S = Subjective (complaint/history)  
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# PROGRESS NOTES

Name **B6** Pet # ( ) Birthdate **B6** File # Page **L**

DATE	SOAP	CODE	CHARGE
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**B6**

# B6

Accession No.	Doctor	Owner	Pet Name	Received
		B6		02/12/2011
Species	Breed	Sex	Pet Age	Reported
Canine		U		02/12/2011 07:44 AM
<b>Test Requested</b>	<b>Results</b>		<b>Reference Range</b>	<b>Units</b>
OVA AND PARASITES WITH CENTRIFUGATION				
Ova & Parasite	B6			

**B6**

Client # 7984  
Chart #

**B6**

Accession No.  
**B6**

Pet Name

**B6**

Received  
03/12/2011

Species  
Canine

Breed  
Golden Retriever

Sex  
M

Pet Age  
14W

Reported  
03/12/2011 06:53 AM

Test Requested

Results

Reference Range

Units

OVA & PARASITE/GIARDIA (ELISA)

Ova & Parasite

**B6**

**B6**

Giardia (ELISA)