

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: 6/10/2019 2:53:18 PM
Subject: FW: Solid Gold Mighty Mini Beef: Lisa Freeman - EON-380716
Attachments: 2063119-report.pdf; Solid Gold Mighty Mini Beef: Lisa Freeman - EON-390030; 2063119-attachments.zip

This is a Dr. Freeman report (follow-up)-not sure if this is one that you were working on.

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: Sunday, February 24, 2019 6:57 PM
To: Cleary, Michael * <Michael.Cleary@fda.hhs.gov>; HQ Pet Food Report Notification <HQPetFoodReportNotification@fda.hhs.gov>; **B6**
Subject: Solid Gold Mighty Mini Beef: Lisa Freeman - EON-380716

A PFR Report has been received and PFR Event [EON-380716] has been created in the EON System.

A "PDF" report by name "2063119-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 "2063119-attachments.zip" and is attached to this email notification.

Below is the summary of the report:

EON Key: EON-380716

ICSR #: 2063119

EON Title: PFR Event created for Solid Gold Mighty Mini Beef Sweet Potato and Apple grain free dry; 2063119

AE Date	01/02/2019	Number Fed/Exposed	1
Best By Date		Number Reacted	1
Animal Species	Dog	Outcome to Date	Stable

Breed	Chihuahua		
Age	9 Years		
District Involved	PFR-New England DO		

Product information

Individual Case Safety Report Number: 2063119

Product Group: Pet Food

Product Name: Solid Gold Mighty Mini Beef, Sweet Potato, and Apple grain free dry

Description: Has been regularly rechecked after B6 Progressive reduction in left ventricular contractile function noted on most recent echo. Eating BEG diet. Owner changed to Royal Canin Early Cardiac diet and we will recheck in April

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
Solid Gold Mighty Mini Beef, Sweet Potato, and Apple grain free 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-380716>

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=397725>

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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 immediately.

Report Details - EON-380716

ICSR: 2063119
 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: 2019-02-24 18:45:24 EST

Reported Problem:
Problem Description: Has been regularly rechecked after [B6] Progressive reduction in left ventricular contractile function noted on most recent echo. Eating BEG diet. Owner changed to Royal Canin Early Cardiac diet and we will recheck in April
Date Problem Started: 01/02/2019
Concurrent Medical Problem: Yes
Pre Existing Conditions: [B6]
Outcome to Date: Stable

Product Information:
Product Name: Solid Gold Mighty Mini Beef, Sweet Potato, and Apple grain free dry
Product Type: Pet Food
Lot Number:
Package Type: BAG
Product Use Information: **Description:** 1/4 cup kibble (divided into 2 meals) 1 tbsp cooked chicken BID Owner switched to Weight Control version of same diet (salmon, lentil, green bean) just a few days before visit
Manufacturer /Distributor Information:
Purchase Location Information:

Animal Information:
Name: [B6]
Type Of Species: Dog
Type Of Breed: Chihuahua
Gender: Female
Reproductive Status: Neutered
Weight: 3.72 Kilogram
Age: 9 Years
Assessment of Prior Health: Good
Number of Animals Given the Product: 1
Number of Animals Reacted: 1
Owner Information: **Owner Information provided:** Yes
Contact: **Name:** [B6]
Phone: [B6]
Email: [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	
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:	T_26346.pdf		
	Description:	Taurine - will send rest of records by email (too large)		
	Type:	Laboratory Report		

From: Related PFR Event <pfrsignificantactivitycreation@fda.hhs.gov>
To: Carey, Lauren; Cleary, Michael *; HQ Pet Food Report Notification; [B6]
Sent: 6/10/2019 2:48:46 PM
Subject: Solid Gold Mighty Mini Beef: Lisa Freeman - EON-390030
Attachments: 2067990-report.pdf; 2067990-attachments.zip

A PFR Report has been received and Related PFR Event [EON-390030] has been created in the EON System.

A "PDF" report by name "2067990-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 "2067990-attachments.zip" and is attached to this email notification.

Below is the summary of the report:

EON Key: EON-390030

ICSR #: 2067990

EON Title: Related PFR Event created for Solid Gold Mighty Mini Beef Sweet Potato and Apple grain free dry; 2067990

AE Date	01/02/2019	Number Fed/Exposed	1
Best By Date		Number Reacted	1
Animal Species	Dog	Outcome to Date	Better/Improved/Recovering
Breed	Chihuahua		
Age	9 Years		
District Involved	PFR-New England DO		

Product information

Individual Case Safety Report Number: 2067990

Product Group: Pet Food

Product Name: Solid Gold Mighty Mini Beef, Sweet Potato, and Apple grain free dry

Description: Has been regularly rechecked after [B6] Progressive reduction in left ventricular contractile function noted on most recent echo. Eating BEG diet. Owner changed to Royal Canin Early Cardiac diet and we will recheck in April April cardiology recheck - echo measurements improved overall - eating Royal Canin Cardiac diet, no additional medications prescribed. [B6] remains occluded. Patient has purposefully lost

weight.

Submission Type: Followup

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

Outcome of reaction/event at the time of last observation: Better/Improved/Recovering

Number of Animals Treated With Product: 1

Number of Animals Reacted With Product: 1

Product Name	Lot Number or ID	Best By Date
Solid Gold Mighty Mini Beef, Sweet Potato, and Apple grain free dry		

This report is linked to:

Initial EON Event Key: EON-380716

Initial ICSR: 2063119

Sender information

Lisa Freeman
200 Westboro Rd
North Grafton, MA 01536
USA

Owner information

B6	USA
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To view this Related PFR Event, please click the link below:

<https://eon.fda.gov/eon//browse/EON-390030>

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

<https://eon.fda.gov/eon//EventCustomDetailsAction!viewReport.jsps?decorator=none&e=0&issueType=10100&issueId=407302&parentIssueTypeId=12>

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Report Details - EON-390030

ICSR:	2067990
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:	2019-06-10 10:42:47 EDT
Initial Report Date:	02/24/2019
Parent ICSR:	2063119
Follow-up Report to FDA Request:	Yes

Reported Problem:	Problem Description:	Has been regularly rechecked after [B6] Progressive reduction in left ventricular contractile function noted on most recent echo. Eating BEG diet. Owner changed to Royal Canin Early Cardiac diet and we will recheck in April April cardiology recheck - echo measurements improved overall - eating Royal Canin Cardiac diet, no additional medications prescribed. [B6] remains occluded. Patient has purposefully lost weight.
	Date Problem Started:	01/02/2019
	Concurrent Medical Problem:	Yes
	Pre Existing Conditions:	[B6]
	Outcome to Date:	Better/Improved/Recovering

Product Information:	Product Name:	Solid Gold Mighty Mini Beef, Sweet Potato, and Apple grain free dry		
	Product Type:	Pet Food		
	Lot Number:			
	Package Type:	BAG		
	Product Use Information:	Description:	1/4 cup kibble (divided into 2 meals) 1 tbsp cooked chicken BID Owner switched to Weight Control version of same diet (salmon, lentil, green bean) just a few days before visit	
	Manufacturer /Distributor Information:			
	Purchase Location Information:			

Animal Information:	Name:	[B6]						
	Type Of Species:	Dog						
	Type Of Breed:	Chihuahua						
	Gender:	Female						
	Reproductive Status:	Neutered						
	Weight:	3.72 Kilogram						
	Age:	9 Years						
	Assessment of Prior Health:	Good						
	Number of Animals Given the Product:	1						
	Number of Animals Reacted:	1						
	Owner Information:	Owner Information provided:	Yes					
		Contact:	<table border="1"> <tr> <td>Name:</td> <td>[B6]</td> </tr> <tr> <td>Phone:</td> <td>[B6]</td> </tr> <tr> <td>Email:</td> <td>[B6]</td> </tr> </table>	Name:	[B6]	Phone:	[B6]	Email:
Name:	[B6]							
Phone:	[B6]							
Email:	[B6]							

		Address:	B6 United States	
Healthcare Professional Information:	Practice Name:	Tufts Cummings School of Veterinary Medicine		
	Contact:	Name:	Lisa Freeman	
		Phone:	(508) 887-4523	
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		
Reported to Other Parties:	None			
Additional Documents:	Attachment:	NT-proBNP & Diet Hx 4-5-19.pdf		
	Description:	lab work		
	Type:	Laboratory Report		
	Attachment:	B6	-2019-01-03-1008 NT-proBNP - Copy.pdf	
	Description:	lab work		
	Type:	Laboratory Report		
	Attachment:	troponin 5-30-2019.pdf		
	Description:	lab work results		
	Type:	Laboratory Report		

B6

PET OWNER: **B6**
SPECIES: Canine
BREED: Chihuahua
GENDER: Unknown
AGE: 9 Years
PATIENT ID:

Tufts University Attn: Lisa Freeman
200 Westboro Rd.
North Grafton, MA 01536
508-839-5395
ACCOUNT #: **B6**
ATTENDING VET: **B6**

LAB ID: 2303280698
ORDER ID: 338315
COLLECTION DATE: **1/1/19**
DATE OF RECEIPT: **1/2/19**
DATE OF RESULT: **1/3/19**

IDEXX Services:

Chemistry



1/2/19 (Order Received)
1/3/19 10:08 AM (Last Updated)

TEST	RESULT	REFERENCE VALUE
Cardiopet proBNP (Canine)	B6	0 - 900 pmol/L

a **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:
Patient:

B6

Diet Hx 4/5/19

338315

CARDIOLOGY DIET HISTORY FORM

Please answer the following questions about your pet
Pet's name: **B6** Owner's name: **B6** Today's date: 4/5/19

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

Example: Poor _____ Excellent
Poor _____ Excellent

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
rice cake - salt free (1/4 cake)	treat		1x day	
Solid Gold Mighty Mini - Sweet Potato + Apple recipe	dry	1/4 cup	split 2x 1x daily	prior to 1-2-19
Royal Canin - Early Cardio	dry	1/4 cup	split 2x daily	Jan 19 - present

*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	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	_____
Carnitine	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	_____
Antioxidants	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	_____
Multivitamin	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	_____
Fish oil	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	_____
Coenzyme Q10	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	_____
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 (liquid)
- 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**

NT-proBNP 4/5/19

IDEXX Reference Laboratories

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

Client: **B6**
Patient: **B6**
Species: CANINE
Breed: CHIHUAHUA
Gender:
Age: 9Y

Date: 04/05/2019
Requisition #: 338315
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	Low	Normal	High
CARDIOPET proBNP -CANINE	B6	0 - 900 pmol/L		B6	

Comments

B6

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



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	Phone:	508 887 4696
Tufts Cummings School of Vet Med - Cardiology/Nutrition	Fax:	
200 Westboro Road	Animal Name:	B6
North Grafton, MA 01536	Owner Name:	B6
USA	Species:	Canine
	Date Received:	May 30, 2019

Tufts Cummings School of Vet Med - Cardiology/Nutrition Tracking Number: 338315
 GI Lab Accession: **B6**

<u>Test</u>	<u>Result</u>	<u>Reference Interval</u>	<u>Assay Date</u>
Ultra-Sensitive Troponin I Fasting	B6 ng/mL	≤0.06	05/31/19

B6

Comments:

GI Lab Contact Information

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

Email: gilab@cvm.tamu.edu
 vetmed.tamu.edu/gilab

26346

Amino Acid Laboratory Sample Submission Form

Amino Acid Laboratory, 1089 Veterinary Medicine Drive, Davis, Ca 95616

Telephone: 530-752-5058, Fax: 530-752-4698

Email: ucd.aminoacid.lab@ucdavis.edu

www.vetmed.ucdavis.edu/labs/amino-acid-laboratory



B6

338315 Canine
1/2/2019 10:35 AM
TAURINE (WHOLE BLOOD)
Lithium Heparin

Veterinarian Contact: **B6**

Clinic/Company Name: Tufts Cummings School of Vet. Med. - Clinical Pathology Laboratory

Address: 200 Westboro Road, North Grafton MA 015369

Email: Clinpath@tufts.edu / cardiovet@tufts.edu

Telephone: 508-887-4669 Fax: 508-839-7936

Billing Contact: **B6** Email: **B6**

Billing Contact Phone: 508-887-4287 Tax ID: _____

Patient Name: **B6** Species: canine

Breed: Chihuahua Owner's Name: **B6**

Current Diet: solid Gold Weebites

Sample type: Plasma Whole Blood Urine Food Other _____

Test: Taurine Complete Amino Acids Other: _____

Taurine Results (lab use only)

Plasma: _____ Whole Blood: **B6** Urine: _____ Food: _____

	Plasma (nMol/ml)		Whole Blood (nMol/ml)	
	Normal Range	No known risk for deficiency	Normal Range	No known risk for deficiency
Cat	80-120	>40	300-600	>200
Dog	60-120	>40	200-350	>150

* Please note with the recent increase in the number of dogs screened for taurine deficiency, we are seeing dogs with values within the reference ranges (or above the "no known risk for deficiency range") yet are still exhibiting signs of cardiac disease. Veterinarians are welcome to contact our laboratory for assistance in evaluating your patient's results.

From: Jones, Jennifer L </o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=0f6ca12eaa9348959a4cbb1e829af244-Jennifer.Jo>
To: 'Freeman, Lisa'
Sent: 3/12/2019 11:00:00 AM
Subject: RE: GILab Results

Thanks, Lisa!

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



From: Freeman, Lisa <Lisa.Freeman@tufts.edu>
Sent: Sunday, March 10, 2019 2:48 PM
To: Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov>
Subject: FW: GILab Results

Hi Jen,
Troponin results on a bunch of the dogs that I've already reported. The 4 **B6** boxers are recheck values –

B5

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

From: Tufts Veterinary Cardiology Service
Sent: Friday, March 08, 2019 10:40 AM
To: Freeman, Lisa <Lisa.Freeman@tufts.edu>; **B6**
Subject: FW: GILab Results

I can put into SS.

From: Clinical Pathology Lab <clinpath@tufts.edu>
Sent: Friday, March 8, 2019 8:28 AM
To: Tufts Veterinary Cardiology Service <cardiovet@tufts.edu>; **B6**
Subject: FW: GILab Results

Forwarding Troponin Results that I think were sent through Cardio service.

B6

Clinical Pathology Laboratory

B6

From: gilab@cvm.tamu.edu [gilab@cvm.tamu.edu]

Sent: Wednesday, March 06, 2019 6:21 PM

To: Clinical Pathology Lab

Cc: **B6**

Subject: GILab Results

Greetings:

Please see the attachment for updated results for your patient(s).

To obtain results faster, you can also login to our website at <http://vetmed.tamu.edu/gilab/service/clinic-login> to view results immediately when they become available.

Your username is **B6**

Thank you for using the GI Lab

The GI Lab - Promoting gastrointestinal health in companion animals
(979) 862 2861; FAX (979) 862 2864; <http://vetmed.tamu.edu/gilab>

=====
Accession: **B6**
Patient: **B6**
=====

Ultra-Sensitive Troponin I Fasting

Timing: Fasting

Result: **B6**

Range: 0 - 0.06

B6

Report Comments:

=====
Accession: **B6**
Patient: **B6**
=====

Ultra-Sensitive Troponin I Fasting

Timing: Fasting

Result: **B6**

Range: 0 - 0.06

B6

Report Comments:

=====

Accession: **B6**

Patient: **B6**

=====

Ultra-Sensitive Troponin I Fasting

Timing: Fasting

Result: **B6**

Range: 0 - 0.06

B6

Report Comments:

=====

Accession: **B6**

Patient: **B6**

=====

Ultra-Sensitive Troponin I Fasting

Timing: Fasting

Result: **B6**

Range: 0 - 0.06

B6

B6

Report Comments:

=====
Accession: **B6**

Patient: **B6**
=====

Ultra-Sensitive Troponin I Fasting

Timing: Fasting

Result: **B6**

Range: 0 - 0.06

B6

Report Comments:

=====
Accession: **B6**

Patient: **B6**
=====

Ultra-Sensitive Troponin I Fasting

Timing: Fasting

Result: **B6**

Range: 0 - 0.06

B6

Report Comments:

Accession: **B6**

Patient: **B6**

Ultra-Sensitive Troponin I Fasting

Timing: Fasting

Result: **B6**

Range: 0 - 0.06

B6

Report Comments:

Accession: **B6**

Patient: **B6**

Ultra-Sensitive Troponin I Fasting

Timing: Fasting

Result: **B6**

Range: 0 - 0.06

B6

Report Comments:

Accession: **B6**

Patient: **B6**

Ultra-Sensitive Troponin I Fasting

Timing: Fasting

Result: **B6**

Range: 0 - 0.06

B6

Report Comments:

Accession: **B6**

Patient: **B6**

Ultra-Sensitive Troponin I Fasting

Timing: Fasting

Result: **B6**

Range: 0 - 0.06

B6

Report Comments:



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: clinpath@tufts.edu

GI Lab Assigned Clinic ID: 11405

Dr. Freeman
 Tufts University-Clinical Pathology Lab
 Attn: **B6**
 200 Westboro Road
 North Grafton, MA 01536
 USA

Phone: 508 887 4669
 Fax: 9 508 839 7936
 Animal Name: **B6**
 Owner Name:
 Species: Canine
 Date Received: Mar 06, 2019

Tufts University-Clinical Pathology Lab
 Tracking Number: 337144

GI Lab Accession: **B6**

<u>Test</u>	<u>Result</u>	<u>Reference Interval</u>	<u>Assay Date</u>
Ultra-Sensitive Troponin I Fasting	B6	≤0.06	03/06/19

B6

Comments:

GI Lab Contact Information

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

Email: gilab@cvm.tamu.edu
 vetmed.tamu.edu/gilab



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: clinpath@tufts.edu

GI Lab Assigned Clinic ID: 11405

Dr. B6
 Tufts University-Clinical Pathology Lab
 Attn: B6
 200 Westboro Road
 North Grafton, MA 01536
 USA

Phone: 508 887 4669
 Fax: 9 508 839 7936
 Animal Name: B6
 Owner Name:
 Species: Canine
 Date Received: Mar 06, 2019

Tufts University-Clinical Pathology Lab
 Tracking Number:

GI Lab Accession B6

Test	Result	Reference Interval	Assay Date
Ultra-Sensitive Troponin I Fasting	B6	≤0.06	03/06/19

B6

Comments:

GI Lab Contact Information

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

Email: gilab@cvm.tamu.edu
 vetmed.tamu.edu/gilab



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: clinpath@tufts.edu

GI Lab Assigned Clinic ID: 11405

Dr. Freeman
 Tufts University-Clinical Pathology Lab
 Attn: **B6**
 200 Westboro Road
 North Grafton, MA 01536
 USA

Phone: 508 887 4669
 Fax: 9 508 839 7936
 Animal Name: **B6**
 Owner Name:
 Species: Canine
 Date Received: Mar 06, 2019

Tufts University-Clinical Pathology Lab
 Tracking Number:

GI Lab Accession **B6**

Test	Result	Reference Interval	Assay Date
Ultra-Sensitive Troponin I Fasting	B6	≤0.06	03/06/19

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Tufts University-Clinical Pathology Lab	Fax: 9 508 839 7936
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200 Westboro Road	Owner Name:
North Grafton, MA 01536	Species: Canine
USA	Date Received: Mar 06, 2019

Tufts University-Clinical Pathology Lab	GI Lab Accession
Tracking Number:	B6

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**Important
Notices:**

Internal Medicine Conference

Join us for a unique continuing education event in Phuket, Thailand Oct 7th - 11th, 2019. For details see <http://texasimconference.tamu.edu>

Ongoing studies

Cobalamin Supplementation Study- Dogs and cats with cobalamin deficiency with normal PLI, and either normal or low (consistent with EPI) TLI to compare the efficacy of oral vs parenteral cobalamin supplementation. Contact Dr. Chang at chchang@cvm.tamu.edu for further information.

Chronic Pancreatitis with Uncontrolled Diabetes Mellitus- Seeking dogs with chronic pancreatitis and uncontrolled diabetes mellitus for enrollment into a drug trial (medication provided at no cost). Contact Dr. Sue Yee Lim at slim@cvm.tamu.edu or Dr. Sina Marsilio at smarsilio@cvm.tamu.edu

Dogs with Primary Hyperlipidemia- Prescription diet naïve dogs newly diagnosed with primary hyperlipidemia are eligible to be enrolled in a dietary trial. Contact Dr. Lawrence at ylawrence@cvm.tamu.edu for more information.

Dogs with Chronic Pancreatitis- Dogs with chronic pancreatitis (cPLi >400 µg/L) and hypertriglyceridemia (>300 mg/dl) are eligible to be enrolled in a dietary trial. Contact Dr. Lawrence at ylawrence@cvm.tamu.edu

Chronic enteropathies in dogs- Please fill out this brief form <http://tinyurl.com/ibd-enroll> to see if your patient qualifies.

Feline Chronic Pancreatitis- Cats with chronic pancreatitis for more than 2 weeks and fPLI >10 µg/L are eligible for enrollment into a treatment trial investigating the efficacy of prednisolone or cyclosporine. Please contact Dr. Yamkate for further information at pyamkate@cvm.tamu.edu.

We can not accept packages that are marked "Bill Receiver"

Use our preprinted shipping labels to save on shipping. Call 979-862-2861 for assistance. The GI Lab is not here to accept packages on the weekend. Samples may be compromised if you ship for arrival on Saturday or Sunday or if shipped via US Mail.

GI Lab Contact Information

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

Email: gilab@cvm.tamu.edu
vetmed.tamu.edu/gilab

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: 11/11/2018 1:56:12 AM
Subject: DCM (not Lisa Freeman and/or Tufts) 11/10/2018 2055
Attachments: Wellness Simple Limited Ingredient Diet Grain-Free Healthy Weight Salmon & Peas Formula Dry Dog Food **B6** EON-370755

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>
To: Cleary, Michael *; HQ Pet Food Report Notification; B6
Sent: 11/10/2018 6:44:26 PM
Subject: Wellness Simple Limited Ingredient Diet Grain-Free Healthy Weight Salmon & Peas Formula Dry Dog Food B6 EON-370755
Attachments: 2058695-report.pdf; 2058695-attachments.zip

A PFR Report has been received and PFR Event [EON-370755] has been created in the EON System.

A "PDF" report by name "2058695-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 "2058695-attachments.zip" and is attached to this email notification.

Below is the summary of the report:

EON Key: EON-370755

ICSR #: 2058695

EON Title: PFR Event created for Wellness Simple Limited Ingredient Diet Grain-Free Healthy Weight Salmon & Peas Formula Dry Dog Food; 2058695

AE Date	08/06/2018	Number Fed/Exposed	1
Best By Date		Number Reacted	1
Animal Species	Dog	Outcome to Date	Unknown
Breed	Retriever - Golden		
Age	B6 Years		
District Involved	PFR B6 DO		

Product information

Individual Case Safety Report Number: 2058695

Product Group: Pet Food

Product Name: Wellness Simple Limited Ingredient Diet Grain-Free Healthy Weight Salmon & Peas Formula Dry Dog Food

Description: Low taurine level, eating Wellness Simple grain free for 3 months prior to testing and Wellness Core Low fat Grain Free food for 3 years before that. Taurine level wa B6 Echo showed NO DCM

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: 1

Number of Animals Reacted With Product: 1

Product Name	Lot Number or ID	Best By Date
Wellness Simple Limited Ingredient Diet Grain-Free Healthy Weight Salmon & Peas Formula Dry Dog Food		

Sender information

B6

USA

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

<https://eon.fda.gov/eon//browse/EON-370755>

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=387724>

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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 immediately.

Report Details - EON-370755

ICSR:	2058695		
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:	2018-11-10 13:35:47 EST		
Reporter is the Animal Owner:	Yes		
Reported Problem:	Problem Description:	Low taurine level, eating Wellness Simple grain free for 3 months prior to testing and Wellness Core Low fat Grain Free food for 3 years before that. Taurine level was B6 Echo showed NO DCM	
	Date Problem Started:	08/06/2018	
	Concurrent Medical Problem:	No	
	Outcome to Date:	Unknown	
Product Information:	Product Name:	Wellness Simple Limited Ingredient Diet Grain-Free Healthy Weight Salmon & Peas Formula Dry Dog Food	
	Product Type:	Pet Food	
	Lot Number:		
	UPC:	7634489329	
	Package Type:	BAG	
	Package Size:	24 Pound	
	Purchase Date:	05/21/2018	
	Possess Unopened Product:	No	
	Possess Opened Product:	No	
	Storage Conditions:	In original bag in covered container in garage	
	Product Use Information:	Description:	4 cups a day
		First Exposure Date:	05/21/2018
		Last Exposure Date:	08/31/2018
		Time Interval between Product Use and Adverse Event:	3 Months
Product Use Stopped After the Onset of the Adverse Event:		Yes	
Adverse Event Abate After Product Stop:		Unknown	
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 Name:	Wellpet LLC		

	/Distributor Information:		Type(s): Distributor
			Address: Massachusetts 01876-1274 United States
			Contact:
			Possess One or More Labels from This Product: Yes
	Purchase Location Information:		Name: Chewy.com
			Address: United States
Animal Information:	Name:		B6
	Type Of Species:		Dog
	Type Of Breed:		Retriever - Golden
	Gender:		Male
	Reproductive Status:		Neutered
	Weight:		71 Pound
	Age:		B6 Years
	Assessment of Prior Health:		Excellent
	Number of Animals Given the Product:		1
	Number of Animals Reacted:		1
	Owner Information:		
	Healthcare Professional Information:		Practice Name: UC Davis
			Contact: Name: Joshua Stern Phone: (530) 752-2475
			Address: Davis California United States
		Type of Veterinarian: Referred veterinarian	
		Date First Seen: 08/14/2018	
		Permission to Release Records to FDA: No	
Sender Information:	Name:		B6
	Address:		B6 United States
	Contact:		Email: B6
	Reporter Wants to Remain Anonymous:		No
	Permission To Contact Sender:		Yes
	Preferred Method Of Contact:		Email
	Reported to Other Parties:		None
Additional Documents:	Attachment:		B6 taurine level.pdf
	Description:		Taurine results from UC Davis
	Type:		Laboratory Report

Attachment:	B6	echo.pdf
Description:	Echocardiogram report	
Type:	Echocardiogram	



B6

Cardiology Report

Dr. **B6**

B6 is a 6-year-old FS golden retriever belonging to **B6** who presented to the **B6** **B6** for a cardiac evaluation.

Cardiac Diagnosis: Normal echocardiogram.

Chief Concerns/Major History: **B6** presented for an initial cardiac examination. He is part of a Golden Retriever lifetime study. Recent bloodwork showed a low normal taurine level of under 250 **B6** so it was suggested that he receive an echocardiogram. **B6** is doing well at home and not showing any clinical signs of heart disease. He is eating a low fat grain free diet. **B6** is currently receiving eye medication for **B6**

Cardiology Exam:

B6

CV: I/VI left apical systolic heart murmur. Regular rhythm. Strong and synchronous pulses.

B6

Echocardiogram Subjective Findings: **B6**

B6

Echocardiogram Objective Findings: **B6**

B6

Assessment/Recommendations: There is no evidence of significant cardiomyopathy seen on this exam. There are trace insufficiencies of the mitral and tricuspid valves, which are hemodynamically insignificant at this time. No cardiac medications are warranted at this time. Consider switching to a non-grain-free diet due to low normal contractile function.

Medications: No cardiac medications warranted at this time.

Follow-up: No recheck necessary unless signs of a heart murmur is ausculted or an arrhythmia is seen or ausculted.

Thank you very much for allowing me to be of service to you and your clients. Please feel free to contact me with any questions or concerns.

B6 DVM, DACVIM (Cardiology)



STERN CARDIAC GENETICS LABORATORY
JOSHUA A. STERN, DVM, PHD, DACVIM (CARDIOLOGY)
sterngenetics@ucdavis.edu; August 9, 2018

FREQUENTLY REQUESTED INFORMATION REGARDING TAURINE & DILATED CARDIOMYOPATHY IN GOLDEN RETRIEVERS

Taurine reference ranges for Golden Retrievers: The Stern Lab suggests that the following clinical reference ranges be used for Golden Retrievers and be considered for other known taurine-sensitive breeds such as Newfoundlands or American Cocker Spaniels. This is primarily based on 3 observations :

1. Golden Retrievers with marginal taurine levels (defined below) have been diagnosed with dilated cardiomyopathy and have documented disease reversal after taurine supplementation and diet change.
2. Previously published work documents taurine sensitivity in Golden Retrievers.
3. The most recently published reference on normal blood taurine values shows higher levels than previously reported.

- Normal whole blood taurine: >250nmol/mL
- Normal plasma taurine: >70nmol/mL

- Marginal whole blood taurine: 200-250nmol/mL
- Marginal plasma taurine: 60-70nmol/mL

- Low whole Blood taurine: <200nmol/mL
- Low plasma taurine: <60nmol/mL

References:

- Kramer GA, Kittleson MD, Fox PR, Lewis J, Pion PD. Plasma taurine concentrations with normal dogs and in dogs with heart disease. *J Vet Intern Med* 1995;9:253-258.
- Belanger MC, Ouellet M, Queney G, Moreau M. Taurine-deficient dilated cardiomyopathy in a family of golden retrievers. *J Am Anim Hosp Assoc* 2005;41:284-291.
- Kittleson MD, Keene B, Pion PD, Loyer CG, MUST Study Investigators. Results of the multicenter spaniel trial (MUST): taurine- and carnitine-responsive dilated cardiomyopathy in American Cocker Spaniels with decreased plasma taurine concentration. *J Vet Intern Med* 1197;11:204-211.
- Backus RC, Choen G, Pion PD, Good KL, Rogers QR, Fascetti AJ. Taurine deficiency in Newfoundlands fed commercially available complete and balanced diets. *J Am Vet Med Assoc* 2003;223:1130-1136.
- Fascetti AJ, Reed JR, Rogers QR, Backus RC. Taurine deficiency in dogs with dilated cardiomyopathy: 12 cases (1997-2001). *J Am Vet Med Assoc* 2003;223:1137-1141.
- Freeman LM, Michel KE, Brown DJ, Kaplan PM, Stamoulis ME, Rosenthal SL, Keene BW, Rush JE. Idiopathic dilated cardiomyopathy in Dalmatians: nine cases (1990-1995). *J Am Vet Med Assoc* 1996;209:1592-1596.
- Delaney SJ, Kass PH, Rogers QR, Fascetti AJ. Plasma and whole blood taurine in normal dogs of varying size fed commercially prepared food. *J Anim Physiol a Anim Nutr* 2003;87:236-244.

Plasma vs. whole blood taurine testing:

If at all possible, we recommend that paired (plasma and whole blood) taurine samples be submitted for analysis. A low value on either or both tests is clinically relevant. If your dog is diagnosed with DCM, submitting paired taurine samples (plasma and whole blood) is imperative. We recommend that the UC Davis Amino Acid Laboratory be used for taurine testing, as this is where the literature utilized for our reference ranges was generated. <https://www.vetmed.ucdavis.edu/labs/amino-acid-laboratory>. If a single test is submitted the Stern Lab recommends that whole blood be submitted preferentially. This is due to the false elevation of taurine levels that is possible in plasma samples due to sample handling issues. This is an area of some debate between clinicians and conflicting information on preference for plasma vs. whole blood exists. This underscores the value of paired sampling.

Clinical Recommendations for Golden Retrievers based on taurine levels:

If taurine levels test <200nmol/mL in whole blood or <60nmol/mL in plasma

- An echocardiogram by a board-certified veterinary cardiologist is indicated
- After echocardiogram has been completed, a diet change is recommended.
 - If DCM is diagnosed, this patient may need a variety of cardiac medications that would be prescribed by the attending cardiologist.
 - If DCM is diagnosed, prescribed supplementation with oral taurine and l-carnitine is recommended.
 - Reevaluation of taurine levels is warranted after three months of diet change and supplementation.
 - Cardiology reevaluation schedules will be recommended by the attending clinician pending echocardiographic findings.
 - Many Golden Retrievers with taurine-deficient DCM in our study showed slow and steady improvement over a period of 6-12 months.

If taurine levels test 200 – 250nmol/mL in whole blood or 60-70nmol/mL in plasma

- An echocardiogram by a board-certified cardiologist is recommended.
- After echocardiogram has been completed, a diet change is recommended.
- We recognize that many dogs in this category may have normal echocardiograms and thus the value of screening should be carefully considered. If the dog is eating a diet that falls within the FDA warning or shares features with the diets identified in our study (see diets of concern section below), we encourage echocardiographic screening with greater enthusiasm.
- If an echocardiogram is not performed, a diet change is still recommended and a taurine level reevaluation after three months on the new diet should be considered.
- If DCM is diagnosed, this patient may need a variety of cardiac medications that would be prescribed by the attending cardiologist.
 - If DCM is diagnosed, prescribed supplementation with oral taurine and l-carnitine is recommended.
 - Reevaluation of taurine levels is warranted after three months of diet change and supplementation.
 - Cardiology reevaluation schedules will be recommended by the attending clinician pending echocardiographic findings.
 - Many Golden Retrievers with taurine-deficient DCM in our study showed slow and steady improvement over a period of 6-12 months.

If taurine levels test >250nmol/mL in whole blood or >70nmol/mL in plasma

- Diet change is recommended if you are feeding a diet that falls within the FDA warning or shares features with the diets identified in our study (see diets of concern section below)
- If your pet shows any signs of cardiac disease (trouble breathing, exercise intolerance, fainting/collapse, coughing) we recommend your veterinarian evaluate your pet.

Diets of Concern & Choosing a diet

The FDA alert called attention to several dietary ingredients that should be considered when evaluating whether your pet is at risk (for example legumes like peas and lentils, white or sweet potatoes). These findings were largely recapitulated in our current study of Golden Retrievers with low taurine levels and DCM. Our lab considers these ingredients to be of greatest concern when present within the first 5 listed ingredients on the dog food bag. Additionally, we noted a high percent of diets in our study were using protein sources other than chicken or beef and labeled as grain-free.

Points to consider when making a diet change:

- Choose a diet that does not contain the concerning components listed above
- Choose a diet that meets the WSAVA Global Nutrition Assessment Guidelines published as consensus by veterinary nutritionists from around the world:
 - <https://www.wsava.org/WSAVA/media/Arpita-and-Emma-editorial/Selecting-the-Best-Food-for-your-Pet.pdf>
- FDA alert found here:
 - <https://www.fda.gov/AnimalVeterinary/NewsEvents/CVMUpdates/ucm613305.htm>

Choosing a taurine or l-carnitine supplement:

Selecting supplements should be performed based upon those that match their stated contents and are readily available for absorption. Luckily a previous publication tested multiple taurine and l-carnitine supplements. Based upon this publication our laboratory recommends the following supplements as those meeting our quality criteria. (Bragg et al. 2009 J Am Vet Med Assoc; 234(2))

Tested taurine supplements that test within 5% of stated contents and if applicable disintegrated within 30 minutes

- Mega taurine caps by Twinlab (1000 capsule)
- Taurine by Swanson Health Products (500mg capsule)
- Taurine by NOW foods (500mg capsule)
- Taurine 500 by GNC (500mg tablet)

Tested L-carnitine supplements that test within 5% of stated contents and if applicable disintegrated within 30 minutes

- L-carnitine 500 by Jarrow Formulas (500mg capsule)
- L-carnitine caps by Country Life (500mg capsule)
- Maxi L-carnitine by Solgar Vitamin and Herb (500mg tablet)
- L-carnitine by Puritan's Pride (500mg tablet)

The Stern lab does not recommend the empirical supplementation of taurine or l-carnitine to dogs without evidence of DCM and/or significant deficiency. If DCM is diagnosed we typically recommend dogs over 50lbs receive 1000mg of taurine every 12hrs and dogs under 50lbs receive 500mg of taurine every 12hours. We recommend L-carnitine at a dose of ~50mg/kg orally with food every 8hrs. Your veterinary cardiologist or family veterinarian should be consulted for prescribing the best dose for your dog.

Reporting to the FDA:

Understanding the basis of this condition requires a great deal of research and investigation. Clients with affected dogs can contribute their data to help propel this research forward. You can report cases of taurine deficiency, dilated cardiomyopathy, sudden cardiac death, or any combination of these events to the FDA by following the information found here:

<https://www.fda.gov/animalveterinary/safetyhealth/reportaproblem/ucm182403.htm>

Additional questions or comments:

sterngenetics@ucdavis.edu

This document last updated: Aug. 20, 2018

Page 3 of 3

CARDIOLOGY SERVICE UPDATES: DOG FOOD & DILATED CARDIOMYOPATHY

The Cardiology Service has developed this document in response to the alerts from the FDA. These alerts identify an associated risk for some grain-free diets containing certain ingredients (legumes like peas, pea components, lentils; white potatoes, sweet potatoes) and a diagnosis of dilated cardiomyopathy (DCM). The links provided throughout this document can be copied and pasted to obtain additional information.

FDA Alerts found here:

<https://www.fda.gov/AnimalVeterinary/NewsEvents/CVMUpdates/ucm613305.htm>

<https://www.fda.gov/AnimalVeterinary/ResourcesforYou/AnimalHealthLiteracy/ucm616279.htm>

What is Dilated Cardiomyopathy (DCM)?

DCM is a heart muscle disorder that results in a weak pump function and heart chamber enlargement. In the early stages of this disease pets may appear totally healthy with no apparent clinical signs. Later in the course of this disease, dogs may have a heart murmur, an arrhythmia (irregular heart beat), collapse episodes, weakness or tiredness with exercise, and even trouble breathing from congestive heart failure. While there are some breeds of dogs (like Dobermans) that have a genetic predisposition to development of DCM, there are also nutritional factors that may result in this disease.

What should I do?

If you are feeding a diet of concern based upon the FDA alert we recommend that you consult with your veterinarian or veterinary cardiologist. We provide 4 general points for guidance below:

1. An initial step is to **consider whether you are willing or interested in performing additional testing** to assess whether your pet is affected with DCM. If you believe your dog is at risk, showing any of the aforementioned clinical signs or would prefer to simply rule out any heart disease, we recommend that you first have your pet's taurine levels tested (both whole blood and plasma levels) as well as seek an echocardiogram by a board-certified veterinary cardiologist. Low taurine levels are associated with development of DCM in dogs and are sometimes a component of this current issue.

Information on taurine testing can be found here: <https://www.vetmed.ucdavis.edu/labs/amino-acid-laboratory>

2. At this time, **diet change is recommended when possible** and should be considered regardless of the results obtained from any testing. You can consult with your veterinarian in selecting a new diet that avoids the ingredients of concern listed by the FDA. When selecting this diet, we recommend that you choose a diet that is manufactured with rigorous quality control measures and research behind the formulation. A way to ensure that your diet meets these recommendations is to follow the following guidelines that were generated by a large number of the world's leading experts in veterinary nutrition.

Food selection guidelines found here:

<https://www.wsava.org/WSAVA/media/Arpita-and-Emma-editorial/Selecting-the-Best-Food-for-your-Pet.pdf>

3. If your pet is identified through testing to have a low blood taurine level or evidence of DCM by echocardiogram, we urge you to **report this information to the FDA**.

FDA reporting guidelines found here: <https://www.fda.gov/AnimalVeterinary/SafetyHealth/ReportaProblem/ucm182403.htm>

4. **Work with your veterinarian(s)** to determine the best course of action and medical treatments if indicated. In the case of a DCM diagnosis, diet change alone may not be sufficient and additional medications may be prescribed.

Please continue to monitor the FDA website and the UC Davis School of Veterinary Medicine Newsfeeds for updates and recommendations regarding this issue.

From: Palmer, Lee Anne </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=CF7C8BD53B6C45A39318A596ACEA7C53-LPALMER>
To: Reimschuessel, Renate; Ceric, Olgica; Nemser, Sarah; Jones, Jennifer L; Peloquin, Sarah
CC: Rotstein, David; Carey, Lauren; Hartogensis, Martine
Sent: 8/1/2018 12:11:35 PM
Subject: RE: 800.267-FDA Case Investigation for [REDACTED] EON-359970

Thanks – I have been following a FB page from my home computer (without commenting in any way, of course). I wonder if it's the same – many had been working with Josh Stern at UC Davis. Hopefully some will report to us as well.

From: Reimschuessel, Renate
Sent: Wednesday, August 1, 2018 8:01 AM
To: Ceric, Olgica <Olgica.Ceric@fda.hhs.gov>; Nemser, Sarah <Sarah.Nemser@fda.hhs.gov>; Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov>; Peloquin, Sarah <Sarah.Peloquin@fda.hhs.gov>
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Subject: FW: 800.267-FDA Case Investigation for [REDACTED] EON-359970

Dear folks

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This morning I received the file, and again suggested she advise owners to submit to FDA through the portal.

I'm sharing the file for your additional information.

rr

Renate Reimschuessel V.M.D. Ph.D. Director Vet-LIRN

Phone 1-240-402-5404

Fax 301-210-4685

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

From: Reimschuessel, Renate
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Phone 1-240-402-5404

Fax 301-210-4685

From: [REDACTED] **B6**
Sent: Tuesday, July 31, 2018 10:57 PM
To: Reimschuessel, Renate <Renate.Reimschuessel@fda.hhs.gov>
Subject: Re: 800.267-FDA Case Investigation for [REDACTED] **B6** EON-359970

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Thank you,

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To: Hartogensis, Martine; Reimschuessel, Renate; Ceric, Olgica; Nemser, Sarah; Jones, Jennifer L; Peloquin, Sarah
CC: Rotstein, David; Carey, Lauren
Sent: 8/1/2018 12:16:19 PM
Subject: RE: 800.267-FDA Case Investigation for B6 EON-359970

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From: Reimschuessel, Renate
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To: Palmer, Lee Anne; Hartogensis, Martine; Ceric, Olgica; Nemser, Sarah; Jones, Jennifer L; Peloquin, Sarah
CC: Rotstein, David; Carey, Lauren
Sent: 8/1/2018 12:19:56 PM
Subject: RE: 800.267-FDA Case Investigation for [B6] EON-359970

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Anne <LeeAnne.Palmer@fda.hhs.gov>; Hartogenesis, Martine <Martine.Hartogenesis@fda.hhs.gov>

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To: Reimschuessel, Renate; Palmer, Lee Anne; Hartogensis, Martine; Ceric, Olgica; Nemser, Sarah; Peloquin, Sarah
CC: Rotstein, David; Carey, Lauren
Sent: 8/1/2018 12:25:18 PM
Subject: RE: 800.267-FDA Case Investigation for [REDACTED] EON-359970

Yes-Josh was in a group we spoke with. He mentioned his cases all involved Acana. After speaking w/ Andrea Fascetti at Davis, [REDACTED] B5

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



From: Reimschuessel, Renate
Sent: Wednesday, August 01, 2018 8:20 AM
To: Palmer, Lee Anne <LeeAnne.Palmer@fda.hhs.gov>; Hartogensis, Martine <Martine.Hartogensis@fda.hhs.gov>; Ceric, Olgica <Olgica.Ceric@fda.hhs.gov>; Nemser, Sarah <Sarah.Nemser@fda.hhs.gov>; Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov>; Peloquin, Sarah <Sarah.Peloquin@fda.hhs.gov>
Cc: Rotstein, David <David.Rotstein@fda.hhs.gov>; Carey, Lauren <Lauren.Carey@fda.hhs.gov>
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To: 'Darcy Adin'
CC: [REDACTED] B6
Sent: 1/30/2019 4:37:05 PM
Subject: RE: Sample?

Hi Darcy,

Thank you for the kind words. [REDACTED] B6 I apologize for the delay.

We are definitely interested in the case. We'd just need a complaint submitted through the Safety Reporting Portal found here: <https://www.safetyreporting.hhs.gov/>

After you submit the report, please send me the ICSR number (confirmation of report submission). We can send you a box to collect the tissue. Was there also a full necropsy report with medical records you could share as well? Those can be attached to the report you submit.

Please let me know if you have questions.

Thank you again for your help,

Jen

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

-----Original Message-----

From: Darcy Adin <dbadin@ncsu.edu>
Sent: Friday, January 25, 2019 5:01 PM
To: Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov>
Cc: [REDACTED] B6
Subject: Sample?

Hi Jen,

I hope you are doing well - not sure how the partial government shutdown is impacting your area specifically?

[REDACTED] B6 was able to collect fresh frozen myocardium from one of our presumed diet induced DCM cases and we are wondering if we should hang on to this in a -80 freezer or send you the sample for testing? This is an almost 2yr MI Yorkie mix that was diagnosed in April 2018 and was eating Castor and Pollux Organic GF Small Breed. The owners tried to change the diet to a grain based Royal canin diet but because of lack of interest he was changed to Primal (raw and grain free). He represented in September 2018 for CHF and was then changed to Fromm Adult Gold Small breed, grain-based supplemented with boiled chicken and rice. Progressive disease was noted at each exam echocardiographically with no improvement in systolic function. His whole blood taurine was [REDACTED] B6 but he was still supplemented with taurine.

Thanks for your thoughts!

Take care

Darcy

From: [REDACTED] B6
To: Jones, Jennifer L; [REDACTED] B6 ADIN,DARCY BRITTAIN
Sent: 1/31/2019 4:47:01 PM
Subject: Fwd: Safety Report ID 252600 Submission Confirmation

Hi Jennifer,

Here is the Safety Report Confirmation. Please contact me if you need any additional information.

[REDACTED] B6

----- Forwarded message -----

From: <noreply.safetyreporting@hhs.gov>
Date: Thu, Jan 31, 2019 at 11:37 AM
Subject: Safety Report ID 252600 Submission Confirmation
To: [REDACTED] B6

Your initial Pet Food Safety Report, ID 252600, was successfully submitted on 1/31/2019 11:24:47 AM EST to the FDA, and it was issued an Individual Case Safety Report Number (ICSR) of 2062004.

Thank you for using the Safety Reporting Portal.

Please do not reply to this message. Replies to this message are routed to an unmonitored mailbox. If you have questions please refer to the Portal's Contact Us page for further instructions.

From: Jones, Jennifer L </o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=0f6ca12eaa9348959a4cbb1e829af244-Jennifer.Jo>
To: [REDACTED] B6 ADIN,DARCY BRITTAIN
CC: Peloquin, Sarah
Sent: 2/1/2019 3:16:52 PM
Subject: RE: 800.267-cc-212- Safety Report ID 252600 Submission Confirmation

Thank you for submitting the report.

We will send you a box to collect the frozen heart tissue. You'll reuse the box, package the sample, use the prepaid shipping label we provide, and call UPS for the pick-up. Please return ship the box to us on a Monday through Wednesday.

***If for some reason we are furloughed again mid-February, please do not ship during the government shutdown. ***

Thank you again for your help,
Jen

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



From: [REDACTED] B6
Sent: Thursday, January 31, 2019 11:47 AM
To: Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov> [REDACTED] B6
ADIN,DARCY BRITTAIN <adind@ufl.edu>
Subject: Fwd: Safety Report ID 252600 Submission Confirmation

Hi Jennifer,

Here is the Safety Report Confirmation. Please contact me if you need any additional information.

[REDACTED] B6

----- Forwarded message -----

From: <noreply.safetyreporting@hhs.gov>
Date: Thu, Jan 31, 2019 at 11:37 AM
Subject: Safety Report ID 252600 Submission Confirmation
To: [REDACTED] B6

Your initial Pet Food Safety Report, ID 252600, was successfully submitted on 1/31/2019 11:24:47 AM EST to the FDA, and it was issued an Individual Case Safety Report Number (ICSR) of 2062004.

Thank you for using the Safety Reporting Portal.

Please do not reply to this message. Replies to this message are routed to an unmonitored mailbox. If you have questions please refer to the Portal's Contact Us page for further instructions.

From: Reimschuessel, Renate </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=4C00C47AE2794134B2906D6B9252FCF6-RREIMSCH>
To: Jones, Jennifer L; Nemser, Sarah
Sent: [REDACTED] 12:17:41 PM
Subject: FW: Nutritionally-mediated DCM case necropsy recommendations
Attachments: 800.267-Vet-LIRN Rapid Necropsy-DCM-v7.pdf

fyi

Renate Reimschuessel V.M.D. Ph.D. Director Vet-LIRN

Phone 1-240-402-5404

Fax 301-210-4685

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

From: Joshua A Stern <jstern@ucdavis.edu>
Sent: [REDACTED] 10:39 PM
To: [REDACTED]
Cc: Reimschuessel, Renate <Renate.Reimschuessel@fda.hhs.gov>
Subject: Nutritionally-mediated DCM case necropsy recommendations

Hi [REDACTED] - Although I wasn't on clinic I heard about [REDACTED]. This is such a sad case. For what it is worth for future cases we have seen some dogs take 9-12 months to show improvement after diet change and taurine + carnation supplementation (regardless of measured taurine levels). I'm so glad to hear the owner had a positive experience and wish this case wasn't ending this way for everyone!

The FDA can really use the help with tissue samples. Please ensure that you report the case to the FDA and if you are able to use the attached protocol to obtain samples for them they would greatly appreciate it. I believe they will pay necropsy costs and cover shipping for you. The person to contact (Renate Reimschuessel) at the FDA is CC'd on this email. Your willingness to help us get to the bottom of this horrible disease is greatly appreciated.

Best

Josh

Joshua Stern, DVM, PhD, DACVIM (Cardiology)
Associate Professor & Chief of Service: Cardiology

Interim Small Animal Clinic Director
Department of Medicine & Epidemiology

University of California Davis; CCAH Room 258
(614) 390.1516 cell (530) 752.2475 office
jstern@ucdavis.edu

Associate Editor - Journal of Veterinary Cardiology
www.journals.elsevier.com/journal-of-veterinary-cardiology

Rapid necropsy for Vet-LIRN's Case Investigation into Canine Dilated Cardiomyopathy (DCM) 2018

Prior to Necropsy:

1. Contact Vet-LIRN if you think you have a case of DCM to request authorization for payment to conduct a necropsy.
2. Submit a pet food report through the FDA Safety Reporting Portal. (<https://www.safetyreporting.hhs.gov>)
3. Refrigerate the body if the necropsy can be done in 1 day, otherwise freeze the body.

Necropsy

4. Photograph any lesions – place a tag with the dog's name in each picture.
5. Record any gross findings in detail
 - a. Describe location, number, size, color, and texture.
 - b. Photograph the heart *in situ*.
6. Sampling and **FIXING** (10% neutral buffered formalin, 10:1 NBF to tissue):
 - a. Heart – Weigh it (remove clots first) – place in NBF without cutting
 - b. Eye (#1, record OD or OS) inject with NBF, and place in NBF
 - c. Lungs – Weigh lungs, then fix the perihilar region and caudo-dorsal
 - d. Muscles – sample gastrocnemius and abdominal muscle, labelling each.
 - e. Organs sample:
 - i. Ileum
 - ii. Pancreas
 - iii. Liver
 - iv. Gall bladder
 - v. Spleen
 - vi. Kidney (1/2 of each)
 - vii. Adrenal
 - viii. Thyroid
 - f. Sample any tissues with gross lesions.
7. Sampling for **FROZEN TISSUES**
 - a. Eye (#2, record OD or OS)
 - b. Liver (4x4 cm section – state size or weight)
 - c. Skeletal muscle-gastrocnemius and abdominal muscle
 - d. Kidney (1/2 of each)
 - e. Fat (abdominal)

If available:

- f. small intestinal contents and feces (for bile acids)
- g. Whole blood and/or Plasma
- h. Urine

Sample Shipping to Vet-LIRN:

8. Vet-LIRN will send you 2 boxes – one for fixed samples, one for frozen samples.
 - a. The boxes will contain packaging instructions and a prepaid shipping label.
 - b. Vet-LIRN will need to know the final weights of both the collective frozen and fixed tissues, separately.
 - c. Call UPS to schedule box pick-up ONLY FOR Monday through Wednesday.

Reimbursement:

9. Submit an invoice (email or fax: 301-210-4685) for the necropsy charges.

Histopathology-**to be done by FDA:**

10. Vet-LIRN will send histopathology results to the veterinarian to share with the owner.

From: [redacted] B6
To: Jones, Jennifer L
Sent: [redacted] B6 4:32:34 PM
Subject: Necropsy authorization

Dear Dr. Jones,

I left a message on your number this morning but figured I would also follow up with an email. Dr. Josh Stern gave us your contact information – I reached out to both Renate and Sarah but both appear out of the office today. We have a nutrition mediated DCM case, diagnosed at UC Davis that will be euthanized [redacted] B6 [redacted] B6 is in CHF and isn't responding to treatment. She is a 3.5yr old, FS, Golden Retriever. The owner is willing to submit the body/tissues towards research on this condition. Please give me a call at your earliest convenience to discuss next steps [redacted] B6

Sincerely,

[redacted] B6

[redacted] B6

[redacted] B6

Tel [redacted] B6
Fax [redacted] B6



From: Jones, Jennifer L </o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=0f6ca12eaa9348959a4cbb1e829af244-Jennifer.Jo>
To: [REDACTED] B6
CC: 'Reimschuessel, Renate (Renate.Reimschuessel@fda.hhs.gov)'; Peloquin, Sarah
Sent: [REDACTED] B6 5:40:43 PM
Subject: 800.267-cc-295-RE: Necropsy authorization
Attachments: 02-Vet-LIRN-NetworkProceduresVets-12.22.2015.pdf; 03-Vet-LIRN-NetworkProceduresOwners-12.22.2015.pdf

Good afternoon [REDACTED] B6

Thank you for contacting us about your case. As we discussed on the phone, for me to send you a box to collect the samples, I'll need an official report. You can mention in the report, that I recommended you submit a complaint. Can you please submit a consumer complaint here?

<https://www.safetyreporting.hhs.gov/>

- Please send me the ICSR number (confirmation code) from the report.

We will send you 2 boxes with the materials to collect the fixed and frozen samples, including jars with formalin. You will reuse the boxes we send and package the samples per the instructions in the box.

- Please send me an estimate for the necropsy. After the necropsy is complete, we will call back with our VISA information to reimburse your hospital.
- After the necropsy is complete, please send me the approximate weight of the following individual groups:
 - Fixed tissues in the jars
 - Frozen tissues

We will use this information to make prepaid shipping labels for you. You'll affix the prepaid shipping label to the box and call UPS for a pick-up on Monday-Wednesday.

I attached a copy of our network procedures. They explain how Vet-LIRN operates and how veterinarians help with our case investigations. An owner friendly version is also attached.

For more information, please also visit our open access article in JAVMA that explains the FDA Animal Food Concern Reporting process. It's free and located here: <https://avmajournals.avma.org/doi/pdf/10.2460/javma.253.5.550>

Thank you again,
Jen

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



From: [REDACTED] B6
Sent: Tuesday, [REDACTED] B6 12:33 PM
To: Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov>
Subject: Necropsy authorization

Dear Dr. Jones,

I left a message on your number this morning but figured I would also follow up with an email. Dr. Josh Stern gave us your contact information – I reached out to both Renate and Sarah but both appear out of the office today. We have a nutrition mediated DCM case, diagnosed at UC Davis that will be euthanized [REDACTED] B6 [REDACTED] B6 is in CHF and isn't responding to treatment. She is a 3.5yroid, FS, Golden Retriever. The owner is willing to submit the body/tissues towards research on this condition. Please give me a call at your earliest convenience

to discuss next steps

B6

Sincerely,

B6

B6

B6

Tel:

B6

Fax:

B6

 Like us on
Facebook

Find us on Yelp 



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: Nemser, Sarah </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=5FC1EB8D2F5944ECAA02F40E225C2054-SNEMSER>
To: Jones, Jennifer L
Sent: [REDACTED] 11:44:34 PM
Subject: FW: Necropsy authorization

Forwarding this one on - DCM

Sarah Nemser M.S.

Vet-LIRN Network Coordinator

tel: 240-402-0892

fax: 301-210-4685

sarah.nemser@fda.hhs.gov

From: [REDACTED] B6
Sent: [REDACTED] B6 12:01 PM
To: Nemser, Sarah <Sarah.Nemser@fda.hhs.gov>
Subject: Necropsy authorization

Hi Sarah,

I left a message on your number this morning but figured I would also follow up with an email. Dr. Josh Stern gave us your contact information. We have a nutrition mediated DCM case, diagnosed at UC Davis that will be euthanized this afternoon. [REDACTED] B6 is in CHF and isn't responding to treatment. She is a 3.5yold, FS, Golden Retriever. The owner is willing to submit the body/tissues towards research on this condition. [REDACTED] B6 is out of the office today. Please give me a call at your earliest convenience to discuss next steps [REDACTED] B6

Sincerely,

[REDACTED] B6

B6

B6



All Medical Records

Client: [B6]
Address: [B6]

Patient: [B6]
Breed: English Bulldog
DOB: [B6]

Species: Canine
Sex: Female
(Spayed)

Home Phone: [B6]
Work Phone: [B6]
Cell Phone: [B6]

Referring Information

[B6]
Client: [B6]
Patient: [B6]

Initial Complaint:

Emergency

SOAP Text: [B6] 9:31PM - [B6]

Subjective

NEW VISIT (ER)

Doctor: [B6]

Student: ---

Presenting complaint: Tachypnea

Referral visit? Yes

Diagnostics completed prior to visit-- radiographs, 2 view thorax, in ER email

HISTORY:

Signalment: 8 yo SF English Bulldog

Current history:

Earlier this afternoon, found her laying and trembling with shallow and rapid breathing. Owner also noticed that she had a hacking non productive cough. Has not appreciated it before today. Went to rDVM where radiographs were performed. No history of heart or pulmonary disease. No recent vomiting or diarrhea. Has recently been doing well at home with no concerns.

Prior medical history: anxiety, otherwise healthy

Current medications: [B6] 2mL once daily in PM, had tonight

Diet: Core Wellness, mix of wet and dry, grain free diet

Client: **B6**
Patient:

Vaccination status/flea & tick preventative use: UTD
Travel history: unknown

EXAM: performed with flow by O2

B6

ASSESSMENT:

B6

PLAN:

Diagnostics:

B6

Treatments:

B6

Diagnostics completed:

B6

Diagnostics pending:

CBC

Client:
Patient:

B6

Chemistry
BNP

Client communication:

B6

Deposit & estimate status: **B6**

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

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

SOAP Text **B6** :38AM **B6**

SIGNALMENT: 8yo FS English Bulldog

PRESENTING COMPLAINT: dyspnea

HISTORY:

Presented on **B6** after O found her laying and trembling with shallow and rapid breathing. Owner also noticed that she had a hacking non productive cough. Has not appreciated it before today. Went to rDVM where radiographs were performed. No history of heart or pulmonary disease. No recent vomiting or diarrhea. Has recently been doing well at home with no concerns.

Prior medical history: **B6**

Current medications: **B6**

Diet: Core Wellness, mix of wet and dry, grain free diet

On presentation, P was dyspneic and tachycardic. rDVM rads unable to be assessed as CHF vs. pneumonia, so placed in O2 on Unasyn overnight with bloodwork pulled for CBC/Chem and nt-proBNP. Minimal improvement overnight with persistent tachycardia, but excellent appetite and good spirits.

SUBJECTIVE:

B6

OBJECTIVE:

B6

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

RECTAL: NP

ASSESSMENT:

A1: **B6**

PLAN:

P1: **B6**
P2: **B6**
P3: **B6**
P4: **B6**
P5: **B6**
P6: **B6**
P7: **B6**

Diagnostics completed:

B6

B6

Cardio Consult: DCM, suspect early CHF - add **B6** q8

Diagnostics pending:

BNP
Troponin
Taurine

Deposit & estimate status: **B6**

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

B6, DVM (ECC Resident)

SOAP Text **B6** 7:43AM - Clinician, Unassigned FHSA

HISTORY:

B6 is an **B6** yo FS English Bulldog that presented on **B6** for sudden onset dyspnea. O found her laying and trembling with shallow and rapid breathing. Owner also noticed that she had a hacking non productive cough. Has not appreciated it before. Went to rDVM where radiographs were performed. No history of heart or pulmonary disease. No recent vomiting or diarrhea, has been doing well at home with no concerns. Was on Core Wellness dry and wet grain

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

free diet.

On presentation to ER, P was dyspneic and tachycardic. rDVM rads unable to be assessed as CHF vs. pneumonia, so placed in **B6** on **B6** overnight with bloodwork pulled for CBC/Chem and nt-proBNP. Minimal improvement overnight on **B6** with persistent tachycardia, but excellent appetite and good spirits. Cardio consult was difficult to assess due to dyspnea and conformation, but showed DCM and suspect CHF.

Overnight, P had normal vitals, with RR 24-36 with no to mild effort in O2 cage. Walked well outside of O2 cage, but at 3:45am after a walk was trembling and anxious in the cage, was given **B6** and calmed after. Excellent appetite this morning. Has received **B6** so far since **B6**

Subjective

B6

Objective

B6

H/L: No murmur ausculted although very difficult auscultation due to the constant panting. No obvious arrhythmia either. Jugular pulse bottom 1/3 of the neck. Femoral pulses strong and synchronized with heart beat. Normal BVS bilateral

B6

Diagnostics completed:

B6

B6

- Mild cardiomegaly and left atrial enlargement without evidence of decompensation. Echocardiography can be considered (to evaluate mitral valve and to evaluate for pulmonary hypertension).

B6

Cardio Consult: DCM, suspect early CHF - ad **B6** 3

Diagnostics pending:

BNP

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

Troponin
Taurine

Assessment (A)

B6

Plan (P)

B6

SOAP completed by: **B6**
SOAP reviewed by: **B6** DVM

Addendum:

B6

SOAP Text **B6** 7:28AM **B6**

HISTORY:

B6 is an **B6** FS English Bulldog that presented on **B6** for sudden onset **B6**. **B6** found her laying and trembling with shallow and rapid breathing. Owner also noticed that she had a hacking non productive cough. Has not appreciated it before. Went to rDVM where radiographs were performed. No history of heart or pulmonary disease. No recent vomiting or diarrhea, has been doing well at home with no concerns. Was on Core Wellness dry and wet grain free diet.

On presentation to ER, P was dyspneic and tachycardic. rDVM rads unable to be assessed as CHF vs. pneumonia, so placed in O2 on **B6** overnight with bloodwork pulled for CBC/Chem and nt-proBNP. Minimal improvement overnight on **B6** with persistent tachycardia, but excellent appetite and good spirits. Cardio consult was difficult to assess due to dyspnea and conformation, but showed DCM and suspect CHF.

Since yesterday P has been out of oxygen, increased **B6** to TID, and restarted **B6**. Overnight, P had normal vitals, with RR 28-32 with no effort, but panting earlier in the night. Walks well outside, and still has excellent appetite.

Subjective

B6

Objective

B6

Client: **B6**
Patient:

B6

H/L: No murmur ausculted although very difficult auscultation due to the constant panting. No obvious arrhythmia either. Jugular pulse bottom 1/3 of the neck. Femoral pulses strong and synchronized with heart beat. Normal BVS bilateral

B6

Diagnostics completed:

B6

- Mild cardiomegaly and left atrial enlargement without evidence of decompensation. Echocardiography can be considered (to evaluate mitral valve and to evaluate for pulmonary hypertension).

B6

Cardio Consult: DCM, suspect early CHF - add pimobendan and Lasix q8

B6

Diagnostics pending:

Troponin
Taurine

Assessment (A)

A1: DCM and suspect early CHF vs less likely pneumonia

Plan (P)

B6

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

SOAP completed by: **B6**
SOAP reviewed by: **B6** DVM

Addendum:

B6

Disposition/Recommendations

Client:
Patient:

B6

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

Cummings
Veterinary Medical Center
 AT TUFTS UNIVERSITY

Foster Hospital for Small Animals

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

Client: **B6**
 Veterinarian:
 Patient ID: 437321
 Visit ID:

Patient:	B6
Species:	Canine
Breed:	English Bulldog
Sex:	Female (Spayed)
Age:	B6 Years Old

Lab Results Report

CBC, Comprehensive, Sm Animal **B6** 11:21:12 PM **Accession ID: B6**

Test	Results	Reference Range	Units
WBC (ADVIA)	B6	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 19 11:21:26 PM **Accession ID: B6**

Test	Results	Reference Range	Units
GLUCOSE	B6	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



10/47

B6

Printed Monday, February 25, 2019

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

T. PROTEIN	B6	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
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		

CBC, Comprehensive, Sm Animal **B6** 11:21:08 PM Accession ID: **B6**

Test	Results	Reference Range	Units
SEGS%	B6	43 - 86	%
LYMPHS%		7 - 47	%
MONOS%		1 - 15	%
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			
RBC MORPHOLOGY		0 - 0	
POIKILOCYTOSIS		0 - 0	

CBC, Comprehensive, Sm Animal **B6** 11:22:25 PM Accession ID: **B6**

Test	Results	Reference Range	Units
SO2%	B6	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



11/47

B6

Printed Monday, February 25, 2019

Client: **B6**

Patient:

CL(POC)	B6	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
BEecf		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** 11:28:40 PM Accession ID: **B6**

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

CBC, Comprehensive, Sm Animal **B6** 1:43:18 PM Accession ID: **B6**

Test	Results	Reference Range	Units
GLUCOSE	B6	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



12/47

B6

Printed Monday, February 25, 2019

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

CHLORIDE	B6	106 - 116	mEq/L
POTASSIUM		3.7 - 5.4	mEq/L
NA/K		29 - 40	
T BILIRUBIN		0.1 - 0.3	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

CBC, Comprehensive, Sm Animal **B6** 3:44:46 PM Accession ID: **B6**

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

CBC, Comprehensive, Sm Animal **B6** 9:46:19 AM Accession ID: **B6**

Test	Results	Reference Range	Units
GLUCOSE	B6	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
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
COMMENTS (CHEMISTRY)		0 - 0	

CBC, Comprehensive, Sm Animal **B6** 10:20:57 AM Accession ID: **B6**

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



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

TS (FHSA)

B6

0 - 0

g/dl



stringsoft

14/47

B6

Printed Monday, February 25, 2019

Vitals Results

6:41:14 PM	Heart Rate (/min)
6:41:15 PM	Respiratory Rate
6:41:16 PM	Temperature (F)
6:41:17 PM	Weight (kg)
11:17:43 PM	Heart Rate (/min)
11:17:51 PM	Respiratory Rate
11:22:41 PM	Notes
11:26:08 PM	FiO2 (%)
1:03:01 AM	Respiratory Rate
2:54:19 AM	Catheter Assessment
2:56:22 AM	Heart Rate (/min)
2:56:33 AM	FiO2 (%)
2:57:15 AM	Respiratory Rate
5:07:52 AM	Respiratory Rate
7:34:37 AM	Eliminations
7:35:59 AM	FiO2 (%)
7:37:34 AM	Temperature (F)
7:37:44 AM	Amount eaten
7:46:29 AM	Respiratory Rate
7:46:58 AM	Heart Rate (/min)
7:47:06 AM	Catheter Assessment
9:13:53 AM	Weight (kg)
9:14:50 AM	Respiratory Rate
11:03:18 AM	FiO2 (%)
11:03:33 AM	Catheter Assessment
11:03:43 AM	Heart Rate (/min)
11:03:52 AM	Respiratory Rate
12:50:07 PM	Lasix treatment note
1:10:13 PM	Respiratory Rate
1:10:22 PM	Eliminations
3:18:03 PM	Catheter Assessment
3:18:20 PM	FiO2 (%)
3:18:55 PM	Respiratory Rate

B6

B6

Vitals Results

3:20:08 PM	Heart Rate (/min)
4:46:44 PM	Amount eaten
5:41:52 PM	Respiratory Rate
7:04:34 PM	FiO2 (%)
7:04:58 PM	Catheter Assessment
7:06:54 PM	Heart Rate (/min)
7:07:03 PM	Temperature (F)
7:34:10 PM	Weight (kg)
7:34:17 PM	Eliminations
7:45:53 PM	Lasix treatment note
7:46:17 PM	Respiratory Rate
8:55:18 PM	Nursing note
8:55:56 PM	Eliminations
9:53:33 PM	Respiratory Rate
11:31:43 PM	Catheter Assessment
11:32:37 PM	Catheter Assessment
11:34:10 PM	Heart Rate (/min)
11:34:31 PM	Amount eaten
11:49:45 PM	FiO2 (%)
11:49:58 PM	Respiratory Rate
1:55:25 AM	Respiratory Rate
3:35:30 AM	Lasix treatment note
3:37:10 AM	Catheter Assessment
3:45:10 AM	Heart Rate (/min)
3:45:19 AM	Eliminations
3:53:42 AM	FiO2 (%)
3:53:53 AM	Respiratory Rate
4:55:04 AM	Nursing note
5:55:31 AM	Respiratory Rate
6:11:40 AM	Nursing note
7:19:26 AM	Respiratory Rate
7:19:52 AM	FiO2 (%)
7:20:14 AM	Temperature (F)
7:20:30 AM	Heart Rate (/min)
7:20:46 AM	Amount eaten
7:33:19 AM	Weight (kg)
7:33:27 AM	Eliminations
8:01:36 AM	Catheter Assessment
9:32:45 AM	Respiratory Rate

B6

B6

Client:
Patient:

B6

Vitals Results

11:16:45 AM	FiO2 (%)
12:41:34 PM	Catheter Assessment
12:41:43 PM	Respiratory Rate
12:42:33 PM	Heart Rate (/min)
12:42:50 PM	Lasix treatment note
1:52:56 PM	Heart Rate (/min)
3:03:09 PM	FiO2 (%)
3:03:22 PM	Respiratory Rate
3:40:13 PM	Respiratory Rate
3:55:45 PM	Eliminations
5:04:09 PM	Respiratory Rate
5:40:13 PM	Amount eaten
5:52:28 PM	Eliminations
5:54:07 PM	Respiratory Rate
5:54:57 PM	Heart Rate (/min)
5:55:05 PM	Catheter Assessment
6:52:18 PM	Respiratory Rate
7:17:27 PM	Eliminations
7:45:11 PM	Respiratory Rate
8:01:23 PM	Lasix treatment note
8:17:14 PM	Eliminations
8:54:56 PM	Respiratory Rate
9:32:19 PM	Heart Rate (/min)
9:32:26 PM	Catheter Assessment
9:32:35 PM	Eliminations
9:43:25 PM	Respiratory Rate
10:41:18 PM	Respiratory Rate
11:18:27 PM	Eliminations
11:18:49 PM	Weight (kg)
11:42:42 PM	Eliminations
11:53:16 PM	Respiratory Rate
12:52:00 AM	Respiratory Rate
1:22:40 AM	Heart Rate (/min)
1:22:46 AM	Catheter Assessment
1:45:25 AM	Respiratory Rate
2:53:51 AM	Respiratory Rate
3:34:16 AM	Lasix treatment note
3:34:45 AM	Respiratory Rate
3:43:47 AM	Eliminations
4:50:44 AM	Respiratory Rate
4:52:32 AM	Nursing note

B6

B6

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

Vitals Results

B6	5:25:32 AM	Catheter Assessment	B6
	5:27:43 AM	Heart Rate (/min)	
	5:27:50 AM	Respiratory Rate	
	5:28:01 AM	Amount eaten	
	6:42:00 AM	Respiratory Rate	
	7:25:45 AM	Respiratory Rate	
	7:26:00 AM	Weight (kg)	
	7:26:12 AM	Eliminations	
	8:56:03 AM	Respiratory Rate	
	9:47:19 AM	Respiratory Rate	
	9:50:04 AM	Catheter Assessment	
	9:50:22 AM	Heart Rate (/min)	
	11:05:09 AM	Respiratory Rate	
	12:00:28 PM	Respiratory Rate	
	12:00:44 PM	Eliminations	
	12:05:36 PM	Lasix treatment note	
	12:55:52 PM	Respiratory Rate	
	1:55:49 PM	Respiratory Rate	
3:12:43 PM	Respiratory Rate		
3:17:41 PM	Eliminations		
4:02:34 PM	Respiratory Rate		

Patient History

B6	06:41 PM	Vitals	B6
	06:41 PM	Vitals	
	06:41 PM	Vitals	
	06:41 PM	Vitals	
	07:50 PM	UserForm	
	09:52 PM	UserForm	
	11:17 PM	Treatment	
	11:17 PM	Vitals	
	11:17 PM	Treatment	
	11:17 PM	Vitals	
	11:19 PM	Treatment	
	11:21 PM	Purchase	
	11:21 PM	Purchase	
	11:21 PM	Purchase	
	11:21 PM	Purchase	
	11:21 PM	Purchase	
	11:21 PM	Purchase	
	11:22 PM	Purchase	
11:22 PM	Purchase		
11:22 PM	Vitals		

Client:
Patient:

B6

Patient History

11:22 PM	Purchase
11:22 PM	Purchase
11:25 PM	Treatment
11:26 PM	Treatment
11:26 PM	Vitals
11:26 PM	Treatment
11:28 PM	Labwork
12:50 AM	Treatment
12:53 AM	Treatment
01:03 AM	Treatment
01:03 AM	Vitals
02:54 AM	Treatment
02:54 AM	Treatment
02:54 AM	Vitals
02:56 AM	Treatment
02:56 AM	Vitals
02:56 AM	Treatment
02:56 AM	Vitals
02:57 AM	Treatment
02:57 AM	Vitals
05:07 AM	Treatment
05:07 AM	Vitals
07:34 AM	Treatment
07:34 AM	Treatment
07:34 AM	Vitals
07:35 AM	Treatment
07:35 AM	Vitals
07:37 AM	Treatment
07:37 AM	Vitals
07:37 AM	Treatment
07:37 AM	Vitals
07:46 AM	Treatment
07:46 AM	Vitals
07:46 AM	Treatment
07:46 AM	Vitals
07:47 AM	Treatment
07:47 AM	Vitals
08:13 AM	UserForm
08:19 AM	Purchase
08:32 AM	UserForm
08:39 AM	Treatment

B6

B6

Client:
Patient:

B6

Patient History

08:45 AM	Prescription
08:48 AM	Prescription
09:13 AM	Treatment
09:13 AM	Vitals
09:14 AM	Treatment
09:14 AM	Vitals
09:34 AM	Purchase
09:35 AM	Treatment
11:03 AM	Treatment
11:03 AM	Vitals
11:03 AM	Treatment
11:03 AM	Treatment
11:03 AM	Vitals
11:03 AM	Treatment
11:03 AM	Vitals
11:03 AM	Treatment
11:03 AM	Vitals
11:03 AM	Treatment
11:03 AM	Vitals
11:05 AM	Purchase
11:39 AM	Treatment
11:41 AM	Treatment
12:50 PM	Vitals
12:52 PM	Treatment
12:54 PM	Prescription
01:01 PM	Deleted Reason
01:10 PM	Treatment
01:10 PM	Vitals
01:10 PM	Treatment
01:10 PM	Vitals
01:10 PM	Treatment
03:14 PM	Treatment
03:17 PM	Treatment
03:18 PM	Treatment
03:18 PM	Vitals
03:18 PM	Treatment
03:18 PM	Vitals
03:18 PM	Treatment
03:18 PM	Vitals
03:18 PM	Treatment
03:18 PM	Vitals
03:20 PM	Treatment
03:20 PM	Vitals
04:14 PM	UserForm
04:46 PM	Treatment

B6

B6

Client:
Patient:

B6

Patient History

04:46 PM	Vitals
05:14 PM	Deleted Reason
05:14 PM	Deleted Reason
05:15 PM	Purchase
05:15 PM	Purchase
05:41 PM	Treatment
05:41 PM	Vitals
07:04 PM	Treatment
07:04 PM	Vitals
07:04 PM	Treatment
07:04 PM	Treatment
07:04 PM	Vitals
07:06 PM	Treatment
07:06 PM	Vitals
07:07 PM	Treatment
07:07 PM	Vitals
07:34 PM	Treatment
07:34 PM	Vitals
07:34 PM	Treatment
07:34 PM	Vitals
07:45 PM	Vitals
07:46 PM	Treatment
07:46 PM	Treatment
07:46 PM	Vitals
08:31 PM	Treatment
08:55 PM	Vitals
08:55 PM	Vitals
09:53 PM	Treatment
09:53 PM	Vitals
11:07 PM	Purchase
11:07 PM	Purchase
11:21 PM	Treatment
11:31 PM	Treatment
11:31 PM	Vitals
11:32 PM	Treatment
11:32 PM	Vitals
11:34 PM	Treatment
11:34 PM	Treatment
11:34 PM	Vitals
11:34 PM	Treatment
11:34 PM	Vitals
11:49 PM	Treatment
11:49 PM	Treatment

B6

B6

Client:
Patient:

B6

Patient History

11:49 PM	Vitals
11:49 PM	Treatment
11:49 PM	Vitals
01:55 AM	Treatment
01:55 AM	Vitals
03:05 AM	Treatment
03:35 AM	Vitals
03:37 AM	Treatment
03:37 AM	Treatment
03:37 AM	Vitals
03:45 AM	Treatment
03:45 AM	Vitals
03:45 AM	Treatment
03:45 AM	Vitals
03:45 AM	Vitals
03:45 AM	Vitals
03:53 AM	Treatment
03:53 AM	Vitals
03:53 AM	Treatment
03:53 AM	Vitals
04:50 AM	Treatment
04:55 AM	Treatment
04:55 AM	Vitals
05:55 AM	Treatment
05:55 AM	Vitals
06:03 AM	Treatment
06:11 AM	Vitals
07:19 AM	Treatment
07:19 AM	Vitals
07:19 AM	Treatment
07:19 AM	Vitals
07:20 AM	Treatment
07:20 AM	Treatment
07:20 AM	Vitals
07:20 AM	Treatment
07:20 AM	Vitals
07:20 AM	Treatment
07:20 AM	Vitals
07:33 AM	Treatment
07:33 AM	Vitals
07:33 AM	Treatment
07:33 AM	Vitals
08:01 AM	Treatment
08:01 AM	Vitals
08:01 AM	Treatment

B6

B6

Client: **B6**
Patient:

Patient History

08:46 AM Purchase
09:32 AM Treatment
09:32 AM Vitals
09:46 AM Purchase
10:50 AM Purchase
10:51 AM Treatment
11:05 AM Purchase
11:16 AM Treatment

11:16 AM Vitals
12:41 PM Treatment
12:41 PM Vitals
12:41 PM Treatment
12:41 PM Vitals
12:42 PM Treatment
12:42 PM Vitals
12:42 PM Vitals
12:43 PM Treatment
12:46 PM Treatment

01:43 PM Purchase
01:52 PM Treatment
01:52 PM Vitals
03:03 PM Treatment

03:03 PM Vitals
03:03 PM Treatment
03:03 PM Vitals
03:40 PM Vitals
03:46 PM Labwork
03:50 PM Treatment
03:53 PM Prescription
03:55 PM Treatment
03:55 PM Vitals
05:04 PM Treatment
05:04 PM Vitals
05:09 PM Treatment
05:09 PM Treatment

05:40 PM Treatment

05:40 PM Vitals
05:52 PM Vitals
05:54 PM Treatment
05:54 PM Vitals
05:54 PM Treatment
05:54 PM Vitals
05:55 PM Treatment
05:55 PM Vitals
06:48 PM Prescription

B6

B6

Client: **B6**
Patient:

Patient History

B6	06:52 PM	Treatment	B6
	06:52 PM	Vitals	
	06:52 PM	Treatment	
	07:17 PM	Vitals	
	07:27 PM	Treatment	
	07:45 PM	Treatment	
	07:45 PM	Vitals	
	08:01 PM	Vitals	
	08:01 PM	Treatment	
	08:17 PM	Vitals	
	08:27 PM	Treatment	
	08:54 PM	Treatment	
	08:54 PM	Vitals	
	09:13 PM	Treatment	
	09:32 PM	Treatment	
	09:32 PM	Vitals	
	09:32 PM	Treatment	
	09:32 PM	Vitals	
	09:32 PM	Vitals	
	09:43 PM	Treatment	
	09:43 PM	Vitals	
	10:41 PM	Treatment	
	10:41 PM	Vitals	
	11:07 PM	Purchase	
	11:07 PM	Purchase	
	11:18 PM	Treatment	
	11:18 PM	Vitals	
	11:18 PM	Vitals	
	11:42 PM	Vitals	
	11:53 PM	Treatment	
	11:53 PM	Vitals	
	12:52 AM	Treatment	
	12:52 AM	Vitals	
	01:21 AM	Treatment	
	01:22 AM	Treatment	
	01:22 AM	Vitals	
	01:22 AM	Treatment	
	01:22 AM	Vitals	
	01:45 AM	Treatment	
	01:45 AM	Vitals	
02:53 AM	Treatment		
02:53 AM	Vitals		
03:34 AM	Vitals		
03:34 AM	Treatment		
03:34 AM	Treatment		
03:34 AM	Vitals		
03:34 AM	Treatment		

Client:
Patient:

B6

Patient History

B6

03:35 AM	Treatment
03:43 AM	Treatment
03:43 AM	Vitals
04:50 AM	Treatment
04:50 AM	Vitals
04:52 AM	Vitals
05:25 AM	Treatment
05:25 AM	Vitals
05:25 AM	Treatment
05:27 AM	Treatment
05:27 AM	Vitals
05:27 AM	Treatment
05:27 AM	Vitals
05:28 AM	Treatment
05:28 AM	Vitals
06:41 AM	Treatment
06:42 AM	Vitals
07:25 AM	Treatment
07:25 AM	Vitals
07:26 AM	Treatment
07:26 AM	Vitals
07:26 AM	Treatment
07:26 AM	Vitals
07:26 AM	Vitals
08:56 AM	Treatment
08:56 AM	Vitals
09:31 AM	UserForm
09:39 AM	Purchase
09:47 AM	Treatment
09:47 AM	Vitals
09:50 AM	Treatment
09:50 AM	Vitals
09:50 AM	Treatment
09:50 AM	Vitals
09:50 AM	Treatment
10:21 AM	Labwork
11:05 AM	Purchase
11:05 AM	Treatment
11:05 AM	Vitals
11:25 AM	Treatment
11:25 AM	Treatment
11:48 AM	Purchase
11:48 AM	Treatment
12:00 PM	Treatment
12:00 PM	Vitals

B6

Client:
Patient:

B6

Patient History

B6

12:00 PM	Treatment
12:00 PM	Vitals
12:05 PM	Vitals
12:05 PM	Treatment
12:55 PM	Treatment
12:55 PM	Vitals
01:01 PM	Treatment
01:55 PM	Treatment
01:55 PM	Vitals
03:12 PM	Treatment
03:12 PM	Vitals
03:17 PM	Treatment
03:17 PM	Treatment
03:17 PM	Vitals
03:55 PM	Prescription
03:56 PM	Prescription
04:02 PM	Treatment
04:02 PM	Vitals
04:02 PM	Prescription
04:03 PM	Prescription
04:20 PM	Purchase
12:52 PM	Appointment

B6

B6

B6

Female (Spayed)

Canine English Bulldog Brown/White

Patient ID:437321

STANDARD CONSENT FORM

I am the owner, or agent for the owner, of the above described animal and have the authority to execute consent. I hereby authorize the Cummings School of Veterinary Medicine at Tufts University (herein after Cummings School) to prescribe for treatment of said animal according to the following terms and conditions.

Cummings School and its officers, agents and employees will provide such veterinary medical care as they deem reasonable and appropriate under the circumstances.

Cummings School and its officers, agents, and employees will use all reasonable care in the treatment of the above mentioned animal, but will not be liable for any loss or accident that may occur or any disease that may develop as a result of the care and treatment provided.

I understand that the above identified animal may be treated by Cummings School students under the supervision and assistance of Cummings School staff members.

In executing this form, I hereby expressly acknowledge that risks, benefits and alternative forms of treatment have been explained to me. I understand said explanation, and I consent to treatment. Should any additional treatments or diagnostics be required during the continued care of my animal, I understand that I will be given the opportunity to discuss and consent to these additional procedures. I understand that further or additional treatment may be required without an opportunity for discussion and consideration by me, in the case of the development of any life-threatening emergency during the continued care of my animal and I expressly consent to all such reasonable treatment as required. I realize and understand that results cannot be guaranteed.

If any equipment is left with the animal, it will be accepted with the understanding that Cummings School assumes no responsibility for any loss of equipment that may occur.

I agree to pick up the animal when notified that it is ready for release.

In the event the animal is not picked up, and if ten (10) days have expired since a registered letter was sent to the address given above, notifying me to call for the animal, the animal may be sold or otherwise disposed of in a humane manner and the proceeds applied to the charges incurred in caring and treating the animal. Failure to remove said animal will not and does not relieve me from obligation for the costs of services rendered.

I hereby grant to the Cummings School of Veterinary Medicine at Tufts University, its officers and employees (collectively referred to herein as Cummings School), and its agents and assigns (the Grantees) the irrevocable rights to photograph / videotape the operation or procedure to be performed, including appropriate and otherwise use such photographs and images for, and in connection with, a Grantee's medical, scientific, educational, and publicity purposes, by any means, methods and media (print and electronic) now known or, in the future, developed that the Grantee deems appropriate (provided that such photographs and images may not be used in for-profit commercials, unless such commercials are publicizing educational programs at Cummings School). As medical and surgical treatment necessitates the removal of tissue, cells, fluids or body parts of my animal, I authorize the Grantees to dispose of or use these tissues, cells, fluids or body parts for scientific and educational purposes.

I understand that a FINANCE CHARGE will be applied to all accounts unpaid after 30 days. The FINANCE CHARGE is computed on a monthly rate of 1.33% per month, which is an annual percentage rate of 16% applied to the average daily balance outstanding, with a minimum fee of \$50.

I do further agree that should any payment, or the full amount of the sum stated above, become overdue more than 20 days from the above-agreed upon time of payment or payments, the entire balance shall be considered in default and become due and payable. I further agree to be responsible for any or all collection agency and/or attorney fees necessary to collect the full amount.

I do further agree to comply with hours of visitation in conjunction with our Hospital's policy.

I have read, understand, and agree to accept the terms and conditions herein.

Owner's name: Date:

Owner's address:

**If the individual admitting the animal is someone other than the legal owner,
please complete the portion below:**

The owner of the animal has granted me authority to obtain medical treatment and to bind this owner to pay the veterinary medical services provided at Cummings School pursuant to the terms and conditions described above.

Authorized Agent - Please Print

Agent's Signature

Street Address

Date

Town/City State Zip

Treatment Plan

Estimated Charges
B6

B6

This estimate is based upon our preliminary examination. This is an estimate and is not the final bill. Every effort will be made to keep you informed of the current status of your bill throughout your animal's hospitalization. The final fee may vary considerably from this estimated cost.

Patient	Description	Low Obs	Low Extended	High Obs	High Extended
B6	B6				

B6

Doctor of Record: **B6**

I understand that no guarantee of successful treatment is made. I certify that I have read and fully understand the authorization for medical and/or surgical treatment, the reason for why such medical and/or surgical treatment is considered necessary, as well as its advantages and possible complications, if any. I also assume financial responsibility for all charges incurred to this patient(s). I agree to pay 75% of the estimated cost at the time of admission. Additional deposits will be required if additional care or procedures are required. I further agree to pay the balance of the charges when this patient(s) is released.
 Procedural billing is inclusive up to and including the estimated duration of hospitalization. There will be additional expenses if hospitalization extends beyond the specified duration.
 I have read, understand, and agree to accept the conditions of this treatment plan.
 Thank you for entrusting us with your pet's care.

High Total	B6
Low Total	
75% Deposit	

Radiology Request & Report

Patient

Name: B6
Species: Canine
Brown/White Female (Spayed)
English Bulldog
Birthdate: B6

Owner

Name: B6
Address: B6
01373

Patient ID: 437321
Date of request: B6

Attending Clinician: B6 DVM (Emergency & Critical Care Resident)

Student:

Date of exam: B6

Patient Location: Ward/Cage: ICU 02

Weight (kg) 19.80

Sedation

- Inpatient
- Outpatient Time:
- Waiting
- Emergency

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

Examination Desired: 3-view thorax (prioritize VD/DV and L lat)

Presenting Complaint and Clinical Questions you wish to answer:
Emergency

Pertinent History:

B6

Findings:

THORAX, THREE VIEWS:

B6

Conclusions:

- Diffuse bronchial and interstitial pulmonary pattern may indicate concurrent chronic lower airway disease (allergic, infectious, or parasitic) and interstitial lung disease. Airway sampling can be considered.
- Mild cardiomegaly and left atrial enlargement without evidence of decompensation. Echocardiography can be considered (to evaluate mitral valve and to evaluate for pulmonary hypertension).
- Multifocal intervertebral disk disease and breed-associated vertebral anomalies.
- Moderate bilateral elbow and right stifle degenerative joint disease.

Radiologists

Primary: DVM

Reviewing:

Dates

Reported:

Finalized:

Discharge Instructions

Patient

Name: B6

Species: Canine

Brown/White Female (Spayed) English

Bulldog

Birthdate: B6

Owner

Name: B6

Address: B6

Patient ID: 437321

Attending Cardiologist:

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

B6

Cardiologist Resident:

B6

Cardiologist Technician:

B6

Student: B6

Admit Date: B6 7:49:24 PM

Discharge Date: B6

Diagnoses: Dilated cardiomyopathy (DCM) with congestive heart failure

Diagnostic test results and findings:

- o
- o
- o
- o

B6

Case summary:

Thank you for bringing B6 to Tufts for evaluation of her heart disease. B6 originally presented to the Tufts ER of B6 for sudden onset of respiratory distress and a cough. B6 was stabilized with supplemental oxygen in the ICU and was given antibiotics and mild sedatives to keep her comfortable. X-rays of B6 chest showed a diffuse increased opacity in her lungs that was suspected to be fluid secondary to heart disease, but pneumonia could not be ruled out. A cardiology workup showed that B6 had enlargement of her heart chambers, and a blood test showed that one of the indicators of heart stretch was elevated, thus supporting the presence of heart disease.

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 **B6** comfortable and have her breathing easier.

B6 has been breathing well outside of the oxygen cage, and her recheck examinations, echocardiograms, and chest x-rays have been stable. At this time we are happy with her condition, and are comfortable to send her home.

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 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.
- An increase in breathing rate or effort will usually mean that you should give an extra **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.
- 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

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 her to continue to eat her normal diet for the first 7 to 14 days so we can make sure she 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.

The FDA is currently investigating an apparent association between diet and DCM. The exact cause is still unclear, but it appears to be associated with boutique diets and those containing exotic ingredient or are grain-free. Therefore, we are currently recommending that dogs do not eat these types of diets.

We recommend switching B6 to commercial diet made by a well-established company that is not grain-free and does not contain any exotic ingredients, such as kangaroo, duck, lamb, venison, lentils, peas, beans, buffalo, tapioca, barley, and chickpeas.

The FDA issued a statement regarding this issue

(<https://www.fda.gov/AnimalVeterinary/NewsEvents/CVMUpdates/ucm613305.htm>) and a recent article published by Dr. Lisa Freeman on the Cummings School's Petfoodology blog can further explain these findings (<http://vetnutrition.tufts.edu/2018/06/a-broken-heart-risk-of-heart-disease-in-boutique-or-grain-free-diets-and-exotic-ingredients/>).

Our nutritionists have compiled a list of dog foods that are good options for dogs with heart disease.

Dry Food Options:

Royal Canin Early Cardiac (veterinary diet)
Royal Canin Boxer
Purina Pro Plan Adult Weight Management
Purina Pro Plan Bright Mind Adult Small Breed Formula

Canned Food Options:

Hill's Science Diet Adult Beef and Barley Entree
Hill's Science Diet Adult 1-6 Healthy Cuisine Roasted Chicken, Carrot, and Spinach Stew
Royal Canin Mature 8+

If your dog has special nutritional needs or requires a homecooked diet, we recommend you schedule an appointment with our nutritionists (508-887-4696).

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 recommended in 1-2 weeks after any medication adjustments are made. At this visit we will check your dog's breathing effort and heart function, do a blood test to recheck kidney values, and probably recheck a blood pressure. A recheck echocardiogram is recommended in 3-4 months.

Thank you for entrusting us with B6 care, she is such a spirited girl! Please contact our Cardiology liaison at (508)-887-4696 or email us at cardiovet@tufts.edu for scheduling and non-emergent questions or concerns.

Sincerely,

Dr. [REDACTED] B6

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/cvmc/clinical-studies

Case: [REDACTED] B6

Owner: [REDACTED] B6

Discharge Instructions

Radiology Request & Report

Patient

Name: B6
Species: Canine
Brown/White Female (Spayed)
English Bulldog
Birthdate: B6

Owner

Name: B6
Address: B6
01373

Patient ID: 437321
Date of request: B6

Attending Clinician: B6 DVM (Resident, Cardiology) Student: B6

Date of exam: B6

Patient Location: Ward/Cage: Cardio, ICU Weight (kg) 19.60

Sedation

- Inpatient
- Outpatient Time:
- Waiting
- Emergency
- BAG
- OBAG
- 1/2 dose OBAG
- DexDomitor/Butorphanol
- Anesthesia to sedate/anesthetize

Examination Desired: 2 view CXR- DV and R lateral
TECHS TO HANDLE ONLY- be careful due to dyspnea, do not stress further if dyspneic

Presenting Complaint and Clinical Questions you wish to answer:
Recheck rads for CHF before discharge

Pertinent History:
DCM, suspected CHF on rads B6

Findings:

B6

B6

Conclusions:

- Improving interstitial pulmonary pattern is consistent with response to medical management.
- Unchanged mild cardiomegaly and similar to mildly improved left atrial enlargement.
- Unchanged multifocal intervertebral disk disease and breed-associated vertebral anomalies.
- Unchanged moderate bilateral elbow degenerative joint disease.

Radiologists

Primary: [B6] VMD

Reviewing:

Dates

Reported: [B6]

Finalized:

Cummings Veterinary Medical Center

AT TUFTS UNIVERSITY
Cardiology Liaison: 508-887-4696

B6

Patient ID: 437321

B6

Canine

B6 Years Old Female (Spayed) English
Bulldog

Brown/White BW: Weight (kg) 19.80

Cardiology Inpatient ENROLLED IN DCM STUDY

Date: B6

Weight: Weight (kg) 19.80

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

Patient location:

ICU 02 5/6

Presenting complaint and important concurrent diseases:

Presenting for new onset dyspnea, radiographs unintelligible between pneumonia and CHF. Persistent sinus tachycardia overnight

Current medications and doses:

B6

At-home diet (name, form, amount, frequency)

Core Wellness grain-free wet + dry

Key indication for consultation: (murmur, arrhythmia, needs fluids, etc.)

dyspnea, contiguous B-lines

Questions to be answered:

fluid vs. lasix

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: Very hard to listen due to the marked dyspnea and referred upper airway.

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

Murmur location/description:

Jugular vein:

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

Arterial pulses: n/a

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

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
- Other auscultatory findings:

Abdominal exam: n/a

- Normal
- Hepatomegaly

- Abdominal distension
- Mild ascites

Echocardiogram Findings:

B6

Addendum exam:

B6

Mitral inflow:

- Summated
- Normal
- Delayed relaxation

- Pseudonormal
- Restrictive

Radiographic findings:

B6

Assessment and recommendations:

Despite the poor quality of the echocardiogram pictures obtained today, we suspect the patient to have DCM with moderate to marked LA enlargement. The radiographs are very hard to interpret, typical for bulldog radiographs, but we suspect CHF to be one of the main differential despite the atypical pattern visualized. Treatment for HF should be initiated and improvement of the clinical condition would be a vote in favor for CHF. Antibiotic treatment should be continued since pneumonia cannot be completely rule out. B6 was given during the echocardiogram and B6

B6 The patient was enrolled in Dr. Freeman's study due to its current grain free diet and blood was pulled today for the study. The patient, once more stable, B6. An NT-proBNP was pulled and will be very interesting in order to better assess the cardiovascular status of the patient since there is still some suspicions that the changes seen on radiographs are not all secondary to CHF. B6

B6

B6

An improvement of the interstitial pattern would confirm the suspected diagnosis of CHF versus no changes of the interstitial pattern would be more in favor of another disease process. A recheck echocardiogram should be repeated as well tomorrow once the patient is more stable in order to confirm today's findings. Bloodwork should be repeated tomorrow as well as 10-14 days after the start of the cardiac medications. Full recheck echocardiogram is recommended in 3 months or sooner if the patient develops clinical signs consistent with worsening heart disease.

Addendum:

B6

Final Diagnosis:

- Suspected DCM with moderate to marked LA enlargement and suspected CHF

Heart Failure Classification Score:

ISACHC Classification:

- Ia
- Ib
- II
- IIIa
- IIIb

ACVIM CHF Classification:

- A
- B1
- B2
- C
- D

M-Mode

IVSd

LVIDd

LVPWd

IVSs

LVIDs

LVPWs

EDV(Teich)

ESV(Teich)

EF(Teich)

%FS

SV(Teich)

M-Mode Normalized

IVSdN

LVIDdN

LVPWdN

IVSsN

LVIDsN

LVPWsN

2D

SA LA

B6

cm

cm

cm

cm

cm

cm

ml

ml

%

%

ml

(0.290 - 0.520)

(1.350 - 1.730) !

(0.330 - 0.530)

(0.430 - 0.710)

(0.790 - 1.140) !

(0.530 - 0.780)

cm

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

B6

cm
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ml
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ml
cm
cm
ml
cm

Notice of Patient Admit

Date: [B6] 7:49:24 PM

Case #: 437321

Referring Doctor: [B6]

Client Name: [B6]

Patient Name: [B6]

Dear [B6]

Your patient presented to our Emergency service. Please make note of the following information to facilitate communication with our team.

The attending doctor is [B6]

The reason for admission to the FHSA is: Dyspnea (pneumonia > CHF)

If you have any questions regarding this particular case, please call 508-887-4988 to reach the ICU Service. Information is updated daily, by noon.

Thank you for your referral to our Emergency Service.

Cummings
Veterinary Medical Center
AT TUFTS UNIVERSITY

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

B6

B6 Female (Spayed)
Canine English Bulldog
Brown/White
437321

Daily Update From the Cardiology Service

Today's date: **B6**

Dear Drs at **B6**

Thank you for referring patients to the Foster Hospital for Small Animals at the Cummings School of Tufts University.

Your patient **B6** was admitted and is being cared for by the Cardiology Service.

Today, **B6**

- is in stable condition
- is still in the oxygen cage
- is critically ill
- discharged from the hospital today

Today's treatments include:

- bloodwork planned/pending
- echocardiography - DCM and L-CHF
- cardiac catheter procedure planned
- ongoing treatment for CHF
- ongoing treatment for thrombosis
- ongoing treatment for arrhythmia

Additional plans:

Please allow 3-5 business days for reports to be finalized upon patient discharge.

Please call (508) 887-4696 before 5pm or email us at cardiovet@tufts.edu if you have any questions.

Thank you!

Attending Clinician: **B6** DVM (Resident, Cardiology)

Faculty Clinician: John Rush DVM, DACVIM, DACVECC

Senior student:

Cummings
Veterinary Medical Center
AT TUFTS UNIVERSITY

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

B6

B6

Female (Spayed)

Canine English Bulldog

Brown/White

437321

1/21/2019

Dear Dr. **B6**

Thank you for referring **B6** with their pet **B6**

If you have any questions, or concerns, please contact us at 508-887-4988.

Thank you,

Dr. **B6** VM (Resident, Cardiology)

From: Freeman, Lisa <Lisa.Freeman@tufts.edu>
To: Jones, Jennifer L
Sent: 3/1/2019 9:50:52 PM
Subject: FW: taurine results for [REDACTED]
Attachments: Stern Lab Taurine Recommendations.pdf; T_27754.pdf; UCD Diet and DCM Handout.pdf

FYI

[REDACTED] 3 bulldogs from same household and on same diet
[REDACTED] DCM and CHF had [REDACTED] plasma and [REDACTED] WB
[REDACTED] – with ARVC and arrhythmias had [REDACTED] and [REDACTED]
[REDACTED] this most recent one (likely ARVC) was [REDACTED] and [REDACTED]

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



STERN CARDIAC GENETICS LABORATORY
 JOSHUA A. STERN, DVM, PHD, DACVIM (CARDIOLOGY)
 sterngenetics@ucdavis.edu; August 9, 2018

FREQUENTLY REQUESTED INFORMATION REGARDING TAURINE & DILATED CARDIOMYOPATHY IN GOLDEN RETRIEVERS

Taurine reference ranges for Golden Retrievers: The Stern Lab suggests that the following clinical reference ranges be used for Golden Retrievers and be considered for other known taurine-sensitive breeds such as Newfoundlands or American Cocker Spaniels. This is primarily based on 3 observations :

1. Golden Retrievers with marginal taurine levels (defined below) have been diagnosed with dilated cardiomyopathy and have documented disease reversal after taurine supplementation and diet change.
2. Previously published work documents taurine sensitivity in Golden Retrievers.
3. The most recently published reference on normal blood taurine values shows higher levels than previously reported.

- Normal whole blood taurine: >250nmol/mL
- Normal plasma taurine: >70nmol/mL
- Marginal whole blood taurine: 200-250nmol/mL
- Marginal plasma taurine: 60-70nmol/mL
- Low whole Blood taurine: <200nmol/mL
- Low plasma taurine: <60nmol/mL

References:

- Kramer GA, Kittleson MD, Fox PR, Lewis J, Pion PD. Plasma taurine concentrations with normal dogs and in dogs with heart disease. *J Vet Intern Med* 1995;9:253-258.
- Belanger MC, Ouellet M, Queney G, Moreau M. Taurine-deficient dilated cardiomyopathy in a family of golden retrievers. *J Am Anim Hosp Assoc* 2005;41:284-291.
- Kittleson MD, Keene B, Pion PD, Loyer CG, MUST Study Investigators. Results of the multicenter spaniel trial (MUST): taurine- and carnitine-responsive dilated cardiomyopathy in American Cocker Spaniels with decreased plasma taurine concentration. *J Vet Intern Med* 1197;11:204-211.
- Backus RC, Choen G, Pion PD, Good KL, Rogers QR, Fascetti AJ. Taurine deficiency in Newfoundlands fed commercially available complete and balanced diets. *J Am Vet Med Assoc* 2003;223:1130-1136.
- Fascetti AJ, Reed JR, Rogers QR, Backus RC. Taurine deficiency in dogs with dilated cardiomyopathy: 12 cases (1997-2001). *J Am Vet Med Assoc* 2003;223:1137-1141.
- Freeman LM, Michel KE, Brown DJ, Kaplan PM, Stamoulis ME, Rosenthal SL, Keene BW, Rush JE. Idiopathic dilated cardiomyopathy in Dalmatians: nine cases (1990-1995). *J Am Vet Med Assoc* 1996;209:1592-1596.
- Delaney SJ, Kass PH, Rogers QR, Fascetti AJ. Plasma and whole blood taurine in normal dogs of varying size fed commercially prepared food. *J Anim Physiol a Anim Nutr* 2003;87:236-244.

Plasma vs. whole blood taurine testing:

If at all possible, we recommend that paired (plasma and whole blood) taurine samples be submitted for analysis. A low value on either or both tests is clinically relevant. If your dog is diagnosed with DCM, submitting paired taurine samples (plasma and whole blood) is imperative. We recommend that the UC Davis Amino Acid Laboratory be used for taurine testing, as this is where the literature utilized for our reference ranges was generated. <https://www.vetmed.ucdavis.edu/labs/amino-acid-laboratory>. If a single test is submitted the Stern Lab recommends that whole blood be submitted preferentially. This is due to the false elevation of taurine levels that is possible in plasma samples due to sample handling issues. This is an area of some debate between clinicians and conflicting information on preference for plasma vs. whole blood exists. This underscores the value of paired sampling.

Clinical Recommendations for Golden Retrievers based on taurine levels:

If taurine levels test <200nmol/mL in whole blood or <60nmol/mL in plasma

- An echocardiogram by a board-certified veterinary cardiologist is indicated
- After echocardiogram has been completed, a diet change is recommended.
 - If DCM is diagnosed, this patient may need a variety of cardiac medications that would be prescribed by the attending cardiologist.
 - If DCM is diagnosed, prescribed supplementation with oral taurine and l-carnitine is recommended.
 - Reevaluation of taurine levels is warranted after three months of diet change and supplementation.
 - Cardiology reevaluation schedules will be recommended by the attending clinician pending echocardiographic findings.
 - Many Golden Retrievers with taurine-deficient DCM in our study showed slow and steady improvement over a period of 6-12 months.

If taurine levels test 200 – 250nmol/mL in whole blood or 60-70nmol/mL in plasma

- An echocardiogram by a board-certified cardiologist is recommended.
- After echocardiogram has been completed, a diet change is recommended.
- We recognize that many dogs in this category may have normal echocardiograms and thus the value of screening should be carefully considered. If the dog is eating a diet that falls within the FDA warning or shares features with the diets identified in our study (see diets of concern section below), we encourage echocardiographic screening with greater enthusiasm.
- If an echocardiogram is not performed, a diet change is still recommended and a taurine level reevaluation after three months on the new diet should be considered.
- If DCM is diagnosed, this patient may need a variety of cardiac medications that would be prescribed by the attending cardiologist.
 - If DCM is diagnosed, prescribed supplementation with oral taurine and l-carnitine is recommended.
 - Reevaluation of taurine levels is warranted after three months of diet change and supplementation.
 - Cardiology reevaluation schedules will be recommended by the attending clinician pending echocardiographic findings.
 - Many Golden Retrievers with taurine-deficient DCM in our study showed slow and steady improvement over a period of 6-12 months.

If taurine levels test >250nmol/mL in whole blood or >70nmol/mL in plasma

- Diet change is recommended if you are feeding a diet that falls within the FDA warning or shares features with the diets identified in our study (see diets of concern section below)
- If your pet shows any signs of cardiac disease (trouble breathing, exercise intolerance, fainting/collapse, coughing) we recommend your veterinarian evaluate your pet.

Diets of Concern & Choosing a diet

The FDA alert called attention to several dietary ingredients that should be considered when evaluating whether your pet is at risk (for example legumes like peas and lentils, white or sweet potatoes). These findings were largely recapitulated in our current study of Golden Retrievers with low taurine levels and DCM. Our lab considers these ingredients to be of greatest concern when present within the first 5 listed ingredients on the dog food bag. Additionally, we noted a high percent of diets in our study were using protein sources other than chicken or beef and labeled as grain-free.

Points to consider when making a diet change:

- Choose a diet that does not contain the concerning components listed above
- Choose a diet that meets the WSAVA Global Nutrition Assessment Guidelines published as consensus by veterinary nutritionists from around the world:
 - <https://www.wsava.org/WSAVA/media/Arpita-and-Emma-editorial/Selecting-the-Best-Food-for-your-Pet.pdf>
- FDA alert found here:
 - <https://www.fda.gov/AnimalVeterinary/NewsEvents/CVMUpdates/ucm613305.htm>

Choosing a taurine or l-carnitine supplement:

Selecting supplements should be performed based upon those that match their stated contents and are readily available for absorption. Luckily a previous publication tested multiple taurine and l-carnitine supplements. Based upon this publication our laboratory recommends the following supplements as those meeting our quality criteria. (Bragg et al. 2009 J Am Vet Med Assoc; 234(2))

Tested taurine supplements that test within 5% of stated contents and if applicable disintegrated within 30 minutes

- Mega taurine caps by Twinlab (1000 capsule)
- Taurine by Swanson Health Products (500mg capsule)
- Taurine by NOW foods (500mg capsule)
- Taurine 500 by GNC (500mg tablet)

Tested L-carnitine supplements that test within 5% of stated contents and if applicable disintegrated within 30 minutes

- L-carnitine 500 by Jarrow Formulas (500mg capsule)
- L-carnitine caps by Country Life (500mg capsule)
- Maxi L-carnitine by Solgar Vitamin and Herb (500mg tablet)
- L-carnitine by Puritan's Pride (500mg tablet)

The Stern lab does not recommend the empirical supplementation of taurine or l-carnitine to dogs without evidence of DCM and/or significant deficiency. If DCM is diagnosed we typically recommend dogs over 50lbs receive 1000mg of taurine every 12hrs and dogs under 50lbs receive 500mg of taurine every 12hours. We recommend L-carnitine at a dose of ~50mg/kg orally with food every 8hrs. Your veterinary cardiologist or family veterinarian should be consulted for prescribing the best dose for your dog.

Reporting to the FDA:

Understanding the basis of this condition requires a great deal of research and investigation. Clients with affected dogs can contribute their data to help propel this research forward. You can report cases of taurine deficiency, dilated cardiomyopathy, sudden cardiac death, or any combination of these events to the FDA by following the information found here:

<https://www.fda.gov/animalveterinary/safetyhealth/reportaproblem/ucm182403.htm>

Additional questions or comments:

sterngenetics@ucdavis.edu

This document last updated: Aug. 20, 2018

Page 3 of 3

27754 @PL (need r r)
@WB

Amino Acid Laboratory Sample Submission Form

Amino Acid Laboratory, 1089 Veterinary Medicine Drive, Davis, Ca 95616

Telephone: 530-752-5058, Fax: 530-752-4698

Email: ucd.aminoacid.lab@ucdavis.edu

www.vetmed.ucdavis.edu/labs/amino-acid-laboratory

Veterinarian Contact: **B6**

Clinic/Company Name: Tufts Cummings School of Vet. Med. - Clinical Pathology Laboratory

Address: 200 Westboro Road, North Grafton MA 015369

Email: Clinpath@tufts.edu **cardiovet@tufts.edu**

Telephone: 508-887-4669 Fax: 508-839-7936

Billing Contact: **B6** Email: **B6**

Billing Contact Phone: **B6** Tax ID: _____

Patient Name: **B6** Species: CANINE

Breed: English Bulldog Owner's Name: **B6**

Current Diet: Core Wellness GRAIN Free

Sample type: Plasma Whole Blood Urine Food Other _____

Test: Taurine Complete Amino Acids Other: _____

Taurine Results (lab use only)

Plasma: **B6** Whole Blood: **B6** Urine: _____ Food: _____

	Plasma (nMol/ml)		Whole Blood (nMol/ml)	
	Normal Range	No known risk for deficiency	Normal Range	No known risk for deficiency
Cat	80-120	>40	300-600	>200
Dog	60-120	>40	200-350	>150

* Please note with the recent increase in the number of dogs screened for taurine deficiency, we are seeing dogs with values within the reference ranges (or above the "no known risk for deficiency range") yet are still exhibiting signs of cardiac disease. Veterinarians are welcome to contact our laboratory for assistance in evaluating your patient's results.

CARDIOLOGY SERVICE UPDATES: DOG FOOD & DILATED CARDIOMYOPATHY

The Cardiology Service has developed this document in response to the alerts from the FDA. These alerts identify an associated risk for some grain-free diets containing certain ingredients (legumes like peas, pea components, lentils; white potatoes, sweet potatoes) and a diagnosis of dilated cardiomyopathy (DCM). The links provided throughout this document can be copied and pasted to obtain additional information.

FDA Alerts found here:

<https://www.fda.gov/AnimalVeterinary/NewsEvents/CVMUpdates/ucm613305.htm>

<https://www.fda.gov/AnimalVeterinary/ResourcesforYou/AnimalHealthLiteracy/ucm616279.htm>

What is Dilated Cardiomyopathy (DCM)?

DCM is a heart muscle disorder that results in a weak pump function and heart chamber enlargement. In the early stages of this disease pets may appear totally healthy with no apparent clinical signs. Later in the course of this disease, dogs may have a heart murmur, an arrhythmia (irregular heart beat), collapse episodes, weakness or tiredness with exercise, and even trouble breathing from congestive heart failure. While there are some breeds of dogs (like Dobermans) that have a genetic predisposition to development of DCM, there are also nutritional factors that may result in this disease.

What should I do?

If you are feeding a diet of concern based upon the FDA alert we recommend that you consult with your veterinarian or veterinary cardiologist. We provide 4 general points for guidance below:

1. An initial step is to **consider whether you are willing or interested in performing additional testing** to assess whether your pet is affected with DCM. If you believe your dog is at risk, showing any of the aforementioned clinical signs or would prefer to simply rule out any heart disease, we recommend that you first have your pet's taurine levels tested (both whole blood and plasma levels) as well as seek an echocardiogram by a board-certified veterinary cardiologist. Low taurine levels are associated with development of DCM in dogs and are sometimes a component of this current issue.

Information on taurine testing can be found here: <https://www.vetmed.ucdavis.edu/labs/amino-acid-laboratory>

2. At this time, **diet change is recommended when possible** and should be considered regardless of the results obtained from any testing. You can consult with your veterinarian in selecting a new diet that avoids the ingredients of concern listed by the FDA. When selecting this diet, we recommend that you choose a diet that is manufactured with rigorous quality control measures and research behind the formulation. A way to ensure that your diet meets these recommendations is to follow the following guidelines that were generated by a large number of the world's leading experts in veterinary nutrition.

Food selection guidelines found here:

<https://www.wsava.org/WSAVA/media/Arpita-and-Emma-editorial/Selecting-the-Best-Food-for-your-Pet.pdf>

3. If your pet is identified through testing to have a low blood taurine level or evidence of DCM by echocardiogram, we urge you to **report this information to the FDA**.

FDA reporting guidelines found here: <https://www.fda.gov/AnimalVeterinary/SafetyHealth/ReportaProblem/ucm182403.htm>

4. **Work with your veterinarian(s)** to determine the best course of action and medical treatments if indicated. In the case of a DCM diagnosis, diet change alone may not be sufficient and additional medications may be prescribed.

Please continue to monitor the FDA website and the UC Davis School of Veterinary Medicine Newsfeeds for updates and recommendations regarding this issue.

From: Freeman, Lisa <Lisa.Freeman@tufts.edu>
To: Jones, Jennifer L
Sent: [REDACTED] 3:29:55 PM
Subject: [REDACTED] - time sensitive
Importance: High

Hi Jen

I also left you a voice message but I just heard that [REDACTED] died suddenly, [REDACTED]. This is one of at least 3 dogs in the household affected by DCM eating the same diet. We're actually scheduled to see the 3 dogs tomorrow and to evaluate a 4th dog in the household that has an elevated BNP. So, this is a particularly interesting household.

The referring vet contacted me and said the owner is bringing [REDACTED] in for cremation. He will ask if he can get samples for you but we'd need to know what tissues to get, how to store them, etc.

Please let me know next steps
Thanks
Lisa

Lisa M. Freeman, DVM, PhD, DACVN
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Friedman School of Nutrition Science and Policy
Tufts Clinical and Translational Science Institute
Tufts University
www.petfoodology.org
508-887-4523

From: Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov>
Sent: Tuesday, March 26, 2019 1:50 PM
To: Freeman, Lisa <Lisa.Freeman@tufts.edu>
Subject: RE: Cobalt

Hi Lisa,

We based this on the 25 mg/kg diet for chicks, rats, and sheep per Mineral Tolerances of Animals 2nd Ed, 2005 (NRC). The cobalt in the products we tested was below 1 ppm.

Hope you're well,
Jen

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



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To: Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov>
Subject: Cobalt

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ranges recommended by AAFCO. Since Co is not an essential nutrient listed in the AAFCO profiles, are you using the max of 10 ppm that is for all species from AAFCO (ie, the level that "will not impair animal performance and should not produce unsafe residues in human food derived from that animal"?)

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From: Rotstein, David </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=0A3B17EBFCF14A6CB8E94F322906BADD-DROTSTEI>
To: Jones, Jennifer L
CC: Peloquin, Sarah
Sent: [REDACTED] **B6** 6:51:07 PM
Subject: RE: [REDACTED] **B6** - time sensitive

Jen,

I guess from my point of view, having an additional case would be helpful as I think some of the cases that I looked at will fall out of the counting.

I agree it's a predisposed breed, so perhaps it may make a good comparison (though I suspect we won't see a huge difference).

I will go the way of the consensus (three on the email 😊)

Dave

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



This e-mail message is intended for the exclusive use of the recipient(s) named above. It may contain information that is protected, privileged, or confidential, and it should not be disseminated, distributed, or copied to persons not authorized to receive such information. If you are not the intended recipient, any dissemination, distribution, or copying is strictly prohibited. If you think you received this e-mail message in error, please e-mail the sender immediately at david.rotstein@fda.hhs.gov.

From: Jones, Jennifer L
Sent: [REDACTED] **B6** 2:43 PM
To: Rotstein, David <David.Rotstein@fda.hhs.gov>
Cc: Peloquin, Sarah <Sarah.Peloquin@fda.hhs.gov>
Subject: FW: [REDACTED] **B6** - time sensitive
Importance: High

Dave,
I know we're chatting Thursday about the results and next steps. [REDACTED] **B5** I'm leaning

[REDACTED] **B5**
You're looking at the histo, though, what do you think?

Jen

Jennifer Jones, DVM
Veterinary Medical Officer

Tel: 240-402-5421



From: Freeman, Lisa <Lisa.Freeman@tufts.edu>
Sent: [REDACTED] 2:30 PM
To: Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov>
Subject: [REDACTED] - time sensitive
Importance: High

Hi Jen
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To: Freeman, Lisa
CC: Peloquin, Sarah
Sent: [REDACTED] 11:05:51 AM
Subject: RE: [REDACTED] time sensitive (cc-297)

Thank you, Lisa. I see Jake sent you the necropsy procedures. Yes, we can work on a prioritized list for veterinarians collecting limited tissue sets. We can also have veterinarians freeze the bodies until we send them supplies (esp. if large intact hearts).

Please have [REDACTED] veterinarian contact me directly to coordinate the sample collection and reimbursement. I'll be at my desk until 3 pm.

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



From: Freeman, Lisa <Lisa.Freeman@tufts.edu>
Sent: [REDACTED] 2:30 PM
To: Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov>
Subject: [REDACTED] - time sensitive
Importance: High

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Please let me know next steps
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From: Freeman, Lisa <Lisa.Freeman@tufts.edu>
To: Peloquin, Sarah
Sent: [REDACTED] 6:32:46 PM
Subject: FW: [REDACTED] - time sensitive
Importance: High

Hi Sarah

Got a message that Jen is out today so wanted to see how we can get samples assuming owner gives permission

Thanks

Lisa

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From: Freeman, Lisa
Sent: [REDACTED] 2:30 PM
To: Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov>
Subject: [REDACTED] - time sensitive
Importance: High

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From: Freeman, Lisa <Lisa.Freeman@tufts.edu>
To: Jones, Jennifer L
CC: Peloquin, Sarah
Sent: [REDACTED] 11:13:21 AM
Subject: RE: [REDACTED] - time sensitive (cc-297)

Thanks, Jen

I think that would be helpful. These obviously happen with no warning so that would be great to have ready to tell vets. Including the option of freezing on that same sheet would be great. These owners wanted to get the body back for cremation so this seemed like the best option.

I heard last night that the owners gave permission for sample collection and [REDACTED] was going to take the heart and some liver

If you could send him a box for shipping, that would be great

B6

B6

We'll be seeing the other 3 dogs in the household today
Thanks
Lisa

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From: Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov>
Sent: [REDACTED] 7:06 AM
To: Freeman, Lisa <Lisa.Freeman@tufts.edu>
Cc: Peloquin, Sarah <Sarah.Peloquin@fda.hhs.gov>
Subject: RE: [REDACTED] - time sensitive (cc-297)

Thank you, Lisa. I see Jake sent you the necropsy procedures. Yes, we can work on a prioritized list for veterinarians collecting limited tissue sets. We can also have veterinarians freeze the bodies until we send them supplies (esp. if large intact hearts).

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To: Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov>
Subject: [REDACTED] - time sensitive
Importance: High

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From: PFR Event <pfpreventcreation@fda.hhs.gov>
To: Cleary, Michael *; HQ Pet Food Report Notification; B6
Sent: 12/4/2018 11:04:49 PM
Subject: Earthborn Meadow Feast dry: Lisa Freeman - EON-372828
Attachments: 2059621-report.pdf; 2059621-attachments.zip

A PFR Report has been received and PFR Event [EON-372828] has been created in the EON System.

A "PDF" report by name "2059621-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 "2059621-attachments.zip" and is attached to this email notification.

Below is the summary of the report:

EON Key: EON-372828
ICSR #: 2059621
EON Title: PFR Event created for Earthborn Meadow Feast dry; 2059621

AE Date	11/20/2018	Number Fed/Exposed	5
Best By Date		Number Reacted	4
Animal Species	Dog	Outcome to Date	Stable
Breed	Boxer (German Boxer)		
Age	3 Years		
District Involved	PFR-New England DO		

Product information

Individual Case Safety Report Number: 2059621

Product Group: Pet Food

Product Name: Earthborn Meadow Feast dry

Description: Eating BEG diet (Earthborn) Echo had subjectively reduced contractility; elevated NT-proBNP and cardiac troponin I Taurine pending Owner changing diet and will recheck in 3 months

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: 5

Number of Animals Reacted With Product: 4

Product Name	Lot Number or ID	Best By Date
Earthborn Meadow Feast dry		

Sender information

Lisa Freeman
200 Westboro Rd
North Grafton, MA 01536
USA

Owner information

B6
B6
USA

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

<https://eon.fda.gov/eon//browse/EON-372828>

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=389797>

=====

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 immediately.

Report Details - EON-372828

ICSR: 2059621
 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: 2018-12-04 17:59:30 EST

Reported Problem:
Problem Description: Eating BEG diet (Earthborn) Echo had subjectively reduced contractility, elevated NT-proBNP and cardiac troponin I Taurine pending Owner changing diet and will recheck in 3 months
Date Problem Started: 11/20/2018
Concurrent Medical Problem: No
Outcome to Date: Stable

Product Information:
Product Name: Earthborn Meadow Feast dry
Product Type: Pet Food
Lot Number:
Package Type: BAG
Product Use Information: **Description:** See diet history in records for more details
Manufacturer /Distributor Information:
Purchase Location Information:

Animal Information:
Name: B6
Type Of Species: Dog
Type Of Breed: Boxer (German Boxer)
Gender: Female
Reproductive Status: Intact
Pregnancy Status: Not pregnant
Lactation Status: Not lactating
Weight: 30.3 Kilogram
Age: 3 Years
Assessment of Prior Health: Excellent
Number of Animals Given the Product: 5
Number of Animals Reacted: 4
Owner Information: **Owner Information provided:** Yes
Contact: **Name:** B6
Phone: B6
Email: 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	
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:	rpt_medical_record_preview.pdf		
	Description:	Medical records		
	Type:	Medical Records		

Foster Hospital for Small Animals

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

All Medical Records

Client: [B6]
Address: [B6]

Patient: [B6]
Breed: Boxer
DOB: [B6]

Species: Canine
Sex: Female

Home Phone: [B6]
Work Phone: () -
Cell Phone: [B6]

[B6]

Referring Information

[B6]

Client: [B6]
Patient: [B6]

Initial Complaint:

Scanned Record

Initial Complaint:

New, boxer 2-3 murmur. ok per [B6]

Initial Complaint:

Recheck [B6]

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

Initial Complaint:

Recheck **B6** - **B6** to oversee

SOAP Text **B6** 4:07PM - **B6**

B6 4:30:12 PM
Prescribed **B6** 30mg Tablets - FHSA (30)
Instructions - Give 1/2 tab by mouth every 12 hours. - Expires: **B6** 11 Refills

Initial Complaint:

Recheck **B6**

SOAP Text Nov 29 2017 11:20AM - **B6**

Initial Complaint:

Recheck **B6**

Initial Complaint:

Recheck **B6**

SOAP Text Nov 15 2018 2:01PM - **B6**

Disposition/Recommendations

Client:
Patient:

B6

Client: **B6**
Patient:



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:	Boxer
Sex:	Female
Age:	B6 Years Old

Lab Results Report

11/15/2018 3:35:43 PM Accession ID: **B6**

Test	Results	Reference Range	Units
Troponin I Research - FHSA	B6	0 - 0.08	mg/dl



4/111

B6

B6

Printed Tuesday, December 04, 2018

Client: **B6**
Patient:

Referral and records **B6**

Case ID: **B6**

B6



REFERRAL FORM

TUFTS NEW ENGLAND VETERINARY MEDICAL CENTER
Henry and Lois Fower Hospital for Small Animals
Hospital for Large Animals
250 Winthrop Road, Route 50
North Grafton, MA 01536
508.550.5745

Service to Which Referred: _____ Appointment Date: **B6** Time: _____

OWNER INFORMATION:

Name: **B6** District Phone: **B6** Existing Phone: _____
Address: **B6** City: **B6** State: **B6** Zip Code: **B6**

PATIENT INFORMATION:

Registered Name: **B6**
Species: CORVAC Breed: BOXER Sex: Female Age: 20w

CASE HISTORY:

Chief Complaint/Provisional Diagnosis: Heart MURMUR

Companion History: guy 2/26/16 Date 2/15/16

Other History: _____

History: Test Results (if possible, please attach results): _____

Are Endpapers enclosed? NO

Current Therapy & Medications (include dosage): _____

Special Concerns/Requests: _____

REFERRING VETERINARIAN INFORMATION:

Name: **B6** Clinic/ Hospital: **B6**
Phone: **B6** Fax: **B6**
Address: **B6** City: **B6** State: **B6** Zip Code: **B6**

If an animal is being referred which has had lab work done at TVDL, please include copies of the lab results or the TVDL accession number. If you are facing us information about a clinical case which has been referred, please use fax number (508) 559-7311.

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

Referral and records **B6**

March 14, 2016

B6

B6

2/7

B6
B6

Patient Chart

Printed: 3/22/16 at 12:28a

CLIENT INFORMATION

Name: **B6** Species: **B6**
Address: **B6**
Phone: **B6**

PATIENT INFORMATION

Name: **B6** Species: **B6**
Sex: Female Breed: **B6**
Birthday: **B6** Age: **B6**
Color: Fawn Weight: **B6**
Microchipped: (none) Chip ID: **B6**

Reminders for Pet: **B6** Last Exam: **B6**

3/22/2017	Canine Rabies Vaccination, 1yr	3/22/2016
3/22/2017	Canine DA2PP2 (ADU-LEPTO), 1 yr	3/22/2016

MEDICAL HISTORY - Reminder View

Date	By	Code	Description	Qty (Ordered)
3/22/2016	B6	439	Canine Rabies Vaccine, 1yr 4258-15	
3/22/2016	B6		Expires: 3/22/2018 Type: RV Qty: 2007 Admin: B6	
3/22/2016	B6	438	Canine DA2PP2 (Pre-Lepto), 1 yr	
3/22/2016	B6		Expires: 3/22/2018 Type: MLV Qty: 1152 Admin: B6	

Client: **B6**
Patient:

Referral and records **B6**

B6

B6

B6

B6

B6

Client:
Patient:

B6

Referral and records

B6

B6

B6

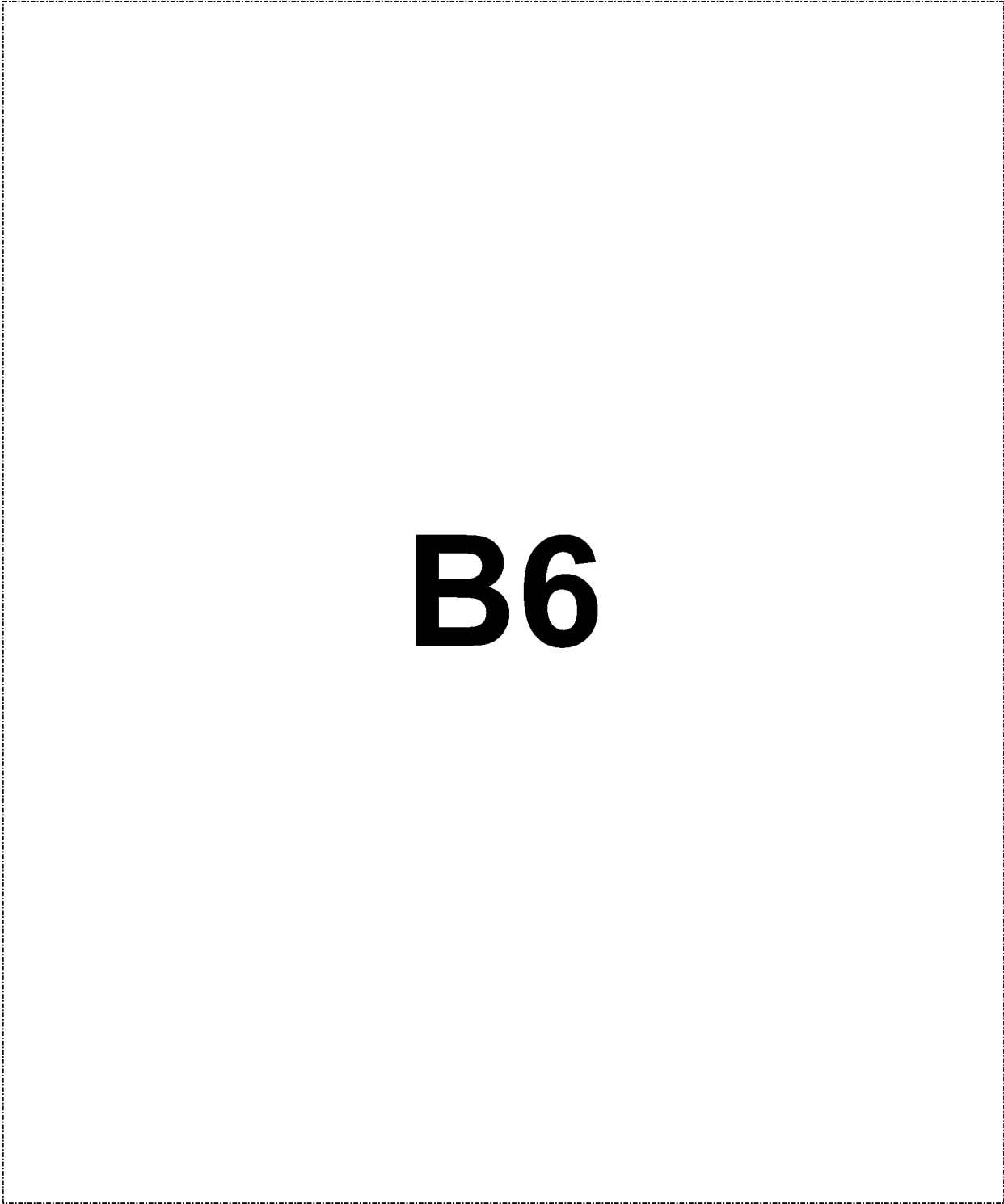
B6

Client: **B6**
Patient:

Referral and records **B6**

B6

B6



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

Signed consent



B6

B6 Female
Central Spinal Cord Injury
Patient ID: **B6**

STANDARD CONSENT FORM

I am the owner, or agent for the owner, of the above described animal and have the authority to execute consent. I hereby authorize the Cummings School of Veterinary Medicine at Tufts University (herein after Cummings School) to provide for treatment of said animal according to the following terms and conditions:

Cummings School and its officers, agents and employees will provide such veterinary medical care as they deem reasonable and appropriate under the circumstances.

Cummings School and its officers, agents, and employees will use all reasonable care in the treatment of the above mentioned animal, but will not be liable for any loss or accident that may occur or any disease that may develop as a result of the care and treatment provided.

I understand that the above described animal may be treated by Cummings School students under the supervision and assistance of Cummings School staff members.

In executing this form, I hereby expressly acknowledge that risks, benefits and alternative forms of treatment have been explained to me. I understand said explanation, and I consent to treatment. Should any additional treatments or diagnostics be required during the continued care of my animal, I understand that I will be given the opportunity to discuss and consent to these additional procedures. I understand that further or additional treatment may be required without an opportunity for discussion and consideration by me, in the case of the development of any life-threatening emergency during the continued care of my animal and I expressly consent to all such reasonable treatment as required. I realize and understand that results cannot be guaranteed.

If any equipment is left with the animal, it will be accepted with the understanding that Cummings School assumes no responsibility for any loss of equipment that may occur.

I agree to picking the animal when notified that it is ready for release.

In the event the animal is not picked up, and if less than 105 days have elapsed since a registered letter was sent to the address given above, notifying me to call for the animal, the animal may be sold or otherwise disposed of in a humane manner and the proceeds applied to the charges incurred in caring and treating the animal. Failure to remove said animal will not and does not release me from obligation for the costs of services rendered.

I hereby grant to the Cummings School of Veterinary Medicine at Tufts University, its officers and employees (herein after referred to herein as Cummings School), and its agents and assigns (the Grantee) the irrevocable right to photograph / videotape the operation or procedure to be performed, including appropriate and extensive use (with photographs and images for, and in connection with, a Grantee's medical, scientific, educational, and publicly funded, by any means, methods and media (print and electronic) now known or, in the future, developed that the Grantee deems appropriate (provided that such photographs and images may not be used in for-profit commercial, unless such commercial and publicizing educational programs at Cummings School). As medical and surgical treatment necessitates the removal of tissue, cells, fluids or body parts of my animal, I authorize the Grantee to dispose of or use these tissues, cells, fluids or body parts for scientific and educational purposes.

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

Signed consent

I understand that a FINANCE CHARGE will be applied to all accounts unpaid after 30 days. The FINANCE CHARGE is computed on a monthly rate of 1.50% per month, which is an annual percentage rate of 18% applied to the average daily balance outstanding, with a minimum fee of \$ 50.

I do further agree that should any payment, or the full amount of the sum stated above, become overdue more than 30 days from the above agreed upon time of payment or payments, the entire balance shall be considered in default and become due and payable. I further agree to be responsible for any or all collection agency and/or attorney fees necessary to collect the full amount.

I do further agree to comply with hours of visitation in conjunction with our Hospital's policy.

I have read, understood, and agree to accept the terms and conditions herein.

Owner's name: **B6** Date: **B6**

Owner's Address: **B6**

B6

B6

If the individual submitting the animal is someone other than the legal owner, please complete the portion below:

The owner of the animal **B6** is granted the authority to obtain medical treatment and to bind this owner to pay the veterinary medical services provided at Cummings School pursuant to the terms and conditions described above.

Authorized Agent - Please Print

Agent's Signature

Street Address

Date

Town/City State Zip

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

rDVM **B6** records 1/8/16-5/30/17

B6

Patient Chart

Address: **B6**

Client Information

Name: **B6** Species: **B6**

Address: **B6**

Phone:

Medical Information

Name: **B6** Species: **B6**

Sex: Female Breed: **B6**

Category: **B6** Age: **B6**

Color: **B6** Status: **B6**

Weight: **B6** Height: **B6**

Color: **B6**

Prescriptions for: **B6** Last Review:

Prescription	Instructions	Last Review
B6	B6	B6
B6	B6	B6
B6	B6	B6
B6	B6	B6
B6	B6	B6

B6

Client:
Patient:

B6

rDVM

B6

records 1/8/16-5/30/17

B6

B6

B6

B6

Client: **B6**
Patient:

rDVM **B6** records 1/8/16-5/30/17

B6 **B6** **B6**

B6

Client:
Patient:

B6

rDVM

B6

Chem 25 w/SDMA, CBC, T4 5/30/17

05/30/17 17:00:00

B6

→

B4

Station 1 Page 002

ANION GAP	B6	[11 - 26] mmol/L	B6
SDMA		[0 - 14] µg/dL	
BOTH SDMA AND CREATININE ARE WITHIN THE REFERENCE INTERVAL, which indicates kidney function is likely good. Evaluate a complete urinalysis and confirm there is no other evidence of kidney disease.			

HEALTHCHEK PLUS CBC COMPREHENSIVE

Test	Result
WBC	14.9 - 17.6) K/UL
RBC	(4.39 - 6.10) M/UL
HGB	(13.4 - 20.7) g/dL
HCT	(39.3 - 56.5) %
MCV	(79 - 76) fL
MCH	(21.9 - 29.1) pg
MCHC	(32.6 - 39.2) g/dL
% RETICULOCYTE	%
RETICULOCYTE	(0 - 1.0) K/UL
% NEUTROPHIL	%
% LYMPHOCYTE	%
% MONOCYTE	%
% EOSINOPHIL	%
% BASOPHIL	%
PLATELET	(143 - 440) K/UL

B6

B6

REMARKS
SLIDE REVIEWED MICROSCOPICALLY.
NO PARASITES SEEN

NEUTROPHIL	B6	(2945 - 12670) /uL	B6
LYMPHOCYTE		(1080 - 4850) /uL	
MONOCYTE		(130 - 1150) /uL	
EOSINOPHIL		(70 - 1480) /uL	
BASOPHIL		(0 - 100) /uL	

B6

HEALTHCHEK PLUS T4

Test	Result
T4	B6 [1.0 - 4.0] µg/dL L B6

Interpretive ranges:
<1.0 Low
1.0-4.0 Normal
>4.0 High
2.1-5.4 Therapeutic

Dogs with no clinical signs of hypothyroidism and results within the

B6

FINAL REPORT - CONTINUED ON NEXT PAGE

PAGE 2

24

B6

B6

05/30/17 17:00:00

Client: **B6**
Patient:

rDVM **B6** Chem 25 w/SDMA, CBC, T4 5/30/17

RESULTS **B6** → **B4** Results Page 180

normal reference range are likely euthyroid. Dogs with low T4 concentrations may be hypothyroid or "euthyroid sick". Occasionally, hypothyroid dogs can have T4 concentrations that are low normal. Dogs with clinical signs of hypothyroidism and low or low normal T4 concentrations may be evaluated further by submission of free T4 and canine TSH. A high T4 concentration in a clinically normal dog is likely variation of normal; however, elevations may occur secondary to thyroid autoantibodies or rarely thyroid neoplasia. For dogs on thyroid supplement, acceptable 4-6 hour post pill total T4 concentrations generally fall within the higher end or slightly above the reference range.

B6

FINAL REPORT PAGE 3 OF 3

B6 **B6** **B6**

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

Holter Monitor report 5/31/17

CANINE HOLTER MONITORING REPORT

HOLTER MONITOR REPORT

Patient Name:	B6	Interp. Physician:	
Date of Birth:		Scan Number:	
ID:	B6	Date Recorded:	5/31/2017 11:00
Age:	22 Months	Date Processed:	6/2/2017
Sex:	F	Recorder Num:	B6
Analyst:		Hookup Tech:	
Physician:		Medications:	
Indications:	Rest of		

B6

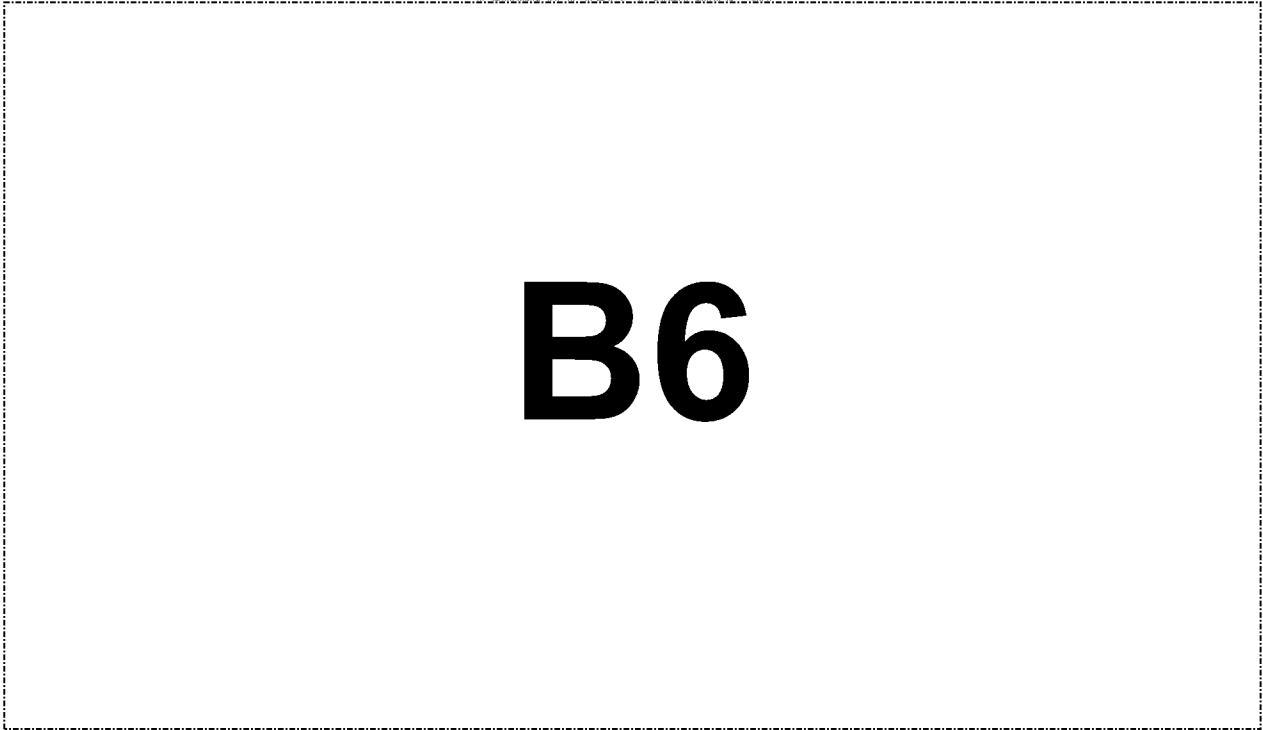
Physician's Signature

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

Holter Monitor report 5/31/17

Patient: **B6** ID: **B6** Date Recorded: 5/31/2017 10:56 Page: 1

GENERAL PROFILE



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

Holter Monitor report 5/31/17

Patient: **B6** ID: **B6** Date Recorded: 5/31/2017 10:56 Page: 8

CRITICAL EVENTS

B6

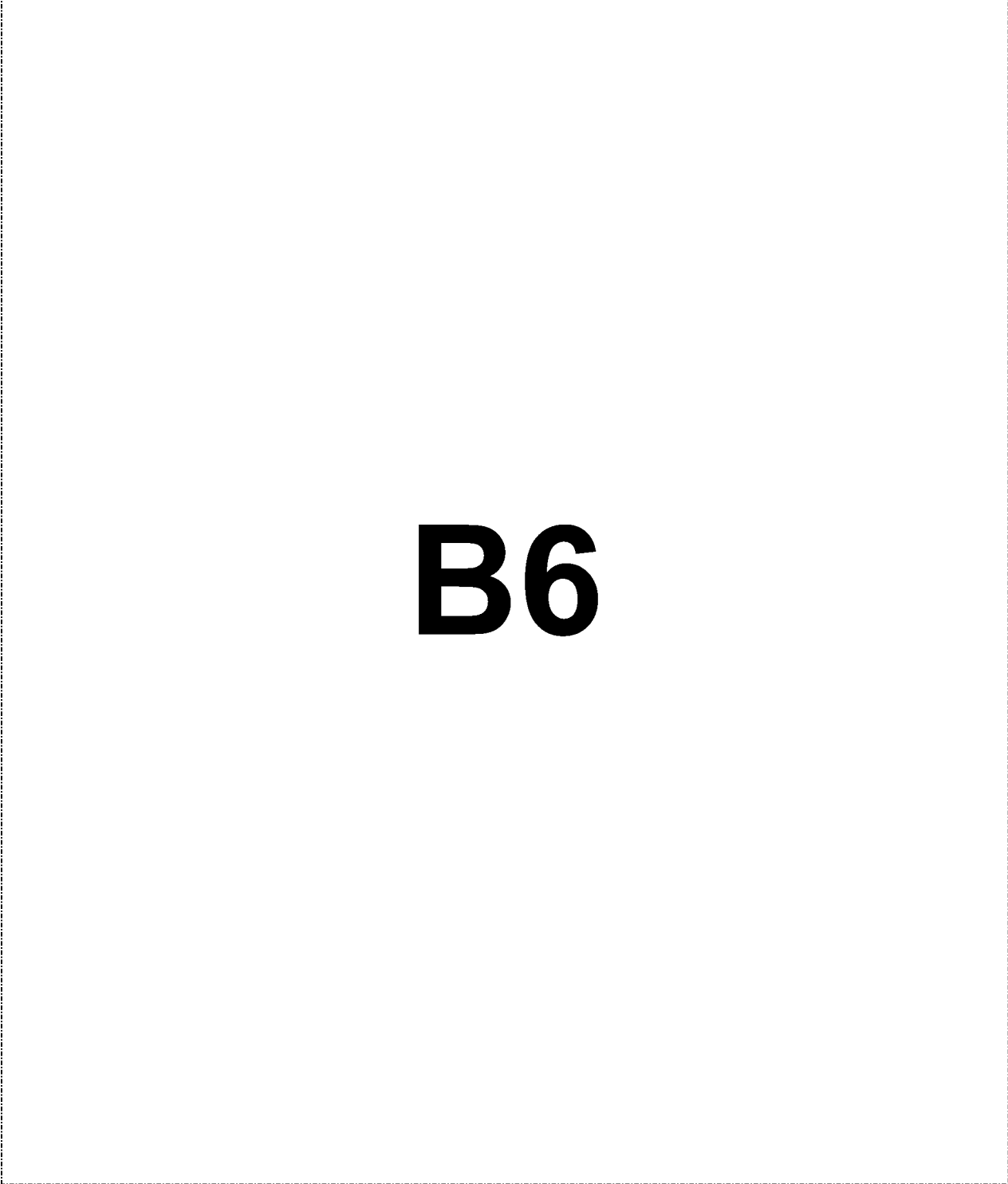
Client: **B6**
Patient: **B6**

Holter Monitor report 5/31/17

Patient: **B6** ID: **B6** Date Recorded: 5/31/2017 10:56 Page: 2

FULL SIZED STRIPS

(Date: 5/31/2017 10:56 AM) (ID: B6)



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

Holter Monitor report 5/31/17

Patient: **B6** ID: **B6** Date Recorded: 5/31/2017 10:56 Page: 1

FULL SIZED STRIPS

B6

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

Holter Monitor report 5/31/17

Patient: **B6** ID: **B6** Date Recorded: 5/31/2017 10:58 Page: 4

FULL-SIZED STRIPS

(Gain 0.50 mv/mm) ECG 25 mm/sec (ALL)

B6

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

Holter Monitor report 5/31/17

Patient: **B6** ID: **B6** Date Recorded: 5/31/2017 10:56 Page: 7

FULL SIZED STRIPS

Strip 1-50, run on 1. Strip 51-100, run on 2 (ALL)

B6

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

Holter Monitor report 5/31/17

Patient: **B6** ID: **B6** Date Recorded: 5/31/2017 10:56 Page: 8

FULL SIZED STRIPS

B6

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

Holter Monitor report 5/31/17

Patient: **B6** ID: **B6** Date Recorded: 5/31/2017 10:56 Page 10

FULL SIZED STRIPS

B6

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

Holter Monitor report 5/31/17

Patient: **B6** ID: **B6** Date Recorded: 5/31/2017 10:56 Page 11

FULL SIZED STRIPS

B6

Client:
Patient:

B6

B6

visit

B6

B6

B6

Class: **B6** (M/M) **B6** * Canine (Breed) * Sex: * Female, Spayed * By: **B6** * Age
Referred by: **B6** * Provider: **B6** * Date seen:

B6

B6

Client: B6
Patient: B6

B6 visit B6

B6

B6

Client: B6 B6

Discharge Instructions for B6
B6

Final Diagnosis: Aortic Hypoplasia, Suspect Syncope Episode

B6 came in tonight for an episode of collapse that she rapidly recovered from. Due to her history of aortic hypoplasia, we checked an ECG and her blood pressure which were within normal limits.

Please schedule an appointment with your cardiologist for reevaluation. If at any time B6 has exercise intolerance, more collapse episodes, change in behavior, or change in mucous membrane color please have her evaluated by a veterinarian.

Thank you for entrusting us with B6 care. She is such a sweet girl and we wish her the best! If you have any questions or concerns please do not hesitate to call.

B6 DVM

Client: **B6**
Patient:

B6 visit **B6**

B6

B6
Species: Canine - **B6**
Color: Fawn, **B6** Sex: Female

1 1/2 yrs FSFI

DATE	B6
TIME	EA 4:00 pm
DR	STM

CHIEF COMPLAINT	collapsed; now unable to walk		
APPETITE	<input checked="" type="radio"/> GOOD	<input type="radio"/> DECREASED	<input type="radio"/> NONE
DIET	Earthen Meadow Food		
VOMITING	<input checked="" type="radio"/> YES	<input type="radio"/> NO	<input type="radio"/> STFOOL
DIARRHEA	<input checked="" type="radio"/> NORMAL	<input type="radio"/> DIARRHEA	<input type="radio"/> CONSTIPATION
PUPID	<input type="radio"/> YES	<input checked="" type="radio"/> NO	
VACCINES	DTP		
HISTORY			

- aortic hypoplasia - Tufts
- came in from outside - wobbly, fell over, couldn't get up
somewhat debilitated
disoriented/slow, fell over - rigid

no restrictions/
modifications

DIFFERENTIAL LIST

HOME INSTRUCTIONS

FINAL DIAGNOSIS

B6

B6

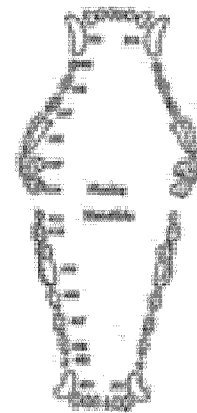
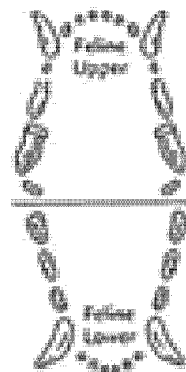
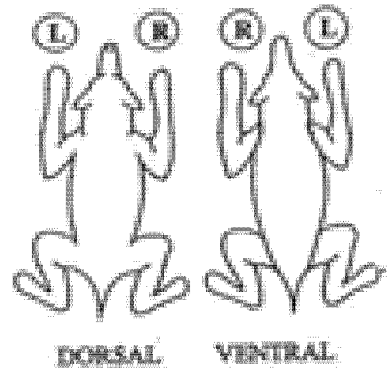
Client: **B6**
 Patient:

B6 visit **B6**

1 General Appearance	N <input type="checkbox"/> A <input type="checkbox"/>	4 Mucous Membranes	N <input type="checkbox"/> A <input type="checkbox"/>	7 Lymph Nodes	N <input type="checkbox"/> A <input type="checkbox"/>	10 Musculoskeletal	N <input type="checkbox"/> A <input type="checkbox"/>
2 Eyes	N <input type="checkbox"/> A <input type="checkbox"/>	5 Circulatory	N <input type="checkbox"/> A <input type="checkbox"/>	8 Digestive	N <input type="checkbox"/> A <input type="checkbox"/>	11 Genitourinary	N <input type="checkbox"/> A <input type="checkbox"/>
3 Ears	N <input type="checkbox"/> A <input type="checkbox"/>	6 Respiratory	N <input type="checkbox"/> A <input type="checkbox"/>	9 Neurologic	N <input type="checkbox"/> A <input type="checkbox"/>	12 Integumentary	N <input type="checkbox"/> A <input type="checkbox"/>
T 09.8	P 100	WT 38 kg	Body Condition (1-5) 1=Emaciated 5=Obese		13 Endocrine	N <input type="checkbox"/> A <input type="checkbox"/>	
R 10	Last WT						
Pain (0-10)		Date:					
Localized to:							
Chronic or Acute							
Last Pain Score:		Date:					

DESCRIPTION OF PE ABNORMALITIES:

Initial PE:
 Vitals: T-99.8; P-100; R-20; W-38 kg CRT +0 sec
 EENT: Mucous membranes pink, moist. No ocular or nasal discharge. No foreign material in external nares. Ears free of discharge AUJ
 HL: No murmurs or arrhythmias, pulses strong and synchronous. Normal respiratory rate and effort. Normal bronchovesicular sounds in all fields.
 Ure/Gen: Bladder small and soft. No discharge from vulva.
 Abd: Soft and non-painful. No palpable masses or organomegaly.
 PLM: Normal size and texture.
 Integ: Quiet, clean
 Musc: Ambulatory x 4.
 CNS: BARS. No neurologic deficits noted.
 BCS: 5/9
 CSU Pain Scale: 0/4



- A. Plaque
- B. Bad Breath
- C. Tumor
- D. Gingivitis
- E. Loose Teeth
- F. Broken Teeth
- G. Missing Teeth
- H. Feline Resorptive Lesion
- I. Other

**Please highlight corresponding recommendation code on travel sheet

B6

B6

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

Holter Monitor Report 11/16/17

CANINE HOLTER MONITORING REPORT

HOLTER MONITOR REPORT

Patient Name:	B6	Interp. Physician:	
Date of Birth:		Scan Number:	
ID:		Date Recorded:	11/16/2017 08:30:00
Age:	2 YEARS	Date Processed:	11/16/2017
Sex:	M	Recorder Num:	B6
Analyst:		Hookup Tech:	
Physician:		Medications:	
Indications:	B6		

B6

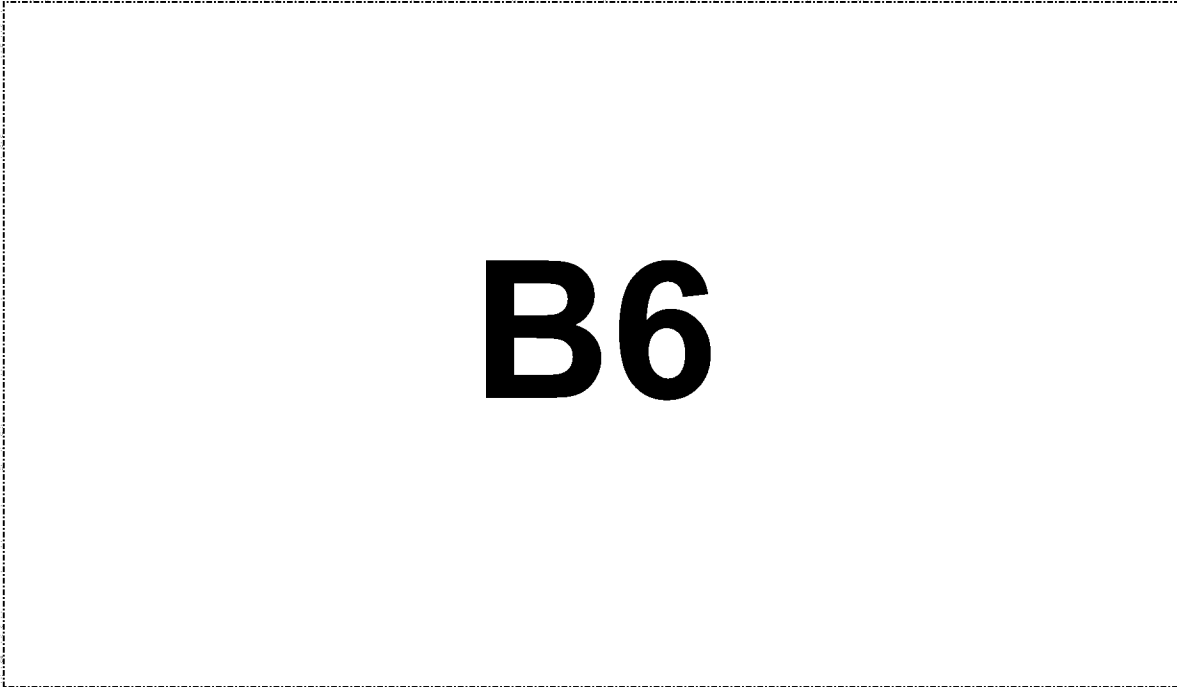
Physician's Signature

Client: **B6**
Patient:

Holter Monitor Report 11/16/17

Patient: **B6** ID: **1** Date Received: **11/16/17** @ **5:51** Page: **1**

GENERAL PROFILE



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

Holter Monitor Report 11/16/17

Patient: **B6** ID: **1** Date Received: **11/14/17** @ **5:51** Page: **3**

CRITICAL EVENTS

B6

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

Holter Monitor Report 11/16/17

Patient: **B6** ID: **1** Date Received: **11/16/17** @ **5:50** Page: **1**

FULL SIZED STRIPS

Strip 0.50 cm x 1.00 cm (1.00 cm x 1.00 cm)

B6

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

Holter Monitor Report 11/16/17

Patient: **B6** ID: **1** Date Received: **11/16/17** @ **5:51** Page: **1**

FULL SIZED STRIPS

B6

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

Holter Monitor Report 11/16/17

Patient: **B6** ID: **1** Date Received: **11/16/17** @ **5:51** Page: **4**

FULL SIZED STRIPS

B6

Client: **B6**
Patient:

Holter Monitor Report 11/16/17

Patient: **B6** ID: **1** Date Received: **11/16/17** @ **5:51** Page: **7**

FULL SIZED STRIPS

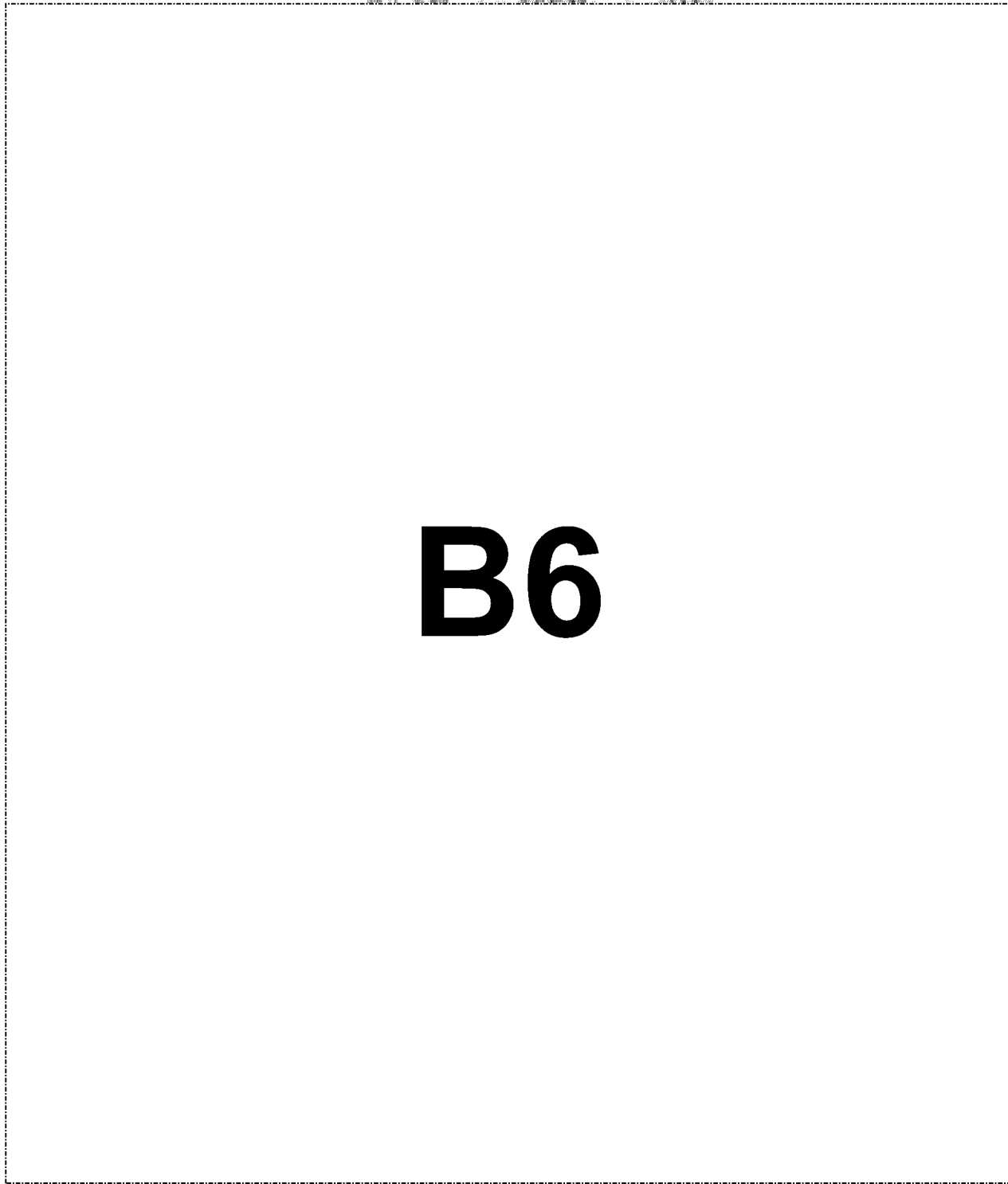
B6

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

Holter Monitor Report 11/16/17

Patient: **B6** ID: **1** Date Received: **11/16/17** @ **5:51** Page: **4**

FULL SIZED STRIPS



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

Holter Monitor Report 11/16/17

Patient: **B6** ID: **1** Date Received: **11/16/17** @ **5:51** Page: **4**

FULL SIZED STRIPS

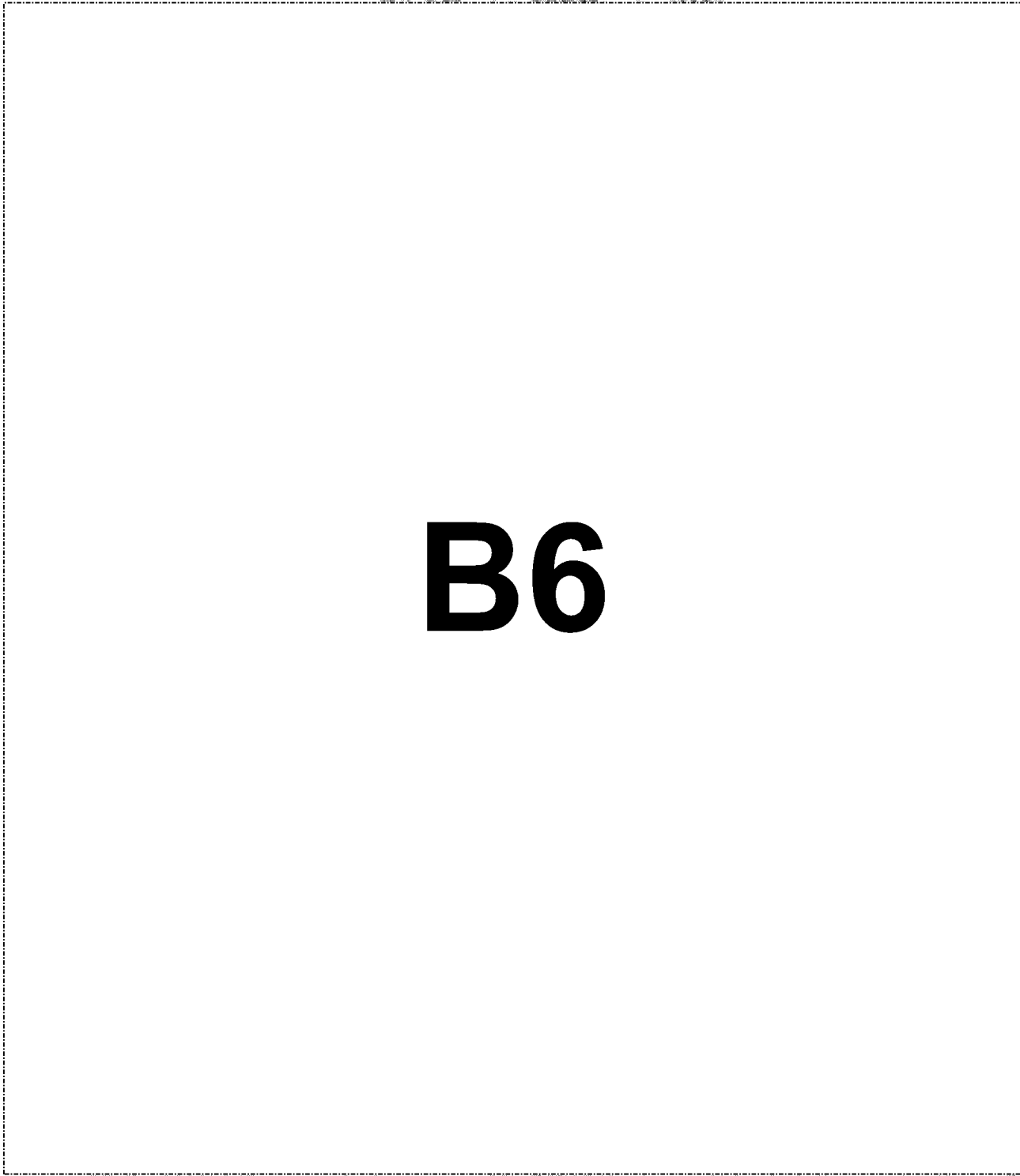
B6

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

Holter Monitor Report 11/16/17

Patient: **B6** ID: **1** Date Received: **11/16/17** @ **5:51** Page: **12**

FULL SIZED STRIPS

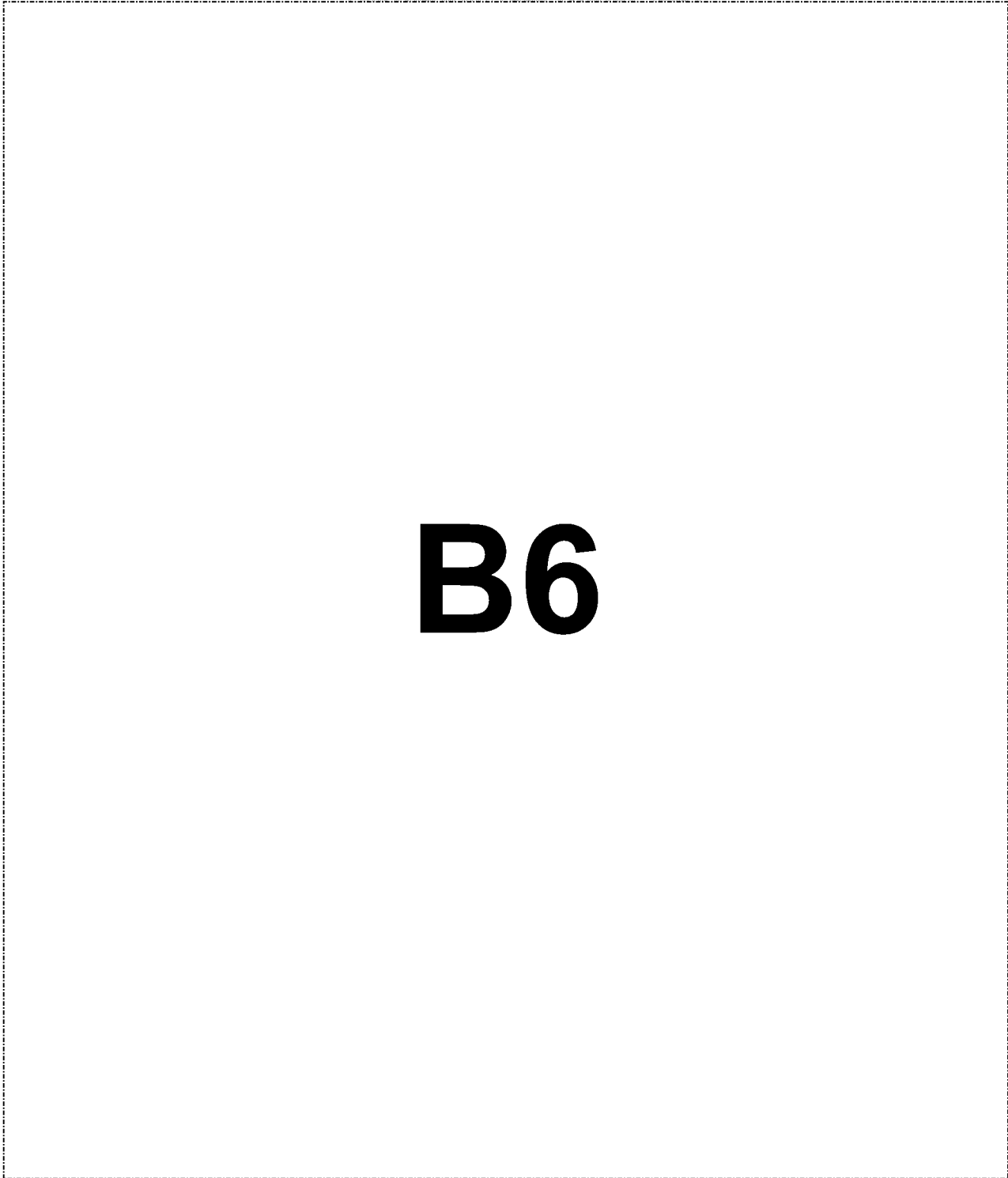


Client:
Patient: **B6**

Holter Monitor Report 11/16/17

Patient: **B6** ID: **1** Date Received: **11/16/17** @ **5:51** Page **11**

FULL SIZED STRIPS



Client: **B6**
Patient:

RDVM - **B6** - Hx, Labs, 1/8/16 - 6/20/17

B6

Patient Chart

Phone: **B6**

CLIENT INFORMATION

Name: **B6**
Address: **B6**
Phone:

Species: **B6**

PHYSICIAN INFORMATION

Name: **B6**
Sex: Female
Category: **B6**
ID:
Color: **B6**
Registration: **B6**

Species: **B6**
Breed: **B6**
Age: **B6**
Status: **B6**
Weight: **B6**
Color:

Registration No: **B6**

Last Name:

ICD-9-CM	ICD-9-CM	ICD-9-CM
562.00	562.00	562.00
562.01	562.01	562.01
562.02	562.02	562.02
562.03	562.03	562.03
562.04	562.04	562.04
562.05	562.05	562.05
562.06	562.06	562.06
562.07	562.07	562.07
562.08	562.08	562.08
562.09	562.09	562.09

MEDICAL HISTORY

Date: Tr: Coll: Description: Sex (Transposed):

B6

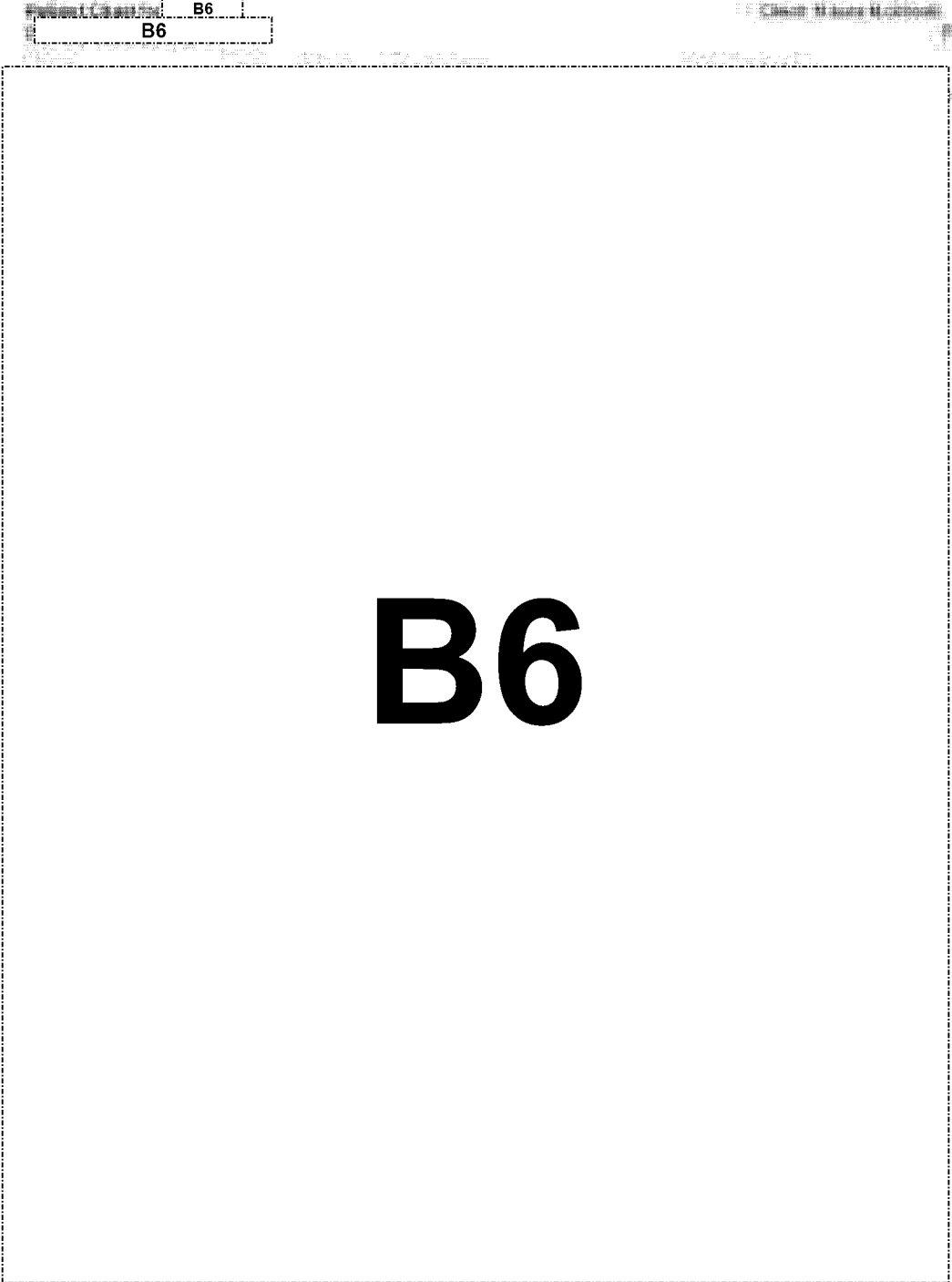
Client:
Patient:

B6

RDVM -

B6

- Hx, Labs, 1/8/16 - 6/20/17



Client:
Patient:

B6

RDVM

B6

- Hx, Labs, 1/8/16 - 6/20/17

B6

B6

Client: **B6**
Patient:

Holter report 3/30/18

CANINE HOLTER MONITORING REPORT

HOLTER MONITOR REPORT

Patient Name:	B6	Interp. Physician:	
Date of Birth:		Scan Number:	10000000000000000000
ID:		Date Recorded:	3/30/2018 @ 20:51
Age:	2 YEARS	Date Processed:	3/30/2018
Sex:	F	Recorder Num:	001560
Analyst:		Hookup Tech:	
Physician:		Medications:	
Indications:	Rest of		

B6

Physician's Signature

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

Holter report 3/30/18

Page: **B6** Date Received: 3/30/2018 @ 14:18 Page: 2

GENERAL PROFILE

B6

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

Holter report 3/30/18

Page: **B6** Date Received: **3/28/2018** Page: **8**

CRITICAL EVENTS

B6

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

Holter report 3/30/18

Patient: **B6** ID: **1011** Date Received: **3/30/18** @ **10:11** Page: **4**

FULL SIZED STRIPS

B6

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

Holter report 3/30/18

Patient: **B6** ID: **B6** Date Received: 3/30/2018 @ 10:11 Page: 8

FULL-SIZED STRIPS

Strip 015 (00:00) - 015 (01:00) (ALL)

B6

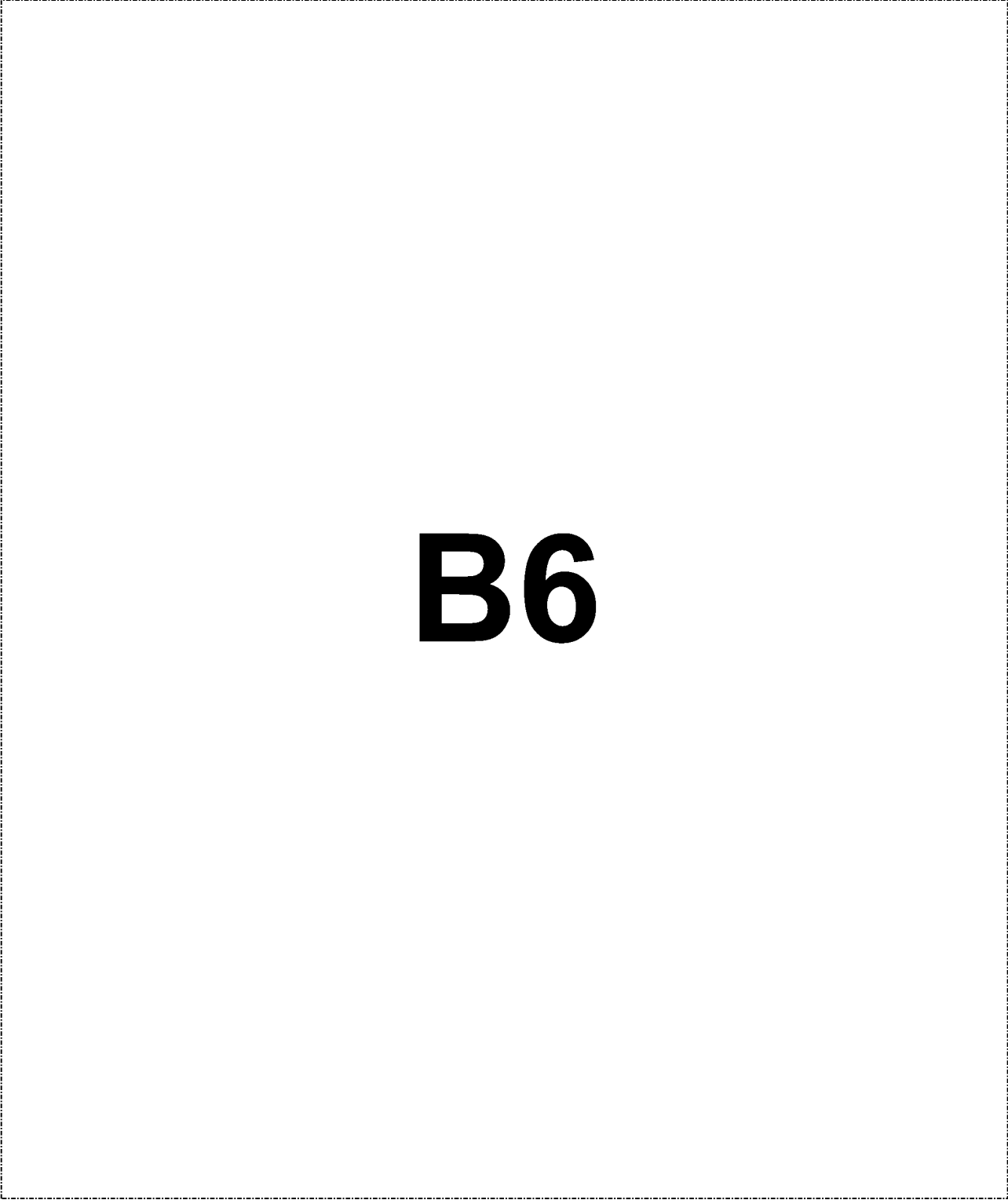
Client: **B6**
Patient: **B6**

Holter report 3/30/18

Patient: **B6** ID: **B6** Date Received: **3/30/2018** @ **10:11** Page: **4**

FULL SIZED STRIPS

Strip 015 (00:00:00 - 00:00:15) (00:00:15 - 00:00:30)



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

Holter report 3/30/18

Patient: **B6** ID: **1011** Date Received: **3/30/2018** @ **10:11** Page: **7**

FULL SIZED STRIPS

B6

Client:
Patient: **B6**

Holter report 3/30/18

Patient: **B6** Date Recorded: 3/30/2018 Page: 8

FULL SIZED STRIPS

B6

Client: **B6**
Patient:

Holter report 3/30/18

Patient: **B6** ID: **1011** Date Received: **3/30/2018** @ **10:11** Page: **8**

FULL SIZED STRIPS

B6

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

Holter report 3/30/18

Patient: **B6** ID: **B6** Date Recorded: 3/30/2018 @ 10:11 Page: 11

FULL SIZED STRIPS

B6

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

Holter Monitor report 11/7/19

CANINE HOLTER MONITORING REPORT

HOLTER MONITOR REPORT

Patient Name:	B6	Interp. Physician:	
Date of Birth:		Scan Number:	brmar03@gmail.com
ID:		Date Recorded:	11/07/2019 @ 20:07
Age:	12 months	Date Processed:	11/08/2019
Sex:	F	Recorder Num:	601963
Analyst:		Hookup Tech:	
Physician:		Medications:	
Indications:	Seizure		

B6

Physician's Signature: _____

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

Holter Monitor report 11/7/19

Patient: **B6** Date: **11/7/2019** Page: **1**

GENERAL PROFILE

B6

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

Holter Monitor report 11/7/19

Patient: **B6** Date Recorded: 11/7/2019 @ 16:47 Page: 1

CRITICAL EVENTS

B6

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

Holter Monitor report 11/7/19

Patient: **B6** Date: 11/7/19 Page: 4

FULL-SIZED STRIPS

ECG # 11/7/19

B6

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

Holter Monitor report 11/7/19

Patient: **B6** Date: 11/7/2019 Page: 1

FULL-SIZED STRIPS

B6

Client:
Patient: **B6**

Holter Monitor report 11/7/19

Patient: **B6** Date: 11/7/2019 Page: 8

FULL-SIZED STRIPS

From: 11/7/2019 12:00:00 AM To: 11/7/2019 11:59:59 AM

B6

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

Holter Monitor report 11/7/19

Patient: **B6** Date: 11/7/2019 Page: 7

FULL-SIZED STRIPS

Printed: 11/7/2019 10:47:11 AM

B6

Client:
Patient: **B6**

Holter Monitor report 11/7/19

Patient: **B6** Date: 11/7/2019 Page: 1

FULL-SIZED STRIPS

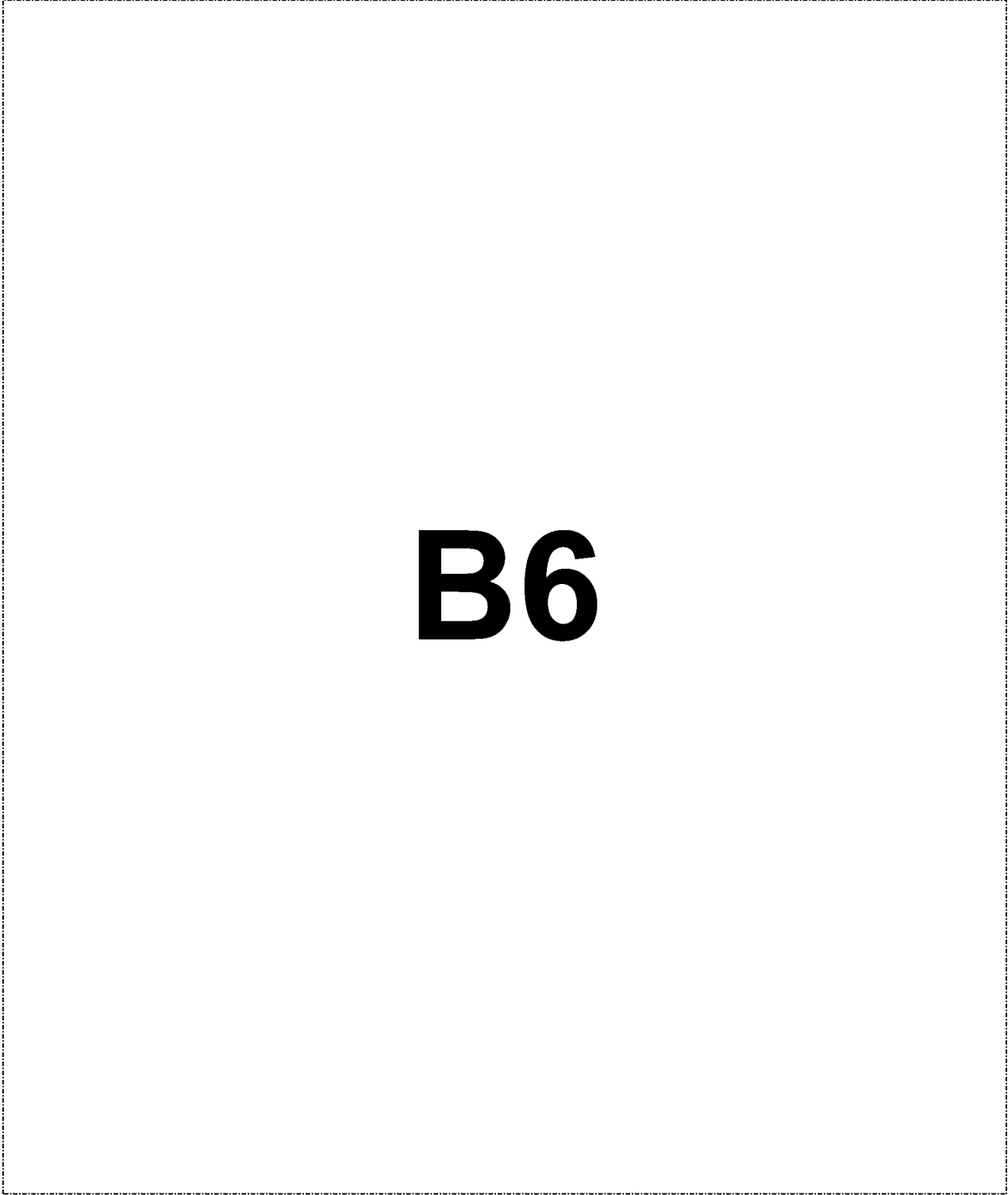
B6

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

Holter Monitor report 11/7/19

Patient: **B6** Date: 11/7/19 Page: 68

FULL-SIZED STRIPS



Client: **B6**
Patient:

Holter Monitor report 11/7/19

Patient: **B6** Date: 11/7/2019 Page: 11

FULL-SIZED STRIPS

Form 6-58 (rev. 10-11-11)

B6

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

Holter Monitor report 11/7/19

Patient: **B6** Date: 11/7/2019 Page: 11

FULL-SIZED STRIPS



Client:
Patient:

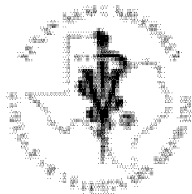
B6

Lab Results IDEXX CARDIOPET proBNP 11/15/18

B6

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

Cardiac Troponin/Texgi SST 11/15/18



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: 11488

B6	Phone:	505 887 4889
Tufts University-Clinical Pathology Lab	Fax:	9 508 839 7936
Attn: B6	Animal Name:	B6
200 Westboro Road	Owner Name:	B6
North Grafton, MA 01536	Species:	Canine
USA	Date Received:	Nov 20, 2018

Tufts University-Clinical Pathology Lab
Tracking Number: 1811159181
GI Lab Accession: **B6**

Test	Result	Reference Interval	Assay Date
B6			

Comments:

B6
B6
11/20/2018 3:51 PM
CARDIAC TROPONIN/TEXGI
S&T
Canine

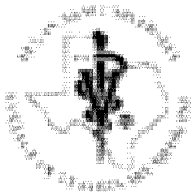
GI Lab Contact Information

Phone: (773) 862-2861
Fax: (773) 862-2864

Email: glab@cvm.tamu.edu
vetmed.tamu.edu/glalab

Client: B6
Patient:

Cardiac Troponin/Texgi SST 11/15/18



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



**Important
Notices:**

Ongoing studies

Cobalamin Supplementation Study- Dogs and cats with cobalamin deficiency with normal PLI, and either normal or low (consistent with EPI) TLI to compare the efficacy of oral vs parenteral cobalamin supplementation. Contact Dr. Cheng at chcheng@cvm.tamu.edu for further information.

Chronic Pancreatitis with Uncontrolled Diabetes Mellitus- Seeking dogs with chronic pancreatitis and uncontrolled diabetes mellitus for enrollment into a drug trial/medication provided at no cost). Contact Dr. Sue Yee Lim at slim@cvm.tamu.edu or Dr. Sinu Manick at smansin@cvm.tamu.edu

Dogs with Primary Hyperlipidemia- Prescription diet naïve dogs newly diagnosed with primary hyperlipidemia are eligible to be enrolled in a dietary trial. Contact Dr. Lawrence at ylawrence@cvm.tamu.edu for more information.

Dogs with Chronic Pancreatitis- Dogs with chronic pancreatitis (cPLI >400 µg/L) and hypertriglyceridemia (>300 mg/dl) are eligible to be enrolled in a dietary trial. Contact Dr. Lawrence at ylawrence@cvm.tamu.edu

Chronic enteropathies in dogs- Please fill out this brief form <http://tinyurl.com/ibc-enc02> to see if your patient qualifies.

Feline Chronic Pancreatitis- Cats with chronic pancreatitis for more than 2 weeks and cPLI >10 µg/L are eligible for enrollment into a treatment trial investigating the efficacy of prednisone or cyclosporine. Please contact Dr. Yamakita for further information at pyamkita@cvm.tamu.edu.

We can not accept packages that are marked "Bill Receiver"

Use our preprinted shipping labels to save on shipping. Call 979-862-2861 for assistance. The GI Lab is not here to accept packages on the weekend. Samples may be compromised if you ship for arrival on Saturday or Sunday or if shipped via US Mail.

GI Lab Contact Information

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

Email: glab@cvm.tamu.edu
vetmed.tamu.edu/glalab

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

TAURINE Panel 11/15/18

Veterinarian Contact: **B6**

Clinic/Company Name: Tufts Cummings School of Vet. Med. - Clinical Pathology Laboratory

Address: 300 Westboro Road, North Grafton, MA 01536

Email: Clinpat@tufts.edu

Telephone: 508-857-4999 Fax: 508-856-7708

Billing Contact: **B6** Email: **B6**

Billing Contact Phone: **B6** Tax ID:

Patient Name: **B6** Species: *19*

Breed: *19* Owner's Name: **B6**

Current Diet: *19*

Sample type: Plasma Whole Blood Urine Food **B6**

Test: Taurine Complete Amino Acids Other: **B6** 2-31 PM Canine
 Taurine Panel
 Lithium Heparin

Taurine Results (do not use only)
 Plasma: **B6** Whole Blood: **B6** Urine: Food:

	Plasma (nMol/ml)		Whole Blood (nMol/ml)	
	Normal Range	No known risk for deficiency	Normal Range	No known risk for deficiency
Cat	80-120	>40	300-600	>200
Dog	60-120	>40	200-350	>150

* Please note with the recent increase in the number of dogs screened for taurine deficiency, we are seeing dogs with values within the reference ranges (or above the 'no known risk for deficiency range') yet are still exhibiting signs of cardiac disease. Veterinarians are welcome to contact our laboratory for assistance in evaluating your patient's results.



CARDIOLOGY SERVICE UPDATE: DOG FOOD & DILATED CARDIOMYOPATHY

The Cardiology Service has developed this document in response to the alerts from the FDA. These alerts identify an associated risk for some grain-free diets containing certain ingredients (legumes like peas, pea components, lentils; white potatoes, sweet potatoes) and a diagnosis of dilated cardiomyopathy (DCM). The links provided throughout this document can be copied and pasted to obtain additional information.

FDA Alerts found here:

<https://www.fda.gov/Animal/Veterinary/News/Events/CDM/peasandcorn618305.htm>
<https://www.fda.gov/Animal/Veterinary/Resources/for/You/Animals/owners/Alerts/peasandcorn618305.htm>

What is Dilated Cardiomyopathy (DCM)?

DCM is a heart muscle disorder that results in a weak pump function and heart chamber enlargement. In the early stages of this disease pets may appear totally healthy with no apparent clinical signs. Later in the course of this disease, dogs may have a heart murmur, an arrhythmia (irregular heart beat), collapse episodes, weakness or tiredness with exercise, and even trouble breathing from congestive heart failure. While there are some breeds of dogs (like Doberman) that have a genetic predisposition to development of DCM, there are also nutritional factors that may result in this disease.

What should I do?

If you are feeding a diet of concern based upon the FDA alert we recommend that you consult with your veterinarian or veterinary cardiologist. We provide 4 general points for guidance below:

1. An initial step is to consider whether you are willing or interested in performing additional testing to assess whether your pet is affected with DCM. If you believe your dog is at risk, showing any of the aforementioned clinical signs or would prefer to simply rule out any heart disease, we recommend that you first have your pet's taurine levels tested (both whole blood and plasma levels) as well as seek an echocardiogram by a board-certified veterinary cardiologist. Low taurine levels are associated with development of DCM in dogs and are sometimes a component of this current issue.

Information on taurine testing can be found here: <https://www.vetmed.ucdavis.edu/lab/taurino-acid-laboratory>

2. At this time, diet change is recommended when possible and should be considered regardless of the results obtained from any testing. You can consult with your veterinarian in selecting a new diet that avoids the ingredients of concern listed by the FDA. When selecting this diet, we recommend that you choose a diet that is manufactured with rigorous quality control measures and research behind the formulation. A way to ensure that your diet meets these recommendations is to follow the following guidelines that were generated by a large number of the world's leading experts in veterinary nutrition.

Food selection guidelines found here:

<https://www.asnvet.org/WBA/VA/media/Article-and-Editorial/Selecting-the-Best-Food-for-your-Pet.pdf>

3. If your pet is identified through testing to have a low blood taurine level or evidence of DCM by echocardiogram, we urge you to report this information to the FDA.

FDA reporting guidelines found here: <https://www.fda.gov/Animal/Veterinary/SafetyHealth/Reports/Problem/um180403.htm>

4. Work with your veterinarian(s) to determine the best course of action and medical treatments if indicated. In the case of a DCM diagnosis, diet change alone may not be sufficient and additional medications may be prescribed.

Please continue to monitor the FDA website and the UC Davis School of Veterinary Medicine Newsfeeds for updates and recommendations regarding this issue.

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

Diet hx

CARDIOLOGY DIET HISTORY FORM

Please answer the following questions about your pet.

Pet's name: **B6**, Owner's name: **B6**, Pet's date: **B6**

1. How would you assess your pet's appetite? (mark the point on the line below that best describes 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 only)
 Lost weight Gained weight Moved about the same weight Don't know

4. Please list below ALL pet foods, people food, treats, snacks, 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 your pet is eating.

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
Arctic Green Free Chicken, Lamb, & Sweet Potato Adult	dry	1 1/2 cups	daily	Jan 2018
100% lean hamburgers	microwaved	2 oz	1x/week	Jan 2018
Applegate organic beef bawls	meat	N	1x/day	Aug 2015
Rawhide	meat	1 inch beef	1x/week	Dec 2018
Raw-Meat - Mountain Forest Jerky	dry	1 1/2 oz	2x/week	Jan 2018
Raw-Meat - Backyard Jerky	meat	1 1/2 oz	3x/week	Jan 2017
Raw-Meat Chicken (Redwood Forest)	meat	1/2 cup	1-2x/week	Jan 2017
Grilled Tuna (100% wild Alaskan)	meat	1/2 cup	1-2x/week	Jan 2017
Organic Wild Salmon (Wild Fish)	meat	1/2 cup	2x/week	Jan 2017

(NO "HOLISTIC" OR "NATURAL")
 *Any additional diet information can be listed on the back of this sheet

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

	Brand/Concentration	Amount per day
Taurine	_____	_____
CoQ10	_____	_____
Anticoagulants	_____	_____
Multivitamins	_____	_____
Fish oil	_____	_____
Coenzyme Q10	_____	_____
Other (please list)	_____	_____
Example: Vitamin C	Nature's Bounty	500 mg tablets - 1 per day
Aspirin	Aspirin - All Natural capsules	100 mg / 1x/week

6. 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 food (pet food) - small piece of (canned) kibble

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

Vitals Results

B6	3:29:53 PM	Weight (kg)
B6	2:23:42 PM	Weight (kg)
B6	10:41:26 AM	Weight (kg)
B6	2:45:48 PM	Weight (kg)
B6	2:01:47 PM	Weight (kg)

B6

Client: **B6**
Patient:

ECG from Cardio

B6

B6

01/28/2018 09:00
Tulsa Community
Health Diagnostic Center of the West
Tulsa, OK

B6

Client: **B6**
Patient:

ECG from Cardio

B6

B6

Page 3 of 8
Full Name: [Redacted]
Full Address: [Redacted]
City: [Redacted]



Client:
Patient:

B6

ECG from Cardio

B6

B6

Page 2 of 2
Full Name: [Redacted]
Full Address: [Redacted]
City: [Redacted]

B6

Client: **B6**
Patient:

ECG from Cardio

B6

B6

01/11/2011
10:00 AM
Page 1 of 1

B6

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

ECG from Cardio

B6

B6

01/11/2011
10:00 AM
Page 1 of 1

B6

Client: **B6**
Patient:

ECG from Cardio

B6

B6

01/28/2011 09:00
Full Name: [REDACTED]
Full Address: [REDACTED]
City: [REDACTED]

B6

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

ECG from Cardio

B6

B6

01/28/2014 09:00
Tutor (Accession):
Ref: (Accession) of the (Accession)
System

B6

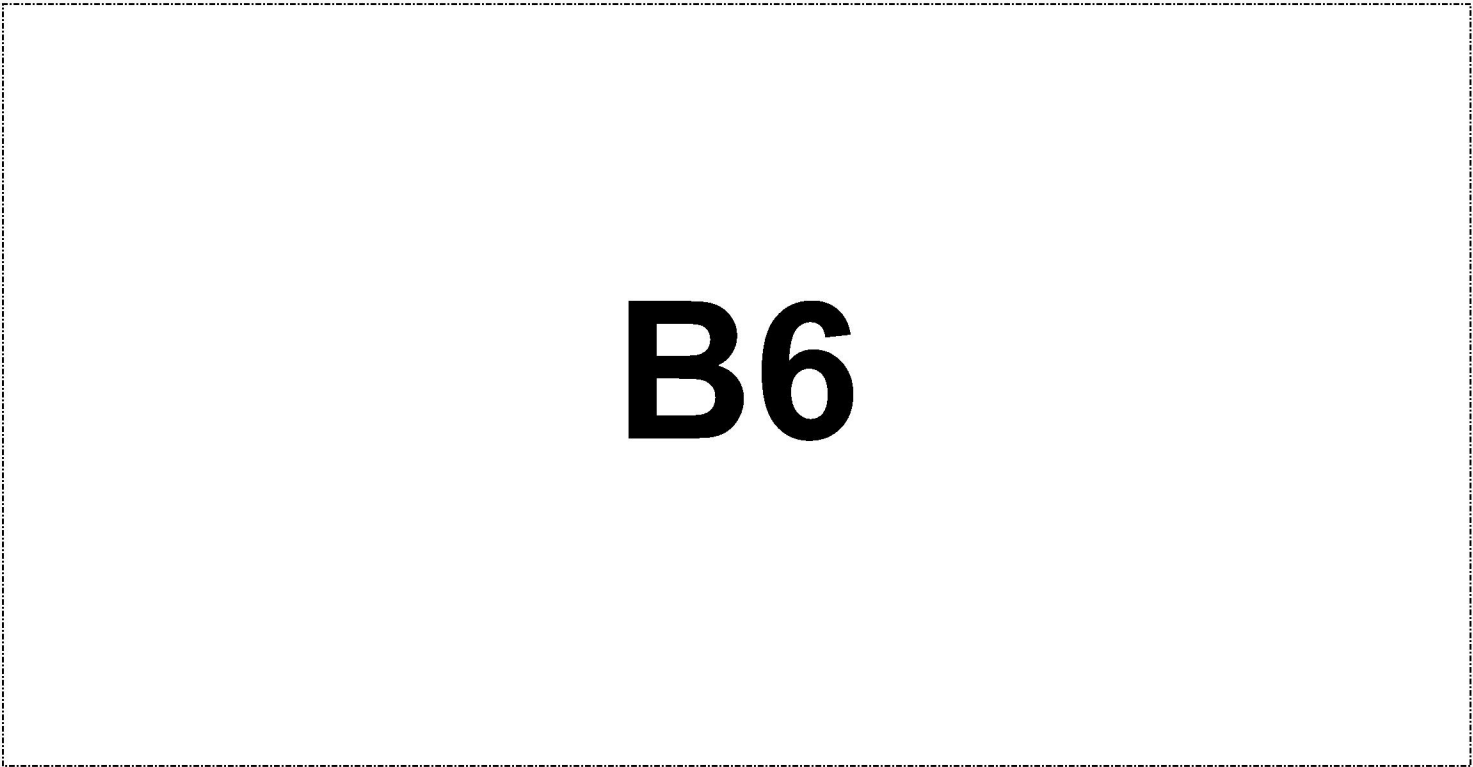
Client: **B6**
Patient: **B6**

ECG from Cardio

B6

B6

01/28/2019 09:00:00 Page 1 of 1
Full Name: [REDACTED]
Full Address: [REDACTED]
City: [REDACTED]



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

ECG from Cardio

B6

B6

01/28/2019 09:00:00 Page 1 of 1
Full Name: [REDACTED]
Full Address: [REDACTED]
City: [REDACTED]

B6

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

Alba Hotler

CANINE HOLTER MONITORING REPORT

HOLTER MONITOR REPORT

Patient Name:	B6	Interp. Physician:	
Date of Birth:		Scan Number:	
ID:	B6	Date Recorded:	5/15/2017 10:00
Age:	22 Months	Date Processed:	6/2/2017
Sex:	F	Recorder Num:	254721
Analyst:		Hookup Tech:	
Physician:		Medications:	
Indications:	Rest of		

B6

Physician's Signature

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

Alba Hotler

Page: 88/111
Page: 88/111
Page: 88/111

GENERAL PROFILE

B6

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

Alba Hotler

Patient: **B6** ID: **B6** Date Encountered: 11/11/2017 11:58 Page: 4

FULL SIZED STRIPS

B6

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

Alba Hotler

Patient: B6 ID: B6 Date Entered: 1/11/2017 10:56 Page: 1

FULL SIZED STRIPS

B6

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

Alba Hotler

Patient: **B6** ID: **B6** Date Encountered: 1/11/2017 11:56 Page: 4

FULL SIZED STRIPS

B6

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

Alba Hotler

Patient: **B6** ID: **B6** Date Encountered: 1/11/2017 10:56 Page: 7

FULL SIZED STRIPS

B6

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

Alba Hotler

Patient: **B6** ID: **B6** Date Encountered: 1/11/2017 10:56 Page: 3

FULL SIZED STRIPS

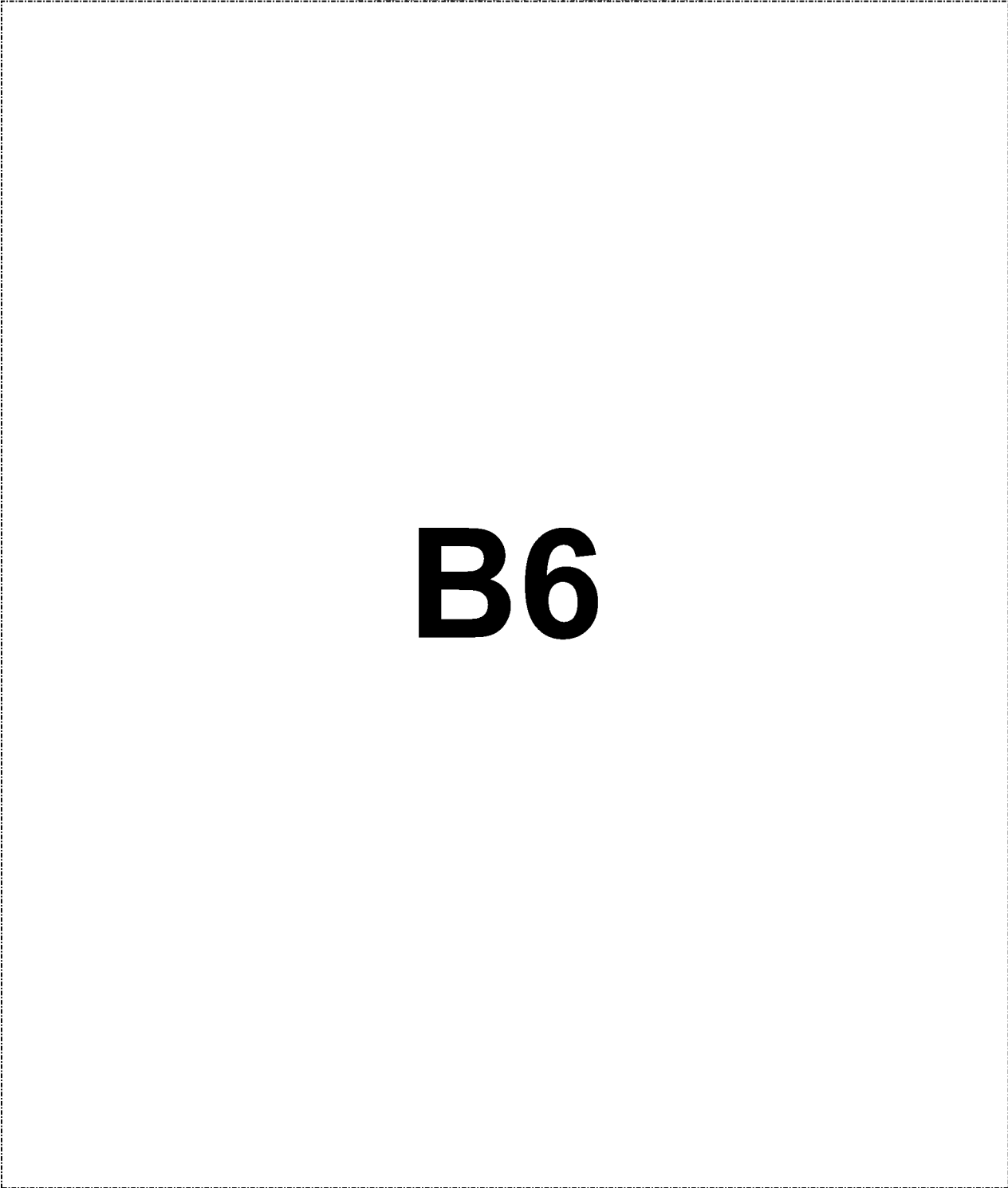
B6

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

Alba Hotler

Patient: **B6** ID: **B6** Date Encountered: 11/11/2017 11:56 Page 10

FULL SIZED STRIPS



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

Alba Hotler

Patient: **B6** ID: **B6** Date Encoded: 11/11/2017 10:56 Page 11

FULL SIZED STRIPS

B6

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

ECG from Cardio

B6

B6

21-1-18, 18
Total Number of
Total Number of
2018/18

B6

Client: **B6**
Patient:

ECG from Cardio

B6

B6 2018/04/04 08:00:00
2018/04/04 08:00:00
2018/04/04 08:00:00
2018/04/04 08:00:00

B6

Client:
Patient:

B6

ECG from Cardio

B6

B6

2018/04/04 Page 2 of 4
FDA Summary
Public Comments (and Responses)
[REDACTED]

B6

Client: **B6**
Patient:

ECG from Cardio

B6

B6

2018 09 08
Full Summary
Full Summary (of 100%)
02/07/2018

B6

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

ECG from Cardio

B6

B6

21.11.17, 10:00
Pulse 55/min
BP 100/60 mmHg
SpO2 98%
ECG 12-lead

B6

Patient History

	03:28 PM	Appointment
	04:51 PM	Appointment
	04:52 PM	Appointment
	04:53 PM	Appointment
	04:58 PM	Appointment
	04:58 PM	Appointment
	04:59 PM	Appointment
	05:19 PM	Purchase
	02:33 PM	UserForm
	02:45 PM	Purchase
	03:29 PM	Vitals
	03:30 PM	Purchase
	03:40 PM	Treatment
	04:02 PM	UserForm
	05:47 PM	Email
	05:47 PM	Email
	12:15 PM	Appointment
	02:10 PM	UserForm
	02:23 PM	UserForm
	02:23 PM	Vitals
	03:10 PM	Treatment
	03:10 PM	Purchase
	03:22 PM	Purchase
	04:46 PM	UserForm
	03:24 PM	Email
	02:20 PM	Appointment
	02:20 PM	Appointment
	02:22 PM	Appointment

B6

B6

Client: **B6**
Patient:

Patient History

02:18 PM	UserForm
02:22 PM	UserForm
03:07 PM	Treatment
03:39 PM	Purchase
03:52 PM	Purchase
04:15 PM	Purchase
04:36 PM	Prescription
04:38 PM	Purchase
09:56 AM	Appointment
10:46 AM	Appointment
09:50 AM	Appointment
09:57 AM	UserForm
10:17 AM	Purchase
10:26 AM	Treatment
10:41 AM	Vitals
11:08 AM	Purchase
11:20 AM	Purchase
11:51 AM	UserForm
05:22 PM	Email
08:51 AM	Appointment
02:19 PM	UserForm
02:43 PM	UserForm
02:45 PM	Treatment
02:45 PM	Vitals
02:46 PM	Purchase
03:26 PM	Purchase
12:57 PM	Email
10:35 AM	UserForm
05:14 PM	Appointment
06:58 PM	Appointment
01:02 PM	UserForm
01:04 PM	Treatment
02:01 PM	Vitals
02:22 PM	Prescription

B6

B6

Client: **B6**
Patient:

Patient History

B6	03:00 PM	Deleted Reason
	03:00 PM	Deleted Reason
	03:00 PM	Deleted Reason
	03:22 PM	Purchase
	03:25 PM	Purchase
	03:25 PM	Purchase
	03:36 PM	Labwork
	03:36 PM	Purchase
	04:48 PM	UserForm
	06:08 PM	Email

B6



Cummings School of
Veterinary Medicine

Healing Animals, Helping Humans, Transforming Global Health

Forster Hospital for Small Animals
55 Willard Street
North Grafton, MA 01526
Telephone (508) 829-5295
Fax (508) 829-8739
<http://vetmed.tufts.edu/>

B6

B6

Female

Canine, Breed: Friesian

B6

B6

Dear **B6**

Thank you for referring **B6** with their pet **B6**.

If you have any questions, or concerns, please contact us at 508-829-1981.

Thank you,

B6, DVM, DACVIM (Cardiology)



Cummings School of
Veterinary Medicine

Healing Animals. Helping Humans. Transforming Global Health.

Forster Hospital for Small Animals
55 Willard Street
North Grafton, MA 01526
Telephone (508) 829-5295
Fax (508) 829-8739
<http://vetmed.tufts.edu/>

B6

B6

Female

Canine Heart Failure

B6

B6

Dear **B6**

Thank you for referring **B6** with their pet **B6**

If you have any questions, or concerns, please contact us at 508-827-1981.

Thank you,

B6 DVM, DACVIM (Cardiology)

Cummings
Veterinary Medical Center
AT TUFTS UNIVERSITY

Forster Hospital for Small Animals
55 Willard Street
North Grafton, MA 01526
Telephone (508) 829-5295
Fax (508) 829-8739
<http://vetmed.tufts.edu/>

B6

B6

Female

Cancer: Bladder Tumor

B6

B6

Dear **B6**

Thank you for referring **B6** with their pet **B6**.

If you have any questions, or concerns, please contact us at 508-827-1981.

Thank you,

B6

DVM (Resident, Cardiology)

Cummings
Veterinary Medical Center
AT TUFTS UNIVERSITY

Forster Hospital for Small Animals
55 Willard Street
North Grafton, MA 01526
Telephone (508) 829-5295
Fax (508) 829-7951
<http://vetmed.tufts.edu/>

B6

B6

Female

Castr. Bitch - Fawn

B6

B6

Dear

B6

Thank you for referring

B6

with their pet

B6

If you have any questions, or concerns, please contact us at 508-827-1981.

Thank you,

B6

DVM, DACVP (Cardiology)

Cummings
Veterinary Medical Center
AT TUFTS UNIVERSITY

Forster Hospital for Small Animals
55 Willard Street
North Grafton, MA 01526
Telephone (508) 829-5295
Fax (508) 829-7951
<http://vetmed.tufts.edu/>

B6

B6

Female

Castrated Spayed Female

B6

B6

Dear

B6

Thank you for referring

B6

with their pet

B6

If you have any questions, or concerns, please contact us at 508-829-4988.

Thank you,

B6

DVM, DACVIM (Cardiology)

Cummings
Veterinary Medical Center
AT TUFTS UNIVERSITY

Forster Hospital for Small Animals
55 Willard Street
North Grafton, MA 01526
Telephone (508) 829-5295
Fax (508) 829-7951
<http://vetmed.tufts.edu/>

B6

B6 Female
Cancer - Breast - Feline
B6

B6

Dear **B6**,

Thank you for referring **B6** with their pet **B6**.

If you have any questions, or concerns, please contact us at 508-829-4988.

Thank you,

B6 DVM, DACVP (Cardiology)

From: PFR Event <pfpreventcreation@fda.hhs.gov>
To: Cleary, Michael *; HQ Pet Food Report Notification; B6
Sent: 12/4/2018 11:21:28 PM
Subject: Earthborn Meadow Feast dry: Lisa Freeman - EON-372834
Attachments: 2059624-report.pdf; 2059624-attachments.zip

A PFR Report has been received and PFR Event [EON-372834] has been created in the EON System.

A "PDF" report by name "2059624-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 "2059624-attachments.zip" and is attached to this email notification.

Below is the summary of the report:

EON Key: EON-372834

ICSR #: 2059624

EON Title: PFR Event created for Earthborn Meadow Feast dry; 2059624

AE Date	11/20/2018	Number Fed/Exposed	5
Best By Date		Number Reacted	4
Animal Species	Dog	Outcome to Date	Stable
Breed	Boxer (German Boxer)		
Age	3 Years		
District Involved	PFR-New England DO		

Product information

Individual Case Safety Report Number: 2059624

Product Group: Pet Food

Product Name: Earthborn Meadow Feast dry

Description: Littermate diagnosed with reduced cardiac contractility Eating BEG diet (Earthborn) so screened all housemates Subjectively reduced contractility on echo and elevated NT-proBNP and cardiac troponin I Taurine pending Owner changing diet and will recheck in 3 months

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: 5

Number of Animals Reacted With Product: 4

Product Name	Lot Number or ID	Best By Date
Earthborn Meadow Feast dry		

Sender information

Lisa Freeman
200 Westboro Rd
North Grafton, MA 01536
USA

Owner information

B6
B6 USA

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

<https://eon.fda.gov/eon//browse/EON-372834>

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=389803>

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Report Details - EON-372834

ICSR: 2059624
 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: 2018-12-04 18:12:06 EST

Reported Problem:
Problem Description: Littermate diagnosed with reduced cardiac contractility Eating BEG diet (Earthborn) so screened all housemates Subjectively reduced contractility on echo and elevated NT-proBNP and cardiac troponin I Taurine pending Owner changing diet and will recheck in 3 months
Date Problem Started: 11/20/2018
Concurrent Medical Problem: No
Outcome to Date: Stable

Product Information:
Product Name: Earthborn Meadow Feast dry
Product Type: Pet Food
Lot Number:
Package Type: BAG
Product Use Information: **Description:** See diet history in medical record for more info
Manufacturer /Distributor Information:
Purchase Location Information:

Animal Information:
Name: B6
Type Of Species: Dog
Type Of Breed: Boxer (German Boxer)
Gender: Male
Reproductive Status: Neutered
Weight: 30.3 Kilogram
Age: 3 Years
Assessment of Prior Health: Excellent
Number of Animals Given the Product: 5
Number of Animals Reacted: 4
Owner Information:
Owner Information provided: Yes
Contact:
Name: B6
Phone: B6
Email: 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
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:	B6	records.pdf
	Description:	Medical records	
	Type:	Medical Records	

All Medical Records

Client: **B6**
Address: **B6**

Patient: **B6**
Breed: Boxer
DOB: **B6**

Species: Canine
Sex: Male
(Neutered)

Home Phone: **B6**
Work Phone: () -
Cell Phone: **B6**

Referring Information

B6

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

Initial Complaint:

Scanned Record

SOAP Text Nov 20 2018 12:22PM - **B6**

Initial Complaint:

DCM Study

SOAP Text Nov 20 2018 1:10PM - **B6**

Disposition/Recommendations

Client:
Patient:

B6

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

Cummings Veterinary Medical Center

AT TUFTS UNIVERSITY

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:	Boxer
Sex:	Male (Neutered)
Age:	B6 Years Old

Lab Results Report

11/20/2018 5:45:23 PM Accession ID: **B6**

Test	Results	Reference Range	Units
Troponin I Research - FHSA	B6	0 - 0.08	mg/dl



3/13

B6

B6

Printed Tuesday, December 04, 2018

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

IDEXX BNP - 11/20/2018

IDEXX Reference Laboratories

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

Client: **B6**
Patient: **B6**
Species: CANINE
Breed: BOXER
Gender: MALE NEUTERED
Age: 3Y

Date: 11/20/2018
Requisition #: 433149
Accession #: **B6**
Ordered by: NOT SPECIFIED

IDEXX VetConnect 1-888-433-9967
TUFTS UNIVERSITY
200 WESTBORO RD
NORTH GRAFTON, Massachusetts 01536
508-839-5395
Account #88933

CARDIOPET proBNP- CANINE

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

B6

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

Client: **B6**
Patient:

CARDIAC TROPONIN/TEXGI SST 11/20/18



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: clinpath@tufts.edu

GI Lab Assigned Clinic ID: 11405

B6
Tufts University Clinical Pathology Lab
Attn: **B6**
200 Westboro Road
North Grafton, MA 01536
USA

Phone: 508 887 4669
Fax: 9 508 839 7936
Animal Name:
Owner Name: **B6**
Species: Canine
Date Received: Nov 27, 2018

Tufts University-Clinical Pathology Lab
Tracking Number: 1811200093

GI Lab Accession: **B6**

Test	Result	Reference Interval	Assay Date
Ultra-Sensitive Troponin I Fasting	B6 ng/ml	≤0.06	11/27/18

B6

Comments:

B6

Canine
11/20/2018 1:18 PM
CARDIAC TROPONIN/TEXGI
SST

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

GI Lab Contact Information

Email: gilab@cvm.tamu.edu
vetmed.tamu.edu/gilab

Client: **B6**
Patient:

CARDIAC TROPONIN/TEXGI SST 11/20/18



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



Important Notices:

Ongoing studies

Cobalamin Supplementation Study- Dogs and cats with cobalamin deficiency with normal PLI, and either normal or low (consistent with EPI) TLI to compare the efficacy of oral vs parenteral cobalamin supplementation. Contact Dr. Chang at chchang@cvm.tamu.edu for further information.

Chronic Pancreatitis with Uncontrolled Diabetes Mellitus- Seeking dogs with chronic pancreatitis and uncontrolled diabetes mellitus for enrollment into a drug trial (medication provided at no cost). Contact Dr. Sue Yee Lim at slim@cvm.tamu.edu or Dr. Sina Marsilio at smarsilio@cvm.tamu.edu

Dogs with Primary Hyperlipidemia- Prescription diet naïve dogs newly diagnosed with primary hyperlipidemia are eligible to be enrolled in a dietary trial. Contact Dr. Lawrence at ylawrence@cvm.tamu.edu for more information.

Dogs with Chronic Pancreatitis- Dogs with chronic pancreatitis (cPLi >400 µg/L) and hypertriglyceridemia (>300 mg/dl) are eligible to be enrolled in a dietary trial. Contact Dr. Lawrence at ylawrence@cvm.tamu.edu

Chronic enteropathies in dogs- Please fill out this brief form <http://tinyurl.com/ibd-enroll> to see if your patient qualifies.

Feline Chronic Pancreatitis- Cats with chronic pancreatitis for more than 2 weeks and fPLI >10 µg/L are eligible for enrollment into a treatment trial investigating the efficacy of prednisolone or cyclosporine. Please contact Dr. Yamkate for further information at pyamkate@cvm.tamu.edu.

We can not accept packages that are marked "Bill Receiver"

Use our preprinted shipping labels to save on shipping. Call 979-862-2861 for assistance. The GI Lab is not here to accept packages on the weekend. Samples may be compromised if you ship for arrival on Saturday or Sunday or if shipped via US Mail.

GI Lab Contact Information

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

Email: gilab@cvm.tamu.edu
vetmed.tamu.edu/gilab

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

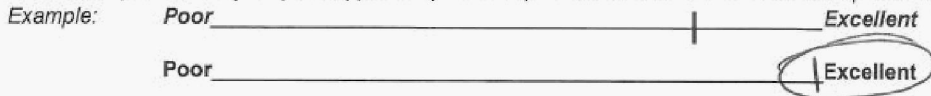
Diet hx

CARDIOLOGY DIET HISTORY FORM

Please answer the following questions about your pet

Pet's name: **B6** Owner's name: **B6** Today's date: 20 NOV 2018

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

4. 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.

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
EARTHBOEN - MEADOWFEAST	dry	~ 1 1/2c +	2x DAY	FEB 2016

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

5. 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="checkbox"/> Yes <input type="checkbox"/> No _____	_____
Carnitine	<input type="checkbox"/> Yes <input type="checkbox"/> No _____	_____
Antioxidants	<input type="checkbox"/> Yes <input type="checkbox"/> No _____	_____
Multivitamin	<input type="checkbox"/> Yes <input type="checkbox"/> No _____	_____
Fish oil	<input type="checkbox"/> Yes <input type="checkbox"/> No _____	_____
Coenzyme Q10	<input type="checkbox"/> Yes <input type="checkbox"/> No _____	_____
Other (please list): Example: Vitamin C	Nature's Bounty	500 mg tablets - 1 per day
SUPPLEMENT	NUPRO - DOG SUPPLEMENT	1 SCOOP (~ 1 TBSP) 1-2x DAY

6. 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): Bologna or CHEESE

Client:
Patient:

B6

Client: **B6**
Patient:

ECG from Cardio

B6

11/20/2018 3:27:51 PM

Tufts University
Tufts Cummings School of Vet Med
Cardiology

B6

Client: **B6**
Patient:

ECG from Cardio

B6

11/20/2018 3:28:15 PM

Page 1 of 2

Tufts University
Tufts Cummings School of Vet Med
Cardiology

B6

Client:
Patient:

B6

ECG from Cardio

B6

11/20/2018 3:28:15 PM

Page 2 of 2

Tufts University
Tufts Cummings School of Vet Med
Cardiology

B6

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

Patient History

11/20/2018 11:45 AM	Appointment
11/20/2018 12:23 PM	UserForm
11/20/2018 01:11 PM	UserForm
11/20/2018 04:04 PM	Purchase
11/20/2018 04:04 PM	Purchase
11/20/2018 04:04 PM	Purchase
11/20/2018 04:55 PM	Treatment
11/20/2018 05:45 PM	Labwork
11/20/2018 05:46 PM	Purchase
11/21/2018 11:25 AM	UserForm
11/26/2018 11:33 AM	Email

B6

Cummings
Veterinary Medical Center
AT TUFTS UNIVERSITY

B6

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

B6 Male (Neutered)
Canine Boxer Fawn
433149

11/22/2018

Dear **B6**

Thank you for referring **B6** with their pet **B6**

If you have any questions, or concerns, please contact us at 508-887-4988.

Thank you,

B6 DVM, DACVIM (Cardiology)

Report Details - EON-372834		
ICSR:	2059624	
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:	2018-12-04 18:12:06 EST	
Reported Problem:	Problem Description: Littermate diagnosed with reduced cardiac contractility Eating BEG diet (Earthborn) so screened all housemates Subjectively reduced contractility on echo and elevated NT-proBNP and cardiac troponin I Taurine pending Owner changing diet and will recheck in 3 months	
	Date Problem Started: 11/20/2018	
	Concurrent Medical Problem: No	
	Outcome to Date: Stable	
Product Information:	Product Name: Earthborn Meadow Feast dry	
	Product Type: Pet Food	
	Lot Number:	
	Package Type: BAG	
	Product Use Information: Description: See diet history in medical record for more info	
	Manufacturer /Distributor Information:	
	Purchase Location Information:	
Animal Information:	Name: B6	
	Type Of Species: Dog	
	Type Of Breed: Boxer (German Boxer)	
	Gender: Male	
	Reproductive Status: Neutered	
	Weight: 30.3 Kilogram	
	Age: 3 Years	
	Assessment of Prior Health: Excellent	
	Number of Animals Given the Product: 5	
	Number of Animals Reacted: 4	
	Owner Information:	Owner Information provided: Yes
		Contact:
		Name: B6
		Phone: B6
Email: 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
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:	B6	records.pdf
	Description:	Medical records	
	Type:	Medical Records	

From: PFR Event <pfpreventcreation@fda.hhs.gov>
To: Cleary, Michael *; HQ Pet Food Report Notification; B6
Sent: 2/24/2019 9:40:39 PM
Subject: Purina One Smart Blend Lamb and Rice dry: Lisa Freeman - EON-380707
Attachments: 2063114-report.pdf; 2063114-attachments.zip

A PFR Report has been received and PFR Event [EON-380707] has been created in the EON System.

A "PDF" report by name "2063114-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 "2063114-attachments.zip" and is attached to this email notification.

Below is the summary of the report:

EON Key: EON-380707

ICSR #: 2063114

EON Title: PFR Event created for Purina One Smart Blend Lamb and Rice dry; 2063114

AE Date	08/01/2018	Number Fed/Exposed	3
Best By Date		Number Reacted	1
Animal Species	Dog	Outcome to Date	Worse/Declining/Deteriorating
Breed	Doberman Pinscher		
Age	B6 Years		
District Involved	PFR-New England DO		

Product information

Individual Case Safety Report Number: 2063114

Product Group: Pet Food

Product Name: Purina One Smart Blend Lamb and Rice dry

Description: DCM and CHF diagnosed Aug 2018 We saw 1/11/19 - CHF still not well controlled Eating Purina Lamb and Rice - unlikely to be associated with DCM but reporting just in case Owner is now changing to different diet and will recheck in 3 months 2 other dogs eating same diet - we have not screened them yet. BNP = B6 troponin B6 but taurine normal (B6 plasma, B6 whole blood)

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: Worse/Declining/Deteriorating

Number of Animals Treated With Product: 3

Number of Animals Reacted With Product: 1

Product Name	Lot Number or ID	Best By Date
Purina One Smart Blend Lamb and Rice dry		

Sender information

Lisa Freeman
200 Westboro Rd
North Grafton, MA 01536
USA

Owner information

B6
B6 USA

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

<https://eon.fda.gov/eon//browse/EON-380707>

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=397716>

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Report Details - EON-380707

ICSR: 2063114
 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: 2019-02-24 16:31:40 EST

Reported Problem:
Problem Description: DCM and CHF diagnosed Aug 2018 We saw 1/11/19 - CHF still not well controlled Eating Purina Lamb and Rice - unlikely to be associated with DCM but reporting just in case Owner is now changing to different diet and will recheck in 3 months 2 other dogs eating same diet - we have not screened them yet. BNP = [B6] troponin [B6] but taurine normal ([B6] plasma [B6] whole blood)
Date Problem Started: 08/01/2018
Concurrent Medical Problem: No
Outcome to Date: Worse/Declining/Deteriorating

Product Information:
Product Name: Purina One Smart Blend Lamb and Rice dry
Product Type: Pet Food
Lot Number:
Product Use Information: **Description:** 1/2 cup twice daily since a puppy See diet history for additional details
Manufacturer /Distributor Information:
Purchase Location Information:

Animal Information:
Name: [B6]
Type Of Species: Dog
Type Of Breed: Doberman Pinscher
Gender: Male
Reproductive Status: Neutered
Weight: 29.9 Kilogram
Age: [B6] Years
Assessment of Prior Health: Excellent
Number of Animals Given the Product: 3
Number of Animals Reacted: 1
Owner Information:
 Owner Information provided: Yes
Contact: Name: [B6]
 Phone: [B6]
 Email: [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
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:	rpt_medical_record_preview B6 pdf
	Description:	Medical records
	Type:	Medical Records

Report Details - EON-380709

ICSR: 2063117
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: 2019-02-24 17:31:22 EST

Reported Problem:
Problem Description: Murmur and arrhythmia ausculted by RDVM. Echoed by another cardiologist who referred to us for study. Eating Fromm Lg Breed Adult (not grain free) so unclear if diet related. Screened other 2 standard poodles in household eating same diet and their hearts were fine. Owners have changed diet for all 3 dogs to Iams MiniChunks and we will recheck in 3 months
Date Problem Started: 01/29/2019
Concurrent Medical Problem: Yes
Pre Existing Conditions: B6
Outcome to Date: Stable

Product Information:
Product Name: Fromm Large Breed Adult dry
Product Type: Pet Food
Lot Number:
Package Type: BAG
Product Use Information: **Description:** Please see diet history for additional details
Manufacturer /Distributor Information:
Purchase Location Information:

Animal Information:
Name: B6
Type Of Species: Dog
Type Of Breed: Poodle - Standard
Gender: Male
Reproductive Status: Neutered
Weight: 24 Kilogram
Age: 16 Years
Assessment of Prior Health: Good
Number of Animals Given the Product: 3
Number of Animals Reacted: 1
Owner Information: **Owner Information provided:** Yes
Contact: **Name:** B6
Phone:
Email:
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	
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:	rpt_medical_record_preview.pdf		
	Description:	Medical records		
	Type:	Medical Records		

From: PFR Event <pfpreventcreation@fda.hhs.gov>
To: Cleary, Michael *; HQ Pet Food Report Notification; B6
Sent: 2/24/2019 10:36:57 PM
Subject: Fromm Large Breed Adult dry: Lisa Freeman - EON-380709
Attachments: 2063117-report.pdf; 2063117-attachments.zip

A PFR Report has been received and PFR Event [EON-380709] has been created in the EON System.

A "PDF" report by name "2063117-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 "2063117-attachments.zip" and is attached to this email notification.

Below is the summary of the report:

EON Key: EON-380709

ICSR #: 2063117

EON Title: PFR Event created for Fromm Large Breed Adult dry; 2063117

AE Date	01/29/2019	Number Fed/Exposed	3
Best By Date		Number Reacted	1
Animal Species	Dog	Outcome to Date	Stable
Breed	Poodle - Standard		
Age	16 Years		
District Involved	PFR-New England DO		

Product information

Individual Case Safety Report Number: 2063117

Product Group: Pet Food

Product Name: Fromm Large Breed Adult dry

Description: Murmur and arrhythmia ausculted by RDVM. Echoed by another cardiologist who referred to us for study. Eating Fromm Lg Breed Adult (not grain free) so unclear if diet related. Screened other 2 standard poodles in household eating same diet and their hearts were fine. Owners have changed diet for all 3 dogs to Iams MiniChunks and we will recheck in 3 months

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: 3

Number of Animals Reacted With Product: 1

Product Name	Lot Number or ID	Best By Date
Fromm Large Breed Adult dry		

Sender information

Lisa Freeman
200 Westboro Rd
North Grafton, MA 01536
USA

Owner information

B6
B6 USA

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

<https://eon.fda.gov/eon//browse/EON-380709>

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=397718>

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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The information is provided as part of the Federal-State Integration initiative. As a Commissioned Official and state government official, you are reminded of your obligation to protect non-public information, including trade secret and confidential commercial information that you receive from the U.S. Food and Drug Administration from further disclosure. The information in the report is intended for situational awareness and should not be shared or acted upon independently. Any and all actions regarding this information should be coordinated through your local district FDA office.

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 immediately.

Report Details - EON-380709

ICSR: 2063117
 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: 2019-02-24 17:31:22 EST

Reported Problem:
Problem Description: Murmur and arrhythmia ausculted by RDVM. Echoed by another cardiologist who referred to us for study. Eating Fromm Lg Breed Adult (not grain free) so unclear if diet related. Screened other 2 standard poodles in household eating same diet and their hearts were fine. Owners have changed diet for all 3 dogs to Iams MiniChunks and we will recheck in 3 months
Date Problem Started: 01/29/2019
Concurrent Medical Problem: Yes
Pre Existing Conditions: B6
Outcome to Date: Stable

Product Information:
Product Name: Fromm Large Breed Adult dry
Product Type: Pet Food
Lot Number:
Package Type: BAG
Product Use Information: **Description:** Please see diet history for additional details
Manufacturer /Distributor Information:
Purchase Location Information:

Animal Information:
Name: B6
Type Of Species: Dog
Type Of Breed: Poodle - Standard
Gender: Male
Reproductive Status: Neutered
Weight: 24 Kilogram
Age: 16 Years
Assessment of Prior Health: Good
Number of Animals Given the Product: 3
Number of Animals Reacted: 1
Owner Information: **Owner Information provided:** Yes
Contact: **Name:** B6
Phone:
Email:
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
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:	rpt_medical_record_preview.pdf	
	Description:	Medical records	
	Type:	Medical Records	

Client:

B6

Address:

All Medical Records

Patient: **B6**

Breed: Poodle

DOB: **B6**

Species: Canine

Sex: Male
(Neutered)

Home Phone:

B6

Work Phone:

Cell Phone: () -

Referring Information

B6

Client:

B6

Patient:

Initial Complaint:

Scanned Record

Initial Complaint:

Cardiology New - per Dr. Freeman

SOAP Text Feb 1 2019 9:52AM - Rush, John

Initial Complaint:

B6

Blood draw and ECG for DCM study

Client:
Patient:

B6

Disposition/Recommendations

Client:
Patient:

B6

Client: **B6**
Patient:

Cummings
Veterinary Medical Center
AT TUFTS UNIVERSITY

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:	Poodle
Sex:	Male (Neutered)
Age:	B6 Year's Old

Lab Results Report

Accession ID:			
Test	Results	Reference Range	Units



4/24

B6

Printed Sunday, February 24, 2019

Vitals Results

2/1/2019 1:49:26 PM	Weight (kg)	24.0000
---------------------	-------------	---------

Patient History

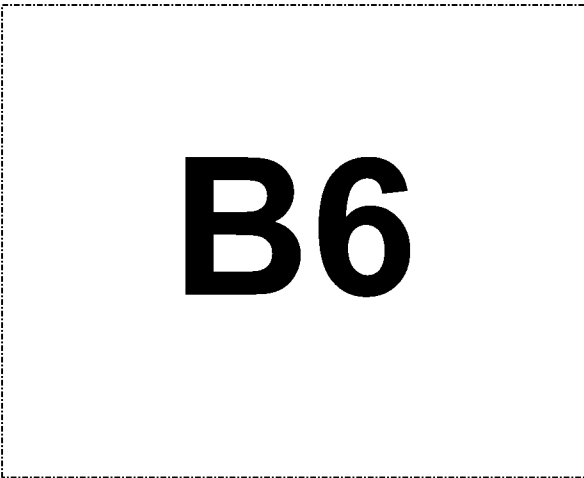
01/30/2019 12:06 PM	Appointment
02/01/2019 08:30 AM	UserForm
02/01/2019 08:30 AM	UserForm
02/01/2019 08:38 AM	UserForm
02/01/2019 09:06 AM	Purchase
02/01/2019 01:49 PM	Vitals
02/01/2019 05:45 PM	UserForm
02/06/2019 04:01 PM	Appointment

B6

Client: **B6**
Patient:

Patient History

02/18/2019 11:34 AM	Appointment
02/20/2019 09:24 AM	Purchase
02/20/2019 09:25 AM	Purchase
02/20/2019 09:25 AM	Purchase
02/20/2019 10:31 AM	UserForm
02/20/2019 05:20 PM	Appointment
02/20/2019 05:47 PM	Email
02/21/2019 04:30 PM	Purchase



B6

B6

B6

Male (Neutered)

Canine Poodle Beige

Patient ID: 438325

STANDARD CONSENT FORM

I am the owner, or agent for the owner, of the above described animal and have the authority to execute consent. I hereby authorize the Cummings School of Veterinary Medicine at Tufts University (herein after Cummings School) to prescribe for treatment of said animal according to the following terms and conditions.

Cummings School and its officers, agents and employees will provide such veterinary medical care as they deem reasonable and appropriate under the circumstances.

Cummings School and its officers, agents, and employees will use all reasonable care in the treatment of the above mentioned animal, but will not be liable for any loss or accident that may occur or any disease that may develop as a result of the care and treatment provided.

I understand that the above identified animal may be treated by Cummings School students under the supervision and assistance of Cummings School staff members.

In executing this form, I hereby expressly acknowledge that risks, benefits and alternative forms of treatment have been explained to me. I understand said explanation, and I consent to treatment. Should any additional treatments or diagnostics be required during the continued care of my animal, I understand that I will be given the opportunity to discuss and consent to these additional procedures. I understand that further or additional treatment may be required without an opportunity for discussion and consideration by me, in the case of the development of any life-threatening emergency during the continued care of my animal and I expressly consent to all such reasonable treatment as required. I realize and understand that results cannot be guaranteed.

If any equipment is left with the animal, it will be accepted with the understanding that Cummings School assumes no responsibility for any loss of equipment that may occur.

I agree to pick up the animal when notified that it is ready for release.

In the event the animal is not picked up, and if ten (10) days have expired since a registered letter was sent to the address given above, notifying me to call for the animal, the animal may be sold or otherwise disposed of in a humane manner and the proceeds applied to the charges incurred in caring and treating the animal. Failure to remove said animal will not and does not relieve me from obligation for the costs of services rendered.

I hereby grant to the Cummings School of Veterinary Medicine at Tufts University, its officers and employees (collectively referred to herein as Cummings School), and its agents and assigns (the Grantees) the irrevocable rights to photograph / videotape the operation or procedure to be performed, including appropriate and otherwise use such photographs and images for, and in connection with, a Grantee's medical, scientific, educational, and publicity purposes, by any means, methods and media (print and electronic) now known or, in the future, developed that the Grantee deems appropriate (provided that such photographs and images may not be used in for-profit commercials, unless such commercials are publicizing educational programs at Cummings School). As medical and surgical treatment necessitates the removal of tissue, cells, fluids or body parts of my animal, I authorize the Grantees to dispose of or use these tissues, cells, fluids or body parts for scientific and educational purposes.

I understand that a FINANCE CHARGE will be applied to all accounts unpaid after 30 days. The FINANCE CHARGE is computed on a monthly rate of 1.33% per month, which is an annual percentage rate of 16% applied to the average daily balance outstanding, with a minimum fee of \$50.

I do further agree that should any payment, or the full amount of the sum stated above, become overdue more than 20 days from the above-agreed upon time of payment or payments, the entire balance shall be considered in default and become due and payable. I further agree to be responsible for any or all collection agency and/or attorney fees necessary to collect the full amount.

I do further agree to comply with hours of visitation in conjunction with our Hospital's policy.

I have read, understand, and agree to accept the terms and conditions herein.

Owner's name:

Date: 2/1/2019

B6

2/1/19
Date

**If the individual admitting the animal is someone other than the legal owner,
please complete the portion below:**

The owner of the animal has granted me authority to obtain medical treatment and to bind this owner to pay the veterinary medical services provided at Cummings School pursuant to the terms and conditions described above

Authorized Agent - Please Print

Agent's Signature

Street Address

Date

Town/City State Zip

Discharge Instructions

Patient

Name: B6

Species: Canine

Breed: Male (Neutered) Poodle

Birthdate: B6

Owner

Name: B6

Address: B6

Patient ID: 438325

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

B6

Cardiology Resident:

B6

Cardiology Technician:

B6

Also Veterinary Nutritionist Dr. Lisa Freeman

Student: B6

Admit Date: 1/30/2019 10:27:28 AM

Discharge Date: 2/1/2019

Diagnoses: Dilated cardiomyopathy (DCM) with congestive heart failure, ventricular arrhythmias (ventricular tachycardia, ventricular bigeminy), short runs of supraventricular arrhythmias

Case Summary:

Thank you for bringing B6 to Tufts Cardiology Service for evaluation of his 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. If you notice that B6 breathing rate is faster than normal at home we will want to have chest x-rays taken. B6 also have some arrhythmias that are likely secondary to his heart disease. We will be starting him on some medications to try to limit the arrhythmias that he is experiencing. We would like to adjust B6 diet and we provided some dietary recommendations below.

Diagnostic test results and findings:

- **Echocardiogram findings:** The walls of the chambers of his heart are thinner than normal and he has reduced contractile function. The left ventricle and left atrium are dilated.
- **ECG findings:** The ECG showed arrhythmias that are mostly ventricular in origin but there are also some from the upper heart chamber as well.
- **Labwork findings:** We will call you when we have the results of his bloodwork. Most of it should come back

tomorrow, but some of it will take a week or so to return.

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 give another dose, and if after giving 2 doses of furosemide 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.
- 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/>)

Your dog's usual diet may also have more sodium than recommended - we want him/her to continue to eat his/her 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, if you are attached to the current diet you can research the amount of sodium in the diet to ensure that the sodium content is similar to those on the list.

- o The FDA is currently investigating an apparent association between diet and a type of heart disease called dilated cardiomyopathy. The exact cause is still unclear, but it appears to be associated with boutique diets and those containing exotic ingredient or are grain-free. Therefore, we are currently recommending that dogs do not eat these types of diets.
- o We recommend switching **B6** to commercial diet made by a well-established company that is not grain-free and does not contain any exotic ingredients, such as kangaroo, duck, lamb, venison, lentils, peas, beans, buffalo, tapioca, barley, and chickpeas.
- o The FDA issued a statement regarding this issue (<https://www.fda.gov/AnimalVeterinary/NewsEvents/CVMUpdates/uom613305.htm>) and a recent article published by Dr. Lisa Freeman on the Cummings School's Pet Foodology blog can further explain these findings (<http://vetnutrition.tufts.edu/2018/06/a-broken-heart-risk-of-heart-disease-in-boutique-or-grain-free-diets-and-exotic-ingredients/>).
- o Our nutritionists have compiled a list of dog foods that are good options for dogs with heart disease.

Dry Food Options:

Royal Canin Early Cardiac (veterinary diet)
Purina Pro Plan Adult Weight Management
Purina Pro Plan Bright Mind Adult Small Breed Formula
Iams Chunks

Canned Food Options:

Hill's Science Diet Adult 1-6 Healthy Cuisine Roasted Chicken, Carrot, and Spinach Stew
Royal Canin Mature 8+

If your dog has special nutritional needs or requires a homecooked diet, we recommend you schedule an appointment with our nutritionists (508-887-4696).

Exercise Recommendations:

We recommend limited activity. Leash walking only is ideal, and short walks to start. 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:

Thank you for enrolling **B6** in our clinical study. Ideally, **B6** would get an ECG (or an Alivacor reading sent to us) in around two weeks once he has had some time on the anti-arrhythmic medication. It would also be great if you can obtain an Alivacor reading if **B6** has an episode of collapse or abnormal behavior.

A recheck of liver values, kidney values, and electrolytes is recommended in 2-3 weeks and then about 1 month after that, so we can keep an eye on the liver values, kidney values, and potassium. This can be done at your primary care veterinarian.

B6 is supposed to have an appointment here at Tufts in about 3 months. We will perform an echo, ECG and bloodwork at this time.

Thank you for entrusting us with **B6** care! It was a pleasure to meet you all today and he was a very good boy. Please contact our Cardiology liaison at (508)-887-4696 or email us at 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/cvmc/clinical-studies

Case: B6

Owner: B6

Discharge Instructions

B6

B6
B6 Male (Neutered)
Canine Poodle Beige
Patient ID: 438325

Outside Prescription Log

B6

- 3. Date:
Clinician:
Prescription:
Pharmacy sent to:
Completed by:
Origin of request:

- 4. Date:
Clinician:
Prescription:
Pharmacy sent to:
Completed by:
Origin of request:

- 5. Date:
Clinician:
Prescription:
Pharmacy sent to:
Completed by:
Origin of request:

- 6. Date:
Clinician:
Prescription:
Pharmacy sent to:
Completed by:

Origin of request:

7. Date:

Clinician:

Prescription:

Pharmacy sent to:

Completed by:

Origin of request:

8. Date:

Clinician:

Prescription:

Pharmacy sent to:

Completed by:

Origin of request:

9. Date:

Clinician:

Prescription:

Pharmacy sent to:

Completed by:

Origin of request:

10. Date:

Clinician:

Prescription:

Pharmacy sent to:

Completed by:

Origin of request:

Cummings Veterinary Medical Center

AT TUFTS UNIVERSITY

Cardiology Liaison: 508-887-4696

B6

Patient ID: 438325

B6

Canine
10 years Old Male (Neutered) Poodle
Beige

Cardiology Appointment Report Enrolled in DCM Study

Date: 2/1/2019

Attending Cardiologist:

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

B6

Cardiology Resident:

B6

Cardiology Technician:

B6

Presenting Complaint:

DCM diagnosed 1/29/19 by **B6** (VPCs but asymptomatic). Eating BEG diet x 3 years

B6

Concurrent Diseases:

B6

General Medical History:

B6

Diet and Supplements: Fromm Large Breed Adult dry

Cardiovascular History:

Prior CHF diagnosis? no

Prior heart murmur? yes

Prior ATE? no

Prior arrhythmia? yes

Monitoring respiratory rate and effort at home? no

Cough? maybe

Shortness of breath or difficulty breathing? no

Syncope or collapse? no

Sudden onset lameness? chronic lameness and weakness back legs

Exercise intolerance? limited by above

Current Medications Pertinent to CV System:

Medication: **B6**

B6

Medication:

B6

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

Murmur location/description: left apical

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 to
- 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: minimal exam

- Normal
- Hepatomegaly
- Mild ascites
- Marked ascites

- Abdominal distension

Problems:

Prior DCM, arrhythmia, +/- cough/gag from laryngeal disease vs other

Diagnostic plan:

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

B6

Assessment and recommendations:

DCM with VPCs and APCs and some runs of SVT and ventricular tachycardia. Suspect the cough/gag is related to more chronic laryngeal disease, but the dog is breathing with slightly more effort than normal at rest. DCM may be related to diet or may be unrelated. Recommend continuing but maybe at since maybe arrhythmias more frequent now than before ? vs day-to-day variation?, give furosemide if dyspnea develops, ideally start low dos if tolerated (potassium is a bit high on recent bloodwork so will have to watch this serially too). The dog has enough arrhythmia that I would likely start an antiarrhythmic today might be the choice, but the dog has increased liver enzymes - if we start this then follow LFs closely. I am not sure if sotalol would be tolerated. is T1D and might not get supraventricular ectopy, but this might be an option if is not well tolerated. Diet change +/- taurine is recommended. Recheck ECG and kidney values, potassium, and liver enzymes in about 2 weeks. Discussed Alivacor option with owners.

Final Diagnosis:

DCM with cardiac arrhythmias

Heart Failure Classification Score:

ISACHC Classification:

- Ia
- Ib close to II
- II
- IIIa
- IIIb

ACVIM Classification:

- A
- B1
- B2 close to C
- C
- D

M-Mode

IVSd	cm
LVIDd	cm
LVPWd	cm
IVSs	cm
LVIDs	cm
LVPWs	cm
EDV(Teich)	ml
ESV(Teich)	ml
EF(Teich)	%
%FS	%
SV(Teich)	ml
Ao Diam	cm
LA Diam	cm
LA/Ao	
Max LA	cm
TAPSE1	cm

M-Mode Normalized

IVSdN	(0.290 - 0.520)
LVIDdN	(1.350 - 1.730) !
LVPWdN	(0.330 - 0.530)
IVSsN	(0.430 - 0.710)
LVIDsN	(0.790 - 1.140) !
LVPWsN	(0.530 - 0.780) !
Ao Diam N	(0.680 - 0.890)
LA Diam N	(0.640 - 0.900) !

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
LV Major	cm
LV Minor	cm
Sphericity Index	
LVLd LAX	cm

B6

LVAd LAX
LVEDV A-L LAX
LVEDV MOD LAX
LVLS LAX
LVA_s 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
R-R
HR
CO A-L LAX
CO MOD LAX

Doppler

MR Vmax
MR maxPG
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
TR Vmax
TR maxPG

B6

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Discharge Instructions
Cardiology Technician

Patient

Name: B6

Species: Canine

Breed: Male (Neutered) Poodle

Birthdate: B6

Owner

Name: B6

Address: B6

Patient ID: 438325

Attending Cardiologist:

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

B6

Cardiology Resident:

B6

Cardiology Technician:

B6

Date: 2/20/2019

We saw B6 today for an ECG and a chemistry panel. We are happy to hear he is doing well at home, although he has been a bit more clingy at night in the last week. Dr Rush saw a bit more arrhythmia today on his ECG than he would like to see. His bloodwork looked ok, although his liver values are still moderately elevated. He would like to add in a low dose of a beta blocker called Carvedilol.

Medications:

B6

B6

Recheck Visits: A recheck visit is scheduled for

May 30th at 10:00am

Thank you for bringing **B6** to see us today, he is such a sweet boy!

Kind Regards,

B6

Thank you for entrusting us with **B6** care. Please contact our Cardiology liaison at (508)-887-4696 or email us at 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.

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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

Case: **B6**

Owner: **B6**

Discharge Instructions

Cummings
Veterinary Medical Center
AT TUFTS UNIVERSITY

B6

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

B6
B6 Male (Neutered)
Canine Poodle Beige
B6

2/12/2019

Dear B6

Thank you for referring B6 with their pet B6

If you have any questions, or concerns, please contact us at 508-887-4988.

Thank you,

John Rush DVM, DACVIM (Cardiology), DACMECC

Cummings
Veterinary Medical Center
AT TUFTS UNIVERSITY

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

B6

B6
B6 Male (Neutered)
Canine Poodle Beige
B6

2/12/2019

Dear B6

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If you have any questions, or concerns, please contact us at 508-887-4988.

Thank you,

John Rush DVM, DACVIM (Cardiology), DACMECC

Cummings
Veterinary Medical Center
AT TUFTS UNIVERSITY

B6

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

B6
B6 Male (Neutered)
Cane Corso Beige
B6

2/23/2019

Dear B6

Thank you for referring B6 with their pet B6

If you have any questions, or concerns, please contact us at 508-887-4988.

Thank you,

John Rush DVM, DACVIM (Cardiology), DACMECC

Cummings
Veterinary Medical Center
AT TUFTS UNIVERSITY

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B6

B6

Male (Neutered)

Canine Poodle Beige

B6

2/23/2019

Dear B6

Thank you for referring B6 with their pet B6

If you have any questions, or concerns, please contact us at 508-887-4988.

Thank you,

John Rush DVM, DACVIM (Cardiology), DACMECC

Report Details - EON-380720

ICSR: 2063120
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: 2019-02-24 19:08:40 EST

Reported Problem:

Problem Description:	Annual RDVM visit identified murmur. Echo done by mobile ultrasonographer showed DCM. We evaluated as part of study 2/1/19 - has DCM Eating BEG diet Changed to Pro Plan Weight management dry and we will recheck in 3 months
Date Problem Started:	02/01/2019
Concurrent Medical Problem:	Yes
Pre Existing Conditions:	B6
Outcome to Date:	Stable

Product Information:

Product Name:	Earthborn Coastal Catch dry
Product Type:	Pet Food
Lot Number:	
Package Type:	BAG
Product Use Information:	Description: Please see diet history for more info
Manufacturer /Distributor Information:	
Purchase Location Information:	

Animal Information:

Name:	B6
Type Of Species:	Dog
Type Of Breed:	Retriever - Golden
Gender:	Male
Reproductive Status:	Neutered
Weight:	36.3 Kilogram
Age:	B6 Years
Assessment of Prior Health:	Excellent
Number of Animals Given the Product:	1
Number of Animals Reacted:	1
Owner Information:	Owner Information provided: Yes
Contact:	Name: B6 Phone: B6 Email: 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	
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:	rpt_medical_record_preview.pdf		
	Description:	Medical records		
	Type:	Medical Records		

From: PFR Event <pfpreventcreation@fda.hhs.gov>
To: Cleary, Michael *; HQ Pet Food Report Notification; B6
Sent: 2/25/2019 12:17:08 AM
Subject: Earthborn Coastal Catch dry: Lisa Freeman - EON-380720
Attachments: 2063120-report.pdf; 2063120-attachments.zip

A PFR Report has been received and PFR Event [EON-380720] has been created in the EON System.

A "PDF" report by name "2063120-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 "2063120-attachments.zip" and is attached to this email notification.

Below is the summary of the report:

EON Key: EON-380720

ICSR #: 2063120

EON Title: PFR Event created for Earthborn Coastal Catch dry; 2063120

AE Date	02/01/2019	Number Fed/Exposed	1
Best By Date		Number Reacted	1
Animal Species	Dog	Outcome to Date	Stable
Breed	Retriever - Golden		
Age	B6 Years		
District Involved	PFR-New England DO		

Product information

Individual Case Safety Report Number: 2063120

Product Group: Pet Food

Product Name: Earthborn Coastal Catch dry

Description: Annual RDVM visit identified murmur. Echo done by mobile ultrasonographer showed DCM. We evaluated as part of study 2/1/19 - has DCM Eating BEG diet Changed to Pro Plan Weight management dry and we will recheck in 3 months

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
Earthborn Coastal Catch 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-380720>

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=397729>

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 immediately.

Report Details - EON-380720

ICSR: 2063120
 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: 2019-02-24 19:08:40 EST

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Problem Description: Annual RDVM visit identified murmur. Echo done by mobile ultrasonographer showed DCM. We evaluated as part of study 2/1/19 - has DCM Eating BEG diet Changed to Pro Plan Weight management dry and we will recheck in 3 months
Date Problem Started: 02/01/2019
Concurrent Medical Problem: Yes
Pre Existing Conditions: B6
Outcome to Date: Stable

Product Information:
Product Name: Earthborn Coastal Catch dry
Product Type: Pet Food
Lot Number:
Package Type: BAG
Product Use Information: **Description:** Please see diet history for more info
Manufacturer /Distributor Information:
Purchase Location Information:

Animal Information:
Name: B6
Type Of Species: Dog
Type Of Breed: Retriever - Golden
Gender: Male
Reproductive Status: Neutered
Weight: 36.3 Kilogram
Age: B6 Years
Assessment of Prior Health: Excellent
Number of Animals Given the Product: 1
Number of Animals Reacted: 1
Owner Information: **Owner Information provided:** Yes
Contact: **Name:** B6
Phone: B6
Email: 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	
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:	rpt_medical_record_preview.pdf		
	Description:	Medical records		
	Type:	Medical Records		

All Medical Records

Client:

B6

Address:

Patient:

B6

Breed: Golden Retriever

DOB:

B6

Species: Canine

Sex: Male

(Neutered)

Home Phone:
Work Phone:
Cell Phone:

B6

Referring Information

B6

Client:

B6

Patient:

Initial Complaint:

Emergency

SOAP Text Jun 20 2017 11:44PM - B6

6/20/2017 11:44:47 PM EXAM, GENERAL

Subjective (S)

Dx wit B6 at RDVM today - got IV fluids and B6 by injection (owner didn't give B6 at home orally). He was seen at RDVM because he was panting and lethargic and had nasal discharge. He was grunting and was not feeling well at home. Wretching at home before presentation. Got bully stick yesterday night. Other owner took stick out of mouth the night before - unsure if he was chewing on it or what. Been slowing down a little past couple months. No breathing difficulty.

Curren meds:

B6

Objective (O)

B6

H/L: NMA, NSR, SSFP; severe inspiratory stridor/dyspnea; harsh BVS bilaterally, no crackles/wheezes

B6

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

Assessment (A)

B6

Plan (P)

B6

Diagnostics:

NOVA

CBC/Chemistry

Thoracic radiographs in the AM

Discussed concern for severe respiratory crisis. Patient would likely need to be intubated overnight. Plan was to just stabilize overnight and reassess in the AM - at this point I was not completely sure **B6** was a straight forward LARPAR case due to the severe inflammation present. I would like to give him the night for the swelling to go down and recheck tomorrow. If necessary, a tieback can be performed - owner aware of higher anesthetic risk and aspiration pneumonia. Expecting update by noon but mentioned she might call by 10 am for update.

Deposit and estimate: **B6**

SOAP completed by: **B6**

B6

6/21/2017 4:48:33 PM

Prescribed - **B6**
Instructions

6/21/2017 5:15:30 PM

Prescribed - **B6**
Instructions

SOAP Text Jun 21 2017 6:14PM **B6**

Doctor: **B6**

Presenting complaint:

B6

Diagnostics

B6

Client: **B6**
Patient:

Treatments

B6

Exam:

Subjective (S): attitude: quiet, sedated

BCS: 7/9

Hydration: normal

Objective (O)

B6

H/L: NMA NSR fPSS normal BV sounds bilaterally with normal RR and RE, snores at rest

B6

Assessment (A)

B6

Dx Plan (P)

B6

Tx Plan

B6

Communication Summary:

See CComm notes

SOAP Text Jun 22 2017 8:00AM **B6**

Doctor: **B6**

Presenting complaint:

B6

Client: **B6**
Patient:

B6

Diagnostics

B6

6/21

B6

Treatments

B6

Exam:

Subjective (S): attitude: quiet, sedated

BCS: 7/9

Hydration: normal

Objective (O)

B6

H/L:NMA NSR fPSS normal BV sounds bilaterally with normal RR and RE, snores at rest

B6

Assessment (A)

B6

Plan

B6

histo pending

Communication Summary:

See CComm notes

6/22/2017 10:55:51 AM **B6**

6/22/2017 11:27:48 AM **B6**

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

Instructions - **B6**

6/22/2017 11:29:01 AM

B6

SOAP Text Jun 23 2017 10:47AM - **B6**

Doctor: **B6**

Presenting complaint:

B6

Diagnostics

B6

6/21

B6

6/22

B6

Treatments

B6

Exam:

Subjective (S): attitude: quiet, interactive

BCS: 7/9

Hydration: normal

Objective (O)

B6

H/L:NMA NSR fPSS normal BV sounds bilaterally with normal RR and RE, minimal airway noise

B6

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

Rectal:np

Assessment (A) **B6**

Plan **B6**

Communication Summary:
See CComm notes **B6**

6/23/2017 4:39:18 PM
Prescribed **B6**
Instructions **B6**

6/23/2017 4:39:37 PM
Prescribed **B6**
Instructions **B6**

6/23/2017 5:03:32 PM
Prescribed **B6**
Instructions **B6**

SOAP Text Jun 24 2017 2:59PM **B6**

Doctor: **B6**

Presenting complaint: **B6**

Diagnostics
6/20 **B6**

6/21 **B6**

6/22 **B6**

Treatments

Client: **B6**
Patient:

Current **B6**

Exam:
Subjective (S): attitude: quiet, interactive
BCS: 7/9
Hydration: normal

Objective (O)

B6

H/L:NMA NSR fPSS normal BV sounds bilaterally with normal RR and RE, minimal airway noise - but after eating was more stertorous

B6

Assessment (A)

B6

Plan

B6

Communication Summary:
See CComm notes

6/25/2017 9:14:51 AM

Prescribed **B6**
Instructions:

SOAP Text Jun 25 2017 4:06PM - **B6**

Doctor: **B6**

Presenting complaint:

B6

Diagnostics
6/20

B6

Client: **B6**
Patient:

6/21

B6

6/22

B6

Treatments

B6

Exam:

Subjective (S): attitude: quiet, interactive

BCS: 7/9

Hydration: normal

Objective (O)

B6

H/L:NMA NSR fPSS normal BV sounds bilaterally with normal RR and RE, minimal airway noise

B6

Assessment (A)

B6

Plan

B6

Communication Summary:

See CComm notes

SOAP Text Jun 26 2017 9:19AM **B6**

B6 6/26/17

Presenting complaint:

B6

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

B6

Overnight update: Clinically well, but had a fever of 105.7 at 10PM. resolved with time and **B6**

Diagnostics
6/20

B6

6/21

B6

6/22

B6

Treatments

B6

Exam:

Subjective (S): attitude: BAR, interactive
BCS: 7/9
Hydration: normal

Objective (O)

B6

H/L: NMA NSR fPSS normal BV sounds bilaterally with normal RR and RE, minimal airway noise

B6

Assessment (A)

B6

Plan

B6

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

Communication Summary **B6**
B6

6/26/2017 2:45:50 PM

Prescribed - **B6**
Instructions **B6**

6/26/2017 2:46:40 PM

Prescribed - **B6**
Instructions **B6**

6/26/2017 2:47:03 PM

Prescribed - **B6**
Instructions **B6**

Initial Complaint:

Emergency

SOAP Text Jan 14 2019 12:03PM - B6

EXAM, GENERAL 1/14/19

Subjective (S)

B6 MC Golden - this week lethargic, o' thinks very lethargic yesterday and could have died. Having to encourage him to get up out of bed, doesn't want to do anything, but one day did go for a long walk. Yesterday had episode in afternoon where he was extremely lethargic but recovered later so didn't have evaluated. No V/D, no C/S or oculonasal discharge. No changes in appetite. Full bloodwork 2 weeks ago, noted new murmur grade 2/6, recommended echo which is scheduled for Feb 5th. O wants sooner.

has been trying to lose weight, T4 checked and was low normal, tick negative 2 weeks ago. Has hot spot that was noted on Friday, put cone on but no topical or oral medications for it, was covered with bacitracin temporarily. Previous hot spots. **B6**

Diet: Earthborne Coastal grain free kibble - good appetite, drinking normally. Hx of **B6**

B6

Medication: **B6**

Vaccines: **B6**

Travel: None.

Objective (O)

B6

H/L: Grade I-II/VI left systolic murmur, FPSS, no arrhythmia, eupneic, normal BV sounds bilaterally

B6

Client: **B6**
Patient:

B6

Assessment (A)

A1: Lethargy: diagnosis open

A2: New heart murmur: DMVD vs. DCM vs. other

Plan (P)

-Recommend recheck CBC/chem/UA - declined

B6

-Keep scheduled appointment with Cardio for echo

Client communication: Patient presented to ER for hot spot and was placed in exam room to wait due to dog aggression/fear aggression. Met with client - introduced myself and client revealed that she was actually here because **B6** was displaying extreme lethargy yesterday and she is concerned for cardiac disease, as her vet recently diagnosed a heart murmur and recommended a cardio consult and workup, which is scheduled for February. Client is very concerned that lethargy is cardiac related and wants echo sooner. She describes patient as non responsive and unwilling to get up yesterday, afraid he might die, but did not want to seek care yesterday. He seemed better in the afternoon and went for his normal walk. Explained to client that I am unlikely able to get a cardio consult today for a stable patient, unless we find significant changes on exam such as lung changes or arrhythmia, and again don't suspect that lethargy will be cardiac in origin but need to perform a full exam. Discussed exam findings - normal patient, low grade murmur, warrants workup but not today. Offered recheck bloodwork since done 2 weeks ago but lethargy is new, client declined. Would like treatment for hot spot and will keep cardio appointment.

SOAP completed by: **B6**

Initial Complaint:

Cardiology Recheck - DCM study - will be fasted - fearful dog will be waiting in car

SOAP Text Feb 1 2019 1:48PM - Rush, John

Disposition/Recommendations

Client:
Patient:

B6

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

Cummings
Veterinary Medical Center
 AT TUFTS UNIVERSITY

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:	Golden Retriever
Sex:	Male (Neutered)
Age:	B6 Years Old

Lab Results Report

Nova Full Panel-ICU **6/20/2017 11:58:25 PM** **Accession ID: B6**

Test	Results	Reference Range	Units
SO2%	B6	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
NOVA SAMPLE		0 - 0	



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

FiO2	B6	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

Nova Full Panel-ICU 6/21/2017 12:14:52 AM Accession ID: **B6**

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

Nova Full Panel-ICU 6/21/2017 2:13:12 AM Accession ID: **B6**

Test	Results	Reference Range	Units
WBC (ADVIA)	B6	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
RETIC(ADVIA)		0.2 - 1.6	%
RETICS (ABS) ADVIA		14.7 - 113.7	K/uL
COMMENTS (HEMATOLOGY)		0 - 0	

Nova Full Panel-ICU 6/21/2017 2:13:27 AM Accession ID: **B6**

Test	Results	Reference Range	Units
GLUCOSE	B6	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
Λ/G RATIO		0.7 - 1.6	
SODIUM		140 - 150	mEq/L



Client: **B6**
 Patient:

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	B6	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

Nova Full Panel-ICU **6/21/2017 2:13:10 AM** **Accession ID: B6**

Test	Results	Reference Range	Units
SEGS%		43 - 86	%
LYMPHS%		7 - 47	%
MONOS%		1 - 15	%
EOS%		0 - 16	%
SEGS (AB)ADVIA	B6	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			
RBC MORPHOLOGY		0 - 0	
See comment(s)			
Some erythrocytes are smudged and their morphologic features are difficult to assess due to the effects of lipemia.			
POIKILOCYTOSIS	B6	0 - 0	

Nova Full Panel-ICU **6/21/2017 12:35:00 PM** **Accession ID: B6**

Test	Results	Reference Range	Units
		0 - 0	

AP results
 CYTOLOGY REPORT

Clinical History:
 Sample Source: Mass (base of tongue)
 Slides Received: 1



Client: **B6**
Patient:

Microscopic Findings:

B6

Cytologic Interpretation:

B6

Comments:

B6

Electronically Signed by 6/21/2017@1:11 PM

B6

0 - 0

AP results
CYTOLOGY REPORT

Clinical History:

Sample Source: Mass: **B6**

Slides Received: 1

Microscopic Findings:

B6

Cytologic Interpretation:

B6

Comments:

B6

Electronically Signed by 6/21/2017@1:11 PM

B6

0 - 0

AP results
CYTOLOGY REPORT

Clinical History:

Sample Source: Mass: **B6**

Slides Received: 1

Microscopic Findings:

B6



B6

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

B6

Cytologic Interpretation:

B6

Comments:

B6

Electronically Signed by 6/21/2017@1:11 PM

B6

Nova Full Panel-ICU	6/21/2017 12:35:00 PM	Accession ID:	B6
Test	Results	Reference Range	Units

0 - 0

AP results
PRELIMINARY BIOPSY REPORT

Microscopic Findings:

B6

Gross Description:

B6

Electronically Signed by 6/23/2017@3:23 PM

B6

0 - 0

AP results
PRELIMINARY BIOPSY REPORT

Microscopic Findings:

B6

Gross Description:

B6

Electronically Signed by 6/23/2017@3:23 PM

B6

0 - 0

AP results
PRELIMINARY BIOPSY REPORT



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

Microscopic Findings:

B6

Gross Description:

B6

Electronically Signed by 6/23/2017@3:23 PM

B6

0 - 0

AP results
BIOPSY REPORT

Diagnosis:

B6

Microscopic Findings:

B6

Gross Description:

B6

Comment:

B6

Electronically Signed by 6/30/2017@11:19 AM

B6

0 - 0

AP results
BIOPSY REPORT

Diagnosis:

B6

Microscopic Findings:

B6

Gross Description:



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

B6

Comment:
B6

Electronically Signed by 6/30/2017@11:19 AM
B6

0 - 0

AP results
BIOPSY REPORT

Diagnosis:
B6

Microscopic Findings:
B6

Gross Description:
B6

Comment:
B6

Electronically Signed by 6/30/2017@11:19 AM
B6

Nova Full Panel-ICU		6/26/2017 11:34:12 AM	Accession ID: B6
Test	Results	Reference Range	Units
WBC (ADVIA)	B6	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
RETIC(ADVIA)		0.2 - 1.6	%



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

RETICS (ABS) ADVIA **B6** 14.7 - 113.7 K/uL
COMMENTS (HEMATOLOGY) 0 - 0

Nova Full Panel-ICU 6/26/2017 11:34:10 AM Accession ID: **B6**

Test	Results	Reference Range	Units
SEGS%	B6	43 - 86	%
LYMPIIS%		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			
ACANTHOCYTES		0 - 0	
POIKILOCYTOSIS		0 - 0	



Vitals Results

6/21/2017 12:08:06 AM Notes
6/21/2017 1:11:50 AM Respiratory Rate
6/21/2017 1:14:59 AM Temperature (F)
6/21/2017 1:15:05 AM Heart Rate (/min)
6/21/2017 1:15:11 AM Respiratory Rate
6/21/2017 1:51:23 AM Weight (kg)
6/21/2017 2:09:14 AM Nursing note
6/21/2017 3:06:54 AM Respiratory Rate
6/21/2017 4:08:04 AM Quantify IV fluids (mls)
6/21/2017 4:15:21 AM Notes
6/21/2017 4:15:37 AM Heart Rate (/min)
6/21/2017 4:15:42 AM Respiratory Rate
6/21/2017 4:56:54 AM Respiratory Rate
6/21/2017 5:29:10 AM Respiratory Rate
6/21/2017 5:29:33 AM Heart Rate (/min)
6/21/2017 8:00:07 AM Respiratory Rate
6/21/2017 8:05:00 AM Quantify IV fluids (mls)
6/21/2017 8:05:46 AM Heart Rate (/min)
6/21/2017 8:15:57 AM Notes

B6

Client:
Patient:

B6

Vitals Results

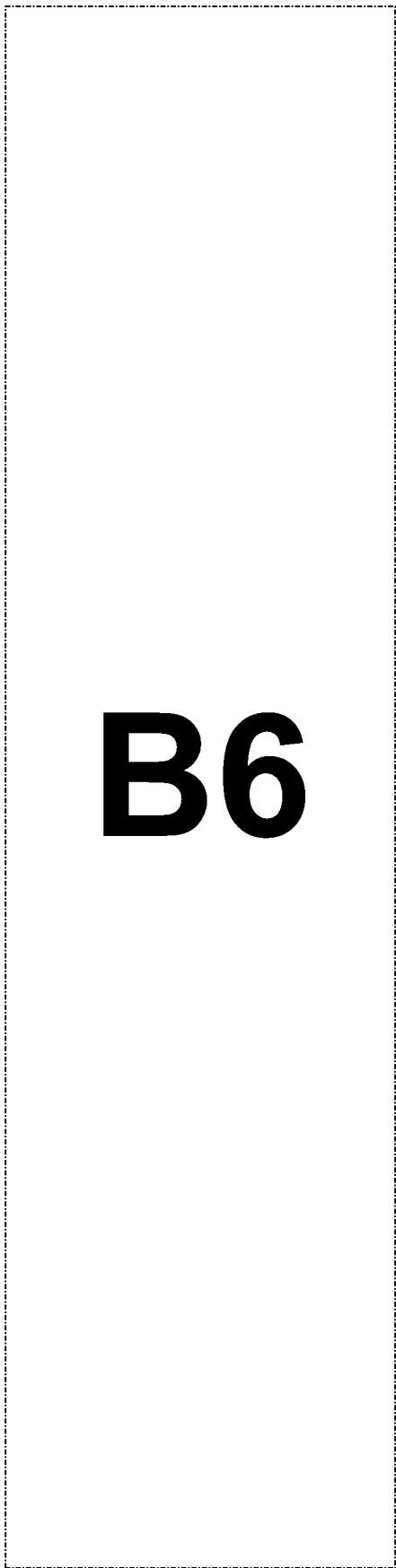
6/21/2017 8:42:45 AM	Eliminations
6/21/2017 9:05:55 AM	Respiratory Rate
6/21/2017 9:56:24 AM	Respiratory Rate
6/21/2017 10:20:08 AM	Heart Rate (/min)
6/21/2017 10:20:17 AM	Temperature (F)
6/21/2017 11:20:32 AM	Respiratory Rate
6/21/2017 11:28:48 AM	Quantify IV fluids (mls)
6/21/2017 11:29:15 AM	Nursing note
6/21/2017 11:57:30 AM	Heart Rate (/min)
6/21/2017 11:57:41 AM	Respiratory Rate
6/21/2017 1:34:24 PM	Respiratory Rate
6/21/2017 1:42:09 PM	Heart Rate (/min)
6/21/2017 1:42:15 PM	Respiratory Rate
6/21/2017 2:52:19 PM	Respiratory Rate
6/21/2017 3:47:24 PM	Quantify IV fluids (mls)
6/21/2017 3:49:14 PM	Heart Rate (/min)
6/21/2017 3:50:21 PM	Nursing note
6/21/2017 3:54:12 PM	Respiratory Rate
6/21/2017 4:25:03 PM	Respiratory Rate
6/21/2017 4:51:03 PM	Nursing note
6/21/2017 5:26:32 PM	Temperature (F)
6/21/2017 5:26:51 PM	Heart Rate (/min)
6/21/2017 5:53:46 PM	Respiratory Rate
6/21/2017 6:53:35 PM	Respiratory Rate
6/21/2017 7:02:31 PM	Quantify IV fluids (mls)
6/21/2017 7:13:37 PM	Heart Rate (/min)
6/21/2017 7:16:53 PM	Amount eaten
6/21/2017 7:23:54 PM	Eliminations
6/21/2017 7:30:08 PM	Notes
6/21/2017 7:59:23 PM	Respiratory Rate
6/21/2017 8:58:25 PM	Respiratory Rate
6/21/2017 9:18:22 PM	Eliminations
6/21/2017 9:30:08 PM	Heart Rate (/min)
6/21/2017 9:48:38 PM	Respiratory Rate
6/21/2017 10:49:14 PM	Respiratory Rate
6/21/2017 11:02:12 PM	Quantify IV fluids (mls)
6/21/2017 11:46:39 PM	Heart Rate (/min)
6/21/2017 11:46:47 PM	Respiratory Rate

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Client: **B6**
Patient:

Vitals Results

6/22/2017 12:14:17 AM	Nursing note
6/22/2017 12:54:08 AM	Respiratory Rate
6/22/2017 1:04:11 AM	Heart Rate (/min)
6/22/2017 1:04:28 AM	Temperature (F)
6/22/2017 1:26:28 AM	Respiratory Rate
6/22/2017 2:53:02 AM	Respiratory Rate
6/22/2017 3:09:30 AM	Quantify IV fluids (mls)
6/22/2017 3:09:56 AM	Heart Rate (/min)
6/22/2017 3:10:07 AM	Urine Output (mls)
6/22/2017 3:35:40 AM	Respiratory Rate
6/22/2017 4:52:22 AM	Respiratory Rate
6/22/2017 4:54:33 AM	Heart Rate (/min)
6/22/2017 5:53:00 AM	Respiratory Rate
6/22/2017 5:53:58 AM	Notes
6/22/2017 6:34:23 AM	Respiratory Rate
6/22/2017 7:46:42 AM	Quantify IV fluids (mls)
6/22/2017 7:47:07 AM	Respiratory Rate
6/22/2017 7:54:10 AM	Heart Rate (/min)
6/22/2017 7:54:39 AM	Nursing note
6/22/2017 9:53:59 AM	Nursing note
6/22/2017 10:52:03 AM	Respiratory Rate
6/22/2017 10:52:31 AM	Temperature (F)
6/22/2017 10:52:39 AM	Heart Rate (/min)
6/22/2017 10:53:42 AM	Eliminations
6/22/2017 10:55:51 AM	Anesthesia Notes
6/22/2017 11:23:11 AM	Quantify IV fluids (mls)
6/22/2017 11:26:32 AM	Heart Rate (/min)
6/22/2017 11:28:14 AM	Respiratory Rate
6/22/2017 11:57:04 AM	Temperature (F)
6/22/2017 12:47:32 PM	Respiratory Rate
6/22/2017 1:03:39 PM	Eliminations
6/22/2017 1:46:43 PM	Heart Rate (/min)
6/22/2017 1:46:49 PM	Respiratory Rate
6/22/2017 2:51:18 PM	Respiratory Rate
6/22/2017 3:23:43 PM	Quantify IV fluids (mls)
6/22/2017 3:29:26 PM	Amount eaten



Client:
Patient:

B6

Vitals Results

6/22/2017 3:32:42 PM	Eliminations
6/22/2017 3:34:45 PM	Heart Rate (/min)
6/22/2017 3:54:20 PM	Respiratory Rate
6/22/2017 3:54:36 PM	Notes
6/22/2017 4:00:16 PM	Eliminations
6/22/2017 4:32:14 PM	Respiratory Rate
6/22/2017 4:53:11 PM	Respiratory Rate
6/22/2017 5:31:23 PM	Eliminations
6/22/2017 6:02:43 PM	Respiratory Rate
6/22/2017 6:03:03 PM	Temperature (F)
6/22/2017 6:14:36 PM	Heart Rate (/min)
6/22/2017 7:00:35 PM	Respiratory Rate
6/22/2017 7:19:26 PM	Eliminations
6/22/2017 7:44:00 PM	Eliminations
6/22/2017 7:54:57 PM	Respiratory Rate
6/22/2017 7:55:15 PM	Heart Rate (/min)
6/22/2017 7:56:11 PM	Quantify IV fluids (mls)
6/22/2017 8:18:55 PM	Nursing note
6/22/2017 9:13:49 PM	Respiratory Rate
6/22/2017 10:13:58 PM	Eliminations
6/22/2017 10:14:01 PM	Eliminations
6/22/2017 10:17:22 PM	Heart Rate (/min)
6/22/2017 10:17:29 PM	Respiratory Rate
6/22/2017 10:18:11 PM	Amount eaten
6/22/2017 10:49:12 PM	Respiratory Rate
6/23/2017 12:15:03 AM	Notes
6/23/2017 12:16:25 AM	Quantify IV fluids (mls)
6/23/2017 12:16:38 AM	Respiratory Rate
6/23/2017 12:16:47 AM	Heart Rate (/min)
6/23/2017 12:17:44 AM	Notes
6/23/2017 12:18:01 AM	Eliminations
6/23/2017 12:45:54 AM	Respiratory Rate
6/23/2017 1:12:07 AM	Heart Rate (/min)
6/23/2017 1:12:20 AM	Temperature (F)
6/23/2017 2:07:00 AM	Respiratory Rate
6/23/2017 2:57:34 AM	Respiratory Rate
6/23/2017 3:08:59 AM	Quantify IV fluids (mls)
6/23/2017 3:09:27 AM	Eliminations
6/23/2017 3:09:36 AM	Amount eaten

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Client: **B6**
Patient:

Vitals Results

6/23/2017 3:16:35 AM	Notes
6/23/2017 4:00:25 AM	Heart Rate (/min)
6/23/2017 4:00:43 AM	Respiratory Rate
6/23/2017 4:16:11 AM	Nursing note
6/23/2017 4:57:44 AM	Respiratory Rate
6/23/2017 6:02:26 AM	Respiratory Rate
6/23/2017 6:02:45 AM	Heart Rate (/min)
6/23/2017 6:52:28 AM	Respiratory Rate
6/23/2017 6:52:51 AM	Eliminations
6/23/2017 6:53:07 AM	Weight (kg)
6/23/2017 6:53:22 AM	Heart Rate (/min)
6/23/2017 6:54:04 AM	Quantify IV fluids (mls)
6/23/2017 7:53:45 AM	Respiratory Rate
6/23/2017 9:12:45 AM	Respiratory Rate
6/23/2017 9:33:36 AM	Heart Rate (/min)
6/23/2017 9:33:44 AM	Respiratory Rate
6/23/2017 9:33:52 AM	Temperature (F)
6/23/2017 9:33:57 AM	Amount eaten
6/23/2017 10:50:22 AM	Quantify IV fluids (mls)
6/23/2017 10:54:22 AM	Nursing note
6/23/2017 11:02:57 AM	Respiratory Rate
6/23/2017 11:13:16 AM	Eliminations
6/23/2017 11:21:24 AM	Heart Rate (/min)
6/23/2017 11:22:18 AM	Respiratory Rate
6/23/2017 1:22:19 PM	Respiratory Rate
6/23/2017 1:23:48 PM	Heart Rate (/min)
6/23/2017 1:58:45 PM	Respiratory Rate
6/23/2017 2:16:37 PM	Eliminations
6/23/2017 2:17:02 PM	Nursing note
6/23/2017 2:49:43 PM	Respiratory Rate
6/23/2017 3:55:36 PM	Quantify IV fluids (mls)
6/23/2017 3:56:08 PM	Notes
6/23/2017 3:56:46 PM	Eliminations
6/23/2017 4:14:11 PM	Respiratory Rate
6/23/2017 4:16:57 PM	Heart Rate (/min)
6/23/2017 4:27:58 PM	Eliminations
6/23/2017 4:57:57 PM	Respiratory Rate
6/23/2017 5:10:34 PM	Eliminations

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Client:
Patient:

B6

Vitals Results

6/23/2017 5:14:04 PM	Amount eaten
6/23/2017 5:29:03 PM	Heart Rate (/min)
6/23/2017 5:29:10 PM	Temperature (F)
6/23/2017 5:56:42 PM	Respiratory Rate
6/23/2017 6:37:55 PM	Respiratory Rate
6/23/2017 7:15:13 PM	Eliminations
6/23/2017 7:39:44 PM	Quantify IV fluids (mls)
6/23/2017 7:41:47 PM	Heart Rate (/min)
6/23/2017 7:43:21 PM	Respiratory Rate
6/23/2017 8:23:36 PM	Eliminations
6/23/2017 9:23:31 PM	Respiratory Rate
6/23/2017 9:28:01 PM	Heart Rate (/min)
6/23/2017 9:28:07 PM	Amount eaten
6/23/2017 10:10:29 PM	Respiratory Rate
6/23/2017 11:20:09 PM	Respiratory Rate
6/23/2017 11:38:19 PM	Quantify IV fluids (mls)
6/23/2017 11:42:07 PM	Eliminations
6/24/2017 12:12:58 AM	Heart Rate (/min)
6/24/2017 12:13:10 AM	Respiratory Rate
6/24/2017 1:07:14 AM	Respiratory Rate
6/24/2017 1:48:11 AM	Heart Rate (/min)
6/24/2017 1:48:20 AM	Temperature (F)
6/24/2017 2:07:07 AM	Respiratory Rate
6/24/2017 3:07:13 AM	Quantify IV fluids (mls)
6/24/2017 3:08:02 AM	Eliminations
6/24/2017 3:10:45 AM	Amount eaten
6/24/2017 3:12:36 AM	Respiratory Rate
6/24/2017 3:55:43 AM	Heart Rate (/min)
6/24/2017 3:55:51 AM	Respiratory Rate
6/24/2017 4:50:14 AM	Notes
6/24/2017 5:05:09 AM	Respiratory Rate
6/24/2017 5:30:06 AM	Nursing note
6/24/2017 5:30:35 AM	Respiratory Rate
6/24/2017 5:30:49 AM	Heart Rate (/min)
6/24/2017 8:52:54 AM	Respiratory Rate
6/24/2017 8:53:42 AM	Quantify IV fluids (mls)
6/24/2017 8:53:50 AM	Heart Rate (/min)
6/24/2017 8:58:15 AM	Eliminations
6/24/2017 8:59:48 AM	Eliminations
6/24/2017 9:08:05 AM	Respiratory Rate

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Client:
Patient:

B6

Vitals Results

6/24/2017 9:46:34 AM	Amount eaten
6/24/2017 11:15:30 AM	Quantify IV fluids (mls)
6/24/2017 12:31:06 PM	Eliminations
6/24/2017 3:13:56 PM	Quantify IV fluids (mls)
6/24/2017 3:14:17 PM	Eliminations
6/24/2017 3:17:16 PM	Amount eaten
6/24/2017 7:29:57 PM	Eliminations
6/24/2017 7:31:31 PM	Quantify IV fluids (mls)
6/24/2017 9:15:51 PM	Amount eaten
6/24/2017 9:35:42 PM	Amount eaten
6/24/2017 11:11:15 PM	Quantify IV fluids (mls)
6/24/2017 11:11:24 PM	Eliminations
6/25/2017 2:01:40 AM	Nursing note
6/25/2017 3:30:46 AM	Amount eaten
6/25/2017 3:32:36 AM	Quantify IV fluids (mls)
6/25/2017 3:39:55 AM	Eliminations
6/25/2017 7:39:55 AM	Weight (kg)
6/25/2017 7:40:12 AM	Eliminations
6/25/2017 7:41:25 AM	Quantify IV fluids (mls)
6/25/2017 9:43:47 AM	Weight (kg)
6/25/2017 9:43:57 AM	Eliminations
6/25/2017 9:47:09 AM	Amount eaten
6/25/2017 9:50:24 AM	Quantify IV fluids (mls)
6/25/2017 10:42:19 AM	Temperature (F)
6/25/2017 10:42:31 AM	Notes
6/25/2017 11:59:42 AM	Eliminations
6/25/2017 12:51:44 PM	Heart Rate (/min)
6/25/2017 12:51:45 PM	Respiratory Rate
6/25/2017 1:44:04 PM	Eliminations
6/25/2017 1:44:18 PM	Quantify IV fluids (mls)
6/25/2017 1:55:23 PM	Notes
6/25/2017 1:56:59 PM	Eliminations
6/25/2017 2:02:20 PM	Quantify IV fluids (mls)
6/25/2017 3:28:10 PM	Eliminations
6/25/2017 3:28:25 PM	Heart Rate (/min)
6/25/2017 3:28:26 PM	Respiratory Rate
6/25/2017 3:30:41 PM	Amount eaten

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Client: **B6**
Patient:

Vitals Results

6/25/2017 5:18:47 PM	Quantify IV fluids (mls)
6/25/2017 5:18:55 PM	Eliminations
6/25/2017 5:44:04 PM	Notes
6/25/2017 7:45:05 PM	Heart Rate (/min)
6/25/2017 7:45:06 PM	Respiratory Rate
6/25/2017 7:46:46 PM	Eliminations
6/25/2017 9:29:34 PM	Notes
6/25/2017 10:19:35 PM	Eliminations
6/25/2017 10:19:48 PM	Quantify IV fluids (mls)
6/25/2017 10:24:30 PM	Amount eaten
6/25/2017 10:24:48 PM	Temperature (F)
6/25/2017 10:29:29 PM	Nursing note
6/25/2017 11:16:25 PM	Temperature (F)
6/25/2017 11:44:31 PM	Heart Rate (/min)
6/25/2017 11:44:32 PM	Respiratory Rate
6/26/2017 12:23:56 AM	Eliminations
6/26/2017 1:19:56 AM	Notes
6/26/2017 1:20:25 AM	Eliminations
6/26/2017 1:20:38 AM	Quantify IV fluids (mls)
6/26/2017 3:18:28 AM	Heart Rate (/min)
6/26/2017 3:18:29 AM	Respiratory Rate
6/26/2017 3:24:36 AM	Eliminations
6/26/2017 5:19:54 AM	Eliminations
6/26/2017 5:20:05 AM	Notes
6/26/2017 5:20:44 AM	Quantify IV fluids (mls)
6/26/2017 8:03:25 AM	Weight (kg)
6/26/2017 8:03:31 AM	Eliminations
6/26/2017 8:36:52 AM	Temperature (F)
6/26/2017 8:37:03 AM	Heart Rate (/min)
6/26/2017 8:37:04 AM	Respiratory Rate
6/26/2017 9:15:52 AM	Eliminations
6/26/2017 10:03:31 AM	Notes
6/26/2017 11:20:02 AM	Temperature (F)
6/26/2017 11:21:40 AM	Heart Rate (/min)
6/26/2017 11:21:41 AM	Respiratory Rate
6/26/2017 11:28:12 AM	Eliminations
6/26/2017 11:39:28 AM	Amount eaten

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Client: **B6**
Patient:

Vitals Results

6/26/2017 1:26:31 PM Eliminations
6/26/2017 1:27:02 PM Notes

6/26/2017 4:02:49 PM Heart Rate (/min)
6/26/2017 4:02:50 PM Respiratory Rate
2/1/2019 1:48:14 PM Weight (kg)

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Patient History

06/20/2017 10:57 PM UserForm
06/20/2017 10:57 PM UserForm
06/20/2017 10:57 PM Email

06/20/2017 11:15 PM Treatment
06/20/2017 11:58 PM Purchase
06/21/2017 12:08 AM Vitals
06/21/2017 12:08 AM Purchase
06/21/2017 12:08 AM Purchase
06/21/2017 12:09 AM Purchase
06/21/2017 12:09 AM Purchase
06/21/2017 12:09 AM Purchase
06/21/2017 12:15 AM Labwork
06/21/2017 12:21 AM UserForm

06/21/2017 01:11 AM Treatment
06/21/2017 01:11 AM Vitals
06/21/2017 01:14 AM Treatment
06/21/2017 01:14 AM Vitals
06/21/2017 01:15 AM Treatment
06/21/2017 01:15 AM Vitals
06/21/2017 01:15 AM Treatment
06/21/2017 01:15 AM Vitals
06/21/2017 01:16 AM Treatment
06/21/2017 01:18 AM Treatment

06/21/2017 01:51 AM Vitals
06/21/2017 01:57 AM Treatment
06/21/2017 02:09 AM Vitals
06/21/2017 02:13 AM Purchase
06/21/2017 02:13 AM Purchase
06/21/2017 03:06 AM Treatment
06/21/2017 03:06 AM Vitals
06/21/2017 03:13 AM Treatment
06/21/2017 04:08 AM Treatment
06/21/2017 04:08 AM Vitals
06/21/2017 04:09 AM Treatment
06/21/2017 04:12 AM Treatment

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Client: **B6**
Patient:

Patient History

06/21/2017 04:15 AM	Treatment
06/21/2017 04:15 AM	Treatment
06/21/2017 04:15 AM	Vitals
06/21/2017 04:15 AM	Treatment
06/21/2017 04:15 AM	Vitals
06/21/2017 04:15 AM	Treatment
06/21/2017 04:15 AM	Vitals
06/21/2017 04:17 AM	Treatment
06/21/2017 04:23 AM	Treatment
06/21/2017 04:52 AM	UserForm
06/21/2017 04:56 AM	Treatment
06/21/2017 04:56 AM	Vitals
06/21/2017 05:29 AM	Treatment
06/21/2017 05:29 AM	Vitals
06/21/2017 05:29 AM	Treatment
06/21/2017 05:29 AM	Vitals
06/21/2017 08:00 AM	Treatment
06/21/2017 08:00 AM	Vitals
06/21/2017 08:05 AM	Treatment
06/21/2017 08:05 AM	Vitals
06/21/2017 08:05 AM	UserForm
06/21/2017 08:05 AM	Treatment
06/21/2017 08:05 AM	Vitals
06/21/2017 08:10 AM	Purchase
06/21/2017 08:15 AM	Treatment
06/21/2017 08:15 AM	Vitals
06/21/2017 08:15 AM	Vitals
06/21/2017 08:42 AM	Vitals
06/21/2017 08:48 AM	Purchase
06/21/2017 08:48 AM	Treatment
06/21/2017 09:05 AM	Vitals
06/21/2017 09:07 AM	Purchase
06/21/2017 09:55 AM	Treatment
06/21/2017 09:56 AM	Treatment
06/21/2017 09:56 AM	Vitals
06/21/2017 10:20 AM	Vitals
06/21/2017 10:20 AM	Vitals
06/21/2017 11:08 AM	Treatment
06/21/2017 11:20 AM	Treatment
06/21/2017 11:20 AM	Treatment
06/21/2017 11:20 AM	Treatment
06/21/2017 11:20 AM	Vitals
06/21/2017 11:24 AM	Treatment
06/21/2017 11:28 AM	Treatment
06/21/2017 11:28 AM	Treatment
06/21/2017 11:28 AM	Vitals

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Client: **B6**
Patient:

Patient History

06/21/2017 11:29 AM	Vitals
06/21/2017 11:57 AM	Treatment
06/21/2017 11:57 AM	Vitals
06/21/2017 11:57 AM	Treatment
06/21/2017 11:57 AM	Vitals
06/21/2017 12:02 PM	Purchase
06/21/2017 12:19 PM	Treatment
06/21/2017 12:33 PM	Purchase
06/21/2017 12:35 PM	Purchase
06/21/2017 01:34 PM	Treatment
06/21/2017 01:34 PM	Vitals
06/21/2017 01:35 PM	Treatment
06/21/2017 01:38 PM	Treatment
06/21/2017 01:42 PM	Treatment
06/21/2017 01:42 PM	Vitals
06/21/2017 01:42 PM	Treatment
06/21/2017 01:42 PM	Vitals
06/21/2017 02:52 PM	Treatment
06/21/2017 02:52 PM	Vitals
06/21/2017 03:47 PM	Treatment
06/21/2017 03:47 PM	Vitals
06/21/2017 03:49 PM	Treatment
06/21/2017 03:49 PM	Vitals
06/21/2017 03:49 PM	UserForm
06/21/2017 03:50 PM	Vitals
06/21/2017 03:54 PM	Treatment
06/21/2017 03:54 PM	Vitals
06/21/2017 04:25 PM	Treatment
06/21/2017 04:25 PM	Vitals
06/21/2017 04:49 PM	Treatment
06/21/2017 04:51 PM	Vitals
06/21/2017 05:00 PM	Prescription
06/21/2017 05:15 PM	Task
06/21/2017 05:17 PM	Prescription
06/21/2017 05:26 PM	Treatment
06/21/2017 05:26 PM	Vitals
06/21/2017 05:26 PM	Treatment
06/21/2017 05:26 PM	Vitals
06/21/2017 05:50 PM	Treatment
06/21/2017 05:53 PM	Treatment
06/21/2017 05:53 PM	Vitals
06/21/2017 06:19 PM	UserForm
06/21/2017 06:32 PM	UserForm
06/21/2017 06:53 PM	Treatment

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Client: **B6**
Patient:

Patient History

06/21/2017 06:53 PM Vitals
06/21/2017 07:02 PM Treatment
06/21/2017 07:02 PM Vitals
06/21/2017 07:12 PM Treatment

06/21/2017 07:13 PM Treatment
06/21/2017 07:13 PM Vitals
06/21/2017 07:16 PM Treatment
06/21/2017 07:16 PM Vitals

06/21/2017 07:23 PM Vitals
06/21/2017 07:30 PM Treatment
06/21/2017 07:30 PM Vitals
06/21/2017 07:59 PM Treatment
06/21/2017 07:59 PM Vitals
06/21/2017 08:58 PM Treatment
06/21/2017 08:58 PM Vitals
06/21/2017 09:18 PM Vitals
06/21/2017 09:30 PM Treatment
06/21/2017 09:30 PM Vitals
06/21/2017 09:48 PM Treatment
06/21/2017 09:48 PM Vitals
06/21/2017 10:49 PM Treatment
06/21/2017 10:49 PM Vitals
06/21/2017 11:01 PM Treatment
06/21/2017 11:02 PM Treatment
06/21/2017 11:02 PM Vitals
06/21/2017 11:46 PM Treatment
06/21/2017 11:46 PM Vitals
06/21/2017 11:46 PM Treatment
06/21/2017 11:46 PM Vitals
06/22/2017 12:00 AM Purchase
06/22/2017 12:00 AM Purchase
06/22/2017 12:14 AM Vitals
06/22/2017 12:54 AM Treatment
06/22/2017 12:54 AM Vitals
06/22/2017 12:57 AM Treatment
06/22/2017 01:04 AM Treatment

06/22/2017 01:04 AM Treatment
06/22/2017 01:04 AM Vitals
06/22/2017 01:04 AM Treatment
06/22/2017 01:04 AM Vitals
06/22/2017 01:26 AM Treatment
06/22/2017 01:26 AM Vitals
06/22/2017 02:53 AM Treatment
06/22/2017 02:53 AM Vitals
06/22/2017 02:55 AM Treatment
06/22/2017 03:09 AM Treatment

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Client: **B6**
Patient:

Patient History

06/22/2017 03:09 AM	Treatment
06/22/2017 03:09 AM	Vitals
06/22/2017 03:09 AM	Treatment
06/22/2017 03:09 AM	Vitals
06/22/2017 03:10 AM	Vitals
06/22/2017 03:35 AM	Treatment
06/22/2017 03:35 AM	Vitals
06/22/2017 04:52 AM	Treatment
06/22/2017 04:52 AM	Vitals
06/22/2017 04:54 AM	Treatment
06/22/2017 04:54 AM	Vitals
06/22/2017 05:53 AM	Treatment
06/22/2017 05:53 AM	Vitals
06/22/2017 05:53 AM	Treatment
06/22/2017 05:53 AM	Vitals
06/22/2017 06:34 AM	Treatment
06/22/2017 06:34 AM	Vitals
06/22/2017 07:46 AM	Treatment
06/22/2017 07:46 AM	Vitals
06/22/2017 07:47 AM	Treatment
06/22/2017 07:47 AM	Vitals
06/22/2017 07:54 AM	Treatment
06/22/2017 07:54 AM	Vitals
06/22/2017 07:54 AM	Vitals
06/22/2017 07:54 AM	Vitals
06/22/2017 09:53 AM	Vitals
06/22/2017 09:55 AM	Purchase
06/22/2017 09:55 AM	Purchase
06/22/2017 09:55 AM	Treatment
06/22/2017 10:20 AM	Purchase
06/22/2017 10:52 AM	Treatment
06/22/2017 10:52 AM	Vitals
06/22/2017 10:52 AM	Treatment
06/22/2017 10:52 AM	Vitals
06/22/2017 10:52 AM	Treatment
06/22/2017 10:52 AM	Vitals
06/22/2017 10:53 AM	Vitals
06/22/2017 10:55 AM	Vitals
06/22/2017 10:58 AM	Purchase
06/22/2017 10:58 AM	Purchase
06/22/2017 10:58 AM	Purchase
06/22/2017 11:17 AM	Treatment
06/22/2017 11:21 AM	Purchase

B6

Client: **B6**
Patient:

Patient History

06/22/2017 11:21 AM	Treatment
06/22/2017 11:23 AM	Treatment
06/22/2017 11:23 AM	Vitals
06/22/2017 11:26 AM	Treatment
06/22/2017 11:26 AM	Vitals
06/22/2017 11:28 AM	Treatment
06/22/2017 11:28 AM	Vitals
06/22/2017 11:29 AM	Prescription
06/22/2017 11:33 AM	Purchase
06/22/2017 11:33 AM	Prescription
06/22/2017 11:55 AM	Treatment
06/22/2017 11:57 AM	Treatment
06/22/2017 11:57 AM	Vitals
06/22/2017 12:02 PM	Purchase
06/22/2017 12:47 PM	Treatment
06/22/2017 12:47 PM	Vitals
06/22/2017 12:47 PM	Vitals
06/22/2017 01:03 PM	Vitals
06/22/2017 01:46 PM	Treatment
06/22/2017 01:46 PM	Vitals
06/22/2017 01:46 PM	Treatment
06/22/2017 01:46 PM	Vitals
06/22/2017 02:51 PM	Treatment
06/22/2017 02:51 PM	Vitals
06/22/2017 03:23 PM	Treatment
06/22/2017 03:23 PM	Vitals
06/22/2017 03:29 PM	Treatment
06/22/2017 03:29 PM	Vitals
06/22/2017 03:32 PM	Treatment
06/22/2017 03:32 PM	Vitals
06/22/2017 03:34 PM	Treatment
06/22/2017 03:34 PM	Vitals
06/22/2017 03:54 PM	Treatment
06/22/2017 03:54 PM	Vitals
06/22/2017 03:54 PM	Treatment
06/22/2017 03:54 PM	Vitals
06/22/2017 04:00 PM	Vitals
06/22/2017 04:32 PM	Vitals
06/22/2017 04:32 PM	Vitals
06/22/2017 04:53 PM	Treatment
06/22/2017 04:53 PM	Vitals
06/22/2017 05:31 PM	Vitals
06/22/2017 06:02 PM	Treatment
06/22/2017 06:02 PM	Vitals
06/22/2017 06:03 PM	Treatment
06/22/2017 06:03 PM	Vitals

B6

Client: **B6**
Patient:

Patient History

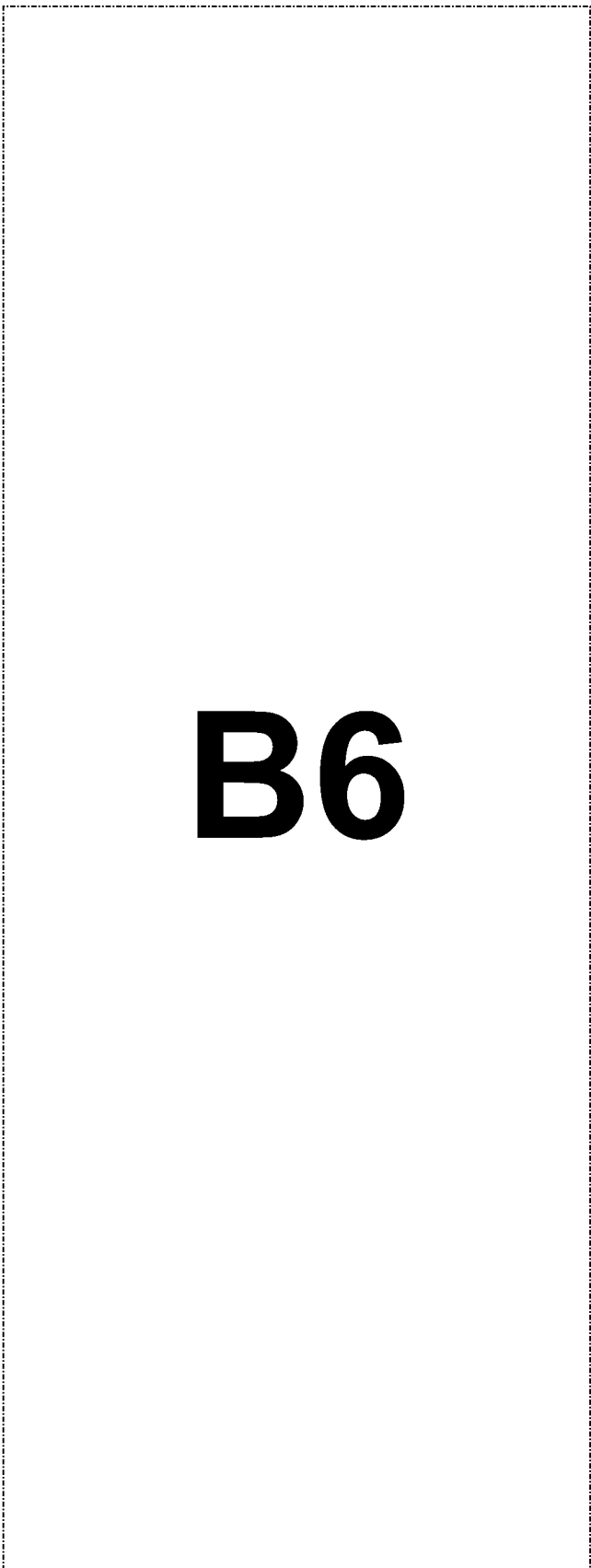
06/22/2017 06:14 PM Treatment
06/22/2017 06:14 PM Vitals
06/22/2017 06:40 PM Treatment

06/22/2017 07:00 PM Treatment
06/22/2017 07:00 PM Vitals
06/22/2017 07:19 PM Vitals
06/22/2017 07:19 PM Vitals
06/22/2017 07:44 PM Vitals
06/22/2017 07:51 PM Treatment

06/22/2017 07:54 PM Treatment
06/22/2017 07:54 PM Vitals
06/22/2017 07:55 PM Treatment
06/22/2017 07:55 PM Vitals
06/22/2017 07:56 PM Treatment
06/22/2017 07:56 PM Vitals
06/22/2017 08:18 PM Vitals
06/22/2017 09:13 PM Treatment
06/22/2017 09:13 PM Vitals
06/22/2017 10:13 PM Vitals
06/22/2017 10:14 PM Treatment
06/22/2017 10:14 PM Vitals
06/22/2017 10:17 PM Treatment
06/22/2017 10:17 PM Vitals
06/22/2017 10:17 PM Treatment
06/22/2017 10:17 PM Vitals
06/22/2017 10:18 PM Treatment
06/22/2017 10:18 PM Vitals

06/22/2017 10:49 PM Treatment
06/22/2017 10:49 PM Vitals
06/23/2017 12:00 AM Purchase
06/23/2017 12:00 AM Purchase
06/23/2017 12:15 AM Treatment
06/23/2017 12:15 AM Vitals
06/23/2017 12:16 AM Treatment
06/23/2017 12:16 AM Vitals
06/23/2017 12:16 AM Treatment
06/23/2017 12:16 AM Vitals
06/23/2017 12:16 AM Treatment
06/23/2017 12:16 AM Vitals
06/23/2017 12:16 AM Treatment
06/23/2017 12:16 AM Vitals
06/23/2017 12:17 AM Treatment

06/23/2017 12:17 AM Treatment
06/23/2017 12:17 AM Vitals
06/23/2017 12:18 AM Treatment
06/23/2017 12:18 AM Vitals
06/23/2017 12:45 AM Treatment
06/23/2017 12:45 AM Vitals



B6

Client: **B6**
Patient:

Patient History

06/23/2017 01:12 AM Treatment
06/23/2017 01:12 AM Vitals
06/23/2017 01:12 AM Vitals
06/23/2017 01:12 AM Treatment
06/23/2017 01:12 AM Vitals
06/23/2017 02:07 AM Treatment
06/23/2017 02:07 AM Vitals
06/23/2017 02:57 AM Treatment
06/23/2017 02:57 AM Vitals
06/23/2017 02:57 AM Vitals
06/23/2017 03:08 AM Treatment
06/23/2017 03:08 AM Vitals
06/23/2017 03:09 AM Treatment
06/23/2017 03:09 AM Vitals
06/23/2017 03:09 AM Treatment
06/23/2017 03:09 AM Vitals

06/23/2017 03:09 AM Treatment

06/23/2017 03:16 AM Treatment
06/23/2017 03:16 AM Vitals
06/23/2017 03:16 AM Vitals
06/23/2017 04:00 AM Treatment
06/23/2017 04:00 AM Vitals
06/23/2017 04:00 AM Treatment
06/23/2017 04:00 AM Vitals
06/23/2017 04:16 AM Vitals
06/23/2017 04:57 AM Treatment
06/23/2017 04:57 AM Vitals
06/23/2017 06:02 AM Treatment
06/23/2017 06:02 AM Vitals
06/23/2017 06:02 AM Treatment
06/23/2017 06:02 AM Vitals
06/23/2017 06:52 AM Treatment
06/23/2017 06:52 AM Vitals
06/23/2017 06:52 AM Vitals
06/23/2017 06:52 AM Treatment
06/23/2017 06:52 AM Vitals
06/23/2017 06:53 AM Treatment
06/23/2017 06:53 AM Vitals
06/23/2017 06:53 AM Treatment
06/23/2017 06:53 AM Vitals
06/23/2017 06:54 AM Treatment
06/23/2017 06:54 AM Vitals
06/23/2017 07:53 AM Treatment
06/23/2017 07:53 AM Vitals
06/23/2017 08:45 AM Purchase
06/23/2017 09:12 AM Vitals
06/23/2017 09:22 AM Treatment
06/23/2017 09:33 AM Treatment

B6

Client: **B6**
Patient:

Patient History

06/23/2017 09:33 AM Vitals
06/23/2017 09:33 AM Treatment
06/23/2017 09:33 AM Vitals
06/23/2017 09:33 AM Treatment
06/23/2017 09:33 AM Vitals
06/23/2017 09:33 AM Treatment
06/23/2017 09:33 AM Vitals
06/23/2017 09:36 AM Prescription

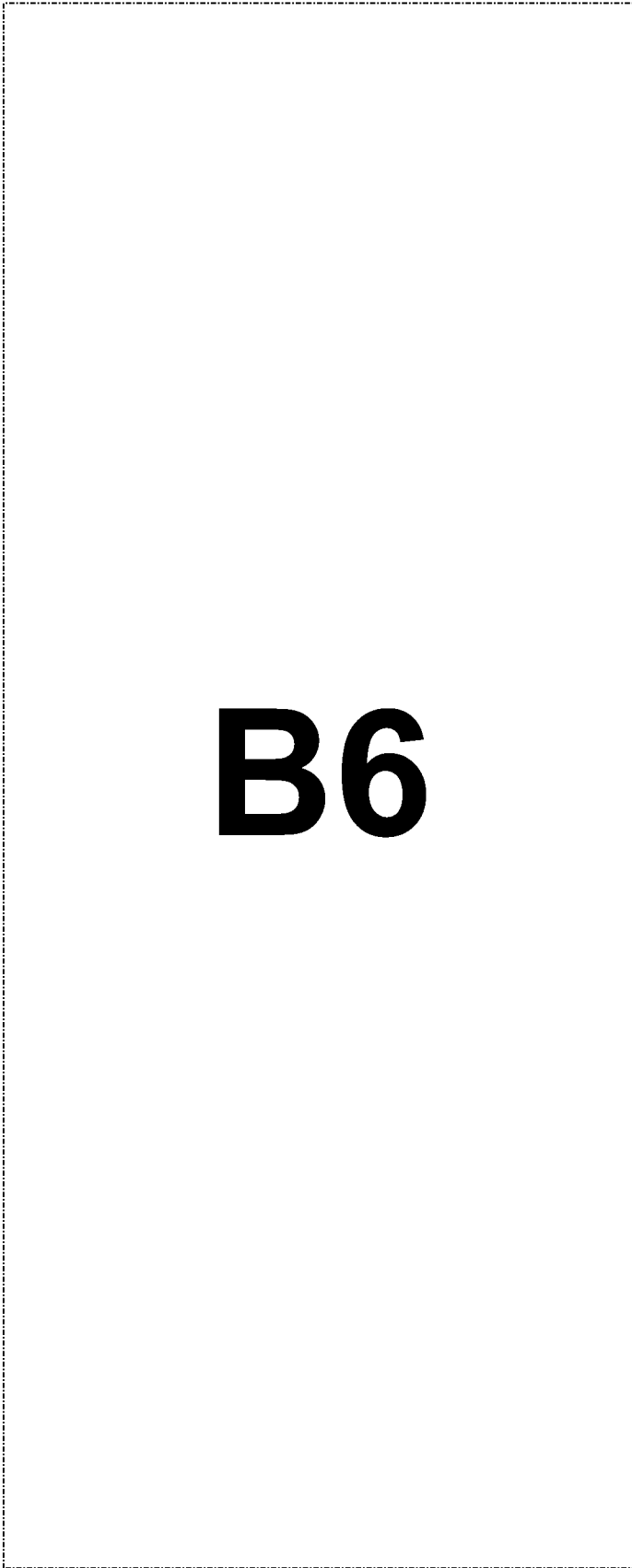
06/23/2017 09:37 AM Purchase
06/23/2017 09:45 AM Prescription
06/23/2017 10:50 AM Treatment
06/23/2017 10:50 AM Vitals
06/23/2017 10:54 AM Vitals

06/23/2017 11:02 AM Treatment
06/23/2017 11:02 AM Vitals
06/23/2017 11:13 AM Treatment
06/23/2017 11:13 AM Vitals

06/23/2017 11:18 AM Treatment

06/23/2017 11:18 AM Treatment

06/23/2017 11:21 AM Treatment
06/23/2017 11:21 AM Vitals
06/23/2017 11:22 AM Treatment
06/23/2017 11:22 AM Vitals
06/23/2017 12:02 PM Purchase
06/23/2017 01:22 PM Treatment
06/23/2017 01:22 PM Vitals
06/23/2017 01:23 PM Treatment
06/23/2017 01:23 PM Vitals
06/23/2017 01:58 PM Treatment
06/23/2017 01:58 PM Vitals
06/23/2017 02:16 PM Vitals
06/23/2017 02:17 PM Vitals
06/23/2017 02:49 PM Treatment
06/23/2017 02:49 PM Vitals
06/23/2017 03:47 PM Treatment
06/23/2017 03:55 PM Treatment
06/23/2017 03:55 PM Treatment
06/23/2017 03:55 PM Vitals
06/23/2017 03:56 PM Treatment
06/23/2017 03:56 PM Vitals
06/23/2017 03:56 PM Treatment
06/23/2017 03:56 PM Vitals
06/23/2017 04:14 PM Treatment
06/23/2017 04:14 PM Vitals
06/23/2017 04:16 PM Treatment



Client: **B6**
Patient:

Patient History

06/23/2017 04:16 PM Vitals
06/23/2017 04:27 PM Vitals
06/23/2017 04:57 PM Treatment
06/23/2017 04:57 PM Vitals
06/23/2017 05:06 PM Prescription
06/23/2017 05:07 PM Prescription
06/23/2017 05:09 PM Prescription
06/23/2017 05:10 PM Vitals
06/23/2017 05:14 PM Treatment
06/23/2017 05:14 PM Vitals
06/23/2017 05:14 PM Vitals
06/23/2017 05:17 PM Treatment

06/23/2017 05:29 PM Treatment
06/23/2017 05:29 PM Vitals
06/23/2017 05:29 PM Treatment
06/23/2017 05:29 PM Vitals
06/23/2017 05:56 PM Treatment
06/23/2017 05:56 PM Vitals
06/23/2017 06:37 PM Treatment
06/23/2017 06:37 PM Vitals
06/23/2017 07:15 PM Vitals
06/23/2017 07:36 PM Treatment

06/23/2017 07:36 PM Treatment

06/23/2017 07:39 PM Treatment

06/23/2017 07:39 PM Treatment
06/23/2017 07:39 PM Vitals
06/23/2017 07:41 PM Treatment
06/23/2017 07:41 PM Vitals
06/23/2017 07:43 PM Treatment
06/23/2017 07:43 PM Vitals
06/23/2017 08:23 PM Treatment
06/23/2017 08:23 PM Vitals
06/23/2017 08:59 PM Treatment
06/23/2017 09:23 PM Treatment
06/23/2017 09:23 PM Vitals
06/23/2017 09:28 PM Treatment
06/23/2017 09:28 PM Vitals
06/23/2017 09:28 PM Treatment
06/23/2017 09:28 PM Vitals
06/23/2017 10:10 PM Treatment
06/23/2017 10:10 PM Vitals
06/23/2017 11:20 PM Treatment
06/23/2017 11:20 PM Vitals
06/23/2017 11:38 PM Treatment
06/23/2017 11:38 PM Vitals
06/23/2017 11:38 PM Treatment

B6

Client: **B6**
Patient:

Patient History

06/23/2017 11:42 PM Treatment
06/23/2017 11:42 PM Vitals
06/24/2017 12:00 AM Purchase
06/24/2017 12:00 AM Purchase
06/24/2017 12:12 AM Treatment
06/24/2017 12:12 AM Vitals
06/24/2017 12:13 AM Treatment
06/24/2017 12:13 AM Vitals
06/24/2017 01:07 AM Treatment
06/24/2017 01:07 AM Vitals
06/24/2017 01:48 AM Treatment
06/24/2017 01:48 AM Vitals
06/24/2017 01:48 AM Treatment
06/24/2017 01:48 AM Vitals
06/24/2017 02:07 AM Treatment
06/24/2017 02:07 AM Vitals
06/24/2017 03:07 AM Treatment
06/24/2017 03:07 AM Vitals
06/24/2017 03:08 AM Treatment
06/24/2017 03:08 AM Vitals
06/24/2017 03:10 AM Treatment
06/24/2017 03:10 AM Vitals

06/24/2017 03:12 AM Treatment
06/24/2017 03:12 AM Vitals
06/24/2017 03:55 AM Treatment

06/24/2017 03:55 AM Treatment
06/24/2017 03:55 AM Vitals
06/24/2017 03:55 AM Treatment
06/24/2017 03:55 AM Vitals
06/24/2017 04:48 AM Treatment
06/24/2017 04:50 AM Treatment
06/24/2017 04:50 AM Vitals
06/24/2017 05:05 AM Treatment
06/24/2017 05:05 AM Vitals
06/24/2017 05:30 AM Vitals
06/24/2017 05:30 AM Treatment
06/24/2017 05:30 AM Vitals
06/24/2017 05:30 AM Treatment
06/24/2017 05:30 AM Vitals
06/24/2017 08:52 AM Treatment
06/24/2017 08:52 AM Vitals
06/24/2017 08:53 AM Treatment

06/24/2017 08:53 AM Treatment
06/24/2017 08:53 AM Vitals
06/24/2017 08:53 AM Treatment
06/24/2017 08:53 AM Vitals

B6

Client:
Patient:

B6

Patient History

06/24/2017 07:29 PM	Treatment
06/24/2017 07:29 PM	Vitals
06/24/2017 07:31 PM	Treatment
06/24/2017 07:31 PM	Vitals
06/24/2017 07:31 PM	Treatment
06/24/2017 09:15 PM	Treatment
06/24/2017 09:15 PM	Vitals
06/24/2017 09:35 PM	Vitals
06/24/2017 11:11 PM	Treatment
06/24/2017 11:11 PM	Vitals
06/24/2017 11:11 PM	Treatment
06/24/2017 11:11 PM	Vitals
06/25/2017 12:00 AM	Purchase
06/25/2017 12:00 AM	Purchase
06/25/2017 02:01 AM	Vitals
06/25/2017 03:30 AM	Treatment
06/25/2017 03:30 AM	Vitals
06/25/2017 03:31 AM	Treatment
06/25/2017 03:32 AM	Treatment
06/25/2017 03:32 AM	Vitals
06/25/2017 03:39 AM	Treatment
06/25/2017 03:39 AM	Vitals
06/25/2017 07:39 AM	Vitals
06/25/2017 07:40 AM	Treatment
06/25/2017 07:40 AM	Vitals
06/25/2017 07:41 AM	Treatment
06/25/2017 07:41 AM	Vitals
06/25/2017 08:38 AM	Treatment
06/25/2017 09:11 AM	Treatment
06/25/2017 09:43 AM	Treatment
06/25/2017 09:43 AM	Vitals
06/25/2017 09:43 AM	Treatment
06/25/2017 09:43 AM	Vitals
06/25/2017 09:47 AM	Treatment
06/25/2017 09:47 AM	Vitals
06/25/2017 09:50 AM	Treatment
06/25/2017 09:50 AM	Vitals
06/25/2017 10:42 AM	Treatment
06/25/2017 10:42 AM	Vitals
06/25/2017 10:42 AM	Treatment
06/25/2017 10:42 AM	Vitals
06/25/2017 11:41 AM	Prescription
06/25/2017 11:59 AM	Treatment

B6

Client: **B6**
Patient:

Patient History

06/25/2017 11:59 AM	Vitals
06/25/2017 12:02 PM	Purchase
06/25/2017 12:10 PM	Purchase
06/25/2017 12:51 PM	Treatment
06/25/2017 12:51 PM	Treatment
06/25/2017 12:51 PM	Vitals
06/25/2017 12:51 PM	Vitals
06/25/2017 01:44 PM	Treatment
06/25/2017 01:44 PM	Vitals
06/25/2017 01:44 PM	Treatment
06/25/2017 01:44 PM	Vitals
06/25/2017 01:55 PM	Treatment
06/25/2017 01:55 PM	Vitals
06/25/2017 01:56 PM	Vitals
06/25/2017 02:02 PM	Treatment
06/25/2017 02:02 PM	Treatment
06/25/2017 02:02 PM	Vitals
06/25/2017 02:08 PM	Treatment
06/25/2017 03:28 PM	Treatment
06/25/2017 03:28 PM	Vitals
06/25/2017 03:28 PM	Treatment
06/25/2017 03:28 PM	Vitals
06/25/2017 03:28 PM	Vitals
06/25/2017 03:28 PM	Vitals
06/25/2017 03:30 PM	Treatment
06/25/2017 03:30 PM	Vitals
06/25/2017 05:18 PM	Treatment
06/25/2017 05:18 PM	Vitals
06/25/2017 05:18 PM	Treatment
06/25/2017 05:18 PM	Vitals
06/25/2017 05:44 PM	Treatment
06/25/2017 05:44 PM	Vitals
06/25/2017 05:44 PM	Treatment
06/25/2017 07:44 PM	Treatment
06/25/2017 07:45 PM	Treatment
06/25/2017 07:45 PM	Treatment
06/25/2017 07:45 PM	Vitals
06/25/2017 07:45 PM	Vitals
06/25/2017 07:46 PM	Treatment
06/25/2017 07:46 PM	Vitals
06/25/2017 09:29 PM	Treatment
06/25/2017 09:29 PM	Vitals

B6

Client:
Patient:

B6

Patient History

06/25/2017 10:19 PM	Treatment
06/25/2017 10:19 PM	Vitals
06/25/2017 10:19 PM	Treatment
06/25/2017 10:19 PM	Vitals
06/25/2017 10:24 PM	Treatment
06/25/2017 10:24 PM	Treatment
06/25/2017 10:24 PM	Vitals
06/25/2017 10:24 PM	Treatment
06/25/2017 10:24 PM	Vitals
06/25/2017 10:29 PM	Vitals
06/25/2017 10:29 PM	Vitals
06/25/2017 11:16 PM	Vitals
06/25/2017 11:44 PM	Treatment
06/25/2017 11:44 PM	Vitals
06/25/2017 11:44 PM	Vitals
06/25/2017 11:45 PM	Treatment
06/26/2017 12:00 AM	Purchase
06/26/2017 12:00 AM	Purchase
06/26/2017 12:20 AM	Treatment
06/26/2017 12:23 AM	Treatment
06/26/2017 12:23 AM	Vitals
06/26/2017 01:19 AM	Treatment
06/26/2017 01:19 AM	Vitals
06/26/2017 01:20 AM	Treatment
06/26/2017 01:20 AM	Vitals
06/26/2017 01:20 AM	Treatment
06/26/2017 01:20 AM	Vitals
06/26/2017 03:18 AM	Treatment
06/26/2017 03:18 AM	Vitals
06/26/2017 03:18 AM	Vitals
06/26/2017 03:24 AM	Treatment
06/26/2017 03:24 AM	Vitals
06/26/2017 05:19 AM	Treatment
06/26/2017 05:19 AM	Vitals
06/26/2017 05:20 AM	Treatment
06/26/2017 05:20 AM	Vitals
06/26/2017 05:20 AM	Treatment
06/26/2017 05:20 AM	Vitals
06/26/2017 08:03 AM	Treatment
06/26/2017 08:03 AM	Vitals
06/26/2017 08:03 AM	Treatment
06/26/2017 08:03 AM	Vitals
06/26/2017 08:36 AM	Treatment
06/26/2017 08:36 AM	Vitals

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Patient History

06/26/2017 08:37 AM	Treatment
06/26/2017 08:37 AM	Vitals
06/26/2017 08:37 AM	Vitals
06/26/2017 08:40 AM	Treatment
06/26/2017 08:40 AM	Treatment
06/26/2017 09:15 AM	Treatment
06/26/2017 09:15 AM	Vitals
06/26/2017 09:17 AM	Treatment
06/26/2017 10:03 AM	Treatment
06/26/2017 10:03 AM	Treatment
06/26/2017 10:03 AM	Vitals
06/26/2017 11:20 AM	Treatment
06/26/2017 11:20 AM	Vitals
06/26/2017 11:21 AM	Treatment
06/26/2017 11:21 AM	Vitals
06/26/2017 11:21 AM	Vitals
06/26/2017 11:28 AM	Treatment
06/26/2017 11:28 AM	Vitals
06/26/2017 11:34 AM	Purchase
06/26/2017 11:35 AM	Treatment
06/26/2017 11:39 AM	Treatment
06/26/2017 11:39 AM	Vitals
06/26/2017 11:54 AM	Purchase
06/26/2017 12:02 PM	Purchase
06/26/2017 01:26 PM	Treatment
06/26/2017 01:26 PM	Vitals
06/26/2017 01:27 PM	Treatment
06/26/2017 01:27 PM	Vitals
06/26/2017 02:23 PM	UserForm
06/26/2017 03:40 PM	Prescription
06/26/2017 03:40 PM	Prescription
06/26/2017 03:41 PM	Prescription
06/26/2017 03:41 PM	Purchase
06/26/2017 04:02 PM	Treatment
06/26/2017 04:02 PM	Vitals
06/26/2017 04:02 PM	Vitals
06/26/2017 04:14 PM	Purchase
06/26/2017 04:15 PM	Treatment
07/02/2017 05:02 PM	Prescription
07/10/2017 05:37 PM	Task

B6

Client:
Patient:

B6

Patient History

01/14/2019 12:25 PM	Purchase
01/14/2019 12:30 PM	Prescription
01/14/2019 01:23 PM	Email
01/14/2019 01:23 PM	UserForm
01/28/2019 03:57 PM	Appointment
01/28/2019 04:00 PM	Appointment
01/28/2019 04:01 PM	Appointment
02/01/2019 08:00 AM	UserForm
02/01/2019 08:01 AM	UserForm
02/01/2019 01:18 PM	Treatment
02/01/2019 01:31 PM	UserForm
02/01/2019 01:48 PM	Vitals
02/01/2019 01:50 PM	Purchase
02/01/2019 02:27 PM	UserForm
02/01/2019 02:57 PM	Appointment
02/01/2019 02:58 PM	Prescription
02/21/2019 04:34 PM	Purchase
02/21/2019 04:34 PM	Purchase

B6

B6

B6

B6

Male (Neutered)

Canine Golden Retriever Golden

Patient ID:394674

STANDARD CONSENT FORM

I am the owner, or agent for the owner, of the above described animal and have the authority to execute consent. I hereby authorize the Cummings School of Veterinary Medicine at Tufts University (herein after Cummings School) to prescribe for treatment of said animal according to the following terms and conditions.

Cummings School and its officers, agents and employees will provide such veterinary medical care as they deem reasonable and appropriate under the circumstances.

Cummings School and its officers, agents, and employees will use all reasonable care in the treatment of the above mentioned animal, but will not be liable for any loss or accident that may occur or any disease that may develop as a result of the care and treatment provided.

I understand that the above identified animal may be treated by Cummings School students under the supervision and assistance of Cummings School staff members.

In executing this form, I hereby expressly acknowledge that risks, benefits and alternative forms of treatment have been explained to me. I understand said explanation, and I consent to treatment. Should any additional treatments or diagnostics be required during the continued care of my animal, I understand that I will be given the opportunity to discuss and consent to these additional procedures. I understand that further or additional treatment may be required without an opportunity for discussion and consideration by me, in the case of the development of any life-threatening emergency during the continued care of my animal and I expressly consent to all such reasonable treatment as required. I realize and understand that results cannot be guaranteed.

If any equipment is left with the animal, it will be accepted with the understanding that Cummings School assumes no responsibility for any loss of equipment that may occur.

I agree to pick up the animal when notified that it is ready for release.

In the event the animal is not picked up, and if ten (10) days have expired since a registered letter was sent to the address given above, notifying me to call for the animal, the animal may be sold or otherwise disposed of in a humane manner and the proceeds applied to the charges incurred in caring and treating the animal. Failure to remove said animal will not and does not relieve me from obligation for the costs of services rendered.

I hereby grant to the Cummings School of Veterinary Medicine at Tufts University, its officers and employees (collectively referred to herein as Cummings School), and its agents and assigns (the Grantees) the irrevocable rights to photograph / videotape the operation or procedure to be performed, including appropriate and otherwise use such photographs and images for, and in connection with, a Grantee's medical, scientific, educational, and publicity purposes, by any means, methods and media (print and electronic) now known or, in the future, developed that the Grantee deems appropriate (provided that such photographs and images may not be used in for-profit commercials, unless such commercials are publicizing educational programs at Cummings School). As medical and surgical treatment necessitates the removal of tissue, cells, fluids or body parts of my animal, I authorize the Grantees to dispose of or use these tissues, cells, fluids or body parts for scientific and educational purposes.

I understand that a FINANCE CHARGE will be applied to all accounts unpaid after 30 days. The FINANCE CHARGE is computed on a monthly rate of 1.33% per month, which is an annual percentage rate of 16% applied to the average daily balance outstanding, with a minimum fee of \$50.

I do further agree that should any payment, or the full amount of the sum stated above, become overdue more than 20 days from the above-agreed upon time of payment or payments, the entire balance shall be considered in default and become due and payable. I further agree to be responsible for any or all collection agency and/or attorney fees necessary to collect the full amount.

I do further agree to comply with hours of visitation in conjunction with our Hospital's policy.

I have read, understand, and agree to accept the terms and conditions herein.

Owner's name: Date: 6/20/2017

Owner's address:

Owner's Name Signature

Date

**If the individual admitting the animal is someone other than the legal owner,
please complete the portion below:**

The owner of the animal has granted me authority to obtain medical treatment and to bind this owner to pay the veterinary medical services provided at Cummings School pursuant to the terms and conditions described above

Authorized Agent - Please Print

Agent's Signature

Street Address

Date

Town/City

State

Zip

B6

B6

B6

Male (Neutered)

Canine Golden Retriever Golden

Patient ID:394674

STANDARD CONSENT FORM

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I understand that the above identified animal may be treated by Cummings School students under the supervision and assistance of Cummings School staff members.

In executing this form, I hereby expressly acknowledge that risks, benefits and alternative forms of treatment have been explained to me. I understand said explanation, and I consent to treatment. Should any additional treatments or diagnostics be required during the continued care of my animal, I understand that I will be given the opportunity to discuss and consent to these additional procedures. I understand that further or additional treatment may be required without an opportunity for discussion and consideration by me, in the case of the development of any life-threatening emergency during the continued care of my animal and I expressly consent to all such reasonable treatment as required. I realize and understand that results cannot be guaranteed.

If any equipment is left with the animal, it will be accepted with the understanding that Cummings School assumes no responsibility for any loss of equipment that may occur.

I agree to pick up the animal when notified that it is ready for release.

In the event the animal is not picked up, and if ten (10) days have expired since a registered letter was sent to the address given above, notifying me to call for the animal, the animal may be sold or otherwise disposed of in a humane manner and the proceeds applied to the charges incurred in caring and treating the animal. Failure to remove said animal will not and does not relieve me from obligation for the costs of services rendered.

I hereby grant to the Cummings School of Veterinary Medicine at Tufts University, its officers and employees (collectively referred to herein as Cummings School), and its agents and assigns (the Grantees) the irrevocable rights to photograph / videotape the operation or procedure to be performed, including appropriate and otherwise use such photographs and images for, and in connection with, a Grantee's medical, scientific, educational, and publicity purposes, by any means, methods and media (print and electronic) now known or, in the future, developed that the Grantee deems appropriate (provided that such photographs and images may not be used in for-profit commercials, unless such commercials are publicizing educational programs at Cummings School). As medical and surgical treatment necessitates the removal of tissue, cells, fluids or body parts of my animal, I authorize the Grantees to dispose of or use these tissues, cells, fluids or body parts for scientific and educational purposes.

I understand that a FINANCE CHARGE will be applied to all accounts unpaid after 30 days. The FINANCE CHARGE is computed on a monthly rate of 1.33% per month, which is an annual percentage rate of 16% applied to the average daily balance outstanding, with a minimum fee of \$50.

I do further agree that should any payment, or the full amount of the sum stated above, become overdue more than 20 days from the above-agreed upon time of payment or payments, the entire balance shall be considered in default and become due and payable. I further agree to be responsible for any or all collection agency and/or attorney fees necessary to collect the full amount.

I do further agree to comply with hours of visitation in conjunction with our Hospital's policy.

I have read, understand, and agree to accept the terms and conditions herein.

Owner's name: Date: 6/20/2017

Owner's address:

Owner's Name Signature

6/20/17
Date

**If the individual admitting the animal is someone other than the legal owner,
please complete the portion below:**

The owner of the animal has granted me authority to obtain medical treatment and to bind this owner to pay the veterinary medical services provided at Cummings School pursuant to the terms and conditions described above

Authorized Agent - Please Print

Agent's Signature

Street Address

Date

Town/City State Zip

Treatment Plan

Estimated Charges
06/20/2017

B6

This estimate is based upon our preliminary examination. This is an estimate and is not the final bill. Every effort will be made to keep you informed of the current status of your bill throughout your animal's hospitalization. The final fee may vary considerably from this estimated cost.

Patient	Description	Low Qty	Low Extended	High Qty	High Extended
B6	B6	1		6	

B6

Doctor of Record: **B6**

Client Signature

I understand that no guarantee of successful treatment is made. I certify that I have read and fully understand the authorization for medical and/or surgical treatment, the reason for why such medical and/or surgical treatments is considered necessary, as well as its advantages and possible complications, if any. I also assume financial responsibility for all charges incurred to this patient(s). I agree to pay 75% of the estimated cost at the time of admission. Additional deposits will be required if additional care or procedures are required. I further agree to pay the balance of the charges when this patient(s) is released.
Procedural billing is inclusive up to and including the estimated duration of hospitalization. There will be additional expenses if hospitalization extends beyond the specified duration.
I have read, understand, and agree to accept the conditions of this treatment plan.
Thank you for entrusting us with your pet's care.

High Total
Low Total
75% Deposit

B6

Radiology Request & Report

Patient

Name: B6

Species: Canine

Golden Male (Neutered) Golden
Retriever

Birthdate: B6

Owner

Name: B6

Address: B6

Patient ID: B6

Date of request: 6/21/2017

Attending Clinician: B6

Student:

DUPLICATE FORM

Date of exam: 6/21/2017

Patient Location: Ward/Cage: ICU R2

Weight (kg) 36.00

- Inpatient
- Outpatient Time:
- Waiting
- Emergency

Sedation

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

Examination Desired:

three view thorax

Presenting Complaint and Clinical Questions you wish to answer:

Emergency - presented with upper airway obstruction, potential tieback today

Pertinent History:

Findings:

Conclusions:

Radiologists

Primary:

Reviewing:

Dates

Reported:

Finalized:

Cummings

Veterinary Medical Center

AT TUFTS UNIVERSITY

Foster Hospital for Small Animals
55 Willard Street
North Grafton, MA 01536
Telephone (508) 839-5395
Fax (508) 839-8739
<http://vetmed.tufts.edu/>

B6

B6
B6 Male (Neutered)
Canine Golden Retriever Golden
B6

Biopsy Request

Doctor to serve as contact: B6

(if primary contact is not available during business hours, provide a secondary contact, as well)

Phone/pager: B6

Email: B6

Total # of anatomic sites sampled (each site will be charged separately): 1

Total # of separate containers submitted: 1

Images sent to pathpics@tufts.edu?

- Yes
- No

CASE SUMMARY (CONCISE DESCRIPTION of -time sequence, therapy, summary of abnormal clinical pathology and diagnostic imaging lesion size, margin labels/orientation if relevant):

mass at base of tongue on left side
acute onset gagging and nasal discharge at home followed by acute respiratory crisis and admitted here
FNA performed as well

CLINICAL DIAGNOSES/DIFFERENTIALS:

abscess vs. neoplasia

CONTAINER 1. (In addition to site specific history include number of tissue pieces):

CONTAINER 2. (In addition to site specific history include number of tissue pieces):

CONTAINER 3. (In addition to site specific history include number of tissue pieces):

CT Request & Report

Patient

Name: B6

Species: Canine

Golden Male (Neutered) Golden

Retriever

Birthdate: B6

Owner

Name: B6

Address: B6

Patient ID: B6

Date of request: 6/21/2017

Attending Clinician: B6

Student:

Date of exam: 6/21/2017

Patient Location: Ward/Cage: ICU R 2

Weight (kg) 36.00

Scheduling and Patient Notes: B6

Examination Desired: B6

Sedation

- Anesthesia to sedate/anesthetize
- DexDomitor/Butorphanol
- Autoanesthesia

Presenting Complaint and Clinical Questions you wish to answer: Emergency

B6

B6

Findings: B6

B6

Procedures:

Aspiration of the B6 mass was performed with no immediate complications

Radiologists

Primary: B6

Reviewing: B6

Dates

Reported: 6.22.2017

Finalized: 6.22.2017

Cummings Veterinary Medical Center

AT TUFTS UNIVERSITY

Emergency & Critical Care Liaison: (508) 887 - 4745

Foster Hospital for Small Animals
55 Willard Street
North Grafton, MA 01536
Telephone (508) 839-5395
Fax (508) 839-8739
<http://vetmed.tufts.edu/>

Patient

Name: B6

Signalment: B6 Golden Male
(Neutered) Golden Retriever

Patient ID: 394674

Clinician: B6 (Resident, Emergency & Critical Care)
Clinician: (Resident, cardiology)

Owner

Name:

Address:

B6

ER Supervisor:

B6

Discharge Instructions

Admit Date: 6/20/2017 10:55:12 PM

Check Out Date: 6/26/2017

Case Summary

Diagnosis:

B6

General Summary:

B6

B6

Patient Care Instructions:

Please continue to monitor **B6** for any trouble breathing. We recommend keeping him calm and as quiet as possible, and avoiding the heat as much as possible. If you start to notice him making more noise please try to keep him calm and cool, and if it does not resolve then please bring him in for evaluation.

Medications:

B6

Recheck Visits:

A recheck is recommended in about 10 days with **B6** or sooner if you have concerns. Please call 508 887 4745 to schedule this appointment. At this visit we would like to check his breathing and recheck his chest x-rays. We have sent home 2 weeks of antibiotic medications, but may want to continue for longer pending how he is doing and how his x-rays look.

Thank you for allowing us to participate in **B6** care. He is such a sweet boy and we hope that he feels good at home!

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

Case: **B6**

Owner: **B6**

Discharge Instructions

Radiology Request & Report

Patient

Name: B6

Species: Canine

Golden Male (Neutered) Golden Retriever

Birthdate: B6

Owner

Name: B6

Address: B6

Patient ID: 394674

Date of request: 6/26/2017

Attending Clinician: B6

Student:

Date of exam: 6/26

Patient Location: Ward/Cage: A run

Weight (kg) 36.00

- Inpatient
- Outpatient Time:
- Waiting
- Emergency

Sedation

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

Examination Desired:

3 view chest- Tech only please, dog has upper airway mass and has trouble breathing with excitement

Presenting Complaint and Clinical Questions you wish to answer:

B6

Pertinent History:

Findings:

B6

Conclusions:

B6

Radiologists

Primary: B6

Reviewing: B6

Dates

Reported: 06/27/17

Radiology Request & Report

Patient

Name: B6
Species: Canine
Golden Male (Neutered) Golden
Retriever
Birthdate: B6

Owner

Name: B6
Address: B6

Patient ID: B6
Date of request: 6/21/2017

Attending Clinician: B6

Student:

Date of exam: 6/21/17

Patient Location: Ward/Cage: icu

Weight (kg) 36.00

- Inpatient
- Outpatient Time:
- Waiting
- Emergency

Sedation

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

Examination Desired: Thorax 3 view

Presenting Complaint and Clinical Questions you wish to answer:
Emergency

Pertinent History: Acute inspiratory crisis (suspect lappar vs oral mass) overnight

Findings:

B6

Conclusions:

- Caudodorsal gas lucency may represent atypical duodenal gas on the DV, and gastric gas on the left lateral; however the possibility of pulmonary localization cannot be excluded. In the latter case, a

pulmonary abscess or mass with central necrosis could be considered, although no soft tissue component is identified. Thoracic CT or follow-up radiographs may be considered for further evaluation.
- Normal cardiovascular structures.

A cause for acute inspiratory dyspnea is not identified.

Radiologists

Primary: [redacted] B6

Reviewing: [redacted] B6

Dates

Reported: 6/21/2017

Finalized: 7/6/2017

Cummings

Veterinary Medical Center

AT TUFTS UNIVERSITY

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

Emergency & Critical Care Liaison: (508) 887-4745

Patient

Name:

B6

Signalment:

B6 Gold Male
(Neutered) Golden Retriever

Owner

Name:

Address:

B6

Patient ID:

394674

Emergency Clinician:

B6

Consulting Clinician:

ER Supervisor:

B6

Discharge Instructions

Admit Date: 1/14/2019 11:22:13 AM

Check Out Date: 1/14/2019

Case Summary

Diagnosis:

1. Lethargy: open diagnosis

2. B6

3. New heart murmur: open diagnosis

Case Summary:

Thank you for bringing B6 to Tufts University Emergency Service for evaluation of lethargy and a hot spot on the tail base. On examination, B6 had normal vital parameters and a normal examination aside from a low grade heart murmur and a large hot spot on the tail base. We discussed that B6 lethargy is unlikely cardiac related and that further workup would start with repeat bloodwork (CBC/chemistry/urinalysis), which you elected to hold on for now.

B6 was discharged with antibiotics to treat his B6 infection and you should follow up with your primary care veterinarian if B6 remains lethargic.

Patient Care Instructions:

B6

Medications:

New medications:

B6

Start today

Recheck Visits: No recheck in the ER is necessary unless [B6] is not doing well at home.

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

Case: [B6]

Owner: [B6]

Discharge Instructions

Discharge Instructions

Patient

Name: B6

Species: Canine

Gold Male (Neutered) Golden Retriever

Birthdate: B6

Owner

Name: B6

Address: B6

Patient ID: 394674

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

B6

Cardiology Resident:

B6

Cardiology Technician:

B6

Veterinary Nutritionist: Dr. Lisa Freeman

Student: B6

Admit Date: 2/1/2019 1:06:44 PM

Discharge Date: 2/1/2019

Diagnoses: Dilated cardiomyopathy (DCM), Suspect mild concurrent Degenerative Mitral Valve Disease**Case Summary:**

Thank you for bringing B6 to Tufts Cardiology Service for evaluation of his newly found heart murmur. On echocardiogram, we found that he does have Dilated Cardiomyopathy or 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. Thankfully, we did not see any arrhythmias on his ECG today. Additionally, we saw a moderate amount of regurgitation coming from the mitral valve. This is a common heart disease in dogs, where the heart valve thickens with age, resulting in a leak. As the leak continues, we may see worsening of the heart enlargement in the future. Signs for congestive heart failure (fluid in the lungs) will be difficulty breathing, coughing, increased breathing rate. If you notice that B6 breathing rate is faster than normal at home we will want to have chest xrays taken. We would like to adjust Dexter's diet and we provided some dietary recommendations below.

Diagnostic test results and findings:

- **Echocardiogram findings:** The walls of the chambers of his heart are thinner than normal and he has reduced contractile function. The left ventricle and left atrium are dilated. The mitral valve has a moderate amount of regurgitation.
- **ECG findings:** The ECG was unremarkable- no arrhythmias
- **Labwork findings:** We will call you when we have the results of his bloodwork. Most of it should come back

tomorrow, but some of it will take a week or so to return.

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.
- 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.
- 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/>)

Your dog's usual diet may also have more sodium than recommended - we want him/her to continue to eat his/her 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, if you are attached to the current diet you can research the amount of sodium in the diet to ensure that the sodium content is similar to those on the list.

- The FDA is currently investigating an apparent association between diet and a type of heart disease called dilated cardiomyopathy. The exact cause is still unclear, but it appears to be associated with boutique diets and those containing exotic ingredient or are grain-free. Therefore, we are currently recommending that dogs do not eat these types of diets.
- We recommend switching in **B6** to commercial diet made by a well-established company that is not grain-free and does not contain any exotic ingredients, such as kangaroo, duck, lamb, venison, lentils, peas, beans, buffalo, tapioca, barley, and chickpeas.
- The FDA issued a statement regarding this issue (<https://www.fda.gov/AnimalVeterinary/NewsEvents/CVMUpdates/uom613305.htm>) and a recent article published by Dr. Lisa Freeman on the Cummings School's Pet Foodology blog can further explain these findings (<http://vetnutrition.tufts.edu/2018/06/a-broken-heart-risk-of-heart-disease-in-boutique-or-grain-free-diets-and-exotic-ingredients/>).
- Our nutritionists have compiled a list of dog foods that are good options for dogs with heart disease.

Dry Food Options:

Royal Canin Early Cardiac (veterinary diet)

Purina Pro Plan Adult Weight Management

Purina Pro Plan Bright Mind Adult Small Breed Formula

lams Chunks

Canned Food Options:

Hill's Science Diet Adult 1-6 Healthy Cuisine Roasted Chicken, Carrot, and Spinach Stew
Royal Canin Mature 8+

If your dog has special nutritional needs or requires a homecooked diet, we recommend you schedule an appointment with our nutritionists (508-887-4696).

Exercise Recommendations:

We recommend limited activity. Leash walking only is ideal, and short walks to start. Repetitive or strenuous high energy activities (repetitive ball chasing, running fast off-leash, etc.) are generally not advised.

Recheck Visits:

Thank you for enrolling B6 in our clinical study.

B6 is supposed to have an appointment here at Tufts in about 3 months - We have an appointment for him scheduled on May 9th at 10AM. We will perform an echo, ECG and bloodwork at this time.

Thank you for entrusting us with B6! It was a pleasure to meet you all today and he was a very good boy. Please contact our Cardiology liaison at (508)-887-4696 or email us at 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/cvmc/clinical-studies

Case: B6

Owner: B6

Discharge Instructions

Cummings Veterinary Medical Center

AT TUFTS UNIVERSITY

Cardiology Liaison: 508-887-4696

duplicate

B6

Patient ID: 394674

B6

Canine

B6 Years Old Male (Neutered) Golden Retriever
Gold

Discharge Instructions

Patient

Name: B6

Species: Canine

Gold Male (Neutered) Golden Retriever

Birthdate: B6

Owner

Name: B6

Address: B6

Patient ID: 394674

Duplicate

Cummings Veterinary Medical Center

AT TUFTS UNIVERSITY

Cardiology Liaison: 508-887-4696

B6

Patient ID: B6

B6 Canine

B6 Years Old Male (Neutered) Golden Retriever
Gold

Cardiology Appointment Report

Date: 2/1/2019

Attending Cardiologist:

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

B6

Cardiology Resident:

B6

Cardiology Technician:

B6

Student:

B6

Presenting Complaint:

RDVM yearly revealed 2/6 heart murmur

B6 echo- DCM with 2+ mitral regurgitation 1+ tricuspid regurgitation and mild pulmonic insufficiency

ER 1/14 for profound lethargy- declined diagnostics but wanted to see cardio sooner than scheduled appointment, diagnosed with B6 but owner didn't read label right and has been giving 500mg PO BID instead

Whole life on grain free diet

Put on a lot of weight within 2018 (84lbs in December, 80lbs today), decreased activity (secondary to owner injury vs. B6 less excited for fetching, still goes on 1-2.5mile walk) - rdvm records low normal thyroid level

Concurrent Diseases:

B6

General Medical History:

Attacked in face by other dog at agility class prior to adoption (1 yo)

B6

Diet and Supplements:

Earthborne grain free 3/4 cup BID, was 1cup BID before rdvm appt in 12/2018

B6

Cardiovascular History:

Prior CHF diagnosis? No

Prior heart murmur? II/VI diagnosed in December 2018

Prior ATE? No

Prior arrhythmia? No

Monitoring respiratory rate and effort at home? No

Cough? No

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:

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

Cardiovascular Physical Exam:

Murmur Grade:

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

Murmur location/description: Left heart apex

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: Faint

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:

Murmur and prior dx of DCM
Here for diet study

Diagnostic plan:

- Echocardiogram +/- other testing
- Chemistry profile
- ECG
- Renal profile
- Blood pressure

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

Echocardiogram Findings:

General/2-D findings:

B6

Mitral inflow:

- Summated
- Normal
- Delayed relaxation

- Pseudonormal
- Restrictive

ECG findings:

B6

Assessment and recommendations:

Echocardiogram reveals DCM with significant MR (which could also indicate a component of DMVD).

Recommend starting: B6

B6 Recommend changing diet to RC Early Cardiac or similar diet on the list. NT-proBNP, troponin, CBC/chem were submitted. Patient was enrolled in DCM Study. Recheck echo and blood work for study in 3, 6, and 9 months.

Final Diagnosis:

DCM with a component of DMVD

Heart Failure Classification Score:

ISACHC Classification:

- Ia
- Ib
- II
- IIIa
- IIIb

ACVIM Classification:

- A
- B1
- B2
- C
- D

M-Mode

IVSd	om
LVIDd	om
LVPWd	om
IVSs	om
LVIDs	om
LVPWs	om
EDV(Teich)	ml
ESV(Teich)	ml
EF(Teich)	%
%FS	%
SV(Teich)	ml
Ao Diam	om
LA Diam	om
LA/Ao	
Max LA	om
TAPSE	om
EPSS	om

B6

M-Mode Normalized

IVSdN	(0.290 - 0.520) !
LVIDdN	(1.350 - 1.730) !

LVPWdN
IVSsN
LVIDsN
LVPWsN
Ao Diam N
LA Diam N

(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)
LV Major
LV Minor
Sphericity Index
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
R-R
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CO MOD LAX

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B6

Doppler

MR Vmax
MR maxPG
MVE Vel

m/s
mmHg
m/s

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
TR Vmax
TR maxPG

B6

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mmHg

Notice of Patient Admit

Date: 6/20/2017 10:55:12 PM

Case #: 394674

Referring Doctor: B6

Client Name: B6

Patient Name: B6

Dear B6,

Your patient presented to our Emergency service. Please make note of the following information to facilitate communication with our team.

The attending doctor is: B6

The reason for admission to the FHSA is: resp distress, lapar, possible B6

If you have any questions regarding this particular case, please call 508-887-4988 to reach the ECC Service. Information is updated daily, by noon.

Thank you for your referral to our Emergency Service.

Cummings
Veterinary Medical Center
AT TUFTS UNIVERSITY

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Telephone (508) 839-5395
Fax (508) 839-8739
<http://vetmed.tufts.edu/>

B6

B6

Male (Neutered)

Canine Golden Retriever Golden
394674

6/25/2017

Dear **B6**

Thank you for referring **B6** with their pet **B6**. Please see attached discharges for further information.

If you have any questions, or concerns, please contact us at 508-887-4988.

Thank you,

B6 (Resident, Emergency & Critical Care)

Cummings
Veterinary Medical Center
AT TUFTS UNIVERSITY

Foster Hospital for Small Animals
55 Willard Street
North Grafton, MA 01536
Telephone (508) 839-5395
Fax (508) 839-8739
<http://vetmed.tufts.edu/>

B6

B6

Male (Neutered)

Canine Golden Retriever Golden
394674

6/28/2017

Dear **B6**

Thank you for referring **B6** with their pet **B6**. He presented with respiratory distress and required intubation and a brief period of ventilation. A mass was noted **B6** which was further evaluated with CT, cytology, and biopsies. The findings were consistent with inflammation and possible infection, but no neoplastic cells were seen. The owners would not pursue chemotherapy or radiation regardless, so we are treating conservatively with antibiotics and antiinflammatories. The surgical team did not feel that the area of swelling was something that they could address surgically. **B6** did well with supportive care in the hospital. He left the hospital on Monday and has been reportedly breathing very well at home. If his trouble breathing recurs the owner may elect to repeat a CT or biopsies to see if we get a different result, but hopefully he will continue to do well.

If you have any questions, or concerns, please contact us at 508-887-4988.

Thank you,

B6

Cummings
Veterinary Medical Center
AT TUFTS UNIVERSITY

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

B6

B6

Male (Neutered)

Canine Golden Retriever Gold
394674

1/14/2019

Dear **B6**

B6 was presented to the Tufts Emergency Service for evaluation of lethargy that started yesterday. Examination was normal aside from a low grade heart murmur (no arrhythmia, no concern for CHF) and **B6** base. The client wished for a cardiology consult on emergency today, which could not be accommodated. Recheck bloodwork was offered, given the change in clinical status, which the client declined. We elected to treat his hot spot with **B6** and he was discharged home to monitor and await his scheduled cardio consult.

If you have any questions, or concerns, please contact us at 508-887-4988.

Thank you,

B6 (Emergency and Critical Care Resident)

Cummings
Veterinary Medical Center
AT TUFTS UNIVERSITY

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

B6

B6

Male (Neutered)

Canine Golden Retriever Gold
394674

2/12/2019

Dear **B6**

Thank you for referring **B6** with their pet **B6**

If you have any questions, or concerns, please contact us at 508-887-4988.

Thank you,

John Rush DVM, DACVIM (Cardiology), DACVECC

From: Jones, Jennifer L </o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=0f6ca12eaa9348959a4cbb1e829af244-Jennifer.Jo>
To: Palmer, Lee Anne
CC: Rotstein, David; Carey, Lauren
Sent: 3/27/2018 7:39:49 PM
Subject: RE: Zignature Kangaroo Formula: [B6] EON-350158

Yes-let's take a look! I think we should check [B5] I'm curious if those aminoacid levels are normal if there is some underlying renal disease causing whole body taurine depletion.
<https://academic.oup.com/alcalc/article/36/1/29/138000>

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



From: Palmer, Lee Anne
Sent: Tuesday, March 27, 2018 3:25 PM
To: Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov>
Cc: Rotstein, David <David.Rotstein@fda.hhs.gov>; Carey, Lauren <Lauren.Carey@fda.hhs.gov>
Subject: FW: Zignature Kangaroo Formula: [B6] - EON-350158

In case of interest – taurine level low?

From: PFR Event [mailto:pfpreventcreation@fda.hhs.gov]
Sent: Tuesday, March 27, 2018 3:20 PM
To: Cleary, Michael * <Michael.Cleary@fda.hhs.gov>; HQ Pet Food Report Notification <HQPetFoodReportNotification@fda.hhs.gov> [B6]
Subject: Zignature Kangaroo Formula: [B6] - EON-350158

A PFR Report has been received and PFR Event [EON-350158] has been created in the EON System.

A "PDF" report by name "2044632-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 "2044632-attachments.zip" and is attached to this email notification.

Below is the summary of the report:

EON Key: EON-350158

ICSR #: 2044632

EON Title: PFR Event created for Zignature Kangaroo Formula; 2044632

AE Date	10/31/2017	Number Fed/Exposed	1
Best By Date		Number Reacted	1
Animal Species	Dog	Outcome to Date	Better/Improved/Recovering
Breed	Retriever - Labrador		

Age	13 Years		
District Involved	PFR- B6 DO		

Product information

Individual Case Safety Report Number: 2044632

Product Group: Pet Food

Product Name: Zignature Kangaroo Formula

Description: At the time of diagnosis (10/31/17), **B6** was a 13 year old female spayed Labrador retriever who had been maintained on a Zignature Kangaroo formula. She presented with a history of a progressive cough which, prior to presentation, became productive and she coughed up a small volume of pink foam (possible pulmonary edema). On examination she had a 2/6 left apical systolic heart murmur and on echo diagnosed with advanced dilated cardiomyopathy with severe left ventricular dilation, moderate to severe left ventricular systolic dysfunction, and moderate to severe left atrial dilation. Thoracic radiographs were suspicious for early congestive heart failure. A whole blood taurine level was submitted and was low at **B6**. She was treatment with **B6** **B6** and her diet was changed to Royal Canin Early Cardiac. At her recheck in 2/26/18, **B6** heart had improved significantly with now mild dilated cardiomyopathy with normalized left atrial dimensions, mild left ventricular dilation and low normal left ventricular systolic function. The **B6** was able to be discontinued at this time.

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: Better/Improved/Recovering

Number of Animals Treated With Product: 1

Number of Animals Reacted With Product: 1

Product Name	Lot Number or ID	Best By Date
Zignature Kangaroo Formula		

Sender information

B6

USA

Owner information

B6

USA

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

<https://eon.fda.gov/eon//browse/EON-350158>

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=366527>

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 immediately.

From: Jones, Jennifer L </o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=0f6ca12eaa9348959a4cbb1e829af244-Jennifer.Jo>
To: 'cvca [B6] @cvcavets.com'
Sent: 3/28/2018 6:40:32 PM
Subject: FDA Case investigation for [B6] (EON-350158)
Attachments: 02-Vet-LIRN-NetworkProceduresVets-12.22.2015.pdf; 03-Vet-LIRN-NetworkProceduresOwners-12.22.2015.pdf

Good afternoon [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 email (preferred) or fax (301-210-4685) a copy of [B6] entire medical history (not just this event).
 - Do you have records from her referring veterinarian?
- **Potentially Test Remaining OPEN product**
 - Do you have any remaining product left?
 - Is there a lot number or best by date for the leftover food?
- **Hold any remaining UNOPENED product** for potential collection.

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





Network Procedures for Veterinary Laboratory Investigation and Response Network Case Investigations

Network Procedures for Veterinarians

1. Introduction

The purpose of this Network Procedure is to facilitate basic interactions between the Vet-LIRN Program Office (VPO) and veterinarians participating in Vet-LIRN case investigations. General procedures such as information flow, sample handling procedures, submission of reports and billing for services are discussed. The focus of most Vet-LIRN case investigations is on diagnostic samples, although occasionally animal food samples will also be submitted. Animal food testing conducted after receiving a consumer complaint is typically handled by FDA's Office of Regulatory Affairs (ORA) Laboratories or accredited laboratories.

- 1.1 In the case of Vet-LIRN investigations, the government is the client.
 - 1.1.1 The government is requesting assistance in its investigation, and is requesting tests or services to be performed by your clinic during this investigation.
 - 1.1.2 The government will pay for these services.
 - 1.1.3 The owner is helping with the government's investigation of a regulated product.
 - 1.1.4 The goal of the investigation is to determine if the product is at fault and why.
 - 1.1.5 The government's investigation may not provide a definitive diagnosis for the patient's illness.

2. Case Background – Consumer complaint

- 2.1 Vet-LIRN obtains information about the cases we investigate from 3 main sources,
 - 2.1.1 Consumer complaints (cc) - obtained by FDA Consumer Complaint Coordinators by phone
 - 2.1.2 Electronic consumer complaint submissions through FDA's Food Safety Reporting Portal, and
 - 2.1.3 Vet-LIRN partner laboratories.

NOTE: Generally, the information received in a 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.



Network Procedures for Veterinary Laboratory Investigation and Response Network Case Investigations

3. Communications

- 3.1 VPO will discuss the case with the referring veterinarian and or the owner.
- 3.2 VPO evaluates the case history and determines a need for follow up testing to determine if the food (or drug) is the cause of the illness or death.
- 3.3 VPO contacts the appropriate member laboratory(-ies) (chosen based on location and capabilities) and provides initial information
 - 3.3.1 In some cases only partial history is available
 - 3.3.2 Follow up information will be sent as it becomes available.
- 3.4 VPO proposes the tests to be conducted and prepares billing documents.
- 3.5 VPO makes arrangements with the veterinarian to obtain and ship samples.
 - 3.5.1 VPO receives test results and forwards the results to the veterinarian who will then communicate the results to the owner.

4. Case history

- 4.1 A complete medical history is essential,
 - 4.1.1 age, sex, breed, animal's ID/name,
 - 4.1.2 other animals affected,
 - 4.1.3 duration of problem, lesion distribution (diagrams or photos are welcome),
 - 4.1.4 treatment of problem (especially dose and duration of therapy) and response to treatment.
 - 4.1.5 concomitant drugs or dietary supplements administered (not used for treatment of the reaction, but administered for other reasons at the same time or within a short time of the problem occurrence).
- 4.2 Vet-LIRN Case Numbers:
 - 4.2.1 Include Vet-LIRN case number in all correspondence.
 - 4.2.2 E-mail: include the Vet-LIRN case number as the first part of the subject line. This will help archiving data for each case.
- 4.3 Electronic submission of medical records and laboratory results is preferred.
- 4.4 Histories can also be submitted by FAX to Vet-LIRN (301-210-4685).
- 4.5 Information about follow-up visits related to the investigation and additional laboratory reports should be provided as soon as possible. Phone calls are very useful for



Network Procedures for Veterinary Laboratory Investigation and Response Network Case Investigations

discussing cases in depth, but should be followed up with the medical records and lab reports.

- 4.5.1 Due to time difference around the country, email communication is often the best way to assure information is transferred in a timely manner.

5. Services Requested by VPO

5.1 Services typically tests will fall into 3 categories:

- 5.1.1 Office Examination
- 5.1.2 Clinical laboratory samples
- 5.1.3 Pathology

5.2 Office Examination:

- 5.2.1 To evaluate the current status of the patient.
- 5.2.2 To obtain samples from the patient for further analysis (blood, urine, feces).

5.3 Clinical Laboratory Samples:

- 5.3.1 VPO may ask for repeat analysis of new samples to be run either by the veterinary hospital, or by its usual testing laboratory.
- 5.3.2 Typical tests include clinical hematology, microbial cultures, urinalysis, and fecal examination.
- 5.3.3 Additional testing may be requested and the samples sent to a Vet-LIRN network laboratory.

5.4 Pathology:

- 5.4.1 Either submit the entire carcass or conduct a routine necropsy examination. Record your findings in detail and submit. Histopathology and microbiological cultures as appropriate.
 - 5.4.1.1 Describe all lesions – location, color, size, texture.
 - 5.4.1.2 Culture lesions or intestinal contents as deemed appropriate based on the history.
 - 5.4.1.3 Save tissues for histopathology- be sure to use 10:1 formalin to tissue mass.
- 5.4.2 Histopathology tissues (preserve in 10% neutral buffered formalin 10:1 ratio fixative to tissue):



Network Procedures for Veterinary Laboratory Investigation and Response Network Case Investigations

5.4.2.1 thyroid, thymus, lung, heart, liver, spleen, adrenal, kidney, pancreas, stomach, duodenum, jejunum, ileum, colon, urinary bladder, skeletal muscle, brain.

5.4.2.2 Request a duplicate set of H&E for submission to VPO for archiving.

5.5 Toxicology:

5.5.1 Freeze and hold tissues if there is any indication that a toxic substance may be involved:

5.5.1.1 brain (for organophosphates and carbamates),

5.5.1.2 eyes, liver, kidney, brain, stomach content, fat,

5.5.1.3 if available, serum, EDTA blood, urine.

5.5.2 Following a review of histopathology, VPO may select tissues to be analyzed and request that tissues be sent to a Vet-LIRN laboratory.

5.5.3 When the case is closed by VPO, samples can be disposed of. When in doubt, please ask.

5.5.3.1 The animal's remains can be disposed of following the laboratories' customary procedures.

6. Sample submissions

6.1 Normally, VPO prefers that the veterinarian, not the pet owner submit samples.

6.2 Arrangements for transport should be made with the VPO (see additional shipping instructions).

6.3 A Vet-LIRN Sample Submission Form, given by VPO to the veterinarian, should be provided to the veterinarian and should accompany all samples being sent to our Vet-LIRN laboratory, listing the recommended tests.

6.4 A Shipping Inventory Sheet, given by VPO to the veterinarian, should also be provided by VPO and should be submitted with all samples. This form will be filled out and faxed to the VPO (301-210-4685) by the receiving Vet-LIRN laboratory.

6.5 Vet-LIRN case numbers should be provided by the VPO and should be included on all samples and reports.

6.5.1 Rarely, an owner will deliver a specimen or an animal for necropsy directly to the participating laboratory. Vet-LIRN should notify the lab to expect the owner if this happens and will provide appropriate forms.



Network Procedures for Veterinary Laboratory Investigation and Response Network Case Investigations

7. Sample types that Vet-LIRN may request from the Veterinarian

- 7.1 Entire bodies (fresh or frozen)
- 7.2 Organs from necropsy (fresh, frozen or formalin fixed)
- 7.3 Clinical samples (serum, blood, urine, feces, biopsy samples, cultures)
- 7.4 Food samples (open bag products from home)

8. Reporting

- 8.1 All reports from Vet-LIRN testing labs are submitted to VPO.
- 8.2 VPO will forward reports to the veterinarian, who should discuss the results with the owner.
- 8.3 If appropriate, VPO will forward reports to the owner.

9. Communications with Owners

9.1 General:

- 9.1.1 VPO usually will have contacted the owner to request permission and assistance in the investigation.
- 9.1.2 Vet-LIRN's investigation is focused on determining if a regulated product is the cause of the animal's illness. The testing requested by Vet-LIRN may not provide a definitive diagnosis
- 9.1.3 VPO will provide testing results to the veterinarian for communication to the owner. This ensures that:
 - 9.1.3.1 Owners can be counseled on the interpretation of the test results,
 - 9.1.3.2 Appropriate medical follow-up care based on test results can be recommended by the owner's veterinarian.



Network Procedures for Veterinary Laboratory Investigation and Response Network Case Investigations

10. Billing

- 10.1 Vet-LIRN VPO can only pay for services which were requested and approved by VPO. Vet-LIRN cannot pay for treatment, or for diagnostic testing outside of the scope of the investigation.
- 10.2 Procurement and Billing Process: The following process needs to be followed in order to adhere to government regulations.
 - 10.2.1 The veterinarian must provide estimates so a Purchase Request can be prepared. Estimates should include items such as office visit(s), in-house diagnostic test costs, biopsy or pathology costs and additional charges such as potential shipping charges.
 - 10.2.2 A billing contact must be provided: include name, address, telephone + fax numbers, and email.
 - 10.2.3 Approved Purchase Request is required prior to beginning service.
 - 10.2.4 Additional services may only be initiated after authorized by Vet-LIRN, but must first be approved by VPO with an additional Purchase Request.
 - 10.2.5 Hospitals must provide an invoice to Vet-LIRN upon the completion of work before they can be paid. VPO is tax exempt. Taxes should be removed from all charges. The invoice must include the Vet-LIRN case number.



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: CVCA - Cardiac Care for Pets [B6]
To: Jones, Jennifer L
Sent: 3/28/2018 10:08:41 PM
Subject: Re: FDA Case investigation for [B6] (EON-350158)

Dear Dr. Jones,

Thank you for following up on our patient, [B6]. We will be sending you our complete records for [B6] including the primary veterinarian history that we have and the history from her previous emergency room visit. Unfortunately, the diagnosis was made in October and the client has disposed of the diet. We will certainly keep this in mind for future patients with dilated cardiomyopathy which could potentially be diet-related and have those owners keep a sample and record the lot number for future testing/tracking. Thank you again for looking into this issue for our patients.

Sincerely,

[B6] VMD, DACVIM - Cardiology

On Wed, Mar 28, 2018 at 2:40 PM, Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov> wrote:

Good afternoon [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 email (preferred) or fax (301-210-4685) a copy of [B6] **entire** medical history (not just this event).
 - Do you have records from her referring veterinarian?
- **Potentially Test Remaining OPEN product**
 - Do you have any remaining product left?
 - Is there a lot number or best by date for the leftover food?
- **Hold any remaining UNOPENED product** for potential collection.

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. 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

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



--

CVCA - Cardiac Care for Pets

B6

Phone: **B6**

Fax: **B6**

Email: **B6** cvcavets.com

Visit our website at: www.cvcavets.com

"Like" us on Facebook at: www.facebook.com/CVCAVETS

"Follow" us on Instagram at: www.instagram.com/CVCAVETS

We want to hear from you! Access our online survey by clicking [here](#).

If there is anything that we can do to improve our service for you, please do not hesitate to contact us directly. We would greatly appreciate your feedback and invite you to fill out a survey based on your experience with CVCA.

Share your photos with us!

If you have a photo that you would like to share, we would love to post it on our Facebook page. Like us on [Facebook](#) and post to our wall or you can email the image with a fun fact to cvcainfo@cvcavets.com and we will forward it to our Facebook administrator.

Please note -- Images are usually posted within 1 month of submission.

From: CVCA - Cardiac Care for Pets [B6]
To: Jones, Jennifer L
Sent: 3/28/2018 10:27:10 PM
Subject: Re: FDA Case investigation for [B6] (EON-350158)
Attachments: [B6] BW.pdf; [B6] BW1.pdf; [B6] echo adata.pdf; [B6] hx.pdf; [B6] consult.pdf; [B6] echo 2.pdf; [B6] echo data.pdf; [B6] echo report 1.pdf; [B6] er.pdf; [B6] fecal.pdf; [B6] hx2.pdf; [B6] hx44.pdf; [B6] labs3.pdf; [B6] labs38.pdf; [B6] taurine.pdf

Attached is entire medical records for [B6]. Please let us know if you need anything else-
Thank-

On Wed, Mar 28, 2018 at 6:08 PM, CVCA - Cardiac Care for Pets [B6] wrote:

Dear Dr. Jones,

Thank you for following up on our patient, [B6]. We will be sending you our complete records for [B6] including the primary veterinarian history that we have and the history from her previous emergency room visit. Unfortunately, the diagnosis was made in October and the client has disposed of the diet. We will certainly keep this in mind for future patients with dilated cardiomyopathy which could potentially be diet-related and have those owners keep a sample and record the lot number for future testing/tracking. Thank you again for looking into this issue for our patients.

Sincerely,

[B6] VMD, DACVIM - Cardiology

On Wed, Mar 28, 2018 at 2:40 PM, Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov> wrote:

Good afternoon [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 email (preferred) or fax (301-210-4685) a copy of [B6] **entire** medical history (not just this event).
 - Do you have records from her referring veterinarian?
- **Potentially Test Remaining OPEN product**
 - Do you have any remaining product left?
 - Is there a lot number or best by date for the leftover food?
- **Hold any remaining UNOPENED product** for potential collection.

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. 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

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



--

CVCA - Cardiac Care for Pets

B6

Phone: **B6**

Fax: **B6**

Email: **B6** [@cvcavets.com](mailto:B6@cvcavets.com)

Visit our website at: www.cvcavets.com

"Like" us on Facebook at: www.facebook.com/CVCAVETS

"Follow" us on Instagram at: www.instagram.com/CVCAVETS

We want to hear from you! Access our online survey by clicking [here](#).

If there is anything that we can do to improve our service for you, please do not hesitate to contact us directly. We would greatly appreciate your feedback and invite you to fill out a survey based on your experience with CVCA.

Share your photos with us!

If you have a photo that you would like to share, we would love to post it on our Facebook page. Like us on [Facebook](#) and post to our wall or you can email the image with a fun fact to cvcainfo@cvcavets.com and we will forward it to our Facebook administrator.

Please note -- Images are usually posted within 1 month of submission.

--

CVCA - Cardiac Care for Pets

B6

Phone: **B6**

Fax: **B6**

Email: **B6**@cvcavets.com

Visit our website at: www.cvcavets.com

"Like" us on Facebook at: www.facebook.com/CVCAVETS

"Follow" us on Instagram at: www.instagram.com/CVCAVETS

We want to hear from you! Access our online survey by clicking [here](#).

If there is anything that we can do to improve our service for you, please do not hesitate to contact us directly. We would greatly appreciate your feedback and invite you to fill out a survey based on your experience with CVCA.

Share your photos with us!

If you have a photo that you would like to share, we would love to post it on our Facebook page. Like us on [Facebook](#) and post to our wall or you can email the image with a fun fact to cvcainfo@cvcavets.com and we will forward it to our Facebook administrator.

Please note -- Images are usually posted within 1 month of submission.

Client: B6 (8546)
Patient Name: B6
Species: Canine
Breed: Labrador Retriever

Gender: Female/Spayed
Weight: 67.60 lbs
Age: 11 Years
Doctor: B6

B6
B6
B6

Test Results Reference Interval LOW NORMAL HIGH

Catalyst Dx (November 14, 2017 4:20 PM)

10/27/17
10:05 AM

GLU 70 - 143 LOW
CREA 0.5 - 1.8
BUN 7 - 27
BUN/CREA
PHOS 2.5 - 6.8
CA 7.9 - 12.0
TP 5.2 - 8.2
ALB 2.2 - 3.9
GLOB 2.5 - 4.5 HIGH
ALB/GLOB HIGH
ALT 10 - 125
ALKP 23 - 212 HIGH
GGT 0 - 11 HIGH
TBIL 0.0 - 0.9
CHOL 110 - 320
AMYL 500 - 1500
LIPA 200 - 1800
Na 144 - 160
K 3.5 - 5.8
Na/K
Cl 109 - 122
Osm Calc

B6

B6



Client: **B6** (8546)
Patient Name: **B6**
Species: Canine
Breed: Labrador Retriever

Gender: Female/Spayed
Weight: 67.60 lbs
Age: 11 Years
Doctor: **B6**

B6
B6
B6

Test Results Reference Interval LOW NORMAL HIGH

Catalyst Dx (November 14, 2017 4:20 PM)

10/27/17

GLU		70 - 143	LOW
CREA		0.5 - 1.8	
BUN		7 - 27	
BUN/CREA			
PHOS		2.5 - 6.8	
CA		7.9 - 12.0	
TP		5.2 - 8.2	
ALB		2.2 - 3.9	
GLOB		2.5 - 4.5	HIGH
ALB/GLOB			
ALT	B6	10 - 125	
ALKP		23 - 212	HIGH
GGT		0 - 11	HIGH
TBIL		0.0 - 0.9	
CHOL		110 - 320	
AMYL		500 - 1500	
LIPA		200 - 1800	
Na		144 - 160	
K		3.5 - 5.8	
Na/K			
Cl		109 - 122	
Osm Calc			

B6

Patient Demographics

B6	Study Date: 11/01/2017					
Patient ID: 121217B	Accession #:		Alt ID:			
DOB:	Age:	Gender:	Ht:	Wt: 67lb 4oz	BSA:	
Institution: CVCA	B6					
Referring Physician:						
Physician of Record:	Performed By:					
Comments:						

Adult Echo: Measurements and Calculations

2D

LVIDd (2D) LVPWd (2D) EDV (2D-Teich) EDV (2D-Cubed) A4Cd LV Vol LV Length LV Area B6	LVAd (A4C) LVAs (A4C) EDV (A4C) B6	IVSd (2D) RVIDd/LVIDd RVIDd (2D) B6
A4Cs LV Vol LV Length LV Area B6	ESV (A4C) LV Mass (Cubed) IVS/LVPW (2D) B6	LA Area LA Dimen (2D) LA/Ao (2D) B6
LVLd (A4C) LVLs (A4C)	SV (A4C) B6 EF (A4C)	AoR Diam (2D) B6

MMode

IVSd (MM) LVIDd (MM) LVPWd (MM) B6	SV (MM-Teich) B6 FS (MM-Teich) B6 EF (MM-Teich) B6	LVPW % (MM) RVIDd (MM) LA Dimen (MM) AoR Diam (MM) LA/Ao (MM) B6
IVSs (MM) LVIDs (MM) LVPWs (MM) IVS/LVPW (MM)	EDV (MM-Cubed) ESV (MM-Cubed) B6 SV (MM-Cubed) EF (MM-Cubed)	MV D-E Exc Dist MV D-E Slope

EDV (MM-
Teich)
ESV (MM-
Teich)

B6

FS (MM-
Cubed)
IVS % (MM)

B6

MV E-F Slope
MV EPSS

B6

Doppler

LVOT Vmax
Max PG
Vmax
RVOT Vmax
Max PG
Vmax
MR Vmax
Max PG
Vmax

B6

MV Peak A Vel
Vel
PG
MV E/A

B6

Lat A` Vel

B6

E`/A` Lateral

B6

TR Vmax
Max PG
Vmax

B6

MV Peak E Vel
Vel
PG

B6

Lat E` Vel

E/Lat E`

Other Measurements

Dimensions: 2D LAX

LA lax (2D)

Dimensions: Diameters

LVID/Ao (2D)

EF & Volume: Simpson's

Sphericity Id

Dimensions: Diameters

LVEDDN

LVID/Ao (2D)

B6

Images

B6

B6

B6

Signature

Signature:
Name(Print):

Date:

Patient Chart for B6

Client: B6

B6

B6

B6

121217 B

B6

CVCA CONSULTATION REQUEST FORM

Date: Tuesday, October 31, 2017

Client Id #: **B6** **Client Name:** **B6**

Address: **B6** **City:** **B6** **State:** **B6** **Zip:** **B6**

Telephone:

Cellular: : **B6**
Cellular: : **B6**

Animal Name: **B6** **Species:** Canine **Breed:** Labrador Retriever

Color: Yellow **Sex:** spayed female **Weight:** 0Kg.

Date of Birth: **B6** **Age:** 13 Yrs. 0 Mos.

Referring Veterinary Hospital: No Vet

Doctor's Name: No Vet

Referring Veterinary Hospital Phone #: **B6**

B6 **Doctor Requesting Consult:** **B6**

Relevant History / Physical Findings:

Cough started last Wednesday. Radiographs and blood work were performed. Radiographs revealed suspected cardiomegaly. Blood work showed mild ALP and GGT elevations. The owner made cardio-consultation on Friday however her cough got worse with pink tinged foam so **B6** was brought to **B6** for a cardiology consultation. **B6** has been a healthy dog with no current medications. She is up to date on vaccination and heartworm preventative.

Current Medications:

B6 which was stopped because her coughing got worse with those medications.

Radiographs performed at:

RDVM

B6

Consulting Cardiologist:

10/31/2017 CVCA Consult 2013

B6

CVCA, Cardiac Care for Pets

B6



www.cvcavets.com

Client: **B6**

Co-owner:

Patient name: **B6**

Species: Canine

Breed: Labrador Retriever

Sex: FS

Age: **B6**

Weight: 33.18kg. / 73.15 lbs

Primary Care Veterinarian: **B6**

Primary Care Hospital: **B6**

Phone: **B6** ext:

Fax: **B6**

Email:

Cardiac Evaluation Report
Exam Date: 02/26/2018

Diagnosis

- Mild, improved dilated cardiomyopathy - suspect taurine-responsive
- Mild, improved mitral and very mild tricuspid valve regurgitation as cause of heart murmur
- Normal, improved left atrial chamber dilation
- Mild, improved eccentric left ventricular chamber dilation
- Low normal, improved left ventricular contractility/heart muscle function
- Cough - suspect bronchial/primary respiratory disease

Medications

B6

• You may purchase the taurine and L-carnitine at any health food or nutrition store www.puritanspride.com. You may also obtain the L-carnitine in bulk powder form from North Carolina State University by calling 919-513-6325.

- Continue with monthly heartworm and flea/tick control as prescribed by **B6**

Please allow 24-48 hours for CVCA to process prescription refill requests.

Refill all medications indefinitely unless directed by CVCA or your primary care veterinarian.

- **Please check all medications and dosages on your discharge report against the pharmacy labels.**

Please Note

- Please see our website www.cvcavets.com for more information about **B6** dilated cardiomyopathy.

Information for **B6**

CVCA **B6** 03/28/2018

Nutrition Recommendations:

- Continue the Royal Canin Early Cardiac diet.
- Consider fish oil supplements (omega-3 fatty acids). Her dose is approximately EPA 1220 mg and DHA 760 mg total per day. Please start at 1/2 the dose for one week, then increase to the full dose if tolerating well thereafter. Please avoid Cod liver oil and flax seed as well as products with Vit A and/or D.

For more information about fish oils, please visit --<http://vet.tufts.edu/heartsmart/diet/important-nutrients-for-pets-with-heart-disease/>

- In addition to the supplements approved by Tuft's Veterinary Nutrition Service, other reputable brands include Welactin and Nordic Naturals. Swan Creek Veterinary Clinic may have additional brand recommendations.

Activity Recommendations:

- Continue normal activity as she wants and is able to do. Please allow [B6] to take more breaks and rest during activity.
- Please avoid exercise in the hot/humid weather.

At Home Monitoring:

- In order to monitor for the development of early congestive heart failure in the out-patient setting, we recommend monitoring your pet's resting respiratory rate several times a week. Normal resting respiratory rates should be less than 30 breaths per minute. Consider using a respiratory rate monitoring application to track [B6] respiratory rate - Cardalis or BI Pharma have reliable phone applications. Please contact us if you note a persistent or progressive increase.

Future Anesthesia/Fluid Recommendations

B6

Reevaluation

- Recheck with [B6] the next 2-4 weeks and every 6 months for wellness care as directed, close auscultation, blood pressure and complete lab tests including blood and urine testing (CBC/Chemistry/Urinalysis/Thyroid evaluation). Please forward these results when available.
- Please recheck with CVCA in 6 months for a follow up consultation/examination, blood pressure, and echocardiogram. Please contact us or schedule an earlier appointment if [B6] has any problems or symptoms indicative of worsening heart disease or if recommended by [B6]

We thank you for trusting in CVCA to care for [B6] today. Please do not hesitate to call us with any questions or concerns.

Sincerely,

B6

Visit Summary

Heart Rate: [B6] **BP:** [B6] **Cuff Size/Location:** [B6]

History: Recheck DCM, suspected early CHF; doing well; RRR - [B6] increased [B6] in January due to increased cough; cough seems to be intermittent and related to excitement; good appetite; 3 kg weight gain since 10/2017; walks 30-45 minutes per day - slow pace, at times winded but recovers very quickly.

B6 developed a cough last Wednesday (10/25/17). Radiographs and blood work were performed by B6. B6 The lab work (which is unavailable for review) reportedly showed an elevated ALP, B6 and GGT, B6 and mild lymphopenia. Thoracic radiographs were performed which revealed cardiomegaly. B6 was treated with B6. All medications were stopped on Monday as her cough had worsened and she was presented to the B6 for a cardiac evaluation as her coughing had worsened and she had brought up a small volume of pink-tinged foam after a coughing fit. During this time there has been no evidence of lethargy and she continues to eat and drink normally at home.

PPHx: None

Meds: None

Other: B6

Diet: changed from Zignature (Kangaroo) to Royal Canin Early Cardiac

Physical Exam Findings: 3/6 pansystolic murmur, PMI - mitral valve, regular rhythm with S3 gallop; LUNGS - clear all fields, panting, normal effort; SI. overweight body condition (BCS - B6) Pink mm; PP - SS; PLN - WNL; ABD - hepatomegaly; BAR

Echocardiographic Findings

Mild left ventricular eccentric dilation - significant improvement compared to previous exam; mild, improved centrally located mitral regurgitant jet, normal, improved left atrial dimensions on 2D imaging and on M-mode imaging, mild, low velocity eccentric low velocity tricuspid regurgitation, subjectively normal right ventricular and right atrial dimensions, normal left and right ventricular outflow velocities, low normal, improved indices of systolic function (FS% and EF% by modified Simpson's, normal EPSS, normal transmitral inflow velocities and E:A wave ratio on spectral Doppler tracings, normal TDI E':A' ratio of the lateral mitral annulus, no masses, effusions or heartworms observed.

Comments

Dear B6

Thank you for sending B6 to see us with B6 today. I am quite pleased with B6 exam today. She has had remarkable improvement in her echocardiogram with the cardiac medications, change in diet and supplementation with Taurine and L-carnitine. Her risk for congestive heart failure at this point is very low so we will be weaning B6 off the B6 while B6 monitors B6 respiratory rate. Her current cough is likely due to respiratory disease and if the cough progresses/worsens, we will consider adding in a B6, such as B6. Right now, with the marked improvement, B6 long-term prognosis has improved considerably. I suspect we will be able to further discontinue cardiac medications if her heart remains stable. We will continue to closely monitor B6 heart disease via serial echocardiography and institute further therapy when progression is noted. While on this course of medication, it is important to monitor the chemistry profiles and blood pressures. Hopefully, B6 will continue to do so well - she's a sweetie!

We appreciate your continued referrals and the trust you place in CVCA to co-manage your cardiac patients. We look forward to working with you on this case and others. In an effort to continue to improve CVCA's service to both you and your clients, please visit our website at www.cvcavets.com and complete our online referring veterinarian survey.

Sincerely,

B6 DVM, DACVIM - Cardiology

Patient Demographics

B6		Study Date: 02/26/2018	
Patient ID: 121217B02262018	Accession #:	Alt ID:	
DOB:	Age:	Gender:	Ht: Wt: 73lb 0oz BSA:
Institution:	B6		
Referring Physician:			
Physician of Record:	Performed By: B6		
Comments:			

Adult Echo: Measurements and Calculations

2D

LVIDd (2D) LVPWd (2D) EDV (2D-Teich) EDV (2D-Cubed) A4Cd LV Vol LV Length LV Area A4Cs LV Vol LV Length LV Area LVLd (A4C) LVLs (A4C)	B6	LVAd (A4C) LVAs (A4C) EDV (A4C) ESV (A4C) LV Mass (Cubed) IVS/LVPW (2D) SV (A4C) EF (A4C)	B6	IVSd (2D) RVIDd/LVIDd RVIDd (2D) LA Area LA Dimen (2D) LA/Ao (2D) AoR Diam (2D) HR - AV	B6
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MMode

IVSd (MM) LVIDd (MM) LVPWd (MM) IVSs (MM) LVIDs (MM) LVPWs (MM) IVS/LVPW (MM)	B6	SV (MM-Teich) FS (MM-Teich) EF (MM-Teich) EDV (MM-Cubed) ESV (MM-Cubed) SV (MM-Cubed) EF (MM-Cubed)	B6	LVPW % (MM) RVIDd (MM) LA Dimen (MM) AoR Diam (MM) LA/Ao (MM) MV D-E Slope MV E-F Slope	B6
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B6

121217B02262018

02/26/2018

Created: 02:56PM 02/26/2018

1/3

EDV (MM-
Teich)
ESV (MM-
Teich)

B6

FS (MM-
Cubed)
IVS % (MM)

B6

MV EPSS

B6

Doppler

LVOT Vmax
Max PG
Vmax

RVOT Vmax
Max PG
Vmax

MV Peak E Vel
Vel
PG

MV Peak A Vel
Vel
PG

B6

MV E/A

Med E` Vel

E/Med E`

Med A` Vel

B6

E`/A` Medial

TR Vmax
Max PG
Vmax

B6

B6

Other Measurements

Dimensions: Diameters

LVID/Ao (2D)

EDVI

ESVI

B6

EF & Volume: Simpson's

Sphericity Id

B6

Dimensions: Diameters

LVEDDN

LVID/Ao (2D)

B6

Images

B6

B6

121217B02262018

02/26/2018

Created: 02:56PM 02/26/2018

2/3

B6

Signature

Signature:
Name(Print):

Date:

B6

121217B02262018

02/26/2018

Created: 02:56PM 02/26/2018

3/3

B6

www.cvcavets.com

Client: **B6**
Co-owner:
Patient name: **B6**
Species: Canine
Breed: Labrador Retriever
Sex: FS
Age: **B6**
Weight: 33.18kg / 73.15 lbs

Primary Care Veterinarian: **B6**
Primary Care Hospital: **B6**
Phone: **B6** ext:
Fax: **B6**
Email:

Cardiac Evaluation Report Exam Date: 10/31/2017

Diagnosis

- Advanced dilated cardiomyopathy - ruleout idiopathic vs. taurine-responsive
- Mild to moderate mitral valve regurgitation as cause of heart murmur
- Trace tricuspid valve regurgitation
- Moderate to severe left atrial chamber dilation
- Severe eccentric left ventricular chamber dilation
- Moderate to severe decrease in contractility/heart muscle function
- Mild left ventricular wall thinning
- Mild right atrial and right ventricular chamber dilation
- Progressive cough - rule out: early left sided congestive heart failure vs. mainstem bronchial compression

Medications

B6

In 2 weeks, if **B6** is eating and feeling well:

B6

B6

• You may purchase the taurine and L-carnitine at any health food or nutrition store www.puritanspride.com. You may also obtain the L-carnitine in bulk powder form from North Carolina State University by calling 919-513-6325.

Please allow 24-48 hours for CVCA to process prescription refill requests.

Refill all medications indefinitely unless directed by CVCA or your primary care veterinarian.

• **Please check all medications and dosages on your discharge report against the pharmacy labels.**

Please Note

• Please see our website www.cvcavets.com for more information about **B6** dilated cardiomyopathy.

Nutrition Recommendations:

B6 is on a specialized diet which could be contributing to taurine deficiency. Please change her to a new diet, as her housemate is on a novel protein diet - consider prescription diets such as Royal Canin or Science Diet. Please discuss diet options with **B6**.

• In patients with early/mild heart failure, CVCA recommends feeding a diet with less than 80 mg of sodium per 100 kCal of food (50-80 mg/100 kCal). In patients with refractory heart failure signs, further sodium restriction may be beneficial.

• For more information about sodium content of various foods, please visit:

- Dog: http://vet.tufts.edu/wp-content/uploads/reduced_sodium_diet_for_dogs.pdf
- Treats: http://vet.tufts.edu/wp-content/uploads/treats_for_dogs_with_heart_disease.pdf

• CVCA recommends avoiding kidney diets unless **B6** has kidney disease that warrants protein restriction.

• Diet changes should be done gradually (ie. over ~1 month) to avoid GI upset and avoided until Lucy is stable and eating well on the cardiac medications, usually about 2 weeks after starting or adjusting therapy.

• If you are interested in a consultation with a veterinary nutritionist, please visit <http://vetnutrition.tufts.edu/make-an-appointment/>

• CVCA recommends fish oil supplements (omega-3 fatty acids) in many dogs with cardiac disease. Her dose should be approximately EPA 1220 mg and DHA 760 mg total per day. Please start at 1/2 the dose for one week, then increase to the full dose if tolerating well thereafter. Please avoid Cod liver oil and flax seed as well as products with Vit A and/or D.

For more information about fish oils, please visit <http://vet.tufts.edu/heartsmart/diet/important-nutrients-for-pets-with-heart-disease/>

• In addition to the supplements approved by Tuft's Veterinary Nutrition Service, other reputable brands include Welactin and Nordic Naturals. **B6** may have additional brand recommendations.

Activity Recommendations:

• Keep **B6** very quiet for the next 3-4 days with only brief leash walks to eliminate.

• Once her coughing has resolved **B6** may gradually resume activity as she wants and is able to do. Please allow **B6** to take more breaks and rest during activity.

• Please try avoid burst type activity, as this increases the arrhythmia risk and avoid exercise in the hot/humid weather.

• Please try to warm **B6** up for 5-10 minutes with walking prior to moderate activity and take more rests during more vigorous activity.

At Home Monitoring:

• Monitor for signs of cough, respiratory difficulty, exercise intolerance, abdominal swelling, weakness, lethargy, etc. If you note any of these symptoms, please notify CVCA of **B6** as these symptoms may indicate recurrent congestive heart failure. If you note an increase in cough, respiratory rate or effort, please feel free to give an additional dose of **B6** while contacting CVCA.

• In order to monitor for the development of early congestive heart failure in the out-patient setting, we recommend monitoring your pet's resting respiratory rate several times a week. Normal resting respiratory rates should be less than 30 breaths per minute. Consider using a respiratory rate monitoring application to track **B6** respiratory rate - Cardalis or BI Pharma have reliable phone applications. Please contact us if you note a persistent or progressive increase.

• In addition **B6** is sadly at increased risk for sudden cardiac death due to her cardiac disease. Dobermans are particularly at risk for development of severe, sudden malignant arrhythmias that sadly may result in sudden death. However, we hope to minimize these risks with our treatment plan.

Future Anesthesia/Fluid Recommendations

B6

Reevaluation

- Please recheck with **B6** in the next day or two to obtain taurine levels. Please forward these results when available.
- Please recheck with **B6** in 2 weeks for a follow up examination and blood chemistry profile with electrolytes and as recommended by **B6**. Please forward these results when available.
- Please recheck with **B6** every 4-6 months for a follow up examination and blood chemistry profile with electrolytes and as recommended by **B6**. Please forward these results when available.
- Please recheck with CVCA in 5 months for a follow up consultation/examination, blood pressure, and echocardiogram. Please contact us or schedule an earlier appointment if **B6** has any problems or symptoms indicative of worsening heart disease or if recommended by **B6**.

Visit Summary

Heart Rate: **B6** **BP:** **B6** (based on MR gradient)

History:

B6 developed a cough last Wednesday (10/25/17). Radiographs and blood work were performed by **B6** Veterinary Clinic. The lab work (which is unavailable for review) reportedly showed an elevated ALP **B6** and GGT **B6** and mild lymphopenia. Thoracic radiographs were performed which revealed cardiomegaly. **B6** was treated with **B6**. All medications were stopped on Monday as her cough had worsened and she was presented to the **B6** for a cardiac evaluation as her coughing had worsened and she had brought up a small volume of pink-tinged foam after a coughing fit. During this time there has been no evidence of lethargy and she continues to eat and drink normally at home.

PPHx: None
Meds: None
Other: **B6**
Diet: Signature (Kangaroo)

Physical Exam Findings:

B6

H/L: Grade 2/6 left apical protosystolic heart murmur, regular rhythm, strong synchronous femoral pulses, RR: **B6** breaths/min, questionable mild increase in bronchovesicular sounds bilaterally, no crackles or wheezes ausculted, eupneic

B6

Other Diagnostics:

10/27/17 pDVM CXR: Generalized cardiomegaly characterized by widening of the cardiac silhouette and loss of the caudal cardiac waist consistent with left atrial enlargement. Slight left auricular bulge. Increased sternal contact and rounding of the right heart on the VD radiograph. Dorsal deviation of the trachea. Prominent pulmonary vasculature with a questionable mild increase in interstitial opacity in the caudodorsal lung fields which may suggest early congestive heart failure/pulmonary edema.

Echocardiographic Findings

Severe left ventricular eccentric hypertrophy with apical rounding and increased sphericity, mild-moderate centrally

located mitral regurgitant jet, moderate-severe secondary left atrial dilation on 2D imaging and moderately-severely increased LA:Ao ratio on M-mode imaging, mild eccentric low velocity tricuspid regurgitation with mildly elevated estimated right ventricular pressures consistent with mild pulmonary hypertension, mild right ventricular and right atrial dilation, normal left and right ventricular outflow velocities, moderately to severely depressed indices of systolic function (FS% and EF% by modified Simpson's - LVDI [B6], LVSI [B6]), increased EPSS, elevated transmitral inflow velocities and E:A wave ratio on spectral Doppler tracings, normal TDI E':A' ratio of the lateral mitral annulus, no masses, effusions or heartworms observed.
ECG during echocardiogram: Normal sinus rhythm. No ventricular ectopy noted.

Comments

Dear [B6]

Thank you for sending [B6] to see us with [B6] today. Sadly [B6] has dilated cardiomyopathy with moderate to severe systolic dysfunction and moderate to severe left atrial dilation. This places her at a high risk of developing congestive heart failure and with the progression in her cough I am concerned that we may be dealing with congestive heart failure at this time. We have begun therapy to control congestive heart failure, support cardiac function, slow down the progression of the heart disease and improve survival. We are now seeing more dogs on specialized diets that are developing taurine deficiency and we have discussed submission of taurine levels to evaluate whether this may be a contributing factor to [B6] condition. [B6] is interested in pursuing this test at your clinic, taurine levels should be drawn and placed in a heparinized tube (green top) and should be frozen and submitted to Idexx (who sends it to UC Davis). It will be interesting to see if this is a contributing factor to [B6] condition.

We will continue to closely monitor [B6] heart disease via serial echocardiography and institute further therapy when progression is noted. While on this course of medication, it is important to monitor the chemistry profiles and blood pressures. Dogs with dilated cardiomyopathy are at a higher risk of developing ventricular arrhythmias. None were noted today; however, it will be important to monitor for arrhythmias periodically in the future. Unfortunately, the prognosis is guarded after the onset of congestive heart failure, and we discussed with the [B6] family that the average survival is ~ 6-12 months.^{1,2} Survival time is highly individually variable depending on response to therapy.

We appreciate your continued referrals and the trust you place in CVCA to co-manage your cardiac patients. We look forward to working with you on this case and others. In an effort to continue to improve CVCA's service to both you and your clients, please visit our website at www.cvcavets.com and complete our online referring veterinarian survey.

Sincerely,

[B6] VMD, DACVIM - Cardiology

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
CC: Peloquin, Sarah
Sent: 12/6/2018 5:56:09 PM
Subject: RE: 800.267-cc-150-EON-369268- [B6] Fromm Four-Star Nutritionals Game Bird
Attachments: MRx.zip

[B6] 1 yr FS Golden Retriever

[B6]

Presented 9/25/2018: discussed cardiomyopathy of GRTs; been on GF diet
WB Tau- [B6] Davis)
10/19/2018 cardio: screening echo b/c on GF diet and low Tau; asymptomatic
PE-nsf
Echo-occult DCM-sys dyxfxn, LV dil
Tx: [B6] diet change, 0.5g Tau BID, OFAs, poss L-carn

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



From: PFR Event <ppreventcreation@fda.hhs.gov>
Sent: Wednesday, October 24, 2018 4:35 PM
To: Cleary, Michael * <Michael.Cleary@fda.hhs.gov>; HQ Pet Food Report Notification <HQPetFoodReportNotification@fda.hhs.gov>; [B6]
Subject: Fromm Four-Star Nutritionals Game Bird Recipe Dog Food: [B6] - EON-369265

A PFR Report has been received and PFR Event [EON-369265] has been created in the EON System.

A "PDF" report by name "2057000-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 "2057000-attachments.zip" and is attached to this email notification.

Below is the summary of the report:

EON Key: EON-369265

ICSR #: 2057000

EON Title: PFR Event created for Fromm Four-Star Nutritionals Game Bird Recipe Dog Food; 2057000

AE Date	10/19/2018	Number Fed/Exposed	1
Best By Date		Number Reacted	1
Animal Species	Dog	Outcome to Date	Stable
Breed	Retriever - Golden		
Age	1 Years		

District Involved	PFR B6 DO		
-------------------	------------------	--	--

Product information

Individual Case Safety Report Number: 2057000

Product Group: Pet Food

Product Name: Fromm Four-Star Nutritionals Game Bird Recipe Dog Food

Description: **B6** was tested to have whole blood taurine of **B6** and was diagnosed with occult dilated cardiomyopathy by echo.

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
Fromm Four-Star Nutritionals Game Bird Recipe Dog Food		

Sender information

B6

USA

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

<https://eon.fda.gov/eon//browse/EON-369265>

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=386187>

=====

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 immediately.

B6

DISCHARGE INSTRUCTIONS AND REFERRAL CORRESPONDENCE

Primary Veterinarian: **B6**
Phone number: **B6**

Owner's name: **B6**
Phone number: **B6**

Patient Name: **B6**
Species: Canine
Sex: Spayed Female

Weight: 28.6 Kgs
Breed: Retriever, Golden
Age: **B6**

Admission Date: **B6**
Discharge Date: **B6**

History: Presented for Screening Echocardiogram for DCM. **B6** is currently in a Grain free diet and a low Taurine level was noted on her blood work. No signs of cardiac disease noted by the owner.

B6

Diagnostic Tests Performed

Echocardiogram: Evidence of occult dilated cardiomyopathy (DCM) based systolic dysfunction and left ventricular dilation noted on the echocardiogram today. Treatment with [B6] has been shown to significantly delay the onset of congestive heart failure (CHF) in these dogs. Since [B6] is an atypical breed to develop DCM, and the fact that she was being fed a grain free diet, with a low blood taurine level, we suspect that the cause is dietary taurine deficiency in golden retriever.

Clinical Diagnosis: Occult Dilated Cardiomyopathy - suspect dietary deficiency. Taurine is an amino acid that is found in high concentrations in heart and muscle. Among its many functions, it aids in normal contractile function. Evidence shows that taurine helps mediate calcium channel transports and modulates calcium sensitivity of the myofibrils. Taurine deficiency as a cause of dilated cardiomyopathy (DCM) is not a new issue. Taurine deficiency in cats was characterized by Fion et al in the late 1980s. Taurine deficiency has since been characterized as a cause of acquired DCM in dogs as well.

Treatment and Recommendations: Ongoing monitoring is recommended for signs of lethargy, decreased appetite, coughing, weakness/collapse, increased respiratory effort or rate (>40 breaths per minute AT REST) as these may be signs of progression of cardiac disease. If any of these signs are noted, please contact a veterinarian.

Medications:

[B6]

Diet: We recommend switching diet to a regular dog balanced diet and supplement Taurine and Omega 3 as follow. Taurine dose in dogs is 500 mg/ dog PO q 12h. Omega-3 fatty acids may improve appetite and reduce cachexia (EPA 30-40 mg/kg PO q 24h, DHA 20-25 mg/kg PO q 24h). Consider L-carnitine (110 mg/kg PO q 12h) in dogs not responding to taurine.

Results Pending: None.

Progress Exam: We recommend a recheck Echocardiogram in 1 month, or sooner should you notice clinical signs listed above.

Questions or Problems: If any problems or questions arise associated with the procedures and treatment performed at [B6] please do not hesitate to call us at [B6]

[B6] If any problems or questions arise concerning [B6] general health, please contact Dr.

[B6] If you have an emergency outside of our business hours, please contact the

[B6] with locations in [B6]

[B6]

[B6]

[B6]
Approved By:

[B6]
Owner/Agent's Signature of
[B6]

Doctor

B4

DISCHARGE INSTRUCTIONS AND REFERRAL CORRESPONDENCE

Primary Veterinarian: [Redacted] **B4, B6**

Phone number: [Redacted] **B4, B6**

Owner's name: [Redacted] **B6**
Phone number: [Redacted]

Patient Name: [Redacted] **B6**
Species: Canine
Sex: Spayed Female

Weight: 28.6 Kgs
Breed: Retriever, Golden
Age: 1 Yrs. 10 Mos.

Admission Date: 10/19/2018
Discharge Date: 10/19/2018

History: Presented for Screening Echocardiogram for DCM. [Redacted] **B6** is currently in a Grain free diet and a low Taurine level was noted on her blood work. No signs of cardiac disease noted by the owner.

B6

Diagnostic Tests Performed:

Echocardiogram: Evidence of occult dilated cardiomyopathy (DCM) based systolic dysfunction and left ventricular dilation noted on the echocardiogram today. Treatment with [B6] has been shown to significantly delay the onset of congestive heart failure (CHF) in these dogs. Since [B6] is an atypical breed to develop DCM, and the fact that she was being fed a grain free diet, with a low blood taurine level, we suspect that the cause is dietary taurine deficiency in golden retriever.

Clinical Diagnosis: Occult Dilated Cardiomyopathy - suspect dietary deficiency. Taurine is an amino acid that is found in high concentrations in heart and muscle. Among its many functions, it aids in normal contractile function. Evidence shows that taurine helps mediate calcium channel transports and modulates calcium sensitivity of the myofibrils. Taurine deficiency as a cause of dilated cardiomyopathy (DCM) is not a new issue. Taurine deficiency in cats was characterized by Pion et al in the late 1980s. Taurine deficiency has since been characterized as a cause of acquired DCM in dogs as well.

Treatment and Recommendations: Ongoing monitoring is recommended for signs of lethargy, decreased appetite, coughing, weakness/collapse, increased respiratory effort or rate (>40 breaths per minute AT REST) as these may be signs of progression of cardiac disease. If any of these signs are noted, please contact a veterinarian.

Medications:

1. [B6]

Diet: We recommend switching diet to a regular dog balanced diet and supplement Taurine and Omega 3 as follow. Taurine dose in dogs is 500 mg/ dog PO q 12h. Omega-3 fatty acids may improve appetite and reduce cachexia (EPA 30-40 mg/kg PO q 24h, DHA 20-25 mg/kg PO q 24h). Consider L-carnitine (110 mg/kg PO q 12h) in dogs not responding to taurine.

Results Pending: None.

Progress Exam: We recommend a recheck Echocardiogram in 1 month, or sooner should you notice clinical signs listed above.

Questions or Problems: If any problems or questions arise associated with the procedures and treatment performed at [B6] please do not hesitate to call us at [B6]. If any problems or questions arise concerning [B6] general health, please contact Dr. [B6]. If you have an emergency outside of our business hours, please contact the [B6].

[B6]

[B6]

[B6]

Board Certified Specialist - Cardiology

[B6]
Approved By:

Owner/Agent's Signature of
[B6]

Doctor

B6

DATE WEIGHT

TREATMENT AND PROGRESS

ANIMAL NAME	B6
HOME	
WORK	

9-25-18 63

DE Discard cardiomyopathy in
Golden Ret. also food related
issues + grain free diet
+101.4 P 120 R Panting

has been eating grain free diet and
concerned about possible issues with
DCM. sending blood to Dr Davis for Taurine
levels

10-16-18 TL

LM to see how visit at specialist
went yesterday

10-18-18

faxed records to

B6

10-23-18

TL LM Dr. cardiologist. Thanks my response
with Taurine

TREATMENT AND PROGRESS

DATE	WEIGHT	TREATMENT AND PROGRESS	ANIMAL NAME
4-12-17	29.2	By oral #2	B6
		B6	
4-13-17	TC	L/M	
4-25-17	80		
5-23-17	39.2		
6-20-17	45.6		
7-29-17	51.6		
8-20-17	56.0		
9-23-17	56.2		- very full
10-28-17	58.2		
11-18-17	58.2		
12-28-17	61.4		
	58.0		
12-29-17	TC		
1-8-18	60.2		

B6

B6

B6

ANIMAL NAME
HOME
WORK

B6

B6

ANIMAL RECORD

Home Phone

B6

Owner's Name

B6

Work Phone

Animal's Name

B6

Species

KA

Allergies

Sex

F

Birthdate

B6

Breed

Golden Retriever

Color

Rabies																					
DHLPP																					
HW																					
Bordetella																					
FVR-CP																					
FeLV																					
FIP																					

MAJOR PROBLEM

B6

22

*28
30*

32

B6

B6

B6

DISCHARGE INSTRUCTIONS AND REFERRAL CORRESPONDENCE

Primary Veterinarian: Dr. **B6**
Phone number: **B6**

Owner's name: **B6**
Phone number: **B6**

Patient Name: **B6** Weight: 38.6 Kgs
Species: Canine Breed: Retriever, Golden
Sex: Spayed Female Age: **B6**

Admission Date: 10/19/2018
Discharge Date: 10/19/2018

History: Presented for Screening Echocardiogram for DCM. **B6** is currently in a Grain free diet and a low Taurine level was noted on her blood work. No signs of cardiac disease noted by the owner.

B6

EKG: Normal sinus rhythm, no murmurs or arrhythmias identified, normal QRS, ST-seg, and T-wave.

B6

Diagnostic Tests Performed

Echocardiogram: Evidence of occult dilated cardiomyopathy (DCM) based systolic dysfunction and left ventricular dilation noted on the echocardiogram today. Treatment with **B6** has been shown to significantly delay the onset of congestive heart failure (CHF) in these dogs. Since **B6** is an atypical breed that develop DCM, and the fact that she was being fed a grain free diet, with a low blood taurine level, we suspect that the cause is dietary taurine deficiency in golden retriever.

Clinical Diagnosis: Occult Dilated Cardiomyopathy - suspect dietary deficiency. Taurine is an amino acid that is found in high concentrations in heart and muscle. Among its many functions, it aids in normal contractile function. Evidence shows that taurine helps mediate calcium channel transports and modulates calcium sensitivity of the myofibrils. Taurine deficiency as a cause of dilated cardiomyopathy (DCM) is not a new issue. Taurine deficiency in cats was characterized by Pion et al in the late 1980s. Taurine deficiency has since been characterized as a cause of acquired DCM in dogs as well.

Treatment and Recommendations: Ongoing monitoring is recommended for signs of lethargy, decreased appetite, coughing, weakness/collapse, increased respiratory effort or rate (>40 breaths per minute AT REST) as these may be signs of progression of cardiac disease. If any of these signs are noted, please contact a veterinarian.

Medications:

1.

B6

Diet: We recommend switching diet to a regular dog balanced diet and supplement Taurine and Omega 3 as follow. Taurine dose in dogs is 500 mg/ dog PO q 12h. Omega-3 fatty acids may improve appetite and reduce cachexia (EPA 30-40 mg/kg PO q 24h, DHA 20-25 mg/kg PO q 24h). Consider L-carnitine (110 mg/kg PO q 12h) in dogs not responding to taurine.

Results Pending: None

Progress Exam: We recommend a recheck Echocardiogram in 1 month, or sooner should you notice clinical signs listed above.

Questions or Problems: If any problems or questions arise associated with the procedure and treatment performed at Affiliated Veterinary Specialists, please do not hesitate to call **B6**

B6

B6

Emergency & Critical Care

Dipl. B.S.V.E.C.C.

B6

Board Certified Specialist - Cardiology

B6

Approved By

B6

22470

Amino Acid Laboratory Sample Submission Form

Amino Acid Laboratory
1089 Veterinary Medicine Drive
Davis, Ca 95616

Telephone: 530-752-5058, Fax: 530-752-4698

Email: ucd.aminoacid.lab@ucdavis.edu

www.vetmed.ucdavis.edu/labs/amino-acid-laboratory

Veterinarian Contact: _____ **B6** _____

Clinic/Company Name: _____ **B6** _____

Address: _____
Email: _____
Telephone: _____
B6

Billing Contact: _____ **B6** _____ Email: _____ **B6** _____

Patient Name: _____ **B6** _____ Species: _____ Canine _____

Breed: _____ Golden Retriever _____ Owner's Name: _____ **B6** _____

Current Diet : _____ Fromm Game Bird Recipe with Primal raw topper and raw goats milk _____

Sample type: Plasma Whole Blood Urine Food Other _____

Test: Taurine Complete Amino Acids Other: _____

Taurine Results (lab use only)

Plasma: _____ Whole Blood: **B6** _____ Urine: _____ Food: _____

	Plasma (nMol/ml)		Whole Blood (nMol/ml)	
	Normal Range	No known risk for deficiency	Normal Range	No known risk for deficiency
Cat	80-120	>40	300-600	>200
Dog	60-120	>40	200-350	>150

* Please note with the recent increase in the number of dogs screened for taurine deficiency, we are seeing dogs with values within the reference ranges (or above the "no known risk for deficiency range") yet are still exhibiting signs of cardiac disease. Veterinarians are welcome to contact our laboratory for assistance in evaluating your patient's results.

Please send copy of results to Owner

CARDIOLOGY SERVICE UPDATES: DOG FOOD & DILATED CARDIOMYOPATHY

The Cardiology Service has developed this document in response to the alerts from the FDA. These alerts identify an associated risk for some grain-free diets containing certain ingredients (legumes like peas, pea components, lentils; white potatoes, sweet potatoes) and a diagnosis of dilated cardiomyopathy (DCM). The links provided throughout this document can be copied and pasted to obtain additional information.

FDA Alerts found here:

<https://www.fda.gov/AnimalVeterinary/NewsEvents/CVMUpdates/ucm613305.htm>

<https://www.fda.gov/AnimalVeterinary/ResourcesforYou/AnimalHealthLiteracy/ucm616279.htm>

What is Dilated Cardiomyopathy (DCM)?

DCM is a heart muscle disorder that results in a weak pump function and heart chamber enlargement. In the early stages of this disease pets may appear totally healthy with no apparent clinical signs. Later in the course of this disease, dogs may have a heart murmur, an arrhythmia (irregular heart beat), collapse episodes, weakness or tiredness with exercise, and even trouble breathing from congestive heart failure. While there are some breeds of dogs (like Dobermans) that have a genetic predisposition to development of DCM, there are also nutritional factors that may result in this disease.

What should I do?

If you are feeding a diet of concern based upon the FDA alert we recommend that you consult with your veterinarian or veterinary cardiologist. We provide 4 general points for guidance below:

1. An initial step is to **consider whether you are willing or interested in performing additional testing** to assess whether your pet is affected with DCM. If you believe your dog is at risk, showing any of the aforementioned clinical signs or would prefer to simply rule out any heart disease, we recommend that you first have your pet's taurine levels tested (both whole blood and plasma levels) as well as seek an echocardiogram by a board-certified veterinary cardiologist. Low taurine levels are associated with development of DCM in dogs and are sometimes a component of this current issue.

Information on taurine testing can be found here: <https://www.vetmed.ucdavis.edu/labs/amino-acid-laboratory>

2. At this time, **diet change is recommended when possible** and should be considered regardless of the results obtained from any testing. You can consult with your veterinarian in selecting a new diet that avoids the ingredients of concern listed by the FDA. When selecting this diet, we recommend that you choose a diet that is manufactured with rigorous quality control measures and research behind the formulation. A way to ensure that your diet meets these recommendations is to follow the following guidelines that were generated by a large number of the world's leading experts in veterinary nutrition.

Food selection guidelines found here:

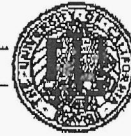
<https://www.wsava.org/WSAVA/media/Arpita-and-Emma-editorial/Selecting-the-Best-Food-for-your-Pet.pdf>

3. If your pet is identified through testing to have a low blood taurine level or evidence of DCM by echocardiogram, we urge you to **report this information to the FDA**.

FDA reporting guidelines found here: <https://www.fda.gov/AnimalVeterinary/SafetyHealth/ReportaProblem/ucm182403.htm>

4. **Work with your veterinarian(s)** to determine the best course of action and medical treatments if indicated. In the case of a DCM diagnosis, diet change alone may not be sufficient and additional medications may be prescribed.

Please continue to monitor the FDA website and the UC Davis School of Veterinary Medicine Newsfeeds for updates and recommendations regarding this issue.



STERN CARDIAC GENETICS LABORATORY
 JOSHUA A. STERN, DVM, PHD, DACVIM (CARDIOLOGY)
sterngenetics@ucdavis.edu; August 9, 2018

FREQUENTLY REQUESTED INFORMATION REGARDING TAURINE & DILATED CARDIOMYOPATHY IN GOLDEN RETRIEVERS

Taurine reference ranges for Golden Retrievers: The Stern Lab suggests that the following clinical reference ranges be used for Golden Retrievers and be considered for other known taurine-sensitive breeds such as Newfoundlands or American Cocker Spaniels. This is primarily based on 3 observations:

1. Golden Retrievers with marginal taurine levels (defined below) have been diagnosed with dilated cardiomyopathy and have documented disease reversal after taurine supplementation and diet change.
2. Previously published work documents taurine sensitivity in Golden Retrievers.
3. The most recently published reference on normal blood taurine values shows higher levels than previously reported.

- Normal whole blood taurine: >250nmol/mL
- Normal plasma taurine: >70nmol/mL
- Marginal whole blood taurine: 200-250nmol/mL
- Marginal plasma taurine: 60-70nmol/mL
- Low whole Blood taurine: <200nmol/mL
- Low plasma taurine: <60nmol/mL

References:

- Kramer GA, Kittleson MD, Fox PR, Lewis J, Pion PD. Plasma taurine concentrations with normal dogs and in dogs with heart disease. *J Vet Intern Med* 1995;9:253-258.
- Belanger MC, Ouellet M, Queney G, Moreau M. Taurine-deficient dilated cardiomyopathy in a family of golden retrievers. *J Am Anim Hosp Assoc* 2005;41:284-291.
- Kittleson MD, Keene B, Pion PD, Loyer CG, MUST Study Investigators. Results of the multicenter spaniel trial (MUST): taurine- and carnitine-responsive dilated cardiomyopathy in American Cocker Spaniels with decreased plasma taurine concentration. *J Vet Intern Med* 1197;11:204-211.
- Backus RC, Choen G, Pion PD, Good KL, Rogers QR, Fascetti AJ. Taurine deficiency in Newfoundlands fed commercially available complete and balanced diets. *J Am Vet Med Assoc* 2003;223:1130-1136.
- Fascetti AJ, Reed JR, Rogers QR, Backus RC. Taurine deficiency in dogs with dilated cardiomyopathy: 12 cases (1997-2001). *J Am Vet Med Assoc* 2003;223:1137-1141.
- Freeman LM, Michel KE, Brown DJ, Kaplan PM, Stamoulis ME, Rosenthal SL, Keene BW, Rush JE. Idiopathic dilated cardiomyopathy in Dalmatians: nine cases (1990-1995). *J Am Vet Med Assoc* 1996;209:1592-1596.
- Delaney SJ, Kass PH, Rogers QR, Fascetti AJ. Plasma and whole blood taurine in normal dogs of varying size fed commercially prepared food. *J Anim Physiol a Anim Nutr* 2003;87:236-244.

Plasma vs. whole blood taurine testing:

If at all possible, we recommend that paired (plasma and whole blood) taurine samples be submitted for analysis. A low value on either or both tests is clinically relevant. If your dog is diagnosed with DCM, submitting paired taurine samples (plasma and whole blood) is imperative. We recommend that the UC Davis Amino Acid Laboratory be used for taurine testing, as this is where the literature utilized for our reference ranges was generated. <https://www.vetmed.ucdavis.edu/labs/amino-acid-laboratory>. If a single test is submitted the Stern Lab recommends that whole blood be submitted preferentially. This is due to the false elevation of taurine levels that is possible in plasma samples due to sample handling issues. This is an area of some debate between clinicians and conflicting information on preference for plasma vs. whole blood exists. This underscores the value of paired sampling.

Clinical Recommendations for Golden Retrievers based on taurine levels:

If taurine levels test <200nmol/mL in whole blood or <60nmol/mL in plasma

- An echocardiogram by a board-certified veterinary cardiologist is indicated
- After echocardiogram has been completed, a diet change is recommended.
 - If DCM is diagnosed, this patient may need a variety of cardiac medications that would be prescribed by the attending cardiologist.
 - If DCM is diagnosed, prescribed supplementation with oral taurine and l-carnitine is recommended.
 - Reevaluation of taurine levels is warranted after three months of diet change and supplementation.
 - Cardiology reevaluation schedules will be recommended by the attending clinician pending echocardiographic findings.
 - Many Golden Retrievers with taurine-deficient DCM in our study showed slow and steady improvement over a period of 6-12 months.

If taurine levels test 200 – 250nmol/mL in whole blood or 60-70nmol/mL in plasma

- An echocardiogram by a board-certified cardiologist is recommended.
- After echocardiogram has been completed, a diet change is recommended.
- We recognize that many dogs in this category may have normal echocardiograms and thus the value of screening should be carefully considered. If the dog is eating a diet that falls within the FDA warning or shares features with the diets identified in our study (see diets of concern section below), we encourage echocardiographic screening with greater enthusiasm.
- If an echocardiogram is not performed, a diet change is still recommended and a taurine level reevaluation after three months on the new diet should be considered.
- If DCM is diagnosed, this patient may need a variety of cardiac medications that would be prescribed by the attending cardiologist.
 - If DCM is diagnosed, prescribed supplementation with oral taurine and l-carnitine is recommended.
 - Reevaluation of taurine levels is warranted after three months of diet change and supplementation.
 - Cardiology reevaluation schedules will be recommended by the attending clinician pending echocardiographic findings.
 - Many Golden Retrievers with taurine-deficient DCM in our study showed slow and steady improvement over a period of 6-12 months.

If taurine levels test >250nmol/mL in whole blood or >70nmol/mL in plasma

- Diet change is recommended if you are feeding a diet that falls within the FDA warning or shares features with the diets identified in our study (see diets of concern section below)
- If your pet shows any signs of cardiac disease (trouble breathing, exercise intolerance, fainting/collapse, coughing) we recommend your veterinarian evaluate your pet.

Diets of Concern & Choosing a diet

The FDA alert called attention to several dietary ingredients that should be considered when evaluating whether your pet is at risk (for example legumes like peas and lentils, white or sweet potatoes). These findings were largely recapitulated in our current study of Golden Retrievers with low taurine levels and DCM. Our lab considers these ingredients to be of greatest concern when present within the first 5 listed ingredients on the dog food bag. Additionally, we noted a high percent of diets in our study were using protein sources other than chicken or beef and labeled as grain-free.

Points to consider when making a diet change:

- Choose a diet that does not contain the concerning components listed above
- Choose a diet that meets the WSAVA Global Nutrition Assessment Guidelines published as consensus by veterinary nutritionists from around the world:
 - <https://www.wsava.org/WSAVA/media/Arpita-and-Emma-editorial/Selecting-the-Best-Food-for-your-Pet.pdf>
- FDA alert found here:
 - <https://www.fda.gov/AnimalVeterinary/NewsEvents/CVMUpdates/ucm613305.htm>

Choosing a taurine or l-carnitine supplement:

Selecting supplements should be performed based upon those that match their stated contents and are readily available for absorption. Luckily a previous publication tested multiple taurine and l-carnitine supplements. Based upon this publication our laboratory recommends the following supplements as those meeting our quality criteria. (Bragg et al. 2009 J Am Vet Med Assoc; 234(2))

Tested taurine supplements that test within 5% of stated contents and if applicable disintegrated within 30 minutes

- Mega taurine caps by Twinlab (1000 capsule)
- Taurine by Swanson Health Products (500mg capsule)
- Taurine by NOW foods (500mg capsule)
- Taurine 500 by GNC (500mg tablet)

Tested L-carnitine supplements that test within 5% of stated contents and if applicable disintegrated within 30 minutes

- L-carnitine 500 by Jarrow Formulas (500mg capsule)
- L-carnitine caps by Country Life (500mg capsule)
- Maxi L-carnitine by Solgar Vitamin and Herb (500mg tablet)
- L-carnitine by Puritan's Pride (500mg tablet)

The Stern lab does not recommend the empirical supplementation of taurine or l-carnitine to dogs without evidence of DCM and/or significant deficiency. If DCM is diagnosed we typically recommend dogs over 50lbs receive 1000mg of taurine every 12hrs and dogs under 50lbs receive 500mg of taurine every 12hours. We recommend L-carnitine at a dose of ~50mg/kg orally with food every 8hrs. Your veterinary cardiologist or family veterinarian should be consulted for prescribing the best dose for your dog.

Reporting to the FDA:

Understanding the basis of this condition requires a great deal of research and investigation. Clients with affected dogs can contribute their data to help propel this research forward. You can report cases of taurine deficiency, dilated cardiomyopathy, sudden cardiac death, or any combination of these events to the FDA by following the information found here:

<https://www.fda.gov/animalveterinary/safetyhealth/reportaproblem/ucm182403.htm>

Additional questions or comments:

sterngenetics@ucdavis.edu

This document last updated: Aug. 20, 2018

Page 3 of 3



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 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 due to concern and panic, many owners have identified concerns and proceeded with supplementation or diet change. 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 DCM and wish to have taurine levels tested - please request a whole-blood taurine level be submitted (~~to the laboratory of your choice~~) for analysis. The laboratory that I recommend can be found here: <https://www.vetmed.ucdavis.edu/labs/amino-acid-laboratory>
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.
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 https://www.vetmed.ucdavis.edu/sites/g/files/dgvnsk491/files/inline-files/Diet_History_Form_FINAL_April2017.doc 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. A member of our laboratory team will contact you to discuss our thoughts and possible 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.

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: jsstern@ucdavis.edu

Patient History Report

Client:	B6	Phone:	B6	
Patient:		Species:	Canine	Breed: Retriever, Golden
		Age:	B6	Sex: Female
			Days	

Date	Type	Staff	History
------	------	-------	---------

12/28/2017 L

B6

Chemistry results from IDEXX VetLab In-clinic
 Laboratory Requisition ID: 2953969 Posted Final

Test	Result	Reference Range	
ALB =	B6	2.3 - 4.0	
ALKP =		23 - 212	
ALT =		10 - 125	
BUN/UREA =		7 - 27	
CREA =		0.5 - 1.8	
GLU =		74 - 143	
TP =		5.2 - 8.2	
GLOB =		2.5 - 4.5	
ALB/GLOB =			
BUN/CREA =			

12/28/2017 L

B6

Hematology results from IDEXX VetLab In-clinic
 Laboratory Requisition ID: 2953969 Posted Final

Test	Result	Reference Range	
HCT =	B6	37.0 - 55.0	
HGB =		12.0 - 18.0	
MCHC =		30.0 - 37.5	
WBC =		5.50 - 16.90	
LYMPHS =		0.50 - 4.90	
%LYMPHS =			
MONOS =		0.30 - 2.00	
%MONOS =			
NEUT =		2.00 - 12.00	
%NEUT =			
EOS =		0.10 - 1.49	
%EOS =			
BASO =		0.00 - 0.10	
%BASO =			
PLT =		175 - 500	
Retics =		10.0 - 110.0	
%Retics =			
RBC =		5.50 - 8.50	
MCV =	60.0 - 77.0		
MCH =	18.5 - 30.0		
RDW =	14.7 - 17.9		
MPV =			
PDW =			
PCT =			

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B6

B4

B4

OFFICIAL CERTIFICATE OF VETERINARY INSPECTION FOR INTRASTATE SALE OF A DOG OR CAT

EXPIRES 30 DAYS FROM DATE OF ISSUANCE

Pursuant to Section 828.29, F.S., Rule 5C-27 and Rule 5C-28, F.A.C.

Section 828.29, Florida Statutes, provides that each dog or cat offered for sale within the state must be accompanied by a current Official Certificate of Veterinary Inspection (OCVI), issued by a veterinarian licensed by the state and accredited by the United States Department of Agriculture.

SELLER				PURCHASER			
Name	B6			Name	B6		
Address							
City							
State	B6	City					
Email		Email					

B6

22470

Amino Acid Laboratory Sample Submission Form

Amino Acid Laboratory
1089 Veterinary Medicine Drive
Davis, Ca 95616
Telephone: 530-752-5058, Fax: 530-752-4698
Email: ucd.aminoacid.lab@ucdavis.edu
www.vetmed.ucdavis.edu/labs/amino-acid-laboratory

Veterinarian Contact: _____ **B6** _____

Clinic/Company Name: _____ **B6** _____

Address: _____ **B6** _____
Email: _____

Telephone: _____ **B4** _____, owner **B6** _____ Fax: _____ **B4** _____

Billing Contact: _____ **B6** _____ Email: _____ **B6** _____

Patient Name: _____ Species: Canine

Breed: Golden Retriever Owner's Name: Nicole Ritter and Eric Yard

Current Diet : Fromm Game Bird Recipe with Primal raw topper and raw goats milk

Sample type: Plasma Whole Blood Urine Food Other _____

Test: Taurine Complete Amino Acids Other: _____

Taurine Results (lab use only)

Plasma: _____ Whole Blood: **B6** _____ Urine: _____ Food: _____

	Plasma (nMol/ml)		Whole Blood (nMol/ml)	
	Normal Range	No known risk for deficiency	Normal Range	No known risk for deficiency
Cat	80-120	>40	300-600	>200
Dog	60-120	>40	200-350	>150

* Please note with the recent increase in the number of dogs screened for taurine deficiency, we are seeing dogs with values within the reference ranges (or above the "no known risk for deficiency range") yet are still exhibiting signs of cardiac disease. Veterinarians are welcome to contact our laboratory for assistance in evaluating your patient's results.

Please send copy of results to owner

Report Details - EON-364577

ICSR: 2054750
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: 2018-09-07 17:16:09 EDT

Reported Problem:
Problem Description: Not true DCM but reduced contractility **B6** taurine (whole blood)
Date Problem Started: 09/05/2018
Concurrent Medical Problem: No
Outcome to Date: Stable

Product Information:
Product Name: Ziwi Peak (recently started)
Product Type: Pet Food
Lot Number:
Package Type: BAG
Product Use Information:
Manufacturer /Distributor Information:
Purchase Location Information:
Product Name: Honest Kitchen Whole Grain Turkey, Beef, or CHicken
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: Retriever - Golden
Gender: Male
Reproductive Status: Neutered
Weight: 31.5 Kilogram
Age: **B6** Years
Assessment of Prior Health: Excellent
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		
	Practice Name:	Tufts Cummings School of Veterinary Medicine		
	Contact:	Name:	B6	
Phone:		B6		
Permission to Release Records to FDA:	Yes			
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 discharge 9-5-18.pdf		
	Description:	Cardio discharge		
	Type:	Medical Records		
	Attachment:	t4.pdf		
	Description:	T4		
	Type:	Laboratory Report		
	Attachment:	rdvm records.pdf		
	Description:	RDVM records		
	Type:	Medical Records		
	Attachment:	cardio report 9-5-18.pdf		
	Description:	Cardio report		
	Type:	Medical Records		

Discharge Instructions

Patient

Name: B6

Species: Canine

Gold Male (Neutered) Golden Retriever

Birthdate: B6

Owner

Name: B6

Address: B6

Patient ID: 426744

Attending Cardiologist:

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

B6

Cardiology Resident:

B6

Cardiology Technician:

B6

Date: B6

Diagnoses:

Mild reduced contractile function, normal cardiac size

Low blood taurine levels

Clinical Findings: Thank you for bringing B6 in for evaluation of his heart. His heart is normal in size, but his contractile function is not quite as vigorous as some dogs. This could be a variation of normal for him, but it is also possible that it could be related to low taurine. We have submitted an NTproBNP test to gather more information about B6 heart health. We also submitted a total T4 to assess B6 thyroid on his current level of medication. We will call you with these results within the next few days.

Monitoring at Home: Please watch for any exercise intolerance, weakness, or collapse.

Diet Suggestions: We recommend a change in B6 diet. If you would like to pursue a mix of home cooking and new kibble we recommend scheduling a Nutrition consultation with Dr Lisa Freeman. If you would like to feed primarily home cooked diet then please schedule an appointment with B6

Exercise Recommendations: B6 can have normal exercise.

Recommended Medications:

B6

Recheck Visits: We will want to do a recheck echocardiogram in around 6-12 months, but we will decide based on his NTproBNP results.

Thank you for entrusting us with B6 care. He is such a good boy! Please contact our Cardiology liaison at

(508)-887-4696 or email us at 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/cvmc/clinical-studies

Case: B6

Owner: B6

Discharge Instructions

Cummings Veterinary Medical Center

AT TUFTS UNIVERSITY

Cardiology Liaison: 508-887-4696

B6

Patient ID: 426744

B6

Canine

B6 Years Old Male (Neutered) Golden Retriever
Gold

Cardiology Appointment Report

Date: 9/5/2018

Attending Cardiologist:

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

B6

Cardiology Resident:

B6

Cardiology Technician:

B6

Presenting Complaint: Low taurine level (B6) On facebook page with UC Davis. Dr Stern recommended getting an echo. Tested positive for (B6) but is not symptomatic. Has been treated in the past. Has noticed in the last year that he gets out of the pool sooner than usual. Slowing down on hikes, but no breathing difficulties or coughing. May breathe faster than other dog (B6 bpm).

Owner sent out whole blood taurine test after reading about low taurine on line.

Concurrent Diseases:

B6

B6

General Medical History:

Is on (B6) prevention every 6 weeks to 2 months. (B6)

Diet and Supplements:

ZiwePeak grain free, air dried; home cooked. Switched to honest kitchen about 3 years ago. Bravo canned rotates food, got treats with grains. Sardines.

Cardiovascular History:

Prior CHF diagnosis? no

Prior heart murmur? no

Prior ATE? no

Prior arrhythmia? no

Monitoring respiratory rate and effort at home? no

Cough? after swimming

Shortness of breath or difficulty breathing? no

Syncope or collapse? no

Sudden onset lameness? no

Exercise intolerance? starting last year started leaving the pool sooner, coughs to clear throat

Current Medications Pertinent to CV System:

Medication: B6

Formulation/Tab Size: B6

Administration Frequency:

Need refills?

Medication: B6

Formulation/Tab Size: B6

Administration Frequency: Give 1 Tablet Twice a day

Need refills?

Medication: B6

Formulation/Tab Size: B6

Administration Frequency:

Need refills?

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
- Abdominal distension

- Mild ascites
- Marked ascites

Problems:

Low whole blood taurine, on grain free diet

Diagnostic plan:

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

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

Echocardiogram Findings:

B6

Mitral inflow:

- Summated
- Normal
- Delayed relaxation

- Pseudonormal
- Restrictive

ECG findings:

B6

Assessment and recommendations:

Echocardiogram reveals mildly reduced contractile function with no evidence of chamber enlargement or wall thinning. It is possible that these mild changes are related to taurine deficiency/diet, but other mild cardiomyopathy, age related change, or variation for this individual cannot be ruled out. An NTproBNP level was submitted for additional information. Patient is receiving B6 and B6 has not been checked recently, so B6 was also submitted today (6 hours post pill) B6

B6

Final Diagnosis:

Mildly reduced LV contractile function

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

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

B6

cm
cm
cm
cm

LVPWd		cm
EDV(Teich)		ml
IVSs		cm
LVIDs		cm
LVPWs		cm
ESV(Teich)		ml
EF(Teich)		%
%FS		%
SV(Teich)		ml
LVID A2C		cm
LVEDV MOD A2C		ml
LVLs A2C		cm
LVESV MOD A2C		ml
LVEF MOD A2C		%
SV MOD A2C		ml
LVID LAX		cm
LVAd LAX		cm
LVEDV A-L LAX		ml
LVEDV MOD LAX		ml
LVLs LAX		cm
LVA _s 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

<u>Doppler</u>		
MV E Vel		m/s
MV DecT		ms
MV A Vel		m/s
MV E/A Ratio		
E'		m/s
A'		m/s
E/E'		
PV Vmax		m/s
PV maxPG		mmHg
AV Vmax		m/s
AV maxPG		mmHg
TR Vmax		m/s
TR maxPG		mmHg

B6

Patient History Report

Client:	B6	Patient:	B6	Breed:	Golden Retriever
Phone:		Species:	Canine	Sex:	M/Neutered
Address:		Age:	B6	Color:	Buff

Date	Type	Staff	History
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B6 TC 012 Phone & Other Contact - TENTATIVE - Taurine level low, wants to see cardiologist.
 Client Initiated Call / Contact MVC Initiated Call / Contact LMOM In Person E-mail
B6 taurine level was low and the vet at UC Davis recommends he have an echocardiogram with a cardiologist. Is there someone AS would recommend? **B6**
 Called client and spoke to her. **B6** recommends **B6** (Medicine). Client has an appointment at **B6** for their earliest available (mid October), so will call to see if **B6** to see if they can get **B6** in earlier. **B6**

B6

8/21/2018 C 012 Office Visit - CLOSED 08/29/2018 - Blood draw--> owner to send to UC for taurine level
 Reason For Visit: Blood draw for taurine level
 Discussion Items: Blood draw, put into green top tube. Owner to send to UC lab herself for. Sent home styrofoam container and ice packs since lives 30 mins away.
 Enter Item Discussed:
 Follow Up needed / recommended: None

8/21/2018 V 088 Aug 21, 2018 09:14 AM Staff: 088
 Weight : 72.2 pounds
 8/21/2018 CK 0 Blood draw SCFD - AD

B: Billing, C: Med note, CB: Call back, CK: Check-in, CM: Communications, D: Diagnosis, DH: Declined to history, E: Examination, ES: Estimates, I: Departing instr, L: Lab result, M: Image cases, P: Prescription, PA: PVL Accepted, PB: problems, PP: PVL Performed, PR: PVL Recommended, R: Correspondence, T: Images, TC: Tentative med note, V: Vital signs

Patient History Report

Client:	B6	Patient:	[B6]	Breed:	Golden Retriever
Phone:		Species:	Canine	Sex:	M/Neutered
Address:		Age:	[B6]	Color:	Buff

Date	Type	Staff	History
------	------	-------	---------

8/21/2018	B	012	Reason for Visit: TECH APPOINTMENT Date Patient Checked Out: 08/21/18 Practice: 1 1.00 Blood Draw/Pack-Dodds/MSU-CT Mails (374) by 022
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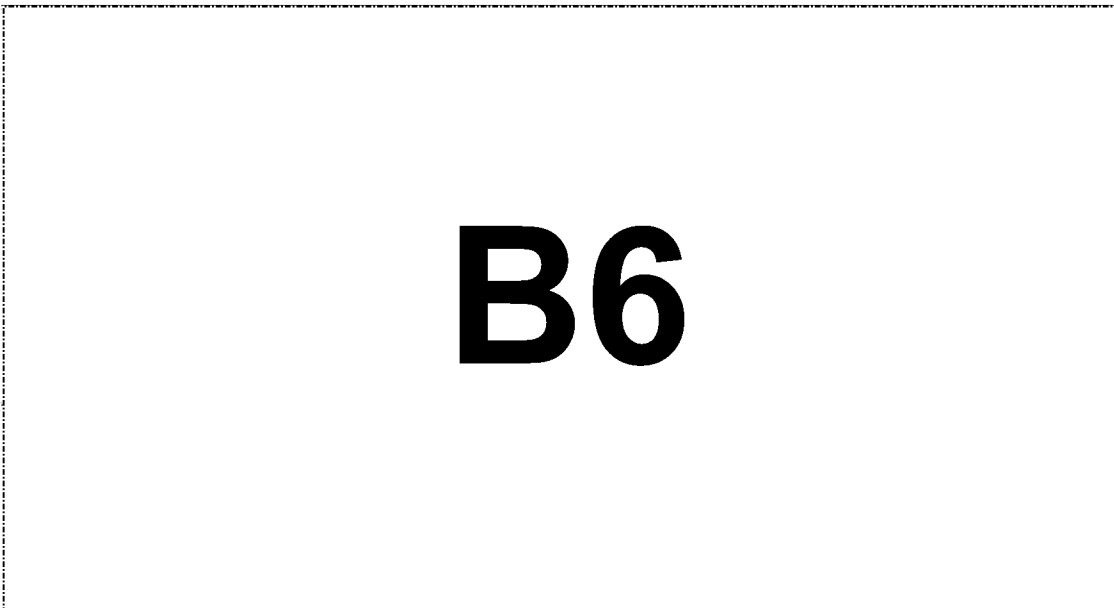
8/7/2018	C	081	Phone & Other Contact - CLOSED 08/17/2018 - Wanting to schedule blood draw to check taurine levels
----------	---	-----	--

Client Initiated Call / Contact M/C Initiated Call / Contact LMQM In Person E-mail
 Ct would like to schedule a blood draw so that she can get pt's taurine levels checked. [B6] Ct says the study for golden retrievers that she wants to join would prefer a blood sample sent to them and not run through Idaxx, it would need to be in a special blood tube (ct says green top). Ct is going to email us instructions. Note to [B6] to see best way to schedule this. [B6]

3:10 instructions attached to this note, ct says she will handle the shipping of the blood samples. [B6]

5:20 ok per [B6] to schedule with a tech, ct will wait till the blood tubes come in and we call her to schedule, ct would prefer a morning appt so that she can go to [B6] right after the appointment to send the blood. [B6]

8/11/18 ct called and sched appt with tech [B6]



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Patient History Report

Client:	B6	Patient:	B6	Breed:	Golden Retriever
Phone:		Species:	Canine	Sex:	M/Neutered
Address:		Age:	B6	Color:	Buff

Date	Type	Staff	History
B6			

B: Billing, C: Med note, CB: Call back, CK: Check-in, CM: Communications, D: Diagnosis, DH: Declined to history, E: Examination, ES: Estimate, I: Departing instr, L: Lab result, M: Image cases, P: Prescription, PA: PVL Accepted, PB: problems, PP: PVL Performed, PR: PVL Recommended, R: Correspondence, T: Images, TC: Tentative medl note, V: Vital signs

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Patient History Report

Client:	B6	Patient:	B6	Breed:	Golden Retriever
Phone:		Species:	Canine	Sex:	M/Neutered
Address:		Age:	B6	Color:	Buff

Date	Type	Staff	History
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Address:		Age:	B6	Color:	Buff

Date	Type	Staff	History
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Phone:		Species:	Canine	Sex:	M/Neutered
Address:		Age:	B6	Color:	Buff

Date	Type	Staff	History
B6			

B: Billing, C: Med note, CB: Call back, CK: Check-in, CM: Communications, D: Diagnosis, DH: Declined to history, E: Examination, ES: Estimate, I: Departing instr, L: Lab result, M: Image cases, P: Prescription, PA: PVL Accepted, PB: problems, PP: PVL Performed, PR: PVL Recommended, R: Correspondence, T: Images, TC: Tentative medl note, V: Vital signs

B6

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Client:	B6	Patient:	B6	Breed:	Golden Retriever
Phone:		Species:	Canine	Sex:	M/Neutered
Address:		Age:	B6	Color:	Buff

Date	Type	Staff	History
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B6			
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B: Billing, C: Med note, CB: Call back, CK: Check-in, CM: Communications, D: Diagnosis, DH: Declined to history, E: Examination, ES: Estimates, I: Departing instr, L: Lab result, M: Image cases, P: Prescription, PA: PVL Accepted, PB: problems, PP: PVL Performed, PR: PVL Recommended, R: Correspondence, T: Images, TC: Tentative med note, V: Vital signs

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Phone:		Species:	Canine	Sex:	M/Neutered
Address:		Age:	B6	Color:	Buff

Date	Type	Staff	History
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B6

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B6

Patient History Report

Client:	B6	Patient:	B6	Breed:	Golden Retriever
Phone:		Species:	Canine	Sex:	M/Neutered
Address:		Age:	B6	Color:	Buff

Date	Type	Staff	History
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B6

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B6

Patient History Report

Client:	B6	Patient:	B6	Breed:	Golden Retriever
Phone:		Species:	Canine	Sex:	M/Neutered
Address:		Age:	B6	Color:	Buff

Date	Type	Staff	History
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<h1>B6</h1>			
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B6

Patient History Report

Client:	B6	Patient:	B6	Breed:	Golden Retriever
Phone:		Species:	Canine	Sex:	M/Neutered
Address:		Age:	B6	Color:	Buff

Date	Type	Staff	History
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B6

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B6

Patient History Report

Client:	B6	Patient:	B6	Breed:	Golden Retriever
Phone:		Species:	Canine	Sex:	M/Neutered
Address:		Age:	B6	Color:	Buff

Date	Type	Staff	History
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B6

Patient History Report

Client:	B6	Patient:	B6	Breed:	Golden Retriever
Phone:		Species:	Canine	Sex:	M/Neutered
Address:		Age:	B6	Color:	Buff

Date	Type	Staff	History
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B6

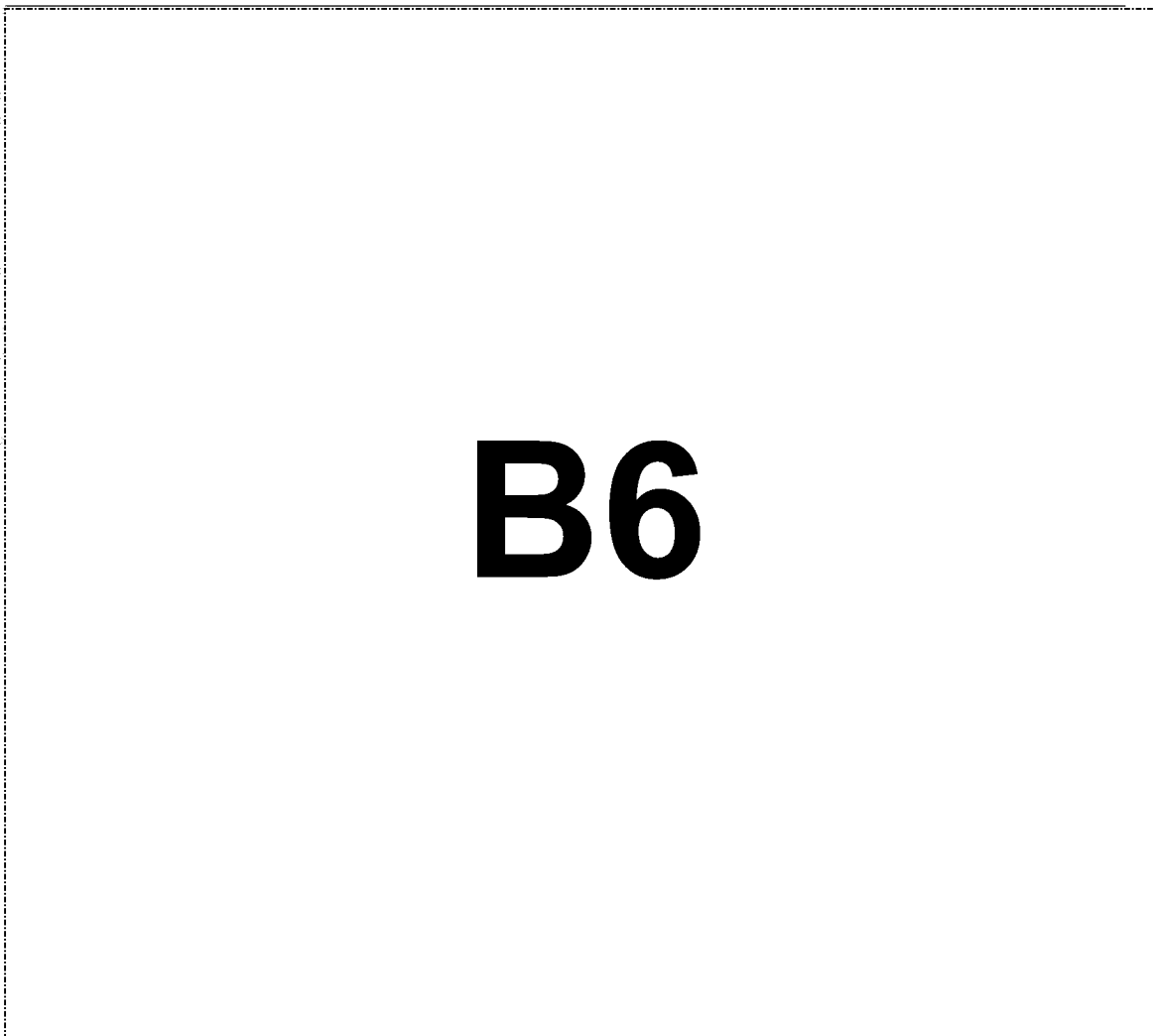
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B6

Patient History Report

Client:	B6	Patient:	B6	Breed:	Golden Retriever
Phone:		Species:	Canine	Sex:	M/Neutered
Address:		Age:	B6	Color:	Buff

Date	Type	Staff	History
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B6

Patient History Report

Client:	B6	Patient:	B6	Breed:	Golden Retriever
Phone:		Species:	Canine	Sex:	M/Neutered
Address:		Age:	B6	Color:	Buff

Date	Type	Staff	History
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B6

B6

Client Initiated Call / Contact MVC Initiated Call / Contact LMOM In Person E-mail
Ct says that one of her dogs got into a fela's naptcha laundry soap bar last night. She says about 1 oz in a half is missing. Note sent to **B6**

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B6

Patient History Report

Client:	B6	Patient:	B6	Breed:	Golden Retriever
Phone:		Species:	Canine	Sex:	M/Neutered
Address:		Age:	B6		
		Color:	Buff		

Date	Type	Staff	History
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B6

Patient History Report

Client:	B6	Patient:	B6	Breed:	Golden Retriever
Phone:		Species:	Canine	Sex:	M/Neutered
Address:		Age:	B6	Color:	Buff

Date	Type	Staff	History
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Patient History Report

Client:	B6	Patient:	B6	Breed:	Golden Retriever
Phone:		Species:	Canine	Sex:	M/Neutered
Address:		Age:	B6	Color:	Buff

Date	Type	Staff	History
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Address:		Age:	B6	Color:	Buff

Date	Type	Staff	History
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Phone:		Species:	Canine	Sex:	M/Neutered
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Patient History Report

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Patient History Report

Client:	B6	Patient:	B6	Breed:	Golden Retriever
Phone:		Species:	Canine	Sex:	M/Neutered
Address:		Age:	B6		
		Color:	Buff		

Date	Type	Staff	History
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[B6]

Patient History Report

Client:	B6	Patient:	B6	Breed:	Golden Retriever
Phone:		Species:	Canine	Sex:	M/Neutered
Address:		Age:	B6	Color:	Buff

Date	Type	Staff	History
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Phone:		Species:	Canine	Sex:	M/Neutered
Address:		Age:	B6	Color:	Buff

Date	Type	Staff	History
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Phone:		Species:	Canine	Sex:	M/Neutered
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Patient History Report

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Phone:		Species:	Canine	Sex:	M/Neutered
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Date	Type	Staff	History
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Address:		Age:	B6	Color:	Buff

Date	Type	Staff	History
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Patient History Report

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Phone:		Species:	Canine	Sex:	M/Neutered
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Date	Type	Staff	History
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Patient History Report

Client:	B6	Patient:	B6	Breed:	Golden Retriever
Phone:		Species:	Canine	Sex:	M/Neutered
Address:		Age:	B6	Color:	Buff

Date	Type	Staff	History
B6			

SUMMARY:

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Patient History Report

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Phone:		Species:	Canine	Sex:	M/Neutered
Address:		Age:	B6	Color:	Buff

Date	Type	Staff	History
B6			

SUMMARY:

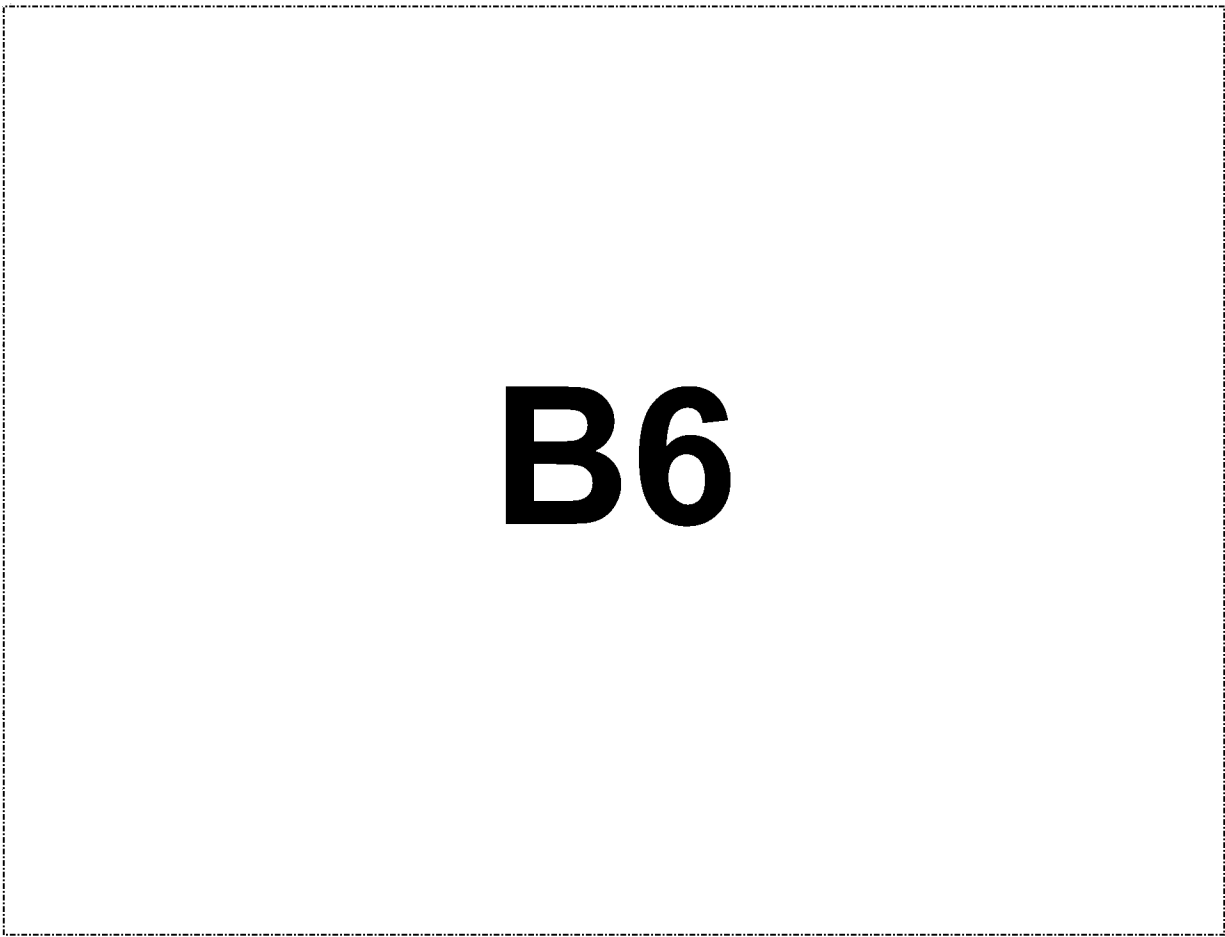
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Patient History Report

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Phone:		Species:	Canine	Sex:	M/Neutered
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Date	Type	Staff	History
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B6

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

Client:	B6
Veterinarian:	
Patient ID:	
Visit ID:	

Patient:	B6
Species:	Canine
Breed:	Golden Retriever
Sex:	Male (Neutered)
Age:	B6 Years Old

Lab Results Report

T4/Clin Path		B6	5:43:00 PM	Accession ID:	B6
Test	Results	Reference Range	Units		
T4/TOSOH	B6	1 - 4.1	ug/dl		

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: 10/1/2018 9:24:42 PM
Subject: please see prior PFR 364577-FW: Honest Kitchen whole grain turkey: Lisa Freeman - EON-367347
Attachments: 2055560-report.pdf; Honest Kitchen Whole Grain Turkey: Lisa Freeman - EON-364577; 2055560-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: Monday, October 01, 2018 5:05 PM
To: Cleary, Michael * <Michael.Cleary@fda.hhs.gov>; HQ Pet Food Report Notification <HQPetFoodReportNotification@fda.hhs.gov>; **B6**
Subject: Honest Kitchen whole grain turkey: Lisa Freeman - EON-367347

A PFR Report has been received and PFR Event [EON-367347] has been created in the EON System.

A "PDF" report by name "2055560-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 "2055560-attachments.zip" and is attached to this email notification.

Below is the summary of the report:

EON Key: EON-367347
ICSR #: 2055560
EON Title: PFR Event created for Honest Kitchen whole grain turkey beef or chicken + Ziwi Peak (just started again) - see diet history for **B6** and **B6** attached; 2055560

AE Date	09/27/2018	Number Fed/Exposed	1
Best By Date		Number Reacted	1

Animal Species	Dog	Outcome to Date	Stable
Breed	Retriever - Golden		
Age	B6 Years		
District Involved	PFR-New England DO		

Product information

Individual Case Safety Report Number: 2055560

Product Group: Pet Food

Product Name: Honest Kitchen whole grain turkey, beef, or chicken + Ziwi Peak (just started again) - see diet history for **B6** and **B6** attached

Description: Housemate diagnosed with reduced contractile function on echo **B6**
Asymptomatic NT-proBNP tested at RDVM. Will send results

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
Honest Kitchen whole grain turkey, beef, or chicken + Ziwi Peak (just started again) - see diet history for B6 and B6 attached		

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-367347>

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&issueld=384261>

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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.

The information is provided as part of the Federal-State Integration initiative. As a Commissioned Official and state government official, you are reminded of your obligation to protect non-public information, including trade secret and confidential commercial information that you receive from the U.S. Food and Drug Administration from further disclosure. The information in the report is intended for situational awareness and should not be shared or acted upon independently. Any and all actions regarding this information should be coordinated through your local district FDA office.

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 immediately.

Report Details - EON-367347

ICSR: 2055560
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: 2018-10-01 16:59:24 EDT

Reported Problem:
Problem Description: Housemate diagnosed with reduced contractile function on echo (B6) (B6) Asymptomatic NT-proBNP tested at RDVM. Will send results
Date Problem Started: 09/27/2018
Concurrent Medical Problem: No
Outcome to Date: Stable

Product Information:
Product Name: Honest Kitchen whole grain turkey, beef, or chicken + Ziwi Peak (just started again) - see diet history for (B6) attached
Product Type: Pet Food
Lot Number:
Package Type: BAG
Product Use Information: **Description:** See attached diet history
Manufacturer /Distributor Information:
Purchase Location Information:

Animal Information:
Name: (B6)
Type Of Species: Dog
Type Of Breed: Retriever - Golden
Gender: Female
Reproductive Status: Neutered
Weight: 29.1 Kilogram
Age: (B6) Years
Assessment of Prior Health: Excellent
Number of Animals Given the Product: 1
Number of Animals Reacted: 1

Owner Information:
Owner Information provided: Yes
Contact: **Name:** (B6)
Phone: (B6)
Email: (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
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:	B6 18100117080.pdf
	Description:	Diet history (for B6 - housemates)
	Type:	Medical Records
	Attachment:	echo 9-27-18.pdf
	Description:	Echo
	Type:	Echocardiogram
	Attachment:	discharge 9-27-18.pdf
	Description:	Discharge
	Type:	Medical Records
	Attachment:	taurine.pdf
	Description:	Taurine
	Type:	Laboratory Report

From: PFR Event <pfpreventcreation@fda.hhs.gov>
To: Cleary, Michael *; HQ Pet Food Report Notification; B6
Sent: 9/7/2018 9:20:34 PM
Subject: Honest Kitchen Whole Grain Turkey: Lisa Freeman - EON-364577
Attachments: 2054750-report.pdf; 2054750-attachments.zip

A PFR Report has been received and PFR Event [EON-364577] has been created in the EON System.

A "PDF" report by name "2054750-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 "2054750-attachments.zip" and is attached to this email notification.

Below is the summary of the report:

EON Key: EON-364577

ICSR #: 2054750

EON Title: PFR Event created for Honest Kitchen Whole Grain Turkey Beef or CHicken, Ziwi Peak (recently started); 2054750

AE Date	09/05/2018	Number Fed/Exposed	
Best By Date		Number Reacted	1
Animal Species	Dog	Outcome to Date	Stable
Breed	Retriever - Golden		
Age	B6 Years		
District Involved	PFR-New England DO		

Product information

Individual Case Safety Report Number: 2054750

Product Group: Pet Food

Product Name: Honest Kitchen Whole Grain Turkey, Beef, or CHicken, Ziwi Peak (recently started)

Description: Not true DCM but reduced contractility. B6 taurine (whole blood)

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 Reacted With Product: 1

Product Name	Lot Number or ID	Best By Date
Ziwi Peak (recently started)		
Honest Kitchen Whole Grain Turkey, Beef, or CHicken		

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-364577>

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=381311>

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Report Details - EON-364577

ICSR: 2054750
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: 2018-09-07 17:16:09 EDT

Reported Problem:
Problem Description: Not true DCM but reduced contractility. **B6** taurine (whole blood)
Date Problem Started: 09/05/2018
Concurrent Medical Problem: No
Outcome to Date: Stable

Product Information:
Product Name: Ziwi Peak (recently started)
Product Type: Pet Food
Lot Number:
Package Type: BAG
Product Use Information:
Manufacturer /Distributor Information:
Purchase Location Information:
Product Name: Honest Kitchen Whole Grain Turkey, Beef, or CHicken
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: Retriever - Golden
Gender: Male
Reproductive Status: Neutered
Weight: 31.5 Kilogram
Age: **B6** Years
Assessment of Prior Health: Excellent
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		
	Practice Name:	Tufts Cummings School of Veterinary Medicine		
Contact:	Name:	Emily Karlin		
	Phone:	508-887-4696		
Permission to Release Records to FDA:	Yes			
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 discharge 9-5-18.pdf		
	Description:	Cardio discharge		
	Type:	Medical Records		
	Attachment:	t4.pdf		
	Description:	T4		
	Type:	Laboratory Report		
	Attachment:	rdvm records.pdf		
	Description:	RDVM records		
	Type:	Medical Records		
	Attachment:	cardio report 9-5-18.pdf		
	Description:	Cardio report		
	Type:	Medical Records		

Discharge Instructions

Patient

Name: B6

Species: Canine

Gold Male (Neutered) Golden Retriever

Birthdate: B6

Owner

Name: B6

Address: B6

Patient ID: 426744

Attending Cardiologist:

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

B6

Cardiology Resident:

B6

Cardiology Technician:

B6

Date: 9/5/2018

Diagnoses:

Mild reduced contractile function, normal cardiac size

Low blood taurine levels

Clinical Findings: Thank you for bringing B6 in for evaluation of his heart. His heart is normal in size, but his contractile function is not quite as vigorous as some dogs. This could be a variation of normal for him, but it is also possible that it could be related to low taurine. We have submitted an NTproBNP test to gather more information about B6 heart health. We also submitted a total T4 to assess B6 thyroid on his current level of medication. We will call you with these results within the next few days.

Monitoring at Home: Please watch for any exercise intolerance, weakness, or collapse.

Diet Suggestions: We recommend a change in B6 diet. If you would like to pursue a mix of home cooking and new kibble we recommend scheduling a Nutrition consultation with Dr Lisa Freeman. If you would like to feed primarily home cooked diet then please schedule an appointment with B6

Exercise Recommendations: B6 can have normal exercise.

Recommended Medications:

B6

Recheck Visits: We will want to do a recheck echocardiogram in around 6-12 months, but we will decide based on his NTproBNP results.

Thank you for entrusting us with B6 care. He is such a good boy! Please contact our Cardiology liaison at

(508)-887-4696 or email us at 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/cvmc/clinical-studies

Case: B6

Owner: B6

Discharge Instructions

Cummings

Veterinary Medical Center

AT TUFTS UNIVERSITY

Cardiology Liaison: 508-887-4696

B6

Patient ID: 426744

B6 Canine

B6 Years Old Male (Neutered) Golden Retriever
Gold

Cardiology Appointment Report

Date: 9/5/2018

Attending Cardiologist:

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

B6

Cardiology Resident:

B6

Cardiology Technician:

B6

Presenting Complaint: Low taurine level - B6 On facebook page with UC Davis. Dr Stern recommended getting an echo. Tested B6 but is not symptomatic. Has been treated in the past. Has noticed in the last year that he gets out of the pool sooner than usual. Slowing down on hikes, but no breathing difficulties or coughing. May breathe faster than other dog B6

Owner sent out whole blood taurine test after reading about low taurine on line.

Concurrent Diseases:

B6

B6

Happy and healthy

otherwise.

General Medical History:

Is on heartworm prevention every 6 weeks to 2 months.

B6

Diet and Supplements:

ZiwePeak grain free, air dried; home cooked. Switched to honest kitchen about 3 years ago. Bravo canned rotates food, got treats with grains. Sardines.

Cardiovascular History:

Prior CHF diagnosis? no

Prior heart murmur? no

Prior ATE? no

Prior arrhythmia? no

Monitoring respiratory rate and effort at home? no

Cough? after swimming

Shortness of breath or difficulty breathing? no

Syncope or collapse? no

Sudden onset lameness? no

Exercise intolerance? starting last year started leaving the pool sooner, coughs to clear throat

Current Medications Pertinent to CV System:

Medication: B6

Formulation/Tab Size: B6 twice a day

Administration Frequency:

Need refills?

Medication: B6

Formulation/Tab Size: B6

Administration Frequency: Give 1 Tablet Twice a day

Need refills?

Medication: omega 3 fatty acids

Formulation/Tab Size: nordic naturals once a day 2 teaspoons

Administration Frequency:

Need refills?

Cardiac Physical Examination:

B6

Muscle condition:

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

Cardiovascular Physical Exam:

Murmur Grade:

- | | |
|--|--------------------------------|
| <input checked="" 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 type="checkbox"/> III/VI | |

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 checked="" type="checkbox"/> Good | <input type="checkbox"/> Pulsus paradoxus |
| <input type="checkbox"/> Strong | <input type="checkbox"/> Other: |

Arrhythmia:

- | | |
|---|--------------------------------------|
| <input checked="" type="checkbox"/> None | <input type="checkbox"/> Bradycardia |
| <input type="checkbox"/> Sinus arrhythmia | <input type="checkbox"/> Tachycardia |
| <input type="checkbox"/> Premature beats | |

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:

Low whole blood taurine, on grain free diet

Diagnostic plan:

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

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

Echocardiogram Findings:

B6

Mitral inflow:

- Summated
- Normal
- Delayed relaxation

- Pseudonormal
- Restrictive

ECG findings:

B6

Assessment and recommendations:

Echocardiogram reveals mildly reduced contractile function with no evidence of chamber enlargement or wall thinning. It is possible that these mild changes are related to taurine deficiency/diet, but other mild cardiomyopathy, age related change, or variation for this individual cannot be ruled out. An NTproBNP level was submitted for additional information. Patient is receiving thyroid supplementation and T4 has not been checked recently, so T4 was also submitted today (6 hours post pill). Recommend taurine

supplementation and diet change

B6

B6

Final Diagnosis:

Mildly reduced LV contractile function

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

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

B6

cm
cm
cm
cm

LVPWd
EDV(Teich)
IVSs
LVIDs
LVPWs
ESV(Teich)
EF(Teich)
%FS
SV(Teich)
LVID A2C
LVEDV MOD A2C
LVIs A2C
LVESV MOD A2C
LVEF MOD A2C
SV MOD A2C
LVID LAX
LVAd LAX
LVEDV A-L LAX
LVEDV MOD LAX
LVIs 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

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l/min

Doppler
MV E Vel
MV DecT
MV A Vel
MV E/A Ratio
E'
A'
E/E'
PV Vmax
PV maxPG
AV Vmax
AV maxPG
TR Vmax
TR maxPG

B6

m/s
ms
m/s

m/s
m/s

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

Patient History Report

Client:	B6	Patient:	B6	Breed:	Golden Retriever
Phone:		Species:	Canine	Sex:	M/Neutered
Address:		Age:	B6	Color:	Buff

Date	Type	Staff	History
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[B6] TC 012 Phone & Other Contact - TENTATIVE - Taurine level low, wants to see cardiologist.
 Client Initiated Call / Contact M/C Initiated Call / Contact LMOM In Person E-mail
 Donovan's taurine level was low and the vet at UC Davis recommends he have an echocardiogram with a cardiologist. Is there someone [B6] would recommend? [B6]
 Called client and spoke to her. [B6] recommends [B6] for their earliest available (mid October), so will call to see if [B6] to see if they can get [B6] in earlier. [B6]

B6

[B6] C 012 Office Visit - CLOSED [B6] Blood draw--> owner to send to UC for taurine level
 Reason For Visit: Blood draw for taurine level
 Discussion Items: Enter Item Discussed: Blood draw, put into green top tube. Owner to send to UC lab herself for [B6]
 Follow Up needed / recommended: None

[B6] V 088 Aug 21, 2018 09:14 AM Staff: 088
 Weight : 72.2 pounds
 CK 0 Blood draw SCFD - AD

B: Billing, C: Med note, CB: Call back, CK: Check-in, CM: Communications, D: Diagnosis, DH: Declined to history, E: Examination, ES: Estimates, I: Departing instr, L: Lab result, M: Image cases, P: Prescription, PA: PVL Accepted, PB: problems, PP: PVL Performed, PR: PVL Recommended, R: Correspondence, T: Images, TC: Tentative med note, V: Vital signs

Patient History Report

Client:	B6	Patient:	B6	Breed:	Golden Retriever
Phone:		Species:	Canine	Sex:	M/Neutered
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Date	Type	Staff	History
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B6	B	012	Reason for Visit: TECH APPOINTMENT Date Patient Checked Out: 08/21/18 Practice: 1 1.00 Blood Draw/Pac [B6] ISU-CT Mails (374) by 022
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B6	C	081	Phone & Other Contact - CLOSED [B6] - Wanting to schedule blood draw to check taurine levels
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Client Initiated Call / Contact M/C Initiated Call / Contact LMDM In Person E-mail

Ct would like to schedule a blood draw so that she can get pt's taurine levels checked [B6] (Girl too) Ct says the study for golden retrievers that she wants to join would prefer a blood sample sent to them and not run through [B6] it would need to be in a special blood tube (ct says green top) Ct is going to email us instructions. Note to [B6] to see best way to schedule this [B6]

3:10 instructions attached to this note, ct says she will handle the shipping of the blood samples [B6]

5:20 ok per [B6] to schedule with a tech, ct will wait till the blood tubes come in and we call her to schedule, ct would prefer a morning appt so that she can go to fedex right after the appointment to send the blood [B6]

[B6] ct called and sched appt with tech [B6]



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Patient History Report

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Phone:		Species:	Canine	Sex:	M/Neutered
Address:		Age:	B6	Color:	Buff

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B6

Patient History Report

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B6

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Phone:		Species:	Canine	Sex:	M/Neutered
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Phone:		Species:	Canine	Sex:	M/Neutered
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[B6]

Patient History Report

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Phone:		Species:	Canine	Sex:	M/Neutered
Address:		Age:	B6		
		Color:	Buff		

Date	Type	Staff	History
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B6

Hard copy is filed Document is captured below, no hard copy saved

SUMMARY: Seen 8/9 at **B6** Hospital for possible chocolate ingestion during the night, dog clinically normal, induced vomiting with no chocolate residue seen, given **B6** and sent home.

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Date	Type	Staff	History
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B6

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Address:		Age:	B6	Color:	Buff

Date	Type	Staff	History
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B6

Client Initiated Call / Contact MVC Initiated Call / Contact LMOM In Person E-mail

Ct says that one of her dogs got into a fels n apto ha laundry soap bar last night. She says about 1 oz in a half is missing. Note sent to **B6**

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Address:		Age:	B6	Color:	Buff

Date	Type	Staff	History
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B6

Patient History Report

Client:	B6	Patient:	B6	Breed:	Golden Retriever
Phone:		Species:	Canine	Sex:	M/Neutered
Address:		Age:	B6	Color:	Buff

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B6

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

Client:	B6
Veterinarian:	
Patient ID:	
Visit ID:	

Patient:	B6
Species:	Canine
Breed:	Golden Retriever
Sex:	Male (Neutered)
Age:	B6 Years Old

Lab Results Report

T4/Clin Path		9/5/2018 5:43:00 PM	Accession ID:	B6
Test	Results	Reference Range	Units	
T4/TOSOH	B6	1 - 4.1	ug/dl	

Discharge Instructions

Patient

Name: B6

Species: Canine

Gold Female (Spayed) Golden Retriever

Birthdate: B6

Owner

Name: B6

Address: B6

Patient ID: 426794

Attending Cardiologist:

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

B6

Cardiology Resident:

B6

Cardiology Technician:

B6

Student: B6, V19

Date: B6

Diagnoses:

Mild reduced contractile function, normal cardiac size

Clinical Findings: Thank you for bringing B6 in for evaluation of her heart. Similar to B6 B6 heart is normal in size, but her contractile function is not quite as vigorous as some dogs. This could be a variation of normal for her, but it is also possible that this is an abnormality related to having been eating a grain free diet. We recommend getting an NT-pro BNP test done when you take B6 in for her physical examination on Monday to better assess her heart function.

Monitoring at Home: Please watch for any exercise intolerance, weakness, or collapse.

Diet Suggestions: We recommend continuing to feed a main stream brand diet with standard protein source that is not grain-free.

Exercise Recommendations: B6 can have normal exercise.

Recheck Visits: We will want to do a recheck echocardiogram in 6-12 months (on the sooner side if B6 BNP is very high.)

Thank you for entrusting us with B6 care. She is so sweet! Please contact our Cardiology liaison at (508)-887-4696 or email us at 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/cvmc/clinical-studies

Case: B6

Owner: B6

Discharge Instructions

Cummings Veterinary Medical Center

AT TUFTS UNIVERSITY

Cardiology Liaison: 508-887-4696

B6

Patient ID: 426794

B6 Canine

B6 Years Old Female (Spayed) Golden Retriever
Gold

Cardiology Appointment Report

Date: 9/27/2018

Attending Cardiologist:

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

B6

Cardiology Resident:

B6

Cardiology Technician:

B6

Student: **B6**, V19

Presenting Complaint: Check for DCM (has been on grain free diet)

Concurrent Diseases: none

General Medical History: **B6** had been on a grain free diet at home, and another golden retriever of owner's was low in taurine (**B6** taurine level was normal)- owner wants to make sure **B6** does not have DCM. No concerns at home.

Diet and Supplements:

Honest Kitchen (grain free), primal once a month, home cooked here and there (Old diet)

Now on Canine Natural, Bag of royal can in Golden retriever, zee wee peak

Omega 3 fatty acid oil

Eye drops- diclofenac for pigmentary uveitis

On heartworm preventative

Cardiovascular History:

Prior CHF diagnosis? No

Prior heart murmur? No

Prior ATE? No

Prior arrhythmia? No

Monitoring respiratory rate and effort at home? No

Cough? No

Shortness of breath or difficulty breathing? No

Syncope or collapse? no

Sudden onset lameness? no

Exercise intolerance? no

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: Hx of grain free diet; apparently healthy dog

Diagnostic plan:

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

Echocardiogram Findings:

B6

Mitral inflow:

- Summated
- Normal
- Delayed relaxation
- Pseudonormal
- Restrictive

ECG findings:

NSR, HR 90 bpm

Assessment and recommendations:

Echocardiogram reveals mildly reduced contractile function with no evidence of chamber enlargement or wall thinning. It is possible that these mild changes are related to diet, but other mild cardiomyopathy, age related change, or variation of normal for this patient cannot be ruled out. An NTproBNP level was submitted for additional information. Given the possibility of a dietary association **B6** ing

B6

Final Diagnosis:

Mildly reduced LV contractile function (r/o cardiomyopathy v variation of normal)

M-Mode

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

B6

EPSS
Max LA

B6

cm
cm

M-Mode Normalized

IVSdN
LVIDdN
LVPWdN
IVSsN
LVIDsN
LVPWsN
Ao Diam N
LA Diam N

(0.29 - 0.52)
(1.35 - 1.73)
(0.33 - 0.53)
B6 (0.43 - 0.71) !
(0.79 - 1.14)
(0.53 - 0.78)
(0.68 - 0.89)
(0.64 - 0.90)

2D

Ao Diam
IVSd
LVIDd
LVPWd
EDV(Teich)
IVSs
LVIDs
LVPWs
ESV(Teich)
EF(Teich)
EF(Cube)
%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
SA LA

B6

cm
cm
cm
cm
ml
cm
cm
cm
ml
%
%
%
ml
cm
cm
ml
ml
ml
ml
BPM
%
%
ml
ml
l/min
l/min
cm

Doppler

MV E Vel
MV DecT
MV Dec Slope
MV A Vel

m/s
ms
m/s
m/s

MV E/A Ratio

E'

E/E'

PV Vmax

PV maxPG

AV Vmax

AV maxPG

B6

m/s

m/s

mmHg

m/s

mmHg

Amino Acid Laboratory Sample Submission Form

Amino Acid Laboratory
 1089 Veterinary Medicine Drive
 Davis, Ca 95616
 Telephone: 530-752-5058, Fax: 530-752-4698
 Email: ucd.aminoacid.lab@ucdavis.edu
www.vetmed.ucdavis.edu/labs/amino-acid-laboratory

Veterinarian Contact: **B6**

Clinic/Company Name: **B6**

Address: **B6**
Email: _____

Telephone: **B6** Fax: **B6**
Billing Contact: _____ Email: _____

Patient Name: **B6** Species: Dog
Breed: Golden Retriever Owner's Name: **B6**

Current Diet : K-9 Naturals, RC GR, ZiwiPeak

Sample type: Plasma Whole Blood Urine Food Other _____

Test: Taurine Complete Amino Acids Other: _____

Taurine Results (lab use only) **B6**
Plasma: _____ Whole Blood: _____ Urine: _____ Food: _____

	Plasma (nMol/ml)		Whole Blood (nMol/ml)	
	Normal Range	No known risk for deficiency	Normal Range	No known risk for deficiency
Cat	80-120	>40	300-600	>200
Dog	60-120	>40	200-350	>150

* Please note with the recent increase in the number of dogs screened for taurine deficiency, we are seeing dogs with values within the reference ranges (or above the "no known risk for deficiency range") yet are still exhibiting signs of cardiac disease. Veterinarians are welcome to contact our laboratory for assistance in evaluating your patient's results.

* Please send results to **B6** in addition to Vet. Thank you **B6**

From: Jones, Jennifer L </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=0F6CA12EAA9348959A4CBB1E829AF244-JENNIFER.JO>
To: Rotstein, David
CC: Peloquin, Sarah
Sent: [REDACTED] 4:42:56 PM
Subject: FW: [REDACTED] - time sensitive
Importance: High
Attachments: 2063133-report - Copy.pdf; 2063133-report.pdf; 2063134-report - Copy.pdf; 2063134-report.pdf

Dave,

I know we're chatting Thursday about the results and next steps. [REDACTED] B5

[REDACTED] B5

[REDACTED] B5 what do you think?

Jen

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



From: Freeman, Lisa <Lisa.Freeman@tufts.edu>
Sent: [REDACTED] B6 2:30 PM
To: Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov>
Subject: [REDACTED] B6 time sensitive
Importance: High

Hi Jen
I also left you a voice message but I just heard that [REDACTED] B6 died suddenly [REDACTED] B6 This is one of at least 3 dogs in the household affected by DCM eating the same diet. We're actually scheduled to see the 3 dogs tomorrow and to evaluate a 4th dog in the household that has an elevated BNP. So, this is a particularly interesting household.

The referring vet contacted me and said the owner is bringing [REDACTED] B6 in for cremation. He will ask if he can get samples for you but we'd need to know what tissues to get, how to store them, etc.

Please let me know next steps
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
508-887-4523

From: Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov>
Sent: Tuesday, March 26, 2019 1:50 PM

To: Freeman, Lisa <Lisa.Freeman@tufts.edu>

Subject: RE: Cobalt

Hi Lisa,

We based this on the 25 mg/kg diet for chicks, rats, and sheep per Mineral Tolerances of Animals 2nd Ed, 2005 (NRC). The cobalt in the products we tested was below 1 ppm.

Hope you're well,

Jen

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



From: Freeman, Lisa <Lisa.Freeman@tufts.edu>

Sent: Saturday, March 23, 2019 11:43 AM

To: Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov>

Subject: Cobalt

Hi Jen,

In the Feb, 2019 Vet-LIRN report, it states that cobalt was tested in the diets and was within normal nutrient ranges recommended by AAFCO. Since Co is not an essential nutrient listed in the AAFCO profiles, are you using the max of 10 ppm that is for all species from AAFCO (ie, the level that "will not impair animal performance and should not produce unsafe residues in human food derived from that animal"?)

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