
From: B6
To: Darcy Adin
CC: Jones, Jennifer L; Reimschuessel, Renate
Sent: 7/10/2017 2:49:30 PM
Subject: Pet food concern

Hi Dr. Adin,

As we discussed this morning, one avenue to explore your concern about pet food contamination (toxin or infectious disease) is the FDA program. Here is a website that highlights how you can report a complaint.

<https://www.fda.gov/AnimalVeterinary/SafetyHealth/ReportaProblem/ucm182403.htm>

We work with the FDA Vet-LIRN program on diagnostics from the pet side, but they agree to include the case in the program and would coordinate with us (or another laboratory). I have copied Dr. Jones and Dr. Reimschuessel here - they can help let us know the process to see if these cases are eligible.

Regards,

B6

From: Darcy Adin <dbadin@ncsu.edu>
To: Jones, Jennifer L
CC: B6
Sent: 7/11/2017 1:57:59 PM
Subject: Re: Pet food concern

Great! I will give you a call during one of those times depending on our clinic cases - thank you!

On Tue, Jul 11, 2017 at 7:33 AM, Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov> wrote:

Hi Darcy,

I can chat today from 11-1pm or or 2-3pm.

Jen

Jennifer Jones, DVM

Veterinary Medical Officer



From: Darcy Adin [<mailto:dbadin@ncsu.edu>]
Sent: Monday, July 10, 2017 6:47 PM
To: Jones, Jennifer L
Cc: Reimschuessel, Renate; B6

Subject: Re: Pet food concern

Thank you Dr. Jones! I'm sorry I am just reading email now so I have missed you! I'd love to chat with you about the cases. I am on clinics this week but can try to call you if you have another block of time tomorrow (or later this week). My number is B6 or I can be paged from B6

Thank you!

Darcy

On Jul 10, 2017, at 1:05 PM, Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov> wrote:

Hello Dr. Adin,

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If you suspect an animal's illness may be due to the food, you can submit a report at www.safetyreporting.hhs.gov

Please mention Vet-LIRN encouraged you to submit a report. Please email me the ICSR number (similar to a confirmation number), so I can find the report on my end.

Thank you,

Jennifer

Jennifer Jones, DVM

Veterinary Medical Officer

<image001.png> <image004.png>

From: Darcy Adin [<mailto:dbadin@ncsu.edu>]

Sent: Monday, July 10, 2017 11:31 AM

To: **B6**

Cc: Jones, Jennifer L; Reimschuessel, Renate

Subject: Re: Pet food concern

Thank you! I will work on this submission later today. I appreciate your help!

On Mon, Jul 10, 2017 at 10:49 AM, **B6** wrote:

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B6

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Darcy B. Adin, DVM, DACVIM (Cardiology)

Clinical Assistant Professor of Cardiology

North Carolina State University

NC State Veterinary Hospital

1060 William Moore Drive

Raleigh, NC 27607

919-513-6032

--

Darcy B. Adin, DVM, DACVIM (Cardiology)

Clinical Assistant Professor of Cardiology

North Carolina State University

NC State Veterinary Hospital

1060 William Moore Drive

Raleigh, NC 27607

919-513-6032

From: Darcy Adin <dbadin@ncsu.edu>
To: Jones, Jennifer L
Sent: 7/11/2017 9:44:00 PM
Subject: Re: Pet food concern
Attachments:

B6

Hi Jennifer,

I've submitted the reports through the portal - one for each dog. The numbers are:

2023230 (I) for **B6**
2023228 (I) for **B6**

I've also attached the visit summaries for **B6** and **B6** as well as **B6** necropsy report. I have the biological samples stored at -80 and also have food samples.

Thank you so much for your help and I'll look forward to hearing from you or someone on your team!

Take care

Darcy

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Jennifer Jones, DVM

Veterinary Medical Officer



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Cc: Reimschuessel, Renate; **B6**

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Thank you,

Jennifer

Jennifer Jones, DVM

Veterinary Medical Officer

<[image001.png](#)> <[image004.png](#)>

From: Darcy Adin [<mailto:dbadin@ncsu.edu>]

Sent: Monday, July 10, 2017 11:31 AM

To: B6

Cc: Jones, Jennifer L; Reimschuessel, Renate

Subject: Re: Pet food concern

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Regards,

B6

B6

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Darcy B. Adin, DVM, DACVIM (Cardiology)

Clinical Assistant Professor of Cardiology

North Carolina State University

NC State Veterinary Hospital

1060 William Moore Drive

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919-513-6032

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Darcy B. Adin, DVM, DACVIM (Cardiology)

Clinical Assistant Professor of Cardiology

North Carolina State University

NC State Veterinary Hospital

1060 William Moore Drive

Raleigh, NC 27607

919-513-6032

From: Jones, Jennifer L </o=FDA/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=Jennifer.Jonesaa8>
To: 'Darcy Adin'
CC: Ceric, Olgica
Sent: 8/22/2017 11:54:03 AM
Subject: RE: Pet food concern (800.218)

My apologies for the second email.
Which dry food (Kangaroo or Venison) was sent to us for the testing?

Jennifer Jones, DVM
Veterinary Medical Officer



From: Jones, Jennifer L
Sent: Tuesday, August 22, 2017 7:37 AM
To: 'Darcy Adin'
Cc: Ceric, Olgica
Subject: RE: Pet food concern (800.218)

Good morning Dr. Adin,
We received results of the product testing for [B5] those were negative. Please see the attached. The results for the [B5] and taurine are in progress. I'll forward along as soon as possible.
Thank you for your patience,
Jen

Jennifer Jones, DVM
Veterinary Medical Officer



From: Darcy Adin [mailto:dbadin@ncsu.edu]
Sent: Friday, August 18, 2017 10:38 AM
To: Jones, Jennifer L
Subject: Re: Pet food concern (800.218)

Hi Dr. Jones,

I'm not sure what timeline to expect so forgive me if this premature, but I wanted to check in to see if you have any information about the cases yet?

Thanks!
Darcy Adin

On Jul 28, 2017, at 9:18 AM, Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov> wrote:

This is great information to add to the case. Thank you, Darcy.

Jennifer Jones, DVM

Veterinary Medical Officer



From: Darcy Adin [mailto:dbadin@ncsu.edu]
Sent: Wednesday, July 26, 2017 9:39 PM
To: Jones, Jennifer L
Subject: Re: Pet food concern (800.218)

Hi Jennifer,

I don't know if there is anything to this but I have treated 2 other dogs in the last 2 weeks with DCM and CHF that are being fed California natural food (one kangaroo and lentil, and we are trying to find out about the other one which is in our ER now). One is mixed breed and we'll recommend testing for taurine deficiency. The other was a golden and taurine was a bit low but not super low so although we supplemented, I wasn't totally convinced it was the cause. Unfortunately she died a week later.

I don't have a sense for how widely fed this diet is but I don't see it on the top selling lists I can find by google, so seeing 4 DCM dogs recently eating this particular food is interesting to say the least. I thought this might be of interest to you as you start to look at the California natural food sample from the B6 dogs.

Thank you!
Darcy

On Jul 26, 2017, at 8:08 AM, Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov> wrote:

Thank you, Darcy. One way I've seen veterinarians handle the reimbursement for other cases is posting the amount to the patient's chart, leaving a balance of the shipping charges. In those cases, our accountant then called and paid the shipping charge balance on the account.

Jennifer Jones, DVM
Veterinary Medical Officer
<image001.png> <image002.png>

From: Darcy Adin [mailto:dbadin@ncsu.edu]
Sent: Wednesday, July 26, 2017 7:42 AM
To: Jones, Jennifer L
Cc: Ceric, Olgica
Subject: Re: Pet food concern (800.218)

Hi Dr. Jones

We included the invoice in the package. There was a fair bit of discussion here because I don't think there will be an easy way to reimburse - so probably don't worry about it!
Thank you!
Darcy

On Jul 26, 2017, at 6:32 AM, Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov> wrote:

Excellent. Thank you, Darcy. Please email or fax an invoice so we can reimburse you for the shipping.

Jennifer Jones, DVM
Veterinary Medical Officer

<image001.png> <image003.png>

From: Darcy Adin [mailto:dbadin@ncsu.edu]
Sent: Tuesday, July 25, 2017 10:36 PM
To: Jones, Jennifer L
Cc: Ceric, Olgica
Subject: Re: Pet food concern (800.218)

Thank you Dr. Jones!
It went out tonight by FedEx tonight. I'll look forward to hearing from you soon.
Take care
Darcy

On Tue, Jul 25, 2017 at 10:48 AM, Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov> wrote:

Hi Darcy,
I spoke with my colleague. If you can, please return ship the box using FedEx or your preferred carrier. You'll ship the box for overnight delivery on a Monday-Wednesday. Please ship to:

Attention: Jennifer Jones
8401 Muirkirk Rd
Laurel, MD 20708

After you return ship the box, please email or fax (301-210-4685) an invoice for the shipping charges. We can then call NCSU and reimburse with our VISA information.

Please let me know if you have questions.
Thank you again for your patience,
Jen

Jennifer Jones, DVM
Veterinary Medical Officer
<image001.png> <image005.png>

From: Darcy Adin [mailto:dbadin@ncsu.edu]
Sent: Tuesday, July 25, 2017 10:30 AM

To: Jones, Jennifer L
Cc: Ceric, Olgica
Subject: Re: Pet food concern (800.218)

thanks!

On Tue, Jul 25, 2017 at 8:45 AM, Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov> wrote:

Hi Darcy,
I'm sorry for the trouble getting the label. I'm going to reach out to my colleague to get one made for you. I'll send it via email. If that doesn't work, then we can go with FedEx.
Thank you for the update, and sorry for the trouble with the label,
Jen

Jennifer Jones, DVM
Veterinary Medical Officer
<image001.png> <image008.png>

From: Darcy Adin [mailto:dbadin@ncsu.edu]
Sent: Monday, July 24, 2017 3:31 PM
To: Jones, Jennifer L
Subject: Re: Pet food concern (800.218)

Hi Jen,

The shipping box arrived this afternoon, however, we don't see a return shipping label. Our shipping and receiving staff suggested that FedEx might be better since with UPS pick up, we can't control how much time the package may be sitting in the heat. I'm happy to send however you would recommend though!

Thank you!

Darcy

On Fri, Jul 21, 2017 at 12:47 PM, Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov> wrote:

Good afternoon Darcy,

The package will ship today and arrive Monday. UPS said they will give you a return shipping label. For some reason, we were unable to put it in the shipping box we sent to you. UPS, however, has assured us they will give you the label Monday. Please let me know if you do not get that label, because I'll need to get you one.

Thank you,

Jen

Jennifer Jones, DVM

Veterinary Medical Officer

<[image001.png](#)> <[image009.png](#)>

From: Jones, Jennifer L

Sent: Wednesday, July 19, 2017 1:04 PM

To: 'Darcy Adin'

Cc: Ceric, Olgica

Subject: RE: Pet food concern (800.218)

Excellent. Thank you, Darcy. We'll ship the kit to your office to collect the food. It will contain the return shipping label for use with the box.

The box should arrive for you by close of business Tuesday (7/25).

Jen

Jennifer Jones, DVM

Veterinary Medical Officer

<[image001.png](#)> <[image008.png](#)>

From: Darcy Adin [<mailto:dbadin@ncsu.edu>]

Sent: Tuesday, July 18, 2017 9:59 PM

To: Jones, Jennifer L

Cc: Ceric, Olgica

Subject: Re: Pet food concern (800.218)

Hi Dr. Jones,

The owner confirmed that neither dog B5 in February or chronically.

Thank you!

Darcy

On Jul 18, 2017, at 8:33 AM, Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov> wrote:

Good morning Dr. Adin,

After reviewing the complaint and medical records, we'd like to request the following:

· Please check with the owner/confirm B5 either in February 2017 or consistently) B5 injury.

Collect open bag of California Naturals food to test for **B5**

- Please email me the size/weight of the food.
- We will send you an empty box with a prepaid shipping label to send the product back to our lab.
- After we test the product, we'll send you the results to share with the owner.

After I get the size/weight of the food, I'll send the box.
Thank you for helping with the case,
Jennifer

Jennifer Jones, DVM
Veterinary Medical Officer
<image001.png> <image003.png>

From: Darcy Adin [mailto:dbadin@ncsu.edu]
Sent: Tuesday, July 11, 2017 5:44 PM
To: Jones, Jennifer L
Subject: Re: Pet food concern

Hi Jennifer,

I've submitted the reports through the portal - one for each dog. The numbers are:
2023230 (I) for **B6**
2023228 (I) for **B6**

I've also attached the visit summaries for **B6** (2) and **B6** (1) as well as **B6** necropsy report. I have the biological samples stored at -80 and also have food samples.

Thank you so much for your help and I'll look forward to hearing from you or someone on your team!
Take care
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Jennifer Jones, DVM
Veterinary Medical Officer
<image001.png> <image010.png>

From: Darcy Adin [mailto:dbadin@ncsu.edu]
Sent: Monday, July 10, 2017 6:47 PM
To: Jones, Jennifer L
Cc: Reimschuessel, Renate; **B6**

Subject: Re: Pet food concern

Thank you Dr. Jones! I'm sorry I am just reading email now so I have missed you! I'd love to chat with you about the cases. I am on clinics this week but can try to call you if you have another block of time tomorrow (or

later this week). My number is [B6] or I can be paged from [B6]

Thank you!

Darcy

On Jul 10, 2017, at 1:05 PM, Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov> wrote:

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Thank you,

Jennifer

Jennifer Jones, DVM

Veterinary Medical Officer

<[image001.png](#)> <[image004.png](#)>

From: Darcy Adin [<mailto:dbadin@ncsu.edu>]

Sent: Monday, July 10, 2017 11:31 AM

To: [B6]

Cc: Jones, Jennifer L; Reimschuessel, Renate

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Thank you! I will work on this submission later today. I appreciate your help!

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919-513-6032

From: Rotstein, David </O=FDA/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=DAVID.ROTSTEIN>
To: Jones, Jennifer L; Palmer, Lee Anne; Reimschuessel, Renate; Queen, Jackie L; Carey, Lauren
CC: Ceric, Olgica
Sent: 8/22/2017 12:39:27 PM
Subject: RE: 800.218-Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers-EON-323515-323519

Agreed. Thanks Jen

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: Jones, Jennifer L
Sent: Tuesday, August 22, 2017 8:37 AM
To: Rotstein, David; Palmer, Lee Anne; Reimschuessel, Renate; Queen, Jackie L; Carey, Lauren
Cc: Ceric, Olgica
Subject: RE: 800.218-Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers-EON-323515-323519

BLUF: **Final Conclusion:** The cause of the two dogs' DCM is unclear. The bloodwork for these dogs showed normal taurine and [B5] levels. Based on the dogs' blood taurine [B5] levels and the dry dog food test results, it is unlikely that [B5] taurine, or [B5] caused the dogs' illness.

B5

B5

Final Conclusion: The cause of the two dogs' DCM is unclear. The bloodwork for these dogs showed normal taurine and [B5] levels. Based on the dogs' blood taurine [B5] levels and the dry dog food test results, it is unlikely that [B5] taurine, or [B5] caused the dogs' illness.

Jennifer Jones, DVM
Veterinary Medical Officer



From: Jones, Jennifer L
Sent: Monday, August 07, 2017 7:02 AM
To: Rotstein, David; Palmer, Lee Anne; Reimschuessel, Renate; Queen, Jackie L; Carey, Lauren
Cc: Ceric, Olgica
Subject: RE: 800.218-Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers-EON-323515-323519

FYI-Taurine [B5] still pending, but [B5] negative.

Jennifer Jones, DVM
Veterinary Medical Officer



From: Jones, Jennifer L
Sent: Thursday, July 27, 2017 7:25 AM
To: Rotstein, David; Palmer, Lee Anne; Reimschuessel, Renate; Queen, Jackie L; Carey, Lauren
Cc: Ceric, Olgica
Subject: RE: Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers-EON-323515-323519

We received the food and plan to test for [B5]. The vet also mentioned two items of interest:

1. She's treated 2 other dogs in last 2 weeks with DCM/CHF and being fed California Natural food. That brings us to 4 DCM dogs recently eating this food.
 - a. We can consider taurine and other types of testing?

[B5]

Thoughts from the group?

Jennifer Jones, DVM
Veterinary Medical Officer



From: Jones, Jennifer L
Sent: Tuesday, July 18, 2017 8:18 AM
To: Rotstein, David; Palmer, Lee Anne; Reimschuessel, Renate; Queen, Jackie L; Carey, Lauren
Cc: Ceric, Olgica
Subject: RE: Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers-EON-323515-323519

Ok, thanks, Dave. I'll check with the vet if seafood fed and will plan to test open product fo

B5

Jennifer Jones, DVM
Veterinary Medical Officer



From: Rotstein, David
Sent: Thursday, July 13, 2017 2:54 PM
To: Jones, Jennifer L; Palmer, Lee Anne; Reimschuessel, Renate; Queen, Jackie L; Carey, Lauren
Cc: Ceric, Olgica
Subject: RE: Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers-EON-323515-323519

I think testing is worth pursuing. Oddball question

B5

B5

This would highly unlikely, but wanted to put it out there.

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: Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov>
Date: July 13, 2017 at 2:44:24 PM EDT
To: Palmer, Lee Anne <LeeAnne.Palmer@fda.hhs.gov>, Rotstein, David <David.Rotstein@fda.hhs.gov>, Reimschuessel, Renate <Renate.Reimschuessel@fda.hhs.gov>, Queen, Jackie L <Jackie.Queen@fda.hhs.gov>, Carey, Lauren <Lauren.Carey@fda.hhs.gov>

Cc: Ceric, Olgica <Olgica.Ceric@fda.hhs.gov>

Subject: RE: Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers-EON-323515-323519

We could test for [B5] in food, what does the group think? Any additional testing? Is it worth testing the [B5]

Medical Record Review:

[B6]

Presenting complaint [B6]

B6

PE [B6]

[B6]

[B6]

[B6]

B6

B6

Rads 1/31

B6

B6 cardiomegaly, severe diffuse mixed interstitial to alveolar pattern most severe caudo-dorsally, hepatomegaly, dec abdominal serosal contrast

B6 severe generalized cardiomegaly with biventricular heart failure, improved vs rDVM rads

B6 worsening cardiogenic pulmonary edema, cannot exclude lung induced injury +/- pneumonia

B6 post ultrafiltration, improved cardiogenic edema, hypovolemia, residual interstitial to patchy alveolar

B6 improved CHF with possible concern for bronchopneumonia, suspected hiatal hernia

B6 markedly progressive alveolar pattern with significantly worse cardiogenic edema

tFAST **B6** severe cardiomegaly with ventricular hypocontractility

Echo **B6** dcm vs. myocarditis vs pacing induce vs. other (severely dilated & hypocontractile left & right ventricles, severely dilated left and right atria)

Necropsy: Lung-severe diffuse alveolar injury with marked fibrin deposition (hyaline) and marked alveolar histiocytosis and multifocal type II pneumocyte hyperplasia; mod to marked diffuse pulmonary edema; mild cardiomegaly with mild mitral valve endocardiosis and mild left ventricular hypertrophy and left atrial dilation; thorax with mild pleural effusion; Suspect primary non-cardiogenic etiology but if clinical cardiac dysfunction then functional cardiac abnormalities cannot be ruled out

B6

B6

Presented

B6

B6

B6

B6

B6 Rads: left sided congestive heart failure

B6 moderate left sided cardiomegaly without heart failure, moderate hepatomegaly

B6 Echo: mitral valve endocardiosis with left atrial enlargement and heart failure, decreased left ventricular systolic function, suspected DCM

B5

Jennifer Jones, DVM
Veterinary Medical Officer



From: Rotstein, David
Sent: Tuesday, July 11, 2017 12:44 PM
To: Jones, Jennifer L; Reimschuessel, Renate; Palmer, Lee Anne; Carey, Lauren; Queen, Jackie L
Cc: Ceric, Olgica
Subject: RE: Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers

Jen,

B5

, so I don't think that could be ruled out.

I do like the exploration of other causes.

d.

David Rotstein, DVM, MPVM, Dipl. ACVP
CVM Vet-LIRN Liaison
CVM OSC/DC/CERT
7519 Standish Place, RM 120
240-402-5613 (Office) (NEW NUMBER)
240-506-6763 (BB)



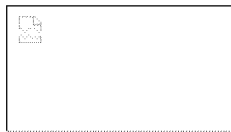
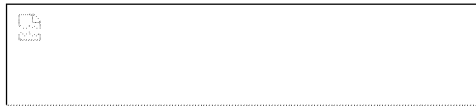
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From: Jones, Jennifer L
Sent: Tuesday, July 11, 2017 12:41 PM
To: Reimschuessel, Renate; Rotstein, David; Palmer, Lee Anne; Carey, Lauren; Queen, Jackie L
Cc: Ceric, Olgica
Subject: RE: Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers

Yes, and also, vet talked to MARS who said there was no corn in this food...but that doesn't rule out treats.

B5

Jennifer Jones, DVM
Veterinary Medical Officer



From: Reimschuessel, Renate
Sent: Tuesday, July 11, 2017 11:51 AM
To: Jones, Jennifer L; Rotstein, David; Palmer, Lee Anne; Carey, Lauren; Queen, Jackie L
Cc: Ceric, Olgica
Subject: RE: Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers

Davis may be able to screen for

B5

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

Phone 1- 240-402-5404

Fax 301-210-4685

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

From: Jones, Jennifer L

Sent: Tuesday, July 11, 2017 11:38 AM

To: Rotstein, David; Palmer, Lee Anne; Carey, Lauren; Queen, Jackie L

Cc: Ceric, Olgica; Reimschuessel, Renate

Subject: Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers

Vet will submit PFR online à
2 dogs-unrelated miniature schnauzers

Dog 1: 2 yr à presented 2/2017 with fulminant CHFà severe DCM on echo, taurine/carnitine normal, infectious disease testing negative, died on the ventilator, necropsy done-myocardial changes were subtle but could be similar to moldy corn toxicity in pigsà plasma, urine, serum, and myocardial tissue available

Dog 2: 7 yr, had a syncopal episode ~2/2017 but presented to vet for progressive frequency of syncopal episodesà 6/2017 for CHF, diagnosed with DCM similar to housemate, nearly same image on Echo, taurine/carnitine normal, infectious disease testing negative, they have changed the diet (Hill's) and dog is responding to treatment; plasma, urine, and serum available

Dogs were eating California Naturals (different bag than from 2/2017) and treats (Milo's Kitchen); Vet has samples of food and treats

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>



From: Darcy Adin <dbadin@ncsu.edu>
To: Jones, Jennifer L
Sent: 8/22/2017 2:11:22 PM
Subject: Re: Pet food concern (800.218)

Thank you for all your help!

On Tue, Aug 22, 2017 at 8:45 AM, Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov> wrote:

B5

The cause of the two dogs' DCM is unclear.

B5

B5

B5

At this time we will not request any further testing. Thank you very much for all your help with the case. Please let me know if you have any additional questions or any future animal food related illness concerns.

Jen

Jennifer Jones, DVM

Veterinary Medical Officer



From: Jones, Jennifer L
Sent: Tuesday, August 22, 2017 8:20 AM
To: 'Darcy Adin'
Cc: Ceric, Olgica
Subject: RE: Pet food concern (800.218)

Thank you for the quick response.

B5

Jennifer Jones, DVM

Veterinary Medical Officer



From: Darcy Adin [<mailto:dbadin@ncsu.edu>]
Sent: Tuesday, August 22, 2017 8:17 AM

To: Jones, Jennifer L
Subject: Re: Pet food concern (800.218)

Hi Jennifer

It was kangaroo. That's great about the **B5** We'll wait for the taurine and **B5** however I guess I'd be surprised if this was the answer since blood amino acid levels were adequate. Is there any other testing that can be done (e.g. **B5**)

Thanks so much!

Darcy

On Aug 22, 2017, at 7:54 AM, Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov> wrote:

My apologies for the second email.

Which dry food (Kangaroo or Venison) was sent to us for the testing?

Jennifer Jones, DVM

Veterinary Medical Officer

<[image001.png](#)> <[image002.png](#)>

From: Jones, Jennifer L
Sent: Tuesday, August 22, 2017 7:37 AM
To: 'Darcy Adin'
Cc: Ceric, Olgica
Subject: RE: Pet food concern (800.218)

Good morning Dr. Adin,

We received results of the product testing for **B5** those were negative. Please see the attached. The results for the **B5** and taurine are in progress. I'll forward along as soon as possible.

Thank you for your patience,
Jen

Jennifer Jones, DVM

Veterinary Medical Officer

<image001.png> <image003.png>

From: Darcy Adin [<mailto:dbadin@ncsu.edu>]
Sent: Friday, August 18, 2017 10:38 AM
To: Jones, Jennifer L
Subject: Re: Pet food concern (800.218)

Hi Dr. Jones,

I'm not sure what timeline to expect so forgive me if this premature, but I wanted to check in to see if you have any information about the cases yet?

Thanks!

Darcy Adin

On Jul 28, 2017, at 9:18 AM, Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov> wrote:

This is great information to add to the case. Thank you, Darcy.

Jennifer Jones, DVM

Veterinary Medical Officer

<image001.png> <image004.png>

From: Darcy Adin [<mailto:dbadin@ncsu.edu>]
Sent: Wednesday, July 26, 2017 9:39 PM
To: Jones, Jennifer L

Subject: Re: Pet food concern (800.218)

Hi Jennifer,

I don't know if there is anything to this but I have treated 2 other dogs in the last 2 weeks with DCM and CHF that are being fed California natural food (one kangaroo and lentil, and we are trying to find out about the other one which is in our ER now). One is mixed breed and we'll recommend testing for taurine deficiency. The other was a golden and taurine was a bit low but not super low so although we supplemented, I wasn't totally convinced it was the cause. Unfortunately she died a week later.

I don't have a sense for how widely fed this diet is but I don't see it on the top selling lists I can find by google, so seeing 4 DCM dogs recently eating this particular food is interesting to say the least. I thought this might be of interest to you as you start to look at the California natural food sample from the B6 dogs.

Thank you!

Darcy

On Jul 26, 2017, at 8:08 AM, Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov> wrote:

Thank you, Darcy. One way I've seen veterinarians handle the reimbursement for other cases is posting the amount to the patient's chart, leaving a balance of the shipping charges. In those cases, our accountant then called and paid the shipping charge balance on the account.

Jennifer Jones, DVM

Veterinary Medical Officer

<[image001.png](#)> <[image002.png](#)>

From: Darcy Adin [<mailto:dbadin@ncsu.edu>]
Sent: Wednesday, July 26, 2017 7:42 AM
To: Jones, Jennifer L
Cc: Ceric, Olgica
Subject: Re: Pet food concern (800.218)

Hi Dr. Jones

We included the invoice in the package. There was a fair bit of discussion here because I don't think there will be an easy way to reimburse - so probably don't worry about it!

Thank you!

Darcy

On Jul 26, 2017, at 6:32 AM, Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov> wrote:

Excellent. Thank you, Darcy. Please email or fax an invoice so we can reimburse you for the shipping.

Jennifer Jones, DVM

Veterinary Medical Officer

<[image001.png](#)> <[image003.png](#)>

From: Darcy Adin [<mailto:dbadin@ncsu.edu>]

Sent: Tuesday, July 25, 2017 10:36 PM

To: Jones, Jennifer L

Cc: Ceric, Olgica

Subject: Re: Pet food concern (800.218)

Thank you Dr. Jones!

It went out tonight by FedEx tonight. I'll look forward to hearing from you soon.

Take care

Darcy

On Tue, Jul 25, 2017 at 10:48 AM, Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov> wrote:

Hi Darcy,

I spoke with my colleague. If you can, please return ship the box using FedEx or your preferred carrier. You'll ship the box for overnight delivery on a Monday-Wednesday. Please ship to:

Attention: Jennifer Jones

8401 Muirkirk Rd

Laurel, MD 20708

After you return ship the box, please email or fax ([301-210-4685](tel:301-210-4685)) an invoice for the shipping charges. We can then call NCSU and reimburse with our VISA information.

Please let me know if you have questions.

Thank you again for your patience,

Jen

Jennifer Jones, DVM

Veterinary Medical Officer

<[image001.png](#)> <[image005.png](#)>

From: Darcy Adin [mailto:dbadin@ncsu.edu]

Sent: Tuesday, July 25, 2017 10:30 AM

To: Jones, Jennifer L

Cc: Ceric, Olgica

Subject: Re: Pet food concern (800.218)

thanks!

On Tue, Jul 25, 2017 at 8:45 AM, Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov> wrote:

Hi Darcy,

I'm sorry for the trouble getting the label. I'm going to reach out to my colleague to get one made for you. I'll send it via email. If that doesn't work, then we can go with FedEx.

Thank you for the update, and sorry for the trouble with the label,

Jen

Jennifer Jones, DVM

Veterinary Medical Officer

<[image001.png](#)> <[image008.png](#)>

From: Darcy Adin [mailto:dbadin@ncsu.edu]

Sent: Monday, July 24, 2017 3:31 PM

To: Jones, Jennifer L

Subject: Re: Pet food concern (800.218)

Hi Jen,

The shipping box arrived this afternoon, however, we don't see a return shipping label. Our shipping and

receiving staff suggested that FedEx might be better since with UPS pick up, we can't control how much time the package may be sitting in the heat. I'm happy to send however you would recommend though!

Thank you!

Darcy

On Fri, Jul 21, 2017 at 12:47 PM, Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov> wrote:

Good afternoon Darcy,

The package will ship today and arrive Monday. UPS said they will give you a return shipping label. For some reason, we were unable to put it in the shipping box we sent to you. UPS, however, has assured us they will give you the label Monday. Please let me know if you do not get that label, because I'll need to get you one.

Thank you,

Jen

Jennifer Jones, DVM

Veterinary Medical Officer

<[image001.png](#)> <[image009.png](#)>

From: Jones, Jennifer L
Sent: Wednesday, July 19, 2017 1:04 PM
To: 'Darcy Adin'
Cc: Ceric, Olgica
Subject: RE: Pet food concern (800.218)

Excellent. Thank you, Darcy. We'll ship the kit to your office to collect the food. It will contain the return shipping label for use with the box.

The box should arrive for you by close of business Tuesday (7/25).

Jen

Jennifer Jones, DVM

Veterinary Medical Officer

<[image001.png](#)> <[image008.png](#)>

From: Darcy Adin [mailto:dbadin@ncsu.edu]
Sent: Tuesday, July 18, 2017 9:59 PM
To: Jones, Jennifer L
Cc: Ceric, Olgica
Subject: Re: Pet food concern (800.218)

Hi Dr. Jones,

The owner confirmed that neither do [REDACTED] B5 February or chronically.

Thank you!

Darcy

On Jul 18, 2017, at 8:33 AM, Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov> wrote:

Good morning Dr. Adin,

After reviewing the complaint and medical records, we'd like to request the following:

- Please check with the owner/confirm if [REDACTED] B5 (either in February 2017 or consistently) [REDACTED] B5
- Collect open bag of California Naturals food to test for [REDACTED] B5
 - o Please email me the size/weight of the food.
 - o We will send you an empty box with a prepaid shipping label to send the product back to our lab.
 - o After we test the product, we'll send you the results to share with the owner.

After I get the size/weight of the food, I'll send the box.

Thank you for helping with the case,

Jennifer

Jennifer Jones, DVM

Veterinary Medical Officer

<image001.png> <image003.png>

From: Darcy Adin [mailto:dbadin@ncsu.edu]
Sent: Tuesday, July 11, 2017 5:44 PM
To: Jones, Jennifer L
Subject: Re: Pet food concern

Hi Jennifer,

I've submitted the reports through the portal - one for each dog. The numbers are:

2023230 (I) for [B6]
2023228 (I) for [B6]

I've also attached the visit summaries for [B6] (2) and [B6] (1) as well as [B6] necropsy report. I have the biological samples stored at -80 and also have food samples.

Thank you so much for your help and I'll look forward to hearing from you or someone on your team!

Take care

Darcy

On Tue, Jul 11, 2017 at 7:33 AM, Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov> wrote:

Hi Darcy,

I can chat today from 11-1pm or or 2-3pm.

Jen

Jennifer Jones, DVM

Veterinary Medical Officer

<[image001.png](#)> <[image010.png](#)>

From: Darcy Adin [<mailto:dbadin@ncsu.edu>]

Sent: Monday, July 10, 2017 6:47 PM

To: Jones, Jennifer L

Cc: Reimschuessel, Renate; [B6]

Subject: Re: Pet food concern

Thank you Dr. Jones! I'm sorry I am just reading email now so I have missed you! I'd love to chat with you about the cases. I am on clinics this week but can try to call you if you have another block of time tomorrow (or later this week). My number is [B6] or I can be paged from [B6]

Thank you!

Darcy

On Jul 10, 2017, at 1:05 PM, Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov> wrote:

Hello Dr. Adin,

Please let me know if you'd like to chat about the case this afternoon. I'll be in the office from 1-3pm (tel: [240-402-5421](tel:240-402-5421)).

If you suspect an animal's illness may be due to the food, you can submit a report at www.safetyreporting.hhs.gov

Please mention Vet-LIRN encouraged you to submit a report. Please email me the ICSR number (similar to a confirmation number), so I can find the report on my end.

Thank you,

Jennifer

Jennifer Jones, DVM

Veterinary Medical Officer

<[image001.png](#)> <[image004.png](#)>

From: Darcy Adin [<mailto:dbadin@ncsu.edu>]

Sent: Monday, July 10, 2017 11:31 AM

To: [REDACTED] **B6**

Cc: Jones, Jennifer L; Reimschuessel, Renate

Subject: Re: Pet food concern

Thank you! I will work on this submission later today. I appreciate your help!

On Mon, Jul 10, 2017 at 10:49 AM, [REDACTED] **B6** wrote:

Hi Dr. Adin,

As we discussed this morning, one avenue to explore your concern about pet food contamination (toxin or infectious disease) is the FDA program. Here is a website that highlights how you can report a complaint.

<https://www.fda.gov/AnimalVeterinary/SafetyHealth/ReportaProblem/ucm182403.htm>

We work with the FDA Vet-LIRN program on diagnostics from the pet side, but they agree to include the case in

the program and would coordinate with us (or another laboratory). I have copied Dr. Jones and Dr. Reimschuessel here - they can help let us know the process to see if these cases are eligible.

Regards,

B6

--

Darcy B. Adin, DVM, DACVIM (Cardiology)

Clinical Assistant Professor of Cardiology

North Carolina State University

NC State Veterinary Hospital

1060 William Moore Drive

Raleigh, NC 27607

919-513-6032

--

Darcy B. Adin, DVM, DACVIM (Cardiology)

Clinical Assistant Professor of Cardiology

North Carolina State University

NC State Veterinary Hospital

1060 William Moore Drive

Raleigh, NC 27607

919-513-6032

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Darcy B. Adin, DVM, DACVIM (Cardiology)

Clinical Assistant Professor of Cardiology

North Carolina State University

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Clinical Assistant Professor of Cardiology

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1060 William Moore Drive

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Darcy B. Adin, DVM, DACVIM (Cardiology)

Clinical Assistant Professor of Cardiology

North Carolina State University

NC State Veterinary Hospital

1060 William Moore Drive

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--

Darcy B. Adin, DVM, DACVIM (Cardiology)

Clinical Assistant Professor of Cardiology

North Carolina State University

NC State Veterinary Hospital

1060 William Moore Drive

Raleigh, NC 27607

919-513-6032

From: Jones, Jennifer L </O=FDA/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=JENNIFER.JONESAA8>
To: Rotstein, David
Sent: 1/3/2018 5:09:01 PM
Subject: RE: california naturals---I can request the article---FDA says that we have access, but the link isn't working

B5

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



From: Rotstein, David
Sent: Wednesday, January 03, 2018 11:56 AM
To: Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov>
Subject: RE: california naturals---I can request the article---FDA says that we have access, but the link isn't working

I just put in the request.

B5

B5

Hope not—I eat lentils!

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: Jones, Jennifer L
Sent: Wednesday, January 03, 2018 11:55 AM
To: Rotstein, David <David.Rotstein@fda.hhs.gov>
Subject: RE: california naturals---I can request the article---FDA says that we have access, but the link isn't working

Thanks, Dave!!

Jennifer Jones, DVM

Veterinary Medical Officer

Tel: 240-402-5421



From: Rotstein, David

Sent: Wednesday, January 03, 2018 11:50 AM

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

Subject: california naturals---I can request the article---FDA says that we have access, but the link isn't working



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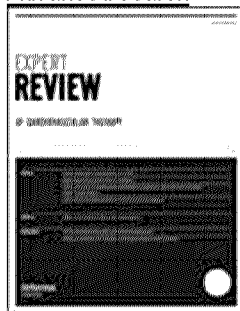
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Expert Review of Cardiovascular Therapy

Volume 9, 2011 - Issue 9

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Theme: Heart failure - Review

Nutritional and micronutrient determinants of idiopathic dilated cardiomyopathy: diagnostic and therapeutic implications

**Victor Marinescu Department of Medicine,
William Beaumont Hospital, Royal Oak, MI
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**Department of Medicine, William Beaumont
Hospital, Royal Oak, MI 48073, USA.**

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McCullough St John Providence Health System,
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Providence Park Heart Institute, Novi, MI
48374, USA**

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Pages 1161-1170

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Abstract

Idiopathic dilated cardiomyopathy (IDCM) is the term used to describe a group of myocardial diseases of unknown cause whose common clinical presentation is heart failure. The prevalence of IDCM is estimated to be between 7 and 13% of patients with systolic heart failure. Throughout medical history, several nutrient-deficient states have been identified as the root cause of IDCMs, Keshan's disease being one such example, where selenium deficiency-induced heart failure is now well

documented. This raises the question of whether a micro- or macro-nutrient imbalance can provide the milieu for inefficient energy expenditure and cardiac metabolism in the context of IDCMs, either causing or exacerbating the condition. To date, there is insufficient evidence in the literature to support this theory, although numerous studies suggest a link between nutrient deficiencies, inefficient energy expenditure and subsequent heart failure. Given the unique metabolic needs of the failing heart, the role of micronutrient testing and supplementation in IDCMs warrants further well-designed studies.

Keywords:: heart failure, idiopathic dilated cardiomyopathy, macrominerals, metabolic cardiology, micronutrients, multinutrient supplementation, vitamins

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: Jones, Jennifer L </O=FDA/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=JENNIFER.JONESAA8>
To: Rotstein, David; Palmer, Lee Anne; Queen, Jackie L; Carey, Lauren
CC: Ceric, Olgica; Nemser, Sarah; 'Reimschuessel, Renate (Renate.Reimschuessel@fda.hhs.gov)'
Sent: 1/3/2018 7:31:44 PM
Subject: RE: 800.218-Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers-EON-323515-323519
Attachments: dog food concern; EON-323515-19; B6; case summary-1.3.2018.doc

Going to test the leftover food for B5 based on our discussion during the PFO meeting today. I asked the vet if any dogs tested (blood/tissue) for B5

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



From: Rotstein, David
Sent: Tuesday, August 22, 2017 8:39 AM
To: Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov>; Palmer, Lee Anne <LeeAnne.Palmer@fda.hhs.gov>; Reimschuessel, Renate <Renate.Reimschuessel@fda.hhs.gov>; Queen, Jackie L <Jackie.Queen@fda.hhs.gov>; Carey, Lauren <Lauren.Carey@fda.hhs.gov>
Cc: Ceric, Olgica <Olgica.Ceric@fda.hhs.gov>
Subject: RE: 800.218-Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers-EON-323515-323519

Agreed. Thanks Jen

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: Jones, Jennifer L
Sent: Tuesday, August 22, 2017 8:37 AM
To: Rotstein, David; Palmer, Lee Anne; Reimschuessel, Renate; Queen, Jackie L; Carey, Lauren
Cc: Ceric, Olgica
Subject: RE: 800.218-Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers-EON-323515-323519

BLUF: **Final Conclusion:** The cause of the two dogs' DCM is unclear. The bloodwork for these dogs

showed normal taurine and [B5] levels. Based on the dogs' blood taurine [B5] levels and the dry dog food test results, it is unlikely that [B5] taurine, [B5] caused the dogs' illness.

B5

Final Conclusion: The cause of the two dogs' DCM is unclear. The bloodwork for these dogs showed normal taurine and [B5] levels. Based on the dogs' blood taurine [B5] levels and the dry dog food test results, it is unlikely that [B5] taurine, or [B5] caused the dogs' illness.

Jennifer Jones, DVM
Veterinary Medical Officer



From: Jones, Jennifer L
Sent: Monday, August 07, 2017 7:02 AM
To: Rotstein, David; Palmer, Lee Anne; Reimschuessel, Renate; Queen, Jackie L; Carey, Lauren
Cc: Ceric, Olgica
Subject: RE: 800.218-Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers-EON-323515-323519

FYI-Taurine [B5] still pending, but [B5] negative.

Jennifer Jones, DVM
Veterinary Medical Officer



From: Jones, Jennifer L
Sent: Thursday, July 27, 2017 7:25 AM
To: Rotstein, David; Palmer, Lee Anne; Reimschuessel, Renate; Queen, Jackie L; Carey, Lauren
Cc: Ceric, Olgica
Subject: RE: Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers-EON-323515-323519

We received the food and plan to test for [B5] The vet also mentioned two items of interest:
1. She's treated 2 other dogs in last 2 weeks with DCM/CHF and being fed California Natural food. That brings us to 4 DCM dogs recently eating this food.
a. We can consider taurine and other types of testing?

[B5]

Thoughts from the group?

Jennifer Jones, DVM
Veterinary Medical Officer



From: Jones, Jennifer L
Sent: Tuesday, July 18, 2017 8:18 AM
To: Rotstein, David; Palmer, Lee Anne; Reimschuessel, Renate; Queen, Jackie L; Carey, Lauren
Cc: Ceric, Olgica
Subject: RE: Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers-EON-323515-323519

Ok, thanks, Dave. I'll check with the vet if seafood fed and will plan to test open product for [B5]

Jennifer Jones, DVM
Veterinary Medical Officer



From: Rotstein, David
Sent: Thursday, July 13, 2017 2:54 PM
To: Jones, Jennifer L; Palmer, Lee Anne; Reimschuessel, Renate; Queen, Jackie L; Carey, Lauren
Cc: Ceric, Olgica
Subject: RE: Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers-EON-323515-323519

I think testing is worth pursuing. [B5]

I was thinking of the [B5] and was thinking of [B5]

This would highly unlikely, but wanted to put it out there.

David Rotstein, DVM, MPVM, Dipl.ACVP

CVM Vet-LIRN Liaison
CVM OSC/DC/CERT
7519 Standish Place

B6

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From: Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov>
Date: July 13, 2017 at 2:44:24 PM EDT
To: Palmer, Lee Anne <LeeAnne.Palmer@fda.hhs.gov>, Rotstein, David <David.Rotstein@fda.hhs.gov>, Reimschuessel, Renate <Renate.Reimschuessel@fda.hhs.gov>, Queen, Jackie L <Jackie.Queen@fda.hhs.gov>, Carey, Lauren <Lauren.Carey@fda.hhs.gov>
Cc: Ceric, Olgica <Olgica.Ceric@fda.hhs.gov>
Subject: RE: Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers-EON-323515-323519

We could test for **B5** in food, what does the group think? Any additional testing? Is it worth testing the **B5**

Medical Record Review:

Louie:

Presenting complaint

B6

B6

PE

B6

B6

Labwork:

B6

B6

B6

Rads: **B6**

B6 cardiomegaly, severe diffuse mixed interstitial to alveolar pattern most severe caudo-dorsally, hepatomegaly, dec abdominal serosal contrast

B6 severe generalized cardiomegaly with biventricular heart failure, improved vs rDVM rads

B6 worsening cardiogenic pulmonary edema, cannot exclude lung induced injury +/- pneumonia

B6 post ultrafiltration, improved cardiogenic edema, hypovolemia, residual interstitial to patchy alveolar

B6 improved CHF with possible concern for bronchopneumonia, suspected hiatal hernia
B6 markedly progressive alveolar pattern with significantly worse cardiogenic edema

tFAST 2/2: severe cardiomegaly with ventricular hypocontractility

Echo 2/2: dcm vs. myocarditis vs pacing induce vs. other (severely dilated & hypocontractile left & right ventricles, severely dilated left and right atria)

Necropsy: Lung-severe diffuse alveolar injury with marked fibrin deposition (hyaline) and marked alveolar histiocytosis and multifocal type II pneumocyte hyperplasia; mod to marked diffuse pulmonary edema; mild cardiomegaly with mild mitral valve endocardiosis and mild left ventricular hypertrophy and left atrial dilation; thorax with mild pleural effusion; Suspect primary non-cardiogenic etiology but if clinical cardiac dysfunction then functional cardiac abnormalities cannot be ruled out

Prior MHx

B6

B6

B6

Presented 6/22/2017:

B6

B6

B6

ECG: left ventricular enlargement suggested

B6

B6

Rads: left sided congestive heart failure

B6

B6

moderate left sided cardiomegaly without heart failure, moderate hepatomegaly

Echo: mitral valve endocardiosis with left atrial enlargement and heart failure, decreased left ventricular systolic function, suspected DCM

B5

B5

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Jen,

B5

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I do like the exploration of other causes.

d.

David Rotstein, DVM, MPVM, Dipl. ACVP
CVM Vet-LIRN Liaison
CVM OSC/DC/CERT
7519 Standish Place, RM 120
240-402-5613 (Office) (NEW NUMBER)
240-506-6763 (BB)



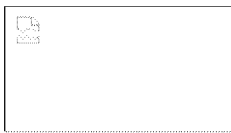
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Subject: RE: Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers

Davis may be able to screen for B5

Renate Reimschuessel V.M.D. Ph.D. Vet-LIRN
Phone 1- 240-402-5404
Fax 301-210-4685
<http://www.fda.gov/AnimalVeterinary/ScienceResearch/ucm247334.htm>

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Vet will submit PFR online à
2 dogs-unrelated miniature schnauzers

Dog 1: 2 yr à presented 2/2017 with fulminant CHF à severe DCM on echo, taurine/carnitine normal, infectious disease testing negative, died on the ventilator, necropsy done-myocardial changes were subtle but could be similar to moldy corn toxicity in pigs à plasma, urine, serum, and myocardial tissue available

Dog 2: 7 yr, had a syncopal episode ~2/2017 but presented to vet for progressive frequency of syncopal episodes à 6/2017 for CHF, diagnosed with DCM similar to housemate, nearly same image on Echo, taurine/carnitine normal, infectious disease testing negative, they have changed the diet (Hill's) and dog is responding to treatment; plasma, urine, and serum available

Dogs were eating California Naturals (different bag than from 2/2017) and treats (Milo's Kitchen); Vet has samples of food and treats

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>



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To: Jones, Jennifer L; Palmer, Lee Anne; Queen, Jackie L; Carey, Lauren
CC: Ceric, Olgica; Nemser, Sarah; Reimschuessel, Renate
Sent: 1/3/2018 7:59:43 PM
Subject: RE: 800.218-Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers-EON-323515-323519
Attachments: cardiomyopathy.pdf

Please see the attached article.

B5

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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Sent: Wednesday, January 03, 2018 2:32 PM
To: Rotstein, David <David.Rotstein@fda.hhs.gov>; Palmer, Lee Anne <LeeAnne.Palmer@fda.hhs.gov>; Queen, Jackie L <Jackie.Queen@fda.hhs.gov>; Carey, Lauren <Lauren.Carey@fda.hhs.gov>
Cc: Ceric, Olgica <Olgica.Ceric@fda.hhs.gov>; Nemser, Sarah <Sarah.Nemser@fda.hhs.gov>; Reimschuessel, Renate <Renate.Reimschuessel@fda.hhs.gov>
Subject: RE: 800.218-Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers-EON-323515-323519

Going to test the leftover food for [B5] based on our discussion during the PFO meeting today. I asked the vet if any dogs tested (blood/tissue) for [B5]

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



From: Rotstein, David
Sent: Tuesday, August 22, 2017 8:39 AM
To: Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov>; Palmer, Lee Anne <LeeAnne.Palmer@fda.hhs.gov>; Reimschuessel, Renate <Renate.Reimschuessel@fda.hhs.gov>; Queen, Jackie L <Jackie.Queen@fda.hhs.gov>; Carey, Lauren <Lauren.Carey@fda.hhs.gov>
Cc: Ceric, Olgica <Olgica.Ceric@fda.hhs.gov>
Subject: RE: 800.218-Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers-EON-323515-323519

Agreed. Thanks Jen

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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Cc: Ceric, Olgica
Subject: RE: 800.218-Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers-EON-323515-323519

BLUF: **Final Conclusion:** The cause of the two dogs' DCM is unclear. The bloodwork for these dogs showed normal taurine and [B5] levels. Based on the dogs' blood taurine/[B5] levels and the dry dog food test results, it is unlikely that [B5] taurine, or [B5] caused the dogs' illness.

B5

B5

B5

Interpretation: No [B5] minimum for dogs or cats. Unclear whether or not this is low, normal, or high.

Final Conclusion: The cause of the two dogs' DCM is unclear. The bloodwork for these dogs showed normal taurine and [B5] levels. Based on the dogs' blood taurine/[B5] levels and the dry dog food test results, it is unlikely that [B5] taurine, or [B5] caused the dogs' illness.

Jennifer Jones, DVM
Veterinary Medical Officer



From: Jones, Jennifer L
Sent: Monday, August 07, 2017 7:02 AM
To: Rotstein, David; Palmer, Lee Anne; Reimschuessel, Renate; Queen, Jackie L; Carey, Lauren
Cc: Ceric, Olgica
Subject: RE: 800.218-Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers-EON-323515-323519

FYI-Taurine/[B5] still pending, but [B5] negative.

Jennifer Jones, DVM
Veterinary Medical Officer



From: Jones, Jennifer L
Sent: Thursday, July 27, 2017 7:25 AM
To: Rotstein, David; Palmer, Lee Anne; Reimschuessel, Renate; Queen, Jackie L; Carey, Lauren
Cc: Ceric, Olgica
Subject: RE: Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers-EON-323515-323519

We received the food and plan to test for [B5] The vet also mentioned two items of interest:

1. She's treated 2 other dogs in last 2 weeks with DCM/CHF and being fed California Natural food. That brings us to 4 DCM dogs recently eating this food.
 - a. We can consider taurine and other types of testing?

B5

Thoughts from the group?

Jennifer Jones, DVM
Veterinary Medical Officer



From: Jones, Jennifer L
Sent: Tuesday, July 18, 2017 8:18 AM
To: Rotstein, David; Palmer, Lee Anne; Reimschuessel, Renate; Queen, Jackie L; Carey, Lauren
Cc: Ceric, Olgica
Subject: RE: Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers-EON-323515-323519

Ok, thanks, Dave. I'll check with: [redacted] **B5**

Jennifer Jones, DVM
Veterinary Medical Officer



From: Rotstein, David
Sent: Thursday, July 13, 2017 2:54 PM
To: Jones, Jennifer L; Palmer, Lee Anne; Reimschuessel, Renate; Queen, Jackie L; Carey, Lauren
Cc: Ceric, Olgica
Subject: RE: Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers-EON-323515-323519

I think testing is worth pursuing. Oddball question, [redacted] **B5**

I was thinking of the [redacted] **B5** and was thinking of [redacted] **B5**

This would highly unlikely, but wanted to put it out there.

David Rotstein, DVM, MPVM, Dipl.ACVP
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We could test for **B5** in food, what does the group think? Any additional testing? Is it worth testing the **B6** /other analytes or trending?

Medical Record Review:

B6

Presenting complaint

B6

B6

PE

B6

B6

Labwork:

B6

B6

B6

Rads

B6

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B6

severe generalized cardiomegaly with biventricular heart failure, improved vs rDVM rads
worsening cardiogenic pulmonary edema, cannot exclude lung induced injury
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B6

post ultrafiltration, improved cardiogenic edema, hypovolemia, residual interstitial to patchy alveolar

B6

improved CHF with possible concern for bronchopneumonia, suspected hiatal hernia
markedly progressive alveolar pattern with significantly worse cardiogenic edema

tFAST

B6

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Echo

B6

dcm vs. myocarditis vs pacing induce vs. other (severely dilated & hypocontractile left & right ventricles, severely dilated left and right atria)

Necropsy: Lung-severe diffuse alveolar injury with marked fibrin deposition (hyaline) and marked alveolar histiocytosis and multifocal type II pneumocyte hyperplasia; mod to marked diffuse pulmonary edema; mild cardiomegaly with mild mitral valve endocardiosis and mild left ventricular hypertrophy and left atrial dilation; thorax with mild pleural effusion; Suspect primary non-cardiogenic etiology but if clinical cardiac dysfunction then functional cardiac abnormalities cannot be ruled out

Prior MHx

B6

B6

B6

Presented

B6

B6

B6

ECG: left ventricular enlargement suggested

B6

B6

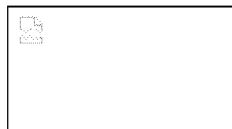
Rads: left sided congestive heart failure

B6 **B6** moderate left sided cardiomegaly without heart failure, moderate hepatomegaly

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B5

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Jen,

B5 can be present in **B5** so I don't think that could be ruled out.

I do like the exploration of other causes.

d.

David Rotstein, DVM, MPVM, Dipl. ACVP
CVM Vet-LIRN Liaison
CVM OSC/DC/CERT
7519 Standish Place, RM 120
240-402-5613 (Office) (NEW NUMBER)
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Yes, and also, vet talked to MARS who said there was no corn in this food... but that doesn't rule out treats.

I'm not sure with normal **B5** and taurine levels if we should suspect issues with those as well.

B5 **B5**

Jennifer Jones, DVM
Veterinary Medical Officer



From: Reimschuessel, Renate
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To: Jones, Jennifer L; Rotstein, David; Palmer, Lee Anne; Carey, Lauren; Queen, Jackie L
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Davis may be able to screen for **B5**

Renate Reimschuessel V.M.D. Ph.D. Vet-LIRN
Phone 1- 240-402-5404

Fax 301-210-4685

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

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Sent: 1/3/2018 8:07:33 PM
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Thanks, Dave.

When I send for [B5] testing, those will be on the panel too J

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



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To: Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov>; Palmer, Lee Anne <LeeAnne.Palmer@fda.hhs.gov>; Queen, Jackie L <Jackie.Queen@fda.hhs.gov>; Carey, Lauren <Lauren.Carey@fda.hhs.gov>
Cc: Ceric, Olgica <Olgica.Ceric@fda.hhs.gov>; Nemser, Sarah <Sarah.Nemser@fda.hhs.gov>; Reimschuessel, Renate <Renate.Reimschuessel@fda.hhs.gov>
Subject: RE: 800.218-Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers-EON-323515-323519

Please see the attached article.

I don't want to suggest a fishing expedition-but [B5] may be worth looking into.

David Rotstein, DVM, MPVM, Dipl. ACVP
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CVM OSC/DC/CERT
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B5

B5

B5

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FYI-Taurine [B5] still pending, but [B5] negative.

Jennifer Jones, DVM
Veterinary Medical Officer



From: Jones, Jennifer L
Sent: Thursday, July 27, 2017 7:25 AM
To: Rotstein, David; Palmer, Lee Anne; Reimschuessel, Renate; Queen, Jackie L; Carey, Lauren
Cc: Ceric, Olgica

Subject: RE: Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers-EON-323515-323519

We received the food and plan to test for [B5] The vet also mentioned two items of interest:

1. She's treated 2 other dogs in last 2 weeks with DCM/CHF and being fed California Natural food. That brings us to 4 DCM dogs recently eating this food.
 - a. We can consider taurine and other types of testing?

[B5]

Thoughts from the group?

Jennifer Jones, DVM
Veterinary Medical Officer



From: Jones, Jennifer L

Sent: Tuesday, July 18, 2017 8:18 AM

To: Rotstein, David; Palmer, Lee Anne; Reimschuessel, Renate; Queen, Jackie L; Carey, Lauren

Cc: Ceric, Olgica

Subject: RE: Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers-EON-323515-323519

Ok, thanks, Dave. I'll check [B5]

[B5]

Jennifer Jones, DVM
Veterinary Medical Officer



From: Rotstein, David

Sent: Thursday, July 13, 2017 2:54 PM

To: Jones, Jennifer L; Palmer, Lee Anne; Reimschuessel, Renate; Queen, Jackie L; Carey, Lauren

Cc: Ceric, Olgica

Subject: RE: Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers-EON-323515-323519

I think testing is worth pursuing. Oddball question, [B5]

[B5]

I was thinking of the [B5] and was thinking of [B5]

[B5]

[B5]

This would highly unlikely, but wanted to put it out there.

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: Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov>
Date: July 13, 2017 at 2:44:24 PM EDT
To: Palmer, Lee Anne <LeeAnne.Palmer@fda.hhs.gov>, Rotstein, David <David.Rotstein@fda.hhs.gov>, Reimschuessel, Renate <Renate.Reimschuessel@fda.hhs.gov>, Queen, Jackie L <Jackie.Queen@fda.hhs.gov>, Carey, Lauren <Lauren.Carey@fda.hhs.gov>
Cc: Ceric, Olgica <Olgica.Ceric@fda.hhs.gov>
Subject: RE: Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers-EON-323515-323519

We could test for B5 in food, what does the group think? Any additional testing? Is it worth testing the B5

Medical Record Review:

B6

Presenting complaint B6

B6

PE B6

B6

B6

B6

Rads B6

B6 cardiomegaly, severe diffuse mixed interstitial to alveolar pattern most severe caudo-dorsally, hepatomegaly, dec abdominal serosal contrast

B6 severe generalized cardiomegaly with biventricular heart failure, improved vs rDVM rads
worsening cardiogenic pulmonary edema, cannot exclude lung induced injury
+/- pneumonia

B6 post ultrafiltration, improved cardiogenic edema, hypovolemia, residual interstitial to patchy alveolar

B6 improved CHF with possible concern for bronchopneumonia, suspected hiatal hernia
markedly progressive alveolar pattern with significantly worse cardiogenic edema

tFAST B6 severe cardiomegaly with ventricular hypocontractility

Echo B6 dcm vs. myocarditis vs pacing induce vs. other (severely dilated & hypocontractile left & right ventricles, severely dilated left and right atria)

Necropsy: Lung-severe diffuse alveolar injury with marked fibrin deposition (hyaline) and marked alveolar histiocytosis and multifocal type II pneumocyte hyperplasia; mod to marked diffuse pulmonary edema; mild cardiomegaly with mild mitral valve endocardiosis and mild left ventricular hypertrophy and left atrial dilation; thorax with mild pleural effusion; Suspect primary non-cardiogenic etiology but if clinical cardiac dysfunction then functional cardiac abnormalities cannot be ruled out

Prior MHx: B6
B6

B6

Presented: B6
B6

B6

B6

B6

Labs:

B6

ECG: left ventricular enlargement suggested

B6

Rads: left sided congestive heart failure

B6 **B6** moderate left sided cardiomegaly without heart failure, moderate hepatomegaly

Echo: mitral valve endocardiosis with left atrial enlargement and heart failure, decreased left ventricular systolic function, suspected DCM

B5

B5

Jennifer Jones, DVM
Veterinary Medical Officer



From: Rotstein, David
Sent: Tuesday, July 11, 2017 12:44 PM
To: Jones, Jennifer L; Reimschuessel, Renate; Palmer, Lee Anne; Carey, Lauren; Queen, Jackie L
Cc: Ceric, Olgica
Subject: RE: Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers

Jen,

B5 so I don't think that could be ruled out.

I do like the exploration of other causes.

d.

David Rotstein, DVM, MPVM, Dipl. ACVP
 CVM Vet-LIRN Liaison
 CVM OSC/DC/CERT
 7519 Standish Place, RM 120
240-402-5613 (Office) (NEW NUMBER)
240-506-6763 (BB)



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From: Jones, Jennifer L
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To: Reimschuessel, Renate; Rotstein, David; Palmer, Lee Anne; Carey, Lauren; Queen, Jackie L
Cc: Ceric, Olgica
Subject: RE: Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers

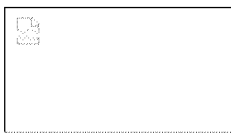
Yes, and also, vet talked to MARS who said there was no corn in this food...but that doesn't rule out treats.

I'm not sure with normal **B5** and taurine levels if we should suspect issues with those as well.

B5

B5

Jennifer Jones, DVM
 Veterinary Medical Officer



From: Reimschuessel, Renate
Sent: Tuesday, July 11, 2017 11:51 AM
To: Jones, Jennifer L; Rotstein, David; Palmer, Lee Anne; Carey, Lauren; Queen, Jackie L
Cc: Ceric, Olgica
Subject: RE: Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers

Davis may be able to screen for B5

Renate Reimschuessel V.M.D. Ph.D. Vet-LIRN
Phone 1- 240-402-5404
Fax 301-210-4685
<http://www.fda.gov/AnimalVeterinary/ScienceResearch/ucm247334.htm>

From: Jones, Jennifer L
Sent: Tuesday, July 11, 2017 11:38 AM
To: Rotstein, David; Palmer, Lee Anne; Carey, Lauren; Queen, Jackie L
Cc: Ceric, Olgica; Reimschuessel, Renate
Subject: Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers

Vet will submit PFR online à
2 dogs-unrelated miniature schnauzers

Dog 1: 2 yr à presented 2/2017 with fulminant CHFà severe DCM on echo, taurine/carnitine normal, infectious disease testing negative, died on the ventilator, necropsy done-myocardial changes were subtle but could be similar to moldy corn toxicity in pigsà plasma, urine, serum, and myocardial tissue available

Dog 2: 7 yr, had a syncopal episode ~2/2017 but presented to vet for progressive frequency of syncopal episodesà 6/2017 for CHF, diagnosed with DCM similar to housemate, nearly same image on Echo, taurine/carnitine normal, infectious disease testing negative, they have changed the diet (Hill's) and dog is responding to treatment; plasma, urine, and serum available

Dogs were eating California Naturals (different bag than from 2/2017) and treats (Milo's Kitchen); Vet has samples of food and treats

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>



From: Rotstein, David </O=FDA/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=DAVID.ROTSTEIN>
To: Jones, Jennifer L; Palmer, Lee Anne; Queen, Jackie L; Carey, Lauren
CC: Ceric, Olgica; Nemser, Sarah; Reimschuessel, Renate
Sent: 1/3/2018 8:08:15 PM
Subject: RE: 800.218-Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers-EON-323515-323519

Wonderful!!!

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



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From: Jones, Jennifer L
Sent: Wednesday, January 03, 2018 3:08 PM
To: Rotstein, David <David.Rotstein@fda.hhs.gov>; Palmer, Lee Anne <LeeAnne.Palmer@fda.hhs.gov>; Queen, Jackie L <Jackie.Queen@fda.hhs.gov>; Carey, Lauren <Lauren.Carey@fda.hhs.gov>
Cc: Ceric, Olgica <Olgica.Ceric@fda.hhs.gov>; Nemser, Sarah <Sarah.Nemser@fda.hhs.gov>; Reimschuessel, Renate <Renate.Reimschuessel@fda.hhs.gov>
Subject: RE: 800.218-Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers-EON-323515-323519

Thanks, Dave.
When I send for **B5** testing, those will be on the panel too J

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



From: Rotstein, David
Sent: Wednesday, January 03, 2018 3:00 PM
To: Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov>; Palmer, Lee Anne <LeeAnne.Palmer@fda.hhs.gov>; Queen, Jackie L <Jackie.Queen@fda.hhs.gov>; Carey, Lauren <Lauren.Carey@fda.hhs.gov>
Cc: Ceric, Olgica <Olgica.Ceric@fda.hhs.gov>; Nemser, Sarah <Sarah.Nemser@fda.hhs.gov>; Reimschuessel, Renate <Renate.Reimschuessel@fda.hhs.gov>
Subject: RE: 800.218-Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers-EON-323515-323519

Please see the attached article.

I don't want to suggest a fishing expedition-but [B5] may be worth looking into.

David Rotstein, DVM, MPVM, Dipl. ACVP
CVM Vet-LIRN Liaison
CVM OSC/DC/CERT
7519 Standish Place
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From: Jones, Jennifer L
Sent: Wednesday, January 03, 2018 2:32 PM
To: Rotstein, David <David.Rotstein@fda.hhs.gov>; Palmer, Lee Anne <LeeAnne.Palmer@fda.hhs.gov>; Queen, Jackie L <Jackie.Queen@fda.hhs.gov>; Carey, Lauren <Lauren.Carey@fda.hhs.gov>
Cc: Ceric, Olgica <Olgica.Ceric@fda.hhs.gov>; Nemser, Sarah <Sarah.Nemser@fda.hhs.gov>; Reimschuessel, Renate <Renate.Reimschuessel@fda.hhs.gov>
Subject: RE: 800.218-Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers-EON-323515-323519

Going to test the leftover food for [B5] based on our discussion during the PFO meeting today. I asked the vet if any dogs tested (blood/tissue) for [B5]

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



From: Rotstein, David
Sent: Tuesday, August 22, 2017 8:39 AM
To: Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov>; Palmer, Lee Anne <LeeAnne.Palmer@fda.hhs.gov>; Reimschuessel, Renate <Renate.Reimschuessel@fda.hhs.gov>; Queen, Jackie L <Jackie.Queen@fda.hhs.gov>; Carey, Lauren <Lauren.Carey@fda.hhs.gov>
Cc: Ceric, Olgica <Olgica.Ceric@fda.hhs.gov>
Subject: RE: 800.218-Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers-EON-323515-323519

Agreed. Thanks Jen

David Rotstein, DVM, MPVM, Dipl. ACVP
CVM Vet-LIRN Liaison
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From: Jones, Jennifer L
Sent: Tuesday, August 22, 2017 8:37 AM
To: Rotstein, David; Palmer, Lee Anne; Reimschuessel, Renate; Queen, Jackie L; Carey, Lauren
Cc: Ceric, Olgica
Subject: RE: 800.218-Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers-EON-323515-323519

BLUF: **Final Conclusion:** The cause of the two dogs' DCM is unclear. The bloodwork for these dogs showed normal taurine and [B5] levels. Based on the dogs' blood taurine/[B5] levels and the dry dog food test results, it is unlikely that [B5] taurine, or [B5] caused the dogs' illness.

B5

Final Conclusion: The cause of the two dogs' DCM is unclear. The bloodwork for these dogs showed normal taurine and [B5] levels. Based on the dogs' blood taurine [B5] levels and the dry dog food test results, it is unlikely that [B5] taurine, or [B5] caused the dogs' illness.

Jennifer Jones, DVM
Veterinary Medical Officer



From: Jones, Jennifer L
Sent: Monday, August 07, 2017 7:02 AM
To: Rotstein, David; Palmer, Lee Anne; Reimschuessel, Renate; Queen, Jackie L; Carey, Lauren
Cc: Ceric, Olgica
Subject: RE: 800.218-Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers-EON-323515-323519

FYI-Taurine [B5] still pending, but [B5] negative.

Jennifer Jones, DVM
Veterinary Medical Officer



From: Jones, Jennifer L
Sent: Thursday, July 27, 2017 7:25 AM
To: Rotstein, David; Palmer, Lee Anne; Reimschuessel, Renate; Queen, Jackie L; Carey, Lauren
Cc: Ceric, Olgica
Subject: RE: Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers-EON-323515-323519

We received the food and plan to test for [B5]. The vet also mentioned two items of interest:

1. She's treated 2 other dogs in last 2 weeks with DCM/CHF and being fed California Natural food. That brings us to 4 DCM dogs recently eating this food.
 - a. We can consider taurine and other types of testing?

[B5]

Thoughts from the group?

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Veterinary Medical Officer



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To: Rotstein, David; Palmer, Lee Anne; Reimschuessel, Renate; Queen, Jackie L; Carey, Lauren
Cc: Ceric, Olgica
Subject: RE: Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers-EON-323515-323519

Ok, thanks, Dave. I'll check

[B5]

Jennifer Jones, DVM
Veterinary Medical Officer



From: Rotstein, David
Sent: Thursday, July 13, 2017 2:54 PM
To: Jones, Jennifer L; Palmer, Lee Anne; Reimschuessel, Renate; Queen, Jackie L; Carey, Lauren
Cc: Ceric, Olgica
Subject: RE: Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers-EON-323515-323519

I think testing is worth pursuing. Oddball question, but

B5

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B5

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B5

This would highly unlikely, but wanted to put it out there.

David Rotstein, DVM, MPVM, Dipl.ACVP
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From: Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov>
Date: July 13, 2017 at 2:44:24 PM EDT
To: Palmer, Lee Anne <LeeAnne.Palmer@fda.hhs.gov>, Rotstein, David <David.Rotstein@fda.hhs.gov>, Reimschuessel, Renate <Renate.Reimschuessel@fda.hhs.gov>, Queen, Jackie L <Jackie.Queen@fda.hhs.gov>, Carey, Lauren <Lauren.Carey@fda.hhs.gov>
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We could test for

B5

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B5

Medical Record Review:

B6

Presenting complaint

B6

B6

B6

PE

B5

B6

B6

Rads

B6

B6 cardiomegaly, severe diffuse mixed interstitial to alveolar pattern most severe caudo-dorsally, hepatomegaly, dec abdominal serosal contrast

B6 severe generalized cardiomegaly with biventricular heart failure, improved vs rDVM rads

B6 worsening cardiogenic pulmonary edema, cannot exclude lung induced injury +/- pneumonia

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B6 markedly progressive alveolar pattern with significantly worse cardiogenic edema

tFAST B6: severe cardiomegaly with ventricular hypocontractility

Echo B6 dcm vs. myocarditis vs pacing induce vs. other (severely dilated & hypocontractile left & right ventricles, severely dilated left and right atria)

Necropsy: Lung-severe diffuse alveolar injury with marked fibrin deposition (hyaline) and marked alveolar histiocytosis and multifocal type II pneumocyte hyperplasia; mod to marked diffuse pulmonary edema; mild cardiomegaly with mild mitral valve endocardiosis and mild left ventricular hypertrophy and left atrial dilation; thorax with mild pleural effusion; Suspect primary non-cardiogenic etiology but if clinical cardiac dysfunction then functional cardiac abnormalities cannot be ruled out

Prior MHx: **B6**

B6

Presented: **B6**

B6

Labs: **B6**

ECG: left ventricular enlargement suggested

B6

B6

B6 Rads: left sided congestive heart failure

B6 moderate left sided cardiomegaly without heart failure, moderate hepatomegaly

B6 Echo: mitral valve endocardiosis with left atrial enlargement and heart failure, decreased left ventricular systolic function, suspected DCM

B5

Jennifer Jones, DVM
Veterinary Medical Officer



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To: Jones, Jennifer L; Reimschuessel, Renate; Palmer, Lee Anne; Carey, Lauren; Queen, Jackie L
Cc: Ceric, Olgica
Subject: RE: Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers

Jen,

B5

so I don't think that could be ruled out.

I do like the exploration of other causes.

d.

David Rotstein, DVM, MPVM, Dipl. ACVP
CVM Vet-LIRN Liaison
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Subject: RE: Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers

Yes, and also, vet talked to MARS who said there was no corn in this food... but that doesn't rule out treats.

I'm not sure with normal B5 and taurine levels if we should suspect issues with those as well.

B5 B5

Jennifer Jones, DVM
 Veterinary Medical Officer



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To: Jones, Jennifer L; Rotstein, David; Palmer, Lee Anne; Carey, Lauren; Queen, Jackie L
Cc: Ceric, Olgica
Subject: RE: Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers

Davis may be able to screen for B5

Renate Reimschuessel V.M.D. Ph.D. Vet-LIRN
Phone 1- 240-402-5404
 Fax 301-210-4685
<http://www.fda.gov/AnimalVeterinary/ScienceResearch/ucm247334.htm>

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Cc: Ceric, Olgica; Reimschuessel, Renate
Subject: Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers

Vet will submit PFR online à
 2 dogs-unrelated miniature schnauzers

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Dog 2: 7 yr, had a syncopal episode ~2/2017 but presented to vet for progressive frequency of syncopal episodesà 6/2017 for CHF, diagnosed with DCM similar to housemate, nearly same image on Echo, taurine/carnitine normal, infectious disease testing negative, they have changed the diet (Hill's) and dog is responding to treatment; plasma, urine, and serum available

Dogs were eating California Naturals (different bag than from 2/2017) and treats (Milo's Kitchen); Vet has samples of food and treats

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
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e-mail: jennifer.jones@fda.hhs.gov
Web: <http://www.fda.gov/AnimalVeterinary/ScienceResearch/ucm247334.htm>



From: Darcy Adin <dbadin@ncsu.edu>
To: Jones, Jennifer L
CC: Ceric, Olgica; Nemser, Sarah
Sent: 1/4/2018 7:39:28 PM
Subject: Re: dog food concern

The myocardium is from [B6] Maybe we will wait to see what the blood levels show.

B5

Thanks!
Darcy

On Thu, Jan 4, 2018 at 2:14 PM, Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov> wrote:

Thank you for the update. I'll let you know the [B5] concentration from [B6] food after the results are back.

The frozen myocardium, is it from the [B6] case?

Jennifer Jones, DVM

Veterinary Medical Officer

Tel: [240-402-5421](tel:240-402-5421)



From: Darcy Adin [mailto:dbadin@ncsu.edu]
Sent: Wednesday, January 03, 2018 3:10 PM
To: Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov>
Cc: Ceric, Olgica <Olgica.Ceric@fda.hhs.gov>; Nemser, Sarah <Sarah.Nemser@fda.hhs.gov>
Subject: Re: dog food concern

Hi Jennifer,

Thank you! We have not tested for [B5] in any of the dogs. We have stored blood samples from several dogs and have an inpatient right now that we can submit blood from [B4] (uns this). We will probably start with looking at blood samples from 2 dogs as a screening. We also have frozen myocardium from one dog - do you think this should also be evaluated?

Thank you!

Darcy

On Wed, Jan 3, 2018 at 2:30 PM, Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov> wrote:

Good afternoon Darcy,

Happy New Year! Thank you for the additional information. I discussed the information you provided below and from the previous case ([REDACTED] B6 Miniature Schnauzers-800.218) with my colleagues.

Based on our discussions, I will test some leftover food from the 800.218 case, for [REDACTED] B5 content. Have any of the dogs with DCM had blood or tissue [REDACTED] B5 levels tested?

Thank you kindly,

Jen

Jennifer Jones, DVM

Veterinary Medical Officer

Tel: [240-402-5421](tel:240-402-5421)



From: Darcy Adin [<mailto:dbadin@ncsu.edu>]
Sent: Wednesday, January 03, 2018 11:31 AM
To: Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov>
Subject: dog food concern

Hi Dr. Jones,

I'm hoping that you recall our communications over the summer regarding food testing for unrelated housemate dogs that developed DCM. These dogs were eating California Naturals Kangaroo and Lentil diet and we were not able to identify a cause of the DCM, dietary or infectious or toxic.

I wanted to reach out again because we continue to see DCM in non-genetically predisposed breeds and it seems that this diet is a relatively common theme. We have been increasingly better about recording a diet history in dogs that are presented to cardiology or ER at our hospital with DCM in the last 6 months. Most of the dogs

have been tested for taurine and carnitine deficiency and have been within the reference range. About half of them are alive and half died close to the time of diagnosis.

I also searched our records for this diet (knowing that recording of diet in the MR history has been spotty at best) and found another pair of unrelated housemate dogs eating California naturals kangaroo and lentil that were diagnosed with DCM 6 months apart.

We will continue to record the cases we see but since last june we have seen 7 dogs eating California Naturals diet (5 kangaroo and lentil) in addition to the pair of housemates from 2016 (so total of 9). We also have 4 dogs eating Acana (3/4 are dobermans though) and 1 each of 4Health and Iams - so maybe these are not necessarily related.

Have you had any other reports of such an association? If you have any other thoughts or testing suggestions, I would be all ears!

Thank you!

Darcy

--

Darcy B. Adin, DVM, DACVIM (Cardiology)

Clinical Assistant Professor of Cardiology

North Carolina State University

NC State Veterinary Hospital

1060 William Moore Drive

Raleigh, NC 27607

919-513-6032

--

Darcy B. Adin, DVM, DACVIM (Cardiology)

Clinical Assistant Professor of Cardiology

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Darcy B. Adin, DVM, DACVIM (Cardiology)

Clinical Assistant Professor of Cardiology

North Carolina State University

NC State Veterinary Hospital

1060 William Moore Drive

Raleigh, NC 27607

919-513-6032

From: Darcy Adin <dbadin@ncsu.edu>
To: Jones, Jennifer L
CC: Ceric, Olgica; Nemser, Sarah
Sent: 1/4/2018 7:46:50 PM
Subject: Re: dog food concern

I also have a food sample for our current inpatient (same food - California Naturals kangaroo and lentil)

B5

B5

On Thu, Jan 4, 2018 at 2:39 PM, Darcy Adin <dbadin@ncsu.edu> wrote:

The myocardium is from **B6** Maybe we will wait to see what the blood levels show.

B5

Thanks!
Darcy

On Thu, Jan 4, 2018 at 2:14 PM, Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov> wrote:

Thank you for the update. I'll let you know the **B5** concentration from **B6** food after the results are back.

The frozen myocardium, is it from the **B6** case?

Jennifer Jones, DVM

Veterinary Medical Officer

Tel: 240-402-5421



From: Darcy Adin [mailto:dbadin@ncsu.edu]

Sent: Wednesday, January 03, 2018 3:10 PM

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

Cc: Ceric, Olgica <Olgica.Ceric@fda.hhs.gov>; Nemser, Sarah <Sarah.Nemser@fda.hhs.gov>

Subject: Re: dog food concern

Hi Jennifer,

Thank you! We have not tested for [B5] in any of the dogs. We have stored blood samples from several dogs and have an inpatient right now that we can submit blood from ([B4] runs this). We will probably start with looking at blood samples from 2 dogs as a screening. We also have frozen myocardium from one dog - do you think this should also be evaluated?

Thank you!

Darcy

On Wed, Jan 3, 2018 at 2:30 PM, Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov> wrote:

Good afternoon Darcy,

Happy New Year! Thank you for the additional information. I discussed the information you provided below and from the previous case ([B6] Miniature Schnauzers-800.218) with my colleagues.

Based on our discussions, I will test some leftover food from the 800.218 case, for [B5] content. Have any of the dogs with DCM had blood or tissue [B5] levels tested?

Thank you kindly,

Jen

Jennifer Jones, DVM

Veterinary Medical Officer

Tel: [240-402-5421](tel:240-402-5421)



From: Darcy Adin [<mailto:dbadin@ncsu.edu>]
Sent: Wednesday, January 03, 2018 11:31 AM
To: Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov>
Subject: dog food concern

Hi Dr. Jones,

I'm hoping that you recall our communications over the summer regarding food testing for unrelated housemate dogs that developed DCM. These dogs were eating California Naturals Kangaroo and Lentil diet and we were not able to identify a cause of the DCM, dietary or infectious or toxic.

I wanted to reach out again because we continue to see DCM in non-genetically predisposed breeds and it seems that this diet is a relatively common theme. We have been increasingly better about recording a diet history in dogs that are presented to cardiology or ER at our hospital with DCM in the last 6 months. Most of the dogs have been tested for taurine and carnitine deficiency and have been within the reference range. About half of them are alive and half died close to the time of diagnosis.

I also searched our records for this diet (knowing that recording of diet in the MR history has been spotty at best) and found another pair of unrelated housemate dogs eating California naturals kangaroo and lentil that were diagnosed with DCM 6 months apart.

We will continue to record the cases we see but since last june we have seen 7 dogs eating California Naturals diet (5 kangaroo and lentil) in addition to the pair of housemates from 2016 (so total of 9). We also have 4 dogs eating Acana (3/4 are dobermans though) and 1 each of 4Health and Iams - so maybe these are not necessarily related.

Have you had any other reports of such an association? If you have any other thoughts or testing suggestions, I would be all ears!

Thank you!

Darcy

--

Darcy B. Adin, DVM, DACVIM (Cardiology)

Clinical Assistant Professor of Cardiology

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919-513-6032

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Darcy B. Adin, DVM, DACVIM (Cardiology)

Clinical Assistant Professor of Cardiology

North Carolina State University

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1060 William Moore Drive

Raleigh, NC 27607

919-513-6032

From: Jones, Jennifer L </O=FDA/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=JENNIFER.JONESAA8>
To: Rotstein, David; Palmer, Lee Anne; Queen, Jackie L; Carey, Lauren
CC: Ceric, Olgica; Nemser, Sarah; Reimschuessel, Renate
Sent: 1/11/2018 2:36:21 PM
Subject: RE: 800.218-Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers-EON-323515-323519
Attachments: EON-323515-19-[B6]-case summary-1.11.2018.doc

FYI-

JJ-Vet emailed-“ As additional information, one of our cardiologist colleagues in [B6] posted a question about this association today on our list serve. She has seen 4 cases of DCM in dogs eating kangaroo and lentil (I assume CN but not sure) in the last year - 2 were housemates but related.”

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



From: Jones, Jennifer L
Sent: Wednesday, January 03, 2018 2:32 PM
To: Rotstein, David <David.Rotstein@fda.hhs.gov>; Palmer, Lee Anne <LeeAnne.Palmer@fda.hhs.gov>; Queen, Jackie L <Jackie.Queen@fda.hhs.gov>; Carey, Lauren <Lauren.Carey@fda.hhs.gov>
Cc: Ceric, Olgica <Olgica.Ceric@fda.hhs.gov>; Nemser, Sarah <Sarah.Nemser@fda.hhs.gov>; 'Reimschuessel, Renate (Renate.Reimschuessel@fda.hhs.gov)' <Renate.Reimschuessel@fda.hhs.gov>
Subject: RE: 800.218-Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers-EON-323515-323519

Going to test the leftover food for [B5] based on our discussion during the PFO meeting today. I asked the vet if any dogs tested (blood/tissue) for [B5]

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



From: Rotstein, David
Sent: Tuesday, August 22, 2017 8:39 AM
To: Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov>; Palmer, Lee Anne <LeeAnne.Palmer@fda.hhs.gov>; Reimschuessel, Renate <Renate.Reimschuessel@fda.hhs.gov>; Queen, Jackie L <Jackie.Queen@fda.hhs.gov>; Carey, Lauren <Lauren.Carey@fda.hhs.gov>
Cc: Ceric, Olgica <Olgica.Ceric@fda.hhs.gov>
Subject: RE: 800.218-Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers-EON-323515-323519

Agreed. Thanks Jen

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: Jones, Jennifer L
Sent: Tuesday, August 22, 2017 8:37 AM
To: Rotstein, David; Palmer, Lee Anne; Reimschuessel, Renate; Queen, Jackie L; Carey, Lauren
Cc: Ceric, Olgica
Subject: RE: 800.218-Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers-EON-323515-323519

BLUF: **Final Conclusion:** The cause of the two dogs' DCM is unclear. The bloodwork for these dogs showed normal taurine and [B5] levels. Based on the dogs' blood taurine/[B5] levels and the dry dog food test results, it is unlikely that [B5] taurine, or [B5] caused the dogs' illness.

B5

B5

Final Conclusion: The cause of the two dogs' DCM is unclear. The bloodwork for these dogs showed normal taurine and [B5] levels. Based on the dogs' blood taurine/[B5] levels and the dry dog food test results, it is unlikely that [B5] taurine, or [B5] caused the dogs' illness.

Jennifer Jones, DVM
Veterinary Medical Officer



From: Jones, Jennifer L
Sent: Monday, August 07, 2017 7:02 AM
To: Rotstein, David; Palmer, Lee Anne; Reimschuessel, Renate; Queen, Jackie L; Carey, Lauren
Cc: Ceric, Olgica
Subject: RE: 800.218-Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers-EON-323515-323519

FYI-Taurine [B5] still pending, but [B5] negative.

Jennifer Jones, DVM
Veterinary Medical Officer



From: Jones, Jennifer L
Sent: Thursday, July 27, 2017 7:25 AM
To: Rotstein, David; Palmer, Lee Anne; Reimschuessel, Renate; Queen, Jackie L; Carey, Lauren
Cc: Ceric, Olgica
Subject: RE: Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers-EON-323515-323519

We received the food and plan to test for [B5]. The vet also mentioned two items of interest:

1. She's treated 2 other dogs in last 2 weeks with DCM/CHF and being fed California Natural food. That brings us to 4 DCM dogs recently eating this food.
 - a. We can consider taurine and other types of testing?

[B5]

Thoughts from the group?

Jennifer Jones, DVM
Veterinary Medical Officer



From: Jones, Jennifer L
Sent: Tuesday, July 18, 2017 8:18 AM
To: Rotstein, David; Palmer, Lee Anne; Reimschuessel, Renate; Queen, Jackie L; Carey, Lauren
Cc: Ceric, Olgica
Subject: RE: Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers-EON-323515-323519

Ok, thanks, Dave. I'll check

B5

Jennifer Jones, DVM
Veterinary Medical Officer



From: Rotstein, David
Sent: Thursday, July 13, 2017 2:54 PM
To: Jones, Jennifer L; Palmer, Lee Anne; Reimschuessel, Renate; Queen, Jackie L; Carey, Lauren
Cc: Ceric, Olgica
Subject: RE: Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers-EON-323515-323519

I think testing is worth pursuing. Oddball question,

B5

I was thinking of the

B5

and was thinking of

B5

This would highly unlikely, but wanted to put it out there.

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: Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov>
Date: July 13, 2017 at 2:44:24 PM EDT
To: Palmer, Lee Anne <LeeAnne.Palmer@fda.hhs.gov>, Rotstein, David <David.Rotstein@fda.hhs.gov>, Reimschuessel, Renate <Renate.Reimschuessel@fda.hhs.gov>, Queen, Jackie L <Jackie.Queen@fda.hhs.gov>, Carey, Lauren <Lauren.Carey@fda.hhs.gov>
Cc: Ceric, Olgica <Olgica.Ceric@fda.hhs.gov>
Subject: RE: Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers-EON-323515-323519

We could test for

B5

in food, what does the group think? Any additional testing? Is it worth testing the

B5

Medical Record Review:

B6

Presenting complaint

B6

B6

Labwork:

B6

B6

ECG: suspected atrial tachycardia

Rads **B6** concern for aspiration pneumonia

B6 cardiomegaly, severe diffuse mixed interstitial to alveolar pattern most severe caudo-dorsally, hepatomegaly, dec abdominal serosal contrast

B6 severe generalized cardiomegaly with biventricular heart failure, improved vs rDVM rads
B6 worsening cardiogenic pulmonary edema, cannot exclude lung induced injury
+/- pneumonia

B6 post ultrafiltration, improved cardiogenic edema, hypovolemia, residual interstitial to patchy alveolar

B6 improved CHF with possible concern for bronchopneumonia, suspected hiatal hernia
B6 markedly progressive alveolar pattern with significantly worse cardiogenic edema

tFAST **B6** severe cardiomegaly with ventricular hypocontractility

Echo **B6** dcm vs. myocarditis vs pacing induce vs. other (severely dilated & hypocontractile left & right ventricles, severely dilated left and right atria)

Necropsy: Lung-severe diffuse alveolar injury with marked fibrin deposition (hyaline) and marked alveolar histiocytosis and multifocal type II pneumocyte hyperplasia; mod to marked diffuse pulmonary edema; mild cardiomegaly with mild mitral valve endocardiosis and mild left ventricular hypertrophy and left atrial dilation; thorax with mild pleural effusion; Suspect primary non-cardiogenic etiology but if clinical cardiac dysfunction then functional cardiac abnormalities cannot be ruled out

Prior MHx: **B6**
B6

B6

Presented **B6**
B6

6/22 **B6**

B6

Labs: **B6**

ECG: left ventricular enlargement suggested

B6

B6

B6 Rads: left sided congestive heart failure

B6 moderate left sided cardiomegaly without heart failure, moderate hepatomegaly

B6 Echo: mitral valve endocardiosis with left atrial enlargement and heart failure, decreased left ventricular systolic function, suspected DCM

B5

B5

Jennifer Jones, DVM
Veterinary Medical Officer



From: Rotstein, David
Sent: Tuesday, July 11, 2017 12:44 PM
To: Jones, Jennifer L; Reimschuessel, Renate; Palmer, Lee Anne; Carey, Lauren; Queen, Jackie L
Cc: Ceric, Olgica
Subject: RE: Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers

Jen,

B5

so I don't think that could be ruled out.

I do like the exploration of other causes.

d.

David Rotstein, DVM, MPVM, Dipl. ACVP
CVM Vet-LIRN Liaison
CVM OSC/DC/CERT
7519 Standish Place, RM 120
240-402-5613 (Office) (NEW NUMBER)

240-506-6763 (BB)



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From: Jones, Jennifer L
Sent: Tuesday, July 11, 2017 12:41 PM
To: Reimschuessel, Renate; Rotstein, David; Palmer, Lee Anne; Carey, Lauren; Queen, Jackie L
Cc: Ceric, Olgica
Subject: RE: Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers

Yes, and also, vet talked to MARS who said there was no corn in this food...but that doesn't rule out treats.

I'm not sure with normal B5 and taurine levels if we should suspect issues with those as well.

B5

B5

Jennifer Jones, DVM
Veterinary Medical Officer



From: Reimschuessel, Renate
Sent: Tuesday, July 11, 2017 11:51 AM
To: Jones, Jennifer L; Rotstein, David; Palmer, Lee Anne; Carey, Lauren; Queen, Jackie L
Cc: Ceric, Olgica
Subject: RE: Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers

Davis may be able to screen for B5

Renate Reimschuessel V.M.D. Ph.D. Vet-LIRN
Phone 1- 240-402-5404
Fax 301-210-4685
<http://www.fda.gov/AnimalVeterinary/ScienceResearch/ucm247334.htm>

From: Jones, Jennifer L
Sent: Tuesday, July 11, 2017 11:38 AM
To: Rotstein, David; Palmer, Lee Anne; Carey, Lauren; Queen, Jackie L
Cc: Ceric, Olgica; Reimschuessel, Renate
Subject: Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers

Vet will submit PFR online à

2 dogs-unrelated miniature schnauzers

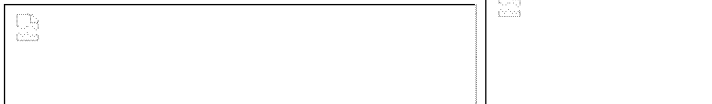
Dog 1: 2 yr à presented 2/2017 with fulminant CHFà severe DCM on echo, taurine/carnitine normal, infectious disease testing negative, died on the ventilator, necropsy done-myocardial changes were subtle but could be similar to moldy corn toxicity in pigsà plasma, urine, serum, and myocardial tissue available

Dog 2: 7 yr, had a syncopal episode ~2/2017 but presented to vet for progressive frequency of syncopal episodesà 6/2017 for CHF, diagnosed with DCM similar to housemate, nearly same image on Echo, taurine/carnitine normal, infectious disease testing negative, they have changed the diet (Hill's) and dog is responding to treatment; plasma, urine, and serum available

Dogs were eating California Naturals (different bag than from 2/2017) and treats (Milo's Kitchen); Vet has samples of food and treats

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>



From: Rotstein, David </O=FDA/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=DAVID.ROTSTEIN>
To: Jones, Jennifer L; Palmer, Lee Anne; Queen, Jackie L; Carey, Lauren
CC: Ceric, Olgica; Nemser, Sarah; Reimschuessel, Renate
Sent: 1/11/2018 2:45:57 PM
Subject: RE: 800.218-Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers-EON-323515-323519

Thanks Jen.

B5

d.

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: Jones, Jennifer L
Sent: Thursday, January 11, 2018 9:36 AM
To: Rotstein, David <David.Rotstein@fda.hhs.gov>; Palmer, Lee Anne <LeeAnne.Palmer@fda.hhs.gov>; Queen, Jackie L <Jackie.Queen@fda.hhs.gov>; Carey, Lauren <Lauren.Carey@fda.hhs.gov>
Cc: Ceric, Olgica <Olgica.Ceric@fda.hhs.gov>; Nemser, Sarah <Sarah.Nemser@fda.hhs.gov>; Reimschuessel, Renate <Renate.Reimschuessel@fda.hhs.gov>
Subject: RE: 800.218-Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers-EON-323515-323519

FYI-

JJ-Vet emailed-“ As additional information, one of our cardiologist colleagues in **B6** posted a question about this association today on our list serve. She has seen 4 cases of DCM in dogs eating kangaroo and lentil (I assume CN but not sure) in the last year - 2 were housemates but related.”

Jennifer Jones, DVM

Veterinary Medical Officer

Tel: 240-402-5421



From: Jones, Jennifer L

Sent: Wednesday, January 03, 2018 2:32 PM

To: Rotstein, David <David.Rotstein@fda.hhs.gov>; Palmer, Lee Anne <LeeAnne.Palmer@fda.hhs.gov>; Queen, Jackie L <Jackie.Queen@fda.hhs.gov>; Carey, Lauren <Lauren.Carey@fda.hhs.gov>

Cc: Ceric, Olgica <Olgica.Ceric@fda.hhs.gov>; Nemser, Sarah <Sarah.Nemser@fda.hhs.gov>;

'Reimschuessel, Renate (Renate.Reimschuessel@fda.hhs.gov)' <Renate.Reimschuessel@fda.hhs.gov>

Subject: RE: 800.218-Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers-EON-323515-323519

Going to test the leftover food for B5 based on our discussion during the PFO meeting today. I asked the vet if any dogs tested (blood/tissue) for B5

Jennifer Jones, DVM

Veterinary Medical Officer

Tel: 240-402-5421



From: Rotstein, David

Sent: Tuesday, August 22, 2017 8:39 AM

To: Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov>; Palmer, Lee Anne <LeeAnne.Palmer@fda.hhs.gov>; Reimschuessel, Renate <Renate.Reimschuessel@fda.hhs.gov>; Queen, Jackie L <Jackie.Queen@fda.hhs.gov>; Carey, Lauren <Lauren.Carey@fda.hhs.gov>

Cc: Ceric, Olgica <Olgica.Ceric@fda.hhs.gov>

Subject: RE: 800.218-Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers-EON-323515-323519

Agreed. Thanks Jen

David Rotstein, DVM, MPVM, Dipl. ACVP

CVM Vet-LIRN Liaison

CVM OSC/DC/CERT

7519 Standish Place

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From: Jones, Jennifer L

Sent: Tuesday, August 22, 2017 8:37 AM

To: Rotstein, David; Palmer, Lee Anne; Reimschuessel, Renate; Queen, Jackie L; Carey, Lauren

Cc: Ceric, Olgica

Subject: RE: 800.218-Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers-EON-323515-323519

BLUF: **Final Conclusion:** The cause of the two dogs' DCM is unclear. The bloodwork for these dogs showed normal taurine and [B5] levels. Based on the dogs' blood taurine [B5] levels and the dry dog food test results, it is unlikely that [B5] taurine, or [B5] caused the dogs' illness.

B5

6

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Jennifer Jones, DVM
Veterinary Medical Officer



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Sent: Monday, August 07, 2017 7:02 AM
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Subject: RE: 800.218-Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers-EON-323515-323519

FYI-Taurine [B5] still pending, but [B5] negative.

Jennifer Jones, DVM
Veterinary Medical Officer



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Sent: Thursday, July 27, 2017 7:25 AM
To: Rotstein, David; Palmer, Lee Anne; Reimschuessel, Renate; Queen, Jackie L; Carey, Lauren
Cc: Ceric, Olgica
Subject: RE: Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers-EON-323515-323519

We received the food and plan to test for [B5]. The vet also mentioned two items of interest:

1. She's treated 2 other dogs in last 2 weeks with DCM/CHF and being fed California Natural food. That brings us to 4 DCM dogs recently eating this food.
 - a. We can consider taurine and other types of testing?

[B5]

Thoughts from the group?

Jennifer Jones, DVM
Veterinary Medical Officer



From: Jones, Jennifer L
Sent: Tuesday, July 18, 2017 8:18 AM
To: Rotstein, David; Palmer, Lee Anne; Reimschuessel, Renate; Queen, Jackie L; Carey, Lauren
Cc: Ceric, Olgica
Subject: RE: Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers-EON-323515-323519

Ok, thanks, Dave. I'll check with [B5]

[B5]

Jennifer Jones, DVM
Veterinary Medical Officer



From: Rotstein, David
Sent: Thursday, July 13, 2017 2:54 PM
To: Jones, Jennifer L; Palmer, Lee Anne; Reimschuessel, Renate; Queen, Jackie L; Carey, Lauren
Cc: Ceric, Olgica
Subject: RE: Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers-EON-323515-323519

I think testing is worth pursuing. Oddball question, [B5]

[B5]

I was thinking of the [B5] and was thinking of [B5]

[B5]

[B5]

This would highly unlikely, but wanted to put it out there.

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: Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov>
Date: July 13, 2017 at 2:44:24 PM EDT
To: Palmer, Lee Anne <LeeAnne.Palmer@fda.hhs.gov>, Rotstein, David <David.Rotstein@fda.hhs.gov>, Reimschuessel, Renate <Renate.Reimschuessel@fda.hhs.gov>, Queen, Jackie L <Jackie.Queen@fda.hhs.gov>, Carey, Lauren <Lauren.Carey@fda.hhs.gov>
Cc: Ceric, Olgica <Olgica.Ceric@fda.hhs.gov>
Subject: RE: Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers-EON-323515-323519

We could test for **B5** in food, what does the group think? Any additional testing? Is it worth testing the **B5**

Medical Record Review:

B6

Presenting complaint

B6

B6

PE

B6

B6

Labwork:

B6

B6

ECG: suspected atrial tachycardia

Rads **B6**: concern for aspiration pneumonia

B6 cardiomegaly, severe diffuse mixed interstitial to alveolar pattern most severe caudo-dorsally, hepatomegaly, dec abdominal serosal contrast

B6 severe generalized cardiomegaly with biventricular heart failure, improved vs rDVM rads
B6 worsening cardiogenic pulmonary edema, cannot exclude lung induced injury
+/- pneumonia

B6: post ultrafiltration, improved cardiogenic edema, hypovolemia, residual interstitial to patchy alveolar

B6 improved CHF with possible concern for bronchopneumonia, suspected hiatal hernia
B6 markedly progressive alveolar pattern with significantly worse cardiogenic edema

tFAST **B6**: severe cardiomegaly with ventricular hypocontractility

Echo **B6** dcm vs. myocarditis vs pacing induce vs. other (severely dilated & hypocontractile left & right ventricles, severely dilated left and right atria)

Necropsy: Lung-severe diffuse alveolar injury with marked fibrin deposition (hyaline) and marked alveolar histiocytosis and multifocal type II pneumocyte hyperplasia; mod to marked diffuse pulmonary edema; mild cardiomegaly with mild mitral valve endocardiosis and mild left ventricular hypertrophy and left atrial dilation; thorax with mild pleural effusion; Suspect primary non-cardiogenic etiology but if

clinical cardiac dysfunction then functional cardiac abnormalities cannot be ruled out

Prior MHx: [redacted] B6

[redacted] B6

Presented [redacted] B6

[redacted] B6

[redacted] B6

ECG: left ventricular enlargement suggested

[redacted] B6

[redacted] B6 Rads: left sided congestive heart failure

[redacted] B6 moderate left sided cardiomegaly without heart failure, moderate hepatomegaly

[redacted] B6 Echo: mitral valve endocardiosis with left atrial enlargement and heart failure, decreased left ventricular systolic function, suspected DCM

B5
B5

Jennifer Jones, DVM
Veterinary Medical Officer



From: Rotstein, David
Sent: Tuesday, July 11, 2017 12:44 PM
To: Jones, Jennifer L; Reimschuessel, Renate; Palmer, Lee Anne; Carey, Lauren; Queen, Jackie L
Cc: Ceric, Olgica
Subject: RE: Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers

Jen,

B5

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I do like the exploration of other causes.

d.

David Rotstein, DVM, MPVM, Dipl. ACVP
CVM Vet-LIRN Liaison
CVM OSC/DC/CERT
7519 Standish Place, RM 120
240-402-5613 (Office) (NEW NUMBER)
240-506-6763 (BB)



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Subject: RE: Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers

Yes, and also, vet talked to MARS who said there was no corn in this food...but that doesn't rule out

treats.

I'm not sure with normal **B5** and taurine levels if we should suspect issues with those as well.

B5

B5

Jennifer Jones, DVM
Veterinary Medical Officer



From: Reimschuessel, Renate
Sent: Tuesday, July 11, 2017 11:51 AM
To: Jones, Jennifer L; Rotstein, David; Palmer, Lee Anne; Carey, Lauren; Queen, Jackie L
Cc: Ceric, Olgica
Subject: RE: Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers

Davis may be able to screen for **B5**

Renate Reimschuessel V.M.D. Ph.D. Vet-LIRN
Phone 1- 240-402-5404
Fax 301-210-4685
<http://www.fda.gov/AnimalVeterinary/ScienceResearch/ucm247334.htm>

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Sent: Tuesday, July 11, 2017 11:38 AM
To: Rotstein, David; Palmer, Lee Anne; Carey, Lauren; Queen, Jackie L
Cc: Ceric, Olgica; Reimschuessel, Renate
Subject: Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers

Vet will submit PFR online à
2 dogs-unrelated miniature schnauzers

Dog 1: 2 yr à presented 2/2017 with fulminant CHF à severe DCM on echo, taurine/carnitine normal, infectious disease testing negative, died on the ventilator, necropsy done-myocardial changes were subtle but could be similar to moldy corn toxicity in pigs à plasma, urine, serum, and myocardial tissue available

Dog 2: 7 yr, had a syncopal episode ~2/2017 but presented to vet for progressive frequency of syncopal episodes à 6/2017 for CHF, diagnosed with DCM similar to housemate, nearly same image on Echo, taurine/carnitine normal, infectious disease testing negative, they have changed the diet (Hill's) and dog is responding to treatment; plasma, urine, and serum available

Dogs were eating California Naturals (different bag than from 2/2017) and treats (Milo's Kitchen); Vet has samples of food and treats

Jennifer L. A. Jones, DVM
Veterinary Medical Officer
U.S. Food & Drug Administration
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e-mail: jennifer.jones@fda.hhs.gov

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



From: Jones, Jennifer L </O=FDA/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=JENNIFER.JONESAA8>
To: Rotstein, David; Palmer, Lee Anne; Queen, Jackie L; Carey, Lauren
CC: Ceric, Olgica; Nemser, Sarah; Reimschuessel, Renate
Sent: 1/11/2018 2:50:57 PM
Subject: RE: 800.218-Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers-EON-323515-323519

Thanks, Dave. If you have info readily available that's great. If no, I can look/prompt NCSU to look too.

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



From: Rotstein, David
Sent: Thursday, January 11, 2018 9:46 AM
To: Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov>; Palmer, Lee Anne <LeeAnne.Palmer@fda.hhs.gov>; Queen, Jackie L <Jackie.Queen@fda.hhs.gov>; Carey, Lauren <Lauren.Carey@fda.hhs.gov>
Cc: Ceric, Olgica <Olgica.Ceric@fda.hhs.gov>; Nemser, Sarah <Sarah.Nemser@fda.hhs.gov>; Reimschuessel, Renate <Renate.Reimschuessel@fda.hhs.gov>
Subject: RE: 800.218-Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers-EON-323515-323519

Thanks Jen.

B5

d.

David Rotstein, DVM, MPVM, Dipl. ACVP
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Cc: Ceric, Olgica <Olgica.Ceric@fda.hhs.gov>; Nemser, Sarah <Sarah.Nemser@fda.hhs.gov>; Reimschuessel, Renate <Renate.Reimschuessel@fda.hhs.gov>

Subject: RE: 800.218-Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers-EON-323515-323519

FYI-

JJ-Vet emailed-“ As additional information, one of our cardiologist colleagues in [B6] posted a question about this association today on our list serve. She has seen 4 cases of DCM in dogs eating kangaroo and lentil (I assume CN but not sure) in the last year - 2 were housemates but related.”

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



From: Jones, Jennifer L

Sent: Wednesday, January 03, 2018 2:32 PM

To: Rotstein, David <David.Rotstein@fda.hhs.gov>; Palmer, Lee Anne <LeeAnne.Palmer@fda.hhs.gov>; Queen, Jackie L <Jackie.Queen@fda.hhs.gov>; Carey, Lauren <Lauren.Carey@fda.hhs.gov>

Cc: Ceric, Olgica <Olgica.Ceric@fda.hhs.gov>; Nemser, Sarah <Sarah.Nemser@fda.hhs.gov>;

'Reimschuessel, Renate (<Renate.Reimschuessel@fda.hhs.gov>)' <Renate.Reimschuessel@fda.hhs.gov>

Subject: RE: 800.218-Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers-EON-323515-323519

Going to test the leftover food for [B5] based on our discussion during the PFO meeting today. I asked the vet if any dogs tested (blood/tissue) for [B5]

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



From: Rotstein, David

Sent: Tuesday, August 22, 2017 8:39 AM

To: Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov>; Palmer, Lee Anne <LeeAnne.Palmer@fda.hhs.gov>; Reimschuessel, Renate <Renate.Reimschuessel@fda.hhs.gov>; Queen, Jackie L <Jackie.Queen@fda.hhs.gov>; Carey, Lauren <Lauren.Carey@fda.hhs.gov>

Cc: Ceric, Olgica <Olgica.Ceric@fda.hhs.gov>

Subject: RE: 800.218-Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers-EON-323515-323519

Agreed. Thanks Jen

David Rotstein, DVM, MPVM, Dipl. ACVP
CVM Vet-LIRN Liaison
CVM OSC/DC/CERT
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From: Jones, Jennifer L
Sent: Tuesday, August 22, 2017 8:37 AM
To: Rotstein, David; Palmer, Lee Anne; Reimschuessel, Renate; Queen, Jackie L; Carey, Lauren
Cc: Ceric, Olgica
Subject: RE: 800.218-Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers-EON-323515-323519

BLUF: **Final Conclusion:** The cause of the two dogs' DCM is unclear. The bloodwork for these dogs showed normal taurine and **B5** levels. Based on the dogs' blood taurine **B5** levels and the dry dog food test results, it is unlikely that **B5** taurine, or **B5** caused the dogs' illness.

B5

Final Conclusion: The cause of the two dogs' DCM is unclear. The bloodwork for these dogs showed normal taurine and [B5] levels. Based on the dogs' blood taurine [B5] levels and the dry dog food test results, it is unlikely that [B5] taurine, or [B5] caused the dogs' illness.

Jennifer Jones, DVM
Veterinary Medical Officer



From: Jones, Jennifer L
Sent: Monday, August 07, 2017 7:02 AM
To: Rotstein, David; Palmer, Lee Anne; Reimschuessel, Renate; Queen, Jackie L; Carey, Lauren
Cc: Ceric, Olgica
Subject: RE: 800.218-Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers-EON-323515-323519

FYI-Taurine [B5] still pending, but [B5] negative.

Jennifer Jones, DVM
Veterinary Medical Officer



From: Jones, Jennifer L
Sent: Thursday, July 27, 2017 7:25 AM
To: Rotstein, David; Palmer, Lee Anne; Reimschuessel, Renate; Queen, Jackie L; Carey, Lauren
Cc: Ceric, Olgica
Subject: RE: Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers-EON-323515-323519

We received the food and plan to test for [B5]. The vet also mentioned two items of interest:

1. She's treated 2 other dogs in last 2 weeks with DCM/CHF and being fed California Natural food. That brings us to 4 DCM dogs recently eating this food.
 - a. We can consider taurine and other types of testing?

[B5]

Thoughts from the group?

Jennifer Jones, DVM
Veterinary Medical Officer



From: Jones, Jennifer L
Sent: Tuesday, July 18, 2017 8:18 AM
To: Rotstein, David; Palmer, Lee Anne; Reimschuessel, Renate; Queen, Jackie L; Carey, Lauren
Cc: Ceric, Olgica
Subject: RE: Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers-EON-323515-323519

Ok, thanks, Dave. I'll check with t[redacted]

[B5]

Jennifer Jones, DVM
Veterinary Medical Officer



From: Rotstein, David
Sent: Thursday, July 13, 2017 2:54 PM
To: Jones, Jennifer L; Palmer, Lee Anne; Reimschuessel, Renate; Queen, Jackie L; Carey, Lauren
Cc: Ceric, Olgica
Subject: RE: Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers-EON-323515-323519

I think testing is worth pursuing. Oddball question:

B5

I was thinking of the **B5** and was thinking of

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This would highly unlikely, but wanted to put it out there.

David Rotstein, DVM, MPVM, Dipl.ACVP
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From: Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov>
Date: July 13, 2017 at 2:44:24 PM EDT
To: Palmer, Lee Anne <LeeAnne.Palmer@fda.hhs.gov>, Rotstein, David <David.Rotstein@fda.hhs.gov>, Reimschuessel, Renate <Renate.Reimschuessel@fda.hhs.gov>, Queen, Jackie L <Jackie.Queen@fda.hhs.gov>, Carey, Lauren <Lauren.Carey@fda.hhs.gov>
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B6

B6

Rads

B6

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Echo **B6** dcm vs. myocarditis vs pacing induce vs. other (severely dilated & hypocontractile left & right ventricles, severely dilated left and right atria)

Necropsy: Lung-severe diffuse alveolar injury with marked fibrin deposition (hyaline) and marked alveolar histiocytosis and multifocal type II pneumocyte hyperplasia; mod to marked diffuse pulmonary edema; mild cardiomegaly with mild mitral valve endocardiosis and mild left ventricular hypertrophy and left atrial dilation; thorax with mild pleural effusion; Suspect primary non-cardiogenic etiology but if clinical cardiac dysfunction then functional cardiac abnormalities cannot be ruled out

Prior MHx **B6**

B6

B6

ECG: left ventricular enlargement suggested

B6

B6

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B5

B5

Jennifer Jones, DVM
Veterinary Medical Officer



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Jen,

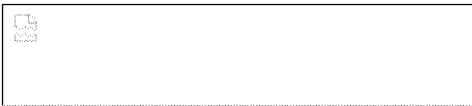
B5

so I don't think that could be ruled out.

I do like the exploration of other causes.

d.

David Rotstein, DVM, MPVM, Dipl. ACVP
CVM Vet-LIRN Liaison
CVM OSC/DC/CERT
7519 Standish Place, RM 120
240-402-5613 (Office) (NEW NUMBER)
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Yes, and also, vet talked to MARS who said there was no corn in this food... but that doesn't rule out treats.

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B5

B5

Jennifer Jones, DVM
 Veterinary Medical Officer



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Subject: RE: Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers

Davis may be able to screen for **B5**

Renate Reimschuessel V.M.D. Ph.D. Vet-LIRN
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Dogs were eating California Naturals (different bag than from 2/2017) and treats (Milo's Kitchen); Vet has samples of food and treats

Jennifer L. A. Jones, DVM

Veterinary Medical Officer
U.S. Food & Drug Administration
Center for Veterinary Medicine
Office of Research
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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>



From: Rotstein, David </O=FDA/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=DAVID.ROTSTEIN>
To: Jones, Jennifer L; Palmer, Lee Anne; Queen, Jackie L; Carey, Lauren
CC: Ceric, Olgica; Nemser, Sarah; Reimschuessel, Renate
Sent: 1/11/2018 3:05:21 PM
Subject: RE: 800.218-Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers-EON-323515-323519
Attachments: 1925740_1662_Bossart_Cardiomyopathy.pdf; Kogia [B5] 1-s2.0-S0045653512006728-main.pdf; Kogia [B5] -s2.0-S0946672X16302577-main.pdf

Here you go!

I couldn't get the original article:

J Am Vet Med Assoc. 1985 Dec 1;187(11):1137-40.

Cardiomyopathy in stranded pygmy and dwarf sperm whales.

Bossart GD, Odell DK, Altman NH.

Abstract

Necropsy and histologic examinations were performed in 23 pygmy sperm whales (*Kogia breviceps*) and 6 dwarf sperm whales (*Kogia simus*) that had been stranded singly or in cow-calf pairs along the southeastern coastline of the United States. At necropsy, the gross findings in the adult whales included pale, flabby right ventricles. Microscopically, lesions in the hearts of the whales were characterized by moderate to extensive myocellular degeneration, atrophy, and fibrosis. Similar changes were not seen in 5 of 6 sexually immature whales or in the whale calves. Hepatic changes were consistent with heart failure. The cause of the myocardial lesions was not determined. The systemic effects of failing myocardium probably were a major reason for the stranding of the adult whales.

David Rotstein, DVM, MPVM, Dipl. ACVP
CVM Vet-LIRN Liaison
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Jennifer Jones, DVM
Veterinary Medical Officer
Tel: 240-402-5421



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Subject: RE: 800.218-Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers-EON-323515-323519

Thanks Jen.

B5

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From: Jones, Jennifer L

Sent: Thursday, January 11, 2018 9:36 AM

To: Rotstein, David <David.Rotstein@fda.hhs.gov>; Palmer, Lee Anne <LeeAnne.Palmer@fda.hhs.gov>; Queen, Jackie L <Jackie.Queen@fda.hhs.gov>; Carey, Lauren <Lauren.Carey@fda.hhs.gov>

Cc: Ceric, Olgica <Olgica.Ceric@fda.hhs.gov>; Nemser, Sarah <Sarah.Nemser@fda.hhs.gov>; Reimschuessel, Renate <Renate.Reimschuessel@fda.hhs.gov>

Subject: RE: 800.218-Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers-EON-323515-323519

FYI-

JJ-Vet emailed-“ As additional information, one of our cardiologist colleagues in **B6** posted a question about

this association today on our list serve. She has seen 4 cases of DCM in dogs eating kangaroo and lentil (I assume CN but not sure) in the last year - 2 were housemates but related.”

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



From: Jones, Jennifer L

Sent: Wednesday, January 03, 2018 2:32 PM

To: Rotstein, David <David.Rotstein@fda.hhs.gov>; Palmer, Lee Anne <LeeAnne.Palmer@fda.hhs.gov>; Queen, Jackie L <Jackie.Queen@fda.hhs.gov>; Carey, Lauren <Lauren.Carey@fda.hhs.gov>

Cc: Ceric, Olgica <Olgica.Ceric@fda.hhs.gov>; Nemser, Sarah <Sarah.Nemser@fda.hhs.gov>;

'Reimschuessel, Renate (Renate.Reimschuessel@fda.hhs.gov)' <Renate.Reimschuessel@fda.hhs.gov>

Subject: RE: 800.218-Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers-EON-323515-323519

Going to test the leftover food for B5 based on our discussion during the PFO meeting today. I asked the vet if any dogs tested (blood/tissue) for B5

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



From: Rotstein, David

Sent: Tuesday, August 22, 2017 8:39 AM

To: Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov>; Palmer, Lee Anne <LeeAnne.Palmer@fda.hhs.gov>; Reimschuessel, Renate <Renate.Reimschuessel@fda.hhs.gov>; Queen, Jackie L <Jackie.Queen@fda.hhs.gov>; Carey, Lauren <Lauren.Carey@fda.hhs.gov>

Cc: Ceric, Olgica <Olgica.Ceric@fda.hhs.gov>

Subject: RE: 800.218-Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers-EON-323515-323519

Agreed. Thanks Jen

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: Jones, Jennifer L

Sent: Tuesday, August 22, 2017 8:37 AM

To: Rotstein, David; Palmer, Lee Anne; Reimschuessel, Renate; Queen, Jackie L; Carey, Lauren

Cc: Ceric, Olgica

Subject: RE: 800.218-Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers-EON-323515-323519

BLUF: **Final Conclusion:** The cause of the two dogs' DCM is unclear. The bloodwork for these dogs showed normal taurine and [B5] levels. Based on the dogs' blood taurine [B5] levels and the dry dog food test results, it is unlikely that [B5] taurine, or [B5] caused the dogs' illness.

B5

Final Conclusion: The cause of the two dogs' DCM is unclear. The bloodwork for these dogs showed normal taurine and [B5] levels. Based on the dogs' blood taurine [B5] levels and the dry dog food test results, it is unlikely that [B5] taurine, or [B5] caused the dogs' illness.

Jennifer Jones, DVM
Veterinary Medical Officer



From: Jones, Jennifer L
Sent: Monday, August 07, 2017 7:02 AM
To: Rotstein, David; Palmer, Lee Anne; Reimschuessel, Renate; Queen, Jackie L; Carey, Lauren
Cc: Ceric, Olgica
Subject: RE: 800.218-Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers-EON-323515-323519

FYI-Taurine [B5] still pending, but [B5] negative.

Jennifer Jones, DVM
Veterinary Medical Officer



From: Jones, Jennifer L
Sent: Thursday, July 27, 2017 7:25 AM
To: Rotstein, David; Palmer, Lee Anne; Reimschuessel, Renate; Queen, Jackie L; Carey, Lauren
Cc: Ceric, Olgica
Subject: RE: Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers-EON-323515-323519

We received the food and plan to test for [B5]. The vet also mentioned two items of interest:

1. She's treated 2 other dogs in last 2 weeks with DCM/CHF and being fed California Natural food. That brings us to 4 DCM dogs recently eating this food.
 - a. We can consider taurine and other types of testing?

[B5]

Thoughts from the group?

Jennifer Jones, DVM
Veterinary Medical Officer



From: Jones, Jennifer L
Sent: Tuesday, July 18, 2017 8:18 AM
To: Rotstein, David; Palmer, Lee Anne; Reimschuessel, Renate; Queen, Jackie L; Carey, Lauren
Cc: Ceric, Olgica
Subject: RE: Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers-EON-323515-323519

Ok, thanks, Dave. I'll check [B5]

Jennifer Jones, DVM
Veterinary Medical Officer



From: Rotstein, David
Sent: Thursday, July 13, 2017 2:54 PM
To: Jones, Jennifer L; Palmer, Lee Anne; Reimschuessel, Renate; Queen, Jackie L; Carey, Lauren
Cc: Ceric, Olgica
Subject: RE: Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers-EON-323515-323519

I think testing is worth pursuing. Oddball question

B5

I was thinking of the

B6

and was thinking of

B6

This would highly unlikely, but wanted to put it out there.

David Rotstein, DVM, MPVM, Dipl.ACVP
CVM Vet-LIRN Liaison
CVM OSC/DC/CERT
7519 Standish Place

B6

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From: Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov>

Date: July 13, 2017 at 2:44:24 PM EDT

To: Palmer, Lee Anne <LeeAnne.Palmer@fda.hhs.gov>, Rotstein, David <David.Rotstein@fda.hhs.gov>, Reimschuessel, Renate <Renate.Reimschuessel@fda.hhs.gov>, Queen, Jackie L <Jackie.Queen@fda.hhs.gov>, Carey, Lauren <Lauren.Carey@fda.hhs.gov>

Cc: Ceric, Olgica <Olgica.Ceric@fda.hhs.gov>

Subject: RE: Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers-EON-323515-323519

We could test for B5 in food, what does the group think? Any additional testing? Is it worth testing the B5

Medical Record Review:

B6

Presenting complaint

B6

B6

PE

B6

B6

Labwork:

B6

B6

ECG: suspected atrial tachycardia

Rads **B6** concern for aspiration pneumonia

B6 cardiomegaly, severe diffuse mixed interstitial to alveolar pattern most severe caudo-dorsally, hepatomegaly, dec abdominal serosal contrast

B6 severe generalized cardiomegaly with biventricular heart failure, improved vs rDVM rads
B6 worsening cardiogenic pulmonary edema, cannot exclude lung induced injury
+/- pneumonia

B6 post ultrafiltration, improved cardiogenic edema, hypovolemia, residual interstitial to patchy alveolar

B6 improved CHF with possible concern for bronchopneumonia, suspected hiatal hernia

B6 markedly progressive alveolar pattern with significantly worse cardiogenic edema

tFAST **B6** severe cardiomegaly with ventricular hypocontractility

Echo **B6** dcm vs. myocarditis vs pacing induce vs. other (severely dilated & hypocontractile left & right ventricles, severely dilated left and right atria)

Necropsy: Lung-severe diffuse alveolar injury with marked fibrin deposition (hyaline) and marked alveolar histiocytosis and multifocal type II pneumocyte hyperplasia; mod to marked diffuse pulmonary edema; mild cardiomegaly with mild mitral valve endocardiosis and mild left ventricular hypertrophy and left atrial dilation; thorax with mild pleural effusion; Suspect primary non-cardiogenic etiology but if clinical cardiac dysfunction then functional cardiac abnormalities cannot be ruled out

Prior MHx: B6 B6

B6

Presented B6

B6

B6

Labs: **B6**

ECG: left ventricular enlargement suggested

B6

B6 Rads: left sided congestive heart failure

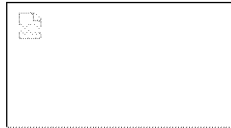
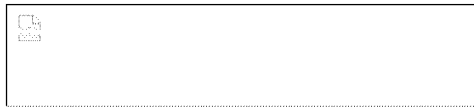
B6 moderate left sided cardiomegaly without heart failure, moderate hepatomegaly

B6 Echo: mitral valve endocardiosis with left atrial enlargement and heart failure, decreased left ventricular systolic function, suspected DCM

B5

B5

Jennifer Jones, DVM
Veterinary Medical Officer



From: Rotstein, David
Sent: Tuesday, July 11, 2017 12:44 PM
To: Jones, Jennifer L; Reimschuessel, Renate; Palmer, Lee Anne; Carey, Lauren; Queen, Jackie L
Cc: Ceric, Olgica
Subject: RE: Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers

Jen,

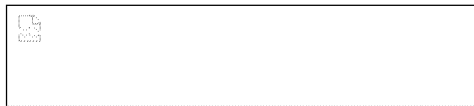
B5

so I don't think that could be ruled out.

I do like the exploration of other causes.

d.

David Rotstein, DVM, MPVM, Dipl. ACVP
CVM Vet-LIRN Liaison
CVM OSC/DC/CERT
7519 Standish Place, RM 120
240-402-5613 (Office) (NEW NUMBER)
240-506-6763 (BB)



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From: Jones, Jennifer L
Sent: Tuesday, July 11, 2017 12:41 PM
To: Reimschuessel, Renate; Rotstein, David; Palmer, Lee Anne; Carey, Lauren; Queen, Jackie L
Cc: Ceric, Olgica
Subject: RE: Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers

Yes, and also, vet talked to MARS who said there was no corn in this food...but that doesn't rule out treats.

I'm not sure with normal **B5** and taurine levels if we should suspect issues with those as well.

B5

B5

Jennifer Jones, DVM
Veterinary Medical Officer



From: Reimschuessel, Renate
Sent: Tuesday, July 11, 2017 11:51 AM
To: Jones, Jennifer L; Rotstein, David; Palmer, Lee Anne; Carey, Lauren; Queen, Jackie L
Cc: Ceric, Olgica
Subject: RE: Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers

Davis may be able to screen for **B5**

Renate Reimschuessel V.M.D. Ph.D. Vet-LIRN
Phone 1- 240-402-5404
Fax 301-210-4685
<http://www.fda.gov/AnimalVeterinary/ScienceResearch/ucm247334.htm>

From: Jones, Jennifer L
Sent: Tuesday, July 11, 2017 11:38 AM
To: Rotstein, David; Palmer, Lee Anne; Carey, Lauren; Queen, Jackie L
Cc: Ceric, Olgica; Reimschuessel, Renate
Subject: Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers

Vet will submit PFR online à
2 dogs-unrelated miniature schnauzers

Dog 1: 2 yr à presented 2/2017 with fulminant CHFà severe DCM on echo, taurine/carnitine normal, infectious disease testing negative, died on the ventilator, necropsy done-myocardial changes were subtle but could be similar to moldy corn toxicity in pigsà plasma, urine, serum, and myocardial tissue available

Dog 2: 7 yr, had a syncopal episode ~2/2017 but presented to vet for progressive frequency of syncopal episodesà 6/2017 for CHF, diagnosed with DCM similar to housemate, nearly same image on Echo, taurine/carnitine normal, infectious disease testing negative, they have changed the diet (Hill's) and dog is responding to treatment; plasma, urine, and serum available

Dogs were eating California Naturals (different bag than from 2/2017) and treats (Milo's Kitchen); Vet

has samples of food and treats

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>



From: Jones, Jennifer L </O=FDA/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=JENNIFER.JONESAA8>
To: Darcy Adin
CC: Ceric, Olgica; Nemser, Sarah
Sent: 1/12/2018 1:01:50 PM
Subject: RE: dog food concern
Attachments: 1925740_1662_Bossart_Cardiomyopathy.pdf; Kogia selenium 2 1-s2.0-S0045653512006728-main.pdf; Kogia selenium-1-s2.0-S0946672X16302577-main.pdf

Thank you, Darcy.

B5

B5

I'll forward the feed results when they are back.

Have a nice weekend,
Jen

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



From: Darcy Adin [mailto:dbadin@ncsu.edu]
Sent: Wednesday, January 10, 2018 6:13 PM
To: Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov>
Cc: Ceric, Olgica <Olgica.Ceric@fda.hhs.gov>; Nemser, Sarah <Sarah.Nemser@fda.hhs.gov>
Subject: Re: dog food concern

Thank you Jennifer - we will be on the lookout for it.

As additional information, one of our cardiologist colleagues in [B6] posted a question about this association today on our list serve. She has seen 4 cases of DCM in dogs eating kangaroo and lentil (I assume CN but not sure) in the last year - 2 were housemates but related.

Take care
Darcy

On Jan 10, 2018, at 8:05 AM, Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov> wrote:

Thank you, Darcy. We're sending the kit this week. It should arrive by close of business Friday.

Jennifer Jones, DVM
Veterinary Medical Officer
Tel: 240-402-5421
<image001.png> <image006.png>

From: Darcy Adin [mailto:dbadin@ncsu.edu]
Sent: Tuesday, January 09, 2018 11:27 AM
To: Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov>
Cc: Ceric, Olgica <Olgica.Ceric@fda.hhs.gov>; Nemser, Sarah <Sarah.Nemser@fda.hhs.gov>
Subject: Re: dog food concern

Hi Jennifer,

That is great! I've attached a picture of the food sample - the weight is 0.36 kg. We sent blood samples off from 2 dogs to test for **B5** one was in the reference range and the other a bit high.

Thank you!
Take care
Darcy

On Tue, Jan 9, 2018 at 10:07 AM, Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov> wrote:
Good morning Darcy,

We'd like to collect some of the food from your current case (California Naturals Kangaroo). I'm going to send it with the archived sample of food from the **B6** case. **B5**

B5

Please let me know the size/weight of the sample you have, and I'll send a box to collect it.

Thank you,
Jen

Jennifer Jones, DVM
Veterinary Medical Officer
Tel: [240-402-5421](tel:240-402-5421)
<[image001.png](#)> <[image003.png](#)>

From: Darcy Adin [<mailto:dbadin@ncsu.edu>]
Sent: Thursday, January 04, 2018 2:47 PM

To: Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov>
Cc: Ceric, Olgica <Olgica.Ceric@fda.hhs.gov>; Nemser, Sarah <Sarah.Nemser@fda.hhs.gov>
Subject: Re: dog food concern

I also have a food sample for our current inpatient (same food - California Naturals kangaroo and lentil). **B5**

B5

On Thu, Jan 4, 2018 at 2:39 PM, Darcy Adin <dbadin@ncsu.edu> wrote:
The myocardium is from **B6** Maybe we will wait to see what the blood levels show.

B5

Thanks!
Darcy

On Thu, Jan 4, 2018 at 2:14 PM, Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov> wrote:

Thank you for the update. I'll let you know the [B5] concentration from [B6] food after the results are back.

The frozen myocardium, is it from the [B6] case?

Jennifer Jones, DVM
Veterinary Medical Officer
Tel: 240-402-5421
<image001.png> <image004.png>

From: Darcy Adin [mailto:dbadin@ncsu.edu]
Sent: Wednesday, January 03, 2018 3:10 PM
To: Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov>
Cc: Ceric, Olgica <Olgica.Ceric@fda.hhs.gov>; Nemser, Sarah <Sarah.Nemser@fda.hhs.gov>
Subject: Re: dog food concern

Hi Jennifer,

Thank you! We have not tested for [B5] in any of the dogs. We have stored blood samples from several dogs and have an inpatient right now that we can submit blood from [B4] runs this). We will probably start with looking at blood samples from 2 dogs as a screening. We also have frozen myocardium from one dog - do you think this should also be evaluated?

Thank you!
Darcy

On Wed, Jan 3, 2018 at 2:30 PM, Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov> wrote:

Good afternoon Darcy,
Happy New Year! Thank you for the additional information. I discussed the information you provided below and from the previous case [B6] (Miniature Schnauzers-800.218) with my colleagues.

Based on our discussions, I will test some leftover food from the 800.218 case, for [B5] content. Have any of the dogs with DCM had blood or tissue [B5] levels tested?

Thank you kindly,
Jen

Jennifer Jones, DVM
Veterinary Medical Officer
Tel: 240-402-5421
<image001.png> <image005.png>

From: Darcy Adin [mailto:dbadin@ncsu.edu]
Sent: Wednesday, January 03, 2018 11:31 AM
To: Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov>
Subject: dog food concern

Hi Dr. Jones,

I'm hoping that you recall our communications over the summer regarding food testing for unrelated housemate dogs that developed DCM. These dogs were eating California Naturals Kangaroo and Lentil diet and we were not able to identify a cause of the DCM, dietary or infectious or toxic.

I wanted to reach out again because we continue to see DCM in non-genetically predisposed breeds and it seems

that this diet is a relatively common theme. We have been increasingly better about recording a diet history in dogs that are presented to cardiology or ER at our hospital with DCM in the last 6 months. Most of the dogs have been tested for taurine and carnitine deficiency and have been within the reference range. About half of them are alive and half died close to the time of diagnosis.

I also searched our records for this diet (knowing that recording of diet in the MR history has been spotty at best) and found another pair of unrelated housemate dogs eating California naturals kangaroo and lentil that were diagnosed with DCM 6 months apart.

We will continue to record the cases we see but since last june we have seen 7 dogs eating California Naturals diet (5 kangaroo and lentil) in addition to the pair of housemates from 2016 (so total of 9). We also have 4 dogs eating Acana (3/4 are dobermans though) and 1 each of 4Health and Iams - so maybe these are not necessarily related.

Have you had any other reports of such an association? If you have any other thoughts or testing suggestions, I would be all ears!

Thank you!
Darcy

--

Darcy B. Adin, DVM, DACVIM (Cardiology)
Clinical Assistant Professor of Cardiology
North Carolina State University
NC State Veterinary Hospital
1060 William Moore Drive
Raleigh, NC 27607
919-513-6032

--

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Clinical Assistant Professor of Cardiology
North Carolina State University
NC State Veterinary Hospital
1060 William Moore Drive
Raleigh, NC 27607
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Clinical Assistant Professor of Cardiology
North Carolina State University
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1060 William Moore Drive
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Darcy B. Adin, DVM, DACVIM (Cardiology)
Clinical Assistant Professor of Cardiology
North Carolina State University
NC State Veterinary Hospital
1060 William Moore Drive
Raleigh, NC 27607
919-513-6032

From: Guag, Jake </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=E13AD3C7A7C5484C80E1D9CF9D1A15DE-JGUAG>
To: dbadin@ncsu.edu
CC: Jones, Jennifer L
Sent: 1/17/2018 2:12:36 PM
Subject: FDA (Vet-LIRN) shipped sample collection kit

Dear Dr. Adin,

We shipped a food sample collection kit to your place this morning. Its tracking number is 1ZA4420T0194648732 with UPS. It is expected to arrive on tomorrow (Jan 18, 2018).

Thank you
Jake Guag

Jake Guag, MPH , CPH
Biologist
U.S. Food & Drug Administration
Center for Veterinary Medicine
Office of Research
Vet-LIRN
8401 Muirkirk Road.
Laurel, Maryland 20708
tel: 1-240-402-0917
email: Jake.Guag@fda.hhs.gov

From: Darcy Adin <dbadin@ncsu.edu>
To: Guag, Jake
CC: Jones, Jennifer L; B6
Sent: 1/17/2018 4:12:39 PM
Subject: Re: FDA (Vet-LIRN) shipped sample collection kit

Thank you! We will be on the lookout for it.

Take care

Darcy

On Wed, Jan 17, 2018 at 9:12 AM, Guag, Jake <Jake.Guag@fda.hhs.gov> wrote:

Dear Dr. Adin,

We shipped a food sample collection kit to your place this morning. Its tracking number is 1ZA4420T0194648732 with UPS. It is expected to arrive on tomorrow (Jan 18, 2018).

Thank you

Jake Guag

Jake Guag, MPH , CPH

Biologist

U.S. Food & Drug Administration

Center for Veterinary Medicine

Office of Research

Vet-LIRN

8401 Muirkirk Road.

Laurel, Maryland 20708

tel: 1-240-402-0917

email: Jake.Guag@fda.hhs.gov

--

Darcy B. Adin, DVM, DACVIM (Cardiology)
Clinical Assistant Professor of Cardiology
North Carolina State University
NC State Veterinary Hospital
1060 William Moore Drive
Raleigh, NC 27607
919-513-6032

From: Darcy Adin <dbadin@ncsu.edu>
To: Jones, Jennifer L; B6
Sent: 1/22/2018 4:24:22 PM
Subject: Re: dog food concern

Hi Jennifer,

The boxes have both arrived today. Apparently, the other one was delivered to a different location. Since they are prepaid boxes, I am going to send some other grain free food that an owner gave us as well. These will go out later today.

So, one box will have California Naturals Kangaroo and Lentil and the other box will have Fromm Large Breed Adult Grain free - they are labeled.

Thank you so much!
Darcy

On Wed, Jan 17, 2018 at 7:00 AM, Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov> wrote:

Yes, we can resend the kit. I'll forward the tracking information.

Jennifer Jones, DVM

Veterinary Medical Officer

Tel: [240-402-5421](tel:240-402-5421)



From: Darcy Adin [<mailto:dbadin@ncsu.edu>]
Sent: Tuesday, January 16, 2018 3:09 PM
To: Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov>

Subject: Re: dog food concern

Hi Jennifer,

Unfortunately it looks like it was delivered on thursday but we are not able to find it. Would it be possible to send another box? I am so sorry....

Thanks

Darcy

On Tue, Jan 16, 2018 at 11:27 AM, Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov> wrote:

Thank you, Darcy. Here is the tracking info:

UPS NEXT DAY AIR

TRACKING #: 1Z A44 20T 01 9190 2873

Jennifer Jones, DVM

Veterinary Medical Officer

Tel: 240-402-5421



From: Darcy Adin [mailto:dbadin@ncsu.edu]
Sent: Tuesday, January 16, 2018 11:18 AM
To: Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov>
Subject: Re: dog food concern

Thank you Jennifer! Very interesting...

We have not received the box - do you have a tracking number that we can look into? We have had some FedEx delays both friday and today.

Thank you!

Darcy

On Fri, Jan 12, 2018 at 8:01 AM, Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov> wrote:

Thank you, Darcy!

B5

B5

I'll forward the feed results when they are back.

Have a nice weekend,

Jen

Jennifer Jones, DVM

Veterinary Medical Officer

Tel: 240-402-5421



From: Darcy Adin [mailto:dbadin@ncsu.edu]
Sent: Wednesday, January 10, 2018 6:13 PM

To: Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov>
Cc: Ceric, Olgica <Olgica.Ceric@fda.hhs.gov>; Nemser, Sarah <Sarah.Nemser@fda.hhs.gov>
Subject: Re: dog food concern

Thank you Jennifer - we will be on the lookout for it.

As additional information, one of our cardiologist colleagues in [B6] posted a question about this association today on our list serve. She has seen 4 cases of DCM in dogs eating kangaroo and lentil (I assume CN but not sure) in the last year - 2 were housemates but related.

Take care

Darcy

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Tel: 240-402-5421

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Sent: Tuesday, January 09, 2018 11:27 AM
To: Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov>
Cc: Ceric, Olgica <Olgica.Ceric@fda.hhs.gov>; Nemser, Sarah <Sarah.Nemser@fda.hhs.gov>
Subject: Re: dog food concern

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B5

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From: Darcy Adin <dbadin@ncsu.edu>
To: Jones, Jennifer L
CC: Ceric, Olgica; Nemser, Sarah
Sent: 1/23/2018 1:49:20 PM
Subject: Re: dog food concern

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Thank you, Darcy!

[REDACTED] B5

[REDACTED] B5

I'll forward the feed results when they are back.

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Thanks for chatting today Jennifer!

B5

B5

Do you have access to sales estimates for Grain free diets and California natural diets in particular? I am not able to find this on the web. All I can say is that CN does not come up as one of the "top" diets on websites that discuss Grain free benefits.

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To: Rotstein, David; Palmer, Lee Anne; Queen, Jackie L; Carey, Lauren
CC: Ceric, Olgica; Nemser, Sarah; Reimschuessel, Renate
Sent: 1/23/2018 6:59:39 PM
Subject: RE: 800.218-Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers-EON-323515-323519
Attachments: Re: dog food concern

B5

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Cc: Ceric, Olgica <Olgica.Ceric@fda.hhs.gov>; Nemser, Sarah <Sarah.Nemser@fda.hhs.gov>; 'Reimschuessel, Renate (Renate.Reimschuessel@fda.hhs.gov)' <Renate.Reimschuessel@fda.hhs.gov>
Subject: RE: 800.218-Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers-EON-323515-323519

Going to test the leftover food for [B5] based on our discussion during the PFO meeting today. I asked the vet if any dogs tested (blood/tissue) for [B5]

Jennifer Jones, DVM
Veterinary Medical Officer

Tel: 240-402-5421



From: Rotstein, David

Sent: Tuesday, August 22, 2017 8:39 AM

To: Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov>; Palmer, Lee Anne <LeeAnne.Palmer@fda.hhs.gov>; Reimschuessel, Renate <Renate.Reimschuessel@fda.hhs.gov>; Queen, Jackie L <Jackie.Queen@fda.hhs.gov>; Carey, Lauren <Lauren.Carey@fda.hhs.gov>

Cc: Ceric, Olgica <Olgica.Ceric@fda.hhs.gov>

Subject: RE: 800.218-Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers-EON-323515-323519

Agreed. Thanks Jen

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: Jones, Jennifer L

Sent: Tuesday, August 22, 2017 8:37 AM

To: Rotstein, David; Palmer, Lee Anne; Reimschuessel, Renate; Queen, Jackie L; Carey, Lauren

Cc: Ceric, Olgica

Subject: RE: 800.218-Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers-EON-323515-323519

BLUF: **Final Conclusion:** The cause of the two dogs' DCM is unclear. The bloodwork for these dogs showed normal taurine and **B5** levels. Based on the dogs' blood taurine **B5** levels and the dry dog food test results, it is unlikely that **B5** taurine, or **B5** caused the dogs' illness.

B5

B5

Final Conclusion: The cause of the two dogs' DCM is unclear. The bloodwork for these dogs showed normal taurine and [B5] levels. Based on the dogs' blood taurine [B5] levels and the dry dog food test results, it is unlikely that [B5] taurine, or [B5] caused the dogs' illness.

Jennifer Jones, DVM
Veterinary Medical Officer



From: Jones, Jennifer L
Sent: Monday, August 07, 2017 7:02 AM
To: Rotstein, David; Palmer, Lee Anne; Reimschuessel, Renate; Queen, Jackie L; Carey, Lauren
Cc: Ceric, Olgica
Subject: RE: 800.218-Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers-EON-323515-323519

FYI-Taurine/[B5] still pending, but [B5] negative.

Jennifer Jones, DVM
Veterinary Medical Officer



From: Jones, Jennifer L
Sent: Thursday, July 27, 2017 7:25 AM
To: Rotstein, David; Palmer, Lee Anne; Reimschuessel, Renate; Queen, Jackie L; Carey, Lauren
Cc: Ceric, Olgica
Subject: RE: Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers-EON-323515-323519

We received the food and plan to test for [B5]. The vet also mentioned two items of interest:

1. She's treated 2 other dogs in last 2 weeks with DCM/CHF and being fed California Natural food. That brings us to 4 DCM dogs recently eating this food.

a. We can consider taurine and other types of testing?

B5

Thoughts from the group?

Jennifer Jones, DVM
Veterinary Medical Officer



From: Jones, Jennifer L
Sent: Tuesday, July 18, 2017 8:18 AM
To: Rotstein, David; Palmer, Lee Anne; Reimschuessel, Renate; Queen, Jackie L; Carey, Lauren
Cc: Ceric, Olgica
Subject: RE: Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers-EON-323515-323519

Ok, thanks, Dave. I'll check with the vet if:

B5

Jennifer Jones, DVM
Veterinary Medical Officer



From: Rotstein, David
Sent: Thursday, July 13, 2017 2:54 PM
To: Jones, Jennifer L; Palmer, Lee Anne; Reimschuessel, Renate; Queen, Jackie L; Carey, Lauren
Cc: Ceric, Olgica
Subject: RE: Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers-EON-323515-323519

I think testing is worth pursuing. Oddball question, but

B5

I was thinking of the

B5

and was thinking of

B5

This would highly unlikely, but wanted to put it out there.

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

Date: July 13, 2017 at 2:44:24 PM EDT

To: Palmer, Lee Anne <LeeAnne.Palmer@fda.hhs.gov>, Rotstein, David <David.Rotstein@fda.hhs.gov>, Reimschuessel, Renate <Renate.Reimschuessel@fda.hhs.gov>, Queen, Jackie L <Jackie.Queen@fda.hhs.gov>, Carey, Lauren <Lauren.Carey@fda.hhs.gov>

Cc: Ceric, Olgica <Olgica.Ceric@fda.hhs.gov>

Subject: RE: Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers-EON-323515-323519

We could test for **B5** in food, what does the group think? Any additional testing? Is it worth testing the **B5**?

Medical Record Review:

B6

Presenting complaint

B6

B6

PE

B6

B6

Labwork:

B6

B6

B6

Rads B6 concern for aspiration pneumonia

B6 cardiomegaly, severe diffuse mixed interstitial to alveolar pattern most severe caudo-dorsally, hepatomegaly, dec abdominal serosal contrast

B6 severe generalized cardiomegaly with biventricular heart failure, improved vs rDVM rads
worsening cardiogenic pulmonary edema, cannot exclude lung induced injury +/- pneumonia

B6 post ultrafiltration, improved cardiogenic edema, hypovolemia, residual interstitial to patchy alveolar

B6 improved CHF with possible concern for bronchopneumonia, suspected hiatal hernia
markedly progressive alveolar pattern with significantly worse cardiogenic edema

tFAST B6 severe cardiomegaly with ventricular hypocontractility

Echo B6 dcm vs. myocarditis vs pacing induce vs. other (severely dilated & hypocontractile left & right ventricles, severely dilated left and right atria)

Necropsy: Lung-severe diffuse alveolar injury with marked fibrin deposition (hyaline) and marked alveolar histiocytosis and multifocal type II pneumocyte hyperplasia; mod to marked diffuse pulmonary edema; mild cardiomegaly with mild mitral valve endocardiosis and mild left ventricular hypertrophy and left atrial dilation; thorax with mild pleural effusion; Suspect primary non-cardiogenic etiology but if clinical cardiac dysfunction then functional cardiac abnormalities cannot be ruled out

Prior MHx B6
B6

B6

Presented B6

B6

B6

Labs:

B6

ECG: left ventricular enlargement suggested

B6

Rads: left sided congestive heart failure

B6 **B6** moderate left sided cardiomegaly without heart failure, moderate hepatomegaly

Echo: mitral valve endocardiosis with left atrial enlargement and heart failure, decreased left ventricular systolic function, suspected DCM

B5

Jennifer Jones, DVM
Veterinary Medical Officer



From: Rotstein, David

Sent: Tuesday, July 11, 2017 12:44 PM
To: Jones, Jennifer L; Reimschuessel, Renate; Palmer, Lee Anne; Carey, Lauren; Queen, Jackie L
Cc: Ceric, Olgica
Subject: RE: Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers

Jen,

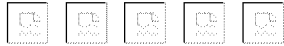
B5

so I don't think that could be ruled out.

I do like the exploration of other causes.

d.

David Rotstein, DVM, MPVM, Dipl. ACVP
CVM Vet-LIRN Liaison
CVM OSC/DC/CERT
7519 Standish Place, RM 120
240-402-5613 (Office) (NEW NUMBER)
240-506-6763 (BB)



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From: Jones, Jennifer L
Sent: Tuesday, July 11, 2017 12:41 PM
To: Reimschuessel, Renate; Rotstein, David; Palmer, Lee Anne; Carey, Lauren; Queen, Jackie L
Cc: Ceric, Olgica
Subject: RE: Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers

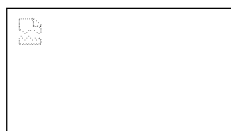
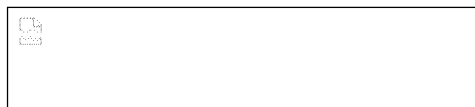
Yes, and also, vet talked to MARS who said there was no corn in this food... but that doesn't rule out treats.

I'm not sure with normal: **B5** and taurine levels if we should suspect issues with those as well.

B5

B5

Jennifer Jones, DVM
Veterinary Medical Officer



From: Reimschuessel, Renate
Sent: Tuesday, July 11, 2017 11:51 AM

To: Jones, Jennifer L; Rotstein, David; Palmer, Lee Anne; Carey, Lauren; Queen, Jackie L
Cc: Ceric, Olgica
Subject: RE: Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers

Davis may be able to screen fo: B5

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

Phone 1- 240-402-5404

Fax 301-210-4685

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

From: Jones, Jennifer L
Sent: Tuesday, July 11, 2017 11:38 AM
To: Rotstein, David; Palmer, Lee Anne; Carey, Lauren; Queen, Jackie L
Cc: Ceric, Olgica; Reimschuessel, Renate
Subject: Head's up-potential DCM case-Dr. Adin-NCSU-2 Schnauzers

Vet will submit PFR online à
2 dogs-unrelated miniature schnauzers

Dog 1: 2 yr à presented 2/2017 with fulminant CHFà severe DCM on echo, taurine/carnitine normal, infectious disease testing negative, died on the ventilator, necropsy done-myocardial changes were subtle but could be similar to moldy corn toxicity in pigsà plasma, urine, serum, and myocardial tissue available

Dog 2: 7 yr, had a syncopal episode ~2/2017 but presented to vet for progressive frequency of syncopal episodesà 6/2017 for CHF, diagnosed with DCM similar to housemate, nearly same image on Echo, taurine/carnitine normal, infectious disease testing negative, they have changed the diet (Hill's) and dog is responding to treatment; plasma, urine, and serum available

Dogs were eating California Naturals (different bag than from 2/2017) and treats (Milo's Kitchen); Vet has samples of food and treats

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
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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>



From: Jones, Jennifer L </o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=0f6ca12eaa9348959a4cbb1e829af244-Jennifer.Jo>
To: 'Darcy Adin'
Sent: 2/2/2018 11:58:34 AM
Subject: RE: dog food concern

Good morning Darcy,
What is the flavor (e.g. chicken and lentil, etc.) for the Fromm Grain free food you submitted?
Thank you and have a nice weekend,
Jen

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



From: Jones, Jennifer L
Sent: Tuesday, January 23, 2018 1:58 PM
To: 'Darcy Adin' <dbadin@ncsu.edu>
Subject: RE: dog food concern

Thank you, Darcy! I'll share this with my team working on the case.

With regards to your question, I don't have access to any sales information. If you find anything online, I'd be interested to read it.

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



From: Darcy Adin [<mailto:dbadin@ncsu.edu>]
Sent: Tuesday, January 23, 2018 1:53 PM
To: Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov>
Cc: Ceric, Olgica <Olgica.Ceric@fda.hhs.gov>; Nemser, Sarah <Sarah.Nemser@fda.hhs.gov>
Subject: Re: dog food concern

Thanks for chatting today Jennifer!

B5

B5

B5

Do you have access to sales estimates for Grain free diets and California natural diets in particular? I am not able to find this on the web. All I can say is that CN does not come up as one of the "top" diets on websites that discuss Grain free benefits.

Thank you!
Darcy

On Tue, Jan 23, 2018 at 8:49 AM, Darcy Adin <dbadin@ncsu.edu> wrote:
Hi Jennifer,

I wondered if I could speak with you sometime today about the diets and some data we have compiled? My office is [919-513-6032](tel:919-513-6032) and my cell is [B6] Alternatively, we could email - just let me know!

Take care
Darcy

On Fri, Jan 12, 2018 at 8:01 AM, Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov> wrote:
Thank you, Darcy.

[B5]

[B5]

I'll forward the feed results when they are back.
Have a nice weekend,
Jen

Jennifer Jones, DVM
Veterinary Medical Officer
Tel: [240-402-5421](tel:240-402-5421)



From: Darcy Adin [<mailto:dbadin@ncsu.edu>]
Sent: Wednesday, January 10, 2018 6:13 PM

To: Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov>
Cc: Ceric, Olgica <Olgica.Ceric@fda.hhs.gov>; Nemser, Sarah <Sarah.Nemser@fda.hhs.gov>
Subject: Re: dog food concern

Thank you Jennifer - we will be on the lookout for it.

As additional information, one of our cardiologist colleagues in [B6] posted a question about this association today on our list serve. She has seen 4 cases of DCM in dogs eating kangaroo and lentil (I assume CN but not sure) in the last year - 2 were housemates but related.

Take care
Darcy

On Jan 10, 2018, at 8:05 AM, Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov> wrote:

Thank you, Darcy. We're sending the kit this week. It should arrive by close of business Friday.

Jennifer Jones, DVM
Veterinary Medical Officer
Tel: 240-402-5421
<[image001.png](#)> <[image006.png](#)>

From: Darcy Adin [<mailto:dbadin@ncsu.edu>]
Sent: Tuesday, January 09, 2018 11:27 AM
To: Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov>
Cc: Ceric, Olgica <Olgica.Ceric@fda.hhs.gov>; Nemser, Sarah <Sarah.Nemser@fda.hhs.gov>
Subject: Re: dog food concern

Hi Jennifer,

That is great! I've attached a picture of the food sample - the weight is 0.36 kg. We sent blood samples off from 2 dogs to test for B5 one was in the reference range and the other a bit high.

Thank you!
Take care
Darcy

On Tue, Jan 9, 2018 at 10:07 AM, Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov> wrote:
Good morning Darcy,

We'd like to collect some of the food from your current case (California Naturals Kangaroo). I'm going to send it with the archived sample of food from the B6 case. B5

B5

Please let me know the size/weight of the sample you have, and I'll send a box to collect it.

Thank you,
Jen

Jennifer Jones, DVM
Veterinary Medical Officer
Tel: 240-402-5421
<[image001.png](#)> <[image003.png](#)>

From: Darcy Adin [<mailto:dbadin@ncsu.edu>]
Sent: Thursday, January 04, 2018 2:47 PM
To: Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov>
Cc: Ceric, Olgica <Olgica.Ceric@fda.hhs.gov>; Nemser, Sarah <Sarah.Nemser@fda.hhs.gov>
Subject: Re: dog food concern

I also have a food sample for our current inpatient (same food - California Naturals kangaroo and lentil)

B5

B5

On Thu, Jan 4, 2018 at 2:39 PM, Darcy Adin <dbadin@ncsu.edu> wrote:

The myocardium is from **B6** Maybe we will wait to see what the blood levels show.

B5

Thanks!

Darcy

On Thu, Jan 4, 2018 at 2:14 PM, Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov> wrote:

Thank you for the update. I'll let you know the **B5** concentration from **B6** food after the results are back.

The frozen myocardium, is it from the **B6** case?

Jennifer Jones, DVM

Veterinary Medical Officer

Tel: 240-402-5421

<[image001.png](#)> <[image004.png](#)>

From: Darcy Adin [<mailto:dbadin@ncsu.edu>]

Sent: Wednesday, January 03, 2018 3:10 PM

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

Cc: Ceric, Olgica <Olgica.Ceric@fda.hhs.gov>; Nemser, Sarah <Sarah.Nemser@fda.hhs.gov>

Subject: Re: dog food concern

Hi Jennifer,

Thank you! We have not tested for **B5** in any of the dogs. We have stored blood samples from several dogs and have an inpatient right now that we can submit blood from **B4** runs this). We will probably start with looking at blood samples from 2 dogs as a screening. We also have frozen myocardium from one dog - do you think this should also be evaluated?

Thank you!

Darcy

On Wed, Jan 3, 2018 at 2:30 PM, Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov> wrote:

Good afternoon Darcy,

Happy New Year! Thank you for the additional information. I discussed the information you provided below and from the previous case **B6** Miniature Schnauzers-800.218) with my colleagues.

Based on our discussions, I will test some leftover food from the 800.218 case, for **B5** content. Have any of the dogs with DCM had blood or tissue **B5** levels tested?

Thank you kindly,

Jen

Jennifer Jones, DVM

Veterinary Medical Officer

Tel: [240-402-5421](tel:240-402-5421)

[<image001.png>](#) [<image005.png>](#)

From: Darcy Adin [<mailto:dbadin@ncsu.edu>]
Sent: Wednesday, January 03, 2018 11:31 AM
To: Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov>
Subject: dog food concern

Hi Dr. Jones,

I'm hoping that you recall our communications over the summer regarding food testing for unrelated housemate dogs that developed DCM. These dogs were eating California Naturals Kangaroo and Lentil diet and we were not able to identify a cause of the DCM, dietary or infectious or toxic.

I wanted to reach out again because we continue to see DCM in non-genetically predisposed breeds and it seems that this diet is a relatively common theme. We have been increasingly better about recording a diet history in dogs that are presented to cardiology or ER at our hospital with DCM in the last 6 months. Most of the dogs have been tested for taurine and carnitine deficiency and have been within the reference range. About half of them are alive and half died close to the time of diagnosis.

I also searched our records for this diet (knowing that recording of diet in the MR history has been spotty at best) and found another pair of unrelated housemate dogs eating California naturals kangaroo and lentil that were diagnosed with DCM 6 months apart.

We will continue to record the cases we see but since last june we have seen 7 dogs eating California Naturals diet (5 kangaroo and lentil) in addition to the pair of housemates from 2016 (so total of 9). We also have 4 dogs eating Acana (3/4 are dobermans though) and 1 each of 4Health and Iams - so maybe these are not necessarily related.

Have you had any other reports of such an association? If you have any other thoughts or testing suggestions, I would be all ears!

Thank you!
Darcy

--

Darcy B. Adin, DVM, DACVIM (Cardiology)
Clinical Assistant Professor of Cardiology
North Carolina State University
NC State Veterinary Hospital
[1060 William Moore Drive](#)
[Raleigh, NC 27607](#)
[919-513-6032](tel:919-513-6032)

--

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Darcy B. Adin, DVM, DACVIM (Cardiology)
Clinical Assistant Professor of Cardiology
North Carolina State University
NC State Veterinary Hospital
1060 William Moore Drive
Raleigh, NC 27607
919-513-6032

From: Freeman, Lisa <Lisa.Freeman@tufts.edu>
To: Jones, Jennifer L
Sent: 2/24/2019 8:28:16 PM
Subject: RE: [REDACTED] B6
Attachments: rpt_medical_record_preview small.pdf

Hi Jen
Sorry for the delay – got very backed up with cases.

[REDACTED] B6 case number was

Your initial Pet Food Safety Report , Submitted by: Lisa Freeman, ID 238367, was successfully submitted on 7/9/2018 8:43:16 AM EST to the FDA, and it was issued an Individual Case Safety Report Number (ICSR) of 2051555.

I should have submitted all of his records before but am resending because you won't have had anything after July and it's not easy to separate
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

From: Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov>
Sent: Monday, January 28, 2019 10:02 AM
To: Freeman, Lisa <Lisa.Freeman@tufts.edu>
Subject: RE: [REDACTED] B6

Thank you for the update, Lisa. I'm sorry to hear that he passed away. Can you please forward the records for his case?

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



From: Freeman, Lisa <Lisa.Freeman@tufts.edu>
Sent: Sunday, December 30, 2018 3:13 PM
To: Jones, Jennifer L <Jennifer.Jones@fda.hhs.gov>
Subject: [REDACTED] B6

Hi Jen
Wanted to let you know that [REDACTED] B6 died unexpectedly [REDACTED] B6 Owner said he had been doing well and we were going to do a recheck in Feb.
So sad ☹️
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

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**

B6

Referring Information

B6

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

Initial Complaint:

Initial Complaint:

Client: B6
Patient: B6

Initial Complaint:

Initial Complaint:

Cardiology recheck

SOAP Text Jun 25 2014 10:30AM - B6

Initial Complaint:

Cardiology 1-2 Week Recheck ONLY

Initial Complaint:

Recheck - B6

SOAP Text Dec 31 2014 11:24AM - B6

Initial Complaint:

Recheck - B6

Initial Complaint:

Emergency

SOAP Text Jul 1 2015 9:50AM - B6

7/1/2015 9:55:46 AM EXAM, GENERAL

History:

B6 NM Boxer, is presented to B6 for progressive swelling in the past 3 days on the left side of his neck reagrdind his pacemaker site.

The owners were away in a hotel over the weekend, brought B6 with them but left him in alone in the hotel room for no more than 4 hours at a time. The owner's haven't noticed any trauma, contact with other dogs or excessive scratching that could explain today's swelling. Monday afternoon, it was noted then B6 pacemaker was slightly loose and could move a little bit under the skin. The following day (Tuesday) a swelling was noted over the pacemaker and it slowly progressed. The owner has tried warm

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

packing and cold packed once, but no significant improvement was noted. Also, the edema progressed to **B6** ventral neck and is more prominent today.

Otherwise than for the swelling, **B6** has been doing fine back home. He is still active, bright and alert. No collapse or syncopal episodes noted, no v/d/c/s. However, he refused to eat this morning which is highly unusual for him.

Past Pertinent Medical History:

- 3rd degree AV block diagnosed in 2013. Pacemaker placed in October 2013.
- Cardio recheck and Pacemaker interrogation last week: no abnormalities noted.

B6

Current medications:

B6

Subjective (S)

- BAR friendly
- MM pink and moist, CRT <2sec
- Euhydrated, BCS 6/9

Objective (O)

B6

H/L: Grade I-II/VI systolic left heart base murmur, no arrhythmia noted. **B6** ECG showed good pacing function, HR 80-100. Normal bronchovesicular sounds bilaterally, no crackles or weezes. Eupneic.

B6

Assessment (A)

- A1: Firm swelling around pacemaker site- r/o hematoma vs. abscess vs. inflammation vs. edema
- A2: History of 3rd degree AV block, pacemaker placed 10/2013. Under controlled

Plan (P)

P1: Cardiology consult

Owner's communication:

The swelling over **B6** pacemaker is definitely abnormal and should not be there. Good news is that is pacemaker is still working based on the ER EKG. However, would like him to be seen by the Cardiology department. Gave an estimate of **B6** Owner agreed.

Addendum: **B6** was seen by the Cardiology department who applied a bandage on the swelling. So far, no diagnostic test has been done regarding the source of the swelling but the goal right now is to stop the progression of the swelling. Because **B6** temperature is in the higher high limit of normal and because he refused to eat this morning, we would like to perform blood test (CBC + Chem 21) and start him on an antibiotic course. The bandage needs to be changed every 3 days at home and **B6** should be recheck by the cardio department in two weeks. At that time, depending on the progression of the swelling, it will be decided if the antibiotic course needs to continue or not and further investigation can me make regarding the origin of the swelling. Plan: **B6**

B6

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

B6

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

7/1/2015 10:57:11 AM

B6

7/1/2015 10:59:11 AM

Prescribed **B6** FHSA (1)

Instructions - Please apply 1/4 inch in both eyes three times a day for the next 5 to 7 days. - Expires: 6/30/2016 No Refills

Initial Complaint:

Recheck **B6**

Initial Complaint:

Recheck **B6**

Initial Complaint:

Recheck **B6** Only

SOAP Text Mar 14 2016 12:30PM **B6**

Initial Complaint:

Tech - Holter

Initial Complaint:

Recheck **B6** *COMING IN AT 1PM*

Client: [B6]
Patient: [B6]

Initial Complaint:

Recheck: [B6]

SOAP Text Mar 17 2017 9:28AM [B6]

Initial Complaint:

Recheck: [B6]

Initial Complaint:

Recheck: [B6]

SOAP Text [B5] 11:35AM [B6]

Initial Complaint:

Emergency

SOAP Text [B6] 3:28PM [B6]

DOA. O elects cremation with return. Pacemaker removed by [B6]

ID

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

Lab Results Report

Chemistry 21 (Cobas) **6/25/2014 12:22:00 PM** **Accession ID: B6**

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



7/213

B6

Printed Sunday, February 24, 2019

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

Chemistry 21 (Cobas) **6/25/2014 12:22:42 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

Chemistry 21 (Cobas) **7/1/2015 10:37:00 AM** **Accession ID: B6**

Test	Results	Reference Range	Units
HCT(ADVIA)	B6	39 - 55	%
RDW (ADVIA)		11.9 - 15.2	
PLT(ADVIA)		173 - 486	K/uL
MCHC(ADVIA)		31.9 - 34.3	g/dL
RBC(ADVIA)		5.8 - 8.5	M/uL
MPV (ADVIA)		8.29 - 13.2	fl
MCV(ADVIA)		64.5 - 77.5	fL
WBC (ADVIA)		4.4 - 15.1	K/uL
MCH(ADVIA)		21.3 - 25.9	pg
HGB(ADVIA)		13.3 - 20.5	g/dL

Chemistry 21 (Cobas) **7/1/2015 10:37:00 AM** **Accession ID: B6**

Test	Results	Reference Range	Units
SEGS (AB)ADVIA	B6	2.8 - 11.5	K/ul
POIKILOCYTOSIS		0 - 0	
L YMPHS%		7 - 47	%
MONOS (ABS)ADVIA		0.1 - 1.5	K/uL
SEGS%		43 - 86	%
L YMPHS (ABS)ADVIA		1 - 4.8	K/uL
MONOS%		1 - 15	%
WBC MORPHOLOGY		0 - 0	
No Morphologic Abnormalities			

Chemistry 21 (Cobas) **7/1/2015 10:49:00 AM** **Accession ID: B6**

Test	Results	Reference Range	Units
CALCIUM2	B6	9.4 - 11.3	mg/dL
ALBUMIN		2.8 - 4	g/dL
CHOLESTEROL		82 - 355	mg/dL
OSMOLALITY (CALCULATED)		291 - 315	mmol/L
CHLORIDE		106 - 116	mEq/L
ALK PHOS		12 - 127	U/L
POTASSIUM		3.7 - 5.4	mEq/L
NA/K		29 - 40	
T. PROTEIN		5.5 - 7.8	g/dL
A/G RATIO		0.7 - 1.6	



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

ALT	B6	14 - 86	U/L
SODIUM		140 - 150	mEq/L
GLUCOSE		67 - 135	mg/dL
PHOSPHORUS		2.6 - 7.2	mg/dL
CREATININE		0.6 - 2	mg/dL
AST		9 - 54	U/L
GLOBULINS		2.3 - 4.2	g/dL
UREA		8 - 30	mg/dL
I BILIRUBIN		0 - 0.2	mg/dL
D.BILIRUBIN		0 - 0.1	mg/dL
T BILIRUBIN	0.1 - 0.3	mg/dL	

Chemistry 21 (Cobas) **3/14/2016 12:32:11 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
RETIC(ADVIA)		0.2 - 1.6	%
RETICS (ABS) ADVIA		14.7 - 113.7	K/uL

Chemistry 21 (Cobas) **3/14/2016 12:32:25 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
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



Client: **B6**
 Patient:

iCO2 (BICARB)	B6	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

Chemistry 21 (Cobas) **3/14/2016 12:32:09 PM** **Accession ID: B6**

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

Chemistry 21 (Cobas) **6/20/2018 11:37:12 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
PLTCRT		0.129 - 0.403	%
RETIC(ADVIA)		0.2 - 1.6	%



10/213

B6

Printed Sunday, February 24, 2019

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

RETICS (ABS) ADVIA **B6** 14.7 - 113.7 K/uL

Chemistry 21 (Cobas) 6/20/2018 11:37:28 AM Accession ID: **B6**

Test	Results	Reference Range	Units
GLUCOSE		67 - 135	mg/dL
UREA		8 - 30	mg/dL
CREATININE		0.6 - 2	mg/dL
PHOSPHORUS		2.6 - 7.2	mg/dL
CALCIUM2		9.4 - 11.3	mg/dL
MAGNESIUM 2+		1.8 - 3	mEq/L
T. PROTEIN		5.5 - 7.8	g/dL
ALBUMIN		2.8 - 4	g/dL
GLOBULINS		2.3 - 4.2	g/dL
A/G RATIO		0.7 - 1.6	
SODIUM		140 - 150	mEq/L
CHLORIDE		106 - 116	mEq/L
POTASSIUM		3.7 - 5.4	mEq/L
iCO2 (BICARB)		14 - 28	mEq/L
AGAP	B6	8 - 19	
NA/K		29 - 40	
T BILIRUBIN		0.1 - 0.3	mg/dL
D.BILIRUBIN		0 - 0.1	mg/dL
I BILIRUBIN		0 - 0.2	mg/dL
ALK PHOS		12 - 127	U/L
GGT		0 - 10	U/L
ALT		14 - 86	U/L
AST		9 - 54	U/L
CK		22 - 422	U/L
CHOLESTEROL		82 - 355	mg/dL
TRIGLYCERIDES		30 - 338	mg/dl
AMYLASE		409 - 1250	U/L
OSMOLALITY (CALCULATED)		291 - 315	mmol/L
COMMENTS (CHEMISTRY)	Slight lipemia	0 - 0	

Chemistry 21 (Cobas) 6/20/2018 11:37:11 AM Accession ID: **B6**

Test	Results	Reference Range	Units
SEGS%		43 - 86	%
LYMPHS%		7 - 47	%
MONOS%		1 - 15	%
EOS%	B6	0 - 16	%
NRBC		0 - 1	/100 WBC
SEGS (AB)ADVIA		2.8 - 11.5	K/uL



Client:
Patient:

B6

LYMPHS (ABS)ADVIA	B6	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	
Occasional reactive lymphocytes			
CRENATION		0 - 0	
POIKILOCYTOSIS		Occasional	0 - 0



12/213

B6

Printed Sunday, February 24, 2019

Client:
Patient:

B6

Archived RDVM-

B6

10/01/2013 15:23
OCT-30-2006 22:13

B6

SWITCH BOARD

B6

B6

PAGE 01
P. 01/02



REFERRAL FORM

TUFTS UNIVERSITY
Cummings School of Veterinary Medicine
Henry and Lois Foster Hospital for Small Animals
Hospital for Large Animals
200 Westboro Road, Route 30
North Grafton, MA 01536
508-839-5395

5227632

FD

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

OWNER INFORMATION:

Name: **B6** Daytime Phone: **B6** Evening Phone() _____
Address: **B6** City: **B6** State: **B6** Zip Code: **B6**

PATIENT INFORMATION:

Registered Name/ID: **B6**
Species: Cat Breed: Boxer Sex: NM Age: **B6**

CASE HISTORY

Chief Concern/Provisional Diagnosis: **B6**

** Chem supports Diatom Leasing enteropathy **

Vaccination History: Attached

Other History: Did have mass removed from chest 3/29/13 (Histopath attached)

Diagnostic Test Results (if possible, please attach results): Bloodwork attached

Are Radiographs enclosed? _____

Current Therapy & Medication (include dosages): _____

Special Comments/Requests: Was scheduled for U/S here ^{for fall} suggested to go directly to Tufts **B6**

REFERRING VETERINARIAN INFORMATION

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

If an animal is being referred which has had lab work done at **B6** please include copies of the lab results or the **B6** accession number. If you are faxing us information about a clinical case which has been referred, please use fax number **B6**

** on the way to you **
Nau

Client: **B6**
Patient:

Archived **B6**

10/01/2013 15:23

B6

B6

PAGE 02

MEDICAL NOTE TEMPLATE INFORMATION

Patient: **B6**

Species: Canine

Breed: Boxer

Age: **B6**

Sex: Neutered Male

Weight: 57.5 pounds

Date: 10/01/2013

Staff: **B6**

Status: TENTATIVE

a SOAP

Enter Office Visit:

History: Last month o changed food, changed back to original food, stool was formed for first time in a long time today. Having some trouble eating, not interested at first, o has started by hand feeding to get him to eat the rest. Gagging like he wants to vomit or have hairball, nothing produces. Loosing weight, breathing irregularly, heart seems to beat out of chest. Was bit by o's aunt's dog two weeks ago. cp

S: BAR BCS=5/10

O: Temp: 98.5

Pulse: 55

Resp-32

Eyes: Normal conjunctiva, sclera, corneas, palpebrae

Ears: NSF

Nose/Throat: NSF

Mouth/Teeth: No tartar, No gingivitis.

M/M: Pink, crt <2, moist

Cardiovascular: No murmur, strong synchronous pulses.

Respiratory: Lungs clear bilaterally.

Abdomen: Soft, non-painful

PLN: NSF

Urogenital: NSF

Musculoskeletal: No lameness, no crepitous or pain in stifles, hocks, elbows, or carpi.

Nervous System: Normal CP, PLR, menace, palpebral reflex. No ataxia.

Skin/Hair Coat: No fleas or flea dirt, no lesions

A:DDX: Open, cardiac or electrolyte.

P: Start with CBC/ Chem, Bicavity US. Owner took dog home against medical advice. Chem supports protein loosing enteropathy. Electrolytes normal.

GI: NSF

B6

Page 1 of 1

Date: 10/01/2013 13:51

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

Archived RDVM- **B6**

10/01/2013 15:23

B6

PAGE 03

Detailed Lab Results

Patient: **B6** Patient: **B6** Sex: Neutered Male Age: **B6**
Client: **B6** Species: Canine Breed: Boxer Weight: 57.5 pounds

Lab ID: INCLINIC IDEXX VetLab In-clinic Laboratory
Template: Chemistry
Staff: **B6**
Status: Posted
Req ID: 7373 - Tuesday 10/1/2013 08:38:59

Test	Results	Reference Range	Low	Normal	High
ALB	B6	2.3 - 4	[]	B6	[]
ALKP		23 - 212			
ALT		H 10 - 100			
AMYL		500 - 1500			
BUN/UREA		7 - 27			
Ca		7.9 - 12			
Chloride		109 - 122			
CHOL		110 - 320			
CREA		0.5 - 1.8			
GGT		0 - 7			
GLU		74 - 143			
LIPA		200 - 1800			
PHOS		2.5 - 6.8			
Potassium		3.5 - 5.8			
Sodium		144 - 160			
TBIL		0 - 0.9			
TP		L 5.2 - 8.2			
GLOB		L 2.5 - 4.5			
ALB/GLOB					
BUN/CREA					
Na/K					
OSM calc					

Client: **B6**
Patient:

Archived RDVM: **B6**

10/01/2013 15:23

B6

PAGE 04

Detailed Lab Results

Patient: **B6** Patient: **B6** Sex: Neutered Male Age: **B6**
Client: **B6** Species: Canine Breed: Boxer Weight: 57.5 pounds

Lab ID: INCLINIC IDEXX VetLab In-clinic Laboratory
Template: Hematology
Staff: **B6**
Status: Posted
Req ID: 7373 - Tuesday 10/1/2013 08:22:40

Test	Results	Reference Range	Low	Normal	High
WBC	B6	5.5 - 16.9		B6	
HCT		37 - 55			
MCV		60 - 77			
RBC		5.5 - 8.5			
HGB		12 - 18			
MCH		18.5 - 30			
MCHC		30 - 37.5			
MPV					
PLT		175 - 500			
LYMPHS		0.5 - 4.9			
%LYMPHS					
MONOS		0.3 - 2			
%MONOS					
NEUT		2 - 12			
%NEUT					
EOS		0.1 - 1.49			
%EOS					
BASO		0 - 0.1			
%BASO					
Retics		10 - 110			
%Retics					
RDW	14.7 - 17.9				
PDW					
PCT					

Client: **B6**
Patient:

Archived RDVM- **B6**

10/01/2013 15:23

B6

PAGE 05

Detailed Lab Results

Patient: **B6** Patient: **B6** Sex: Neutered Male Age: 2 Yrs. 10 Mos
Client: **B6** Species: Canine Breed: Boxer Weight: 57.5 pounds

Lab ID: INCLINIC IDEXX VetLab In-clinic Laboratory

Template: Immunoassay

Staff: **B6**

Status: Posted

Req ID: 7373 - Tuesday 10/1/2013 08:42:40

Test	Results	Reference Range	Low	Normal	High
TT4	= 0.8 µg/dL				

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

Archived RDVM: **B6**

10/01/2013 15:23 **B6** PAGE 05

MEDICAL NOTE TEMPLATE INFORMATION

Patient: **B6**
Species: Canine Breed: Boxer
Age: **B6** Sex: Neutered Male Weight: 57.5 pounds
Date: Staff: **B6**
Status:

a SOAP

Enter Office Visit:

History: Exam] **B6**

B6

B6

Client:
Patient:

B6

Archived RDVM: **B6**

10/01/2013 15:23

B6

PAGE 07

B6 **B6**
Canine Boxer **B6** Neutered Male 69.5 pounds (3/29/2013)

B6

B6

3/29/2013 **B6** Comment
B6 - Closed - 4/1/2013

B6

1 of 1

10/1/13 2:13 PM

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

Archived RDVM- **B6**

10/01/2013 15:23

B6

PAGE 08

Detailed Lab Results

Patient: **B6** Patient: **B6** Sex: Neutered Male Age: **B6**
Client: **B6** Species: Canine Breed: Boxer Weight: 57.5 pounds

Lab ID: INCLINIC IDEXX VetLab In-clinic Laboratory

Template: Hematology

Staff: **B6**

Status: Posted

Req ID: 6222 - Friday

3/29/2013 08:27:59

Test	Results	Reference Range	Low	Normal	High
WBC	B6	5.5 - 16.9		B6	
HCT		37 - 55			
MCV		60 - 77			
RBC		5.5 - 8.5			
HGB		12 - 18			
MCH		18.5 - 30			
MCHC		30 - 37.5			
MPV					
PLT		175 - 500			
LYMPHS		0.5 - 4.9			
%LYMPHS					
MONOS		0.3 - 2			
%MONOS					
NEUT		2 - 12			
%NEUT					
EOS		0.1 - 1.49			
%EOS					
BASO		0 - 0.1			
%BASO					
Retics		10 - 110			
%Retics					
RDW	14.7 - 17.9				
PDW					
PCT					

Lab Comments: WBC Abnormal Distribution

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

Archived RDVM- **B6**

10/01/2013 15:2

B6

PAGE 09

Detailed Lab Results

Patient: **B6** Patient: **B6** Sex: Neutered Male Age: **B6**
Client: **B6** Species: Canine Breed: Boxer Weight: 57.5 pounds

Lab ID: INCLINIC IDEXX VetLab In-clinic Laboratory

Template: Chemistry

Staff: **B6**

Status: Posted

Req ID: 6222 - Friday

3/29/2013 08:35:19

Test	Results	Reference Range	Low	Normal	High
ALB	B6	2.3 - 4			
ALKP		23 - 212			
ALT		10 - 100			
BUN/UREA		7 - 27			
Chloride		H 109 - 122			
CREA		0.5 - 1.8			
GLU		74 - 143			
Potassium		3.5 - 5.8			
Sodium		144 - 180			
TP		5.2 - 8.2			
GLOB		2.5 - 4.5			
ALB/GLOB					
BUN/CREA					
Na/K					
OSM calc					

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

Archived RDVM- **B6**

10/01/2013 15:24 **B6**

PAGE 10

Detailed Lab Results

Patient: **B6** Patient: **B6** Sex: Neutered Male Age: **B6**
Client: **B6** Species: Canine Breed: Boxer Weight: 57.5 pounds

Lab ID: IDEXX IDEXX Reference Laboratory

Template: Miscellaneous

Staff: **B6**

Status: Posted

Req ID: 8188 - Friday

3/29/2013 12:22:00

Test	Results	Reference Range	Low	Normal	High
COMMENTS					
B6					

RE: 2007 PATHOLOGIST
PATHOLOGIST

B6

Client: **B6**
Patient:

Archived RDVM- **B6**

10/01/2013 15:23

B6

PAGE 11

Detailed Lab Results

Patient:	B6	Patient:	B6	Sex:	Neutered Male	Age:	B6
Client:	B6	Species:	Canine	Breed:	Boxer	Weight:	57.5 pounds

Lab ID: IDEXX IDEXX Reference Laboratory

Template: Miscellaneous

Staff: **B6**

Status: Posted

Req ID: 8188 - Friday

3/29/2013 12:22:00

Test	Results	Reference Range	Low	Normal	High
COMMENTS: COMMENTS					

B6

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

Archived RDVM- **B6**

10/01/2013 15:23

B6

PAGE 12

Reminder Letter Report Sorted by Client ID

Client ID	Client Name	Patient ID	Patient Name	Item ID/Description	Type	Date
-----------	-------------	------------	--------------	---------------------	------	------

B6

B6

Phone:

B6

B6

B6


B6

Page 1 of 1

Date: 10/1/2013

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

Archived Records 10/1/13-10/4/13 (PART ONE) & 10/11/13-2/7/14

 TUFTS UNIVERSITY Foster Hospital for Small Animals 200 Westboro Road North Grafton, MA 01536-1895 1-508-839-5395	Document Case Summary Copy To: MedRec Status: FINAL Finalized: by B6 on 2/7/2014
Client Information	Patient Information
Client#: Name: Address: City: Zip: Home#: Work#:	Case#: B6 Name: Species: CANINE Breed: BOXER Sex: CM DOB: B6 RVet: Harbor Animal Hospital 286 Maple Ave Barrington, RI 02806 (401) 245-9090

Dates	
Description	Date
Admission	2/7/2014
Discharge	2/7/2014

Veterinary Medical Team

Name	Title
John E. Rush, DVM, MS, DACVIM (Cardiology), DACVECC	Attending (Faculty) Clinician
B6	Senior Student

To the Referring Veterinarian

Dear **B6**:

Diagnoses

Final diagnoses : 3rd degree AV block with pacemaker implantation 10/13
Procedures : pacemaker interrogation, ECG
Recommendations : Recheck in 3 months for echocardiogram and resetting of pacemaker

Professional Report

Thank you for referring **B6** to Tufts Cardiology service. **B6** had his 3 month post pacemaker implantation recheck examination today. The owners report he is doing very well at home. The pacemaker is capturing well, but the battery life appears to be only about 5- 5 1/2 years, so we turned down the output slightly to try to prolong this. We will recheck this in 3 months, at which point we will also do a recheck echocardiogram to assess heart size, and hopefully turn down the output a bit more to prolong battery life further.

Client Report

Thank you for bringing **B6** to Tufts Cardiology service for his 3 month post pacemaker implantation recheck. We are glad to hear that **B6** has been doing very well at home. Today, we checked the output on his pacemaker, and found that it is working the way we would like it to, and that his heart is nearly 100% reliant on the pacemaker. While it is controlling his heart rate well, the projected battery life is about 5-5 1/2 years on his current settings. We lowered the output slightly to try to prolong the battery life. We would like to see **B6** back for a recheck exam to revisit the battery life as well as an echocardiogram (ultrasound of the heart) in 3 months. It is safe to use flea/tick preventative and heartworm preventative on **B6**. At this time, you can begin to slowly increase his level of exercise. Leashed runs and hikes are safe activities, but we recommend that you avoid excessive exercise and avoid jumping or fetching activities.

It was great to see **B6** again, he is such a good patient! If you have any further questions or concerns, please feel free to give us a call!

Patient Care Instructions

2/7/2014 3:49:20 PM

S227632/Case Summary/MedRec Copy

John E. Rush, DVM, MS,

Client:
Patient:

B6

Archived Records 10/1/13-10/4/13 (PART ONE) & 10/11/13-2/7/14

Client:
Patient:

B6

Archived Records 10/1/13-10/4/13 (PART ONE) & 10/11/13-2/7/14

S227632/Case Summary/MedRec Copy/LTURNE03

Page 2 of 2

Please continue to monitor **B6** for any signs of decreased heart rate including counting heart beats (we would like his heart rate to be at or a bit greater than 60 beats/min), weakness, collapse, or difficulty breathing. If you note any of these changes, please contact us immediately.

Follow Up Instructions

Please schedule a recheck appointment for a cardiac exam, pacemaker check and echocardiogram in 3 months.

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

2/7/2014 3:49:20 PM

S227632/Case Summary/MedRec Copy

John E. Rush, DVM, MS,

Client: **B6**
Patient:

Archived Records 10/1/13-10/4/13 (PART ONE) & 10/11/13-2/7/14

Client: **B6**
Patient:

Archived Records 10/1/13-10/4/13 (PART ONE) & 10/11/13-2/7/14



TUFTS UNIVERSITY
FOSTER HOSPITAL FOR SMALL ANIMALS
200 Westboro Rd.
N. Grafton, MA 01536
508-839-5395

B6

Date: 2/7/14 Problem: Recheck Clinician: Rush
Home Instructions:

Follow-up visits TUFTS-SAH Ref. Vet. Date _____ Reason _____
Owner to call Clinician: _____ Date _____ Reason _____

Medication Dispensed	Amount	Size	Instructions

History: fish oil, benadryl, melatonin
flex/flex + flea preventative OK to give
doing well at home, great appetite & energy level
only short leashed walks, no extensive running
kept activity low, free range around the house ->
doing well w/ this level of exercise - no weakness,
collapse, difficulty breathing

Physical Exam: Temp _____ Pulse 84 Resp. part Weight 60.2 lbs Body condition score (1-9) 5/9
SEARS: no ocular discharge
PLM: WNL grade II left systolic murmur
H/L: ~~WNL~~ N/R, pulses fair, no vascular distension, no
ecthymias, lungs clear bilaterally, HR=84, MM pink
GI: soft, non-painful, no masses/egedomegaly CRTS2
US: OK normal
MSL: ambulatory x4, no side looks good
neuro: mentally appropriate

Procedures Performed and Future Plan:

Client:
Patient:


B6

Archived Records 10/1/13-10/4/13 (PART ONE) & 10/11/13-2/7/14

B6

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

Archived Records 10/1/13-10/4/13 (PART ONE) & 10/11/13-2/7/14

 TUFTS UNIVERSITY Foster Hospital for Small Animals 200 Westboro Road North Grafton, MA 01536-1895 1-508-839-5395	Document Cardiology Report Copy To: MedRec Status: FINAL Finalized: by JRUSH01 on 2/8/2014			
	<table border="1"> <tr> <th>Client Information</th> <th>Patient Information</th> </tr> <tr> <td> Client#: Name: Address: City: Zip: Home#: Work#: </td> <td> Case#: Name: Species: CANINE Sex: CM Breed: BOXER DOB: RVet: </td> </tr> </table>	Client Information	Patient Information	Client#: Name: Address: City: Zip: Home#: Work#:
Client Information	Patient Information			
Client#: Name: Address: City: Zip: Home#: Work#:	Case#: Name: Species: CANINE Sex: CM Breed: BOXER DOB: RVet:			

Dates

Description	Date
Appointment	2/7/2014

Personnel

Name	Title
John E. Rush, DVM, MS, DACVIM (Cardiology), DACVECC	Attending (Faculty) Cardiologist
B6	Cardiology Technician

Case Abstract
 3rd degree AV block. Permanent pacemaker implanted October 2013.

Cardiology Findings

Type	Findings
Heart murmur	I-II/VI over mitral valve - intermittent
Transient heart sounds	Bruit de canon
Other auscultatory findings	Clear
Pulses	Good
Jugular veins	Okay
Mucous membranes	Pink
Abdomen	NSF
Echocardiogram	Not performed
ECG / rhythm	3rd degree AV block with paced rhythm
Miscellaneous	Captured down to 0.25 V. Changed output from 3.5 to 3.0V. Minimal evidence of rate responsive feature, tried to adjust.
Body condition score (9)	6
Heart rate (/min)	60 bpm

Assessment and Recommendations
 Third degree AV block and pacemaker implantation - Good pacemaker function with battery life of 5 to 5.5 years.

2/8/2014 9:51:52 AM

S227632/Cardiology Report/MedRec Copy

John E. Rush, DVM, MS,

Client: **B6**
Patient:

Archived Records 10/1/13-10/4/13 (PART ONE) & 10/11/13-2/7/14

Client:
Patient:

B6

S227632/Cardiology Report/MedRec Copy/JRUSH01

Page 2 of 2

Recommend recheck in 3 months to evaluate pacemaker function, battery life and rate responsiveness; likely also recheck echo then as heart was originally dilated.

Cardiology Conclusions

Type	Conclusion
Final diagnoses	Pacemaker implantation for 3rd degree AV block

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

2/8/2014 9:51:52 AM

S227632/Cardiology Report/MedRec Copy

John E. Rush, DVM, MS,

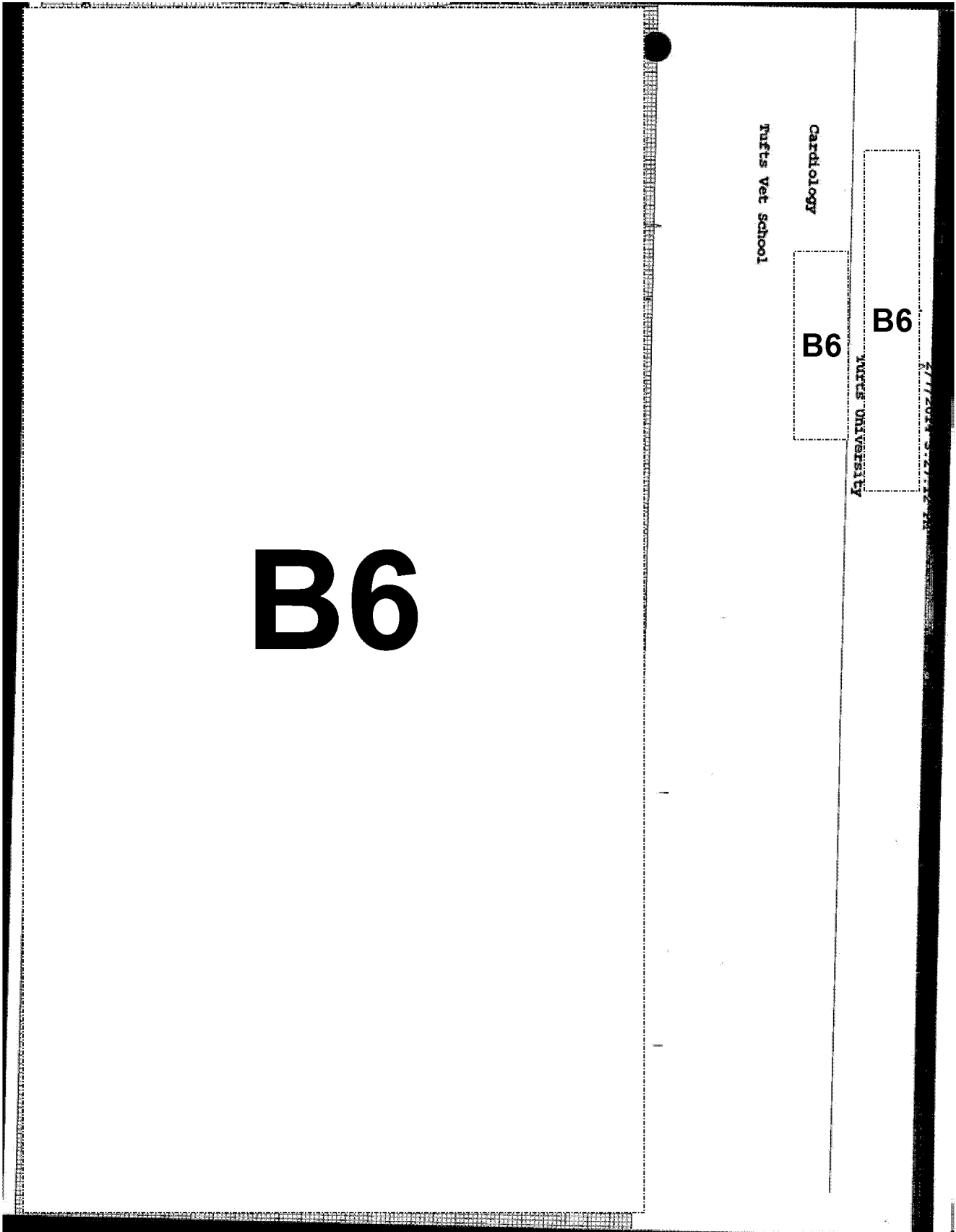
Client:
Patient:

B6

Archived Records 10/1/13-10/4/13 (PART ONE) & 10/11/13-2/7/14

Client: **B6**
Patient:

Archived Records 10/1/13-10/4/13 (PART ONE) & 10/11/13-2/7/14



Tufts Vet School

Cardiology

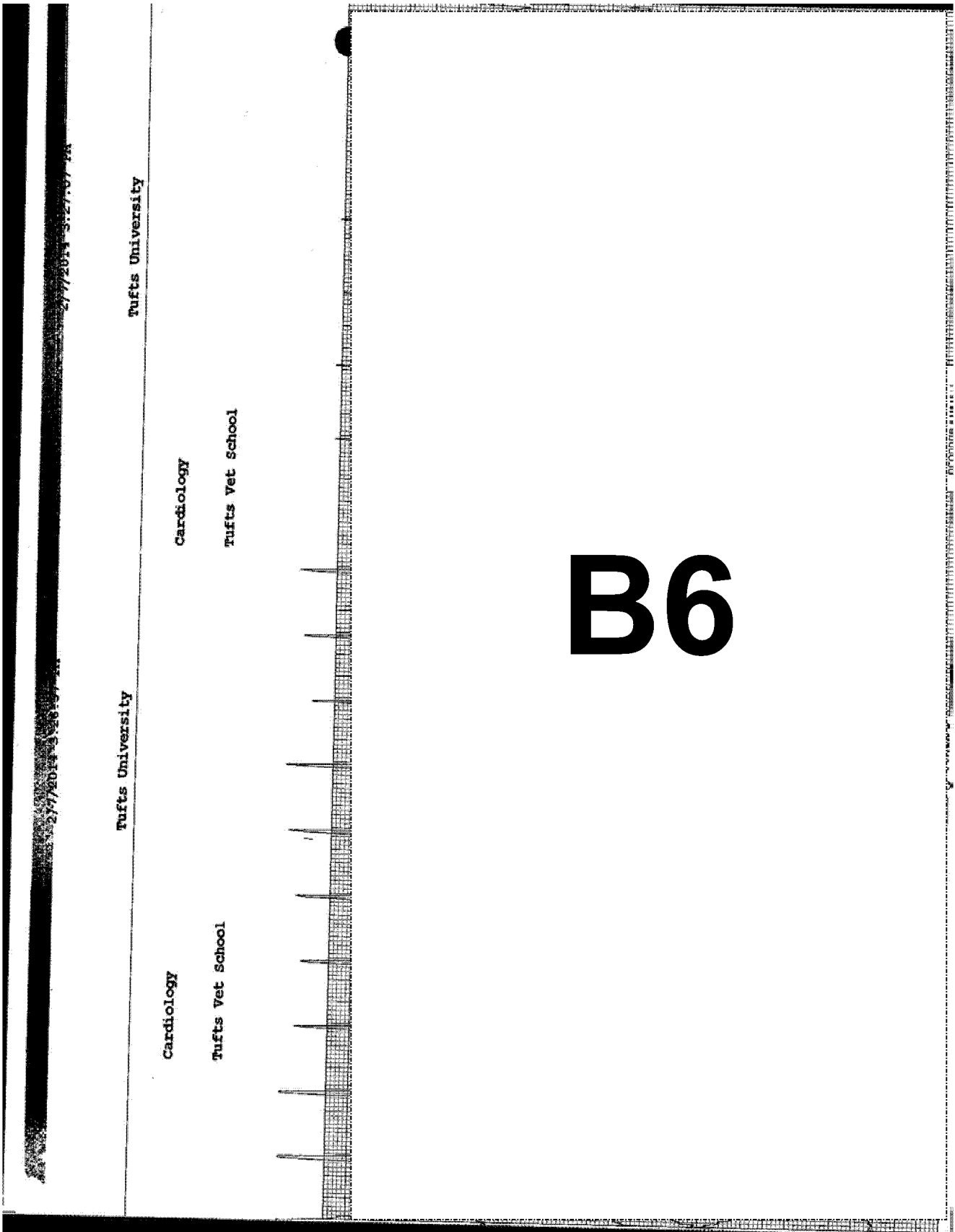
B6

B6
TUFTS UNIVERSITY

Client:
Patient:

B6

Archived Records 10/1/13-10/4/13 (PART ONE) & 10/11/13-2/7/14



B6

Client:
Patient:

B6

Archived Records 10/1/13-10/4/13 (PART ONE) & 10/11/13-2/7/14

Client:
Patient:

B6

Archived Records 10/1/13-10/4/13 (PART ONE) & 10/11/13-2/7/14

2/7/2014 3:26:47 PM

Tufts University

Cardiology

Tufts Vet School

B6

Client:
Patient:

B6

Archived Records 10/1/13-10/4/13 (PART ONE) & 10/11/13-2/7/14

Client: **B6**
Patient:

Archived Records 10/1/13-10/4/13 (PART ONE) & 10/11/13-2/7/14

Initial Parameters

Diagnostics Read Feb 7, 2014 3:18 pm

Basic Operation

Mode
Magnet Response

Rates

Base Rate
Rest Rate
Max Sensor Rate

Refractories & Blar

Ventricular Refractory
Rate Resp. V. Refr.
Shortest Ventricular Refractory

Zephyr® SR 5620

Merlin® PCS (#19916, 3330 v

Capture & Sense

AutoCapture
Pulse Amplitude
Pulse Width
Amplitude Monitoring
Sensitivity

Leads

Lead Type
Pulse Config
Sense Config
Lead Monitoring
Lower Limit
Upper Limit

Patient Data

Patient Name
Patient ID
Implant Date
A LEAD: MODEL S:
MANUFACT: DATE
V LEAD: MODEL S:
MANUFACT: DATE
ADAPTOR:
OTHER:

FastPath® Summary page 1 of 2

Feb 7, 2014 3:23 pm

Zephyr® SR 5620 (#7203154 pr9.7)

TUFTS VET SCHOOL - Cardiology

FastPath® Summary

page 2 of 2
Feb 7, 2014 3:23 pm

Heart Rate Histogram

Paced (VP)
 Sensored (VS)
 Sensor-Indicated Rate*

Events

VP Counts 100%

B6

0d 0h 3m 22s Sampled since Today (3:15 pm)

*Sensor Parameters changed since last cleared

0% 100%
0d 0h 3m 22s Sampled since Today (3:15 pm)

Merlin® PCS (#19916, 3330 v17.1_rev_1)

B6

FastPath® Summary page 2 of 2

Client: **B6**
Patient:

Archived Records 10/1/13-10/4/13 (PART ONE) & 10/11/13-2/7/14

This is the REVERSE side of the page.

Client: **B6**
Patient:

Archived Records 10/1/13-10/4/13 (PART ONE) & 10/11/13-2/7/14

Zephyr® SR 5620 (#7203154 pr9.7)

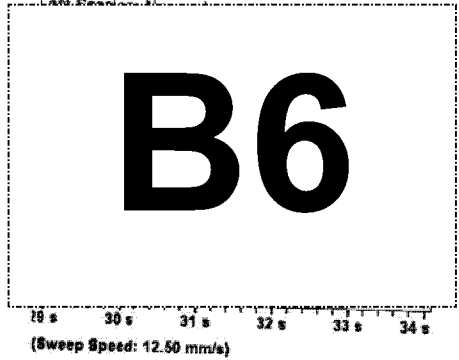
TUFTS VET SCHOOL - Cardiology

page 1 of 1
Feb 7, 2014 3:23 pm

Test Results

Ventricular Capture Test

This Session: **<0.25** V @ 0.4 ms(BI)
Safety Margin: >12.0 :1 @ 3.00 V



Merlin® PCS (#19916, 3330 v17.1_rev_1)

B6

Test Results page 1 of 1

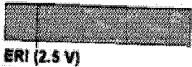
Zephyr® SR 5620 (#7203154 pr9.7)

TUFTS VET SCHOOL - Cardiology

page 1 of 1
Feb 7, 2014 3:23 pm

Battery

Voltage: **2.78** V



ERI (2.5 V)

Remaining Longevity:
Magnet Rate
Current
Impedance

B6

Ventricular Lead



Merlin® PCS (#19916, 3330 v17.1_rev_1)

B6

Test Results page 1 of 1

Client:
Patient:

B6

Archived Records 10/1/13-10/4/13 (PART ONE) & 10/11/13-2/7/14

NO. 1. SUBSCRIBING BY JOHN DESEF

Client: **B6**
Patient:

Archived Records 10/1/13-10/4/13 (PART ONE) & 10/11/13-2/7/14

Zephyr® SR 5620 (#7203154 pr9.7)

TUFTS VET SCHOOL - Cardiology
FastPath® Summary

page 2 of 2
Feb 7, 2014 3:18 pm

Heart Rate Histogram

Events

Paced (VP)

VP Counts

100%

B6

0d 0h 0m 26s Sampled since Today (3:15 pm)

0% 100%
0d 0h 0m 26s Sampled since Today (3:15 pm)

Merlin® PCS (#19916, 3330 v17.1_rev_1)

B6

FastPath® Summary page 2 of 2

Zephyr® SR 5620 (#7203154 pr9.7)

TUFTS VET SCHOOL - Cardiology
Ventricular Capture Test

page 1 of 1
Feb 7, 2014 3:19 pm

This Session: **<0.25** V @ 0.4 ms(Bi)

Safety Margin: >14.0:1 @ 3.50 V

Last Session: No previous results

Feb 7, 2014 3:19 pm (Sweep Speed: 25 mm/s)

B6

Merlin® PCS (#19916, 3330 v17.1_rev_1)

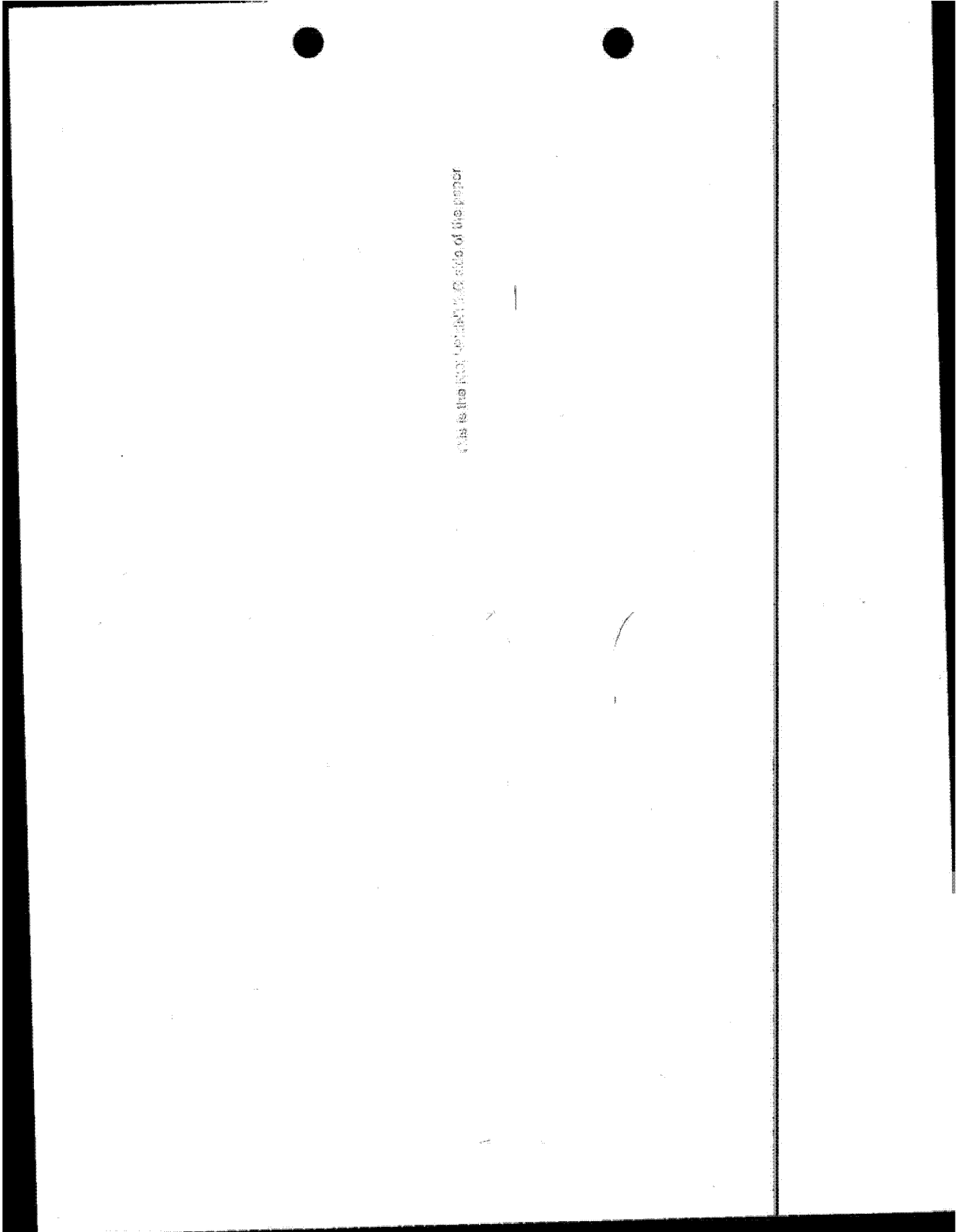
B6

Ventricular Capture Test page 1 of 1

Client:
Patient:

B6

Archived Records 10/1/13-10/4/13 (PART ONE) & 10/11/13-2/7/14



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

Archived Records 10/1/13-10/4/13 (PART ONE) & 10/11/13-2/7/14

Zephyr® SR 5620 (#7203154 pr9.7)

TUFTS VET SCHOOL - Cardiology
Ventricular Capture Test

page 1 of 1
Feb 7, 2014 3:20 pm

This Session: **<0.25** V @ 0.4 ms(Bi)

Safety Margin: >14.0 : 1 @ 3.50 V
Last Session: No previous results

Feb 7, 2014 3:19 pm

B6

Merlin® PCS (rev: 0330V17.7 [REV_1])

B6

Ventricular Capture Test page 1 of 1

Zephyr® SR 5620 (#7203154 pr9.7)

TUFTS VET SCHOOL - Cardiology
FastPath® Summary

page 1 of 2
Feb 7, 2014 3:20 pm

Note:

No Alerts

B6

Test Results (Last Session: Oct 2, 2013)

Capture

Sense

Lead Impedance

B6

Client: **B6**
Patient:

Archived Records 10/1/13-10/4/13 (PART ONE) & 10/11/13-2/7/14

This is a copy of the original document.

Client:
Patient:

B6

Archived Records 10/1/13-10/4/13 (PART ONE) & 10/11/13-2/7/14

Basic Operation

Mode
Magnet Response
Sensor
Threshold
Measured Avg
Slope
Max Sensor Rate
Reaction Time
Recovery Time

Rates

Base Rate
Rest Rate
Max Sensor Rate
Hysteresis Rate

Refractories & Blanki

Ventricular Refractory
Rate Resp. V. Refr.
Shortest Ventricular Refractory

B6

Zephyr® SR 5620 (#7203154 pr9.7)
Merlin® PCS (#19916, 3330 v17.1_rev_1)

B6

Wrap-up™ Overview page 1 of 2
Feb 7, 2014 3:23 pm

Zephyr® SR 5620 (#7203154 pr9.7)

TUFTS VET SCHOOL - Cardiology
Wrap-up™ Overview

page 2 of 2
Feb 7, 2014 3:23 pm

Stored EGM Configuration

Sampling Option
Number of Stored Episodes
Channel
EGM Configuration
EGM Recording Range

Episode Triggers

High Ventricular Rate Trigger
Magnet Placement Trigger

B6

Client:
Patient:


B6

Archived Records 10/1/13-10/4/13 (PART ONE) & 10/11/13-2/7/14

This is a NON-PRINTING side of the page.

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

Archived Records 10/1/13-10/4/13 (PART ONE) & 10/11/13-2/7/14

 TUFTS UNIVERSITY Foster Hospital for Small Animals 200 Westboro Road North Grafton, MA 01536-1895 1-508-839-5395	Document Case Summary Copy To: MedRec Status: FINAL Finalized: by B6 on 10/11/2013
	Client Information Client#: Name: Address: City: Zip: Home#: Work#:

Dates	
Description	Date
Technician Appointment	10/11/2013

Veterinary Medical Team	
Name	Title
B6	
B6	

Diagnoses
Procedures : recheck ECG, suture removal
Recommendations : recheck in 2-3 months

Client Report
B6 came in today for a recheck ECG and to have his sutures taken out. The incision looks good, although slightly red around the area, we applied another neck bandage to keep on him for a couple days. His ECG showed that his pacemaker is working well.
Thank you for bringing **B6** today. He is such a love!
Kind Regards
B6

Patient Care Instructions
You are allowed to leash walk only, for about 10-15 minutes. Please continue to restrict other activity, such as chasing toys, running, jumping up on furniture, etc.

Follow Up Instructions
Please come back in 2-3 months for a pacemaker computer check and an ECG.

B6

Client:
Patient:

B6

Archived Records 10/1/13-10/4/13 (PART ONE) & 10/11/13-2/7/14

Client: **B6**
Patient:

Archived Records 10/1/13-10/4/13 (PART ONE) & 10/11/13-2/7/14



TUFTS UNIVERSITY
FOSTER HOSPITAL FOR SMALL ANIMALS
200 Westboro Rd.
N. Grafton, MA 01536
508-839-5395

B6

Date: 10/11/13 Problem: reecheck Service: Cardio
Home Instructions: _____ Clinician: _____

Follow-up visits TUFTS-SAH Ref. Vet. Date _____ Reason _____
Owner to call Clinician: _____ Date _____ Reason _____

Medication Dispensed	Amount	Size	Instructions

History: antibiotics gone
on Benadryl to stay calm
bandage not staying on well

Physical Exam: Temp _____ Pulse _____ Resp. _____ Weight 24.8kg Body condition score (1-9) _____

Procedures Performed and Future Plan:
suture removal
EEG

Client: **B6**
Patient:

Archived Records 10/1/13-10/4/13 (PART ONE) & 10/11/13-2/7/14

B6

Client: **B6**
Patient:

Archived Records 10/1/13-10/4/13 (PART ONE) & 10/11/13-2/7/14

10/11/2013 3:09:27 PM
Tufts University
Tufts Vet School
Cardiology

B6

12 Lead; Standard Placement

B6

Client:
Patient:

B6

Archived Records 10/1/13-10/4/13 (PART ONE) & 10/11/13-2/7/14

Client: **B6**
Patient:

Archived Records 10/1/13-10/4/13 (PART ONE) & 10/11/13-2/7/14

10/11/2013 3:10:27 PM

Tufts University

Cardiology

Tufts Vet School

B6

Client:
Patient:

B6

Archived Records 10/1/13-10/4/13 (PART ONE) & 10/11/13-2/7/14

Client:
Patient:

B6

Archived Records 10/1/13-10/4/13 (PART ONE) & 10/11/13-2/7/14

10/11/2013 3:10:38 PM

Tufts University

Cardiology Cardiology

Tufts Vet' Tufts Vet School

B6

Client:
Patient:

B6

Archived Records 10/1/13-10/4/13 (PART ONE) & 10/11/13-2/7/14

Client: **B6**
Patient:

Archived Records 10/1/13-10/4/13 (PART ONE) & 10/11/13-2/7/14

Cardiology
Tufts Vet School

B6

Client:
Patient:

B6

Archived Records 10/1/13-10/4/13 (PART ONE) & 10/11/13-2/7/14

10/11/2013 3:11:10 PM

Tufts University

Cardiology

Tufts Vet School

B6

Client:
Patient:

B6

Archived Records 10/1/13-10/4/13 (PART ONE) & 10/11/13-2/7/14

Client: **B6**
Patient:

Archived Records 10/1/13-10/4/13 (PART ONE) & 10/11/13-2/7/14

B6

Cardiology
Tufts Vet Sch


Client:
Patient:

B6

Archived Records 10/1/13-10/4/13 (PART ONE) & 10/11/13-2/7/14

Client: **B6**
Patient:

Archived Records 10/1/13-10/4/13 (PART ONE) & 10/11/13-2/7/14

 TUFTS UNIVERSITY Foster Hospital for Small Animals 200 Westboro Road North Grafton, MA 01536-1895 1-508-839-5395	Document Case Summary Copy To: MedRec Status: FINAL Finalized: by B6 on 10/4/2013
Client Information	Patient Information
Client#: Name: Address: City: Zip: Home#: Work#:	Case#: B6 Name: B6 Species: CANINE Breed: BOXER Sex: CM DOB: B6 RVet: B6

Dates	
Description	Date
Discharge	B6
Admission	

Veterinary Medical Team	
Name	Title
B6	Emergency Clinician
B6	Senior Student
B6	Primary Clinician
John E. Rush, DVM, MS, DACVIM (Cardiology), DACVECC	Attending (Faculty) Surgeon
B6	Senior Student
B6	Attending (Faculty) Clinician

To the Referring Veterinarian
Dear **B6**

Diagnoses
Final diagnoses : 3rd degree AV block
Procedures : echocardiogram, BCG, pacemaker implantation
Recommendations : suture removal and EKG in 7-10 days

Case Progress Notes (ICU Transfer Sheet)
Time and Date Admitted: 01 Oct 13 4:15pm
Transfer Date: 02 Oct 13
Admitting Clinician: **B6**
Transferred to (Clinician): **B6**
Patient Location: ICU R5
Estimate and Financial Notes: **B6**

History and Physical Exam Summary: **B6** is a **B6** CM boxer who presented to Tufts from his rDVM for a slow heart rate. **B6** went to his rDVM last week mild lethargy, **B6** No signs of heart disease were reported during this visit. Over the next week his signs continued so he went back to his rDVM today who found a heart slow heart rate and sent him to Tufts for a cardiology consult. The owner reports that Warren has otherwise been healthy aside from chronic allergies. He has not had any syncopal episodes or fainting spells.

Patient Condition:
S-QAR, T-102.8, P- 50, R-pant, CRT <2, MMs pale pink and tacky

10/4/2013 1:58:44 PM

S227632/Case Summary/MedRec Copy

B6

Client:
Patient:

B6

Archived Records 10/1/13-10/4/13 (PART ONE) & 10/11/13-2/7/14

Client: **B6**
Patient:

S227632/Case Summary/MedRec Copy **B6**

EENT: Clear eyes, mild dental tarter, clear nose, mild debris AU
PLNs: No peripheral lymphadenopathy appreciated
Heart/Circulatory: III/VI systolic murmur, gallop rhythm, hyperdynamic apical beat and femoral pulses
Lungs: clear
Abd: soft, non painful
UG: externally unremarkable CM
MSI: Ambulatory x4
INTEG: small skin focal areas of alopecia on the muzzle, alopecia behind the ears bilaterally
Neuro: QAR, mentally appropriate, full exam not performed
RECTAL: NP

- A1) III/VI systolic murmur
- A2) Gallop rhythm
- A3) Hyperdynamic apical beat and femoral pulses
- A4) 3rd degree AV block (R/O: idiopathic vs myocarditis)
- A5) **B6**
- A6)
- A7)
- A8)

Initial and Current Therapy:

- 1) Telemetry
- 2) **B6**

Diagnostic tests completed and pending:

- 1) Cardiology consult: 3rd degree AV block, dilated cardiac chambers, start treatment with minocycline while awaiting 4DX results
- 2) 4DX: Pending
- 3) CBC: Pending
- 4) CHEM: Pending

Prognosis Given Owner: Stable.

Client and Referring Veterinarian Communication Status: Will admit overnight for telemetry monitoring and transfer to our cardiology service in the morning.

Not sure what else you talked to them about

Oct 2, 2013

B6

B6

CV: HR = 64, 3rd degree AV block, III/VI systolic murmur and gallop heard on left side, snappy femoral pulses (synchronous), jugular vein distended to 3/4 of the neck

Lungs: RR=36, no respiratory effort, normal RV, considerable

B6

Client:
Patient:

B6

Archived Records 10/1/13-10/4/13 (PART ONE) & 10/11/13-2/7/14

Client: **B6**
Patient:

S227632/Case Summary/MedRec Copy **B6**

Recent diagnostic tests:
4dx - all negative
CBC - no abnormal findings
Chem - slight hypoproteinemia (5.4 g/dl), hypoglobulinemia (1.9 g/dl), elevated ALT (99)

- A1: 3rd degree AV block - r/o myocarditis vs. fibrosis
- A2: alopecia - r/o allergic skin disease vs. endocrine
- A3: hypoglobulinemia - hepatic insufficiency vs. PLE vs. hemorrhage
- A4: elevated ALT - decreased cardiac output vs. artifact (hemolysis) vs. liver disease vs. endocrine vs. drug-induced

P:
Pacemaker placement today
discontinue minocycline?

Oct 3, 2013 **B6**

B6

On exam, no pacer, no systolic murmur heard on left side, slight hyperdynamic femoral pulses (synchronous), no jugular vein distention observed

B6

Recent diagnostic tests:

- A1: 3rd degree AV block - resolved
- A2: alopecia - r/o allergic skin disease vs. endocrine
- A3: short runs of v-tach - r/o irritation to ventricle from pacemaker placement vs.
- A4: seroma formation under chin

P:

B6

Oct 4, 2013 **B6**

Recent History: On telemetry overnight, pacemaker placed 10/2/13, no evidence of ventricular tachycardia overnight, eating well

Client:
Patient:

B6

Archived Records 10/1/13-10/4/13 (PART ONE) & 10/11/13-2/7/14

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

Archived Records 10/1/13-10/4/13 (PART ONE) & 10/11/13-2/7/14

S227632/Case Summary/MedRec Copy **B6**

B6

CV: HR=112, paced, II/VI systolic murmur heard on left side, strong synchronous femoral pulses, no jugular vein distension observed.

B6

- A1: 3rd degree AV block - resolved
- A2: alopecia - r/o allergic skin disease vs. endocrine
- A3: short runs of v-tach - resolved
- A4: seroma formation under chin

P:

B6

Professional Report

B6 came to Tufts **B6** after you noticed that his heart rate was too slow. We confirmed 3rd degree AV block, and echocardiogram showed typical changes to dogs with bradycardia. A pacemaker was placed the next day, and **B6** has been doing well. He was tested negative for tick-borne diseases, and UA was unremarkable. **B6** seems to be younger than a typical dog with 3rd degree AV block, so we're still suspicious that some infection started this off. So there is a chance in the future that his rhythm may recover.

Thank you for your referral. Please contact us with any questions or concerns. A copy of the cardiology report will be faxed to you.

Sincerely,

B6
cardiology resident

To Our Client

Dear **B6** Family,

Client Report

B6 presented to the Tufts in third degree AV block. AV block is a condition of the heart where the electrical impulses that are responsible for contraction of the heart fail to be conducted from the atria to the ventricles. In a normal heart, the atria and ventricles would contract the same number of times, allowing blood to move through the heart in a forward direction. In **B6** case, his atria contract multiple times for every one contraction of the ventricles. This results in a significantly slower heart rate and lower volume of blood that gets pumped to the body. An echocardiogram showed that **B6** heart still has good contractile function. The best treatment for **B6** AV block is a pacemaker. Following placement of a pacemaker the prognosis is good. **B6** will require more frequent rechecks initially, but can later be spaced further out.

A pacemaker was placed in **B6** heart on Wednesday 10/2. The surgery went very well. Thursday morning **B6** color and pulses were much better. **B6** was tested for tick borne diseases as they can often be a cause for AV block. He

10/4/2013 1:58:44 PM

S227632/Case Summary/MedRec Copy

B6

Client:
Patient:

B6

Archived Records 10/1/13-10/4/13 (PART ONE) & 10/11/13-2/7/14

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

S227632/Case Summary/MedRec Copy

B6

was negative for the tests. Spontaneous AV block in a young Boxer is uncommon and there is often an infectious cause whether or not we can identify it.

We are sending **B6** home with a course of antibiotics to reduce the chance that his incisions get infected. **B6** suture should be removed in 7-10 days, this can be done with your primary care veterinarian. At that time, a EKG should be checked just to make sure everything's working properly. In 3 months we want to see him here at Tufts to check his pacemaker function and maybe make adjustments to the pacemaker.

B6 will be going home with a neck bandage. Because he tends to scratch at his neck, we will need you to rewrap his neck several times so the bandage stays in place until the sutures come out. Please only use a harness to leash walk him and do not put a collar on while the sutures are still in place.

If you have any questions or concerns between now and your recheck appointment, please do not hesitate to call.

Patient Care Instructions

B6

Medications and Treatments

B6

Itemized Medications

medication	strength	units	qty	formulation	instructions	refill	nextdose	status
B6	B6	B6	B6	B6	B6	None	tomorrow afternoon	Dispense

Follow Up Instructions

1. Please have **B6** suture removal in 7-10 days, and recheck an EKG. This can be done with your primary care veterinarian's. If you would like it done here, you can make an appointment can by made by calling 508-887-4696.
3. We want **B6** to return here to see us for programming of the computer/pacemaker in 2-3 months.

B6 (Resident in cardiology)

Client:
Patient:

B6

Archived Records 10/1/13-10/4/13 (PART ONE) & 10/11/13-2/7/14

Client: **B6**
Patient:

Archived Records 10/1/13-10/4/13 (PART ONE) & 10/11/13-2/7/14



Tufts University
Foster Hospital for Small Animals
200 Westboro Road, N. Grafton, MA 01536
508-839-5395

B6

B6

APPT. DATE	APPT. TIME	CLINICIAN	SERVICE	WARD	CAGE
OWNER/LAST NAME		FIRST NAME	MIDDLE INITIAL	HOME PHONE	WORK PHONE
STREET		TOWN	STATE	ZIP	
REFERRING CLINIC NAME		TOWN	STATE	PHONE	
REFERRING VET NAME					
PET'S NAME		BREED	COLOR	SEX: <input type="checkbox"/> MALE <input type="checkbox"/> FEMALE	BIRTH DATE
				<input type="checkbox"/> NEUTERED <input type="checkbox"/> SPAYED	MO _____ YR _____
Length of time you have owned your pet:		Has your pet ever traveled or resided outside of New England? <input type="checkbox"/> Yes <input type="checkbox"/> No		Obtained from:	
		If yes, where/when: _____		<input type="checkbox"/> Bred <input type="checkbox"/> Breeder <input type="checkbox"/> Friend <input type="checkbox"/> Other	
				<input type="checkbox"/> Pet Shop <input type="checkbox"/> Humane Society <input type="checkbox"/> Stray	
Pets Environment: <input type="checkbox"/> House <input type="checkbox"/> Apartment <input type="checkbox"/> Urban <input type="checkbox"/> Suburban <input type="checkbox"/> Rural		Confined to: <input type="checkbox"/> House <input type="checkbox"/> Fenced yard/chain <input type="checkbox"/> Roams <input type="checkbox"/> Other _____		Other Pets: <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, animal type: _____	
				Diet: Brand _____ <input type="checkbox"/> Canned <input type="checkbox"/> Dry <input type="checkbox"/> Both <input type="checkbox"/> Other _____	
				Feeding: Number of feedings per day: _____ Amount given each feeding: _____	
Date of last Fecal Test: <input type="checkbox"/> Tested - Date: _____ <input type="checkbox"/> Not Tested		Feline Leukemia Test (FELV) <input type="checkbox"/> Tested - Date: _____ <input type="checkbox"/> Not Tested		Date of last Heartworm Test: <input type="checkbox"/> Tested - Date: _____ <input type="checkbox"/> Not Tested	
Vaccination History: Type: Rabies Date: _____ Type: _____ Date: _____ Type: _____ Date: _____		Feline Immunodeficiency Test (FIV) <input type="checkbox"/> Tested - Date: _____ <input type="checkbox"/> Not Tested		Heartworm Prevention: <input type="checkbox"/> Daily <input type="checkbox"/> Monthly <input type="checkbox"/> Not Given	

Presenting Complaint:

(DO NOT WRITE BELOW THIS LINE)

History: last week allergies brought to rDVM - thought labored breathing, not eating as ~~fast~~ much.
having diarrhea brought to rDVM this morning
no fainting or weakness - a little less active.

Client:
Patient:

B6

Archived Records 10/1/13-10/4/13 (PART ONE) & 10/11/13-2/7/14

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

Archived Records 10/1/13-10/4/13 (PART ONE) & 10/11/13-2/7/14



Tufts University
Foster Hospital for Small Animals

200 Westboro Road, N. Grafton, MA 01536

B6
 FAWN CH STD
 DOVER CANINE
 HOSPITAL
B6

Date: 01 Oct 13		Time: 4:15 pm			
Body Condition (1-9) 1= emaciated 5= ideal 9= obese	Body Weight	Temperament	Temperature	Pulse	Respiratory
	419	GAR		50	quiet
General Appearance (1)	N.A.F. <input checked="" type="checkbox"/> Abnorm. <input type="checkbox"/> Not Ex. <input type="checkbox"/>	Integumentary (2)	N.A.F. <input type="checkbox"/> Abnorm. <input checked="" type="checkbox"/> Not Ex. <input type="checkbox"/>	Musculo-Skeletal (3)	N.A.F. <input checked="" type="checkbox"/> Abnorm. <input type="checkbox"/> Not Ex. <input type="checkbox"/>
Respiratory (4)	N.A.F. <input checked="" type="checkbox"/> Abnorm. <input type="checkbox"/> Not Ex. <input type="checkbox"/>	Digestive (5)	N.A.F. <input checked="" type="checkbox"/> Abnorm. <input type="checkbox"/> Not Ex. <input type="checkbox"/>	Genito-Urinary (6)	N.A.F. <input checked="" type="checkbox"/> Abnorm. <input type="checkbox"/> Not Ex. <input type="checkbox"/>
Circulatory (7)	N.A.F. <input type="checkbox"/> Abnorm. <input checked="" type="checkbox"/> Not Ex. <input type="checkbox"/>	Lymph Nodes (8)	N.A.F. <input checked="" type="checkbox"/> Abnorm. <input type="checkbox"/> Not Ex. <input type="checkbox"/>	Nervous (9)	N.A.F. <input checked="" type="checkbox"/> Abnorm. <input type="checkbox"/> Not Ex. <input type="checkbox"/>
Eyes (10)	N.A.F. <input checked="" type="checkbox"/> Abnorm. <input type="checkbox"/> Not Ex. <input type="checkbox"/>	Ears (11)	N.A.F. <input checked="" type="checkbox"/> Abnorm. <input type="checkbox"/> Not Ex. <input type="checkbox"/>	Mucous Membranes (12)	N.A.F. <input type="checkbox"/> Abnorm. <input checked="" type="checkbox"/> Not Ex. <input type="checkbox"/>
Describe abnormal, using code numbers as above, for systems				Pain Assessment (13)	
<p>1) alopecia on muzzle, behind ears</p> <p>2) III/VI systolic murmur, gallop rhythm, hyperdynamic pulses + apex beat, 3rd degree AV block on EKG</p> <p>12) tacky pale pink, CRT 2 bradycardia</p>				<p>N.A.F. <input checked="" type="checkbox"/> Abnorm. <input type="checkbox"/> Not Ex. <input type="checkbox"/></p>	
<p>A1) murmur, bradycardia, gallop</p> <p>A2) EKG: 3rd degree AV block</p>					
<p>P1) cardio consult</p> <p>P2) pericardium</p>					

FORM #040 (REV. 6/05)

PHYSICAL EXAMINATION

(OVER)

Client:
Patient:

B6

Archived Records 10/1/13-10/4/13 (PART ONE) & 10/11/13-2/7/14

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

Archived Records 10/1/13-10/4/13 (PART ONE) & 10/11/13-2/7/14

Cummings Veterinary School
Tufts University
Foster Hospital for Small Animals

PATIENT DISCHARGE CHECKLIST

Date of Discharge 10/4/13

Time of Discharge A.M. 5:30 P.M.

Discharged by (please print) B6

Circle One: STUDENT WARD ATTENDANT ICU/MED TECH CLINICIAN

Check List:	Animal is Clean	YES	N/A
	Showed incision/wound to owner	YES	N/A
	Removed ECG pads	YES	N/A
	Catheter has been removed	YES	N/A
	Instructed owner to remove Pressure Wrap	YES	N/A
	Reviewed Discharge/Medication Orders	YES	N/A
	Returned owners' medication (brought from home)	YES	N/A

Comments: _____

FRONT DESK DISCHARGE

Discharged by (full name) _____ Clinician _____

DISCHARGE ORDERS COMPLETE YES NO Client Wait Time _____

ORDERS IN RECORD YES NO

RECORD IN DISCHARGE YES NO

BILLING FOLDER IN RECORD YES NO N/A (day case)

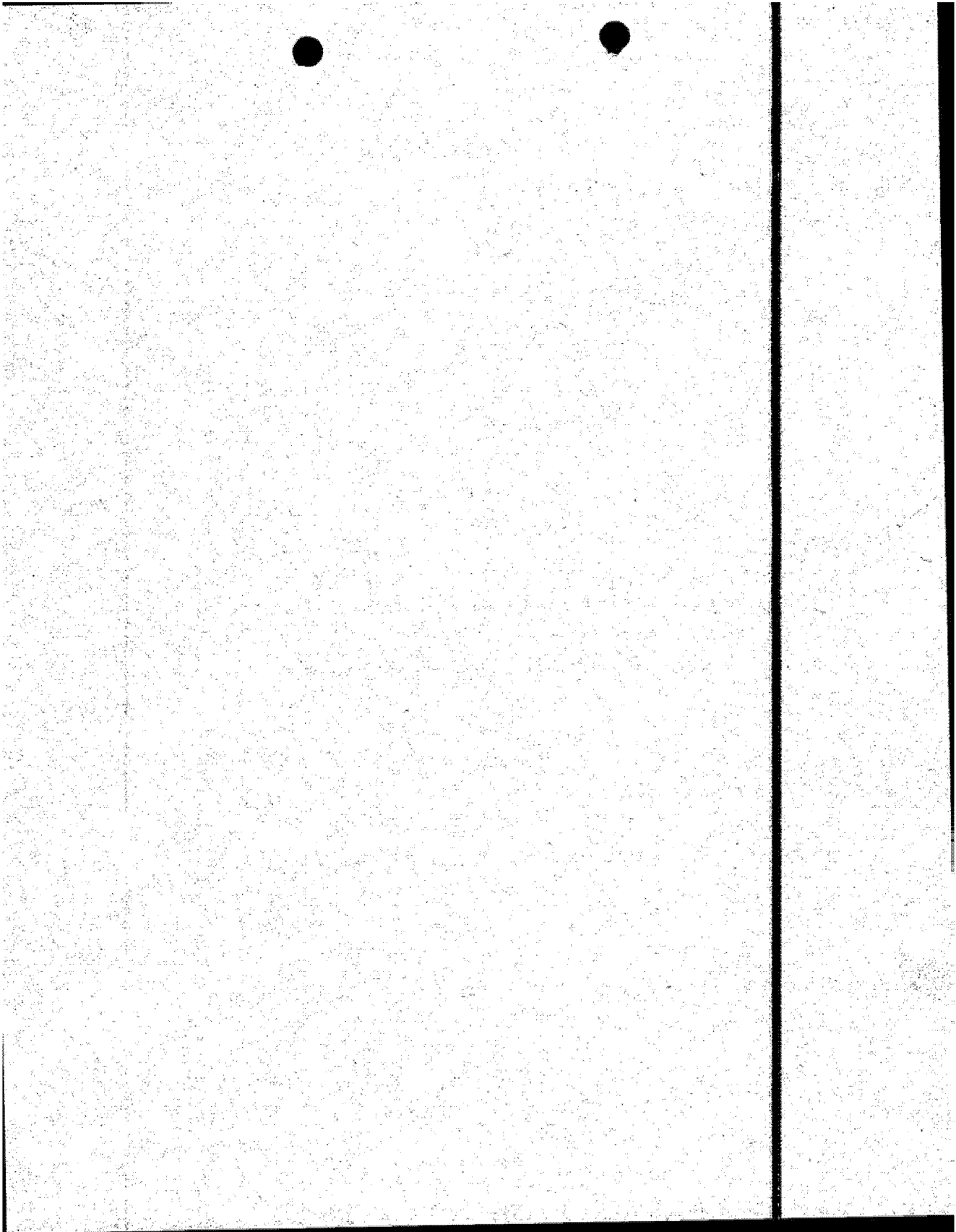
PHARMACY COPY PULLED YES NO N/A

MEDICATION DISPENSED FROM PHARMACY YES NO GIVEN TO OWNER
(Do not dispense left-over medication from Ward)

Client:
Patient:

B6

Archived Records 10/1/13-10/4/13 (PART ONE) & 10/11/13-2/7/14



Client: **B6**
Patient:

Archived Records 10/1/13-10/4/13 (PART ONE) & 10/11/13-2/7/14



LN
TUFTS UNIVERSITY
FOSTER HOSPITAL FOR SMALL ANIMALS
200 Westboro Road, N. Grafton, MA 01536

B6
B6 FAWN **B6** STO
BOYER CANINE
B6

IV CATHETER SITE(S): *18last plus cut* DATE PLACED: *10-1-13* INITIALS: *Pr*
CLINICAL SUMMARY: *3rd Degree AV-Block*
DATE: *10/1/13* CAGE # *40025* DIET: *6/4/1ald* WATER: *ad lib*

B6

Client: **B6**
Patient:

Archived Records 10/1/13-10/4/13 (PART ONE) & 10/11/13-2/7/14



TUFTS UNIVERSITY
FOSTER HOSPITAL FOR SMALL ANIMALS
200 Westboro Road, N. Grafton, MA 01536

*1/2
cat*

B6

B6 FAWN CM STO
BOXER CANINE

IV CATHETER SITE(S): ① cephalic DATE PLACED: 10/1/13 INITIALS: _____

CLINICAL SUMMARY: 3rd degree AV block

** NO NECK LEADS **

DATE: 10/2/13 CAGE #: 110 P5 DIET: W/D FOOD WATER: FL WEIGHT: 20.3 LBS

B6

STUDENT: _____ **B6** CLINICIAN: _____ **B6** Rush
HOME PHONE NO.: _____

FORM #322 (REV. 6/05)

DAILY RECORD

PAGE 1 OF 2

Client: **B6**
Patient:

Archived Records 10/1/13-10/4/13 (PART ONE) & 10/11/13-2/7/14



TUFTS UNIVERSITY
FOSTER HOSPITAL FOR SMALL ANIMALS
200 Westboro Road, N. Grafton, MA 01536

B6

B6 FAWN CH STU
BOXER CANINE
B6

IV CATHETER SITE(S): _____ DATE PLACED: _____ INITIALS: _____

CLINICAL SUMMARY: _____

Page **2**

NO NEW LEADS

DATE: 10/2/13 CAGE #: 10V R5 DIET: canine maintenance WATER: F/C WEIGHT: 25.7 kg

TREATMENT PLAN
RECORD OBSERVATIONS

MONITORING

B6

STUDENT: **B6** CLINICIAN: **B6** *Rush*
HOME PHONE NO.: _____

FORM #322 (REV. 6/05)

DAILY RECORD

PAGE **2** OF **2**

Client: **B6**
Patient:

Archived Records 10/1/13-10/4/13 (PART ONE) & 10/11/13-2/7/14



TUFTS UNIVERSITY
FOSTER HOSPITAL FOR SMALL ANIMALS
200 Westboro Road, N. Grafton, MA 01536

22

B6
B6 FAWN CH STO
BOXER CAMELINE
B6

IV CATHETER SITE(S): ② cephalic DATE PLACED: 10/1/13 INITIALS: _____

CLINICAL SUMMARY: pacemaker placed 10/2/13 d/t AV block (complete)
NO NECK LEADS

DATE: 10/3/13 CAGE #: ICU R5 DIET: _____ WATER: F/C WEIGHT: 25.1 kg (w) kline

TREATMENT PLAN
RECORD OBSERVATIONS

MONITORING

B6

DAILY RECORD

PAGE 1 OF 1

Client: **B6**
Patient:

Archived Records 10/1/13-10/4/13 (PART ONE) & 10/11/13-2/7/14

B6

OTHER	VOMIT	STOOL	URINATION	TIME
OBSERVATIONS (Describe characteristics of event)				

Client:
Patient:

B6

Archived Records 10/1/13-10/4/13 (PART ONE) & 10/11/13-2/7/14



TUFTS UNIVERSITY
FOSTER HOSPITAL FOR SMALL ANIMALS
200 Westboro Road, N. Grafton, MA 01536

U

B6

B6	PAWN	CN	STD
	BOXER	CANINE	
B6			

IV CATHETER SITE(S): @ cephalic DATE PLACED: 10/1/13 INITIALS: _____

CLINICAL SUMMARY: pacemaker placed 10/2/13 - complete AV block

DATE: 10/4/13 CAGE #: ICU #5 DIET: WATER: F/c WEIGHT: 24.8 KG

TREATMENT PLAN
RECORD OBSERVATIONS

MONITORING

B6

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

Archived Records 10/1/13-10/4/13 (PART TWO)



Tufts University
School of Veterinary Medicine

Owner: **B6**
Patient Name: **B6**
S227632
Clinician: **B6** / Rush
Student: **B6**

October 2, 2013

Signalment: **B6** CM Boxer was referred to Tufts **B6** yesterday for bradycardia. **B6** has a week-long history of

B6

CV: HR = 64, normal sinus rhythm, 3rd degree AV block, III/VI systolic murmur and gallop heard on left side, snappy femoral pulses (synchronous), no jugular vein distension *6 of week occasional up to week*

B6

Recent diagnostic tests:

4dx - all negative

CBC - no abnormal findings

Chem - slight hypoproteinemia (5.4 g/dl), hypoglobulinemia (1.9 g/dl), elevated ALT (99)

A1: 3rd degree AV block - r/o myocarditis vs. fibrosis

A2: alopecia - r/o allergic skin disease vs. endocrine

A3: hypoglobulinemia - hepatic insufficiency vs. PLE vs. hemorrhage

A4: elevated ALT - artifact (hemolysis) vs. liver disease vs. endocrine vs. drug-induced vs. reduced CO

P:

B6

B6

Client:
Patient:

B6

Archived Records 10/1/13-10/4/13 (PART TWO)

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

Archived Records 10/1/13-10/4/13 (PART TWO)



Tufts University
School of Veterinary Medicine

Owner: **B6**
Patient Name: **B6**
S227632
Clinician: **B6** / Rush
Student: **B6**

October 3, 2013

Signalment: **B6** CM Boxer was referred to Tufts **B6** 10/1/13 for bradycardia. **B6** had a week-long history of

B6

CV: HR = 66, paced, III/VI systolic murmur heard on left side, slight hyperdynamic femoral pulses (synchronous), no jugular vein distension observed

B6

Recent diagnostic tests:

- A1: 3rd degree AV block - resolved
- A2: alopecia - r/o allergic skin disease vs. endocrine
- A3: short runs of v-tach - r/o irritation to ventricle from pacemaker placement vs.
- A4: *swoma under chin*

P:

B6

B6

Client: **B6**
Patient:

Archived Records 10/1/13-10/4/13 (PART TWO)

Client: **B6**
Patient:

Archived Records 10/1/13-10/4/13 (PART TWO)



Tufts University
School of Veterinary Medicine

Owner: **B6**
Patient Name: **B6**
S227632
Clinician: **B6** / **Rash** **B6**
Student: **B6**

October 4, 2013

Signalment: **B6** CM Boxer was referred to Tufts **B6** 10/1/13 for bradycardia. **B6** had a week-long history of

B6

CV: HR = 112, paced, II/VI systolic murmur heard on left side, strong synchronous femoral pulses, no jugular vein distension observed

B6

- A1: 3rd degree AV block - resolved
- A2: alopecia - r/o allergic skin disease vs. endocrine
- A3: short runs of v-tach - resolved
- A4: seroma formation under chin

P:

B6

B6

Client:
Patient:

B6

Archived Records 10/1/13-10/4/13 (PART TWO)

Client: **B6**
Patient:

Archived Records 10/1/13-10/4/13 (PART TWO)

Released Patient Result

Patient ID: 1310010089
Patient Name:
Time Analyzed: 10/01/2013 04:19:51 PM
Analyzer ID: Z31C12020
Sample Type: Venous
Panel: Critical Care
Analyzed By: 123456
Released By: auto

Barcode: 1310010089
B6 B6 Canine
10/1/2013 4:13 PM
NOVA PANEL-ER
Lithium Heparin

Required Fields:
Patient ID: 1310010089

Optional Fields:
Accession #:

Measured

Test	Value	Units	Reference Range	Flags
pH			-	
PCO2		mmHg	-	
PO2		mmHg	-	
SO2%(ABG)			-	
Hct		%	-	
Hb		g/dL	-	
Na+	B6	mmol/L	-	B6
K+		mmol/L	-	
Cl-		mmol/L	-	
Ca++		mmol/L	-	
Mg++		mmol/L	-	
Glu		mg/dL	-	
Lac		mmol/L	-	
BUN		mg/dL	-	
Creat		mg/dL	-	
TCO2		mmol/L	-	

Wt: 25.6 kg

Calculated

Test	Value	Units	Reference Range	Flags
nCa		mmol/L	-	
nMg		mmol/L	-	
Gap		mmol/L	-	
Ca++/Mg++		mol/mol	-	
BUN/Creat		mg/mg	-	
BE-ecf		mmol/L	-	
BE-b	B6	mmol/L	-	
SBC		mmol/L	-	
HCO3		mmol/L	-	
O2Cap		mL/dL	-	
O2Ct		mL/dL	-	
A		mmHg	-	
Osm		mOsm/kg	-	


Client:
Patient:

B6

Archived Records 10/1/13-10/4/13 (PART TWO)

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

Archived Records 10/1/13-10/4/13 (PART TWO)

 TUFTS UNIVERSITY Foster Hospital for Small Animals 200 Westboro Road North Grafton, MA 01536-1895 1-508-839-5395	Document Cardiology Report Copy To: MedRec Status: FINAL Finalized: by B6 on 10/1/2013
Client Information	Patient Information
Client#: Name: Address: City: Zip: Home#: Work#:	Case#: B6 Name: B6 Species: CANINE Breed: BOXER Sex: CM DOB: B6 RVet: B6

Dates	
Description	Date
Date of Study	10/1/2013

Personnel	
Name	Title
B6	Attending (Faculty) Cardiologist
	Cardiology Technician
	Primary Clinician
	Senior Student

Case Abstract
B6 CM boxer presenting from rDVM for slow heart rate. Owner reports dog has slightly less energy than normal. He has had **B6** over the past week. On presentation his heart rate was 50 and he was QAR. EKG analysis showed possible 3rd degree heart block.

Request Specifics
Location: **B6**
Weight (required) in pounds: 56
Anesthesia/Sedation to follow consultation (Y/N): N
RDVM Radiographs: Film(Y/N): N CD(Y/N): N
Current Medications and Dosages: no medications
Reason for Consultation: Concern for heart block
History: **B6** **B6**; No syncopal episodes. Only slightly decreased energy.

Findings

WAO WIVSd WLVIDd Increased wLVwd WIVSS WLVIDS WLWVS WLA wLAm wLVODd wLVODS wWTd wWTS wDA wMAd	B6
--	-----------

10/1/2013 5:27:26 PM

S227632/Cardiology Report/MedRec Copy

B6

Client:
Patient:

B6

Archived Records 10/1/13-10/4/13 (PART TWO)

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

S227632/Cardiology Report/MedRec Copy **B6** Page 2 of 2
B6

Cardiology Findings

Type	Findings
Heart murmur	B6
Transient heart sounds	
Other auscultatory findings	
Pulses	
Jugular veins	
Mucous membranes	
Abdomen	
Echocardiogram	
Doppler echocardiography	
ECG / rhythm	
Body condition score (9)	
Heart rate (/min)	

Assessment and Recommendations
3rd degree AV block with all cardiac chambers appearing dilated. The chamber dilation is consistent with the bradycardia. Pacemaker placement is recommended to prevent syncope or sudden death. We should also check for tick-borne diseases as given that the dog is younger than most others presenting with 3rd degree AV block, there may be a higher chance that this may be a result of myocarditis. Start minocycline or doxycycline while we wait for the 4DX test to return. CBC/chemistry is also recommended prior to anesthesia. If we cannot place a pacemaker, then try an atropine response test while the dog is on telemetry to see if medical treatment may be an option.

Cardiology Conclusions

Type	Conclusion
Heart Failure Classification	ISACHCIb Evidence of heart disease with mild - moderate cardiac remodeling
Final diagnoses	3rd degree AV block

B6

Client:
Patient:

B6

Archived Records 10/1/13-10/4/13 (PART TWO)

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

Archived Records 10/1/13-10/4/13 (PART TWO)

LABORATORY REPORTS

B6	<small>TUFTS CARDIOLOGY MSS MLL 10/01/13 4:37:38 P JFR, DVG, B T16 0 5</small>	<small>PORT #3 HERE</small>																																										
<table border="1" style="width: 100%; border-collapse: collapse;"><thead><tr><th style="width: 20%;"><small>ZD</small></th><th style="width: 30%;"><small>M-Mode</small></th><th style="width: 50%;"><small>Doppler</small></th></tr></thead><tbody><tr><td><small>SALA</small></td><td>B6</td><td><small>MR Vmax</small></td><td rowspan="14" style="text-align: center; vertical-align: middle;">B6</td></tr><tr><td><small>Ao Diam</small></td><td><small>LVd</small></td><td><small>MR maxPG</small></td></tr><tr><td></td><td><small>LVPWd</small></td><td><small>AVVmax</small></td></tr><tr><td></td><td><small>LVs</small></td><td><small>AV maxPG</small></td></tr><tr><td></td><td><small>LVds</small></td><td><small>PVVmax</small></td></tr><tr><td></td><td><small>LVPWs</small></td><td><small>PV maxPG</small></td></tr><tr><td></td><td><small>EF(Cube)</small></td><td><small>TR Vmax</small></td></tr><tr><td></td><td><small>%FS</small></td><td><small>TR maxPG</small></td></tr><tr><td></td><td><small>Ao Diam</small></td><td></td></tr><tr><td></td><td><small>LA Diam</small></td><td></td></tr><tr><td></td><td><small>L/Ao</small></td><td></td></tr><tr><td></td><td><small>Max LA</small></td><td></td></tr><tr><td></td><td><small>EPSS</small></td><td></td></tr></tbody></table>	<small>ZD</small>	<small>M-Mode</small>	<small>Doppler</small>	<small>SALA</small>	B6	<small>MR Vmax</small>	B6	<small>Ao Diam</small>	<small>LVd</small>	<small>MR maxPG</small>		<small>LVPWd</small>	<small>AVVmax</small>		<small>LVs</small>	<small>AV maxPG</small>		<small>LVds</small>	<small>PVVmax</small>		<small>LVPWs</small>	<small>PV maxPG</small>		<small>EF(Cube)</small>	<small>TR Vmax</small>		<small>%FS</small>	<small>TR maxPG</small>		<small>Ao Diam</small>			<small>LA Diam</small>			<small>L/Ao</small>			<small>Max LA</small>			<small>EPSS</small>		
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	<small>LVPWs</small>	<small>PV maxPG</small>																																										
	<small>EF(Cube)</small>	<small>TR Vmax</small>																																										
	<small>%FS</small>	<small>TR maxPG</small>																																										
	<small>Ao Diam</small>																																											
	<small>LA Diam</small>																																											
	<small>L/Ao</small>																																											
	<small>Max LA</small>																																											
	<small>EPSS</small>																																											
B6		<small>PORT #2 HERE</small>																																										
		<small>PORT #1 HERE</small>																																										

INSTRUCTIONS: TO ATTACH REPORT, REMOVE PROTECTIVE TAPE BACKING, ALIGN REPORT AND PRESS DOWN FIRMLY. REPEAT PROCEDURE FOR SUBSEQUENT REPORTS.

FORM VT-3

LABORATORY REPORTS

Client:
Patient:

B6

Archived Records 10/1/13-10/4/13 (PART TWO)

Client:
Patient: **B6**

Archived Records 10/1/13-10/4/13 (PART TWO)

12 Lead: Standard Placement

B6

B6

10/4/2013 9:35:47 AM
Rutgs University
Rutgs Vet School
Cardiology

Client:
Patient:

B6

Archived Records 10/1/13-10/4/13 (PART TWO)

Client:
Patient:

B6

Archived Records 10/1/13-10/4/13 (PART TWO)

10/4/2013 9:35:42 AM

Tufts University

Cardiology

Tufts Vet School

B6

Client:
Patient:

B6

Archived Records 10/1/13-10/4/13 (PART TWO)

Client: **B6**
Patient:

Archived Records 10/1/13-10/4/13 (PART TWO)

10/4/2013 9:35:31 AM

Tufts University

Cardiology

Tufts Vet School

B6

Client:
Patient:

B6

Archived Records 10/1/13-10/4/13 (PART TWO)

Client:
Patient:

B6

Archived Records 10/1/13-10/4/13 (PART TWO)

227632

B6

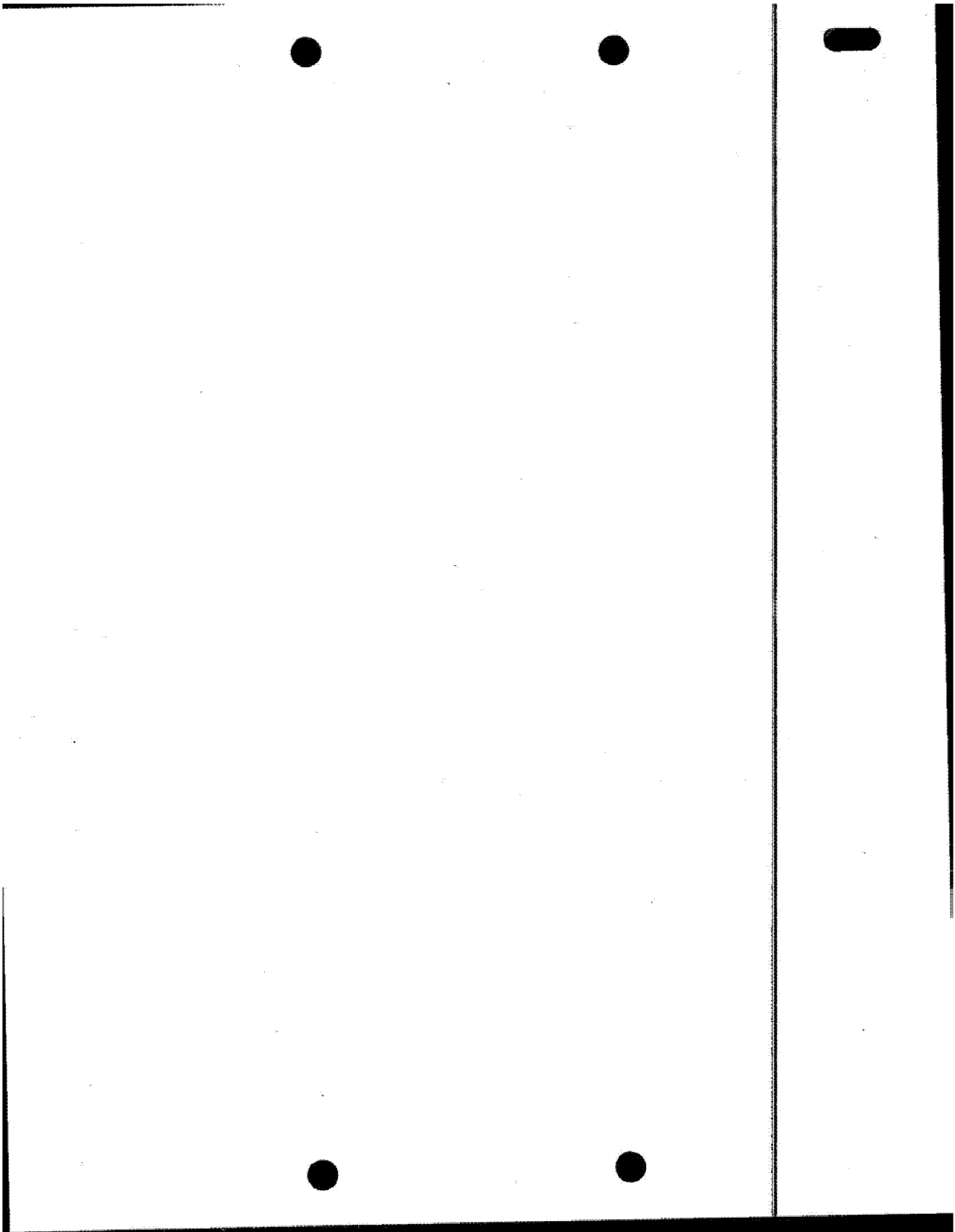
B6

10/1/2013 4:23:43 PM
Tufts University
Tufts Vet School
Cardiology

Client:
Patient:

B6

Archived Records 10/1/13-10/4/13 (PART TWO)



Client:
Patient:

B6

Archived Records 10/1/13-10/4/13 (PART TWO)

227632

10/1/2013 4:24:26 PM

B6

Tufts University

Cardiology

Tufts Vet School

227632

Cardiology

Tufts Vet S

B6

Client:
Patient:

B6

Archived Records 10/1/13-10/4/13 (PART TWO)

Client: **B6**
Patient:

Archived Records 10/1/13-10/4/13 (PART TWO)

B6

10/1/2013 4:24:40 PM

Tufts University

227632

7

Cardiology

Tufts Vet School

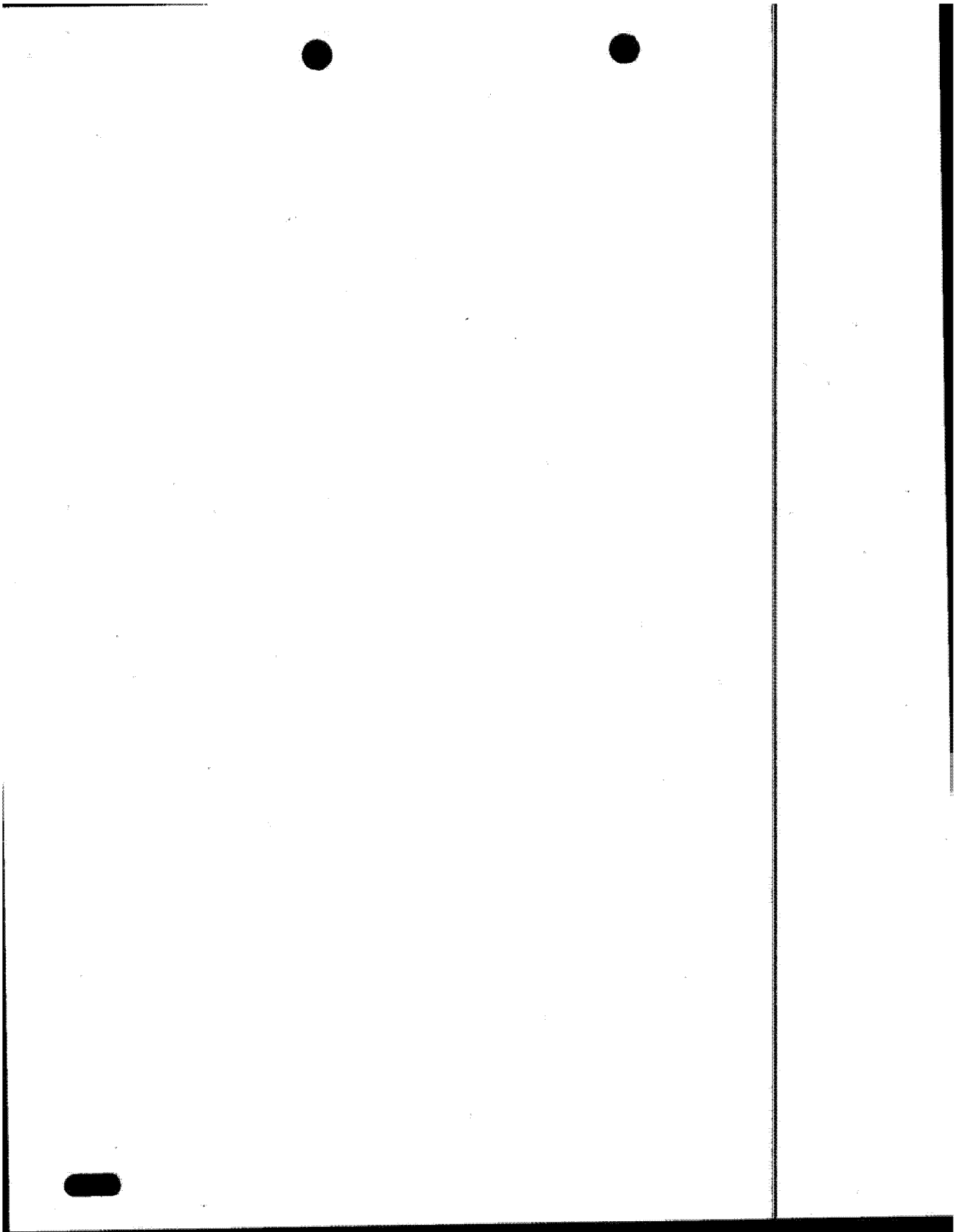
School

B6

Client:
Patient:

B6

Archived Records 10/1/13-10/4/13 (PART TWO)



Client: **B6**
Patient:

Archived Records 10/1/13-10/4/13 (PART TWO)

10/1/2013 4:25:03 PM

Tufts University

B6

Cardiology

Tufts Vet School

10/1/2013 4:24:51 PM

Tufts University

227632

Cardiology

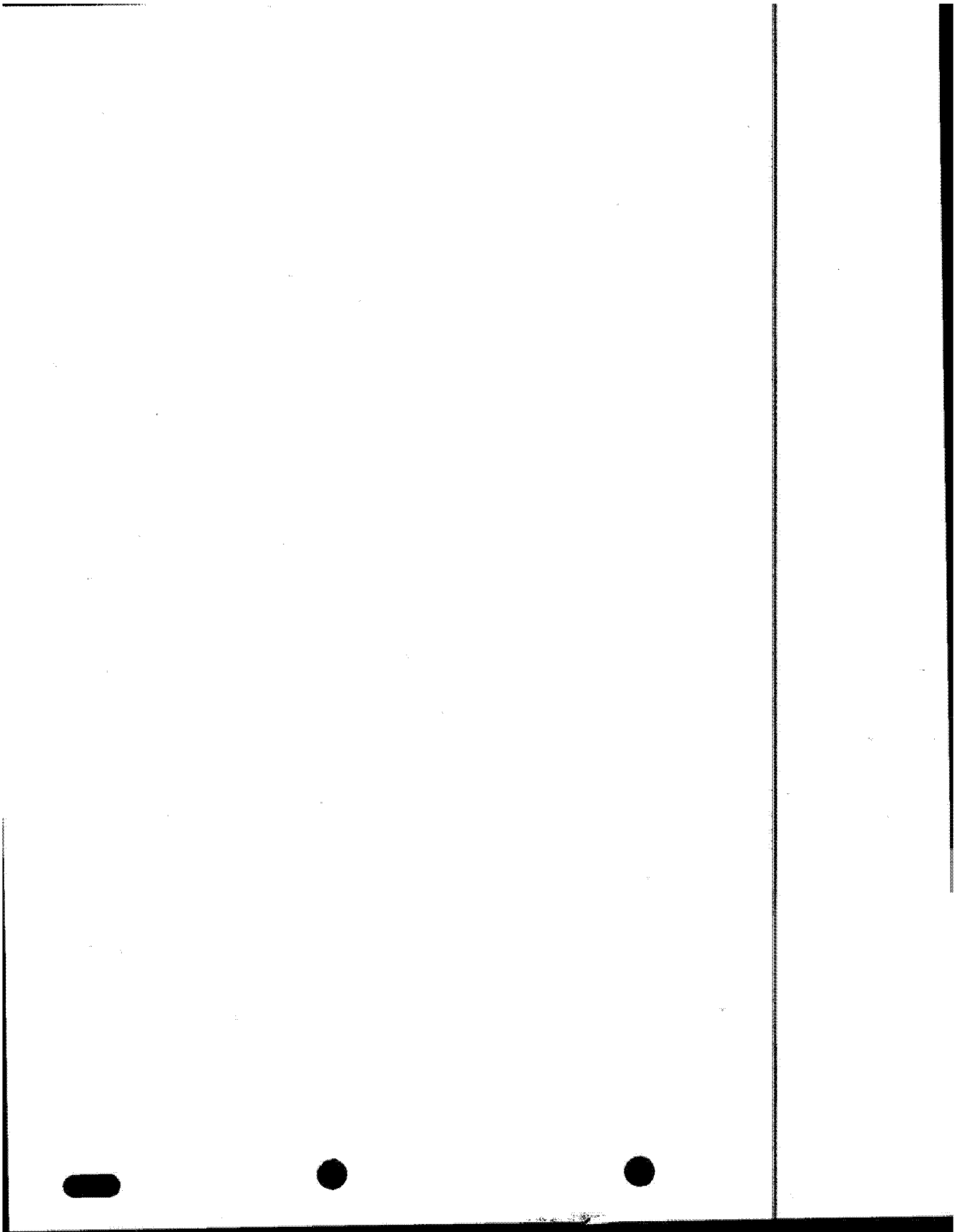
Tufts Vet School

B6

Client:
Patient:

B6

Archived Records 10/1/13-10/4/13 (PART TWO)



Client:
Patient:

B6

Archived Records 10/1/13-10/4/13 (PART TWO)

B6

10/1/2013 4:25:05 PM

Tufts University

227632

Cardiology

Tufts Vet School

B6

B6

Client:
Patient:

B6

Archived Records 10/1/13-10/4/13 (PART TWO)

Client: **B6**
Patient:

Archived Records 10/1/13-10/4/13 (PART TWO)

10/1/2013 4:25:03 PM
Tufts University
Tufts Vet School
Cardiology

One Minute Full Disclosure

B6

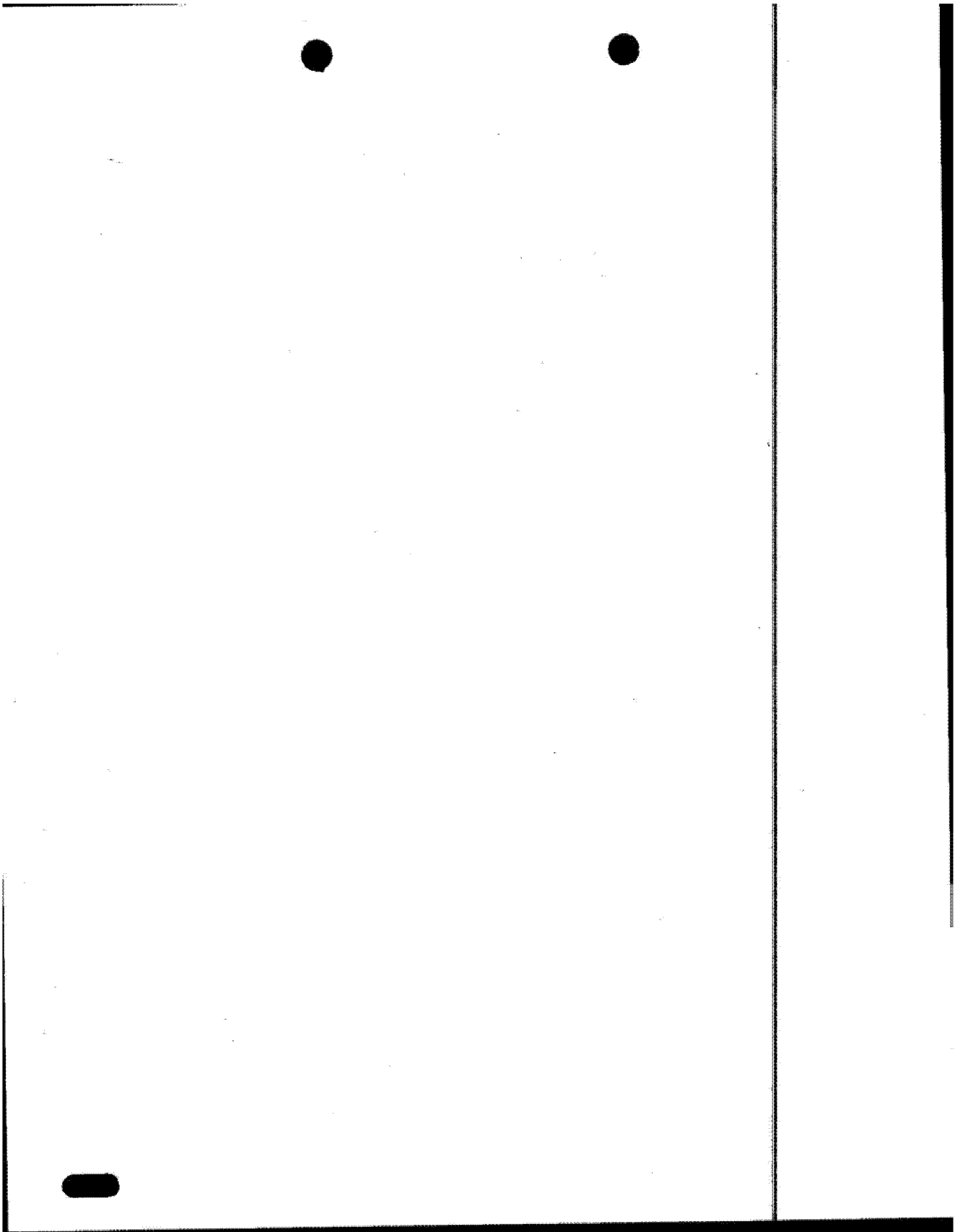
227632

B6

Client:
Patient:

B6

Archived Records 10/1/13-10/4/13 (PART TWO)



Client: B6
Patient: B6

Archived Records 10/1/13-10/4/13 (PART TWO)

Tufts University Cummings School of Veterinary Medicine

ANESTHESIA RECORD

Date: 10/2/13 Weight: 15 Kg. Clinician/Resident: B6
Cage/Stall: 1011 RS 15
Procedures: 1. Pacemaker placement
Pre-Anesthesia Disposition: Alert, Recumbent, Excited, Caution, Depressed, Painful, Anxious
Hydration: Adequate
Renal Function: 14/0/3
Blood Type:
Pre-anesthesia Values: Temp. 100.1, H.R. 44, R.R. 20, M.M. Color/CRT: Pink/1.2, P.C.V. 44, T.P. 5.4
DRUGS IN THE LAST 24 HOURS: LAC 1.6, BG 1.2, ASA Status: I II III IV V E

B6
FAWN CK STD
ROXER CANINE
B6

PRE-ANESTHETIC DRUGS:				Pre-Med. Results		
Drug	Dose	Route	Time	Sedation	Resistance	Vomited
Hydroxyzine 2.5mg IV			2:10	<input type="checkbox"/> None	<input checked="" type="checkbox"/>	Yes <input type="checkbox"/>
Midazolam 5mg IV				<input type="checkbox"/> Slight	<input type="checkbox"/>	No <input checked="" type="checkbox"/>
				<input type="checkbox"/> Moderate	<input type="checkbox"/>	
				<input checked="" type="checkbox"/> Marked	<input type="checkbox"/>	

Discarded Drugs:

ANESTHETIC INDUCTION:			
Drug	Dose	Route	Time
Etoricoxib 10mg IV			2:10

Time: 2:10
Isoflurane (%):
Sevoflurane (%):
O₂ (L/M): 2.2
CODE: 20
• Pulse Rate
◦ Respiratory Rate
v Systolic B.P. 16
- Mean B.P. 14
Δ Diastolic B.P.
C IPPV 12
* ET CO₂ 10
Blood Pressure measured by:
 Oscillometric
 Doppler
 Direct 20
Depth of Anes.: Light, Med., Deep
Fluids: LAS
SpO₂:
Temperature:

Non-reb Semi-closed
Mask Intubated
Size Tube: 10 mm
Recumbency: Left lateral
Post Op Times:
Start anes.: 2:15 PM
Start proc. 1: 2:30 PM
Start proc. 2: 2:40 PM
Start proc. 3: 2:45 PM
End Surgery: 3:45 PM
End anes.: 3:45 PM
Extubated: 4:05 PM
Recovery: Smooth, Rough, Prolonged, Other
Sternal:
Standing:
Epidural: _____
Duramorph: _____
Bupivacaine: _____
Success: _____
Needle size: _____
Initials: _____
Attempts: _____
Success: _____
Needle size: Y N U

B6

REMARKS: Alprazolam 0.25mg IV, Casorolol 500mg IV, 3rd degree AV block, persistent ECG unable to detect due to bradycardia - pulses strong, Placement of lead, pacing, Temporary stop of PM, Recovery smooth, normal extubation, quiet/comfortable following, continued monitoring in ICU.

art/ven	Time	pH	PCO ₂	PO ₂	Na+	K+	Ca ⁺⁺	HCO ₃ ⁻	BE

Signature Anesthesiologist/Technician: B6

Client:
Patient:

B6

Archived Records 10/1/13-10/4/13 (PART TWO)

Client: **B6**
Patient:

Archived Records 10/1/13-10/4/13 (PART TWO)

**Tufts University
Foster Hospital for Small Animals**
North Grafton, MA 01536
(508) 839-5395



B6

TREATMENT PLAN

DATE: 10/1/13 CLINICIAN: **B6**
ESTIMATED COST: **B6** DEPOSIT: 3000-

B6 FRIES CN STD
B6 PLATE CANINE

This estimate is based upon our preliminary examination. The final fee may vary considerably from this estimated cost. Every effort will be made to keep you informed of the current status of your bill throughout your animal's hospitalization.

OFFICE EVALUATION	COST	SPECIAL PROCEDURES (CONTINUED)	COST	ANESTHESIA	COST
<input checked="" type="checkbox"/> Examination		Proctoscopy		<input checked="" type="checkbox"/> Sedation	
<input type="checkbox"/> Recheck Examination		Skin Biopsy		<input type="checkbox"/> General Anesthesia	
<input checked="" type="checkbox"/> Emergency Fee		Skin Testing		Hrs. Day	
<input type="checkbox"/> ICU Examination		Thoracentesis		Hrs. Night	
<input type="checkbox"/> Consultation		Tracheal Aspirate			
<input checked="" type="checkbox"/> Registration		Other:			
HOSPITALIZATION: (# OF DAYS)		LABORATORY		DIAGNOSTIC IMAGING	
<input type="checkbox"/> Day Board		ACTH Plasma Level		<input type="checkbox"/> Barium Enema	
<input type="checkbox"/> Cat Ward		ACTH Response Test		<input type="checkbox"/> Cardiac Catheterization	
<input type="checkbox"/> General Ward Small		Aerobic Culture		<input type="checkbox"/> CT Scan	
<input type="checkbox"/> General Ward Large		Anaerobic Culture		<input type="checkbox"/> Cystourethrogram	
<input type="checkbox"/> Intermediate Care Ward		Bile Acids - Single		<input type="checkbox"/> Intravenous Urogram	
<input type="checkbox"/> Exotic		Blood Ammonia		<input type="checkbox"/> Met Check	
<input type="checkbox"/> Isolation		Blood Gas		<input type="checkbox"/> Myelogram	
<input checked="" type="checkbox"/> ICU		Chemistry Profile		<input type="checkbox"/> Nuclear Scan:	
<input type="checkbox"/> ICU Exotic		Coagulation Profile		Type:	
DAILY PATIENT CARE (# OF DAYS)		CBC/Platelet		<input type="checkbox"/> Upper GI Series	
<input type="checkbox"/> Cat Ward		Complete Blood Count		Radiographs: #	
<input type="checkbox"/> General Ward		Creatinine		<input type="checkbox"/> Ultrasound: Inpatient	
<input type="checkbox"/> Intermediate Care Ward		Cytology		<input type="checkbox"/> Ultrasound Guided Biopsy	
<input type="checkbox"/> Exotic		Dermatophyte Culture		Other:	
<input type="checkbox"/> Isolation		Dexa Response - High Dose			
<input checked="" type="checkbox"/> ICU		Dexa Response - Low Dose		SURGERY	
<input type="checkbox"/> ICU Exotic		Ehrlichia Canis		<input checked="" type="checkbox"/> Procedure <u>Proembo</u>	
ICU LEVEL TREATMENTS		Fecal Flotation		<input type="checkbox"/> Package Procedure	
<input type="checkbox"/> ICU Level I - Basic Treatment		Feline Leukemia Virus		<input type="checkbox"/> Implant Fee	
<input type="checkbox"/> ICU Level II - General Treatment		Feline Screen		<input type="checkbox"/> Emergency After Hrs. Surgery	
<input type="checkbox"/> ICU Level III - Standard Treatment		FIP		<input type="checkbox"/> Bandage Change	
<input type="checkbox"/> ICU Level IV - Extensive Treatment		FIV		<input type="checkbox"/> Splint Change	
<input type="checkbox"/> ICU Level V - Ultra Treatment		Fluid Analysis		Other:	
SPECIAL PROCEDURES		Fungal Culture		OTHER	
<input type="checkbox"/> Abdominocentesis		Heartworm Test (Micro)		<input type="checkbox"/> Oxygen Therapy:	
<input type="checkbox"/> Blood Crossmatch		Heartworm Test (Occult)		Days	
<input type="checkbox"/> Blood Transfusion		Histopath		Hours	
Whole Blood		Immune Profile		<input type="checkbox"/> IV Catheter:	
Plasma		Kidney Profile		Jelco	
50cc Direct		Lipase		<input type="checkbox"/> Intracath	
Packed RBC		Liver Profile		TPN	
Blood Typing		Lyme Disease		<input checked="" type="checkbox"/> Fluids: IV or SQ	
Bone Marrow: aspirate		PCV, TS, AZO, BG No.		Medication	
Bone Marrow: core		Platelet Count		Supplies	
CSF Tap		Reticulocyte Count		Miscellaneous	
Echocardiogram		Rocky Mountain Spotted Fever		Pharmacy	
EEG		Toxoplasmosis			
EKG		TSH Stimulation Test			
EMG		T3 & T4			
Endoscopy		T3 Only or T4 Only			
Joint Tap		Urinalysis			
		Other:			

I understand that no guarantee of successful treatment is made. (I also certify that I have read and fully understand the authorization for medical and/or surgical treatment. The reason 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 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 patient is released.

Procedural billing is inclusive up to and including the estimated duration of hospitalization. There will be additional expenses incurred if hospitalization extends beyond the specified duration.

I have read, understand, and agree to accept the conditions of this treatment plan.

B6

Vet Agent Signature

B6

Clinician Signature

10/1/13

Date

WHITE-MEDICAL RECORDS

CANARY-CLIENT

PINK-ACCOUNTING

Form #011 Revised 07/12

Client:
Patient:

B6

Archived Records 10/1/13-10/4/13 (PART TWO)

Client:
Patient:

B6

Archived Records 10/1/13-10/4/13 (PART TWO)



Tufts University
Foster Hospital for Small Animals
200 Westboro Road,
N. Grafton, MA 01536

B6

STANDARD CONSENT FORM

B6

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

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

TCSVM 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 TCSVM students under the supervision and assistance of TCSVM 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 TCSVM 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 Tufts Cummings School of Veterinary Medicine, its officers and employees (collectively referred to herein as TCSVM), and its agents and assigns the irrevocable rights to: (1) photograph/videotape the operation or procedure to be performed, including appropriate portions of the animal's body, and (2) reproduce, distribute, display, create derivative works of and otherwise use such photographs and images for, and in connection with, the University's medical, scientific, educational, and publicity purposes, for all but third-party commercial purposes, by any means, methods and media (print and electronic) now known or, in the future, developed that the University deems appropriate.

Form #006/C.C.-Rev.-1/29/07

Client: **B6**
Patient:

Archived Records 10/1/13-10/4/13 (PART TWO)

As surgical treatment necessitates the removal of tissue or body parts of my animal, I authorize TCSVM to dispose of or use this tissue for scientific 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.

B6 Owner's Signature	B6 Date: 10/1/13
B6 Owner's Address	B6 Owner's Address
	B6 Town/City State Zip

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 TCSVM pursuant to the terms and conditions described above.

Authorized Agent - Please Print _____
Street Address _____
Town/City State Zip _____

Agent's Signature _____
Date _____

Client: **B6**
Patient:

IDEXX Cardiopet proBNP 3/15/16



1-888-433-9987
Click the RED BANNER on
VetConnect.com for a new view

TUFTS: GRAFTON SMALL ANIM HOSPITAL
200 WESTBORO ROAD
GRAFTON MA 01536

508-887-4669
Account: 80735

Owner: **B6**
Patient:
Species: CANINE
Breed: BOXER
Age: **B6**
Gender: M

Requisition #: 154111
Accession #: **B6**
Order rec'd: 03/15/2016
Ordered by: **B6**
Reported: 03/15/2016

Test	Result	Reference Range	Flag	Bar Graph
CARDIOPET proBNP - CANINE	B6	0 - 900 pmol/L	H	B6
Cardiopet proBNP >1800pmol/L				
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.				

B6
03/15/2016

FINAL REPORT

PAGE 1 OF 1

Client: **B6**
Patient:

Holter ECG Patient Diary 3/18/16

PATIENT INFORMATION AND INSTRUCTIONS

Before leaving, you should read this booklet entirely to see if you have any questions regarding this procedure.

Your physician has recommended a Holter Electrocardiogram for the purpose of determining how your heart functions during your normal every day activities. Your physician will require you to log your activities in this diary while you are wearing the Holter Recorder. Use this diary to record the following:

Time of day: Record the time from the clock on the recorder. **Do Not Use Your Watch or Other Timepieces.**

Activity: For anything you do during this procedure; sitting, eating, taking medication, walking, strenuous exercise, smoking, bowel movements, urinating, sexual intercourse, etc.

Symptoms: During your activity make sure to write down any abnormalities that may occur, such as pains in your chest, neck, arm or face. Include any dizziness, heart pounding, nausea, or shortness of breath. Only make a notation if you feel something abnormal, otherwise, leave the "symptom" column blank.

IMPORTANT NOTES TO PATIENT

1. To insure an accurate evaluation of this recording, it is necessary that you keep a continual diary for 24 hours. This diary must include your activities, the time of these activities as shown on the recorder clock, and how you feel at the time. If you are unsure of the significance of a feeling, write it down.
2. Do not get the recorder wet. Do not bathe, shower, or swim during this monitoring period.
3. Do not open the recorder or tamper with it, or the lead wires. If you should notice any disconnection of the cable or wires into the recorder, please call the technician.

Following these instructions will help your physician analyze the results of your recording using specially designed equipment.

- SAMPLE DIARY -

TIME	ACTIVITY	SYMPTOMS
9:20	Mowing Lawn	Chest pain
10:30	To bathroom to urinate	
12:00	Driving	Heart beats faster
9:00	To bed	

B6

Client: **B6**
Patient:

Letter from client with rDVM sx estimate

04/10/2018 12:32PM FAX **B6**

0001/0002

B6

B6

B6

FAX COVER SHEET

DELIVER TO:	FROM:
B6	B6
COMPANY:	DATE:
ATTN: CARDIOLOGY	April 10, 2018
FAX NUMBER:	TOTAL NO. OF PAGES INCLUDING COVER:
B6	2
FILE NUMBER:	
N/A	

IF YOU DO NOT RECEIVE ALL PAGES:

PLEASE CALL BACK AS SOON AS POSSIBLE AT **B6**

NOTES/COMMENTS:

Attn: Cardiology Service
Re: **B6**

B6

Attached is an estimate for the procedure. The plan is to do the procedure under a dose of buprenorphine and lidocaine to avoid general anesthesia give **B6** cardiac conditions. While under the effect of those medications, **B6** also recommended removal of a wart in the ear via cryosurgery (the leg growth is too big to be frozen off).

Would you kindly review the estimate and advise of any concerns from a cardiac perspective? I am happy to obtain additional documentation from **B6** if necessary.

Very much appreciated,

B6

The documents included with this fax cover sheet contain information from the law firm **B6** which is confidential and/or privileged. This information is intended to be used for the use of the addressee named on this cover sheet. If you are not the addressee, note that any disclosure, photocopying, distribution or use of this faxed information is prohibited. If you have received this fax in error, please notify us by telephone (collect) immediately so that we can arrange for the retrieval of the original documents at no cost to you.

Client: **B6**
Patient:

Letter from client with rDVM sx estimate

04/10/2018 12:33PM FAX

B6

0002/0002

B6

4/9/2018
Page 1 / 1

B6

Client ID: **B6**
Estimate ID: 10090
Expiration Date: 7/8/2018

Patient ID:	B6	Species:	Canine	Weight:	73.50 pounds	Sex:	Neutered Male
Patient Name:		Breed:	Boxer	Birthday:	11/16/2010		

B6

Low Subtotal:

Tax:

Low Total:

B6

This document lists procedures to be performed on your animal. This estimate only approximates the cost of this visit and can vary upon results of further examination and test results. You are responsible for all fees incurred in this visit included or not in this estimate. Be assured that your animal's health is our highest concern and we will do everything to maintain that health. I accept and agree to the terms of this estimate:

Client: **B6**
Patient:

rDVM: **B6** hx 5/5/11-6/9/18

Patient History Report

Client: **B6** Patient: **B6**
Phone: **B6** Species: Canine Breed: Boxer
Address: **B6** Age: **B6** Sex: Neutered Male
Color: Fawn

Date	Type	Staff	History
------	------	-------	---------

6/9/2018 L

B6

Microbiology results from IDEXX Reference
Laboratory Requisition ID: 111882485 Posted Final
Test Result Reference Range
GIARDIA
OVA&PARA **B6**
HOOKWORM
ROUNDWORM
WHIPWORM
Asc: **B6**

OVA & PARASITES
NO OVA OR PARASITES SEEN
The IDEXX Fecal Dx antigen tests detect worm antigen and a positive indicates infection. Antigen-positive and egg-negative specimens can be seen during the pre-patent period, with single sex infections and due to intermittent egg shedding. Identification of eggs microscopically in antigen-negative specimens may be due to ingestion of infected feces (coprophagy) or because the amount of antigen is below the level of detection. Treatment should be considered for patients positive by either antigen or egg-detection. In cases of acute or chronic diarrhea also consider testing for viral, bacterial and protozoal infectious agents using RealPCR (canine diarrhea panel: test code 2625; feline diarrhea panel: test code 2627).

6/8/2018 P

B6

6/7/2018 C
6/7/2018 13:54

aTelephone - FINAL 06/07/2018

B6

-als

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

B6

Page 1 of 54

Date: 6/20/2018 10:38 AM

Client: **B6**
Patient:

rDVM: **B6** hx 5/5/11-6/9/18

Patient History Report

Client:	B6	Patient:	B6	Breed:	Boxer
Phone:	B6	Species:	Canine	Sex:	Neutered Male
Address:	B6	Age:	B6	Color:	Fawn

Date	Type	Staff	History
4/21/2018	C		Default Comments - CLOSED 04/23/2018 B6
4/21/2018	P	B6	B6
4/21/2018	C		B6

- B6** may be fed normally starting tonight.
- Restrict **B6** activity for the next 10-14 days. During this time **B6** should not be allowed outside, except for brief trips on a leash for elimination purposes.
- B6** should not be allowed to run, jump or have access to stairs.
- Please keep **B6** from licking or chewing at his incision site(s). Please keep other pets away from **B6** incision site until fully healed.
- Do not give **B6** a bath for the next 10 days. Keep the incision area(s) clean and dry.
- Give medications as directed.

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 med note, V: Vital signs

B6

Page 2 of 54

Date: 6/20/2018 10:38 AM

Client: **B6**
Patient:

rDVM: **B6** hx 5/5/11-6/9/18

Patient History Report

Client: **B6** Patient: **B6**
Phone: **B6** Species: Canine Breed: Boxer
Address: **B6** Age: **B6** Sex: Neutered Male
Color: Fawn

Date	Type	Staff	History
------	------	-------	---------

7. Monitor **B6** surgery site(s) daily. If you notice any redness, swelling or excessive discharge, or if the incision opens up, please call our office.
8. Please monitor **B6** and call our office if you observe any of the following: Loss of appetite for more than 2 days, excessive discomfort, repeated vomiting, excessive bleeding, refusal to move/depression.
9. Bandage change every three days.
10. Schedule suture removal with a technician in two weeks.

It has been our pleasure having **B6** as our patient. Please do not hesitate to call us **B6** with any questions or concerns.

4/21/2018 V	B6	Apr 21, 2018 08:55 AM Staff: B6
		Weight : 73.10 pounds
4/21/2018 T 4/20/2018 P	B6	

4/20/2018 C **B6** aTelephone - FINAL 04/20/2018 - ***ADDENDUM 4/20/2018
4/20/2018 13:10 **B6**
ADDENDUM on 4/20/2018 at 13:57:47 from **B6**
Call in rx to CVS in **B6**

4/16/2018 P	B6	B6
4/16/2018 P	B6	B6

B: Billing, C: Med note, CB: Call by, 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

B6

Client: **B6**
Patient:

rDVM: **B6** hx 5/5/11-6/9/18

Patient History Report

Client: **B6** Patient: **B6**
Phone: **B6** Species: Canine Breed: Boxer
Address: **B6** Age: **B6** Sex: Neutered Male
Color: Fawn

Date	Type	Staff	History
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B6

4/12/2018 C **B6** aTelephone - FINAL 04/12/2018 - ***ADDENDUM 4/13/2018
4/12/2018 10:46 **B6**
O called to schedule a growth removal for **B6** wondering if because it is being done with a local because of his having a pacemaker, would it be a drop off in the am or scheduled as an appointment
ADDENDUM on 4/13/2018 at 16:43:16 from **B6 **B6****
Called O to tell them to drop off **B6** between 7:30-8am of the

ADDENDUM on 4/13/2018 at 16:44:06 from **B6**
27th was unable to leave message on machine mail box was full

ADDENDUM on 4/13/2018 at 16:58:28 from **B6**
Called o to state that **B6** able to do the growth removal on Saturday the 21st if the O is able to.

ADDENDUM on 4/13/2018 at 16:58:49 from **B6**
Mail box was full unable to leave a message

4/9/2018 C WC aa Recheck - CLOSED 04/10/2018 - ***ADDENDUM 4/17/2018

Doctor: **B6** Tech: **B6**

B6

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 medl note, V: Vital signs

Client: **B6**
Patient:

rDVM: **B6** hx 5/5/11-6/9/18

Patient History Report

Client: **B6**
Phone: **B6**
Address: **B6**
Patient: **B6**
Species: Canine
Age: **B6**
Color: Fawn
Breed: Boxer
Sex: Neutered Male

Date	Type	Staff	History
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O:

A:

P:

ADDENDUM on 4/17/2018 at 15:02:35 from **B6**
Schedule removal under locals.

4/9/2018 V	B6	Apr 9, 2018 04:38 PM Staff: HS Weight : 73.50 pounds
3/24/2018 P	B6	B6

3/24/2018 C	B6	aTelephone - FINAL 03/24/2018 - ***ADDENDUM 3/24/2018
3/24/2018 09:14		

B6 -als

ADDENDUM on 3/24/2018 at 13:30:36 from **B6**
please call o at **B6** when **B6** filled

3/2/2018 P	B6	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 medl note, V: Vital signs

B6

Client: **B6**
Patient:

rDVM **B6** hx 5/5/11-6/9/18

Patient History Report

Client: **B6** Patient: **B6**
Phone: **B6** Species: Canine Breed: Boxer
Address: **B6** Age: **B6** Sex: Neutered Male
Color: Fawn

Date	Type	Staff	History
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3/2/2018	C	B6	aTelephone - FINAL 03/02/2018 - ***ADDENDUM 3/2/2018 o called for a refill of B6 Best B6 ADDENDUM on 3/2/2018 at 18:40:41 from B6 B6 stating that the pt's medication is ready to be picked up.
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1/26/2018	P	B6	B6
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1/24/2018	C	B6	aTelephone - FINAL 01/24/2018 - ***ADDENDUM 1/27/2018 B6 ADDENDUM on 1/26/2018 at 10:25:43 from B6 Owner called waiting for a call to get the approval for the refill.
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ADDENDUM on 1/27/2018 at 12:07:02 from **B6**
LMOM letting O know that **B6** is ready to be picked up.

1/11/2018	C	B6	Default Comments - CLOSED 01/12/2018
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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 Page 6 of 54 Date: 6/20/2018 10:38 AM

Client: **B6**
Patient:

rDVM: **B6** hx 5/5/11-6/9/18

Patient History Report

Client:	B6	Patient:	B6	Breed:	Boxer
Phone:		Species:	Canine	Sex:	Neutered Male
Address:		Age:	B6	Color:	Fawn

Date	Type	Staff	History
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B6

AP

1/10/2018 C **B6** aTelephone - FINAL 01/10/2018
1/10/2018 14:42

B6

1/6/2018 P	B6	B6
1/6/2018 P		

1/6/2018 C aSOAP - CLOSED 01/09/2018
Enter Office Visit:

B6

Current Medications: **B6**

s: BAR BCS=5/10

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 medl note, V: Vital signs

B6

Page 7 of 54

Date: 6/20/2018 10:38 AM

Client: **B6**
Patient:

rDVM: **B6** hx 5/5/11-6/9/18

Patient History Report

Client:	B6	Patient:	B6	Breed:	Boxer
Phone:		Species:	Canine	Sex:	Neutered Male
Address:		Age:	B6	Color:	Fawn

Date	Type	Staff	History
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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

Page 8 of 54

Date: 6/20/2018 10:38 AM

Client: **B6**
Patient:

rDVM: **B6** hx 5/5/11-6/9/18

Patient History Report

Client: Phone: Address:	B6	Patient: B6 Species: Canine Age: B6 Color: Fawn	Breed: Boxer Sex: Neutered Male
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Date	Type	Staff	History
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1/6/2018	V	B6	Jan 6, 2018 01:46 PM Staff: HS Weight: : 69.60 pounds
1/6/2018	L		Miscellaneous results from IDEXX Reference Laboratory Requisition ID: 108542103 Posted Final Ascn: B6 RE: 65008 PATHOLOGIST REPORT PATHOLOGIST REPORT SOURCE/HISTORY: Pedunculated mass left lateral stifle MICROSCOPIC DESCRIPTION: One slide is examined. The slide is of low to moderate cellularity. The cells are in good to fair morphologic condition. There are rare mature, anucleated keratinocytes and keratin bars. The keratinocytes have abundant, lightly basophilic, hyalinized cytoplasm with angular cellular borders. The keratinocytes are cytologically in within normal limits. Rare spindle cells are seen. The spindle cells have oval nuclei with stippled chromatin and scant amounts of lightly basophilic cytoplasm. The spindle cells exhibit mild anisocytosis and anisokaryosis. Rare red blood cells are present. No etiologic agents detected. MICROSCOPIC INTERPRETATION: Cytologically normal keratinocytes with mesenchymal cell proliferation COMMENTS: A small amount of keratinized material is seen. The keratin may represent contents of an epidermoid or follicular cyst or related lesion. Some hair follicle tumors or cornifying epitheliomas

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B6

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Date: 6/20/2018 10:38 AM

Client: **B6**
Patient:

rDVM: **B6** hx 5/5/11-6/9/18

Patient History Report

Client Phone Address:	B6	Patient: B6 Species: Canine Age: B6 Color: Fawn	Breed: Boxer Sex: Neutered Male
Date	Type	Staff	History

may have areas containing similar material, but no basal cells are detected on the slide(s). Correlation with your clinical impression is important. Alternatively, the keratinocytes may be from the normal overlying skin and not representative of the lesion. The mesenchymal cells have a mild degree of atypia. These cells could be from a soft tissue sarcoma (such as hemangiopericytoma, fibrosarcoma, or nerve sheath tumor), but they may also be reactive fibroblasts present from fibrosis. It is difficult to differentiate between cells from well-differentiated soft tissue sarcomas and reactive fibroblasts without evaluation of tissue architecture. Biopsy and histopathology are recommended for further evaluation of the lesion. If possible, wide surgical excision could be considered, as soft tissue sarcomas tend to be locally infiltrative and recurrent.

For veterinarians not currently viewing this pathology report in VetConnect PLUS, please log onto www.vetconnectplus.com today to see the image associated with this case, at no additional cost. If you need help logging on, please contact your local IDEXX Customer Support Team.

PATHOLOGIST:

B6

12/6/2017 P

B6

B6

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 medl note, V: Vital signs

B6

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Date: 6/20/2018 10:38 AM

Client: **B6**
Patient:

rDVM: **B6** hx 5/5/11-6/9/18

Patient History Report

Client: Phone: Address:	B6	Patient: B6 Species: Canine Age: B6 Color: Fawn	Breed: Boxer Sex: Neutered Male
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Date	Type	Staff	History
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appears to be doing the same per o.

Current meds: **B6**
B6 LM

B6

A:
-3rd degree AV block w/ pacemaker implantation in 2013

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 med note, V: Vital signs

B6

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Date: 6/20/2018 10:38 AM

Client: **B6**
Patient:

rDVM: **B6** hx 5/5/11-6/9/18

Patient History Report

Client Phone Address	B6	Patient:	B6	Breed:	Boxer
		Species:	Canine	Sex:	Neutered Male
		Age:	B6		
		Color:	Fawn		

Date	Type	Staff	History
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-L ventricular & atrial dilation w/ reduced contractile fx
-Cardiology recheck @ Tufts 9/29/17: L sided contractile fx improved w/ addition of **B6** is 100% pacemaker dependent, pacemaker interrogation wnl
-Gingival hyperplasia
-Dermal masses: r/o adenoma vs other for L thigh mass. O states mass on ventral thorax was previously diagnosed as a "pressure sore"

D.

B6

9/30/2017 V	B6	Sep 30, 2017 10:10 AM Staff: LM
		Weight: : 67.40 pounds

9/29/2017 C		a referral records - FINAL 09/29/2017
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Referral/History Records: Cummings Veterinary Hospital at Tufts University

Routine Recheck Appt

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

B6

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Date: 6/20/2018 10:38 AM

Client: **B6**
Patient:

rDVM: **B6** hx 5/5/11-6/9/18

Patient History Report

Client:	B6	Patient:	B6	Breed:	Boxer
Phone:		Species:	Canine	Sex:	Neutered Male
Address:		Age:	B6	Color:	Fawn

Date	Type	Staff	History
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8/7/2017	P	B6	B6
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8/7/2017	C		aTelephone - FINAL 08/07/2017
8/7/2017	12:06		
B6			

7/21/2017	C	B6	aTelephone - FINAL 07/21/2017
7/21/2017	15:52		
B6			

6/15/2017	C	B6	Default Comments - CLOSED 06/16/2017
O never picked up RX for		B6	Returned to stock and Rx voided. kb

6/10/2017	C	B6	aTelephone - CLOSED 06/11/2017
6/10/2017	10:28		
B6			

6/10/2017	P	B6	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 medl note, V: Vital signs

B6

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

rDVM: **B6** hx 5/5/11-6/9/18

Patient History Report

Client: **B6** Patient: **B6**
Phone: **B6** Species: Canine Breed: Boxer
Address: **B6** Age: **B6** Sex: Neutered Male
Color: Fawn

Date	Type	Staff	History
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6/10/2017	C	B6	aTelephone - FINAL 06/10/2017
6/10/2017	09:40		

B6

5/22/2017	C	B6	aTelephone - CLOSED 05/23/2017
5/22/2017	09:40		

B6

5/19/2017	C	B6	Default Comments - FINAL 05/19/2017 - ***ADDENDUM 5/20/2017
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B6

ADDENDUM on 5/20/2017 at 08:19:08 from **B6**

B6

ADDENDUM on 5/20/2017 at 08:22:44 from **B6**

B6

5/18/2017	P	B6	90.00 [None] of Internet Rx (6982)
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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 medl note, V: Vital signs

B6

Page 15 of 54

Date: 6/20/2018 10:38 AM

Client: **B6**
Patient:

rDVM: **B6** hx 5/5/11-6/9/18

Patient History Report

Client: **B6** Patient: **B6**
Phone: **B6** Species: Canine Breed: Boxer
Address: **B6** Age: **B6** Sex: Neutered Male
Color: Fawn

Date	Type	Staff	History
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B6

5/18/2017 C **B6** aTelephone - FINAL 05/18/2017
5/18/2017 11:59

B6

5/18/2017 C **B6** aTelephone - FINAL 05/18/2017
5/18/2017 10:31

B6

3/20/2017 P

B6

B6

3/20/2017 C **B6** a referral records - CLOSED 03/22/2017

Referral/History Records: TUFTS Veterinary

Pacemaker Recheck

10/6/2016 C **B6** aTelephone - CLOSED 10/07/2016

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 med note, V: Vital signs

B6

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Date: 6/20/2018 10:38 AM

Client: **B6**
Patient:

rDVM: **B6** hx 5/5/11-6/9/18

Patient History Report

Client: **B6** Patient: **B6**
Phone: **B6** Species: Canine Breed: Boxer
Address: **B6** Age: **B6** Sex: Neutered Male
Color: Fawn

Date	Type	Staff	History
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10/6/2016	12:51		Called in meds fr B6
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10/6/2016	P	B6	B6
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10/6/2016	C	B6	aTelephone - CLOSED 10/07/2016 B6 refill request
10/6/2016	08:22		B6

Authorized, please call in for owner. nd

9/9/2016	D	B6	B6
9/9/2016	P		
9/9/2016	P		
9/9/2016	P		

9/9/2016	C	B6	a SOAP - CLOSED 09/10/2016
Enter Office Visit:			

B6

S: BAR BCS=5/10

O: Temp: 101.5 Pulse: 110 Resp: pant

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 medl note, V: Vital signs

B6

Page 17 of 54

Date: 6/20/2018 10:38 AM

Client: **B6**
Patient:

rDVM: **B6** hx 5/5/11-6/9/18

Patient History Report

Client: Phone: Address:	B6	Patient: B6 Species: Canine Age: B6 Color: Fawn	Breed: Boxer Sex: Neutered Male
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Date	Type	Staff	History
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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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Date: 6/20/2018 10:38 AM

Client: **B6**
Patient:

rDVM: **B6** hx 5/5/11-6/9/18

Patient History Report

Client: **B6** Patient: **B6**
Phone: **B6** Species: Canine Breed: Boxer
Address: **B6** Age: **B6** Sex: Neutered Male
Color: Fawn

Date	Type	Staff	History
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9/9/2016	V	B6	Sep 9, 2016 01:22 PM Staff: ND Weight : 64.00 pounds
6/16/2016	C		a referral records - CLOSED 06/18/2016

Referral Records: Tufts

3/21/2016	P	B6	B6
3/21/2016	TC	B6	B6

3/15/2016	T	B6	Image: tufts report
11/23/2015	C		Default Comments - CLOSED 11/24/2015 VetConnect Plus: Results shared with owner. Monitor site.

11/17/2015	P	B6	B6
11/17/2015	P		

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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Date: 6/20/2018 10:38 AM

Client: **B6**
Patient:

rDVM: **B6** hx 5/5/11-6/9/18

Patient History Report

Client: **B6** Patient: **B6**
Phone: **B6** Species: Canine Breed: Boxer
Address: **B6** Age: **B6** Sex: Neutered Male
Color: Fawn

Date	Type	Staff	History
			B6

11/17/2015 C **B6** a SOAP - CLOSED 11/18/2015
Enter Office Visit:

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 med note, V: Vital signs

B6

Client: **B6**
Patient:

rDVM: **B6** hx 5/5/11-6/9/18

Patient History Report

Client:	B6	Patient:	B6	Breed:	Boxer
Phone:		Species:	Canine	Sex:	Neutered Male
Address:		Age:	B6	Color:	Fawn

Date	Type	Staff	History
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B6

11/17/2015 V

B6

Nov 17, 2015 05:51 PM Staff: ASC

Weight : 63.00 pounds

11/17/2015 L

Miscellaneous results from IDEXX Reference
Laboratory Requisition ID: 100141424 Posted Final
Test Result Reference Range

COMMENTS

Ascn: **B6**
SB, /CANINE MN CANINE
RE: 2016 SOURCE/HISTORY
SOURCE/HISTORY

B6

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 medl note, V: Vital signs

B6

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Date: 6/20/2018 10:38 AM

Client: **B6**
Patient:

rDVM: **B6** hx 5/5/11-6/9/18

Patient History Report

Client:	B6	Patient:	B6	Breed:	Boxer
Phone:		Species:	Canine	Sex:	Neutered Male
Address:		Age:	B6	Color:	Fawn

Date	Type	Staff	History
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Consistent with a histiocytoma.

RE: 2007 PATHOLOGIST
PATHOLOGIST

B6

COMMENTS

B6

10/31/2015 P

B6

7/15/2015 T
7/1/2015 P

B6

7/1/2015 TC NM Report from Tufts was seen for abnormal swelling over his pacemaker. CBC & Chem10 was submitted. - TENTATIVE
Report from Tufts was seen for abnormal swelling over his pacemaker. CBC & Chem10 was submitted. bandaged placed o to change every 3 days for the next 2 weeks. **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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Date: 6/20/2018 10:38 AM

Client: **B6**
Patient:

rDVM: **B6** hx 5/5/11-6/9/18

Patient History Report

Client:	B6	Patient:	B6	Breed:	Boxer
Phone:	B6	Species:	Canine	Sex:	Neutered Male
Address:	B6	Age:	B6	Color:	Fawn

Date	Type	Staff	History
7/1/2015	T	B6	Image: tufts report
6/30/2015	TC	B6	B6
4/25/2015	P	B6	B6
4/25/2015	TC	B6	B6
3/2/2015	P	B6	B6
2/3/2015	V	B6	B6
2/2/2015	C	B6	a SOAP - Closed Feb 04/2015 Enter Office Visit: 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

Client: **B6**
Patient:

rDVM: **B6** hx 5/5/11-6/9/18

Patient History Report

Client:	B6	Patient:	B6	Breed:	Boxer
Phone:		Species:	Canine	Sex:	Neutered Male
Address:		Age:	B6	Color:	Fawn

Date	Type	Staff	History
------	------	-------	---------

B6

GI: NSF

2/2/2015	V	B6	Feb 2, 2015 08:52 AM Staff: WC
			Weight : 61.00 pounds

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 med note, V: Vital signs

B6

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Date: 6/20/2018 10:38 AM

Client: **B6**
Patient:

rDVM: **B6** hx 5/5/11-6/9/18

Patient History Report

Client Phone Address:	B6	Patient:	B6	Breed:	Boxer
		Species:	Canine	Sex:	Neutered Male
		Age:	B6		
		Color:	Fawn		

Date	Type	Staff	History
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8/18/2014	C	B6	aTelephone - Closed Aug 20/2014 8/18/2014 14:07 o called, had asked for records to be faxed to B6 and they were not. Faxed records to B6
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8/1/2014	T		Image: tufts report
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6/30/2014	C		Default Comments - Closed Jul 02/2014 Report from Tuff's Recheck, B6 did have a collapsing episode while on a hike last Sat. Thoracic xrays, echo, ECG and Chem 21 were done. Recheck in 1 month.
-----------	---	--	---

6/29/2014	T		Image: TuftsCardiologyReport:6/27/14
3/19/2014	V		Mar 19, 2014 09:04 AM Staff: NM
			Weight : 61.80 pounds.

3/19/2014	P		B6
3/19/2014	L		SNAP Assays results from IDEXX VetLab In-clinic Laboratory Requisition ID: 8097 Posted Final Test Result Reference Range HW = B6 Lyme = AP_spp = EC-EE =

3/19/2014	C	B6	a SOAP - Closed Mar 21/2014 Enter Office Visit: 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 medl note, V: Vital signs

B6

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Date: 6/20/2018 10:38 AM

Client: **B6**
Patient:

rDVM: **B6** hx 5/5/11-6/9/18

Patient History Report

Client:	B6	Patient:	B6	Breed:	Boxer
Phone:		Species:	Canine	Sex:	Neutered Male
Address:		Age:	B6	Color:	Fawn

Date	Type	Staff	History
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B6

2/10/2014 C

B6

Default Comments - Closed Feb 12/2014
Report from Tufts: Third degree AV block and pacemaker implantation - Good pacemaker function with battery life of 5-5 1/2 years. Recheck in 3 months to

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 med note, V: Vital signs

B6

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Date: 6/20/2018 10:38 AM

Client: **B6**
Patient:

rDVM: **B6** hx 5/5/11-6/9/18

Patient History Report

Client: Phone: Address:	B6	Patient: B6 Species: Canine Age: B6 Color: Fawn	Breed: Boxer Sex: Neutered Male
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Date	Type	Staff	History
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evaluate pacemaker function likely to also recheck echo than as heart was riginally dilated.

2/8/2014 T 2/7/2014 T 10/15/2013 T		B6	Image: Tufts report Image: Tuft University Notes Image: recheck.urinalysis tuft report
10/9/2013 C			aTelephone - Closed Oct 11/2013 10/9/2013 08:05 o Called wanting to set up, S/R & EKG on Monday. Explained that B6 is not here this week, but may be at other facilities. o was hoping to do everything on Monday as she is off from work.
10/7/2013 P			0.01 each of Referral Hospital Medications (7386) B6
10/5/2013 C			Default Comments - Closed Oct 07/2013 O noticed slow heartbeat and brought B6 to Tufts University. B6 was diagnosed with 3rd degree AV block and echocardiogram showed typical changes to dogs with bradycardia. A pacemaker was placed the next day, and B6 has been doing well. He was tested negative for tick-born diseases, and UA was unremarkable. Warren seems to be younger than a typical dog with 3rd degree AV block, so still suspicious that some infection started this off. So there is a chance in the future that his rythm may recover. Suture removal and EKG in 7-10 days. B6
10/4/2013 T			Image: Tufts sx report
10/1/2013 C			Default Comments - Closed Oct 03/2013 Faxed records to Tufts @508-839-7951
10/1/2013 L			Immunoassay results from IDEXX VetLab In-clinic

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 medl note, V: Vital signs

B6

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Date: 6/20/2018 10:38 AM

Client: **B6**
Patient:

rDVM **B6** hx 5/5/11-6/9/18

Patient History Report

Client: Phone: Address:	B6	Patient: B6 Species: Canine Age: B6 Color: Fawn	Breed: Boxer Sex: Neutered Male
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Date	Type	Staff	History
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Laboratory Requisition ID: 7373 Posted Final
Test Result Reference Range
TT4 = **B6**

10/1/2013 L SM Chemistry results from IDEXX VetLab In-clinic
Laboratory Requisition ID: 7373 Posted Final
Test Result Reference Range
ALB = 2.3 - 4
ALKP = 23 - 212
ALT = 10 - 100
AMYL = 500 - 1500
BUN/UREA = 7 - 27
Ca = 7.9 - 12
Chloride = 109 - 122
CHOL = 110 - 320
CREA = 0.5 - 1.8
GGT = 0 - 7
GLU = 74 - 143
LIPA = 200 - 1800
PHOS = 2.5 - 6.8
Potassium = 3.5 - 5.8
Sodium = 144 - 160
TBIL = 0 - 0.9
TP = 5.2 - 8.2
GLOB = 2.5 - 4.5
ALE/GLOB =
BUN/CREA =
Na/K =
OSM calc =

B6

10/1/2013 L SM Hematology results from IDEXX VetLab In-clinic
Laboratory Requisition ID: 7373 Posted Final
Test Result Reference Range
WBC = 5.5 - 16.9
HCT = 37 - 55
MCV = 60 - 77
RBC = 5.5 - 8.5
HGB = 12 - 18
MCH = 18.5 - 30
MCHC = 30 - 37.5
MPV =
PLT = 175 - 500
LYMPHS = 0.5 - 4.9
%LYMPHS =
MONOS = 0.3 - 2
%MONOS =
NEUT = 2 - 12

B6

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, LL: 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

B6

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Date: 6/20/2018 10:38 AM

Client: **B6**
Patient:

rDVM: **B6** hx 5/5/11-6/9/18

Patient History Report

Client: Phone: Address:	B6	Patient: B6 Species: Canine Age: B6 Color: Fawn	Breed: Boxer Sex: Neutered Male
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Date	Type	Staff	History
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%NEUT =	B6	0.1 - 1.49
EOS =		
%EOS =		
BASO =		0 - 0.1
%BASO =		
Retics =		10 - 110
%Retics =		
RDW =		14.7 - 17.9
PDW =		
PCT =		

10/1/2013	V	CP	Oct 1, 2013 07:35 AM Staff: B6 Weight: 57.50 pounds
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10/1/2013	C	CP	a SOAP - Closed Oct 03/2013 Enter Office Visit:
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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

Client: **B6**
Patient:

rDVM: **B6** hx 5/5/11-6/9/18

Patient History Report

Client:	B6	Patient:	B6	Breed:	Boxer
Phone:		Species:	Canine	Sex:	Neutered Male
Address:		Age:	B6	Color:	Fawn

Date	Type	Staff	History
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B6

9/19/2013 P	B6	B6
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9/19/2013 C	B6	a SOAP - Closed Sep 21/2013 Enter Office Visit:
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B6

S: BAR BCS=5/10

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 med note, V: Vital signs

B6

Client: **B6**
Patient:

rDVM: **B6** hx 5/5/11-6/9/18

Patient History Report

Client:	B6	Patient:	B6	Breed:	Boxer
Phone:		Species:	Canine	Sex:	Neutered Male
Address:		Age:	B6	Color:	Fawn

Date	Type	Staff	History
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B6

6/20/2013 P

B6

B6

6/20/2013 P

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 medl note, V: Vital signs

B6

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Date: 6/20/2018 10:38 AM

Client: **B6**
Patient:

rDVM: **B6** 5/5/11-6/9/18

Patient History Report

Client: **B6** Patient: **B6**
Phone: **B6** Species: Canine Breed: Boxer
Address: **B6** Age: **B6** Sex: Neutered Male
Color: Fawn

Date	Type	Staff	History
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6/20/2013 P

B6

B6

6/20/2013 V

Jun 20, 2013 02:18 PM Staff: **B6**

Weight : 57.30 pounds

6/20/2013 C

a SOAP - Closed Jun 22/2013
Enter Office Visit:

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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Date: 6/20/2018 10:38 AM

Client: **B6**
Patient:

rDVM: **B6** hx 5/5/11-6/9/18

Patient History Report

Client Phone Address:	B6	Patient:	B6	Breed:	Boxer
		Species:	Canine	Sex:	Neutered Male
		Age:	B6		
		Color:	Fawn		

Date	Type	Staff	History
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B6

4/30/2013 P

B6

B6

4/30/2013 C

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 med note, V: Vital signs

B6

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Date: 6/20/2018 10:38 AM

Client: **B6**
Patient:

rDVM **B6** hx 5/5/11-6/9/18

Patient History Report

Client: **B6**
Phone:
Address:

Patient: **B6**
Species: Canine
Age: **B6**
Color: Fawn

Breed: Boxer
Sex: Neutered Male

Date	Type	Staff	History
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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 med note, V: Vital signs

B6

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Date: 6/20/2018 10:38 AM

Client: **B6**
Patient:

rDVM **B6** hx 5/5/11-6/9/18

Patient History Report

Client:	B6	Patient:	B6	Breed:	Boxer
Phone:		Species:	Canine	Sex:	Neutered Male
Address:		Age:	B6	Color:	Fawn

Date	Type	Staff	History
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<h1>B6</h1>			
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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: 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 med note, V: Vital signs

B6

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Date: 6/20/2018 10:38 AM

Client: **B6**
Patient:

rDVM Harbor AH hx 5/5/11-6/9/18

Patient History Report

Client:	B6	Patient:	B6	Breed:	Boxer
Phone:		Species:	Canine	Sex:	Neutered Male
Address:		Age:	B6	Color:	Fawn

Date	Type	Staff	History
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<h1>B6</h1>			
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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: 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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Date: 6/20/2018 10:38 AM

Client: **B6**
Patient:

rDVM **B6** hx 5/5/11-6/9/18

Patient History Report

Client:	B6	Patient:	B6	Breed:	Boxer
Phone:	B6	Species:	Canine	Sex:	Neutered Male
Address:	B6	Age:	B6	Color:	Fawn

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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Date: 6/20/2018 10:38 AM

Client: **B6**
Patient:

rDVM: **B6** hx 5/5/11-6/9/18

Patient History Report

Client: Phone: Address:	B6	Patient: B6 Species: Canine Age: B6 Color: Fawn	Breed: Boxer Sex: Neutered Male
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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 med note, V: Vital signs

B6

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Date: 6/20/2018 10:38 AM

Client: **B6**
Patient:

rDVM: **B6** hx 5/5/11-6/9/18

Patient History Report

Client: Phone: Address:	B6	Patient: B6 Species: Canine Age: B6 Color: Fawn	Breed: Boxer Sex: Neutered Male
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Date	Type	Staff	History
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3/29/2013 L

B6

Miscellaneous results from IDEXX Reference
Laboratory Requisition ID: 8188 Posted Final
Test Result Reference Range
COMMENTS
Asc: **B6**
1J, /CANINE MN CANINE
RE: 2016 SOURCE/HISTORY
SOURCE/HISTORY

B6

RE: 2007 PATHOLOGIST
PATHOLOGIST

B6

COMMENTS

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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Date: 6/20/2018 10:38 AM

Client: **B6**
Patient:

rDVM: **B6** x 5/5/11-6/9/18

Patient History Report

Client: **B6** Patient: **B6**
Phone: **B6** Species: Canine Breed: Boxer
Address: **B6** Age: **B6** Sex: Neutered Male
Color: Fawn

Date	Type	Staff	History
------	------	-------	---------

B6

3/29/2013 C **B6** **B6** Comment - CLOSED 04/01/2013

Ventral sternum mass removal: E **B6**

3/29/2013 V **B6** Mar 29, 2013 11:23 AM Staff: WC
Weight : 69.50 pounds

3/29/2013 L **B6** Chemistry results from IDEXX VetLab In-clinic
Laboratory Requisition ID: 6222 Posted Final
Test Result Reference Range
ALB = 2.3 - 4
ALKP = 23 - 212
ALT = 10 - 100
BUN/UREA = 7 - 27
Chloride = 109 - 122
CREA = 0.5 - 1.8
GLU = 74 - 143
Potassium = 3.5 - 5.8
Sodium = 144 - 160
TP = 5.2 - 8.2
GLOB = 2.5 - 4.5
ALB/GLOB =
BUN/CREA =

B: Billing, C: Med note, CB: Call back, CK: Check-in, CM: Communications, D: Diagnosis, DT: Diet/nutrition 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 medl note, V: Vital signs

B6

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Date: 6/20/2018 10:38 AM

Client: **B6**
Patient:

rDVM: **B6** hx 5/5/11-6/9/18

Patient History Report

Client: Phone: Address:	B6	Patient: B6 Species: Canine Age: B6 Color: Fawn	Breed: Boxer Sex: Neutered Male
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Date	Type	Staff	History
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Na/K =
OSM calc = **B6** mmol/kg

3/29/2013 L

B6

Hematology results from IDEXX VetLab In-clinic
Laboratory Requisition ID: 6222

Test	Result	Posted	Final	Reference Range
WBC =	B6			5.5 - 16.9
HCT =				37 - 55
MCV =				60 - 77
RBC =				5.5 - 8.5
HGB =				12 - 18
MCH =				18.5 - 30
MCHC =				30 - 37.5
MPV =				
PLT =				175 - 500
LYMPHS =				0.5 - 4.9
%LYMPHS =				
MONOS *				0.3 - 2
%MONOS *				
NEUT *				2 - 12
%NEUT *				
EOS =			0.1 - 1.49	
%EOS =				
BASO =			0 - 0.1	
%BASO =				
Retics =			10 - 110	
%Retics =				
RDW =			14.7 - 17.9	
PDW =				
PCT =				

WBC Abnormal Distribution

3/29/2013 P

B6

B6

3/29/2013 T

12/21/2012 C

Telephone - Closed Dec 26/2012
12/21/2012 08:41

B6

B: Billing, C: Med note, CB: Cell 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 medl note, V: Vital signs

B6

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Date: 6/20/2018 10:38 AM

Client: **B6**
Patient:

rDVM: **B6** hx 5/5/11-6/9/18

Patient History Report

Client:	B6	Patient:	B6	Breed:	Boxer
Phone:		Species:	Canine	Sex:	Neutered Male
Address:		Age:	B6	Color:	Fawn

Date	Type	Staff	History
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<h1>B6</h1>			
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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: 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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Date: 6/20/2018 10:38 AM

Client: **B6**
Patient:

rDVM: **B6** hx 5/5/11-6/9/18

Patient History Report

Client:	B6	Patient:	B6	Breed:	Boxer
Phone:		Species:	Canine	Sex:	Neutered Male
Address:		Age:	B6	Color:	Fawn

Date	Type	Staff	History
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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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Date: 6/20/2018 10:38 AM

Client: **B6**
Patient:

rDVM: **B6** hx 5/5/11-6/9/18

Patient History Report

Client Phone Address:	B6	Patient:	B6	Breed:	Boxer
		Species:	Canine	Sex:	Neutered Male
		Age:	B6		
		Color:	Fawn		

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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Date: 6/20/2018 10:38 AM

Client: **B6**
Patient:

rDVM: **B6** hx 5/5/11-6/9/18

Patient History Report

Client:	B6	Patient:	B6	Breed:	Boxer
Phone:		Species:	Canine	Sex:	Neutered Male
Address:		Age:	B6	Color:	Fawn

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: 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

B6

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Date: 6/20/2018 10:38 AM

Client: **B6**
Patient:

rDVM: **B6** hx 5/5/11-6/9/18

Patient History Report

Client:	B6	Patient:	B6	Breed:	Boxer
Phone:		Species:	Canine	Sex:	Neutered Male
Address:		Age:	B6	Color:	Fawn

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 med/note, V: Vital signs

B6

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Date: 6/20/2018 10:38 AM

Client: **B6**
Patient:

rDVM: **B6** hx 5/5/11-6/9/18

Patient History Report

Client:	B6	Patient:	B6	Breed:	Boxer
Phone:		Species:	Canine	Sex:	Neutered Male
Address:		Age:	B6	Color:	Fawn

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

Page 47 of 54

Date: 6/20/2018 10:38 AM

Client: **B6**
Patient:

rDVM: **B6** hx 5/5/11-6/9/18

Patient History Report

Client:	B6	Patient:	B6	Breed:	Boxer
Phone:		Species:	Canine	Sex:	Neutered Male
Address:		Age:	B6	Color:	Fawn

Date	Type	Staff	History
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<h1>B6</h1>			
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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: 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 med note, V: Vital signs

B6

Page 48 of 54

Date: 6/20/2018 10:38 AM

Client: **B6**
Patient:

rDVM: **B6** hx 5/5/11-6/9/18

Patient History Report

Client:	B6	Patient:	B6	Breed:	Boxer
Phone:		Species:	Canine	Sex:	Neutered Male
Address:		Age:	B6	Color:	Fawn

Date	Type	Staff	History
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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

Page 49 of 54

Date: 6/20/2018 10:38 AM

Client: **B6**
Patient:

rDVM: **B6** hx 5/5/11-6/9/18

Patient History Report

Client: Phone: Address:	B6	Patient: B6 Species: Canine Age: B6 Color: Fawn	Breed: Boxer Sex: Neutered Male
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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

Page 50 of 54

Date: 6/20/2018 10:38 AM

Client: **B6**
Patient:

rDVM: **B6** hx 5/5/11-6/9/18

Patient History Report

Client:	B6	Patient:	B6	Breed:	Boxer
Phone:		Species:	Canine	Sex:	Neutered Male
Address:		Age:	B6	Color:	Fawn

Date	Type	Staff	History
B6			

B: Billing; C: Case notes; D: Case notes; E: Check-in; F: Communications; G: Diagnostics; H: Exam notes; I: History; J: Examination; K: Exam notes; L: Departing instr.; M: Lab result; N: Image cases; O: Prescription; P: A: PVL Accepted, P: B: problems, P: P: PVL Performed, P: P: PVL Recommended, R: Correspondence, T: Images, TC: Tentative medl note, V: Vital signs

B6

Client: **B6**
Patient:

rDVM: **B6** hx 5/5/11-6/9/18

Patient History Report

Client: Phone: Address:	B6	Patient: B6 Species: Canine Age: B6 Color: Fawn	Breed: Boxer Sex: Neutered Male
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Date	Type	Staff	History
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B6

Page 52 of 54

Date: 6/20/2018 10:38 AM

Client: **B6**
Patient:

rDVM: **B6** hx 5/5/11-6/9/18

Patient History Report

Client: Phone: Address:	B6	Patient: B6 Species: Canine Age: B6 Color: Fawn	Breed: Boxer Sex: Neutered Male
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Date	Type	Staff	History
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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 med note, V: Vital signs

B6

Page 53 of 54

Date: 6/20/2018 10:38 AM

Client: **B6**
Patient:

rDVM: **B6** hx 5/5/11-6/9/18

Patient History Report

Client:	B6	Patient:	B6	Breed:	Boxer
Phone:		Species:	Canine	Sex:	Neutered Male
Address:		Age:	B6	Color:	Fawn

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 med note, V: Vital signs

B6

Page 54 of 54

Date: 6/20/2018 10:38 AM

Client:
Patient:

B6

Euthanasia/Disposition of Remains

B6

B6

Client: **B6**
Patient:

Vitals Results

6/25/2014 10:48:20 AM	Weight (kg)
6/25/2014 11:57:16 AM	Blood Pressure (mmHg)
12/31/2014 11:24:35 AM	Weight (kg)
6/25/2015 2:52:21 PM	Weight (kg)
7/1/2015 9:55:47 AM	Body Condition Score (BCS)
7/1/2015 9:55:48 AM	Temperature (F)
7/1/2015 9:55:49 AM	Weight (kg)
7/1/2015 9:55:50 AM	Heart Rate (/min)
7/1/2015 9:55:51 AM	Respiratory Rate
9/2/2015 10:05:42 AM	Weight (kg)
3/14/2016 11:07:14 AM	Weight (kg)
6/13/2016 1:22:23 PM	Weight (kg)
3/17/2017 9:30:20 AM	Weight (kg)
9/29/2017 10:55:44 AM	Weight (kg)
6/20/2018 10:32:39 AM	Weight (kg)

B6

Patient History

05/28/2014 07:52 PM	Appointment
06/23/2014 01:04 PM	Appointment
06/25/2014 10:00 AM	UserForm
06/25/2014 10:48 AM	Vitals
06/25/2014 11:02 AM	UserForm
06/25/2014 11:19 AM	Purchase
06/25/2014 11:19 AM	Treatment
06/25/2014 11:37 AM	Purchase
06/25/2014 11:37 AM	Purchase
06/25/2014 11:37 AM	Purchase
06/25/2014 11:57 AM	Vitals
06/25/2014 11:57 AM	Purchase
06/25/2014 12:22 PM	Purchase
06/25/2014 12:28 PM	Purchase
06/25/2014 12:43 PM	UserForm
06/25/2014 12:45 PM	Purchase
06/25/2014 12:45 PM	Purchase
06/25/2014 12:55 PM	Appointment
06/25/2014 12:56 PM	Appointment
06/25/2014 12:56 PM	Appointment

B6

Client: **B6**
Patient:

Patient History

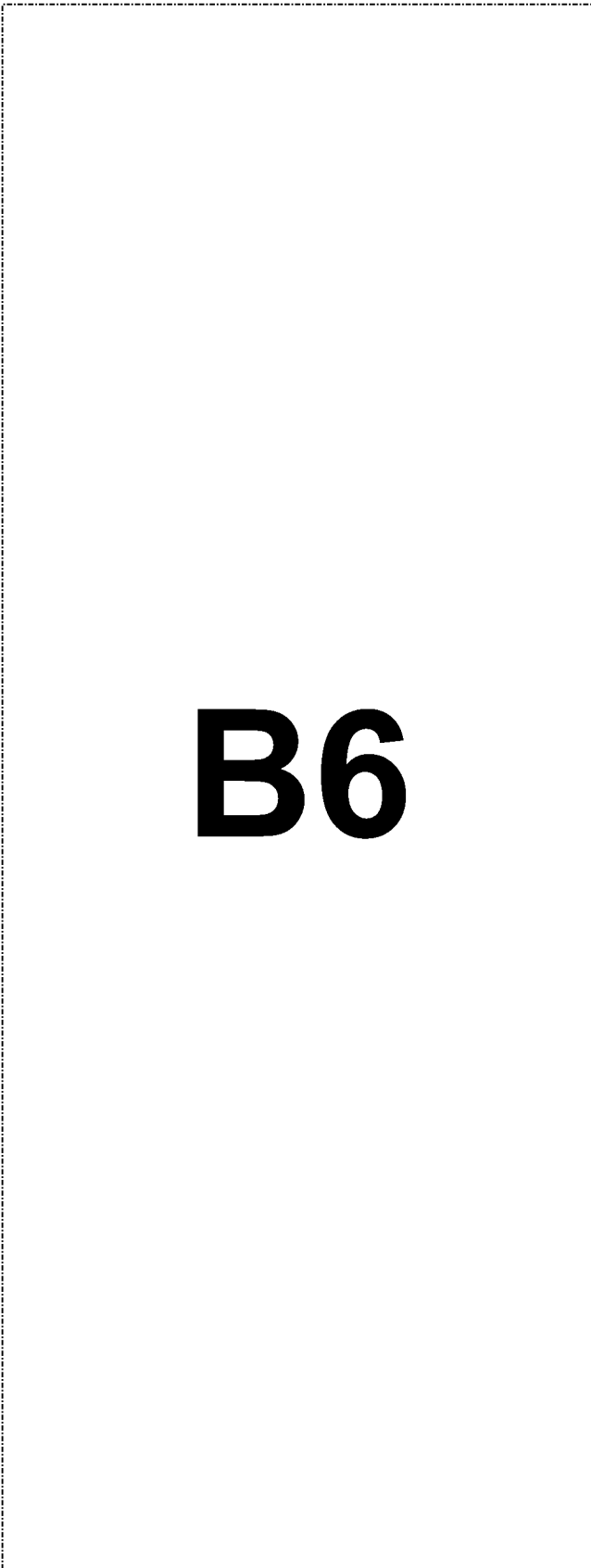
06/25/2014 01:12 PM	Email
06/30/2014 01:28 PM	Appointment
07/15/2014 12:13 PM	UserForm
07/15/2014 12:14 PM	UserForm
07/15/2014 01:01 PM	Purchase
07/15/2014 01:06 PM	Purchase
07/15/2014 01:07 PM	Treatment
07/15/2014 03:46 PM	Email
10/15/2014 11:41 AM	Appointment
12/30/2014 02:24 PM	Appointment
12/31/2014 11:18 AM	UserForm
12/31/2014 11:23 AM	UserForm
12/31/2014 11:24 AM	Vitals
12/31/2014 11:35 AM	Purchase
12/31/2014 11:35 AM	Purchase
12/31/2014 11:35 AM	Purchase
12/31/2014 12:44 PM	Purchase
12/31/2014 02:18 PM	Treatment
12/31/2014 06:24 PM	Email
12/31/2014 06:25 PM	Email
04/29/2015 12:06 PM	Appointment
06/02/2015 10:45 AM	Appointment
06/02/2015 12:12 PM	Appointment
06/02/2015 12:25 PM	Appointment
06/23/2015 11:56 AM	Appointment
06/25/2015 02:33 PM	UserForm
06/25/2015 02:52 PM	Vitals
06/25/2015 03:36 PM	UserForm
06/25/2015 03:41 PM	Purchase
06/25/2015 03:41 PM	Purchase
06/25/2015 03:41 PM	Purchase
06/25/2015 03:41 PM	Purchase

B6

Client: **B6**
Patient:

Patient History

06/25/2015 03:49 PM	Treatment
07/01/2015 09:55 AM	UserForm
07/01/2015 09:55 AM	Vitals
07/01/2015 09:55 AM	Vitals
07/01/2015 09:55 AM	Vitals
07/01/2015 09:55 AM	Vitals
07/01/2015 09:55 AM	Vitals
07/01/2015 10:19 AM	UserForm
07/01/2015 10:34 AM	Treatment
07/01/2015 10:37 AM	Purchase
07/01/2015 10:49 AM	Purchase
07/01/2015 10:59 AM	Purchase
07/01/2015 11:01 AM	Purchase
07/01/2015 11:02 AM	UserForm
07/01/2015 11:06 AM	Prescription
07/01/2015 11:07 AM	Prescription
07/01/2015 11:15 AM	Purchase
07/01/2015 11:21 AM	Purchase
07/02/2015 02:38 PM	Purchase
07/09/2015 01:17 PM	Appointment
07/09/2015 01:50 PM	Appointment
07/15/2015 08:25 AM	Appointment
07/15/2015 01:35 PM	UserForm
07/15/2015 02:19 PM	Purchase
07/15/2015 02:19 PM	Deleted Reason
07/15/2015 02:21 PM	Prescription
07/15/2015 02:23 PM	UserForm
07/15/2015 02:56 PM	Treatment
07/15/2015 02:58 PM	Email
08/28/2015 02:48 PM	Prescription
08/28/2015 04:23 PM	Appointment
09/02/2015 10:00 AM	UserForm
09/02/2015 10:03 AM	Purchase
09/02/2015 10:05 AM	Vitals
09/02/2015 10:42 AM	Treatment
09/02/2015 10:49 AM	Prescription
09/02/2015 06:08 PM	UserForm



Client:
Patient:

B6

Patient History

09/02/2015 07:03 PM	Email
10/06/2015 03:19 PM	Prescription
01/11/2016 03:55 PM	Appointment
03/14/2016 11:02 AM	UserForm
03/14/2016 11:07 AM	Vitals
03/14/2016 11:15 AM	UserForm
03/14/2016 12:01 PM	Purchase
03/14/2016 12:02 PM	Purchase
03/14/2016 12:30 PM	Purchase
03/14/2016 12:30 PM	Purchase
03/14/2016 12:32 PM	Purchase
03/14/2016 12:33 PM	Purchase
03/14/2016 12:33 PM	Purchase
03/14/2016 12:33 PM	Purchase
03/14/2016 12:34 PM	Treatment
03/14/2016 03:35 PM	Purchase
03/14/2016 04:46 PM	Email
03/16/2016 01:57 PM	Appointment
03/16/2016 02:02 PM	Appointment
03/17/2016 05:19 PM	Appointment
03/18/2016 03:46 PM	Purchase
03/18/2016 03:46 PM	Purchase
03/18/2016 03:48 PM	Appointment
03/21/2016 05:45 PM	UserForm
03/21/2016 05:45 PM	Email
05/04/2016 11:21 AM	Appointment
05/09/2016 09:30 AM	Appointment
06/13/2016 09:01 AM	Appointment
06/13/2016 09:09 AM	Appointment
06/13/2016 12:46 PM	UserForm
06/13/2016 12:54 PM	UserForm
06/13/2016 01:22 PM	Vitals
06/13/2016 01:57 PM	Purchase
06/13/2016 01:57 PM	Purchase

B6

Client: **B6**
Patient:

Patient History

06/13/2016 02:33 PM	UserForm
06/13/2016 05:27 PM	Email
03/08/2017 02:21 PM	Appointment
03/17/2017 09:28 AM	UserForm
03/17/2017 09:30 AM	Vitals
03/17/2017 10:05 AM	UserForm
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03/17/2017 10:51 AM	Purchase
03/17/2017 10:52 AM	Purchase
03/17/2017 10:54 AM	Purchase
03/17/2017 10:54 AM	Purchase
03/17/2017 02:21 PM	Email
07/13/2017 03:49 PM	Appointment
09/29/2017 10:55 AM	Vitals
09/29/2017 10:55 AM	Vitals
09/29/2017 10:58 AM	Purchase
09/29/2017 10:58 AM	Treatment
09/29/2017 11:06 AM	UserForm
09/29/2017 11:38 AM	Purchase
09/29/2017 11:38 AM	Purchase
09/29/2017 11:39 AM	Purchase
09/29/2017 11:48 AM	UserForm
04/10/2018 02:32 PM	Appointment
05/06/2018 04:22 PM	Prescription
05/07/2018 11:13 AM	UserForm
05/07/2018 11:14 AM	Deleted Reason
06/20/2018 09:48 AM	UserForm
06/20/2018 10:08 AM	Purchase
06/20/2018 10:32 AM	Vitals
06/20/2018 10:47 AM	Treatment
06/20/2018 11:22 AM	Purchase
06/20/2018 11:25 AM	Purchase
06/20/2018 11:25 AM	Purchase
06/20/2018 11:36 AM	Purchase
06/20/2018 11:36 AM	Purchase
06/20/2018 12:04 PM	UserForm
06/20/2018 12:26 PM	Purchase
06/20/2018 04:00 PM	Email

B6

Client: **B6**
Patient:

Patient History

06/21/2018 01:16 PM
11/29/2018 12:33 PM

Email
Appointment

B6

B6 11:04 AM
11:10 AM

UserForm
Purchase



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B6

() -

Foster Hospital for Small Animals
200 Westboro Road
North Grafton, MA 01536
Telephone (508) 839-5395
Fax (508) 839-8739
<http://www.tufts.edu/vet/Warren>

B6

Male (Neutered)

Canine Boxer Fawn

B6

Daily Update From the Cardiology Service

Today's date: 6/27/2014

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 seen today by the Cardiology Service for a recheck appointment and evaluation of a recent episode that occurred on a hike.

B6 has been doing very well at home and has not had any issues up until last Saturday when he was on a hike with the owners. B6 made it about half a mile into the hike when he layed down and began breathing heavy. His gums were blu, but he nver lost concisousness during the episode. He was carried out of the woods by the owner as he would not walk or move and was taken to a local animal hospital. By the time he arrived, his gum color was pink and he began walking around and doing better. His heart rate at that time was around 70. We discussed the possability of the collapsing episodic being caused by pacemaker dislodgement, tachyarrhythmia, metabolic abnormality, or neurological in origin. Thoracic radiographs, echocardiogram, ECG, and Chem 21 were performed to distinguish these causes.

Today, B6 was BAR on presentation. His physical exam was unremarkable with a HR of 80, and no arrythmia noted on auscultation. B6 echocardiogram revealed similar changes to the previous echocardiogram and showed the pacing lead seated within the RV wall. His BP today was 140-150mmHg. Thoracic radiographs were performed which ruled out the possibility of gross dislodgement of the pacemaker lead, although micro-dislodgement could still be possible. Electrocardiogram revealed a single VPC during a 5 minute period. A chemistry 21 was also performed today to rule out systemic, metabolic, or electrolyte abnormalites which may have altered pacemaker capture.

While B6 exam today did not identify a definitive cause for the recent collapsing episode, his persisten third degree AV block is being corrected by appropriate cardiac pacing. At this time the most likely differentials for the presumed syncopal episode includes micro-dislodgement of the pacemaker lead or transient functional exit block. We programed Warren's pacemaker to detect and record intermittent ventricular tachycardia/tachyarrhythmias, and enabled autocapture mode which will detect micro-dislodgement and adjust the capture

voltage as needed.

We plan to recheck [B6] within the next month to re-evaluate his pacemaker settings, and recheck his echocardiogram in 6 months.

Please call our direct line at (508) 887-4988 if you have any questions. Thank you!

Attending Clinician: [B6]
Faculty Clinician:
Senior student:

B6
() -

B6
B6 Male (Neutered)
Canine, Boxer, Fawn
B6

6/27/2014

Dear Drs at B6

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

Your patient B6 was seen today by the Cardiology Service for a recheck appointment and evaluation of a recent episode that occurred on a hike.

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We plan to recheck [B6] within the next month to re-evaluate his pacemaker settings, and recheck his echocardiogram in 6 months.

Please call our direct line at (508) 887-4988 if you have any questions. Thank you!

Attending Clinician: [B6]



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200 Westboro Road
North Grafton, MA 01536
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Fax (508) 839-8739
<http://www.tufts.edu/vet/Warren>

B6

B6 Male (Neutered)
Canine, Boxer, Fawn
B6

7/18/2014

Dear Dr. **B6**

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

Please see attached records about **B6** appointment.

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

Thank you,

B6 VM (Resident, Cardiology)



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Fax (508) 839-8739
<http://www.tufts.edu/vet/>

B6

B6 Male (Neutered)
Canine Boxer Fawn
B6

1/2/2015

Dear Dr. **B6**

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

Please see attached records for **B6**

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

Thank you,

B6 DVM, DACVIM (Cardiology)



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

B6

B6

Male (Neutered)

Canine Boxer Fawn

B6

6/29/2015

Dear Dr:

B6

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

B6

Please see attached records for

B6

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

Thank you,

B6

VM (Resident, Cardiology)



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

B6

B6

B6

Male (Neutered)

Canine Boxer Fawn

B6

B6

Dear Dr. B6

One of your patient, B6, was seen by the Emergency department of Tufts University to investigate a progressive swelling over his pacemaker site. Except for that swelling that had been noticed for the first time on Monday, B6 is still doing fine back home. However, he refused to eat this morning which is highly unusual for him.

On presentation, B6 was bright and alert but there was definitely abnormal swelling over his Pacemaker. He was then seen by the Cardiology department who applied a mild compressive bandage and recommended a 3 weeks course of B6 bandage change at home every three days, and a recheck in 2 weeks with the Cardiology department. No diagnostic tests has been done to try to find the source of the swelling. However, a CBC + Chem 21 was submitted (results pending). For further informations regarding B6 visit, please refer to his discharge.

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

Thank you,

Dr. B6



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North Grafton, MA 01536
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Fax (508) 839-8739
<http://www.tufts.edu/vet/>

B6

B6
B6 Male (Neutered)
Canine Boxer Fawn
B6

7/15/2015

Dear Dr. B6

Thank you for referring B6 with their pet B6

Please see attached records for B6

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

Thank you,

B6



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Fax (508) 839-8739
<http://vetmed.tufts.edu/>

B6

B6

B6

Male (Neutered)

Canine Boxer Fawn

B6

3/15/2016

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,

B6



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North Grafton, MA 01536
Telephone (508) 839-5395
Fax (508) 839-8739
<http://vetmed.tufts.edu/>

B6

B6
B6 Male (Neutered)
Canine Boxer Fawn
B6

3/31/2016

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,

B6



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Telephone (508) 839-5395
Fax (508) 839-8739
<http://vetmed.tufts.edu/>

B6

B6
B6 Male (Neutered)
Canine Boxer Fawn
B6

6/15/2016

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,

B6



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Fax (508) 839-8739
<http://vetmed.tufts.edu/>

B6

B6
B6 Male (Neutered)
Canine Boxer Fawn
B6

3/17/2017

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,

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

B6

Male (Neutered)

canine water Fawn

B6

9/29/2017

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,

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
B6 Male (Neutered)
Canine Boxer Fawn

B6

6/22/2018

Dear Dr. **B6**

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

2

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

Thank you,

B6

Deceased Notification

Date: **B6** 1:00:45 AM
Referring Doctor: **B6**
Client Name:
Patient Name: **B6**

Case No: **B6**

Dear Dr. **B6**

The above-named patient presented to the Foster Hospital for Small Animals, and the owner has indicated that you are the primary care veterinarian.

We are sad to inform you that your patient is deceased. A report will be forthcoming from the attending doctor for your review. If you have any questions regarding this particular case, please seek assistance from our Medical Records Department by calling 508-887-4636.

We value your partnership and are very sorry for the loss of your patient.

Report Details - EON-369322		
ICSR:	2057941	
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:	2018-10-25 07:21:15 EDT	
Reported Problem:	Problem Description: DCM and CHF Euthanized for worsening heart failure and arrhythmia in September	
	Date Problem Started: 02/09/2018	
	Concurrent Medical Problem: No	
	Outcome to Date: Died Euthanized	
	Date of Death: B6	
Product Information:	Product Name: Merrick LID Grain Free dry (salmon, duck, or chicken)	
	Product Type: Pet Food	
	Lot Number:	
	Package Type: BAG	
	Product Use Information: Description: Merrick for ~1 year Please see diet history for other foods and previous diets (Canidae LID grain free)	
	Manufacturer /Distributor Information:	
	Purchase Location Information:	
Animal Information:	Name: B6	
	Type Of Species: Dog	
	Type Of Breed: Retriever - Labrador	
	Gender: Male	
	Reproductive Status: Neutered	
	Weight: 47 Kilogram	
	Age: 9 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 compiled record.pdf
	Description:	Compiled medical record
	Type:	Medical Records

From: Freeman, Lisa <Lisa.Freeman@tufts.edu>
To: Jones, Jennifer L
Sent: 9/26/2018 9:27:10 PM
Subject: DCM updates
Attachments: [REDACTED] dcm and chf 9-24-18.pdf; diet history.pdf

Hi Jen

1. [REDACTED] This owner told me that he reported the case to you (4 yr old CM Miniature Schnauzer diagnosed in April). I'm attaching a copy of my nutrition report and the diet history
2. [REDACTED] (reported to FDA on 8/22/18). Owner just informed me that [REDACTED] was euthanized [REDACTED]. She said he had worsening heart failure, arrhythmias, and GI discomfort. She did get an amino acid profile from UC Davis within the last month and reported:

Whole blood taurine [REDACTED] (300-600)

Plasma taurine [REDACTED] (ref 77+/-2)

I believe all other amino acids in the plasma profile were within ref ranges, with the exception of L-cysteine, which was low: [REDACTED] (ref range 46+/-1)

Her primary care vet, Dr. [REDACTED] would have the full results if you'd like those. This was after he'd been on taurine supplementation for several months.

Best,
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

Clinical Nutrition Service

Foster Hospital for Small Animals
200 Westboro Road
North Grafton, MA 01536
Phone: (508) 887-4696 Attn: Nutrition Liaison
Fax: 508-887-4363
www.petfoodology.org
vetnutrition@tufts.edu



Nutrition Consultation

Date: 9/24/18

Pet Name: [B6]

Signalment: 4 year old, castrated male Miniature Schnauzer

Weight: 22 pounds (10 kg), body condition score: 5.5/9, mild muscle loss

Relevant health conditions: Apparent diet-associated dilated cardiomyopathy and congestive heart failure diagnosed April 2018 (whole blood taurine [B6] – UC Davis Amino Acid Lab). Owners reported to FDA. Also has dysrexia (altered food preferences or eating patterns).

Referring veterinarians: Dr. [B6] Dr. [B6]
[B6]

Diet History:

- Current diet: Chicken or beef (lightly cooked), rice, vegetables
- Previous diets: Canidae Grain-Free Pure Fields Small Breed Chicken dry, Blue Buffalo Life Protection Adult Small Breed Chicken/Brown Rice dry, Instinct Original Small Breed Grain Free Recipe with Real Chicken dry (Nature's Variety). Tried Royal Canin Early Cardiac after diagnosis but stopped eating
- Treats: Cheese, fruits, carrots
- Medications: [B6]
- Supplements: None currently; has used [B6] (1 teaspoon/day) in past
- Medication administration: Pill Pockets dog tablet size – chicken flavor (5/day)

Nutritional Goals

- Nutritionally balanced diet from well-established company with nutrition expertise and rigorous quality control that contains standard ingredients, including grains
- Adequate calories to maintain body weight at 22 pounds
- Increased protein (to minimize muscle loss)
- Reduced sodium
- Supplements: Consider taurine and omega-3 fatty acids

Recommendations:

- It's great that you're being proactive about [B6] diet to ensure he's getting optimal nutrition. Nutrition is an integral part of the treatment for any dog with heart disease, but especially when it is very possible that [B6] has a diet-responsive form of DCM. As we discussed, it is still unclear whether this problem is caused by a nutrient deficiency or a toxicity. Either way, one of our key goals, in addition to the excellent medical care he's been getting, is to change his diet. While you have changed from his original suspected diets, the homecooked diet you're currently feeding is not nutritionally balanced so it's important for us to modify his diet as soon as possible. [B6] lack of improvement since April could be because his diet still has deficiencies of nutrients critical for normal heart function, because his heart hasn't had enough time to recover, or because the damage to his heart was too severe. It will be important to continue to monitor his heart function once his diet has been changed.
- My strong preference is for a nutritionally balanced commercial dog food made by a company with excellent nutritional expertise and quality control, one that doesn't contain any unusual ingredients, and is very tasty. That way, we'll be sure [B6] getting all the nutrients he needs in the right proportions and that other ingredients in the diet do not reduce nutrient availability. If we can't make a commercial diet work, then we will go to Plan B and I will formulate a nutritionally balanced homecooked diet for him.
- To meet all of our nutritional goals for [B6] the high quality diets I recommend are below:

Diet	Amount to feed (this amount may need to be adjusted to maintain his weight at 22 pounds)
Canned food options	
<i>Hill's Science Diet <u>Adult 1-6 Healthy Cuisine Roasted Chicken, Carrots, & Spinach Stew</u> - 12.5 oz cans</i>	¾ cans twice daily
<i>Hill's Science Diet <u>Adult 7+ Healthy Cuisine Braised Beef, Carrots & Peas Stew Dog Food</u> - 12.5 oz cans</i>	¾ cans twice daily
<i>Royal Canin Mature 8+ - 5.8 oz cans</i>	1 ½ cans twice daily
Dry food options	
<i>Purina Pro Plan <u>Bright Mind Adult Small Breed Formula</u></i>	½ cup twice daily
<i>Purina Pro Plan <u>Adult Weight Management</u></i>	2/3 cup twice daily
<i>Royal Canin <u>Early Cardiac</u></i>	¾ cup twice daily

- I would start with the canned foods since I think he may enjoy those most.
- Introduce the new food gradually over 5-7 days to avoid gastrointestinal upset.
- Most dogs enjoy these food but if he doesn't like any of them, please let me know and we'll go to Plan B.

Treats and Taste Enhancers

- To ensure **B6** overall diet is nutritionally balanced, it's important that at least 90% of his calories are coming from the dog food above and a maximum of 45 calories come from treats and taste enhancers. If he gets more than that, he is at risk for having nutritional deficiencies which are critical to avoid right now!
- I'm hoping that **B6** will enjoy the canned foods and eat them well by themselves. If not, you can add small amounts of one of the taste enhancers below (these contribute to his daily calories so the maximum amount is listed below for each option):
 - Sugar (brown or white) sprinkled on top of the food (1 teaspoon/meal)
 - Cooked meat (1 tablespoon/meal): chicken, fish (tilapia, salmon, cod), or lean meat. Avoid deli meats, prepared meats with seasoning or sauces, any canned meat or fish, and rotisserie chicken
 - Cooked brown or white rice or pasta (1 tablespoon/meal)
 - Vanilla or fruit yogurt (1 tablespoon/meal)– Two options that dogs seem to like and are low in sodium are *Yoplait Custard Yogurt* (caramel or vanilla flavors) or *Chobani Greek plain, vanilla, or fruit on the bottom yogurts*
 - Maple syrup (1 tablespoon/meal). Low salt brands include *Log Cabin All Natural, Maple Grove Farm 100% pure maple syrup, or Stop and Shop Original Syrup*
 - Homemade chicken, beef, or fish broth (made without salt; ¼ cup/meal). Avoid store bought broths because even the low sodium brands are too high in sodium
 - Ketchup (*Hunts or Heinz no salt added varieties*; 1 tablespoon/meal)
 - Pasta sauce (no salt added varieties only – *Francesco Rinaldi no salt added or Enrico's no salt added* are 2 options; 1 tablespoon/meal)
 - *Frosted Mini Wheats Original* – 4-5 pieces can be crumbled on his meal
- Try different temperatures for the canned food – some dogs prefer food at room temperature, some prefer it warmed, and some prefer it cold or even put into the freezer for 10-15 mins.
- The fruits and vegetables you're using are great treats! **B6** can have apples, carrots, pears, watermelon or other melon, cucumbers, green beans, green peppers, or tomatoes. He could have an occasional unsalted walnut but these are higher in calories than the fruits and vegetables so the calories add up quickly. Avoid macadamia nuts, avocado, garlic, onions, grapes, raisins, and other foods known to be toxic to dogs.
- A good quality, low sodium dog treat is: *Royal Canin Original Dog Treats (maximum of 4/day)*.
- Please discontinue the cheese as even low sodium varieties of cheese are too high for **B6**
- Avoid people foods that are high in sodium, such as bread, peanut butter, soup, prepared foods with seasonings or sauces, deli meats, rotisserie chicken, canned tuna, and other high sodium foods.
- There is also now a good appetite stimulant available for dogs (*Entyce*), so we could consider that if his

appetite for these diets continues to be an issue.

Dietary Supplements:

- Unfortunately, there is little regulation of supplements for people or animals so safety, effectiveness, and quality control are questionable. Therefore, I am very selective when it comes to recommending specific supplements that have undergone independent quality control testing.
- Although [B6] taurine level was normal, until we know the cause of the non-aurine deficient DCM cases, it might be worthwhile to supplement taurine. It is a very safe supplement for dogs (as long as we use a good quality brand) and can have some other benefits for the heart. Good brands include:
 - *Solgar, Twinlab, Swanson, Twinlab, or Vitamin Shoppe brands.*
 - [B6] dose is 500 mg per day
- Omega-3 fatty acids: Fish oil, which is high in the omega-3 fatty acids, EPA and DHA, can have modest benefits on reducing inflammation, maintaining muscle mass, reducing abnormal heart rhythms, and improving appetite. From past experience, it sounds like [B6] doesn't mind the taste of fish oil. However, please do not start fish oil until you have him completely transitioned to the new diet (we only want to change one thing at a time). Once we're sure [B6] enjoys his new food, you can introduce one of the fish oils below that has had independent quality control testing. If he doesn't mind the taste, you can put the liquid fish oil in his food but if he dislikes the taste, discontinue giving it immediately since it can negatively affect his appetite. There are also small capsules that can be used instead of the liquid.

Fish oil brand	Dose
<i>CVS Brand Half the Size Fish Oil Capsules (1000 mg total, with 180 mg EPA and 120 mg DHA per capsule)</i>	2 capsules/day
<i>Welactin Canine Liquid</i>	1/2 scoop/day

Medication Administration

- It sounds like it's working well to give [B6] his medications in *Pill Pockets*, so that's fine to continue. They are relatively low in sodium as long as you avoid the Duck and Pea flavor (which is high in sodium). I would try to avoid giving more than 5 tablet-sized *Pill Pockets* per day. If pill administration becomes an issue, some other good options besides *Pill Pockets* are bananas, melon, or mini marshmallows.

Follow Up:

- Please follow Dr. [B6] and Dr. [B6] recommendations for monitoring [B6] clinical condition, laboratory tests, and echocardiogram. Changes in heart function for dogs with diet-associated DCM can take 3-6 months.
- Please weigh [B6] in 2 weeks to be sure he's maintaining his weight at 22 pounds. The amount of food in my recommendations above may need to be adjusted to keep him at a healthy weight of 22 pounds. Once you weigh him, please send me an update so I can help you if any dietary adjustments are needed.

Please contact me if you have any questions about [B6] nutritional plan.

Sincerely,
Lisa M. Freeman, DVM, PhD, DACVN
Professor, Clinical Nutrition
508-887-4696 (telephone)
vetnutrition@tufts.edu (email)
www.petfoodology.org

Client Diet History Form

Submitted: 07/21/2018

PET INFORMATION

Pet Name B6
Pet Last Name B6
Pet Species/Breed Dog / Miniature Schnauzer
Pet's Color Pepper & Salt
Pet's Birthdate B6
Pet's Sex Male
Spayed or Neutered? No

CLIENT INFORMATION

Client Name B6
Client Address B6
Client Phone B6
Client Email B6
Co-Owner Name B6
Co-Owner Phone B6
Co-Owner Email B6

CONSULT INFORMATION

Type of Consult In person
HCD Being Requested? Yes

Reasons & Goals for Consult

REASONS:
B6 refuses to eat any dry food anymore.
B6 was diagnosed by cardiologist with dilated cardiomyopathy (DCM).
- As FDA reported dogs fed grain-free food based on peas, lentils or potatoes developing unusual condition that may cause DCM. We fed Canidae Canidae dry dog food containing all these 3 ingredients (peas, lentils and potatoes). We also fed him Instinct dry food containing chickpeas and peas. We guess that it could cause DCM.

GOALS:
- We would like to switch to natural home cooked food.
- Improve B6 health and quality of life.
- Reverse DCM.

Attachments

01-CANIDAE-BAG-FRONT.jpg
02-CANIDAE-BAG-BACK.jpg
03-CANIDAE-INGREDIENTS.jpg
04-INSTINCT-FRONT.jpg
05-INSTINCT-BACK.jpg
06-INSTINCT-INGREDIENTS.jpg
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12-ROYAL-CANIN-EARLY-CARDIAC-INGREDIENTS.jpg
13-GREENIES-PILL-POCKETS-FRONT.jpg
14-GREENIES-PILL-POCKETS-BACK.jpg

PRIMARY VETERINARIAN INFORMATION

rDVM Name
rDVM Clinic
rDVM Phone
rDVM Fax
rDVM Email

B6

Diet History Form - updated

Agree to Terms

Date Submitted

07/21/2018

Information to Gather

About You, Your Veterinarian(s) and Your Pet

What type of appointment are you requesting?

In person

Has your pet been seen at Tufts in the last 6 months?

No

About the Pet Owner

Pet owner name

B6

Pet owner email

B6

Address

B6

Preferred Phone

B6

Preferred Phone Type

Mobile

Alternate Phone

Is there another phone number you would like to give us in case we can't reach you at one of the above?

No

Spouse/partner/co-owner's name

B6

Spouse/partner/co-owner's email

B6

Spouse/partner/co-owner's phone

B6

How did you hear about our service?

. Recommended by your veterinarian

Your Pet's Primary Veterinarian

Primary veterinarian

B6

Primary veterinarian's clinic name

B6

Primary veterinarian's clinic phone

B6

Primary veterinarian's clinic fax

B6

Primary veterinarian's clinic email

B6

Is your pet currently being (or has your pet been) seen by any other veterinarians in relation to her/his current health issues or other health issues that you'd like to discuss with us?

Yes

Information About Your Second Veterinarian

Name of 2nd veterinarian

B6

Clinic name of 2nd veterinarian

B6

Phone for 2nd veterinarian's clinic

B6

Fax for 2nd veterinarian's clinic

B6

Email for 2nd veterinarian's clinic

What is this second veterinarian's role in your pet's care?

Cardiologist

Should this 2nd veterinarian receive a copy of any written reports that result from working with our service?

Yes

Is your pet being seen by a 3rd veterinarian?

No

About Your Pet

Pet's name

B6

What is your pet's species?

Dog

Breed Miniature Schnauzer
Color Pepper & Salt
Sex Male
Spayed/neutered? No
Do you know your pet's exact birthdate? Yes
Pet's Birthdate B6
What is your pet's current weight 21
Pounds or kilograms? lbs
Has your pet gained or lost weight within the past 6 months? Stayed the same
Which category best describes your pet? ideal weight
Reason and goals for consultation REASONS: - B6 refuses to eat any dry food anymore. - B6 was diagnosed by cardiologist with dilated cardiomyopathy (DCM). - As FDA reported dogs fed grain-free food based on peas, lentils or potatoes developing unusual condition that may cause DCM. We fed Canidae Canidae dry dog food containing all these 3 ingredients (peas, lentils and potatoes). We also fed him Instinct dry food containing chickpeas and peas. We guess that it could cause DCM. GOALS: - We would like to switch to natural home cooked food. - Improve B6 health and quality of life. - Reverse DCM.
Details About Your Pet's Habits
Questions about your pet
Is your pet housed: - Indoors
Please describe your pet's activity level: Moderate
Do you have any other pets?

No

How many people (including yourself) live in your household?
2

Who feeds your pet?
Both owners

How many times per day do you feed your pet?
Three

Does your pet finish all food that is offered?
It depends

Depends on what?
He don't want to eat dry food anymore. We have to ask him to eat. He may reject the dry food or leave some food. If we give him rice with boiled chicken tenders he finish all food. Apples or carrots as treats he eats everything with pleasure.

Does your pet have any difficulty with the following?

Does your pet have any of the following?

Have you observed any changes in any of the following?

- Appetite
- Activity level

Please explain the changes you have observed
B6 used to be a very active dog. We were walking him 3 times per day for 1 hour. From February 2018 he is not as active as before. He don't play much. He don't walk as much as before.

Have you made any recent changes in diet (last 4 weeks)?
Yes

Please explain the changes in your pet's diet
B6 didn't want to eat the dry food. We switched to boiled chicken tenders and rice.

Your Pet's Diet

Do you feed your pet DRY (e.g., kibble) pet food?
Yes

Please list each kind of DRY pet food individually

Brand or name	Amount per serving	How often given?	Fed since (mo/yr)?
Royal Canin Veterinary Diet Canine Early Cardiac Dry Dog Food	About 3/4 cup (about 60 grams)	2x/day	MAY 2018

Do you feed your pet WET (e.g., canned or pouched) pet food?
No

Do you feed your pet HOME-COOKED food?

Yes

Please list each kind of HOME-COOKED petfood individually

Food/Ingredient	Amount per serving	How often given?	Fed since (mo/yr)?
Boiled chicken tenders and rice	About 3/4 cup	2x/day	18 JUL 2018

Do you feed your pet TREATS?
Yes

Please list each kind of TREAT individually

Brand or name	Amount per serving	How often given?	Fed since (mo/yr)?
Apple	1/2 of apple (about 60g)	2-3 times per week	Feb 2015
Pear	1/2 of apple (about 60g)	1 time per week	May 2018
Carrot	1/2 of carrot (about 30g)	1 time per two weeks	Feb 2015
Cheese	10 grams	1-2 time per week	May 2014

Is there any OTHER kind of food you feed your pet?
No

Do you give any dietary supplements to your pet (for example: vitamins, glucosamine, fatty acids, herbs, or any other supplements)?
Yes

Please list any dietary supplements

Product Name	Amount	Frequency
Fish Oil	1 bottle course, 1 teaspoon per day	Once in March 2017 and once in March 2018

Is your pet receiving any medications?
Yes

Please list your pet's medications

Drug Name	Dosage
B6	

Do you use food (e.g., Pill Pockets, cheese, bread, peanut butter, etc.) to administer medications?
Yes

Lists foods used to administer medication

What kind?	Amount?	How often?
Greenies Pill Pockets Canine Chicken Flavor	2.5 pockets	2 times per day

Regarding commercial diets (pet foods and treats not made in your home) your pet may have received in the past, please select the following statement that is most accurate:
I have fed my pet other commercial diets in the past.

Please list all other commercial diets you are not currently feeding but have fed to your pet in the past.

Nutrition Client Diet History Form 7/21/18 w/ packaged foods snapshots

Food	Approximate Dates	Reason for discontinuing
CANIDAE Grain Free PURE Fields Small Breed Fresh Chicken Dog Food	NOV 2016 - APR 2017	B6 didn't want to eat this food anymore
Blue Buffalo Blue Life Protection Formula Adult Small Breed Chicken & Brown Rice Recipe Dry Dog Food	MAY 2016 - NOV 2017	B6 didn't want to eat this food anymore
CANIDAE Grain Free PURE Fields Small Breed Fresh Chicken Dog Food	NOV 2017 - DEC 2017	B6 didn't want to eat this food anymore, protesting and running away
Instinct Original Small Breed Grain Free Recipe with Real Chicken Natural Dry Dog Food by Nature's Variety	DEC 2017 - APRIL 2018	1) B6 didn't want to eat it anymore; 2) Switched to Royal Canin Veterinary Diet Canine Early Cardiac recommended by cardiologist
Hill's Prescription Diet Hypoallergenic Canine Treats	FEB 2017 - FEB 2018	

Home-cooked Diets

Is a home-cooked diet being requested? (Please note that this option is only available for phone or in-person consults, not for consults directly with veterinarians.)
Yes

Does your pet have kidney disease?
No

Protein Sources

- Chicken
- Ground beef
- Egg

What is your pet's preferred protein?
Chicken

Carbohydrate Sources

- Barley
- Oats
- Rice

What is your pet's preferred carbohydrate?
Rice

Medical Records & Test Results

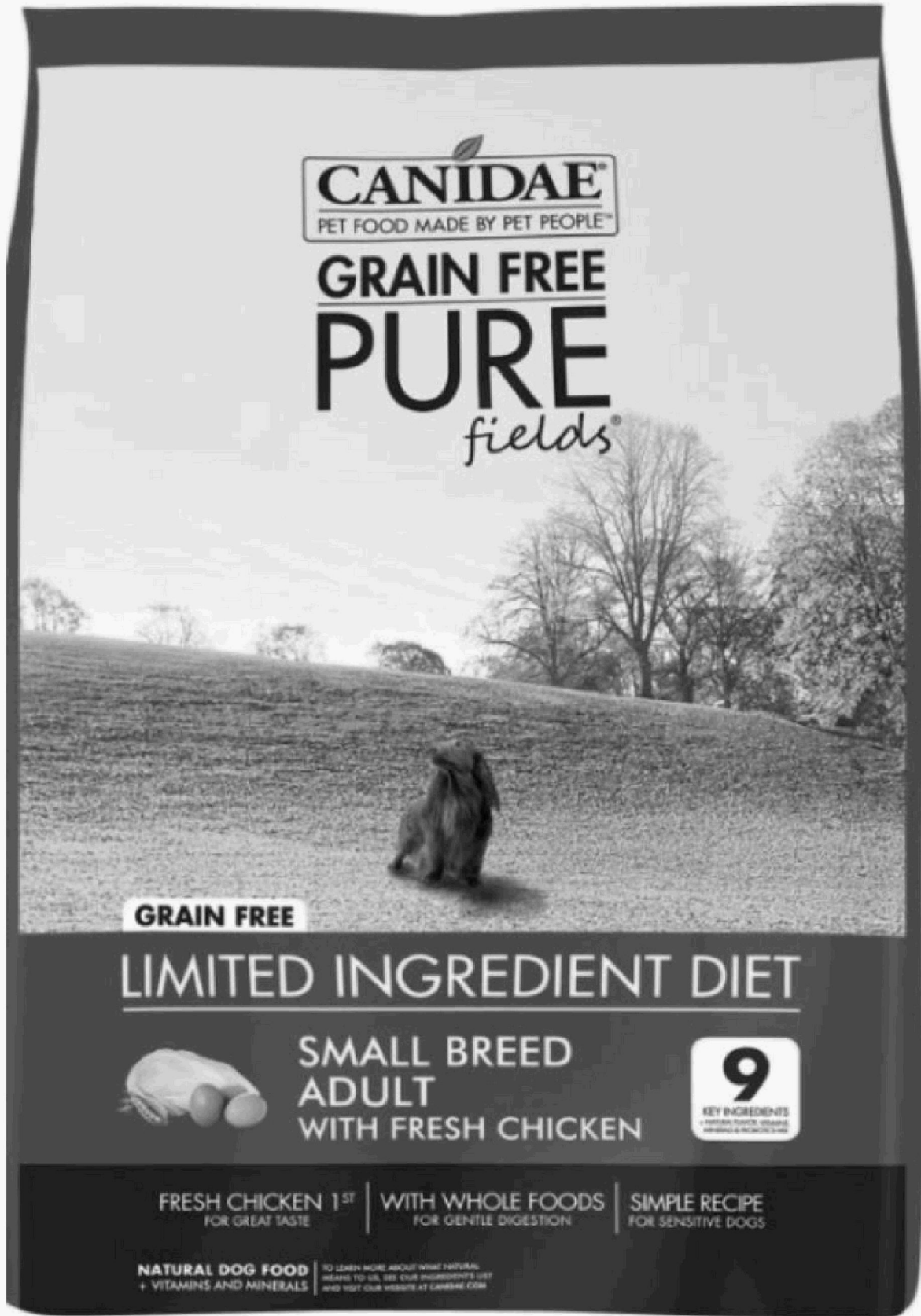
Requested Items

- Complete blood count, biochemistry profile and urinalysis
- Additional relevant diagnostics (e.g., urine culture, T4, ultrasound reports)
- Last 6 months' medical records or as appropriate (all consults)

Do you have any of the above in electronic format?
No

Would you like to upload and attach anything else to this form?

- [01-CANIDAE-BAG-FRONT.jpg](#)
- [02-CANIDAE-BAG-BACK.jpg](#)
- [03-CANIDAE-INGREDIENTS.jpg](#)
- [04-INSTINCT-FRONT.jpg](#)
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- [13-GREENIES-PILL-POCKETS-FRONT.jpg](#)
- [14-GREENIES-PILL-POCKETS-BACK.jpg](#)



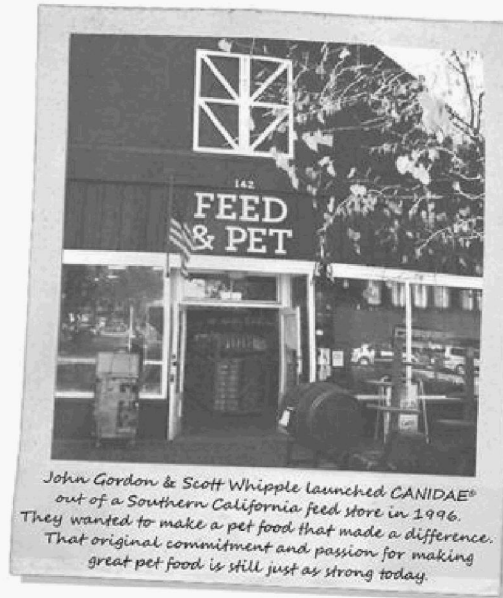


LIMITED INGREDIENT DIET

8 key INGREDIENTS

- Fresh Chicken
- Chicken Meal
- Lentils
- Peas
- Chicken Fat
- Chickpeas
- Suncured Alfalfa
- Flaxseed

PLUS Natural Flavor, Vitamins, Minerals, and Probiotics Mix



John Gordon & Scott Whipple launched CANIDAE® out of a Southern California feed store in 1996. They wanted to make a pet food that made a difference. That original commitment and passion for making great pet food is still just as strong today.

A SIMPLE RECIPE MADE WITH FRESH CHICKEN AND WHOLE FOODS



FRESH CHICKEN IS ALWAYS FIRST

This recipe is made with fresh chicken as the first ingredient for great taste your dog is sure to love.



WITH WHOLE FOODS FOR GENTLE DIGESTION

We use ingredients like lentils, peas, and chickpeas in their whole form whenever possible.



SIMPLE RECIPE FOR SENSITIVE DOGS

This limited ingredient diet is made with quality, easily recognizable ingredients you can feel good about.



HEALTHPLUS SOLUTIONS IN EVERY BITE®

Probiotics added to every kibble after cooking to help support healthy digestion, antioxidants to help support a healthy immune system, and omega 6&3 fatty acids to help support beautiful skin and coat.



ETHOS PET NUTRITION COMMITTED TO QUALITY

CANIDAE's own Brawmwood, Texas facility. Find out more about ETHOS and our commitment to pets and their people at canidae.com.

THE CANIDAE® GUARANTEE
If you are not completely satisfied with this product, please return the unused portion along with your sales receipt to the place of purchase for a full refund or replacement.

GUARANTEED BY
CANIDAE® Corporation, San Luis Obispo, CA 93403-3610
800-398-1600 within USA | 909-599-5190 outside USA
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JOIN OUR FAMILY
CONNECT WITH US



OUR NUTRITIOUS INGREDIENTS

Chicken, menhaden fish meal, peas, lentils, potatoes, dried whole egg, chicken fat (preserved with mixed tocopherols), suncured alfalfa, flaxseed, natural flavor, minerals (iron proteinate, zinc proteinate, copper proteinate, ferrous sulfate, zinc sulfate, copper sulfate, potassium iodide, manganese proteinate, manganous oxide, manganese sulfate, sodium selenite), vitamins (vitamin E supplement, thiamine mononitrate, ascorbic acid, vitamin A supplement, biotin, niacin, calcium pantothenate, pyridoxine hydrochloride, vitamin B12 supplement, riboflavin, vitamin D3 supplement, folic acid), salt, choline chloride, mixed tocopherols (a preservative), dried enterococcus faecium fermentation product, dried lactobacillus acidophilus fermentation product, dried lactobacillus casei fermentation product, dried lactobacillus plantarum fermentation product, dried trichoderma longibrachiatum fermentation extract

GUARANTEED ANALYSIS

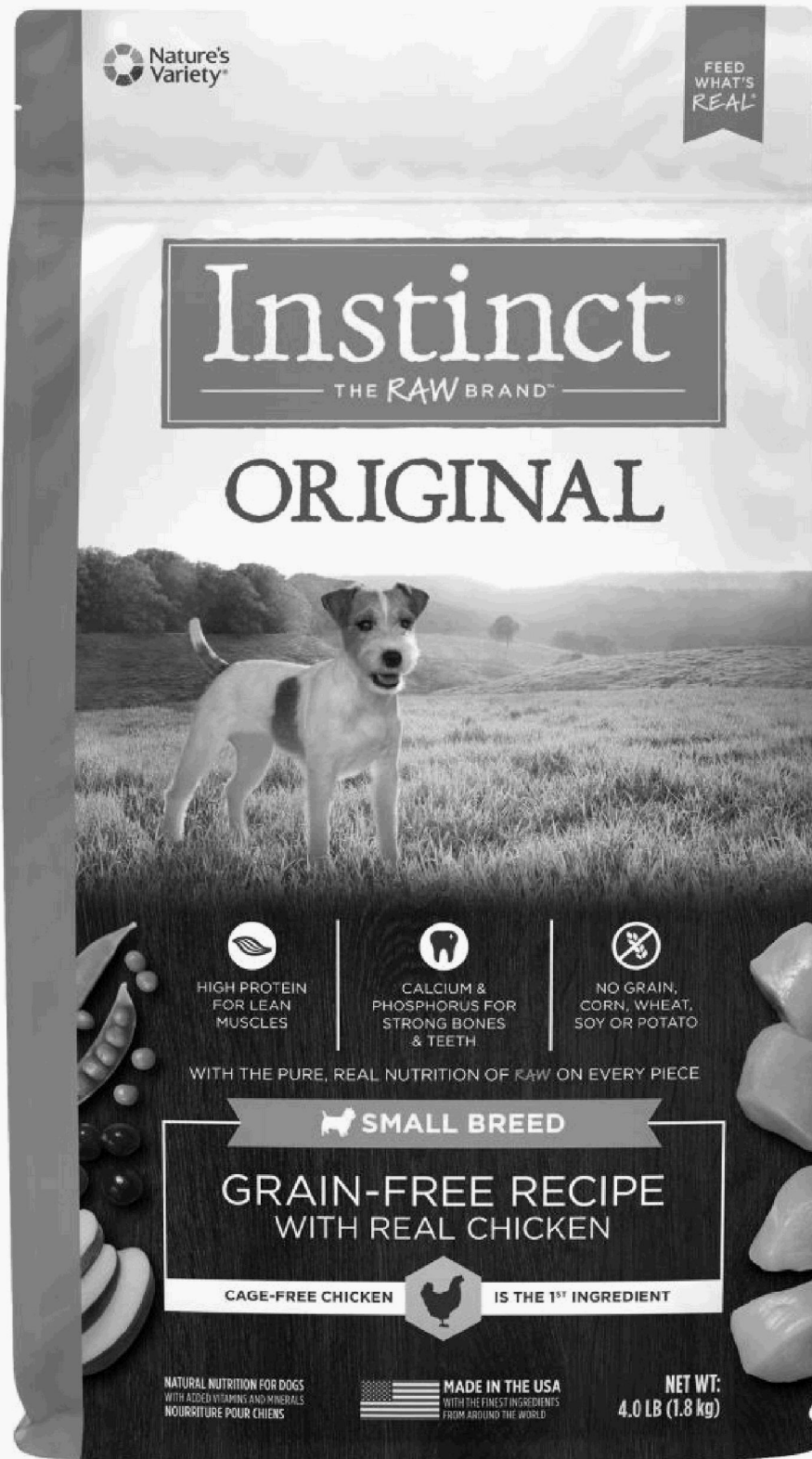
Crude Protein	(min.).....	30.00%
Crude Fat	(min.).....	12.00%
Crude Fiber	(max.).....	4.00%
Moisture	(max.).....	10.00%
Linoleic Acid (omega 6)	(min.).....	3.00%
Vitamin E	(min.).....	50.00 IU/kg
Alpha Linolenic Acid (omega 3)**	(min.).....	0.40%
Lactobacillus Acidophilus**	(min.).....	100 million CFU/lb
Cellulase** (a)	(min.).....	100 CMCU/kg

**Not recognized as an essential nutrient by the AAFCO Dog Food Nutrient Profiles

(a) One Carboxymethyl Cellulose Unit (CMCU) liberates one micromole of reducing sugar (expressed as glucose equivalents) in one minute under the conditions of the assay.

CALORIE CONTENT (Calculated)

ME (kcal/kg) 3,470 ME (kcal/lb) 1,573
ME (kcal/g) 3.47 ME (kcal/cup) 520



Instinct

THE RAW BRAND

WE'RE ON A MISSION TO TRANSFORM THE LIVES OF PETS.

We believe that all pets deserve the best life possible. And if you ask us—it starts with food. Let's satisfy our pets' need for real food. Let's stick with what's natural and keep it simple. And as pure as possible. Let's follow nature's lead and give them more raw and stay free from filler, by-product and artificial preservatives. Let's redefine better. And put the pure, real nutrition of raw into more bowls. Let's do our part.

FEED WHAT'S REAL®

PERFECTLY TAILORED NUTRITION FOR SMALL BREEDS GUIDED BY OUR BELIEF IN RAW

Real, natural, whole-food ingredients, purposefully chosen for the nutrition they provide for your small breed. All with the pure, real nutrition of raw on every piece.

OUR FIRST FOUR INGREDIENTS

- ✓ CHICKEN
- ✓ CHICKEN MEAL
- ✓ CHICKPEAS
- ✓ TURKEY MEAL

MADE WITHOUT

- ✗ GRAIN OR POTATO
- ✗ CORN, WHEAT, SOY
- ✗ BY-PRODUCT MEAL
- ✗ ARTIFICIAL COLORS OR PRESERVATIVES

LEAN MUSCLES

Packed with animal protein—cage-free chicken is the first ingredient.

DIGESTIVE & IMMUNE HEALTH

Guaranteed levels of probiotics, omegas and antioxidants.

JOINT HEALTH

Naturally occurring glucosamine and chondroitin.



HEALTHY BODY WEIGHT

Ideal balance of protein, fat and calories.

STRONG BONES AND TEETH

Guaranteed levels of calcium and phosphorus.



THE PURE, REAL NUTRITION OF RAW ON EVERY PIECE

We believe in the power of raw, because we know the good it can do. So we asked ourselves—how can we incorporate this into every food that we make? And eventually, we found a way—raising the bar in nutrition and taste.



ACTUAL SIZE

HERE'S HOW:



We make our raw frozen recipes then freeze-dry them—removing the moisture and locking in the nutrients.



Then, the freeze-dried raw is crushed and tumbled with our kibble—putting the pure, real nutrition of raw on every piece.



ONE MILLION MEALS

We think all pets deserve food that's real, nutrient-rich, grain-free and natural. That's why Instinct® provides over one million meals annually to the dogs and cats at Best Friends Animal Society® adoption centers nationwide. Because what we feed them can make all the difference.

NATURAL NUTRITION

WITH ADDED VITAMINS, MINERALS & OTHER TRACE NUTRIENTS

OUR INGREDIENTS

Chicken, Chicken Meal (source of Glucosamine and Chondroitin Sulfate), Chickpeas, Turkey Meal, Tapioca, Herring Meal, Chicken Fat (preserved with Mixed Tocopherols and Citric Acid), Peas, Dried Tomato Pomace, Natural Flavor, Coconut Oil, Montmorillonite Clay, Salt, Chicken Eggs, Potassium Chloride, Vitamins (Vitamin E Supplement, L-Ascorbyl-2-Polyphosphate, Niacin Supplement, Thiamine Mononitrate, d-Calcium Pantothenate, Vitamin A Supplement, Riboflavin Supplement, Pyridoxine Hydrochloride, Vitamin B12 Supplement, Folic Acid, Vitamin D₃ Supplement, Biotin), Carrots, Apples, Cranberries, Choline Chloride, Minerals (Zinc Proteinate, Iron Proteinate, Copper Proteinate, Manganese Proteinate, Sodium Selenite, Ethylenediamine Dihydrochloride), Freeze Dried Chicken, Freeze Dried Chicken Liver, Pumpkinseeds, Freeze Dried Chicken Heart, Dried Bacillus coagulans Fermentation Product, Rosemary Extract.

This is a naturally preserved product. Contains a source of live, naturally occurring microorganisms.

DAILY FEEDING GUIDELINES

Ideal feeding amounts will vary by age, weight and activity level so the guide below should be used as an initial recommendation. Divide the cups per day by the number of feedings per day. Be sure to always provide clean, fresh water. Along with dry food, we recommend feeding raw or wet food to help increase the amount of water in your dog's diet.

WEIGHT OF DOG	2-8 lb	9-12 lb	13-20 lb	21-30 lb
ADULT MAINTENANCE (cups per day*)	1/4-1/2	1/2-1	1-1 1/2	1 1/2-1 3/4
WEIGHT LOSS (cups per day*)	1/4-1/2	1/2-1	1-1 1/2	1 1/2-1 3/4

*Standard 8 oz dry measuring cup
PUPPIES: Feed up to twice the adult maintenance amount shown above.
PREGNANT/NURSING FEMALES: Feed up to three times the adult maintenance amount shown above.

TRANSITIONING TO INSTINCT: Always introduce a new food over a period of 5 to 7 days, mixing increasing amounts of Instinct with the current food each day.

Visit instinctpetfood.com/feeding-guide for more specific feeding recommendations and information on how to easily combine different forms of food.

GUARANTEED ANALYSIS

Crude Protein (min):	36.0%
Crude Fat (min):	15.5%
Crude Fiber (max):	3.0%
Moisture (max):	10.0%
Calcium (min):	1.4%
Phosphorus (min):	1.1%
Vitamin E (min):	200 IU/kg
*Ascorbic Acid (Vitamin C) (min):	100 mg/kg
*Omega 3 Fatty Acids (min):	0.25%
*Omega 6 Fatty Acids (min):	2.0%
*Glucosamine (min):	300 mg/kg
*Chondroitin Sulfate (min):	525 mg/kg
*Bacillus coagulans (min):	60,000,000 CFU/lb

*Not recognized as an essential nutrient by the AAFCO Dog Food Nutrient Profiles.

CALORIE CONTENT (FED): Metabolizable Energy
 4,140 kcal/kg; 463 kcal/cup

COMPLETE & BALANCED

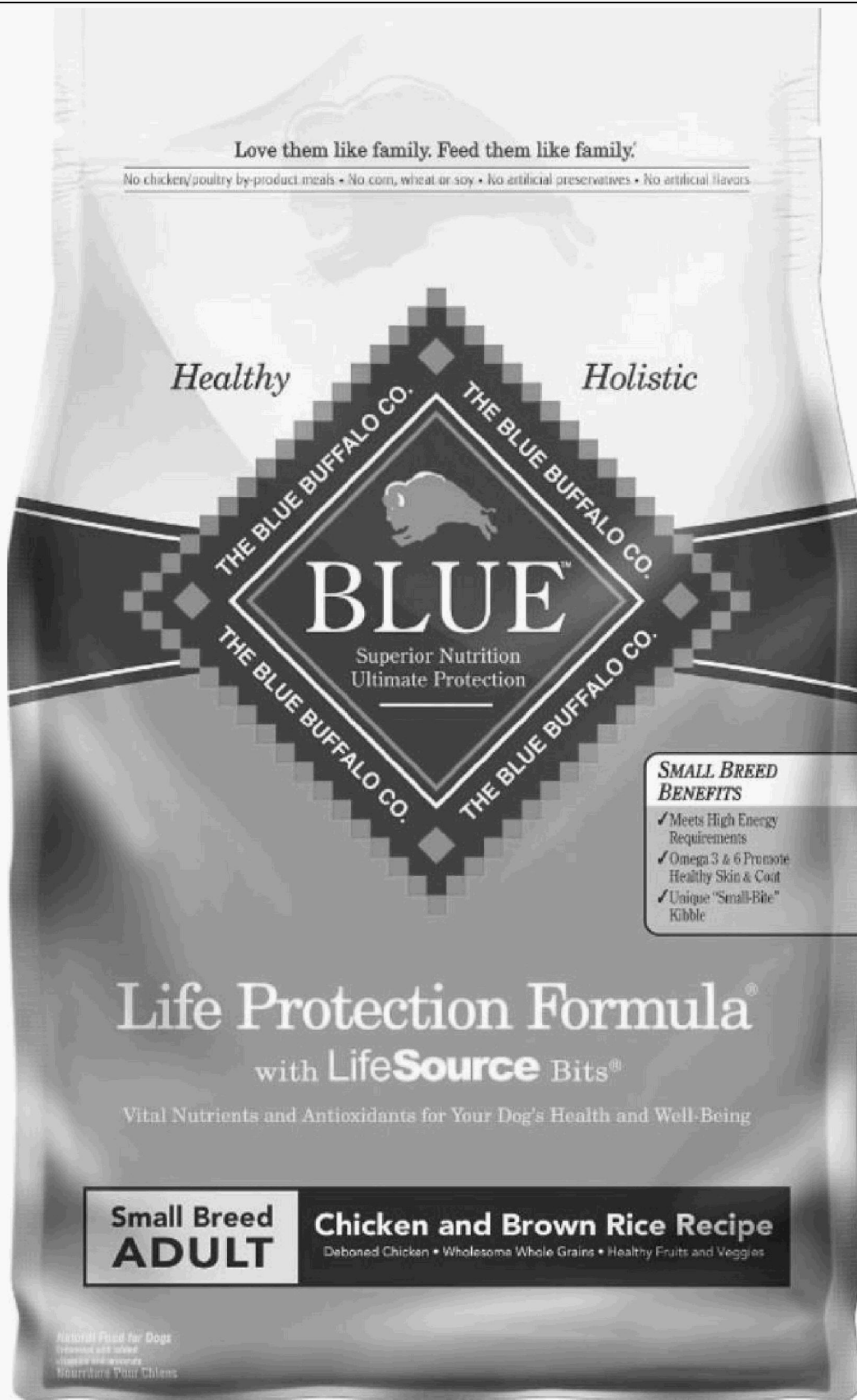
Instinct® Original Grain-Free Recipe with Real Chicken for Small Breed Dogs is formulated to meet the nutritional levels established by the AAFCO Dog Food Nutrient Profiles for all life stages except for growth of large size dogs (70 lbs or more as an adult).

SATISFACTION GUARANTEED

If you or your pet are not completely satisfied with this product, simply return the unused portion, along with the original sales receipt, back to the retailer and receive a full refund or exchange.

WE'D LOVE TO HEAR FROM YOU!
 Call 1-888-519-7387 or learn more at
www.instinctpetfood.com

Store in a cool, dry place. Keep package sealed to maintain freshness.
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Love them like family. Feed them like family.

No chicken/poultry by-product meals • No corn, wheat or soy • No artificial preservatives • No artificial flavors

Healthy

Holistic

THE BLUE BUFFALO CO.

THE BLUE BUFFALO CO.

BLUE

Superior Nutrition
Ultimate Protection

THE BLUE BUFFALO CO.

THE BLUE BUFFALO CO.

**SMALL BREED
BENEFITS**

- ✓ Meets High Energy Requirements
- ✓ Omega 3 & 6 Promote Healthy Skin & Coat
- ✓ Unique "Small-Bite" Kibble

Life Protection Formula
with **LifeSource Bits**

Vital Nutrients and Antioxidants for Your Dog's Health and Well-Being

**Small Breed
ADULT**

Chicken and Brown Rice Recipe

Deboned Chicken • Wholesome Whole Grains • Healthy Fruits and Veggies

Natural Food for Dogs
Hydrates and soaks
upside the world
Nourishes Your Chews



Healthy  Holistic

Love them like family. Feed them like family.®

Like you, we think of our dogs as family members. We want them to enjoy every meal, and we do all we can to help them live long, happy and healthy lives. That's why we take great care in selecting the finest natural ingredients for every one of our BLUE dog foods. Our starting point is always delicious protein rich, deboned chicken, fish or lamb, and we never use any chicken (or poultry) by-product meals.

When you add the potent nutrient and antioxidant support of our exclusive LifeSource Bits to the superior nutrition of the finest natural ingredients, you get BLUE healthy and holistic dog food. It's the perfect food for your furry family member.

The Finest Natural Ingredients Enhanced with Vitamins and Minerals

Nothing beats natural when it comes to providing your dog with the nutrition he needs to stay healthy and happy. Every one of BLUE's tasty recipes has just the right balance of high-quality protein, whole grains, garden vegetables, and fruit in every bite.

- High-Quality Protein**
Delicious deboned chicken
- Wholesome Whole Grains**
Brown rice, oatmeal and barley
- Healthy Garden Veggies**
Whole peas, sweet potatoes, carrots and more

Antioxidant-Rich Fruit

Blueberries and cranberries



Enhanced Supplementation of LifeSource Bits®

BLUE's exclusive LifeSource Bits are a precise blend of antioxidants, vitamins and minerals selected by holistic veterinarians and animal nutritionists. LifeSource Bits include ingredients that have been shown to help support:

- Immune system health
- Life stage requirements
- Healthy oxidative balance

And LifeSource Bits are "cold-formed" to help maintain the potency of their ingredients by minimizing their exposure to heat during processing. Learn more at bluebuffalo.com/LifeSourceBits.



BLUE Small Breed Adult Dog Chicken & Brown Rice Recipe Benefits

<p>Healthy Muscle Development High-quality protein from Deboned Chicken, plus Chicken Meal helps build and maintain strong muscles.</p> <p>Higher Energy Needs Increased levels of protein and carbohydrates help meet higher energy requirements.</p> <p>Dental Health Unique "small-bite" kibble is the perfect size for smaller jaws and is shaped to help promote tartar removal with chewing.</p>	<p>Joint Health Glucosamine helps support joint function and overall mobility.</p> <p>Healthy Skin & Coat An optimal balance of Omega 3 & 6 Fatty Acids helps promote a shiny coat and healthy skin.</p> <p>Immune System Health Essential vitamins, chelated minerals and important antioxidants help support the immune system.</p>
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Inspired by Blue Himself

Blue, our large breed Airedale, is the good pal who inspired us to develop BLUE. A tireless pursuer of squirrels, Blue always enjoyed sharing the yard with his favorite canine companions Molly, Emma & Zack.

Follow Us

#bluebuffalo

Best if Used By:

For more information on BLUE™ visit BlueBuffalo.com or call us at 1.800.919.2833

Ingredients

Deboned Chicken, Chicken Meal, Brown Rice, Oatmeal, Barley, Menhaden Fish Meal (source of Omega 3 Fatty Acids), Chicken Fat (preserved with Mixed Tocopherols), Flaxseed (source of Omega 6 Fatty Acids), Natural Flavor, Pea Starch, Dried Tomato Pomace, Peas, Pea Protein, Dried Egg Product, Salt, Potassium Chloride, Dehydrated Alfalfa Meal, Potatoes, Dried Chicory Root, Pea Fiber, Alfalfa Nutrient Concentrate, Calcium Carbonate, Choline Chloride, DL-Methionine, Preserved with Mixed Tocopherols, Sweet Potatoes, Carrots, Garlic, Zinc Amino Acid Chelate, Zinc Sulfate, Vegetable Juice for color, Ferrous Sulfate, Vitamin E Supplement, Iron Amino Acid Chelate, Blueberries, Cranberries, Barley Grass, Parsley, Turmeric, Dried Kelp, Yucca Schidigera Extract, Glucosamine Hydrochloride, Niacin (Vitamin B3), Calcium Pantothenate (Vitamin B5), L-Carnitine, L-Ascorbyl-2-Polyphosphate (source of Vitamin C), L-Lysine, Copper Sulfate, Biotin (Vitamin B7), Vitamin A Supplement, Copper Amino Acid Chelate, Manganese Sulfate, Taurine, Manganese Amino Acid Chelate, Thiamine Mononitrate (Vitamin B1), Riboflavin (Vitamin B2), Vitamin D3 Supplement, Vitamin B12 Supplement, Pyridoxine Hydrochloride (Vitamin B6), Calcium Iodate, Dried Yeast, Dried Enterococcus faecium fermentation product, Dried Lactobacillus acidophilus fermentation product, Dried Aspergillus niger fermentation extract, Dried Trichoderma longibrachiatum fermentation extract, Dried Bacillus subtilis fermentation extract, Folic Acid (Vitamin B9), Sodium Selenite, Oil of Rosemary.

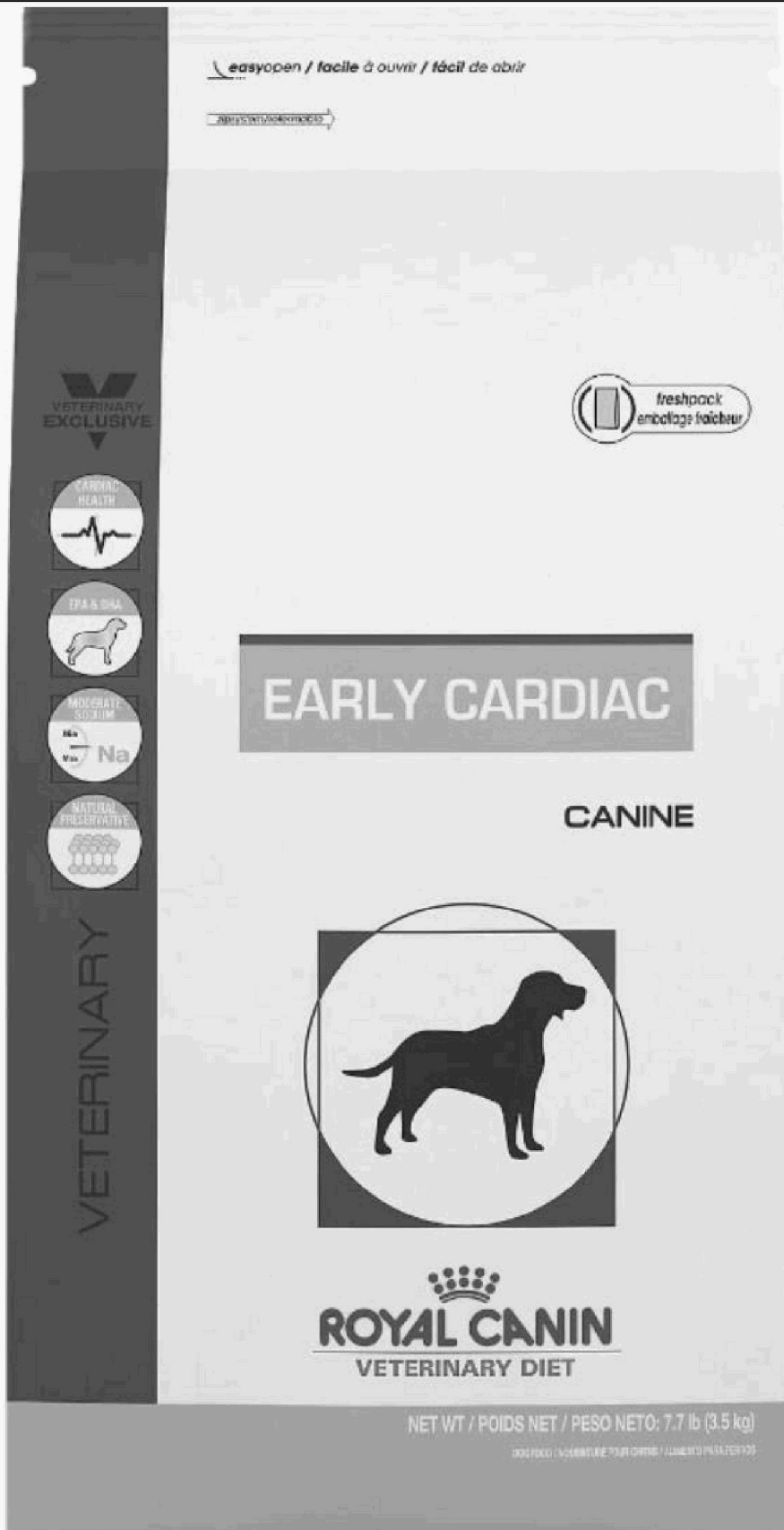
Guaranteed Analysis

Crude Protein	26.0% min
Crude Fat	15.0% min
Crude Fiber	4.0% max
Moisture	10.0% max
Calcium	1.2% min
Phosphorus	0.9% min
Omega 3 Fatty Acids*	0.5% min
Omega 6 Fatty Acids*	3.0% min
Glucosamine*	400 mg/kg min

*Not recognized as an essential nutrient by the AAFCO Dog Food Nutrient Profiles.

Nutrition Statement

BLUE Life Protection Formula Chicken and Brown Rice Recipe for Small Breed Adult Dogs is formulated to meet the nutritional levels established by the AAFCO Dog Food Nutrient Profiles for maintenance.



#PetFoodNoOpen #PetFoodNoOpen #PetFoodNoOpen
 #PetFoodNoOpen #PetFoodNoOpen #PetFoodNoOpen
 #PetFoodNoOpen #PetFoodNoOpen #PetFoodNoOpen

EARLY CARDIAC

FOUNDED BY A VETERINARIAN, ROYAL CANIN has over 40 years of experience in health nutrition. Our work with pet nutritionists, breeders, and veterinarians from around the world has provided us with knowledge about the specific nutritional requirements of dogs. This knowledge allows us to formulate the optimal diet for your dog's special needs.
FONDÉE PAR UN VÉTÉRINAIRE, ROYAL CANIN compte plus de 40 ans d'expérience en alimentation saine. Nos travaux avec des nutritionnistes animaliers, des éleveurs et des vétérinaires de partout dans le monde nous ont permis d'acquies des connaissances spécifiques sur les besoins nutritionnels des chiens. Ces connaissances nous ont permis de créer une diète optimale pour les besoins particuliers de votre chien.
FUNDADA POR UN VETERINARIO, ROYAL CANIN tiene más de 40 años de experiencia en nutrición para la salud. Nuestro trabajo con nutricionistas de mascotas, criadores y veterinarios de todo el mundo, nos ha proporcionado el conocimiento de las necesidades nutricionales específicas de los perros. Este conocimiento nos permite formular la dieta óptima para las necesidades específicas de su perro.



Cardiac Health / Santé Cardiaque / Salud Cardíaca:
 Contains arginine, carnitine, and taurine.
 Contient de l'arginine, de la carnitine et de la taurocine.
 Contiene arginina, carnitina y taurina.



Moderate Sodium / Teneur Modérée en Sodium / Sodio Moderado:
 Moderate, rather than severe, sodium restriction to reduce the workload on the heart.
 Réduction modérée, et non sévère, de la teneur en sodium afin de diminuer le travail du cœur.
 Restricción de sodio moderada, más que rigurosa, para disminuir el trabajo del corazón.



EPA and DHA / EPA et DHA / EPA y DHA:
 Essential fatty acid and docosahexaenoic acids are long chain omega-3 fatty acids for healthy cardiac vascular function.
 Les acides grasés essentiels et les acides grasés à chaîne longue d'acides grasés omega-3 qui aident à un fonctionnement sain du système cardiovasculaire.
 El ácido vírico es importante y el docosahexaenoico son ácidos grasos omega-3 de cadena larga para lograr un funcionamiento cardiovascular sano.



Natural Preservation / Agent de Conservation Naturel / Conservante Natural:
 Naturally preserved to ensure freshness and quality.
 Agent de conservation naturel pour garantir la fraîcheur et la qualité.
 Conservado de manera natural para asegurar la frescura y calidad.

Recommended Daily Feeding Portion Alimentación cotidiana recomendada / Porciones diarias recomendadas		
Weight of dog (kg) Poids du chien (kg) Peso del perro (kilogramos)	Weight of dog (kg) Poids du chien (kg) Peso del perro (kilogramos)	Dogs (puppies) per year Taux (pupilles) par jour
4.4	2	7 (400 g)
6.6	3	7 (400 g)
11.0	5	7 (400 g)
22.0	10	7 (400 g)
33.0	15	7 (400 g)
44.0	20	7 (400 g)
55.0	25	7 (400 g)
66.0	30	7 (400 g)
77.0	35	7 (400 g)
88.0	40	7 (400 g)
99.0	45	7 (400 g)
110.0	50	7 (400 g)
121.0	55	7 (400 g)
132.0	60	7 (400 g)
143.0	65	7 (400 g)
154.0	70	7 (400 g)
165.0	75	7 (400 g)
176.0	80	7 (400 g)
187.0	85	7 (400 g)
198.0	90	7 (400 g)
209.0	95	7 (400 g)
220.0	100	7 (400 g)

1 Cup = 8 fluid ounces = 64 Grams / 1 Tasse = 8 Once liquide = 64 Grammes / 1 Taza = 8 Onzas líquido = 64 Gramas

Calorie Content / Contenu Calorique / Contenido Calórico
 Contents/Contenu/Contenido 3600 kcal ME/kg (calculated/calculé/calculada)
 Contents/Contenu/Contenido 305 kcal ME/cup (calculated/calculé/calculada)

GENERAL FEEDING RECOMMENDATIONS
 Daily feeding recommendations may be divided into two to four meals. Individual requirements may vary. Consult your veterinarian for specific feeding guidelines for your pet. This feeding guide does not apply to puppies or pregnant/lactating dogs. Ensure fresh drinking water is available at all times. Store product in a cool, dry place.

RECOMMENDATIONS ALIMENTAIRES GÉNÉRALES
 Les portions quotidiennes recommandées peuvent être réparties en deux à quatre repas. Les besoins individuels peuvent varier. Consultez votre vétérinaire pour obtenir des recommandations spécifiques pour votre animal. Le présent guide alimentaire ne s'applique pas aux chiots ni aux chiennes enceintes ou qui allaitent. Fournir de l'eau fraîche en tout temps. Conserver le produit dans un endroit frais et sec.

RECOMENDACIONES GENERALES DE ALIMENTACIÓN
 Las recomendaciones de alimentación diarias pueden dividirse en dos a cuatro comidas. Los requerimientos particulares pueden variar. Consulte al médico veterinario. Esta guía de alimentación no se aplica a cachorros ni perras gestantes o en período de lactancia. Asegúrese de que su mascota siempre tenga agua fresca disponible para beber. Guarde el producto en un lugar fresco y seco.

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 www.royalcanin.com.mx
 SAGARPA A-0077-432

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Bott by - Bouteille par - Fidejuciat / Manufactured in - Fabriqué en - Hecho en
 PAB0779C



INGREDIENTS: Brewers rice, chicken fat, chicken meal, fish meal, soy protein isolate, natural flavors, powdered cellulose, potassium chloride, fish oil, L-arginine, choline chloride, taurine, monosodium phosphate, L-carnitine, vitamins [DL-alpha tocopherol acetate (source of vitamin E), L-ascorbyl-2-polyphosphate (source of vitamin C), niacin supplement, biotin, riboflavin supplement, D-calcium pantothenate, pyridoxine hydrochloride (vitamin B6), vitamin A acetate, thiamine mononitrate (vitamin B1), folic acid, vitamin B12 supplement, vitamin D3 supplement], trace minerals (zinc oxide, ferrous sulfate, copper sulfate, manganous oxide, calcium iodate, sodium selenite), rosemary extract, preserved with mixed tocopherols and citric acid.





TEAR TO OPEN
DÉCHIRER POUR OUVRIR

Why GREENIES™ PILL POCKETS™ treats?

Getting your dog to take their medicine can be difficult and can leave you feeling frustrated and your dog angry, scared or confused.

GREENIES™ PILL POCKETS™ treats:

- Offer a proven solution for administering medication.
- Contain a built-in pouch suited for hiding the medicine.
- Makes taking medicine a positive experience for your dog.
- Dogs love them!

Pourquoi les gâteries GREENIES™ PILL POCKETS™?

Donner des médicaments à votre chien peut être difficile, ce qui risque de vous frustrer et de rendre votre chien contrarié, anxieux ou confus.

Les gâteries PILL POCKETS™ de la gamme GREENIES™ :

- Offrent une solution éprouvée lorsqu'il est difficile d'administrer un médicament.
- Comportent une pochette intégrée, idéale pour cacher le médicament.
- Transforment la prise de médicament en une expérience positive pour votre chien.
- Les chiens en raffolent!

FEEDING GUIDELINES Feed as a treat.
GUIDE ALIMENTAIRE Offrir comme une gâterie

1 FILL: Hold PILL POCKETS™ treat with your thumb and forefinger; insert tablet.
GARNIR : Tenez la gâterie PILL POCKETS™ entre le pouce et l'index, insérez le comprimé.



2 PINCH: Using the same hand holding the PILL POCKETS™ treat, squeeze the top half closed.
PINCER : Avec la main qui tient la gâterie PILL POCKETS™, refermez en pinçant la moitié supérieure.



3 GIVE: The PILL POCKETS™ treat is now sealed, feed to your dog.
DONNER : Donnez la gâterie PILL POCKETS™ ainsi refermée à votre chien.



IMPORTANT: To prevent transfer of medicine smell or taste, do not touch PILL POCKETS™ treat with the hand that held the medicine. **IMPORTANT :** Afin d'éviter de conférer à la gâterie l'odeur ou le goût de médicament, ne touchez pas la gâterie PILL POCKETS™ avec la main qui a tenu le médicament.

INGREDIENTS Rehydrated chicken, glycerin, wheat flour, dried corn syrup, dried cheese, vegetable oil, wheat gluten, dried cultured skim milk, natural cheddar cheese flavor, sodium bisulfate, water, natural flavors, preserved with mixed tocopherols.

INGRÉDIENTS Poulet réhydraté, glycérine, farine de blé, sirop de maïs déshydraté, fromage séché, huile végétale, gluten de blé, lait écrémé de culture en poudre, arôme naturelle de fromage cheddar, bisulfate de sodium, eau, arômes naturels, mélange de tocophérols comme agent de conservation.

GUARANTEED ANALYSIS / ANALYSE GARANTIE

Crude Protein / Protéines brutesMin. 11.0%
Crude Fat / Matières grasses brutesMin. 10.0%
Crude Fiber / Fibres brutesMax. 1.5%
Moisture / HumiditéMax. 31.0%

**CALORIE CONTENT / (CALCULATED)
VALEUR CALORIGÈNE / (CALCULÉE)**

(kcal/kg) ME /	2,941
(kcal/kg) Énergie métabolisable
Calories (kcal) ME per treat /	9
Calories (kcal) par gâterie
Servings per package (approx.) /	30
Portions par paquet (approx.)



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visit our website at www.greenies.com
Commentaires ou questions? Composez le 1-866-473-3643 ou visitez
notre site Web au www.greenies.com

Client:

Address:

B6

All Medical Records

Patient: **B6**

Breed: Great Dane

DOB: **B6**

Species: Canine

Sex: Male

Referring Information

B6

Client:

Patient: **B6**

Initial Complaint:

Emergency

SOAP Text

B6

Subjective NEW VISIT (ER)

Doctor: **B6**

Student:

Presenting complaint: collapse, referral for A-fib

Referral visit? yes

Diagnostics completed prior to visit

ECG - suspect A-fib

HISTORY:

Signalment: 8yr MI Great Dane

Current history: **B6** collapsed Friday. Noted having more effort while breathing and abdomen became more distended since Friday. Notified abdomen distension Sunday. No hx of heart problems. Had him cardiac tested several years ago and came back normal. O held him for several minutes while he recovered. Bad diarrhea several weeks ago, tested for parasites but came back negative **B6** for 7 days. Decreased appetite for last few days. rDVM yesterday, gave injection of lasix. ECG showed possible A-fib. Better after lasix.

Prior medical history: has been otherwise healthy, oral papilloma 2 yr ago

Current medications: chondroitin

EXAM:

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

S: **B6**
O: **B6**

B6

C/V: NMA, irregularly irregular tachyarrhythmia, pulse deficits

B6

ASSESSMENT:

A1: DCM with CHF

A2: **B6**
A3: **B6**

PLAN:

B6

3. Cardiology consult - DCM with CHF, A-fib

4. **B6**
5. **B6**
6. **B6**
7. **B6**
8. **B6**
9. **B6**
10. **B6**

Diagnostics completed:

- 1. CBC/chem - monocytosis 1.7, AST 77
- 2. CXR

Diagnostics pending:

Client communication:

Discussed dx of DCM with CHF and A-fib. Explained long term px not always good. 6 months would be excellent but we dont know how long he has. Could go into failure again sooner. We can likely bring him out of failure and try to control his rhythm. He will need lifelong meds and rechecks. Dogs with this dz can die suddenly, here or at home, from fatal arrhythmias. O understand. Recommend hospitalization for treatment and monitoring. Likely will need 2-3 days in the hospital depending on how he responds. O elected to hospitalize. Cardiology will take over his care

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

tomorrow and touch base in the morning. No news is good news overnight. O happy with plan.

Deposit & estimate status **B6**

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

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

SOAP Text **B6** 8:12AM - Clinician, Unassigned FHSA

Subjective

EXAM, GENERAL

Subjective (S)

B6 8yo IM Great Dane, presented to the ER of **B6** for Afib and history of collapse. He was diagnosed with DCM with CHF and A-fib. In the evening, 6-lead ECG showed wide QRS complexes (LBBB). CBC and chem were unremarkable (**B6**). Overnight, his heart rate was around 200 and rhythm was afib. He defecated and urinated (~4L (4kg weight loss)) and had a good appetite. His RE was none to slight and he received 300mg furosemide overnight.

P is BAR and friendly. BCS 5/9. Appears euhydrated.

Objective (O)

B6

H/L: 2/6 left apical systolic murmur. Irregularly irregular tachy arrhythmia. Femoral pulses fair and synchronous. Eupneic. Normal BV sounds bilaterally and no crackles or wheezes ausculted.

B6

Diagnostics completed:

B6

CBC/chem - **B6**

CXR (1 view)- Mild to moderate left atrial enlargement. No clear evidence of cardiogenic pulmonary edema on this limited exam.

Echo-Reveals severe DCM with moderate secondary LAE, and EKG reveals atrial fibrillation with rapid ventricular response rate. Changes are consistent with CHF being the cause for effusions and trouble breathing. The collapse episode could be related to CHF or intermittent more severe arrhythmia.

Assessment (A)

A1: DCM with CHF-Improved

B6

Plan (P)

P: Continue in hospital monitoring (RR Q1, Temp Q12, weight Q12)

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

B6

P: Submit NT-ProBNP
P: Recheck echocardiogram/fluid

SOAP completed by: **B6** V18
SOAP reviewed by: etk

****Appended Soap Entry****

Subjective

EXAM, GENERAL

Subjective (S)

B6 8yo IM Great Dane, presented to the ER on **B6** for Afib and history of collapse. He was diagnosed with DCM with CHF and A-fib. In the evening, 6-lead ECG showed wide QRS complexes (LBBB). CBC and chem were unremarkable (**B6**). Overnight, his heart rate was around 200 and rhythm was afib. He defecated and urinated (~4L (4kg weight loss)) and had a good appetite. His RE was none to slight and he received **B6** overnight.

P is BAR and friendly. BCS 5/9. Appears euhydrated.

Objective (O)

B6

H/L: 2/6 left apical systolic murmur. Irregularly irregular tachy arrhythmia. Femoral pulses fair and synchronous. Eupneic. Normal BV sounds bilaterally and no crackles or wheezes ausculted.

B6

Diagnostics completed:

B6

CBC/chem - **B6**

CXR (1 view)- Mild to moderate left atrial enlargement. No clear evidence of cardiogenic pulmonary edema on this limited exam.

Assessment (A)

A1: DCM with CHF-Improved

B6

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

Plan (P)

P: Continue in hospital monitoring (RR Q1, Temp Q12, weight Q12)

P: Telemetry

P: Continue **B6**

P: Continue

P: Continue

P: Continue

P: Submit NT-ProBNP

P: Recheck echocardiogram/fluid

SOAP completed by: **B6** V18

SOAP reviewed by: **B6**

SOAP Text **B6** 7:57AM - Clinician, Unassigned FHSA

Subjective

EXAM, GENERAL

Subjective (S)

B6 8yo IM Great Dane, presented to the ER of **B6** for Afib and history of collapse. He was diagnosed with DCM with CHF and A-fib. Overnight, his heart rate was between **B6**. He had a good appetite and this am had soft stool and small amount of diarrhea. His last dose of **B6**

B6

Objective (O)

B6

H/L: II/VI left apical systolic murmur. Irregularly irregular tachy arrhythmia. Femoral pulses good and synchronous. Eupneic. Normal BV sounds bilaterally and no crackles or wheezes ausculted.

B6

Diagnostics completed:

B6

CBC/chem - **B6**

CXR (1 view)- Mild to moderate left atrial enlargement. No clear evidence of cardiogenic pulmonary edema on this limited exam.

Echo-Reveals severe DCM with moderate secondary LAE, and EKG reveals atrial fibrillation with rapid ventricular response rate. Changes are consistent with CHF being the cause for effusions and trouble breathing. The collapse episode could be related to CHF or intermittent more severe arrhythmia.

NT-ProBNB-pending

B6

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

Che: **B6**
NT: **B6**
2/22
Chem: **B6**

Assessment (A)

A1: DCM with CHF-Improvement in RR/RE

B6

Plan (P)

P: Continue in hospital monitoring (RR Q1, Temp Q12, weight Q12)

P: Telemetry

P: Continue **B6**
P: Continue
P: Continue
P: Continue

P: Consider metronidazole if diarrhea persists

P: TGH tomorrow

P: Add **B6** PO SID; consider increasing to **B6** if well tolerated

SOAP completed by: **B6** V18

SOAP reviewed by: **B6**

SOAP Text **B6** 7:10AM - Clinician, Unassigned FHSA

Subjective

EXAM, GENERAL

Subjective (S)

B6, 8yo IM Great Dane, presented to the ER on **B6** for Afib and history of collapse. He was diagnosed with DCM with CHF and A-fib. Overnight, his heart rate was between 170-190 and rhythm was afib. He pulled his IVC and not replaced. He had a good appetite and this am had formed stool. His last dose of **B6** and he had no effort all night.

P is BAR and friendly. BCS 5/9. MM moist and pink with CRT <2s.

Objective (O)

B6

H/L: II/VI left apical systolic murmur. Irregularly irregular tachy arrhythmia. Femoral pulses good and synchronous Jugular distension bottom 1/3rd of neck. Eupneic. Normal BV sounds bilaterally and no crackles or wheezes ausculted.

B6

Diagnostics completed:

B6

Client:
Patient:

B6

CBC/chem - **B6**

CXR (1 view)- Mild to moderate left atrial enlargement. No clear evidence of cardiogenic pulmonary edema on this limited exam.

Echo-Reveals severe DCM with moderate secondary LAE, and EKG reveals atrial fibrillation with rapid ventricular response rate. Changes are consistent with CHF being the cause for effusions and trouble breathing. The collapse episode could be related to CHF or intermittent more severe arrhythmia.

NT-ProBNB-pending

B6

Chem **B6**

NT- **B6**

B6

Chem **B6**

Assessment (A)

A1: DCM with CHF-Improvement in RR/RE

B6

Plan (P)

P: Continue in hospital monitoring (RR Q1, Temp Q12, weight Q12)

P: Telemetry

P: Continue **B6**

P: Continue

P: Continue

P: Continue

P: AFAST this AM

P: Continue **B6** SID if well tolerated

P: TGH today

SOAP completed by: **B6** V18

SOAP reviewed by:

Initial Complaint:

Recheck - **B6**

SOAP Text Apr 12 2018 12:08PM - **B6**

Initial Complaint:

Tech - **B6**

SOAP Text Jun 5 2018 10:53AM - **B6**

Disposition/Recommendations

Client:
Patient:

B6

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



Foster Hospital for Small Animals

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

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

Patient:	B6
Species:	Canine
Breed:	Great Dane
Sex:	Male
Age:	B6 Years Old

Lab Results Report

CBC, Comprehensive, Sm Animal **B6** 2:56:11 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
RETIC(ADVIA)		0.2 - 1.6	%
RETICS (ABS) ADVIA		14.7 - 113.7	K/uL

CBC, Comprehensive, Sm Animal **B6** 2:56:27 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
T. PROTEIN		5.5 - 7.8	g/dL



Client:
Patient:

B6

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

B6

CBC, Comprehensive, Sm Animal 2:56:10 PM Accession ID: **B6**

Test	Results	Reference Range	Units
SEGS%		43 - 86	%
LYMPHS%		7 - 47	%
MONOS%		1 - 15	%
EOS%		0 - 16	%
NRBC		0 - 1	/100 WBC
SEGS (AB)ADVIA		2.8 - 11.5	K/uL
LYMPHS (ABS)ADVIA		1 - 4.8	K/uL
MONOS (ABS)ADVIA		0.1 - 1.5	K/uL
EOS (ABS)ADVIA		0 - 1.4	K/uL
WBC MORPHOLOGY		0 - 0	
No Morphologic Abnormalities			
CRENATION		0 - 0	

B6

B6

CBC, Comprehensive, Sm Animal 10:22:20 AM Accession ID: **B6**

Test	Results	Reference Range	Units
GLUCOSE		67 - 135	mg/dL
UREA		8 - 30	mg/dL
CREATININE		0.6 - 2	mg/dL

B6



Client:
Patient:

B6

PHOSPHORUS		2.6 - 7.2	mg/dL
CALCIUM2		9.4 - 11.3	mg/dL
T. PROTEIN		5.5 - 7.8	g/dL
ALBUMIN		2.8 - 4	g/dL
GLOBULINS		2.3 - 4.2	g/dL
A/G RATIO		0.7 - 1.6	
SODIUM		140 - 150	mEq/L
CHLORIDE		106 - 116	mEq/L
POTASSIUM		3.7 - 5.4	mEq/L
NA/K		29 - 40	
T BILIRUBIN		0.1 - 0.3	mg/dL
D.BILIRUBIN		0 - 0.1	mg/dL
I BILIRUBIN		0 - 0.2	mg/dL
ALK PHOS		12 - 127	U/L
ALT		14 - 86	U/L
AST		9 - 54	U/L
CHOLESTEROL		82 - 355	mg/dL
OSMOLALITY (CALCULATED)		291 - 315	mmol/L

B6

CBC, Comprehensive, Sm Animal 10:50:23 AM Accession ID: **B6**

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

B6

CBC, Comprehensive, Sm Animal 10:30:21 AM Accession ID: **B6**

Test	Results	Reference Range	Units
GLUCOSE		67 - 135	mg/dL
UREA		8 - 30	mg/dL
CREATININE		0.6 - 2	mg/dL
PHOSPHORUS		2.6 - 7.2	mg/dL
CALCIUM2		9.4 - 11.3	mg/dL
T. PROTEIN		5.5 - 7.8	g/dL
ALBUMIN		2.8 - 4	g/dL
GLOBULINS		2.3 - 4.2	g/dL
A/G RATIO		0.7 - 1.6	
SODIUM		140 - 150	mEq/L
CHLORIDE		106 - 116	mEq/L
POTASSIUM		3.7 - 5.4	mEq/L
NA/K		29 - 40	
T BILIRUBIN		0.1 - 0.3	mg/dL
D.BILIRUBIN		0 - 0.1	mg/dL

B6



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

I BILIRUBIN	B6	0 - 0.2	mg/dL
ALK PHOS		12 - 127	U/L
ALT		14 - 86	U/L
AST		9 - 54	U/L
CHOLESTEROL		82 - 355	mg/dL
OSMOLALITY (CALCULATED)		291 - 315	mmol/L
COMMENTS (CHEMISTRY)		0 - 0	

CBC, Comprehensive, Sm Animal		B6	10:36:26 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	

CBC, Comprehensive, Sm Animal			9:29:20 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	
D.BILIRUBIN		0 - 0.1	mg/dL	
I BILIRUBIN		0 - 0.2	mg/dL	
ALK PHOS		12 - 127	U/L	
ALT		14 - 86	U/L	
AST		9 - 54	U/L	
CHOLESTEROL		82 - 355	mg/dL	
OSMOLALITY (CALCULATED)	291 - 315	mmol/L		

CBC, Comprehensive, Sm Animal			9:41:44 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	



Client: **B6**
 Patient:

CBC, Comprehensive, Sm Animal		4/12/2018 12:09:21 PM	Accession ID: 366163
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
D.BILIRUBIN		0 - 0.1	mg/dL
I BILIRUBIN		0 - 0.2	mg/dL
ALK PHOS		12 - 127	U/L
ALT		14 - 86	U/L
AST		9 - 54	U/L
CHOLESTEROL		82 - 355	mg/dL
OSMOLALITY (CALCULATED)	291 - 315	mmol/L	
COMMENTS (CHEMISTRY)	0 - 0		
Slight hemolysis,Slight lipemia			

CBC, Comprehensive, Sm Animal		4/12/2018 12:16:07 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		6/5/2018 11:06:00 AM	Accession ID: B6
Test	Results	Reference Range	Units
TAURINE WB	B6	200 - 350	nmol/mL

CBC, Comprehensive, Sm Animal		6/5/2018 11:07:21 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



Client: **B6**
Patient:

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
NA/K		29 - 40	
T BILIRUBIN		0.1 - 0.3	mg/dL
D.BILIRUBIN		0 - 0.1	mg/dL
I BILIRUBIN		0 - 0.2	mg/dL
ALK PHOS		12 - 127	U/L
ALT		14 - 86	U/L
AST		9 - 54	U/L
CHOLESTEROL		82 - 355	mg/dL
OSMOLALITY (CALCULATED)		291 - 315	mmol/L
COMMENTS (CHEMISTRY)		0 - 0	

Slight hemolysis,Slight lipemia



Client:
Patient:

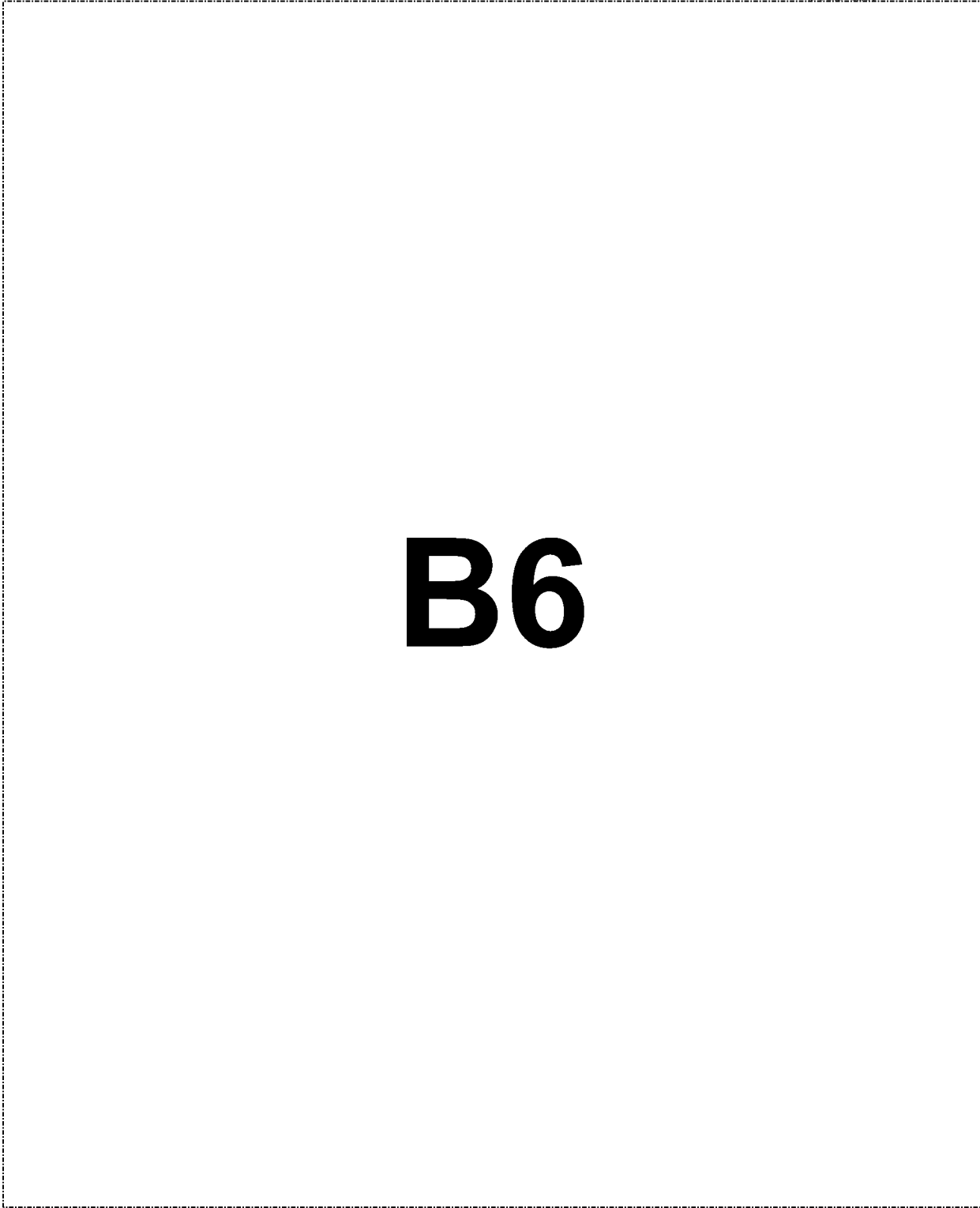
B6

rDVM:

B6

ECG/Invoice:

B6



Client: **B6**
Patient:

rDVM: **B6** AH ECG/Invoice: **B6**

B6

B6

B6

Client: **B6**
Patient:

rDVM: **B6** AH ECG/Invoice **B6**

B6

B6

Client: **B6**
Patient:

rDVM **B6** AH ECG/Invoice **B6**

Feb 19 2018 17:35:17

Heart Laboratory ->

XXXXXXXXXX

Page 18/86

B6

B6

Client:
Patient:

B6

rDVM

B6

ECG/Invoice

B6

INVOICE

B6

FOR:

B6

Printed: 02-19-18 at 8:02a
Date: 02-19-18
Account: **B6**
Invoice:

Date For Qty Description Price

B6

B6

Old balance
0.00

Change Payments

B6

New balance

Reminders for

04/20
02/19
05/18

B6

Client:
Patient:

B6

rDVM:

B6

AH ECG/Invoice

B6

B6

Client:
Patient:

B6

EKG

B6

B6

Client:
Patient:

B6

EKG

B6

B6

Client:
Patient:

B6

Lab Image: NT proBNP

B6



Client:
Patient:

B6

Insurance

B6

B6

B6

Client:
Patient:

B6

Insurance

B6

Claim Form (DO

B6

B6

Client: **B6**
Patient:

Insurance **B6** Claim Form (DOS: **B6**)

Cummings
Veterinary Medical Center
AT TUFTS UNIVERSITY

Foster Hospital for Small Animals
25 Alfred Street
North Duffield, MA 01830
1703.225.9393
<http://www.cummings.vet>

Invoice
Invoice ID: 1347344400

B6

Client:
Patient:

B6

Insurance

B6

Claim Form (DOS)

B6

B6

Client:
Patient:

B6

Prescription

B6

Count #2 3/1/2018

B6

Client:
Patient:

B6

rDVM: **B6** AH labs and note 3/5/18

B6

Client:
Patient:

B6

rDVM

B6

H labs and note 3/5/18

B6

Get deeper insight. For complete access to this patient's diagnostic results, including critical values and images, log in to www.vetmedportal.com
Final report generated March 06, 2018

PAGE 2 of 2

Client:
Patient:

B6

Insurance

B6

Claim DOS 4/12/2018

B6

B6

B6

B6

Client:
Patient:

B6

Insurance

B6

Claim DOS 4/12/2018

B6

L

Client: **B6**
Patient:

Insurance: **B6** Claim DOS 4/12/2018

Cummings
Veterinary Medical Center
AT TEXAS A&M UNIVERSITY

Poston Hospital For Small Animals
221 YERGEN DRIVE
North Charleston, SC 29505
TEL: 843-824-2200
WWW.VETERINARIANIMALS.COM

Invoice

B6

Client: **B6**
Patient:

Prescription The: **B6** 10 mg 5/8/18

RECEIVED TELE PH... MA... PHARMACY VIA PSI-FAA

Page 1 of 1 NUMBER 00

B6

B6

Client:
Patient:

B6

Insurance

B6

Stamped Form for Client DOS 6/5/18

B6

Client: **B6**
Patient:

Insurance **B6** Stamped Form for Client DOS 6/5/18

B6

B6

Client:
Patient:

B6

Insurance: **B6** Stamped Form for Client DOS 6/5/18

B6

B6

Client: **B6**
Patient:

Insurance: **B6** Stamped Form for Client DOS 6/5/18

B6

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

Insurance **B6** Stamped Form for Client DOS 6/5/18

B6



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

Insurance: **B6** Request for Diagnosis DOS 6/5/18

B6

Client:
Patient:

B6

Insurance

B6

Request for Diagnosis DOS 6/5/18

B6

Client: **B6**
Patient:

UCD- Taurine Results 6/5/18

B6

Client:
Patient:

B6

Vitals Results

11:05:25 AM	Notes
1:01:22 PM	Lasix treatment note
1:02:20 PM	Nursing note
3:01:59 PM	Cardiac rhythm
3:02:00 PM	Heart Rate (/min)
3:12:20 PM	Interest in water
3:19:12 PM	Weight (kg)
3:44:46 PM	Cardiac rhythm
3:44:47 PM	Heart Rate (/min)
3:45:02 PM	Respiratory Rate
3:45:08 PM	Interest in water
4:51:21 PM	Respiratory Rate
4:51:29 PM	Cardiac rhythm
4:51:30 PM	Heart Rate (/min)
5:26:20 PM	Interest in water
5:35:49 PM	Eliminations
5:55:59 PM	Respiratory Rate
5:56:06 PM	Cardiac rhythm
5:56:07 PM	Heart Rate (/min)
6:44:59 PM	Cardiac rhythm
6:45:00 PM	Heart Rate (/min)
6:45:33 PM	Respiratory Rate
7:41:22 PM	Temperature (F)
7:43:00 PM	Amount eaten
7:43:45 PM	Cardiac rhythm
7:43:46 PM	Heart Rate (/min)
7:46:32 PM	Respiratory Rate
7:48:22 PM	Lasix treatment note
7:56:57 PM	Cage or Walk notes
8:59:27 PM	Respiratory Rate
8:59:35 PM	Cardiac rhythm
8:59:36 PM	Heart Rate (/min)
9:02:18 PM	Cage or Walk notes
9:11:04 PM	Interest in water
9:44:17 PM	Cardiac rhythm
9:44:18 PM	Heart Rate (/min)
9:44:53 PM	Respiratory Rate
10:49:55 PM	Respiratory Rate
10:50:09 PM	Cardiac rhythm

B6

B6

Client:
Patient:

B6

Vitals Results

10:50:10 PM	Heart Rate (/min)
11:04:55 PM	Cardiac rhythm
11:04:56 PM	Heart Rate (/min)
11:07:24 PM	Respiratory Rate
11:59:35 PM	Eliminations
1:10:28 AM	Interest in water
1:10:44 AM	Eliminations
1:11:46 AM	Respiratory Rate
1:12:03 AM	Cardiac rhythm
1:12:04 AM	Heart Rate (/min)
1:54:33 AM	Respiratory Rate
1:58:49 AM	Cardiac rhythm
1:58:50 AM	Heart Rate (/min)
2:49:31 AM	Respiratory Rate
2:49:48 AM	Cardiac rhythm
2:49:49 AM	Heart Rate (/min)
3:23:28 AM	Eliminations
3:27:53 AM	Lasix treatment note
3:57:42 AM	Respiratory Rate
3:58:29 AM	Cardiac rhythm
3:58:30 AM	Heart Rate (/min)
4:52:42 AM	Cardiac rhythm
4:52:43 AM	Heart Rate (/min)
4:53:13 AM	Interest in water
5:24:09 AM	Respiratory Rate
5:49:13 AM	Cardiac rhythm
5:49:14 AM	Heart Rate (/min)
5:49:27 AM	Respiratory Rate
7:13:03 AM	Respiratory Rate
7:13:16 AM	Eliminations
7:13:29 AM	Weight (kg)
7:22:58 AM	Cardiac rhythm
7:22:59 AM	Heart Rate (/min)
8:01:55 AM	Cardiac rhythm
8:01:56 AM	Heart Rate (/min)
8:55:37 AM	Respiratory Rate
8:55:47 AM	Amount eaten
8:56:06 AM	Cardiac rhythm
8:56:07 AM	Heart Rate (/min)
9:12:34 AM	Respiratory Rate

B6

B6

Client:
Patient:

B6

Vitals Results

10:32:11 AM	Respiratory Rate
10:33:36 AM	Cardiac rhythm
10:33:37 AM	Heart Rate (/min)
11:15:57 AM	Cardiac rhythm
11:15:58 AM	Heart Rate (/min)
11:17:20 AM	Respiratory Rate
11:52:55 AM	Cardiac rhythm
11:52:56 AM	Heart Rate (/min)
12:51:15 PM	Respiratory Rate
12:51:49 PM	Lasix treatment note
12:52:17 PM	Catheter Assessment
1:24:05 PM	Respiratory Rate
1:25:00 PM	Cardiac rhythm
1:25:01 PM	Heart Rate (/min)
1:32:20 PM	Eliminations
1:56:57 PM	Cardiac rhythm
1:56:58 PM	Heart Rate (/min)
1:59:15 PM	Respiratory Rate
3:19:21 PM	Cardiac rhythm
3:19:22 PM	Heart Rate (/min)
3:20:03 PM	Respiratory Rate
3:40:26 PM	Eliminations
4:04:48 PM	Cardiac rhythm
4:04:49 PM	Heart Rate (/min)
4:15:45 PM	Respiratory Rate
4:54:24 PM	Cardiac rhythm
4:54:25 PM	Heart Rate (/min)
4:55:24 PM	Respiratory Rate
6:08:56 PM	Eliminations
6:10:01 PM	Respiratory Rate
6:10:47 PM	Catheter Assessment
6:13:39 PM	Cardiac rhythm
6:13:40 PM	Heart Rate (/min)
6:23:42 PM	Nursing note
7:20:06 PM	Eliminations
7:20:27 PM	Respiratory Rate
7:20:39 PM	Cardiac rhythm
7:20:40 PM	Heart Rate (/min)
7:25:29 PM	Respiratory Rate
7:45:44 PM	Amount eaten

B6

B6

Client:
Patient:

B6

Vitals Results

9:02:16 PM	Respiratory Rate
9:02:26 PM	Cardiac rhythm
9:02:27 PM	Heart Rate (/min)
9:13:21 PM	Eliminations
9:47:36 PM	Respiratory Rate
9:47:44 PM	Cardiac rhythm
9:47:45 PM	Heart Rate (/min)
10:45:50 PM	Cardiac rhythm
10:45:51 PM	Heart Rate (/min)
10:46:40 PM	Respiratory Rate
11:46:55 PM	Lasix treatment note
11:47:22 PM	Respiratory Rate
11:47:34 PM	Catheter Assessment
11:48:05 PM	Cardiac rhythm
11:48:06 PM	Heart Rate (/min)
11:49:23 PM	Nursing note
12:36:00 AM	Nursing note
12:49:48 AM	Respiratory Rate
12:50:01 AM	Cardiac rhythm
12:50:02 AM	Heart Rate (/min)
12:56:24 AM	Eliminations
1:44:09 AM	Respiratory Rate
1:44:22 AM	Cardiac rhythm
1:44:23 AM	Heart Rate (/min)
1:49:40 AM	Cardiac rhythm
1:49:41 AM	Heart Rate (/min)
1:51:39 AM	Respiratory Rate
1:51:59 AM	Nursing note
1:55:15 AM	Respiratory Rate
1:55:30 AM	Cardiac rhythm
1:55:31 AM	Heart Rate (/min)
1:43:12 AM	Respiratory Rate
1:43:50 AM	Cardiac rhythm
1:43:51 AM	Heart Rate (/min)
1:50:44 AM	Eliminations
1:16:23 AM	Catheter Assessment
1:40:22 AM	Respiratory Rate
1:40:37 AM	Cardiac rhythm
1:40:38 AM	Heart Rate (/min)
1:52:40 AM	Respiratory Rate

B6

B6

Client:
Patient:

B6

Vitals Results

5:24:14 AM	Cardiac rhythm
5:24:15 AM	Heart Rate (/min)
5:52:18 AM	Respiratory Rate
7:30:07 AM	Amount eaten
7:51:31 AM	Cardiac rhythm
7:51:32 AM	Heart Rate (/min)
7:58:35 AM	Eliminations
8:53:21 AM	Cardiac rhythm
8:53:22 AM	Heart Rate (/min)
8:54:31 AM	Respiratory Rate
9:34:15 AM	Catheter Assessment
9:49:16 AM	Respiratory Rate
9:50:50 AM	Cardiac rhythm
9:50:51 AM	Heart Rate (/min)
10:02:22 AM	Lasix treatment note
10:54:07 AM	Cardiac rhythm
10:54:08 AM	Heart Rate (/min)
10:55:01 AM	Respiratory Rate
11:04:30 AM	Eliminations
11:43:29 AM	Cardiac rhythm
11:43:30 AM	Heart Rate (/min)
11:44:10 AM	Respiratory Rate
12:46:17 PM	Respiratory Rate
12:46:31 PM	Cardiac rhythm
12:46:32 PM	Heart Rate (/min)
1:31:04 PM	Eliminations
1:31:13 PM	Catheter Assessment
1:55:12 PM	Cardiac rhythm
1:55:13 PM	Heart Rate (/min)
1:57:38 PM	Respiratory Rate
3:04:46 PM	Respiratory Rate
3:07:07 PM	Cardiac rhythm
3:07:08 PM	Heart Rate (/min)
3:53:37 PM	Cardiac rhythm
3:53:38 PM	Heart Rate (/min)
3:54:21 PM	Respiratory Rate
3:58:47 PM	Lasix treatment note
4:53:28 PM	Eliminations

B6

B6

Client: **B6**
Patient:

Vitals Results

53:44 PM	Cardiac rhythm
53:45 PM	Heart Rate (/min)
54:08 PM	Respiratory Rate
14:40 PM	Catheter Assessment
48:36 PM	Respiratory Rate
05:36 PM	Cardiac rhythm
05:37 PM	Heart Rate (/min)
47:51 PM	Respiratory Rate
24:20 PM	Amount eaten
27:04 PM	Respiratory Rate
45:23 PM	Cardiac rhythm
45:24 PM	Heart Rate (/min)
54:13 PM	Cardiac rhythm
54:14 PM	Heart Rate (/min)
57:14 PM	Respiratory Rate
05:16 PM	Eliminations
11:39 PM	Catheter Assessment
50:30 PM	Nursing note
51:05 PM	Cardiac rhythm
51:06 PM	Heart Rate (/min)
51:21 PM	Respiratory Rate
0:54:33 PM	Cardiac rhythm
0:54:34 PM	Heart Rate (/min)
0:54:46 PM	Respiratory Rate
1:27:32 PM	Eliminations
1:49:58 PM	Lasix treatment note
1:50:21 PM	Cardiac rhythm
1:50:22 PM	Heart Rate (/min)
1:50:32 PM	Respiratory Rate
2:45:32 AM	Cardiac rhythm
2:45:33 AM	Heart Rate (/min)
2:45:57 AM	Respiratory Rate
14:41 AM	Eliminations
58:26 AM	Cardiac rhythm
58:27 AM	Heart Rate (/min)
58:47 AM	Respiratory Rate
38:48 AM	Cardiac rhythm
38:49 AM	Heart Rate (/min)
39:03 AM	Respiratory Rate

B6

B6

Client:
Patient:

B6

Vitals Results

3:45:04 AM	Cardiac rhythm
3:45:05 AM	Heart Rate (/min)
3:46:08 AM	Respiratory Rate
4:46:19 AM	Cardiac rhythm
4:46:20 AM	Heart Rate (/min)
5:27:30 AM	Respiratory Rate
5:27:46 AM	Eliminations
5:27:59 AM	Catheter Assessment
5:28:24 AM	Nursing note
5:42:40 AM	Cardiac rhythm
5:42:41 AM	Heart Rate (/min)
6:51:21 AM	Cardiac rhythm
6:51:22 AM	Heart Rate (/min)
6:54:04 AM	Respiratory Rate
7:13:57 AM	Eliminations
7:35:54 AM	Amount eaten
B6 7:44:22 AM	Respiratory Rate
7:44:37 AM	Cardiac rhythm
7:44:38 AM	Heart Rate (/min)
8:44:11 AM	Cardiac rhythm
8:44:12 AM	Heart Rate (/min)
8:50:18 AM	Eliminations
9:47:56 AM	Cardiac rhythm
9:47:57 AM	Heart Rate (/min)
9:49:09 AM	Respiratory Rate
10:15:03 AM	Lasix treatment note
10:49:35 AM	Cardiac rhythm
10:49:36 AM	Heart Rate (/min)
10:50:15 AM	Respiratory Rate
11:54:12 AM	Cardiac rhythm
11:54:13 AM	Heart Rate (/min)
11:54:59 AM	Respiratory Rate
12:49:13 PM	Cardiac rhythm
12:49:14 PM	Heart Rate (/min)
12:49:56 PM	Respiratory Rate
4/12/2018 11:15:13 AM	Weight (kg)

B6

Client: **B6**
Patient:

ECG from Cardio

B6

XXXXXXXX XX-XX-XX XX
XXXXX XXXXX
XXXXX XXXXX XXXXX XXXXX
XXXXX XXXXX XXXXX XXXXX
XXXXX XXXXX XXXXX XXXXX

B6

Client: **B6**
Patient:

ECG from Cardio

B6

2/28/2019 10:44:41 AM Page 5 of 8
FDA Center for
FDA Center for
FDA Center for

B6

Client:
Patient:

B6

ECG from Cardio

B6

2/28/2019 10:44:41 AM Page 3 of 8
FDA Center for
Medical Devices and Research
CDRH/CDRE

B6

Client:
Patient:

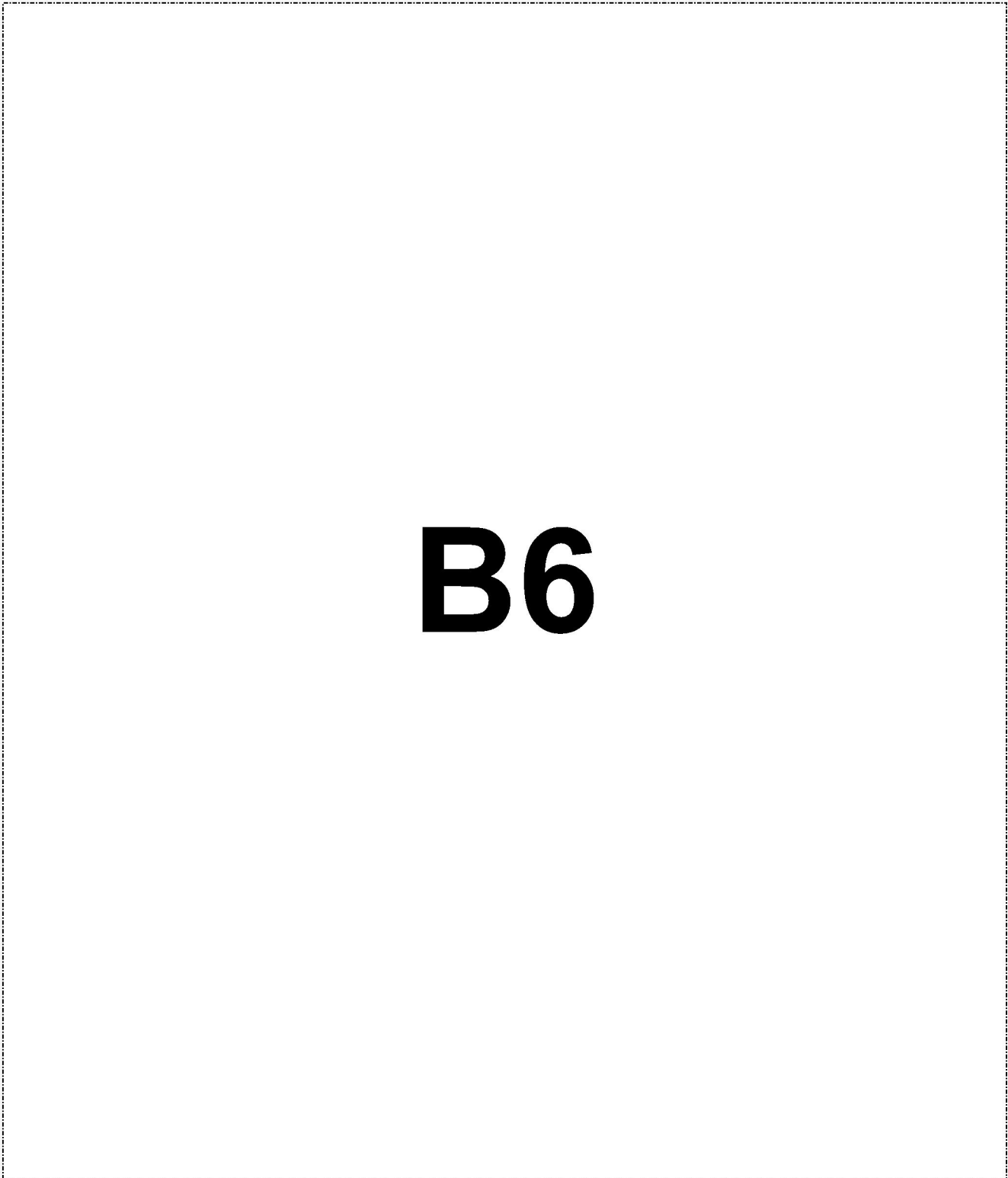
B6

Alivcor from cardio

Patient: **B6** (64 yrs)
Recorded: Wednesday, Apr 11, 2018, 8:29:42 PM
Heart Rate: 142 bpm

Reading by AlivCor: Processed and Archived

Keenle



Client:
Patient:

B6

Alivecor ECG

Patient: **B6**
Recorded: Tuesday, 28 Feb 2012, 10:27:28 PM
Heart Rate: 114 bpm Duration: 30s

Editing by AliveCor - Private and Notable

Keods

B6

Client:
Patient:

B6

Alivecor ECG

Patient:
Recorded:
Heart Rate:

B6

Wednesday, May 23, 2018, 8:18:49 PM
124 bpm

Testing By: AliveCor, Inc. (www.alivecor.com)

Model:

B6

Client:
Patient:

B6

Alivecor ECG

Patient: **B6**
Recorded: Thursday, May 01, 2014, 11:07:50 AM
Heart Rate: 120 bpm Duration: 32s

Printing by AliveCor - Possible print restriction

Words

B6

Client:
Patient:

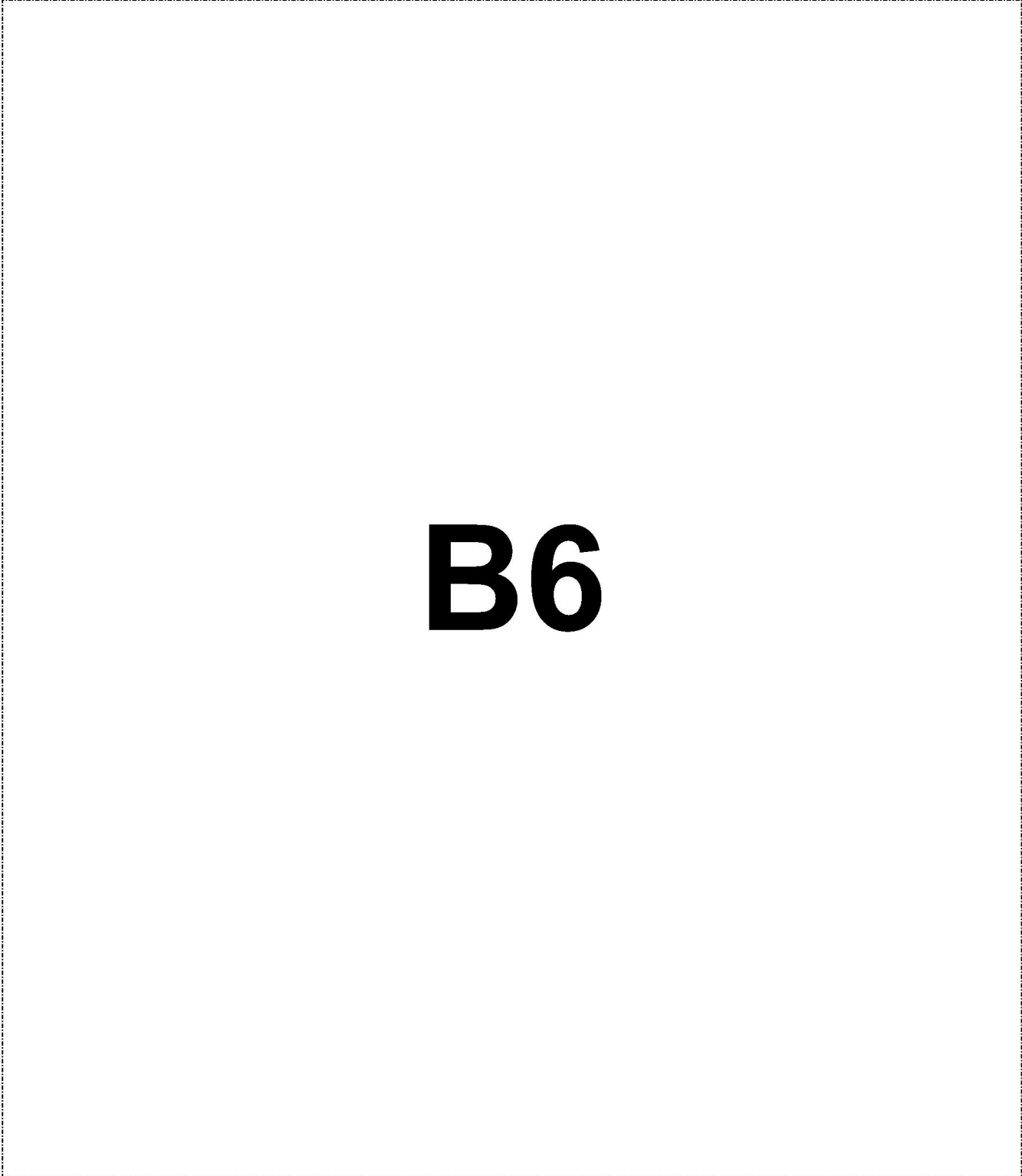
B6

Alivecor ECG

Patient: **B6**
Recorded: Thursday, May 01, 2014, 11:07:50 AM
Heart Rate: 100 bpm Duration: 30s

Printing by AliveCor - Printable atrial flutter

Records



Client:
Patient:

B6

Alivecor ECG

Patient: **B6**
Recorded: 5/20/2019, 10:15:40 PM
Heart Rate: 124 bpm Duration: 30s

Tracing by AliveCor, Possible Lead Reversal

Words

B6

Client:
Patient:

B6

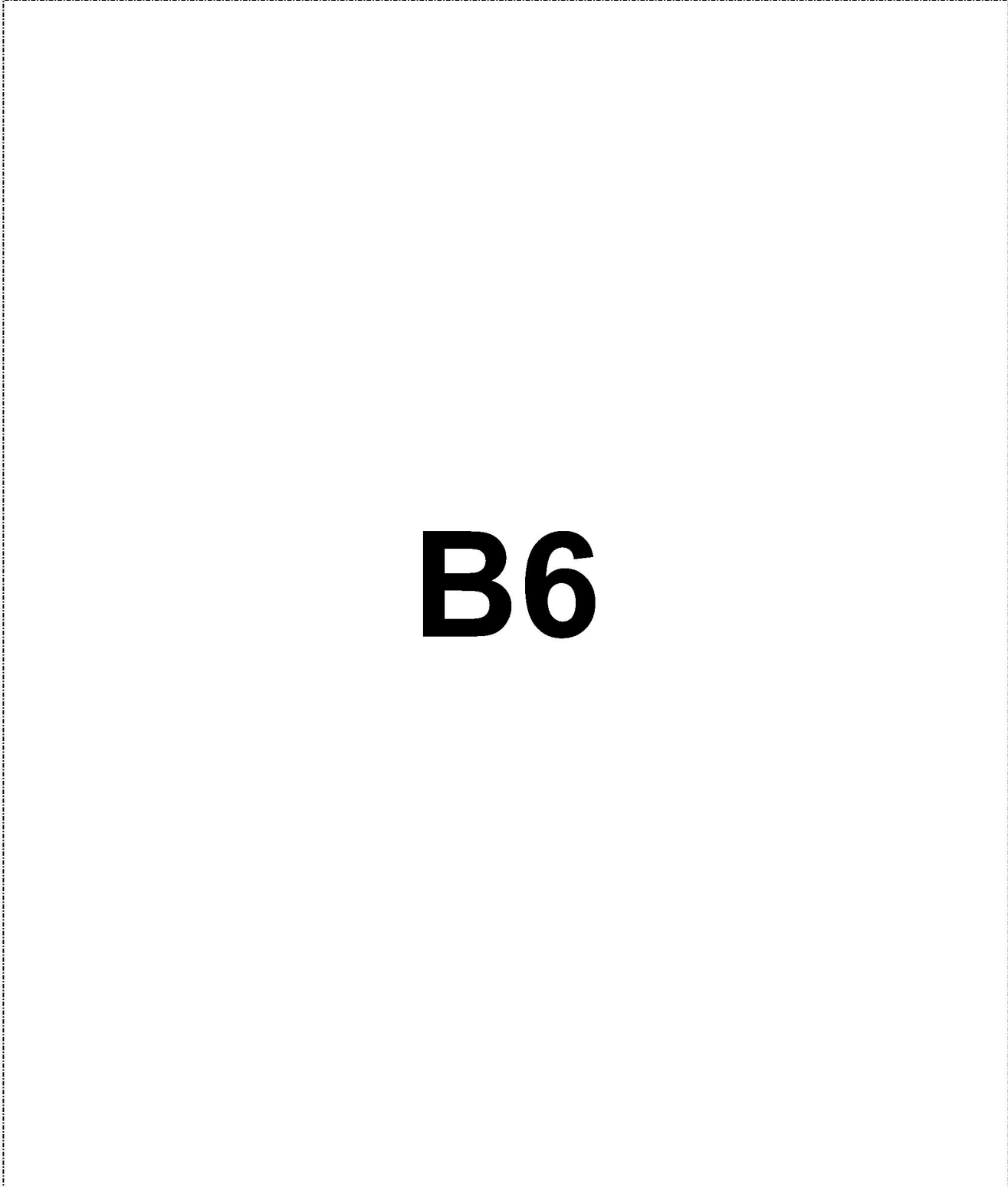
Alivecor ECG

Patient:
Recorded:
Heart Rate:

B6
5-seconds Jun 23, 2018, 8:15:00 PM
170 bpm

Tracing by AliveCor, Possible Lead Reversal

Normal



B6

Patient History

B6	10:47 AM	UserForm	B6
	10:48 AM	Email	
	11:05 AM	Vitals	
	11:05 AM	Purchase	
	11:06 AM	Purchase	
	11:32 AM	UserForm	
	01:00 PM	Purchase	
	01:01 PM	Purchase	
	01:01 PM	Vitals	
	01:01 PM	Treatment	
	01:02 PM	Treatment	
	01:02 PM	Vitals	
	02:21 PM	UserForm	
	02:48 PM	Purchase	
	02:48 PM	Purchase	
	02:51 PM	UserForm	
	02:55 PM	Treatment	
	02:55 PM	Purchase	
	02:55 PM	Purchase	
	03:01 PM	Treatment	
	03:01 PM	Vitals	
	03:01 PM	Vitals	
	03:12 PM	Treatment	
	03:12 PM	Vitals	
	03:19 PM	Vitals	
	03:20 PM	Purchase	
	03:22 PM	Prescription	
	03:24 PM	Prescription	
	03:28 PM	Prescription	
	03:38 PM	Purchase	
03:39 PM	Treatment		
03:44 PM	Treatment		
03:44 PM	Vitals		
03:44 PM	Vitals		
03:45 PM	Treatment		
03:45 PM	Vitals		
03:45 PM	Treatment		
03:45 PM	Vitals		
03:46 PM	Treatment		

Client: **B6**
Patient:

Patient History

03:46 PM	Treatment
04:51 PM	Treatment
04:51 PM	Vitals
04:51 PM	Treatment
04:51 PM	Vitals
04:51 PM	Vitals
05:26 PM	Treatment
05:26 PM	Vitals
05:35 PM	Treatment
05:35 PM	Vitals
05:55 PM	Treatment
05:55 PM	Vitals
05:56 PM	Treatment
05:56 PM	Vitals
05:56 PM	Vitals
06:44 PM	Treatment
06:44 PM	Vitals
06:44 PM	Vitals
06:45 PM	Treatment
06:45 PM	Vitals
07:40 PM	Treatment
07:41 PM	Treatment
07:41 PM	Vitals
07:43 PM	Treatment
07:43 PM	Vitals
07:43 PM	Treatment
07:43 PM	Vitals
07:43 PM	Vitals
07:46 PM	Treatment
07:46 PM	Vitals
07:48 PM	Vitals
07:48 PM	Treatment
07:56 PM	Vitals
08:59 PM	Treatment
08:59 PM	Vitals
08:59 PM	Treatment
08:59 PM	Vitals
08:59 PM	Vitals
09:02 PM	Vitals
09:11 PM	Treatment
09:11 PM	Vitals
09:44 PM	Treatment

B6

B6

Client:
Patient:

B6

Patient History

9:44 PM	Vitals
9:44 PM	Vitals
9:44 PM	Treatment
9:44 PM	Vitals
10:49 PM	Treatment
10:49 PM	Vitals
10:50 PM	Treatment
10:50 PM	Vitals
10:50 PM	Vitals
11:04 PM	Treatment
11:04 PM	Vitals
11:04 PM	Vitals
11:07 PM	Treatment
11:07 PM	Vitals
11:59 PM	Vitals
12:10 AM	Treatment
12:10 AM	Vitals
12:10 AM	Treatment
12:10 AM	Vitals
12:11 AM	Treatment
12:11 AM	Vitals
12:12 AM	Treatment
12:12 AM	Vitals
12:12 AM	Vitals
12:54 AM	Treatment
12:54 AM	Vitals
12:58 AM	Treatment
12:58 AM	Vitals
12:58 AM	Vitals
1:13 AM	Purchase
1:49 AM	Treatment
1:49 AM	Vitals
1:49 AM	Treatment
1:49 AM	Vitals
1:49 AM	Vitals
2:23 AM	Vitals
2:27 AM	Treatment
2:27 AM	Vitals
2:29 AM	Treatment
2:57 AM	Treatment
2:57 AM	Vitals
2:58 AM	Treatment
2:58 AM	Vitals

B6

B6

Client:
Patient:

B6

Patient History

03:58 AM	Vitals
04:52 AM	Treatment
04:52 AM	Vitals
04:52 AM	Vitals
04:53 AM	Treatment
04:53 AM	Vitals
05:24 AM	Treatment
05:24 AM	Vitals
05:24 AM	Treatment
05:24 AM	Treatment
05:49 AM	Treatment
05:49 AM	Vitals
05:49 AM	Vitals
05:49 AM	Treatment
05:49 AM	Vitals
07:13 AM	Treatment
07:13 AM	Vitals
07:13 AM	Treatment
07:13 AM	Vitals
07:13 AM	Treatment
07:13 AM	Vitals
07:22 AM	Treatment
07:22 AM	Vitals
07:22 AM	Vitals
07:43 AM	Purchase
07:44 AM	Purchase
08:01 AM	Treatment
08:01 AM	Vitals
08:01 AM	Vitals
08:01 AM	Vitals
08:55 AM	Treatment
08:55 AM	Vitals
08:55 AM	Treatment
08:55 AM	Vitals
08:56 AM	Treatment
08:56 AM	Vitals
08:56 AM	Vitals
09:12 AM	Treatment
09:12 AM	Vitals
10:21 AM	Purchase
10:22 AM	Purchase
10:32 AM	Treatment

B6

B6

Client:
Patient:

B6

Patient History

10:32 AM	Vitals
10:33 AM	Treatment
10:33 AM	Vitals
10:33 AM	Vitals
10:51 AM	Labwork
11:15 AM	Treatment
11:15 AM	Vitals
11:15 AM	Vitals
11:17 AM	Treatment
11:17 AM	Vitals
11:37 AM	Purchase
11:52 AM	Treatment
11:52 AM	Vitals
11:52 AM	Vitals
12:51 PM	Treatment
12:51 PM	Treatment
12:51 PM	Vitals
12:51 PM	Vitals
12:52 PM	Treatment
12:52 PM	Treatment
12:52 PM	Vitals
12:55 PM	UserForm
01:24 PM	Treatment
01:24 PM	Vitals
01:25 PM	Treatment
01:25 PM	Vitals
01:25 PM	Vitals
01:25 PM	Treatment
01:32 PM	Treatment
01:32 PM	Vitals
01:56 PM	Treatment
01:56 PM	Vitals
01:56 PM	Vitals
01:59 PM	Treatment
01:59 PM	Vitals
02:15 PM	Purchase
02:15 PM	Purchase
03:19 PM	Treatment
03:19 PM	Vitals
03:19 PM	Vitals
03:20 PM	Treatment

B6

B6

Client:
Patient:

B6

Patient History

03:20 PM	Vitals
03:20 PM	Vitals
03:40 PM	Vitals
04:04 PM	Treatment
04:04 PM	Vitals
04:04 PM	Vitals
04:15 PM	Treatment
04:15 PM	Vitals
04:54 PM	Treatment
04:54 PM	Vitals
04:54 PM	Vitals
04:55 PM	Treatment
04:55 PM	Vitals
05:39 PM	Treatment
06:08 PM	Treatment
06:08 PM	Vitals
06:10 PM	Treatment
06:10 PM	Vitals
06:10 PM	Treatment
06:10 PM	Vitals
06:13 PM	Treatment
06:13 PM	Treatment
06:13 PM	Treatment
06:13 PM	Vitals
06:13 PM	Vitals
06:23 PM	Vitals
07:20 PM	Vitals
07:20 PM	Treatment
07:20 PM	Vitals
07:20 PM	Treatment
07:20 PM	Vitals
07:20 PM	Vitals
07:25 PM	Treatment
07:25 PM	Vitals
07:32 PM	Treatment
07:45 PM	Treatment
07:45 PM	Vitals
09:02 PM	Treatment
09:02 PM	Vitals
09:02 PM	Treatment
09:02 PM	Vitals

B6

B6

Client:
Patient:

B6

Patient History

09:02 PM	Vitals
09:13 PM	Treatment
09:13 PM	Vitals
09:13 PM	Treatment
09:47 PM	Treatment
09:47 PM	Vitals
09:47 PM	Treatment
09:47 PM	Vitals
09:47 PM	Vitals
10:45 PM	Treatment
10:45 PM	Vitals
10:45 PM	Vitals
10:46 PM	Treatment
10:46 PM	Vitals
11:46 PM	Vitals
11:47 PM	Treatment
11:47 PM	Treatment
11:47 PM	Vitals
11:47 PM	Treatment
11:47 PM	Vitals
11:48 PM	Treatment
11:48 PM	Vitals
11:48 PM	Vitals
11:49 PM	Vitals
12:36 AM	Vitals
12:49 AM	Treatment
12:49 AM	Vitals
12:50 AM	Treatment
12:50 AM	Vitals
12:50 AM	Vitals
12:52 AM	Treatment
12:56 AM	Treatment
12:56 AM	Vitals
01:44 AM	Treatment
01:44 AM	Vitals
01:44 AM	Treatment
01:44 AM	Vitals
01:44 AM	Vitals
02:13 AM	Purchase
02:49 AM	Treatment
02:49 AM	Vitals
02:49 AM	Vitals
02:51 AM	Treatment
02:51 AM	Vitals

B6

B6

Client: **B6**
Patient:

Patient History

02:51 AM	Vitals
03:07 AM	Treatment
03:55 AM	Treatment
03:55 AM	Vitals
03:55 AM	Treatment
03:55 AM	Vitals
03:55 AM	Vitals
04:43 AM	Treatment
04:43 AM	Vitals
04:43 AM	Treatment
04:43 AM	Vitals
04:43 AM	Vitals
05:03 AM	Treatment
05:06 AM	Treatment
05:06 AM	Vitals
05:16 AM	Treatment
05:16 AM	Treatment
05:16 AM	Treatment
05:16 AM	Vitals
05:40 AM	Treatment
05:40 AM	Vitals
05:40 AM	Treatment
05:40 AM	Vitals
05:40 AM	Vitals
06:24 AM	Treatment
06:24 AM	Vitals
06:24 AM	Treatment
06:24 AM	Vitals
06:24 AM	Vitals
06:52 AM	Treatment
06:52 AM	Vitals
07:30 AM	Treatment
07:30 AM	Vitals
07:41 AM	Purchase
07:51 AM	Treatment
07:51 AM	Vitals
07:51 AM	Vitals
07:58 AM	Vitals
08:53 AM	Treatment

B6

B6

Client:
Patient:

B6

Patient History

08:53 AM	Vitals
08:53 AM	Vitals
08:54 AM	Treatment
08:54 AM	Vitals
09:34 AM	Treatment
09:34 AM	Vitals
09:34 AM	Treatment
09:49 AM	Treatment
09:49 AM	Vitals
09:50 AM	Treatment
09:50 AM	Vitals
09:50 AM	Vitals
10:02 AM	Vitals
10:02 AM	Treatment
10:30 AM	Purchase
10:39 AM	Labwork
10:54 AM	Treatment
10:54 AM	Vitals
10:54 AM	Vitals
10:55 AM	Treatment
10:55 AM	Vitals
11:04 AM	Treatment
11:04 AM	Vitals
11:04 AM	Treatment
11:43 AM	Treatment
11:43 AM	Vitals
11:43 AM	Vitals
11:44 AM	Treatment
11:44 AM	Vitals
12:33 PM	Deleted Reason
12:46 PM	Treatment
12:46 PM	Vitals
12:46 PM	Treatment
12:46 PM	Vitals
12:46 PM	Vitals
01:31 PM	Treatment
01:31 PM	Vitals
01:31 PM	Treatment
01:31 PM	Vitals
01:31 PM	Treatment
01:55 PM	Treatment
01:55 PM	Vitals
01:55 PM	Vitals

B6

B6

Client: **B6**
Patient:

Patient History

1:57 PM Treatment
1:57 PM Vitals
2:15 PM Purchase
2:15 PM Purchase
3:04 PM Treatment
3:04 PM Vitals
3:07 PM Treatment

3:07 PM Vitals
3:07 PM Vitals
3:50 PM Prescription
3:53 PM Treatment

3:53 PM Vitals
3:53 PM Vitals
3:54 PM Treatment
3:54 PM Vitals
3:58 PM Vitals

3:59 PM Treatment
4:53 PM Treatment
4:53 PM Vitals
4:53 PM Treatment

4:53 PM Vitals
4:53 PM Vitals
4:54 PM Treatment
4:54 PM Vitals
5:05 PM Treatment
5:14 PM Treatment

5:14 PM Treatment
5:14 PM Vitals
5:48 PM Treatment
5:48 PM Vitals
6:05 PM Treatment

6:05 PM Vitals
6:05 PM Vitals
6:47 PM Treatment
6:47 PM Vitals
7:13 PM Treatment
7:24 PM Treatment

7:24 PM Vitals
7:27 PM Treatment
7:27 PM Vitals
7:45 PM Treatment

7:45 PM Vitals

B6

B6

Client:
Patient: **B6**

Patient History

07:45 PM	Vitals
08:54 PM	Treatment
08:54 PM	Vitals
08:54 PM	Vitals
08:57 PM	Treatment
08:57 PM	Vitals
09:05 PM	Treatment
09:05 PM	Vitals
09:10 PM	Treatment
09:11 PM	Treatment
09:11 PM	Vitals
09:50 PM	Vitals
09:51 PM	Treatment
09:51 PM	Vitals
09:51 PM	Vitals
09:51 PM	Treatment
09:51 PM	Vitals
10:54 PM	Treatment
10:54 PM	Vitals
10:54 PM	Vitals
10:54 PM	Treatment
10:54 PM	Vitals
11:27 PM	Vitals
11:49 PM	Treatment
11:49 PM	Vitals
11:50 PM	Treatment
11:50 PM	Vitals
11:50 PM	Vitals
11:50 PM	Treatment
11:50 PM	Vitals
12:45 AM	Treatment
12:45 AM	Vitals
12:45 AM	Vitals
12:45 AM	Treatment
12:45 AM	Vitals
01:14 AM	Treatment
01:14 AM	Vitals
01:18 AM	Treatment
01:58 AM	Treatment
01:58 AM	Vitals
01:58 AM	Vitals

B6

B6

Client: **B6**
Patient:

Patient History

01:58 AM	Treatment
01:58 AM	Vitals
02:13 AM	Purchase
02:38 AM	Treatment
02:38 AM	Vitals
02:38 AM	Vitals
02:39 AM	Treatment
02:39 AM	Vitals
03:18 AM	Treatment
03:45 AM	Treatment
03:45 AM	Vitals
03:45 AM	Vitals
03:46 AM	Treatment
03:46 AM	Vitals
04:46 AM	Treatment
04:46 AM	Vitals
04:46 AM	Vitals
05:27 AM	Treatment
05:27 AM	Vitals
05:27 AM	Treatment
05:27 AM	Vitals
05:27 AM	Treatment
05:27 AM	Vitals
05:28 AM	Treatment
05:28 AM	Treatment
05:28 AM	Treatment
05:28 AM	Vitals
05:42 AM	Treatment
05:42 AM	Vitals
05:42 AM	Vitals
06:51 AM	Treatment
06:51 AM	Vitals
06:51 AM	Vitals
06:54 AM	Treatment
06:54 AM	Vitals
07:13 AM	Vitals
07:35 AM	Treatment
07:35 AM	Vitals
07:35 AM	Vitals
07:44 AM	Treatment
07:44 AM	Vitals

B6

B6

Client:
Patient:

B6

Patient History

07:44 AM	Treatment
07:44 AM	Vitals
07:44 AM	Vitals
08:44 AM	Treatment
08:44 AM	Vitals
08:44 AM	Vitals
08:50 AM	Treatment
08:50 AM	Vitals
09:01 AM	Treatment
09:29 AM	Purchase
09:42 AM	Labwork
09:47 AM	Treatment
09:47 AM	Vitals
09:47 AM	Vitals
09:49 AM	Treatment
09:49 AM	Vitals
09:54 AM	Purchase
10:15 AM	Treatment
10:15 AM	Vitals
10:36 AM	Appointment
10:38 AM	Deleted Reason
10:38 AM	Deleted Reason
10:42 AM	Prescription
10:43 AM	Prescription
10:43 AM	Prescription
10:43 AM	Prescription
10:44 AM	Prescription
10:49 AM	Treatment
10:49 AM	Vitals
10:49 AM	Vitals
10:49 AM	Purchase
10:50 AM	Treatment
10:50 AM	Vitals
11:34 AM	Treatment
11:54 AM	Treatment
11:54 AM	Vitals
11:54 AM	Vitals

B6

B6

Client: **B6**
Patient:

Patient History

B6	1:54 AM	Treatment
	1:54 AM	Vitals
	2:49 PM	Treatment
	2:49 PM	Vitals
	2:49 PM	Vitals
	2:49 PM	Treatment
	2:49 PM	Vitals
03/02/2018	02:15 PM	Appointment
03/09/2018	05:54 PM	Appointment
03/21/2018	11:15 AM	Prescription
03/21/2018	11:17 AM	Purchase
04/12/2018	11:08 AM	UserForm
04/12/2018	11:14 AM	Treatment
04/12/2018	11:15 AM	Vitals
04/12/2018	11:21 AM	Purchase
04/12/2018	11:53 AM	UserForm
04/12/2018	12:08 PM	Purchase
04/12/2018	12:09 PM	Purchase
04/12/2018	12:17 PM	Labwork
04/12/2018	12:32 PM	Prescription
04/12/2018	12:32 PM	Purchase
04/21/2018	10:41 AM	Prescription
04/21/2018	10:44 AM	Purchase
05/18/2018	05:13 PM	Prescription
05/18/2018	05:15 PM	Purchase
06/01/2018	04:27 PM	Appointment
06/05/2018	11:06 AM	Purchase
06/05/2018	11:06 AM	Purchase
06/05/2018	11:07 AM	Purchase
06/05/2018	05:21 PM	UserForm
06/05/2018	05:22 PM	Email
06/06/2018	11:42 AM	Email
06/23/2018	03:25 PM	Prescription
06/23/2018	03:28 PM	Purchase

B6

Cummings Veterinary Medical Center

AT TUFTS UNIVERSITY

Foster Hospital for Small Animals
35 Willard Street
North Grafton, MA 01524
Telephone: (508) 833-5335
Fax: (508) 833-7951
<http://vetmed.tufts.edu/>
Referring Vet Direct Line: 508-887-4988

Notice of Patient Admit

Date: B6

Case No: B6

Referring Doctor: Dr. B6

Clinical Reason: B6

Patient Name: B6

Dear Dr. 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: Dr. B6

The reason for admission to the FHSA is: AF with LBBB, DCM, CHF

If you have any questions regarding this particular case, please call 508-887-4988 to reach the Cardiology 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 01506
Telephone: (508) 839-5305
Fax: (508) 839-7951
<http://vetmed.tufts.edu/fost/>

B6

B6

Male

Canine - Great Dane

B6

B6

Daily Update From the Cardiology Service

Today's date: **B6**

Dear Doctor: **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
- might be discharged from the hospital today

Today's treatments include:

- bloodwork planned/pending
- echocardiography
- 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 cardflowet@tufts.edu if you have any questions. Thank you!

Attending Clinician: Dr. **B6** DVM

Faculty Clinician: **B6** DVM, DACVIM (Cardiology), DACVECC

Senior student:

Cummings Veterinary Medical Center AT TUFTS UNIVERSITY

Foster Hospital for Small Animals
55 Willard Street
North Grafton, MA 01506
Telephone: (508) 839-5305
Fax: (508) 839-7951
<http://vetmed.tufts.edu/fost/>

B6

B6

Male

Caesal, Great Dane, Fawn

B6

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
- might be discharged from the hospital today

Today's treatments include:

- bloodwork planned/pending
- echocardiography
- cardiac catheter procedure planned
- treatment for CHF
- ongoing treatment for thrombosis
- 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 cardflowet@tufts.edu if you have any questions. Thank you!

Attending Clinician: Dr. **B6**

Faculty Clinician: **B6** DVM, DACVIM (Cardiology), DACVECC

Senior student:

Cummings Veterinary Medical Center AT TUFTS UNIVERSITY

Foster Hospital for Small Animals
55 Willard Street
North Grafton, MA 01506
Telephone: (508) 839-5305
Fax: (508) 839-7951
<http://vetmed.tufts.edu/fost/>

B6

B6

Male

Cause: Great Dane Fever

B6

Daily Update From the Cardiology Service

Today's date: **B6**

Dear Dr. 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
- 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 cardflow@tufts.edu if you have any questions. Thank you!

Attending Clinician: Dr. **B6**

Faculty Clinician: **B6**, DACVIM (Cardiology), DACVECC

Senior student:

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

Male

Cause: Great Dane Fever

B6

2/21/2018

Dear Dr.

B6

Thank you for referring

B6

with their pet

B6

If you have any questions, or concerns, please contact us at 508-827-1901.

Thank you,

Dr.

B6

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

Male

Castrated Great Dane Female

B6

B6

Dear Dr. **B6**

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

If you have any questions, or concerns, please contact us at 508-829-4981.

Thank you,

Dr. **B6**

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

Male

Cause: Great Dane Fever

B6

B6

Dear Dr. **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,

Dr. **B6**

Report Details - EON-371239

ICSR:	2058943		
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:	2018-11-16 10:04:13 EST		
Reporter is the Animal Owner:	Yes		
Reported Problem:	Problem Description:	Our Golden Retriever, [B6], was diagnosed with diet-related Dilated Cardiomyopathy on 09/30/2018. Because [B6] and [B6] were fed the same food, Tufts in Grafton, MA chose to administer an echocardiogram on [B6] to see if he also has DCM. [B6] was diagnosed with DCM after his echocardiogram on 11/07/2018. His taurine levels were tested by University of California-Davis and results will be attached to this report.	
	Date Problem Started:	11/07/2018	
	Concurrent Medical Problem:	No	
	Outcome to Date:	Stable	
Product Information:	Product Name:	Zignature Trout & Salmon Meal Limited Ingredient Formula Grain-Free Dry Dog Food	
	Product Type:	Pet Food	
	Lot Number:		
	Package Type:	BAG	
	Package Size:	27 Pound	
	Purchase Date:	09/29/2015	
	Number Purchased:	1	
	Possess Unopened Product:	No	
	Possess Opened Product:	No	
	Storage Conditions:	After purchasing, the bag was opened and poured into an airtight plastic container.	
	Product Use Information:	Description:	[B6] ate 1 cup of this food twice per day.
		First Exposure Date:	09/30/2015
		Last Exposure Date:	10/01/2018
		Time Interval between Product Use and Adverse Event:	39 Months
Product Use Stopped After the Onset of the Adverse Event:		Yes	
Adverse Event Abate After Product Stop:		Yes	
Product Use Started Again:		No	
Perceived Relatedness to Adverse Event:		Definitely related	
Other Foods or Products Given to the Animal		Yes	

		During This Time Period:	
	Manufacturer /Distributor Information:		
	Purchase Location Information:	Name:	B6
		Address:	B6 United States
Animal Information:	Name:	B6	
	Type Of Species:	Dog	
	Type Of Breed:	Retriever - Golden	
	Gender:	Male	
	Reproductive Status:	Neutered	
	Weight:	57 Pound	
	Age:	3 Years	
	Assessment of Prior Health:	Excellent	
	Number of Animals Given the Product:	2	
	Number of Animals Reacted:	2	
	Owner Information:		
	Healthcare Professional Information:	Practice Name:	Cummings School of Veterinary Medicine at Tufts University
		Contact:	Name: B6 Phone: (508) 887-4696 Email: Liasons@tufts.edu
		Address:	200 Westboro Rd. N. Grafton Massachusetts 01536 United States
		Type of Veterinarian:	Referred veterinarian
		Date First Seen:	11/07/2018
		Permission to Release Records to FDA:	Yes
		Practice Name:	B6
		Contact:	Name: B6 Phone: B6 Email: B6
		Address:	B6 United States
		Type of Veterinarian:	Primary/regular veterinarian
		Date First Seen:	10/18/2018
		Permission to Release Records to FDA:	Yes
Sender Information:	Name:	B6	

	Address:	B6 United States						
	Contact:	Phone: B6 Email: B6						
	Permission To Contact Sender:	Yes						
	Preferred Method Of Contact:	Email						
	Reported to Other Parties:	None						
Additional Documents:	<table border="1"> <tr> <td>Attachment:</td> <td>B6.pdf</td> </tr> <tr> <td>Description:</td> <td>Tufts medical records and taurine test results</td> </tr> <tr> <td>Type:</td> <td>Medical Records</td> </tr> </table>		Attachment:	B6 .pdf	Description:	Tufts medical records and taurine test results	Type:	Medical Records
Attachment:	B6 .pdf							
Description:	Tufts medical records and taurine test results							
Type:	Medical Records							

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

BNP 3/28/19

B4

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

B4

Client: **B6**
Patient: **B6**
Species: CANINE
Breed:
Gender: MALE
Age: 8Y

Date: 03/27/2019
Requisition #: 1A
Accession #: **B6**
Ordered by: **B6**

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

Comments

B6

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

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

Diet Hx 3/27/19

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

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

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

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
Royal Canine	dry	1 1/2 cup	1x/day	Oct 2018
Hills Science Diet - Chick skew	wet	1/2 can	1x/day	Oct 2018

*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 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

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): _____

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

T4 - 3/27/19



Tufts Cummings School Of Veterinary Medicine

200 Westboro Road
North Grafton, MA 01536

DUPLICATE

Name/DOB:	B6	Sex: U	Provider: B6
Patient ID:	B6	Age: 8	Order Location: V320559: Investigation into
Phone number:		Species: Canine	Sample ID: B6
Collection Date:	3/27/2019 12:55 PM	Breed: Boxer	
Approval date:	3/27/2019 3:15 PM		

T4/Clin Path (Research)

ABLASOTTO
T4/Tosoh

B6

Ref. Range/-
1.00-4.10 ug/dl

Sample ID: **B6**
REPRINT: Orig. printing on 3/27/2019 (Final)

Reviewed by: _____

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

Cbc/Chem 10/31/18



Tufts Cummings School Of Veterinary Medicine

200 Westboro Road
North Grafton, MA 01536

DUPLICATE

Name/DOB: **B6** Sex: U Provider: **B6**
Patient ID: **B6** Age: 8 Order Location: V320422: Barkley Fund Lipitor Study
Phone number: Species: Canine Sample ID: **B6**
Collection Date: 10/31/2018 10:45 AM Breed: Boxer
Approval date: 10/31/2018 12:58 PM

CBC (Research) (Advia)

SMACHUNSKI		Ref. Range/-
WBC (ADVIA)		4.40-15.10 K/uL
RBC (Advia)		5.80-8.50 M/uL
Hemoglobin (ADVIA)		13.3-20.5 g/dL
Hematocrit (Advia)		39-55 %
MCV (ADVIA)		64.5-77.5 fL
MCH (ADVIA)		21.3-25.9 pg
MCHC (ADVIA)	H	31.9-34.3 g/dL
RDW (ADVIA)		11.9-15.2
Comments (Hematology)	platelets/ 100x field (estimated count of 200,000-500,000/ul)	

Microscopic Exam of Blood Smear (Advia)

SMACHUNSKI		Ref. Range/-
Seg Neuts (%)	H	43-86 %
Lymphocytes (%)	L	7-47 %
Monocytes (%)		1-15 %
Eosinophils (%)		0-16 %
Seg Neutrophils (Abs) Advia	H	2.800-11.500 K/uL
Lymphs (Abs) Advia	L	1.00-4.80 K/uL
Mono (Abs) Advia		0.10-1.50 K/uL
Eosinophils (Abs) Advia		0.00-1.40 K/uL
WBC Morphology		
Acanthocytes		
Poikilocytosis		

Research Chemistry Profile - Small Animal (Cobas)

TFRANK		Ref. Range/-
Glucose		67-135 mg/dL
Urea		8-30 mg/dL
Creatinine		0.6-2.0 mg/dL
Phosphorus		2.6-7.2 mg/dL
Calcium 2		9.4-11.3 mg/dL
Magnesium 2+		1.8-3.0 mEq/L
Total Protein		5.5-7.8 g/dL
Albumin		2.8-4.0 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		8.0-19.0
NA/K		29-40

Sample ID: 1810310042/1
This report continues... (Final)

Reviewed by: _____

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

Cbc/Chem 10/31/18



Tufts Cummings School Of Veterinary Medicine

200 Westboro Road
North Grafton, MA 01536

DUPLICATE

Name/DOB: **B6** Sex: U Provider: **B6**
Patient ID: **B6** Age: 8 Order Location: V320422: Barkley Fund Lipitor Study
Phone number: Species: Canine Sample ID: **B6**
Collection Date: 10/31/2018 10:45 AM Breed: Boxer
Approval date: 10/31/2018 12:58 PM

Research Chemistry Profile - Small Animal (Cobas) (cont'd)

		Ref. Range/-
TFRANK		
Total Bilirubin		0.10-0.30 mg/dL
Direct Bilirubin		0.00-0.10 mg/dL
Indirect Bilirubin		0.00-0.20 mg/dL
Alkaline Phosphatase		12-127 U/L
GGT		0-10 U/L
ALT		14-86 U/L
AST		9-54 U/L
Creatine Kinase		22-422 U/L
Cholesterol	H	82-355 mg/dL
Triglycerides		30-338 mg/dl
Amylase		409-1250 U/L
Osmolality (calculated)	L	291-315 mmol/L
Comments (Chemistry)		

Sample ID: **B6**
REPRINT: Orig. printing on 10/31/2018 (Final)

Reviewed by: _____
Page 2

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

Cbc/Chem 10/7/18



Tufts Cummings School Of Veterinary Medicine

200 Westboro Road
North Grafton, MA 01536

DUPLICATE

Name/DOB: **B6** Sex: U Provider: **B6**
Patient ID: **B6** Age: 8 Order Location: Foster Hospital for Small Animals
Phone number: Species: Canine Sample ID: **B6**
Collection Date: 10/7/2018 10:31 AM Breed: Boxer
Approval date: 10/7/2018 4:14 PM

CBC, Comprehensive, Sm Animal

TFRANK		Ref. Range/-
WBC (ADVIA)	H B6	4.40-15.10 K/uL
RBC (Advia)		5.80-8.50 M/uL
Hemoglobin (ADVIA)		13.3-20.5 g/dL
Hematocrit (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
Platelet Count (Advia)	L B6	173-486 K/uL
10/07/18 4:11 PM	B6	
Mean Platelet Volume (Advia)	B6	8.29-13.20 fl
10/07/18 1:18 PM	B6	
Platelet Crit	B6	0.129-0.403 %
10/07/18 1:18 PM	B6	
Reticulocyte Count (Advia)	B6	0.20-1.60 %
Absolute Reticulocyte Count (Advia)		14.7-113.7 K/uL

Microscopic Exam of Blood Smear (Advia)

TFRANK		Ref. Range/-
Seg Neuts (%)	H B6	43-86 %
Lymphocytes (%)	L	7-47 %
Monocytes (%)		1-15 %
Eosinophils (%)		0-16 %
Seg Neutrophils (Abs) Advia	H B6	2.800-11.500 K/uL
Lymphs (Abs) Advia	L	1.00-4.80 K/uL
Mono (Abs) Advia		0.10-1.50 K/uL
Eosinophils (Abs) Advia		0.00-1.40 K/uL
Toxic Change	B6	
10/07/18 4:14 PM	B6	
Acanthocytes	B6	
Keratocytes/Blister Cells		
Poikilocytosis		

Sample ID: **B6**
This report continues... (Final)

Reviewed by: _____

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

Cbc/Chem 10/7/18



Tufts Cummings School Of Veterinary Medicine

200 Westboro Road
North Grafton, MA 01536

DUPLICATE

Name/DOB: B6	Sex: U	Provider: B6
Patient ID: B6	Age: 8	Order Location: Foster Hospital for Small Animals
Phone number:	Species: Canine	Sample ID: B6
Collection Date: 10/7/2018 10:31 AM	Breed: Boxer	
Approval date: 10/7/2018 4:14 PM		

Chemistry Profile - Small Animal (Package) (Cobas)

		Ref. Range/-
TFRANK		
Glucose		67-135 mg/dL
Urea		8-30 mg/dL
Creatinine		0.6-2.0 mg/dL
Phosphorus		2.6-7.2 mg/dL
Calcium 2		9.4-11.3 mg/dL
Magnesium 2+		1.8-3.0 mEq/L
Total Protein		5.5-7.8 g/dL
Albumin		2.8-4.0 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		8.0-19.0
NA/K		29-40
Total Bilirubin		0.10-0.30 mg/dL
Direct Bilirubin		0.00-0.10 mg/dL
Indirect Bilirubin		0.00-0.20 mg/dL
Alkaline Phosphatase	H	12-127 U/L
GGT		0-10 U/L
ALT	H	14-86 U/L
AST	H	9-54 U/L
Creatine Kinase	H	22-422 U/L
Cholesterol	H	82-355 mg/dL
Triglycerides		30-338 mg/dl
Amylase		409-1250 U/L
Osmolality (calculated)		291-315 mmol/L

B6

Sample ID: **B6**
REPRINT: Orig. printing on 10/7/2018 (Final)

Reviewed by: _____
Page 2

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

NOVA 10/6/18



ICU/Emergency & Critical Care

Foster Hospital for Small Animals, TCSVM
200 Westboro Rd
North Grafton, MA 01536

DUPLICATE

Name/DOB: **B6** Sex: U Provider: **B6**
Patient ID: **B6** Age: 8 Order Location: Foster Hospital for Small Animals
Phone number: Species: Canine Sample ID: **B6**
Collection Date: 10/6/2018 1:30 AM Breed: Boxer
Approval date: 10/6/2018 1:58 AM

Nova Full Panel-ICU

10/06/18 1:58 AM k (SO2%)

Test	Result	Ref. Range
RGREENWAY		
pH	L	7.337-7.467
pCO2		36.0-44.0 mmHg
pO2	L	80.0-100.0 mmHg
SO2%	L	94.0-100.0 %
Hct (POC)		38-48 %
Hb (POC)		12.6-16.0 g/dL
Sodium (POC)		140.0-154.0 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, (ionized) (POC)	H	0.1-0.4 mmol/L
Glucose (POC)	L	80-120 mg/dL
Lactate	H	0.0-2.0 mmol/L
BUN (POC)		12.0-28.0 mg/dL
Creat (POC)	H	0.2-2.1 mg/dL
TCO2 (POC)		mmol/L
nCa		mmol/L
nMg		mmol/L
Gap		mmol/L
Ca/Mg		mol/mol
BEecf		mmol/L
BEb		mmol/L
HCO3	L	18.0-24.0 mmol/L
A		mmHg
NOVA Sample Source		
FiO2	B6 (room air)	%

Sample ID: **B6**
REPRINT: Orig printing on 10/6/2018 (Final)

Reviewed by: _____

Client:
Patient:

B6

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

ECG from cardio

B6

B6

9:39:52 AM

Page 1 of 2

Tufts University
Tufts Cummings School of Vet Med
Cardiology

B6

Client:
Patient:

B6

ECG from cardio

B6

B6

9:39:52 AM

Page 2 of 2

Tufts University
Tufts Cummings School of Vet Med
Cardiology

B6

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

ECG from cardio

B6

B6 9:40:00 AM Page 1 of 2
Tufts University
Tufts Cummings School of Vet Med
Cardiology

B6

Client: **B6**
Patient:

ECG from cardio

B6

B6

9:40:00 AM

Page 2 of 2

Tufts University
Tufts Cummings School of Vet Med
Cardiology

B6

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

ECG from cardio

B6

B6

9:40:52 AM

Page 1 of 2

Tufts University
Tufts Cummings School of Vet Med
Cardiology

B6

Client: **B6**
Patient:

ECG from cardio

B6

B6 9:40:52 AM Page 2 of 2
Tufts University
Tufts Cummings School of Vet Med
Cardiology

B6

Client:
Patient:

B6

ECG from cardio

B6

B6

9:40:52 AM

Page 1 of 2

Tufts University
Tufts Cummings School of Vet Med
Cardiology

B6

Client: **B6**
Patient:

ECG from cardio

B6

B6

9:40:52 AM

Page 2 of 2

Tufts University
Tufts Cummings School of Vet Med
Cardiology

B6

Client: **B6**
Patient:

ECG from cardio

B6

B6 9:41:17 AM
Tufts University
Tufts Cummings School of Vet Med
Cardiology

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/>

Emergency & Critical Care Liaison: (508) 887-4745

Patient

Name:

B6

Signalment:

B6 Years Old White Male Boxer

Owner

Name:

Address:

B6

Patient ID:

B6

Emergency Clinician:

B6

DVM (Emergency and Critical Care Resident)

Consulting Clinician:

B6

DVM DACVECC, B6

B6

(Cardiology)

ER Supervisor:

B6

Discharge Instructions

Admit Date: B6 12:54:23 AM

Check Out Date: B6

Case Summary

Diagnosis:

1. Gastric dilatation and volvulus (GDV, "bloat")
2. Dilated cardiomyopathy (DCM)
3. Elevated liver enzymes

Case Summary:

Thank you for bringing B6 to Tufts Emergency Service for evaluation of an acute onset of abdominal distension and discomfort. On presentation to the ER, B6 had an elevated heart rate and abdominal distension consistent with GDV, which was confirmed on abdominal radiographs. Point of care ultrasound identified dilated heart chambers.

B6 was treated with IV fluids and pain medications prior to surgery to de-rotate the stomach. A gastropexy (stomach tacking) was performed to prevent recurrent GDV. B6 had low blood pressure in surgery but recovered well post-operatively. The following day, a cardiology consultation was performed which revealed dilated cardiomyopathy (DCM), which is a common heart disease of Boxer's. Bloodwork showed elevated liver enzymes, which can sometimes be seen after GDV or surgery or could indicate an underlying liver issue.

B6 has continued to do very well in hospital and is now ready to be discharged home for continued supportive care, with the following instructions:

Patient Care Instructions:

1. MONITORING: Please monitor B6 closely for any vomiting, lethargy, lack of appetite or pale gums. If any of these signs are noted, please have him re-evaluated immediately.

2. **INCISION:** Check the incision at least once daily to ensure that it is clean and dry with no oozing, discharge, separation of skin edges or increased redness or bruising. The sutures are absorbable; there is no need for suture removal.

3. **EXERCISE & ACTIVITY:** B6 must remain exercise restricted for 2 weeks after surgery. This means NO running, jumping, rough housing with other dogs or any off leash activity for 2 weeks. He may be taken outside on a leash for short walks for eliminations, but should otherwise remain indoors. No bath or swimming for 2 weeks.

4. **DIET:** B6 can continue his normal diet. If he is not eating at least 50% of his normal amount within 24 hours of discharge, please call for advice.

Medications:

New medications:

B6

Cardiology Summary:

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 NOT YET 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 to improve his quality and duration of life.

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 have a breathing rate at rest of less than 35 to 40 breaths per minute. **WHILE AT REST OR ASLEEP.** 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.

Recheck Visits:

1) Recheck exam and bloodwork is recommended in 1-2 weeks. This can be performed with your primary care veterinarian or here at Tufts by scheduling an appointment with B6 at 508-887-4745.

2) Recheck with the Cardiology team for recheck echocardiogram is recommended in 3-6 months, or sooner if B6 develops ANY of the following symptoms: increased effort or rate of breathing at rest, cough, exercise intolerance or collapse / fainting. Cardiology recheck can be scheduled by calling 508-887-4696.

Prescription Refill Disclaimer:

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

Ordering Food:

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

Clinical Trials:

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

Case: B6

Owner: B6

Discharge Instructions

Cummings Veterinary Medical Center

AT TUFTS UNIVERSITY
Cardiology Liaison: 508-887-4696

B6

Patient ID: B6
B6 Canine
B6 Years Old Male Boxer
White BW: Weight (kg) 36.80

Cardiology Consultation

Date: B6

Weight: Weight (kg) 36.80

Requesting Clinician: B6 DVM (Emergency and Critical Care Resident)

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

Presenting complaint and important concurrent diseases:

GDV - <12 hours post op

No previously diagnosed heart disease or heart murmurs

B6

At-home diet: Unknown

Key indication for consultation: Concern for LV dilation and decreased contractility on TFAST, minimal ventricular ectopy intra op and none post op. Hypotensive intra op and received dobutamine, BP post op 80-110.

STOP - remainder of form to be filled out by Cardiology

Physical Examination

B6

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

Arterial pulses:

- 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:

- Normal
- Hepatomegaly
- Abdominal distension
- Mild ascites

B6

Mitral inflow:

- | | |
|--|---------------------------------------|
| <input checked="" type="checkbox"/> Summated | <input type="checkbox"/> Pseudonormal |
| <input type="checkbox"/> Normal | <input type="checkbox"/> Restrictive |
| <input type="checkbox"/> Delayed relaxation | |

ECG findings:

Sinus tachycardia during the echocardiogram.

Radiographic findings:

Mild cardiomegaly (VHS 11.5) with mild LA enlargement. The pulmonary vessels are within normal limits although hard to visualize. No evidence of congestive heart failure.

Assessment and recommendations:

Echocardiogram findings are consistent with DCM-like changes. Base on the current chest radiographs the patient does not appear to be in active CHF. There is decreased contractile function which could be secondary to cardiomyopathy but could also be influenced by the fact that the patient was tachycardic and had recent major surgery (inflammation/sepsis component). The degree of LAE in a dog would argue for intrinsic heart disease (DCM). We would still recommend to start pimobendan 10 mg PO BID and to be careful with fluid administration. Differentials for the changes visualized include primary DCM vs. diet-related vs. ARVC vs. end-stage DMVD (seems less likely base on the small amount of MR and the fact that the jet was very central). Because of the breed, ARVC that would affect mainly the LV remains a differential and the patient should be on telemetry to monitor for ventricular arrhythmia. A quick recheck echocardiogram could be perform before the patient leaves the hospital to reassess the contractile function once the patient is systemically better. Full recheck echocardiogram in 4-6 months or sooner if the patient develops clinical signs consistent with worsening heart disease such as increased RR/RE, cough, exercise intolerance, or syncope.

The diet should be explored and if a grain free diet it should be reported to the FDA.

Final Diagnosis:

- DCM-like changes r/o DCM vs. diet-related vs. ARVC vs. end-stage DMVD

Heart Failure Classification Score:

ISACHC Classification:

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

ACVIM CHF Classification:

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

M-Mode

IVSd

LVIDd

LVPWd

IVSs

LVIDs

LVPWs

%FS

Ao Diam

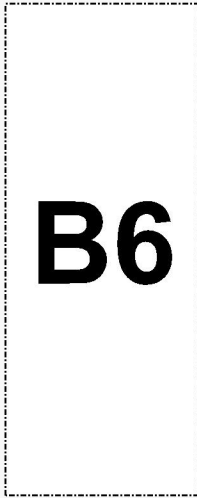
LA Diam

LA/Ao

Max LA

TAPSE

EPSS



cm

cm

cm

cm

cm

cm

%

cm

cm

cm

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} !

{0.43 - 0.71} !

{0.79 - 1.14} !

{0.53 - 0.78} !

{0.68 - 0.89} !

{0.64 - 0.90} !

2D

IVSd

LVIDd

LVPWd

EDV(Teich)

IVSs

LVIDs

LVPWs

ESV(Teich)

EF(Teich)

%FS

SV(Teich)



cm

cm

cm

ml

cm

cm

cm

ml

%

%

ml

Doppler

MR Vmax

MR maxPG

MV E Vel

MV DecT

MV A Vel

MV E/A Ratio

E'

A'

E/E'

PV Vmax



m/s

mmHg

m/s

ms

m/s

m/s

m/s

m/s

PV maxPG
AV Vmax
AV maxPG
TR Vmax
TR maxPG

B6

mmHg
m/s
mmHg
m/s
mmHg

Discharge Instructions

Patient

Name: B6
Species: Canine
White Male Boxer
Birthdate: B6

Owner

Name: B6
Address: B6

Patient ID: B6

Attending Cardiologist:

B6

Cardiology Resident:

B6

Cardiology Technician:

B6

Date: B6

Diagnoses: Dilated cardiomyopathy (DCM)

Case summary:

Thank you for bringing Tufts for evaluation of his heart. 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 (so far B6 has not had this). The heart enlargement can eventually progress to the point of congestive heart failure, meaning that fluid would be backing up into the lungs or belly. Unfortunately this is typically a progressive disease and we usually cannot reverse the changes to the heart muscle. However, some dogs that have been on certain grain/gluten free diets have shown improvement in their hearts when the diet has been changed and they have received taurine supplementation.

Monitoring at home:

- We would like you to occasionally monitor your dog's breathing rate and effort at home, ideally during sleep or at a time of rest. Normal breathing rate at rest is less than 35 to 40 breaths per minute.
- 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.

B6

B6

2. Taurine supplementation - Give 1000 mg by mouth twice daily.

We recommend using GNC, Twinlab, Swanson, or NOW brands.

This is a supplement that has helped some dogs with DOM. It is usually well tolerated, and can be purchased from a human supplement store.

Diet suggestions:

We recommend feeding a diet formulated by a well established company since certain unique dog foods have been anecdotally associated with heart disease. Below are some dry and canned options, or if B6 does not like these foods then you could consider scheduling an appointment with our Nutrition Service (this can be done over the phone).

Dry options:

Royal Canin Early Cardiac

Royal Canin Boxer

Purina Pro Plan Adult Weight Management (not significantly calory restricted despite the name)

Canned options:

Hill's Science Diet Adult Beef and Barley Entree

Hill's Science Diet Adult 1-6 Healthy Cuisine Roasted Chicken, Carrots, and Spinach Stew

Royal Canin Mature 8+

Exercise Recommendations:

B6 can continue his walks as long as he does not lag behind or seem tired after. We generally recommend avoiding vigorous high intensity activity as this could worsen strain on the heart or cause arrhythmias.

Recheck Visits:

A recheck visit is recommended in 3 months. B6 has been enrolled in a study and this recheck along with another one in 6 months would be included in the study. We also recommend having B6 daughter B6 screened for heart disease, which may also be covered by the study. We will plan to call you to set this appointment up, but if you have not heard from us by next week then please give us a call.

Thank you for entrusting us with B6 care. He is such a good dog! 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:

B6

B6

Canine

B6 Years Old Male Boxer

White

Cardiology Appointment Report

Date: B6

Attending Cardiologist:

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

B6

Cardiology Resident:

B6

Cardiology Technician:

B6

Presenting Complaint: Doing great at home since surgery. Eating and drinking normally. No V/D. Had since he was a puppy. Is on heartworm prev.

Concurrent Diseases: Injured cornea 6 months ago, got stick in his eye, has had a few UTI.

General Medical History: Had GDV about 4 weeks ago. Cardio consult done at that hospitalization. No cough or trouble breathing, no exercise intolerance, goes on long walks.

Diet and Supplements:

Rachel ray super premium dry real chicken and veggie dry, purina one chicken and rice canned, Newmans own chicken and rice, hamburger and chicken and rice cooked, mixed every other day. O feels is not grain free, but it is wheat and gluten free.

Cardiovascular History:

Prior CHF diagnosis? No

Prior heart murmur? No

Prior ATE? No

Prior arrhythmia? No

Monitoring respiratory rate and effort at home?

Cough? 2 weeks before GVD had bad cough, no fine

Shortness of breath or difficulty breathing? No

Syncope or collapse? No

Sudden onset lameness? No

Exercise intolerance? No

B6

Muscle condition:

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

Cardiovascular Physical Exam:

Murmur Grade:

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

Murmur location/description: systolic left apical

Jugular vein:

- Bottom 1/3 of 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 when more excited

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
- Mild ascites

- Hepatomegaly
- Abdominal distension

- Marked ascites

Problems:

DCM like changes at time of GDV (r/o DCM v ARVC variant v sepsis/inflammatory related)

Diagnostic plan:

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

Echocardiogram Findings:

B6

Assessment and recommendations:

Echocardiogram reveals persistent DCM like changes consistent with cardiomyopathy (primary DCM v ARVC with DCM phenotype v dietary) rather than sepsis/inflammatory induced cardiac changes. Patient was enrolled in DCM study. Recommend Will report current diet to FDA (owner gave permission and will save bag). Recheck for study in 3 months and again in 6 months. House mate should be screened for DCM also.

Final Diagnosis:

DCM-like changes (r/o primary DCM v ARVC with DCM phenotype v dietary)

Heart Failure Classification Score:

ISACHC Classification:

- Ia
- Ib
- II
- IIIa
- IIIb

ACVIM Classification:

- A
- B1
- B2
- C
- D

M-Mode

IVSd	B6	cm
LVIDd		cm
LVPWd		cm
IVSs		cm
LVIDs		cm
LVPWs		cm
%FS		%
Ao Diam		cm
LA Diam		cm
LA/Ao		
Max LA		cm
TAPSE		cm
EPSS		cm

M-Mode Normalized

IVSdN	B6	{0.29 - 0.52}
LVIDdN		{1.35 - 1.73} !
LVPWdN		{0.33 - 0.53}
IVSsN		{0.43 - 0.71}
LVIDsN		{0.79 - 1.14} !
LVPWsN		{0.53 - 0.78} !
Ao Diam N		{0.68 - 0.89} !
LA Diam N		{0.64 - 0.90} !

2D

SA LA	B6	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
LVID LAX		cm
LVA d 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
EF A-L LAX
LVEF MOD LAX
SV A-L LAX
SV MOD LAX
CO A-L LAX
CO MOD LAX

B6

BPM
%
%
ml
ml
l/min
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

B6

m/s
ms
m/s

m/s
m/s

m/s
mmHg
m/s
mmHg

B6

B6 Male
Canine Boxer White
Patient ID: **B6**

Outside Prescription Log

1. **B6**

2. Date:
Clinician:
Prescription:
Pharmacy sent to:
Completed by:
Origin of request:

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:

Radiology Request & Report

Patient

Name: B6
Species: Canine
White Male Boxer
Birthdate: B6

Owner

Name: B6
Address: B6

Patient ID: B6
Date of request: B6

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

Student:

Date of exam:

Patient Location: Ward/Cage:

Weight (kg) 36.80

- Inpatient
- Outpatient Time:
- Waiting
- Emergency

Sedation

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

Examination Desired:

Presenting Complaint and Clinical Questions you wish to answer:
Emergency

Pertinent History:

B6

B6

Conclusions:

- Gastric dilatation and volvulus. Surgery is recommended. Cranial diaphragmatic displacement is secondary to gastric distention.
- Appearance of the pulmonary vessels and caudal vena cava suggest hypovolemia.
- Mild diffuse bronchointerstitial pattern is likely incidental. There is no evidence of pulmonary metastatic disease.

Radiologists

Primary: [B6] DVM

Reviewing: [B6] DVM, DACVR

Dates

Reported: [B6]

Finalized: 11/5/2018

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/>

Patient

Name: B6
Signalment: B6 Years Old White Male Boxer

Owner

Name:
Address:

B6

Patient ID: B6

Contact Clinician: B6 DVM, PhD, DECVS,

B6
Alternate Clinician: B6 DVM, MPH
(Ophthalmology Intern)

Student: B6 V19

Discharge Instructions

Admit Date: B6 3:00:03 PM

Discharge Date:

Diagnosis:

Procedures:

B6

B6

Diet: No changes indicated at this time.

CASE SUMMARY

General summary:

B6

B6

B6

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

Ophthalmology Liason: 508-887-4839

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

Indolent Ulcer

What is an indolent ulcer and why do they occur?

Indolent ulcers are also called spontaneous chronic corneal epithelial defects (SCCEDs) or Boxer ulcers. This is a condition in which a minor corneal trauma occurs and fails to heal. In most animals, a small scratch or cut to the cornea heals quickly and is not even noticed by owners. In some animals, however, the top layer of the cornea (the epithelium) does not adhere properly to the underlying layers as it tries to heal. It forms a loose lip or flap of tissue. This is thought to be due to an underlying abnormality in the tissue of the cornea. Indolent ulcers usually do not worsen (get deeper) but they are uncomfortable - you may notice squinting and discharge from the eye, or your dog may be rubbing at his or her eye. This type of ulcer is common in older animals and in certain breeds (Boxers, for example). This type of ulcer may also occur if your dog has hair rubbing his or her eyes, or if he or she has foreign material (dirt, plant material) in or around the eyes. If this is the case, we may need to take additional steps to address the underlying cause of the ulcer.

How are indolent ulcers treated?

We typically treat the surface of your dog's eye with a diamond burr or with a small needle. This speeds healing dramatically. In most cases we also place a protective contact lens. The contact lens keeps your dog comfortable and helps the eye to heal. In addition, we will treat your dog with antibiotic eyedrops or ointment and a lubricating product. We will either dispense the lubricating product here or instruct you to pick it up at the drugstore. This is very important for healing so please do not neglect to use this medication. In addition to eyedrops, most dogs are also treated with minocycline or doxycycline, which are oral antibiotics. We use these oral antibiotics not to treat infection, but because these particular antibiotics also have wound-healing properties. They have been shown to help indolent ulcers heal more quickly. Finally, rubbing at the eyes can also delay healing, so it is also very important that your dog wears his/her e-collar when unattended.

How long do indolent ulcers take to heal?

With the type of treatment done today, most indolent ulcers heal within 1-2 weeks. Some dogs require multiple treatments and can take months to heal, however. It is very important that you understand this - patience is necessary in treating this condition. Rarely, a small surgical procedure (superficial keratectomy) is required to get the ulcer to heal.

What if the contact lens falls out?

The contact lens is very helpful in promoting healing but is not absolutely necessary. You do not need to bring your dog in if the lens falls out, and you should not try to replace it. If the lens does not fall out on its own, we will remove it when we recheck your dog.

Will my dog get more indolent ulcers in the future?

Maybe. Dogs who have had one indolent ulcer seem to be predisposed to develop more. Sometimes we can prevent future ulcers with long-term use of eyedrops or ointments. Indolent ulcers likely occur because the cornea is abnormal, however, and this is something we cannot fix. If you notice squinting, rubbing, discharge, or redness, please make an appointment to have your dog evaluated.

Cummings

Veterinary Medical Center

AT TUFTS UNIVERSITY

B6

B6 Male
 Canine Boxer White
 B6

OCULAR EXAMINATION

Date: B6 3:00:03 PM

Chief complaint: ocular FB over the summer, cornea scratch in June or July, meds: ABX ointment, refresh

Attending Ophthalmologist:

B6

Ophthalmology Resident:

B6

OD	Exam	OS
<input checked="" type="checkbox"/> Normal <input type="checkbox"/> Decreased <input type="checkbox"/> Absent Comment:	Menace	<input checked="" type="checkbox"/> Normal <input type="checkbox"/> Decreased <input type="checkbox"/> Absent Comment:
<input checked="" type="checkbox"/> Normal <input type="checkbox"/> Decreased <input type="checkbox"/> Absent Comment:	PLR(Direct)	<input checked="" type="checkbox"/> Normal <input type="checkbox"/> Decreased <input type="checkbox"/> Absent Comment:
<input type="checkbox"/> Normal <input type="checkbox"/> Decreased <input type="checkbox"/> Absent Comment:	PLR(Indirect)	<input type="checkbox"/> Normal <input type="checkbox"/> Decreased <input type="checkbox"/> Absent Comment:
<input checked="" type="checkbox"/> Normal <input type="checkbox"/> Decreased <input type="checkbox"/> Absent Comment:	Dazzle	<input checked="" type="checkbox"/> Normal <input type="checkbox"/> Decreased <input type="checkbox"/> Absent Comment:
15mm/ 30sec	STT(mm/sec)	15 mm/ 10sec
Comment:	Orbit	Comment:
Comment: marked epiphora and staining	Eyelids	Comment:
Comment:	Nictitating	Comments:

Membranes

Comment:

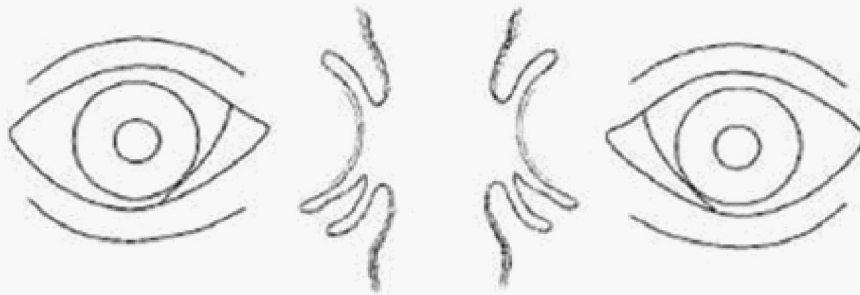
Sclera

Comments:

Comment: hyperemia

Conjunctiva

Comment:



OD

Exam

OS

Comment: axial, linear 3mm superficial epithelial erosion with redundant epithelial lip

Cornea

Comment: round opacity, lipid likely

Esthesiometry

Comment: 0

Flare

Comment: 0

Negative
 Positive

Fluorescein

Negative
 Positive

Negative
 Positive

Jones Test

Negative
 Positive

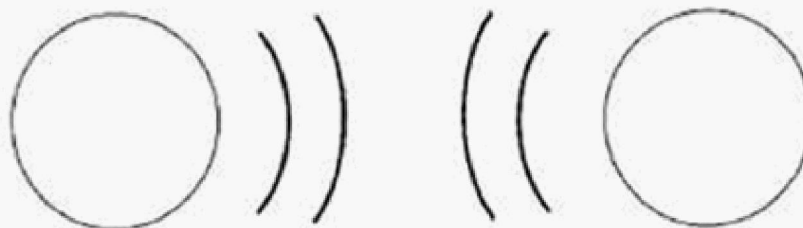
Negative
 Positive

Rose Bengal

Negative
 Positive

Comment:

Comment:



OD

12 mmHg

Exam

IOP (TV)

OS

17 mmHg

Comment:

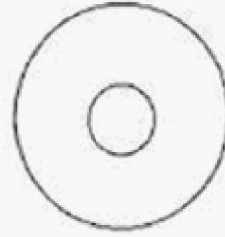
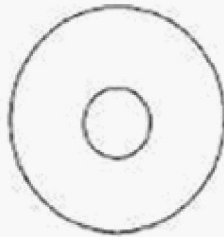
Iris

Comment:

Comment:

Pupil

Comment:



OD

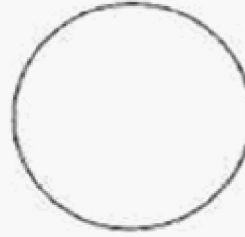
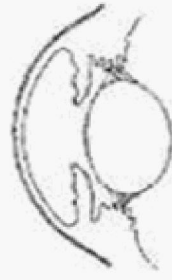
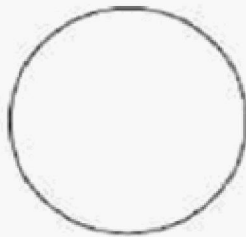
Comment:

Exam

Lens

OS

Comment:



OD

Comment:

Exam

Vitreous

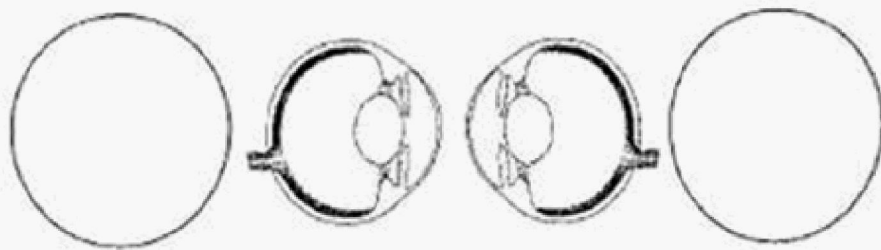
OS

Comment:

Comment: wnl

Fundus

Comment: wnl



Findings:

Diagnosis: indolent corneal ulcer OD

Therapy: diamond burr keratectomy + contact lens placement

tobramycin OD TID

serum OD TID

Refresh OU TID

doxycycline 5mg/kg PO q12

gabapentin 10mg/kg PO q8-12

recheck in 10-14 days

Photography

Video

Patient

Name: B6
Signalment: B6 Years Old White Male Boxer

Owner

Name:
Address:

B6

Patient ID: B6

Contact Clinician: B6 DVM, MPH
Alternate Clinician: B6 DVM, PhD, DECVS,

Student: B6 V19

Discharge Instructions

Admit Date: B6 9:06:06 AM
Discharge Date:

Diagnosis:

Procedures:

Medications:

B6

B6

CASE SUMMARY

General summary:

B6

Thank you for entrusting us with **B6** care. He is a very sweet boy!

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 Male
Canine Boxer White
B6

OCULAR EXAMINATION

Date: **B6** 9:06:06 AM

B6

Attending Ophthalmologist: **B6**

Ophthalmology Resident: **B6**

<u>OD</u>	<u>Exam</u>	<u>OS</u>
<input checked="" type="checkbox"/> Normal <input type="checkbox"/> Decreased <input type="checkbox"/> Absent Comment:	Menace	<input checked="" type="checkbox"/> Normal <input type="checkbox"/> Decreased <input type="checkbox"/> Absent Comment:
<input checked="" type="checkbox"/> Normal <input type="checkbox"/> Decreased <input type="checkbox"/> Absent Comment:	PLR(Direct)	<input checked="" type="checkbox"/> Normal <input type="checkbox"/> Decreased <input type="checkbox"/> Absent Comment:
<input checked="" type="checkbox"/> Normal <input type="checkbox"/> Decreased <input type="checkbox"/> Absent Comment:	PLR(Indirect)	<input checked="" type="checkbox"/> Normal <input type="checkbox"/> Decreased <input type="checkbox"/> Absent Comment:
<input checked="" type="checkbox"/> Normal <input type="checkbox"/> Decreased <input type="checkbox"/> Absent Comment:	Dazzle	<input checked="" type="checkbox"/> Normal <input type="checkbox"/> Decreased <input type="checkbox"/> Absent Comment:
mm/ sec	STT(mm/sec)	mm/ sec
Comment:	Orbit	Comment:
Comment: moderate epiphora staining, lateral 1/3 superior palpebrum small susp meib adenoma (~2mm)	Eyelids	Comment:

Comment:

Nictitating Membranes

Comments:

Comment:

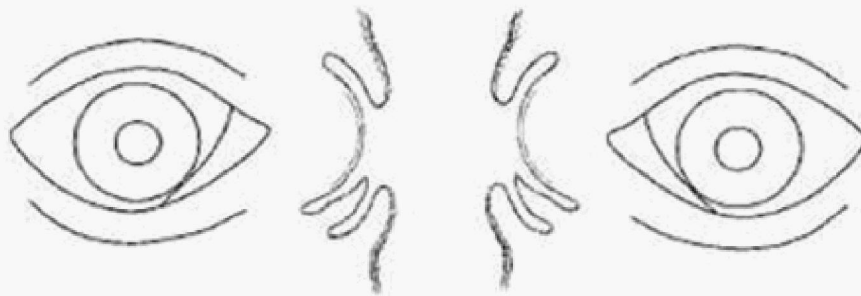
Sclera

Comments:

Comment: mild hyperemia

Conjunctiva

Comment:



OD

Comment: contact lens in place, no evidence of previous ulcer, ventral paraxial corneal opacity most likely lipid

Exam

Cornea

OS

Comment: round opacity, lipid likely

Esthesiometry

Comment: 0

Flare

Comment: 0

- Negative
- Positive

Fluorescein

- Negative
- Positive

- Negative
- Positive

Jones Test

- Negative
- Positive

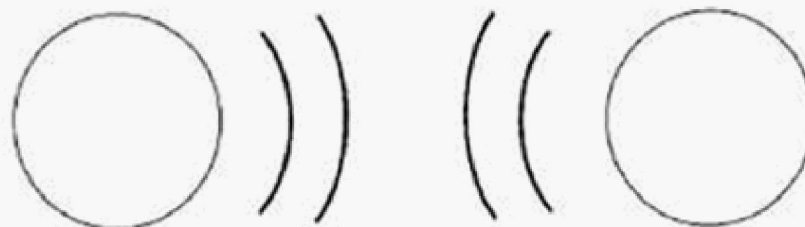
- Negative
- Positive

Rose Bengal

- Negative
- Positive

Comment:

Comment:



OD

12 mmHg

Exam

IOP (TP)

OS

14 mmHg

Comment:

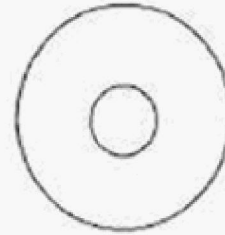
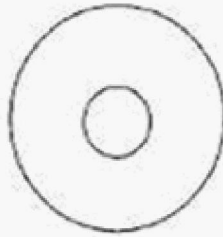
Iris

Comment:

Comment:

Pupil

Comment:



OD

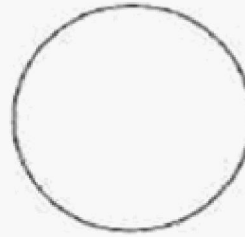
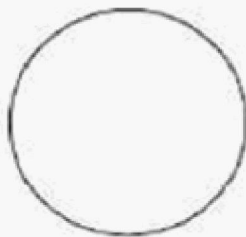
Comment:

Exam

Lens

OS

Comment:



OD

Comment:

Exam

Vitreous

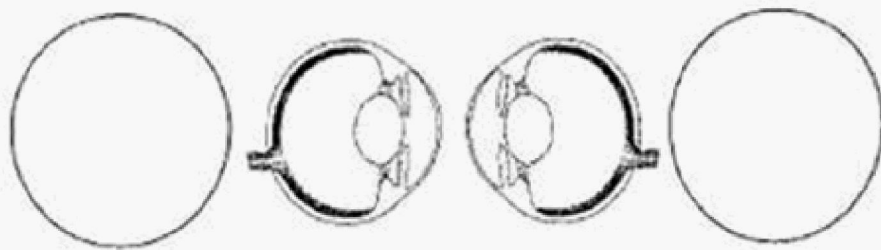
OS

Comment:

Comment: wnl

Fundus

Comment: wnl



Findings:

Diagnosis: indolent corneal ulcer OD - fully healed

Therapy:

Refresh OUITD

no recheck indicated

Photography

Video

Discharge Instructions

Patient

Name: B6
Species: Canine
White Male Boxer
Birthdate: B6

Owner

Name: B6
Address: B6

Patient ID: B6

Attending Cardiologist:

B6

Cardiology Resident:

B6

Cardiology Technician:

B6

Student: B6 V20

Date: B6

Diagnoses:

Dilated cardiomyopathy (DCM)

Case summary:

Thank you for bringing B6 in today for re-evaluation of his heart - he is such a sweet boy! B6 echocardiogram today showed a large left ventricle with decreased contractile function (as previously seen), and further enlargement of his left atrium, one of the upper chambers of his heart. Since B6 has some progressive heart enlargement, we are going to add a new medication and have you take another medication home to have on hand in case of trouble breathing (see below).

Monitoring at home:

- We would like you to monitor B6 breathing rate and effort at home, ideally during sleep or at a time of rest. The doses of drugs will be adjusted based on the breathing rate and effort.
- In general, most dogs will have a breathing rate at rest of less than 35 to 40 breaths per minute.
- In the case of an increase in breathing rate or effort, you can give B6 a dose of B6 per giving the dose of B6 please call Tufts or your primary care veterinarian.
- 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:

Please continue current diet.

Exercise Recommendations:

can continue his walks as long as he does not lag behind or seem tired after. We generally recommend avoiding vigorous high intensity activity as this could worsen strain on the heart or cause arrhythmias.

Recheck Visits:

Recheck blood work is recommended to check kidney values and electrolytes 2-3 weeks after starting This can be done here as a technician appointment or at your primary care veterinarian.

A recheck with cardiology has been scheduled for or at 2:30 P.M. This is his next appointment for the DCM study.

Please call 508-887-4745 to schedule an appointment with dermatology if skin on his face does not improve. You could also try an e-collar to prevent him from scratching at his face.

Thank you for entrusting us with 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/>

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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:

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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:

Owner:

Discharge Instructions

B6

Patient ID: B6
B6 Canine
B6 Years Old Male Boxer
White

Cardiology Appointment Report

Date: B6

Attending Cardiologist:

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

B6

Cardiology Resident:

B6

Cardiology Technician:

B6

Student: B6

Presenting Complaint:

B6 presents for 4-month recheck following diagnosis of DCM following GDV correction and gastropexy in October. Per O is doing very well at home, no concerns related to his DCM.

Concurrent Diseases:

Hypothyroid managed with Thyrotabs

General Medical History:

B6

Diet and Supplements:

RC dry + Hills Science Diet canned (chicken stew)
No supplements after discontinuing Taurine in October/November

Cardiovascular History:

Prior CHF diagnosis? No
Prior heart murmur? Grade I/M
Prior ATE? No

Prior arrhythmia? No

Monitoring respiratory rate and effort at home? Yes, resting RR 25 or less

Cough? None since before the GDV sx

Shortness of breath or difficulty breathing? No

Syncope or collapse? No

Sudden onset lameness? No

Exercise intolerance? No, goes on several mile walks daily

B6

Muscle condition:

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

Cardiovascular Physical Exam:

Murmur Grade:

- | | |
|--|--------------------------------|
| <input 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 checked="" type="checkbox"/> Fair | <input type="checkbox"/> Pulse deficits |
| <input type="checkbox"/> Good | <input type="checkbox"/> Pulsus paradoxus |
| <input type="checkbox"/> Strong | <input type="checkbox"/> Other: |

Arrhythmia:

- | | |
|-------------------------------|--------------------------------------|
| <input type="checkbox"/> None | <input type="checkbox"/> Bradycardia |
|-------------------------------|--------------------------------------|

- Sinus arrhythmia
- Premature beats

- 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:

-DCM, r/o primary cardiomyopathy, diet induced

-Facial excoriations, r/o bacterial folliculitis, allergic dermatitis, atopic dermatitis, behavioral

Diagnostic plan:

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

- Dialysis profile
- Thoracic radiographs
- NT-proBNP
- Troponin I
- Other tests: DCM study; Recommend Derm Appt

B6

Mitral inflow:

- Summated
- Normal
- Delayed relaxation

- Pseudonormal
- Restrictive

ECG findings:

Sinus tachycardia, occasional variation in P wave morphology (as previously noted)

Assessment and recommendations:

Echocardiogram reveals persistent DCM changes with progression in LA size. Recommend having

B6

on hand in case of increased RR/RE or cough. Recommend starting

B6

increase to BID if well tolerated). Recheck renal values and electrolytes 2-3 weeks after starting enalapril.

Continue pimobendan at current dose. Recommend dermatology consultation for facial skin issues.

Recheck echo and blood work for study in 3 months, or sooner if clinical signs occur.

Final Diagnosis:

DCM-like changes (r/o primary DCM v ARVC with DCM phenotype v dietary)

Heart Failure Classification Score:

ISACHC Classification:

- Ia
- Ib
- II
- IIIa
- IIIb

ACVIM Classification:

- A
- B1
- B2
- C
- D

M-Mode

IVSd	B6	cm
LVIDd		cm
LVPWd		cm
IVSs		cm
LVIDs		cm
LVPWs		cm
EDV(Teich)		ml
ESV(Teich)		ml
EF(Teich)		%
%FS		%
SV(Teich)		ml
Ao Diam		cm
LA Diam		cm
LA/Ao		
Max LA		cm
Ao Diam		cm
LA Diam		cm
LA/Ao		
TAPSE	cm	
EPSS	cm	

M-Mode Normalized

IVSdN	B6	{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

SALA	B6	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
LVAAd LAX		cm
LVEDV A-L LAX		ml
LVEDV MOD LAX		ml
LVLs LAX		cm
LVAAs 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
LVLd A4C		cm
LVEDV MOD A4C		ml
LVLs A4C		cm
LVESV MOD A4C		ml
LVEF MOD A4C		%
SV MOD A4C		ml

B6

<u>Doppler</u>		
E'		m/s
A'		m/s
S'		m/s
EASUM		m/s
AV Vmax		m/s
AV maxPG		mmHg
PV Vmax		m/s
PV maxPG		mmHg

B6

From: PFR Event <pfpreventcreation@fda.hhs.gov>
To: Cleary, Michael *; HQ Pet Food Report Notification; [B6]
Sent: 12/3/2018 2:36:39 PM
Subject: Acana Lamb and Apple singles: Lisa Freeman - EON-372606
Attachments: 2059540-report.pdf; 2059540-attachments.zip

A PFR Report has been received and PFR Event [EON-372606] has been created in the EON System.

A "PDF" report by name "2059540-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 "2059540-attachments.zip" and is attached to this email notification.

Below is the summary of the report:

EON Key: EON-372606

ICSR #: 2059540

EON Title: PFR Event created for Acana Lamb and Apple singles; 2059540

AE Date	11/08/2018	Number Fed/Exposed	1
Best By Date		Number Reacted	1
Animal Species	Dog	Outcome to Date	Stable
Breed	Irish Wolfhound		
Age	3 Years		
District Involved	PFR-New England DO		

Product information

Individual Case Safety Report Number: 2059540

Product Group: Pet Food

Product Name: Acana Lamb and Apple singles

Description: Littermate diagnosed with DCM. Initial taurine level (plasma only) was [B6]. WB taurine submitted = [B6]. Eats BEG diet Mildly reduced contractile function on echo NT-proBNP = [B6], troponin mildly elevated at [B6] (istat) and [B6] at Texas A&M Will recheck in 3-4 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
Acana Lamb and Apple singles		

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-372606>

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=389575>

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.

From: Freeman, Lisa <Lisa.Freeman@tufts.edu>
To: Jones, Jennifer L
Sent: 2/24/2019 10:10:51 PM
Subject: update - [B6]

Hi Jen

Plasma taurine was [B6] WB = [B6]
Troponin = [B6]

Best,
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: PFR Event <pfpreventcreation@fda.hhs.gov>
To: Cleary, Michael *; HQ Pet Food Report Notification; B6
Sent: 1/15/2019 8:56:35 PM
Subject: Zignature - various flavors (venison: Lisa Freeman - EON-376446
Attachments: 2061214-report.pdf; 2061214-attachments.zip

A PFR Report has been received and PFR Event [EON-376446] has been created in the EON System.

A "PDF" report by name "2061214-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 "2061214-attachments.zip" and is attached to this email notification.

Below is the summary of the report:

EON Key: EON-376446

ICSR #: 2061214

EON Title: PFR Event created for Zignature - various flavors (venison goat kangaroo lamb turkey pork); 2061214

AE Date	01/09/2019	Number Fed/Exposed	1
Best By Date		Number Reacted	1
Animal Species	Dog	Outcome to Date	Stable
Breed	Boxer (German Boxer)		
Age	B6 Years		
District Involved	PFR-New England DO		

Product information

Individual Case Safety Report Number: 2061214

Product Group: Pet Food

Product Name: Zignature - various flavors (venison, goat, kangaroo, lamb, turkey, pork)

Description: 2 syncopal episodes in summer got echo in October 2018 and arrhythmia identified Feeding BEG diets all of her life (Zignature) DCM and VPCs identified 1/9/19 Owner changing to Purina EN Fiber and we will recheck in 3 months BNP elevated, troponin and taurine pending

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
Zignature - various flavors (venison, goat, kangaroo, lamb, turkey, pork)		

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-376446>

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=393455>

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Report Details - EON-376446			
ICSR:	2061214		
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:	2019-01-15 15:49:52 EST		
Reported Problem:	Problem Description: 2 syncopal episodes in summer got echo in October 2018 and arrhythmia identified Feeding BEG diets all of her life (Zignature) DCM and VPCs identified 1/9/19 Owner changing to Purina EN Fiber and we will recheck in 3 months BNP elevated, troponin and taurine pending		
	Date Problem Started: 01/09/2019		
	Concurrent Medical Problem: Yes		
	Pre Existing Conditions: B6 Successfully treated		
	Outcome to Date: Stable		
Product Information:	Product Name: Zignature - various flavors (venison, goat, kangaroo, lamb, turkey, pork)		
	Product Type: Pet Food		
	Lot Number:		
	Product Use Information: Description: Rotated proteins/flavors of Zignature for past 8-9 years		
	Manufacturer /Distributor Information:		
	Purchase Location Information:		
Animal Information:	Name: B6		
	Type Of Species: Dog		
	Type Of Breed: Boxer (German Boxer)		
	Gender: Female		
	Reproductive Status: Neutered		
	Weight: 21 Kilogram		
	Age: B6 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:	rpt_medical_record_preview	B6 pdf	
	Description:	Records		
	Type:	Medical Records		

From: PFR Event <pfpreventcreation@fda.hhs.gov>
To: Cleary, Michael *; HQ Pet Food Report Notification; [B6]
Sent: 1/23/2019 11:40:21 PM
Subject: Wellness Core Ocean Grain Free Protein-Rich Nutrition; [B6]
EON-377321
Attachments: 2061666-report.pdf; 2061666-attachments.zip

A PFR Report has been received and PFR Event [EON-377321] has been created in the EON System.

A "PDF" report by name "2061666-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 "2061666-attachments.zip" and is attached to this email notification.

Below is the summary of the report:

EON Key: EON-377321

ICSR #: 2061666

EON Title: PFR Event created for Wellness Core Ocean Grain Free Protein-Rich Nutrition; 2061666

AE Date	02/15/2015	Number Fed/Exposed	2
Best By Date	10/24/2019	Number Reacted	2
Animal Species	Dog	Outcome to Date	Better/Improved/Recovering
Breed	Retriever - Golden		
Age	7 Years		
District Involved	PFR [B6] DO		

Product information

Individual Case Safety Report Number: 2061666

Product Group: Pet Food

Product Name: Wellness Core Ocean Grain Free Protein-Rich Nutrition

Description: Began feeding Wellness CORE Ocean Dry Kibble Feb. 2015 as main source of nutrition, fed 1 cup 2x per day. Submitted Whole Blood sample to UC Davis Amino Acid Lab for Taurine Testing 6/26/2018. Lab Result [B6] Whole Blood Taurine Results which per Dr. Joshua Stern UC Davis DVM Cardiologist is BELOW the 250 minimum range for a Golden Retriever Dog. Per Dr. Stern's order continue feeding this food and supplement each daily meal with taurine rich foods for 3 months then ReTest. Supplemented kibble with 1/2cup

pan fried Ground Sirloin, 1 Hardboiled Eggs and 3 Greek 2% Yogurt for 3months. ReTested Whole Blood Taurine Level October 24, 2018 sent to UC Davis Amino Acid Lab. 10/24/2018 Lab Result Whole Blood Taurine Results: [B6] Improvement of [B6] putting him within the "normal" range Dr. Stern has identified for Golden Retriever Dogs.

Submission Type: Initial

Report Type: Both

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

Number of Animals Treated With Product: 2

Number of Animals Reacted With Product: 2

Product Name	Lot Number or ID	Best By Date
Wellness Core Ocean Grain Free Protein-Rich Nutrition	1228J22	10/24/2019

Sender information

B6

USA

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

<https://eon.fda.gov/eon//browse/EON-377321>

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=394330>

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you received this email in error, please send an email to FDAREportableFoods@fda.hhs.gov immediately.

Report Details - EON-377321		
ICSR:	2061666	
Type Of Submission:	Initial	
Report Version:	FPSR.FDA.PETF.V.V1	
Type Of Report:	Both	
Reporting Type:	Voluntary	
Report Submission Date:	2019-01-23 18:29:48 EST	
Reporter is the Animal Owner:	Yes	
Reported Problem:	Problem Description: Began feeding Wellness CORE Ocean Dry Kibble Feb. 2015 as main source of nutrition, fed 1 cup 2x per day. Submitted Whole Blood sample to UC Davis Amino Acid Lab for Taurine Testing 6/26/2018. Lab Result: B6 Whole Blood Taurine Results which per Dr. Joshua Stern UC Davis DVM Cardiologist is BELOW the 250 minimum range for a Golden Retriever Dog. Per Dr. Stern's order continue feeding this food and supplement each daily meal with taurine rich foods for 3 months then ReTest. Supplemented kibble with 1/2cup pan fried Ground Sirloin, 1 Hardboiled Eggs and 3 Greek 2% Yogurt for 3months. ReTested Whole Blood Taurine Level October 24, 2018 sent to UC Davis Amino Acid Lab. 10/24/2018 Lab Result Whole Blood Taurine Results: B6 Improvement of B6 , putting him within the "normal" range Dr. Stern has identified for Golden Retriever Dogs.	
	Date Problem Started: 02/15/2015	
	Date of Recovery: 10/24/2018	
	Outcome to Date: Better/Improved/Recovering	
Product Information:	Product Name: Wellness Core Ocean Grain Free Protein-Rich Nutrition	
	Product Type: Pet Food	
	Lot Number: Lot Number: 1228J22	
	Expiration Date: 10/24/2019	
	UPC: 076344884132	
	Package Type: BAG	
	Package Size: 12 Pound	
	Purchase Date: 01/04/2019	
	Number Purchased: 1	
	Possess Unopened Product: No	
	Possess Opened Product: Yes	
	Storage Conditions: Bag has a ziplock freshness seal which was opened and resealed after each use.	
	Product Use Information:	Description: Fed 1 cup kibble soaked in warm water 2x per day to B6
		Last Exposure Date: 01/04/2019
Time Interval between Product Use and Adverse Event: 3 Years		
Product Use Stopped After the Onset of the Adverse Event: Yes		
Adverse Event Abate After Product Stop: Yes		
Product Use Started Again: No		
Perceived: Definitely related		

		Relatedness to Adverse Event:	
		Other Foods or Products Given to the Animal During This Time Period:	Yes
	Manufacturer /Distributor Information:		
	Purchase Location Information:	Name:	Petco
		Address:	B6 United States
Animal Information:	Name:	B6	
	Type Of Species:	Dog	
	Type Of Breed:	Retriever - Golden	
	Gender:	Male	
	Reproductive Status:	Neutered	
	Weight:	73 Pound	
	Age:	7 Years	
	Assessment of Prior Health:	Good	
	Number of Animals Given the Product:	2	
	Number of Animals Reacted:	2	
	Owner Information:		
	Healthcare Professional Information:	Practice Name:	B6
		Contact: Name:	B6
		Phone:	B6
		Email:	B6
		Address:	B6 United States
		Type of Veterinarian:	Primary/regular veterinarian
		Date First Seen:	06/26/2018
		Permission to Release Records to FDA:	Yes
Sender Information:	Name:		
	Address:	B6 United States	
	Contact: Phone:	B6	
	Email:	B6	
	Reporter Wants to Remain Anonymous:	No	
	Permission To Contact	Yes	

	Sender:	
	Preferred Method Of Contact:	Email
	Reported to Other Parties:	Other Store/Place of Purchase

Additional Documents:	Attachment:	B6 Oct20182ndTaurineResults_23928.jpg.pdf
	Description:	Taurine Retest Lab Report after 3 months of adding Taurine Rich Foods to existing kibble which was causing the problem.
	Type:	Laboratory Report
	Attachment:	B6 June2620181stTaurineResultsT_19251.pdf
	Description:	First Taurine Results, Per Dr. Stern: "Those taurine levels are ok. I would prefer to see over 250. My recommendation would be either diet change and retest after 3 months or add in taurine rich ingredients and retest in 3 months. "
	Type:	Laboratory Report
	Attachment:	DrStern Lab Taurine RecommendationsAug2018.pdf
	Description:	Aug 2018 Letter from Dr. Joshua Stern DVM Cardiologist explaining the Taurine Deficeincy results specifically to Golden Retriever owners with the correct range that Golden Retriever dogs are to be in.
	Type:	Letter



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

Sample Submission Form

Amino Acid Laboratory
 University of California, Davis
 1020 Vet Med 3B
 1089 Veterinary Medicine Drive
 Davis, CA 95616
 Tel: (530)752-5058, Fax: (530)752-4698

UC CUSTOMERS ONLY:
 Non-federal funds ID/Account Number
 to bill: _____

<http://www.vetmed.ucdavis.edu/vmb/aal/aal.html>

Vet/Tech Contact: B6 B6
 Company Name: B6
 Address: B6

Email: B6
 Tel: B6 Fax: _____

Billing Contact: B6 TAX ID: _____
 Email: B6 Tel: B6

Patient Name: B6

Species: Canine

Owner's Name: B6

Sample Type: Plasma Whole Blood Urine Food Other: _____
 Test Items: Taurine Complete Amino Acid Other: _____

Taurine Results (nmol/ml)
 Plasma: _____ Whole Blood: B6 Urine: _____ Food: _____

Reference Ranges (nmol/ml)

	Plasma		Whole Blood	
	Normal Range	No Known Risk for Taurine Deficiency	Normal Range	No Known Risk for Taurine Deficiency
Cat	80-120	>40	300-600	>200
Dog	60-120	>40	200-350	>150



239²⁹

Sample Submission Form

Amino Acid Laboratory
University of California, Davis
1020 Vet Med 3B
1089 Veterinary Medicine Drive
Davis, CA 95616
Tel: (530)752-5058, Fax: (530)752-4698

UC CUSTOMERS ONLY:
Non-federal funds ID/Account Number
to bill: _____

<http://www.vetmed.ucdavis.edu/vmb/aal/aal.html>

Vet/Tech Contact: **B6**
Company Name: **B6**
Address: **B6**

Email: **B6**
Tel: **B6** Fax: _____

Billing Contact: **B6** TAX ID: _____
Email: **B6** Tel: **B6**

Patient Name: **B6**
Species: *k-9*
Owner's Name: **B6**

Sample Type: Plasma Whole Blood Urine Food Other: _____
Test Items: Taurine Complete Amino Acid Other: _____

Taurine Results (nmol/ml)
Plasma: _____ Whole Blood: **B6** Urine: _____ Food: _____

Reference Ranges (nmol/ml)

	Plasma		Whole Blood	
	Normal Range	No Known Risk for Taurine Deficiency	Normal Range	No Known Risk for Taurine Deficiency
Cat	80-120	>40	300-600	>200
Dog	60-120	>40	200-350	>150

Report Details - EON-377321		
ICSR:	2061666	
Type Of Submission:	Initial	
Report Version:	FPSR.FDA.PETF.V.V1	
Type Of Report:	Both	
Reporting Type:	Voluntary	
Report Submission Date:	2019-01-23 18:29:48 EST	
Reporter is the Animal Owner:	Yes	
Reported Problem:	Problem Description: Began feeding Wellness CORE Ocean Dry Kibble Feb. 2015 as main source of nutrition, fed 1 cup 2x per day. Submitted Whole Blood sample to UC Davis Amino Acid Lab for Taurine Testing 6/26/2018. Lab Result: B6 Whole Blood Taurine Results which per Dr. Joshua Stern UC Davis DVM Cardiologist is BELOW the 250 minimum range for a Golden Retriever Dog. Per Dr. Stern's order continue feeding this food and supplement each daily meal with taurine rich foods for 3 months then ReTest. Supplemented kibble with 1/2cup pan fried Ground Sirloin, 1 Hardboiled Eggs and 3 Greek 2% Yogurt for 3months. ReTested Whole Blood Taurine Level October 24, 2018 sent to UC Davis Amino Acid Lab. 10/24/2018 Lab Result Whole Blood Taurine Results: B6. Improvement of B6; putting him within the "normal" range Dr. Stern has identified for Golden Retriever Dogs.	
	Date Problem Started: 02/15/2015	
	Date of Recovery: 10/24/2018	
	Outcome to Date: Better/Improved/Recovering	
Product Information:	Product Name: Wellness Core Ocean Grain Free Protein-Rich Nutrition	
	Product Type: Pet Food	
	Lot Number: Lot Number: 1228J22 Expiration Date: 10/24/2019	
	UPC: 076344884132	
	Package Type: BAG	
	Package Size: 12 Pound	
	Purchase Date: 01/04/2019	
	Number Purchased: 1	
	Possess Unopened Product: No	
	Possess Opened Product: Yes	
	Storage Conditions: Bag has a ziplock freshness seal which was opened and resealed after each use.	
	Product Use Information:	Description: Fed 1 cup kibble soaked in warm water 2x per day to B6
		Last Exposure Date: 01/04/2019
		Time Interval between Product Use and Adverse Event: 3 Years
Product Use Stopped After the Onset of the Adverse Event: Yes		
Adverse Event Abate After Product Stop: Yes		
Product Use Started Again: No		
Perceived: Definitely related		

		Relatedness to Adverse Event:	
		Other Foods or Products Given to the Animal During This Time Period:	Yes
	Manufacturer /Distributor Information:		
	Purchase Location Information:	Name:	Petco
		Address:	B6 United States
Animal Information:	Name:	B6	
	Type Of Species:	Dog	
	Type Of Breed:	Retriever - Golden	
	Gender:	Male	
	Reproductive Status:	Neutered	
	Weight:	73 Pound	
	Age:	7 Years	
	Assessment of Prior Health:	Good	
	Number of Animals Given the Product:	2	
	Number of Animals Reacted:	2	
	Owner Information:		
	Healthcare Professional Information:	Practice Name:	B6
		Contact: Name:	B6
		Phone:	B6
		Email:	B6
		Address:	B6 United States
		Type of Veterinarian:	Primary/regular veterinarian
		Date First Seen:	06/26/2018
		Permission to Release Records to FDA:	Yes
Sender Information:	Name:		
	Address:	B6 United States	
	Contact: Phone:	B6	
	Email:	B6	
	Reporter Wants to Remain Anonymous:	No	
	Permission To Contact	Yes	

	Sender:	
	Preferred Method Of Contact:	Email
	Reported to Other Parties:	Other Store/Place of Purchase

Additional Documents:	Attachment:	B6 Oct20182ndTaurineResults_23928.jpg.pdf
	Description:	Taurine Retest Lab Report after 3 months of adding Taurine Rich Foods to existing kibble which was causing the problem.
	Type:	Laboratory Report
	Attachment:	B6 June2620181stTaurineResultsT_19251.pdf
	Description:	First Taurine Results, Per Dr. Stern: "Those taurine levels are ok. I would prefer to see over 250. My recommendation would be either diet change and retest after 3 months or add in taurine rich ingredients and retest in 3 months. "
	Type:	Laboratory Report
	Attachment:	DrStern Lab Taurine RecommendationsAug2018.pdf
	Description:	Aug 2018 Letter from Dr. Joshua Stern DVM Cardiologist explaining the Taurine Deficeincy results specifically to Golden Retriever owners with the correct range that Golden Retriever dogs are to be in.
	Type:	Letter

Report Details - EON-377324		
ICSR:	2061667	
Type Of Submission:	Initial	
Report Version:	FPSR.FDA.PETF.V.V1	
Type Of Report:	Both	
Reporting Type:	Voluntary	
Report Submission Date:	2019-01-23 18:59:19 EST	
Reporter is the Animal Owner:	Yes	
Reported Problem:	Problem Description: Began feeding Wellness CORE Ocean Dry Kibble Jan. 2017 as main source of nutrition, fed 1.5 cup 2x per day. Submitted Whole Blood sample to UC Davis Amino Acid Lab for Taurine Testing 6/26/2018. Lab Result: B6 Whole Blood Taurine Results which per Dr. Joshua Stern UC Davis DVM Cardiologist is barely above the 250 minimum range for a Golden Retriever Dog. Per Dr. Stern's order continue feeding this food and supplement each daily meal with taurine rich foods for 3 months then ReTest. Supplemented kibble with 1/2cup pan fried Ground Sirloin, 1 Hardboiled Eggs and 3 Greek 2% Yogurt for 3months. ReTested Whole Blood Taurine Level October 24, 2018 sent to UC Davis Amino Acid Lab. 10/24 /2018 Lab Result Whole Blood Taurine Results: B6 Improvement of B6 putting him within the "normal" range Dr. Stern has identified for Golden Retriever Dogs.	
	Date Problem Started: 01/02/2017	
	Date of Recovery: 10/24/2018	
	Concurrent Medical Problem: No	
	Outcome to Date: Better/Improved/Recovering	
Product Information:	Product Name: Wellness Core Ocean Grain Free Protein-Rich Nutrition	
	Product Type: Pet Food	
	Lot Number: Lot Number: 1228J22	
	Expiration Date: 10/24/2019	
	UPC: 076344884132	
	Package Type: BAG	
	Package Size: 12 Pound	
	Purchase Date: 12/04/2018	
	Number Purchased: 1	
	Possess Unopened Product: No	
	Possess Opened Product: Yes	
	Storage Conditions: Bag has a ziplock freshness seal which was opened and resealed after each use.	
	Product Use Information:	Description: Fed 1.5 cups kibble soaked in warm water 2x per day to: B6
		Last Exposure Date: 01/04/2019
Time Interval between Product Use and Adverse Event: 2 Years		
Product Use Stopped After the Onset of the Adverse Event: Yes		
Adverse Event Abate After Product Stop: Yes		
Product Use Started Again: No		
Perceived: Definitely related		

		Relatedness to Adverse Event:		
		Other Foods or Products Given to the Animal During This Time Period:	Yes	
Manufacturer /Distributor Information:	Name:	WellPet		
	Type(s):	Manufacturer		
	Address:	200 Ames Pond Drive Tewksbury Massachusetts 01876 United States		
	Contact:	Phone:	1-800-225-0904	
		Web Address:	http://wellnesspetfood.com/contact-us	
	Possess One or More Labels from This Product:	Yes		
Purchase Location Information:	Name:	Petco		
	Address:	<div style="border: 1px dashed black; padding: 5px; display: inline-block;"> B6 </div> United States		
Animal Information:	Name:	<div style="border: 1px dashed black; padding: 2px;">B6</div>		
	Type Of Species:	Dog		
	Type Of Breed:	Retriever - Golden		
	Gender:	Male		
	Reproductive Status:	Neutered		
	Weight:	65 Pound		
	Age:	<div style="border: 1px dashed black; padding: 2px;">B6</div>		
	Assessment of Prior Health:	Excellent		
	Number of Animals Given the Product:	2		
	Number of Animals Reacted:	2		
	Owner Information:			
	Healthcare Professional Information:	Practice Name:	<div style="border: 1px dashed black; padding: 2px;">B6</div>	
		Contact:	Name:	<div style="border: 1px dashed black; padding: 5px; display: inline-block;">B6</div>
Phone:				
Email:				
Address:		<div style="border: 1px dashed black; padding: 5px; display: inline-block;"> B6 </div> United States		
Type of Veterinarian:		Primary/regular veterinarian		
Date First Seen:	06/26/2018			
Permission to Release Records to FDA:	Yes			

Sender Information:	Name:	
	Address:	B6 United States
	Contact:	Phone: B6
		Email:
	Reporter Wants to Remain Anonymous:	No
	Permission To Contact Sender:	Yes
	Preferred Method Of Contact:	Email
Reported to Other Parties:	Store/Place of Purchase Other	

Additional Documents:	Attachment:	B6 June20181stTaurineResults_19250.jpg.pdf
	Description:	First Taurine Results Lab Report June 2018
	Type:	Laboratory Report
	Attachment:	B6 Oct20182ndTaurineResults_23928.jpg.pdf
	Description:	2nd Lab Results for Taurine from UC Davis Vet Amimno Acid Lab
	Type:	Laboratory Report
	Attachment:	DrStern Lab Taurine RecommendationsAug2018.pdf
	Description:	Per email from Dr. Stern: "Those taurine levels are just ok. I would prefer to see it higher than B6 . My recommendation would be either diet change & retest after 3 months or add in taurine rich ingredients & retest in 3 months."
	Type:	Letter

From: Related PFR Event <pfrsignificantactivitycreation@fda.hhs.gov>
To: Carey, Lauren; Cleary, Michael *; HQ Pet Food Report Notification;
B6
Sent: 6/11/2019 6:40:49 PM
Subject: Wellness Core grain-free ocean fish dry-Wellness core grain free turkey: Lisa Freeman - EON-390201
Attachments: 2068094-report.pdf; 2068094-attachments.zip

A PFR Report has been received and Related PFR Event [EON-390201] has been created in the EON System.

A "PDF" report by name "2068094-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 "2068094-attachments.zip" and is attached to this email notification.

Below is the summary of the report:

EON Key: EON-390201

ICSR #: 2068094

EON Title: Related PFR Event created for Wellness Core grain-free ocean fish dry Wellness core grain free turkey chicken liver & turkey liver canned Wellness Hearty Cuts grain-free in gravy chicken and turkey recipe; 2068094

AE Date	01/15/2019	Number Fed/Exposed	6
Best By Date		Number Reacted	4
Animal Species	Dog	Outcome to Date	Died Euthanized
Breed	Bulldog		
Age	B6 Years		
District Involved	PFR-New England DO		

Product information

Individual Case Safety Report Number: 2068094

Product Group: Pet Food

Product Name: Wellness Core grain-free ocean fish dry Wellness core grain free turkey, chicken liver & turkey liver canned Wellness Hearty Cuts grain-free in gravy chicken and turkey recipe

Description: DCM and CHF diagnosed 1/15/19 Eating BEG diet. 6 dogs being fed this diet - so far, 4 have been

diagnosed with DCM/ARVC. One other had a normal NT-proBNP and 2 others will be tested Diet has been changed to Royal Canin Early Cardiac and we will recheck in 3 months. I have sample of dry and canned food

B6

Owners elected humane euthanasia due to worsening heart failure. Samples of heart muscle were submitted to FDA from rDVM.

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: Died Euthanized

Number of Animals Treated With Product: 6

Number of Animals Reacted With Product: 4

Product Name	Lot Number or ID	Best By Date
Wellness Core grain-free ocean fish dry Wellness core grain free turkey, chicken liver & turkey liver canned Wellness Hearty Cuts grain-free in gravy chicken and turkey recipe		

This report is linked to:

Initial EON Event Key: EON-380742

Initial ICSR: 2063133

Sender information

Lisa Freeman

200 Westboro Rd

North Grafton, MA 01536

USA

Owner information

B6

USA

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

<https://eon.fda.gov/eon//browse/EON-390201>

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

<https://eon.fda.gov/eon//EventCustomDetailsAction!viewReport.jspx?decorator=none&e=0&issueType=10100&issueId=407473&parentIssueTypeId=12>

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Report Details - EON-390201

ICSR:	2068094
Type Of Submission:	Followup
Report Version:	FPSR.FDA.PETF.V.V1
Type Of Report:	Adverse Event (a symptom, reaction or disease associated with the product)
Reporting Type:	Voluntary
Report Submission Date:	2019-06-11 14:32:32 EDT
Initial Report Date:	02/25/2019
Parent ICSR:	2063133
Follow-up Report to FDA Request:	Yes

Reported Problem:	Problem Description:	DCM and CHF diagnosed 1/15/19 Eating BEG diet. 6 dogs being fed this diet - so far, 4 have been diagnosed with DCM/ARVC. One other had a normal NT-proBNP and 2 others will be tested Diet has been changed to Royal Canin Early Cardiac and we will recheck in 3 months. I have sample of dry and canned food. B6 Owners elected humane euthanasia due to worsening heart failure. Samples of heart muscle were submitted to FDA from rDVM.
	Date Problem Started:	01/15/2019
	Concurrent Medical Problem:	Yes
	Pre Existing Conditions:	B6
	Outcome to Date:	Died Euthanized
	Date of Death:	B6

Product Information:	Product Name:	Wellness Core grain-free ocean fish dry Wellness core grain free turkey, chicken liver & turkey liver canned Wellness Hearty Cuts grain-free in gravy chicken and turkey recipe
	Product Type:	Pet Food
	Lot Number:	
	Product Use Information:	Description: Please see diet history
	Manufacturer /Distributor Information:	
	Purchase Location Information:	

Animal Information:	Name:	B6
	Type Of Species:	Dog
	Type Of Breed:	Bulldog
	Gender:	Female
	Reproductive Status:	Neutered
	Weight:	19.8 Kilogram
	Age:	B6 Years
	Assessment of Prior Health:	Excellent
	Number of Animals Given the Product:	6
	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:	Follow-up med records pt 2.pdf		
	Description:	Med records		
	Type:	Medical Records		
	Attachment:	Follow-up med records pt 1.pdf		
	Description:	Med records		
	Type:	Medical Records		

Client: **B6**
Patient:

Chem 21 - 5/8/2019



Tufts Cummings School Of Veterinary Medicine

200 Westboro Road
North Grafton, MA 01536

DUPLICATE

Name/DOB: **B6** Sex: SF Provider: **B6**
Patient ID: Age: 8 Order Location: V320559: Investigation into
Phone number: Species: Canine Sample ID: 1905080053
Collection Date: 5/8/2019 12:31 PM Breed:
Approval date: 5/8/2019 1:07 PM

Research Chemistry Profile - Small Animal (Cobas)

		Ref. Range/Females
DNOYES	B6	
Glucose		67-135 mg/dL
Urea		8-30 mg/dL
Creatinine		0.6-2.0 mg/dL
Phosphorus		2.6-7.2 mg/dL
Calcium 2		9.4-11.3 mg/dL
Magnesium 2+		1.8-3.0 mEq/L
Total Protein		5.5-7.8 g/dL
Albumin		2.8-4.0 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		8.0-19.0
NA/K		29-40
Total Bilirubin		0.10-0.30 mg/dL
Alkaline Phosphatase		12-127 U/L
GGT		0-10 U/L
ALT	14-86 U/L	
AST	9-54 U/L	
Creatine Kinase	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	

Sample ID: 1905080053/1
END OF REPORT (Final)

Reviewed by: _____

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

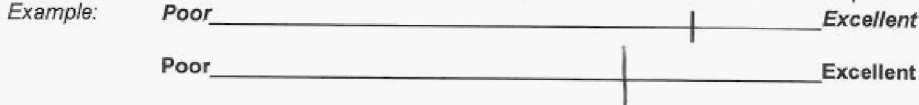
Diet hx: **B6**

B6

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

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

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



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

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

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

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

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

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

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

	Brand/Concentration	Amount per day
Taurine <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Now / 500	2x
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
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

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

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

B6 NT-proBNP 5/8/2019

IDEXX Reference Laboratories

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

Client: **B6**
Patient: **B6**
Species: CANINE
Breed: ENGLISH_BULLDOG
Gender: FEMALE SPAYED
Age: 0Y

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

B6
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	HIGH		B6

Comments

B6

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

Client: **B6**
Patient:

Troponin **B6**



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



Website User ID: **B6**

GI Lab Assigned Clinic ID: 23523

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

Phone: 508 887 4696
Fax:
Animal Name: **B6**
Owner Name:
Species: Canine
Date Received: May 30, 2019

Tufts Cummings School of Vet Med -
Cardiology/Nutrition Tracking Number:
437321

GI Lab Accession: **B6**

Test	Result	Reference Interval	Assay Date
Ultra-Sensitive Troponin I-Estima	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

Discharge Instructions

Patient

Name: B6

Species: Canine

Brown/White Female (Spayed) English

Bulldog

Birthdate: B6

Owner

Name: B6

Address: B6

Patient ID: B6

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

B6

Cardiology Resident:

B6

Cardiology Technician:

B6

Student: B6 V20

Date: B6

Diagnoses: Dilated cardiomyopathy (DCM); history of active congestive heart failure**Clinical Findings:**

Thank you for bringing B6 in today for a three month recheck as a part of the DCM study. B6 has been doing well at home and has had good energy, though she has been slightly stubborn about taking her medications.

During B6 appointment today, we performed a recheck echocardiogram (ultrasound of the heart). B6 still has significant structural and functional changes to her heart, but these changes do not appear to have worsened since her last echocardiogram in January. We also assessed B6 heart rhythm using electrocardiogram (EKG) and did not see any cardiac arrhythmias. We drew blood samples from B6 as part of the DCM study, and her kidney values are still perfect. We would therefore like to increase her enalapril to twice daily (see below). B6 is also on a relatively conservative dose of furosemide, so you should have no hesitation to give an extra dose if needed for increased breathing rate or effort.

Monitoring at Home:

- Please continue to monitor B6 breathing rate and effort at home, ideally during sleep or at a time of rest. The doses of drugs will be adjusted based on the breathing rate and effort.
- In general, most dogs with heart failure that is well controlled have a breathing rate at rest of less than 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 dose of B6* if difficulty breathing is not improved by within 30-60 minutes after giving extra B6 then we recommend that a recheck exam be scheduled and/or that your dog be evaluated by an emergency clinic.

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

Diet Suggestions:

Please continue to feed B6 the Royal Canin Cardiac diet.

Exercise Recommendations:

B6 may continue her normal exercise routine at home.

Recommended Medications:

B6

Recheck Visits: We would like to see B6 for a recheck appointment in 3 months. At this visit we will want to check breathing effort and heart function, do a blood test for the study, and recheck an echocardiogram. B6 will contact you to schedule this appointment.

Thank you for entrusting us with B6 care. She is such a sweet 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.

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

Patient ID: **B6**

B6 Canine
years Old Female (Spayed) English Bulldog
Brown/White

Cardiology Appointment Report
ENROLLED IN DCM DIET STUDY

Date: **B6**

Attending Cardiologist:

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

B6

Cardiology Resident:

B6

Cardiology Technician:

B6

Student: **B6**, V20; **B6**, V20

Presenting Complaint: 3 month recheck DCM study, history of DCM and CHF

Concurrent Diseases:

None

General Medical History:

CHF diagnosed 1/16/19, BNP **B6** O reports good energy at home, but slightly decreased appetite.
Can be difficult to medicate. Was previously on grain-free diet.

Diet and Supplements:

NOW Taurine 500mg BID
RC early cardiac diet

Cardiovascular History:

Prior CHF diagnosis? yes
Prior heart murmur? n
Prior ATE? n
Prior arrhythmia? n
Monitoring respiratory rate and effort at home? y- usually in the 30s
Cough? n
Shortness of breath or difficulty breathing? y (one day)

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

Current Medications Pertinent to CV System:

B6

Muscle condition:

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

Cardiovascular Physical Exam:

Murmur Grade:

- None/difficult to auscult
- 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
- Bradycardia

- Sinus arrhythmia
- Premature beats

- 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:

Suspected DCM based on previous echo findings

Differential Diagnoses:

DCM - diet-associated vs. primary

Diagnostic plan:

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

Echocardiogram Findings:

B6

Assessment and recommendations:

Patient has been doing well at home, but echocardiogram still reveals significant structural and functional changes to her heart. Measurements are stable overall. If renal values are stable then recommend

increasing enalapril to BID. Continue other cardiac medications at current doses. **B6** dose is relatively low so owners were instructed to have no hesitation to give extra doses as necessary and let us know. Recheck in 3 months for blood work/echo/DCM study, or sooner if clinical signs occur such as increased RR/RE, cough, collapse, or exercise intolerance.

Final Diagnosis:

DCM; history of L-CHF

Heart Failure Classification Score:

ISACHC Classification:

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

ACVIM Classification:

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

M-Mode

IVSd	B6	cm
LVIDd		cm
LVPWd		cm
IVSs		cm
LVIDs		cm
LVPWs		cm
EDV(Teich)		ml
ESV(Teich)		ml
EF(Teich)		%
%FS		%
SV(Teich)		ml
Max LA		cm
Ao Diam		cm
LA Diam		cm
LA/Ao		
TAPSE	cm	
EPSS	cm	

M-Mode Normalized

IVSdN	B6	{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}	

2D

SA LA	B6	cm
Ao Diam		cm

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

B6

cm
cm
cm
ml
cm
cm
cm
ml
%
%
ml

Doppler

MR Vmax
MR maxPG
MVE Vel
MV DecT
MV Dec Slope
MVA Vel
MVE/A Ratio
E'
E/E'
A'
AV Vmax
AV maxPG
PV Vmax
PV maxPG

B6

m/s
mmHg
m/s
ms
m/s
m/s

m/s

m/s
m/s
mmHg
m/s
mmHg

From: PFR Event <pfpreventcreation@fda.hhs.gov>
To: Cleary, Michael *; HQ Pet Food Report Notification; B6
Sent: 2/27/2019 7:00:50 PM
Subject: CANIDAE- ALL LIFE STAGES-CHICKEN MEAL & RICE FORMULA--DRY
DOG FOOD: Lisa Freeman - EON-381040
Attachments: 2063286-report.pdf; 2063286-attachments.zip

A PFR Report has been received and PFR Event [EON-381040] has been created in the EON System.

A "PDF" report by name "2063286-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 "2063286-attachments.zip" and is attached to this email notification.

Below is the summary of the report:

EON Key: EON-381040

ICSR #: 2063286

EON Title: PFR Event created for CANIDAE® ALL LIFE STAGES CHICKEN MEAL & RICE FORMULA DRY DOG FOOD; 2063286

AE Date	02/25/2019	Number Fed/Exposed	3
Best By Date		Number Reacted	1
Animal Species	Dog	Outcome to Date	Stable
Breed	Doberman Pinscher		
Age	B6 Years		
District Involved	PFR-New England DO		

Product information

Individual Case Safety Report Number: 2063286

Product Group: Pet Food

Product Name: CANIDAE® ALL LIFE STAGES CHICKEN MEAL & RICE FORMULA DRY DOG FOOD

Description: DCM and CHF diagnosed 2/25/19. Eating BEG diet. 2 other dogs in household will be screened. Will change diet on B6 and reassess in 3 months. Just being discharged today. Taurine and troponin pending

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
CANIDAE® ALL LIFE STAGES CHICKEN MEAL & RICE FORMULA DRY DOG FOOD		

Sender information

Lisa Freeman
200 Westboro Rd
North Grafton, MA 01536
USA

Owner information

B6

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

<https://eon.fda.gov/eon//browse/EON-381040>

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=398049>

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-381040		
ICSR:	2063286	
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:	2019-02-27 13:49:14 EST	
Reported Problem:	Problem Description: DCM and CHF diagnosed 2/25/19. Eating BEG diet. 2 other dogs in household will be screened. Will change diet on [B6] and reassess in 3 months. Just being discharged today. Taurine and troponin pending	
	Date Problem Started: 02/25/2019	
	Concurrent Medical Problem: Yes	
	Pre Existing Conditions: [B6]	
	Outcome to Date: Stable	
Product Information:	Product Name: CANIDAE® ALL LIFE STAGES CHICKEN MEAL & RICE FORMULA DRY DOG FOOD	
	Product Type: Pet Food	
	Lot Number:	
	Product Use Information: Description: Fed this diet most of his life	
	Manufacturer /Distributor Information:	
	Purchase Location Information:	
Animal Information:	Name: [B6]	
	Type Of Species: Dog	
	Type Of Breed: Doberman Pinscher	
	Gender: Male	
	Reproductive Status: Intact	
	Weight: 60 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]		
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: [B6]

Patient: [B6]
Breed: Doberman Pinscher
DOB: [B6]

Species: Canine
Sex: Male

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

Referring Information

[B6]

Client: [B6]
Patient: [B6]

Initial Complaint:

Emergency

SOAP Text [B6] 9:28PM - [B6]

Subjective

NEW VISIT (ER)

Doctor: [B6]
Presenting complaint: [B6]

HISTORY:

[B6]

Client:
Patient:

B6

SOAP approved (DVM to sign):

Initial Complaint:

Emergency

SOAP Text 4:46PM -

Subjective

NEW VISIT (ER)

Doctor:

Student:

Client: **B6**
Patient:

Presenting complaint: Suspect CHF
Referral visit? Yes
Diagnostics completed prior to visit: 3 view CXR (in e-mail)

HISTORY:

Signalment: 3yo MI Doberman Pinscher

Current history: Presenting today for suspect CHF after visiting rDVM earlier today - according to O, 3 view CXR's showed evidence of pleural effusion. They were referred to Tufts at this time. O reports that **B6** began coughing last Thursday **B6**

B6

ASSESSMENT:

- A1: Increased respiratory rate and effort r/o: congestive heart failure (DCM vs other) vs pneumonia
- A2: Tachycardic r/o: CHF vs stress
- A3: Suspect acral lick dermatitis/granulomas on distal limbs

PLAN:

- P1. NOVA
- P2. TFAST
- P3. O2 Cage

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

B6

B6

new diet

Diagnostics completed:

NOVA: HCT **B6** Lact **B6**

TFAST: B-lines, pleural effusion

Diagnostics pending:

CBC/Chem associated with DCM diet trial study

Client communication: strongly suspect heart failure secondary to DCM. discussed hospitalization in O2 to get under control. discussed diet study with them. lifelong medications, asked about cardiology consultation.

Deposit & estimate status: **B6**

Resuscitation code (if admitting to ICU): red

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

Addendum:

Starting at 2:32am, P started having atrial fibrillation >200bpm on telemetry, consistent with auscultation and pulse deficits on physical examination. P clinically well despite cardiac rhythm. rate slowed down for a period of time until re-starting >200bpm at 3:17am where it was sustained. At 4am started 45mg regular (not ER) **B6** PO q8. Converted to NSR at 6:30 am and discontinued further dilt tx pending cardiology assessment.

B6

SOAP Text Feb 26 2019 7:18AM - **B6**

History:

4 y/o IM Doberman Pinscher presented yesterday to the Tufts ER for suspect CHF after visiting rDVM-3 view CXB's showed evidence of pulmonary edema/pleural effusion. O reports that **B6** began coughing last Thursday **B6**

abx). The last dose of antibiotics was given 2/24. **B6** was having increased respiratory effort as well as difficulty getting comfortable while laying down.

Overnight: **B6** at ~5:30PM. Starting at 2:32am, P started having atrial fibrillation >200bpm on telemetry, consistent with auscultation and pulse deficits on physical examination. P clinically well despite cardiac rhythm. Rate slowed down for a period of time until re-starting >200bpm at 3:17am where it was sustained. At 4am started 45mg regular (not ER) **B6** PO q8. Converted to **B6** at 6:30 am and discontinued further **B6** tx pending cardiology assessment.

Subjective:

T: 100.4 (Aural)

HR: 120

Client:
Patient:

B6

RR: 16, sleeping, no increased effort

Wt: 60kg

MM: pink/moist, CRT<2

Mentation: QAR, woke up from sleeping

Hydration: Overhydrated

Overall impression since arrival or since last exam: Stable to improve since presentation. The RR and RE improved overnight and **B6** appears more comfortable this morning. He had new onset atrial fibrillation and converted back to sinus rhythm which is quite unusual but is still in sinus rhythm this morning.

Appetite: No interest in food since arrival

Diet History: Canidae All Life Stages dry food (grain free) - has been eating this for 1.5 - 2 years.

Objective:

B6

Diagnostics:

2/25/19:

B6

Assessments

A1: CHF secondary to DCM r/o diet related vs. genetic

A2: Atrial fibrillation secondary A1

A4: Granulomatous lesions on distal limbs: secondary to suspected acral lick dermatitis

Plan

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

P: Echocardiogram
P: Repeat blood chemistry

P: **B6**
P:
P:

P: Holter monitoring
P: Consider repeat radiographs tomorrow 2/27/19
P: Transition to Cardio safe diet TGH

Resuscitation code (if admitting to ICU): red

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

Addendum: added 400mg **B6** PO BID at 12PM and **B6** mg PO BID

SOAP Text Feb 27 2019 7:48AM **B6**

History:

4 y/o IM Doberman Pinscher presented yesterday to the Tufts ER for suspect CHF after visiting rDVM-3 view CXR's showed evidence of pulmonary edema/pleural effusion. O reports that **B6** began coughing last Thursday **B6** was unsure of name/dose of abx). The last dose of antibiotics was given 2/24. **B6** was having increased respiratory effort as well as difficulty getting comfortable while laying down.

-2/25/19 (overnight) P given **B6** at ~5:30PM. Starting at 2:32am, P started having atrial fibrillation >200bpm on telemetry, consistent with auscultation and pulse deficits on physical examination. P clinically well despite cardiac rhythm. Rate slowed down for a period of time until re-starting >200bpm at 3:17am where it was sustained. At 4am started 45mg regular (not ER) **B6** PO q8. Converted to **B6** at 6:30 am and discontinued further **B6** pending cardiology assessment.

-2/26/19 (overnight): P remained stable overnight, converted to sinus rhythm ~11PM. No interest in food overnight, eager to drink water when bowl placed in front of him.

Subjective:

T: 100.6 (Aural)
HR: 124
RR: 16, sleeping, no increased effort
Wt: 60kg
MM: pink/moist, CRT<2

Mentation: QAR, woke up from sleeping
Hydration: Euhydrated

Overall impression since arrival or since last exam: Stable to improved since presentation. The RR and RE have remained stable since removed from oxygen. No atrial fibrillation since 11PM and normal sinus rhythm this morning.
Appetite: No interest in food since arrival
Diet History: Canidae All Life Stages dry food (grain free) - has been eating this for 1.5 - 2 years.

Objective:

B6

Client: **B6**
Patient:

B6

Diagnostics:

2/25/19:

B6

Assessments

A1: CHF secondary to DCM r/o diet related vs. genetic

A2: Atrial fibrillation secondary A1

A4: Granulomatous lesions on distal limbs: secondary to suspected acral lick dermatitis

Plan

P: Repeat blood chemistry

P:
P:
P:
P:
P:
B6

P: Holter monitoring

P: Repeat radiographs today 2/27/19

P: Transition to Cardio safe diet TGH

Resuscitation code (if admitting to ICU): red

SOAP completed by: **B6**

SOAP reviewed by:

Client:
Patient:

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:	Doberman Pinscher
Sex:	Male
Age:	B6 years Old

Lab Results Report

None **B6** 12:19:34 AM **Accession ID: B6**

Test	Results	Reference Range	Units
Anaplasma (4dx)	B6	0 - 0	
Ehrlichia (4dx)		0 - 0	
Heartworm (4DX) - FHSA		0 - 0	
Lyme (4dx)*		0 - 0	

None 2/25/2019 4:52:25 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



10/50

B6

B6

Printed Wednesday, February 27, 2019

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

GAP		0 - 0	mmol/L
CA/MG		0 - 0	mol/mol
BEecf		0 - 0	mmol/L
BEb		0 - 0	mmol/L
A		0 - 0	mmol/L
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

B6

None 2/25/2019 4:59:11 PM Accession ID: **B6**

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

None 2/26/2019 9:37:18 AM Accession ID: **B6**

Test	Results	Reference Range	Units
GLUCOSE		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

B6

None 2/26/2019 10:10:37 AM Accession ID: **B6**



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

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

None 2/27/2019 10:46:18 AM Accession ID: **B6**

Test	Results	Reference Range	Units
GLUCOSE		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	B6	140 - 150	mEq/L
CHLORIDE		106 - 116	mEq/L
86 Result(s) verified			
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

None 2/27/2019 10:46:09 AM Accession ID: **B6**

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

None 2/27/2019 11:17:25 AM Accession ID: **B6**

Test	Results	Reference Range	Units
GLUCOSE		67 - 135	mg/dL
UREA		8 - 30	mg/dL
CREATININE		0.6 - 2	mg/dL
PHOSPHORUS	B6	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



Client: **B6**

Patient: **B6**

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
87 Result(s) verified			
POTASSIUM		3.7 - 5.4	mEq/L
tCO2 (BICARB)		14 - 28	mEq/L
AGAP		8 - 19	
NA/K		29 - 40	
T BILIRUBIN	B6	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



13/50

B6

B6

Printed Wednesday, February 27, 2019

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

CBC/Chem - 2/25/2019



Tufts Cummings School Of Veterinary Medicine

200 Westboro Road
North Grafton, MA 01536

DUPLICATE

Name/DOB:	B6	Sex:	M	Provider:	B6
Patient ID:	B6	Age:	3	Order Location:	B6
Phone number:		Species:	Canine	Investigation into	
Collection Date:	2/25/2019 6:09 PM	Breed:	Doberman Pinscher	Sample ID:	1902250140
Approval date:	2/25/2019 7:13 PM				

CBC, Comprehensive, Sm Animal (Research)

Parameter	Value	Ref. Range/Males
SMACHUNSKI	B6	
WBC (ADVIA)	B6	4.40-15.10 K/uL
RBC (Advia)	B6	5.80-8.50 M/uL
Hemoglobin (ADVIA)	B6	13.3-20.5 g/dL
Hematocrit (Advia)	B6	39-55 %
MCV (ADVIA)	B6	64.5-77.5 fL
MCH (ADVIA)	B6	21.3-25.9 pg
CHCM	B6	
MCHC (ADVIA)	B6	31.9-34.3 g/dL
RDW (ADVIA)	B6	11.9-15.2
Platelet Count (Advia)	B6	173-486 K/uL
02/25/19 6:51 PM	B6	
Mean Platelet Volume (Advia)	B6	8.29-13.20 fl
02/25/19 6:28 PM	B6	
Platelet Crit	B6	0.129-0.403 %
02/25/19 6:28 PM	B6	
Platelet Crit is invalid when clumped platelets are present. Interpretation of PltCt is unclear in species other than canines.		
PDW	B6	
Reticulocyte Count (Advia)	B6	0.20-1.60 %
Absolute Reticulocyte Count (Advia)	B6	14.7-113.7 K/uL
CHr	B6	
MCVr	B6	

Microscopic Exam of Blood Smear (Advia)

Parameter	Value	Ref. Range/Males
SMACHUNSKI	B6	
Seg Neuts (%)	B6	43-86 %
Lymphocytes (%)	B6	7-47 %
Monocytes (%)	B6	1-15 %
Nucleated RBC	B6	0-1 /100 WBC
02/25/19 6:28 PM	B6	
Seg Neutrophils (Abs) Advia	B6	2.800-11.500 K/uL
Lymphs (Abs) Advia	B6	1.00-4.80 K/uL
Mono (Abs) Advia	B6	0.10-1.50 K/uL
WBC Morphology	B6	
Polychromasia	B6	

Research Chemistry Profile - Small Animal (Cobas)

Sample ID: 1902250140/1
This report continues... (Final)

Reviewed by: _____

Client: **B6**
Patient:

CBC/Chem - 2/25/2019



Tufts Cummings School Of Veterinary Medicine

200 Westboro Road
North Grafton, MA 01536

DUPLICATE

Name/DOB: **B6** Sex: M Provider: **B6**
Patient ID: **B6** Age: 3 Order Location: **B6** Investigation into
Phone number: Species: Canine Sample ID: 1902250140
Collection Date: 2/25/2019 6:09 PM Breed: Doberman Pinscher
Approval date: 2/25/2019 7:13 PM

Research Chemistry Profile - Small Animal (Cobas) (cont'd)

		Ref. Range/Males
SMACHUNSKI	B6	
Glucose		67-135 mg/dL
Urea		8-30 mg/dL
Creatinine		0.6-2.0 mg/dL
Phosphorus		2.6-7.2 mg/dL
Calcium 2		9.4-11.3 mg/dL
Magnesium 2+		1.8-3.0 mEq/L
Total Protein		5.5-7.8 g/dL
Albumin		2.8-4.0 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		8.0-19.0
NA/K		29-40
Total Bilirubin		0.10-0.30 mg/dL
Alkaline Phosphatase		12-127 U/L
GGT		0-10 U/L
ALT	14-86 U/L	
AST	9-54 U/L	
Creatine Kinase	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	

Sample ID: 1902250140/2
REPRINT: Orig. printing on 2/25/2019 (Final)

Reviewed by: _____
Page 2

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

IDEXX BNP - 2/25/2019

IDEXX Reference Laboratories

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

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

Date: 02/25/2019
Requisition #: 1A
Accession #: **B6**
Ordered by: **B6**

IDEXX VetConnect 1-888-433-9987
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

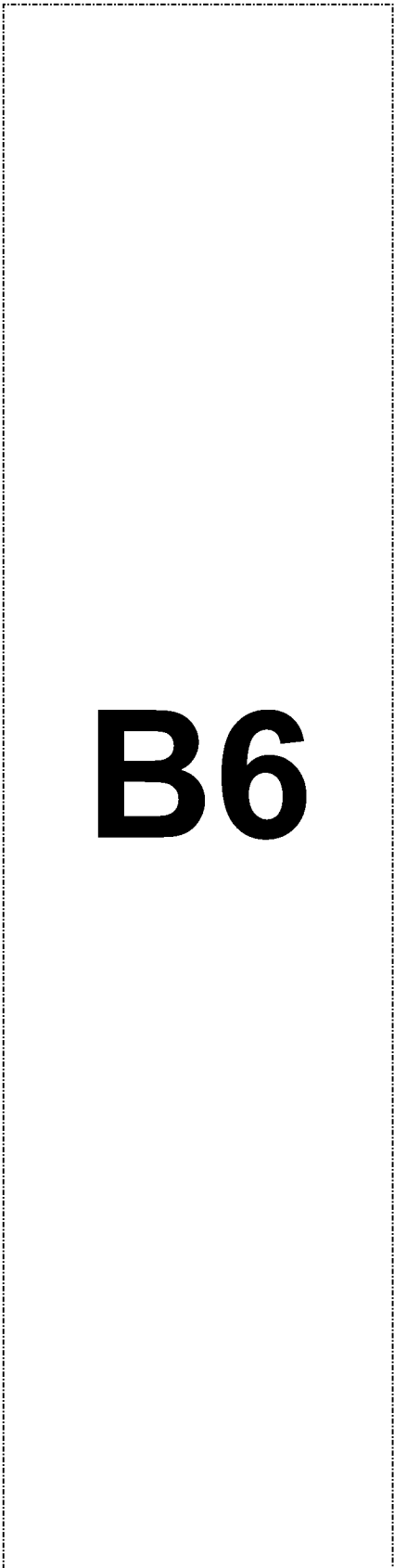
1. **B6**

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

Client: **B6**
Patient:

Vitals Results

B6	10:00:27 PM	Heart Rate (/min)
	10:00:29 PM	Temperature (F)
	10:00:30 PM	Weight (kg)
2/25/2019	4:46:45 PM	Heart Rate (/min)
2/25/2019	4:46:46 PM	Temperature (F)
2/25/2019	4:46:47 PM	Respiratory Rate
2/25/2019	4:58:34 PM	Lasix treatment note
2/25/2019	5:23:00 PM	Lasix treatment note
2/25/2019	6:19:31 PM	FiO2 (%)
2/25/2019	6:19:38 PM	Respiratory Rate
2/25/2019	7:34:46 PM	Amount eaten
2/25/2019	8:11:13 PM	FiO2 (%)
2/25/2019	8:11:35 PM	Cardiac rhythm
2/25/2019	8:11:36 PM	Heart Rate (/min)
2/25/2019	8:11:47 PM	Respiratory Rate
2/25/2019	8:36:39 PM	FiO2 (%)
2/25/2019	8:36:47 PM	Respiratory Rate
2/25/2019	9:31:47 PM	FiO2 (%)
2/25/2019	9:32:00 PM	Eliminations
2/25/2019	9:32:13 PM	Cardiac rhythm
2/25/2019	9:32:14 PM	Heart Rate (/min)
2/25/2019	9:32:36 PM	Respiratory Rate
2/25/2019	9:40:39 PM	Lasix treatment note
2/25/2019	9:40:47 PM	Catheter Assessment
2/25/2019	10:49:51 PM	Cardiac rhythm
2/25/2019	10:49:52 PM	Heart Rate (/min)
2/25/2019	10:50:28 PM	Respiratory Rate
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2/25/2019	11:37:54 PM	Heart Rate (/min)
2/25/2019	11:38:31 PM	FiO2 (%)
2/25/2019	11:38:38 PM	Respiratory Rate
2/26/2019	12:48:55 AM	FiO2 (%)
2/26/2019	12:49:03 AM	Respiratory Rate
2/26/2019	12:49:20 AM	Cardiac rhythm
2/26/2019	12:49:21 AM	Heart Rate (/min)
2/26/2019	1:04:45 AM	Lasix treatment note
2/26/2019	1:04:55 AM	Catheter Assessment



Client: **B6**
Patient:

Vitals Results

2/26/2019 1:21:13 AM Eliminations
2/26/2019 1:21:57 AM Eliminations
2/26/2019 1:22:08 AM Cardiac rhythm
2/26/2019 1:22:09 AM Heart Rate (/min)
2/26/2019 1:23:39 AM FiO2 (%)
2/26/2019 1:23:48 AM Respiratory Rate
2/26/2019 2:19:46 AM Cardiac rhythm
2/26/2019 2:19:47 AM Heart Rate (/min)
2/26/2019 2:21:02 AM FiO2 (%)
2/26/2019 2:21:09 AM Respiratory Rate
2/26/2019 3:27:16 AM Respiratory Rate
2/26/2019 3:27:34 AM Cardiac rhythm
2/26/2019 3:27:35 AM Heart Rate (/min)
2/26/2019 3:27:56 AM FiO2 (%)
2/26/2019 3:52:05 AM Eliminations
2/26/2019 4:34:17 AM FiO2 (%)
2/26/2019 4:34:34 AM Cardiac rhythm
2/26/2019 4:34:35 AM Heart Rate (/min)
2/26/2019 4:34:54 AM Respiratory Rate
2/26/2019 5:23:41 AM Lasix treatment note
2/26/2019 5:25:58 AM Amount eaten
2/26/2019 5:26:39 AM FiO2 (%)
2/26/2019 5:26:47 AM Catheter Assessment
2/26/2019 5:27:00 AM Eliminations
2/26/2019 5:27:30 AM Respiratory Rate
2/26/2019 5:28:36 AM Cardiac rhythm
2/26/2019 5:28:37 AM Heart Rate (/min)
2/26/2019 6:33:22 AM FiO2 (%)
2/26/2019 6:33:31 AM Cardiac rhythm
2/26/2019 6:33:32 AM Heart Rate (/min)
2/26/2019 6:33:44 AM Respiratory Rate
2/26/2019 6:58:26 AM FiO2 (%)
2/26/2019 6:58:41 AM Respiratory Rate
2/26/2019 7:05:37 AM Heart Rate (/min)
2/26/2019 7:06:38 AM Cardiac rhythm
2/26/2019 7:06:39 AM Heart Rate (/min)
2/26/2019 7:10:40 AM Temperature (F)
2/26/2019 9:07:00 AM Cardiac rhythm
2/26/2019 9:07:01 AM Heart Rate (/min)
2/26/2019 9:07:59 AM Respiratory Rate
2/26/2019 9:08:42 AM FiO2 (%)

B6

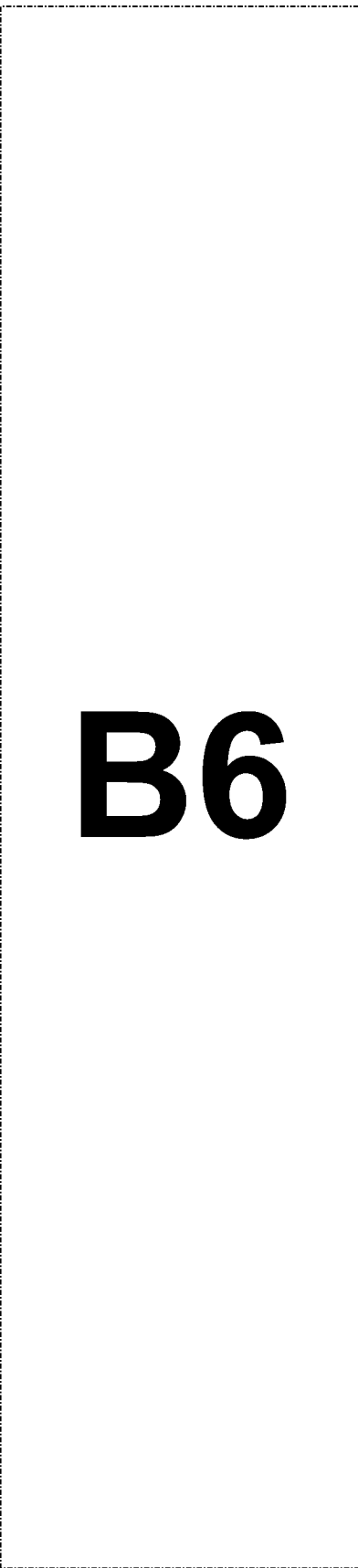
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Patient:

Vitals Results

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2/26/2019 9:36:40 AM FiO2 (%)
2/26/2019 10:08:22 AM Cardiac rhythm
2/26/2019 10:08:23 AM Heart Rate (/min)
2/26/2019 10:36:31 AM Cardiac rhythm

2/26/2019 10:36:58 AM Heart Rate (/min)
2/26/2019 11:09:05 AM Cardiac rhythm
2/26/2019 11:09:06 AM Heart Rate (/min)
2/26/2019 11:09:54 AM FiO2 (%)
2/26/2019 11:10:13 AM FiO2 (%)
2/26/2019 12:19:00 PM Cardiac rhythm
2/26/2019 12:19:01 PM Heart Rate (/min)
2/26/2019 12:19:17 PM FiO2 (%)
2/26/2019 1:05:19 PM Cardiac rhythm
2/26/2019 1:05:20 PM Heart Rate (/min)
2/26/2019 1:05:29 PM FiO2 (%)
2/26/2019 1:15:27 PM Respiratory Rate
2/26/2019 1:41:39 PM FiO2 (%)
2/26/2019 1:41:52 PM Catheter Assessment
2/26/2019 1:42:48 PM Respiratory Rate
2/26/2019 1:56:11 PM Cardiac rhythm
2/26/2019 1:56:12 PM Heart Rate (/min)
2/26/2019 1:56:29 PM Eliminations
2/26/2019 2:47:23 PM FiO2 (%)
2/26/2019 2:47:35 PM Cardiac rhythm
2/26/2019 2:47:36 PM Heart Rate (/min)
2/26/2019 2:47:58 PM Respiratory Rate
2/26/2019 3:38:55 PM FiO2 (%)
2/26/2019 3:39:03 PM Cardiac rhythm

2/26/2019 3:39:04 PM Heart Rate (/min)
2/26/2019 3:40:32 PM Respiratory Rate
2/26/2019 4:08:34 PM Lasix treatment note
2/26/2019 4:56:17 PM Cardiac rhythm
2/26/2019 4:56:18 PM Heart Rate (/min)
2/26/2019 4:56:29 PM Respiratory Rate
2/26/2019 5:07:18 PM Catheter Assessment



Client:
Patient:

B6

Vitals Results

2/26/2019 5:28:28 PM	Cardiac rhythm
2/26/2019 5:28:29 PM	Heart Rate (/min)
2/26/2019 5:28:53 PM	Amount eaten
2/26/2019 5:29:10 PM	Respiratory Rate
2/26/2019 5:36:02 PM	Eliminations
2/26/2019 7:03:18 PM	Cardiac rhythm
2/26/2019 7:03:19 PM	Heart Rate (/min)
2/26/2019 7:03:59 PM	Respiratory Rate
2/26/2019 7:28:32 PM	Cardiac rhythm
2/26/2019 7:28:33 PM	Heart Rate (/min)
2/26/2019 7:28:47 PM	Respiratory Rate
2/26/2019 8:40:39 PM	Cardiac rhythm
2/26/2019 8:40:40 PM	Heart Rate (/min)
2/26/2019 8:41:22 PM	Respiratory Rate
2/26/2019 9:25:13 PM	Cardiac rhythm
2/26/2019 9:25:14 PM	Heart Rate (/min)
2/26/2019 9:25:24 PM	Catheter Assessment
2/26/2019 9:25:35 PM	Respiratory Rate
2/26/2019 10:54:11 PM	Cardiac rhythm
2/26/2019 10:54:12 PM	Heart Rate (/min)
2/26/2019 10:55:00 PM	Respiratory Rate
2/26/2019 11:37:22 PM	Cardiac rhythm
2/26/2019 11:37:23 PM	Heart Rate (/min)
2/26/2019 11:37:58 PM	Respiratory Rate
2/26/2019 11:52:29 PM	Lasix treatment note
2/27/2019 12:36:51 AM	Cardiac rhythm
2/27/2019 12:36:52 AM	Heart Rate (/min)
2/27/2019 12:37:38 AM	Respiratory Rate
2/27/2019 1:11:31 AM	Catheter Assessment
2/27/2019 1:16:20 AM	Eliminations
2/27/2019 1:16:29 AM	Respiratory Rate
2/27/2019 1:35:41 AM	Cardiac rhythm
2/27/2019 1:35:42 AM	Heart Rate (/min)
2/27/2019 2:57:22 AM	Respiratory Rate
2/27/2019 2:58:12 AM	Cardiac rhythm
2/27/2019 2:58:13 AM	Heart Rate (/min)
2/27/2019 3:52:42 AM	Cardiac rhythm
2/27/2019 3:52:43 AM	Heart Rate (/min)
2/27/2019 3:52:55 AM	Respiratory Rate
2/27/2019 4:50:20 AM	Cardiac rhythm

B6

Client: **B6**
Patient:

Vitals Results

2/27/2019 4:50:21 AM Heart Rate (/min)
2/27/2019 4:50:35 AM Respiratory Rate
2/27/2019 5:48:38 AM Catheter Assessment
2/27/2019 5:48:57 AM Amount eaten
2/27/2019 5:49:04 AM Eliminations
2/27/2019 5:49:11 AM Cardiac rhythm
2/27/2019 5:49:12 AM Heart Rate (/min)
2/27/2019 5:49:50 AM Respiratory Rate
2/27/2019 6:32:36 AM Cardiac rhythm
2/27/2019 6:32:37 AM Heart Rate (/min)
2/27/2019 6:32:47 AM Respiratory Rate
2/27/2019 6:33:46 AM Eliminations
2/27/2019 7:17:14 AM Cardiac rhythm
2/27/2019 7:17:15 AM Heart Rate (/min)
2/27/2019 7:18:38 AM Respiratory Rate
2/27/2019 7:40:44 AM Lasix treatment note

2/27/2019 9:08:24 AM Cardiac rhythm
2/27/2019 9:08:25 AM Heart Rate (/min)
2/27/2019 9:08:38 AM Eliminations
2/27/2019 9:09:00 AM Catheter Assessment
2/27/2019 9:19:53 AM Respiratory Rate
2/27/2019 10:15:37 AM Cardiac rhythm
2/27/2019 10:15:38 AM Heart Rate (/min)
2/27/2019 10:16:40 AM Respiratory Rate
2/27/2019 11:06:38 AM Cardiac rhythm
2/27/2019 11:06:39 AM Heart Rate (/min)
2/27/2019 11:24:58 AM Respiratory Rate
2/27/2019 11:51:00 AM Cardiac rhythm
2/27/2019 11:51:01 AM Heart Rate (/min)
2/27/2019 11:51:54 AM Respiratory Rate
2/27/2019 12:30:30 PM Eliminations
2/27/2019 1:18:22 PM Cardiac rhythm
2/27/2019 1:18:23 PM Heart Rate (/min)
2/27/2019 1:18:32 PM Respiratory Rate
2/27/2019 1:22:54 PM Eliminations
2/27/2019 1:23:50 PM Catheter Assessment

B6

Client: **B6**
Patient:

Telemetry ECG

B6

Client:
Patient:

B6

Telemetry ECG

B6

Client:
Patient:

B6

Telemetry ECG

B6

Client: **B6**
Patient:

Telemetry ECG

B6

Client: **B6**
Patient:

ECG from Cardio

B6

2/26/2019 10:22:22 AM

Page 1 of 2

Tufts University
Tufts Cummings School of Vet Med
Cardiology

12-Lead Standard Placement

B6

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

ECG from Cardio

B6

2/26/2019 10:22:22 AM

Page 2 of 2

Tufts University
Tufts Cummings School of Vet Med
Cardiology

B6

Client: **B6**
Patient:

ECG from Cardio

B6

2/26/2019 10:25:49 AM

Tufts University
Tufts Cummings School of Vet Med
Cardiology

12 Lead, Standard Placement

B6

Client: **B6**
Patient:

ECG from Cardio

B6

2/26/2019 10:26:06 AM

Tufts University
Tufts Cummings School of Vet Med
Cardiology

12 Lead: Standard Placement

B6

Client:
Patient:

B6

rDVM CXR - 2/25/2019

B6

Client: **B6**
Patient:

rDVM CXR - 2/25/2019

B6

Patient History

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	10:00 PM	Vitals
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	11:39 PM	Purchase
	11:59 PM	Treatment
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	12:41 AM	Prescription
	12:41 AM	Prescription
	12:53 AM	Purchase
	01:00 AM	Treatment
	06:06 AM	UserForm
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	01:39 PM	Appointment
	02/12/2019 07:47 AM	Appointment
	02/25/2019 04:46 PM	Vitals
	02/25/2019 04:46 PM	Vitals
	02/25/2019 04:46 PM	Vitals
	02/25/2019 04:46 PM	Vitals
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B6

Client: **B6**
Patient:

Patient History

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B6

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Patient:

Patient History

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02/26/2019 01:04 AM Treatment

02/26/2019 01:04 AM Vitals
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02/26/2019 01:22 AM Vitals
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02/26/2019 01:23 AM Treatment

02/26/2019 01:23 AM Vitals
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02/26/2019 01:23 AM Vitals
02/26/2019 02:19 AM Treatment

02/26/2019 02:19 AM Vitals
02/26/2019 02:19 AM Vitals
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02/26/2019 02:21 AM Vitals

B6

Client: **B6**
Patient:

Patient History

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02/26/2019 03:27 AM Treatment

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02/26/2019 03:27 AM Vitals
02/26/2019 03:52 AM Vitals
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02/26/2019 04:04 AM Treatment
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02/26/2019 04:34 AM Treatment

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02/26/2019 05:23 AM Treatment

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02/26/2019 05:28 AM Treatment

02/26/2019 05:28 AM Vitals
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02/26/2019 06:33 AM Treatment

02/26/2019 06:33 AM Vitals
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02/26/2019 06:33 AM Vitals

B6

Client: **B6**

Patient:

Patient History

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B6

Client: **B6**
Patient:

Patient History

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02/26/2019 11:31 AM Purchase
02/26/2019 11:35 AM Treatment

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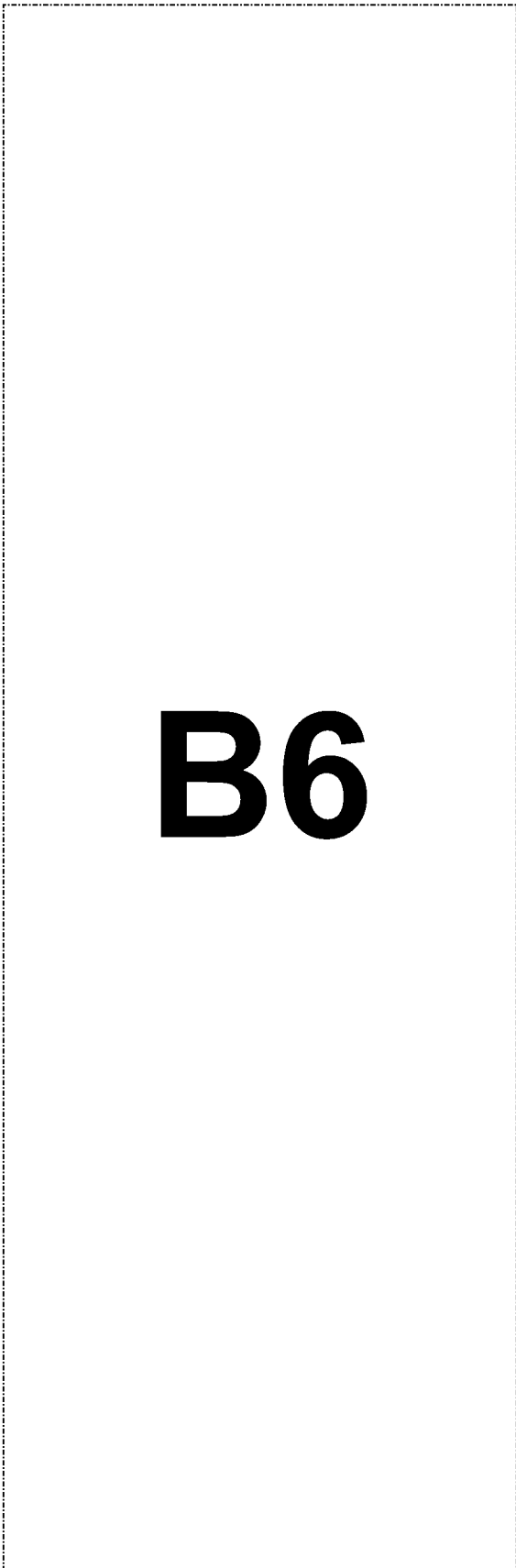
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Client: **B6**
Patient: **B6**

Patient History

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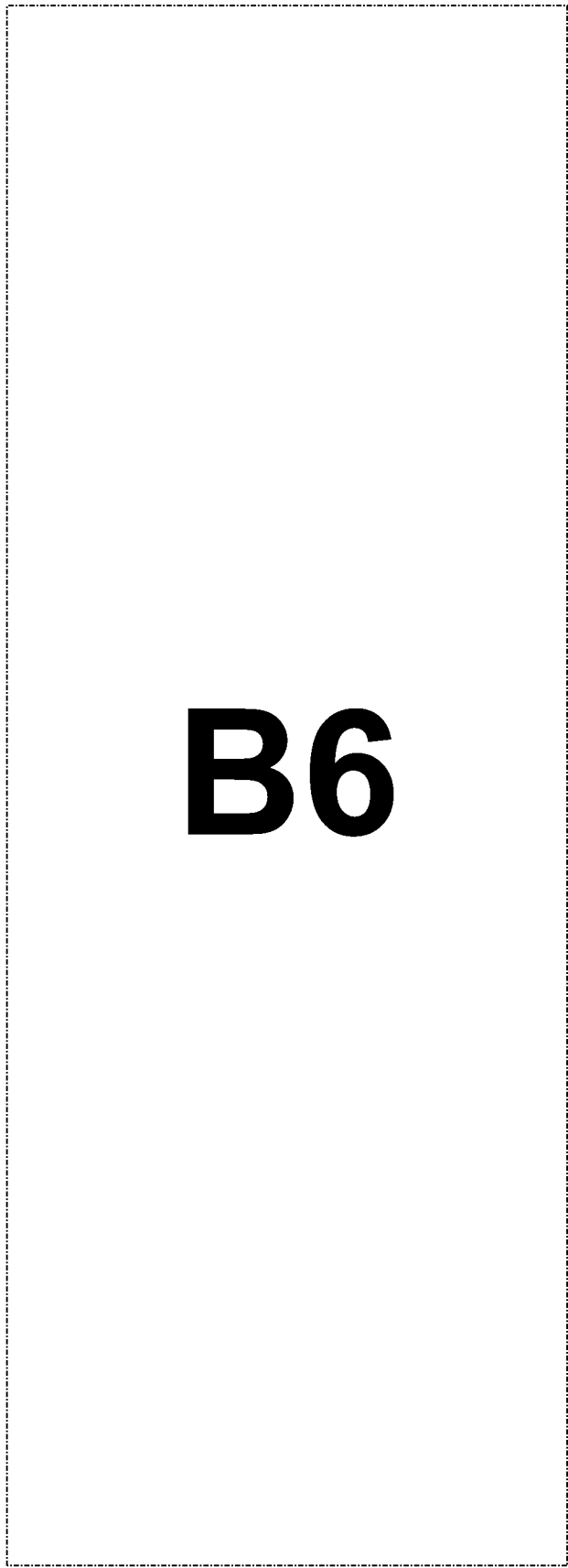
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Client:
Patient:

B6

Patient History

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02/27/2019 01:11 AM Treatment
02/27/2019 01:16 AM Treatment

02/27/2019 01:16 AM Treatment

B6

Client:
Patient:

B6

Patient History

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02/27/2019 02:58 AM Vitals
02/27/2019 02:58 AM Vitals
02/27/2019 03:52 AM Treatment

02/27/2019 03:52 AM Vitals
02/27/2019 03:52 AM Vitals
02/27/2019 03:52 AM Treatment
02/27/2019 03:52 AM Vitals
02/27/2019 04:50 AM Treatment

02/27/2019 04:50 AM Vitals
02/27/2019 04:50 AM Vitals
02/27/2019 04:50 AM Treatment
02/27/2019 04:50 AM Vitals
02/27/2019 05:48 AM Treatment

02/27/2019 05:48 AM Treatment
02/27/2019 05:48 AM Treatment
02/27/2019 05:48 AM Vitals
02/27/2019 05:48 AM Treatment

02/27/2019 05:48 AM Vitals
02/27/2019 05:49 AM Treatment
02/27/2019 05:49 AM Vitals
02/27/2019 05:49 AM Treatment

02/27/2019 05:49 AM Vitals
02/27/2019 05:49 AM Vitals
02/27/2019 05:49 AM Treatment
02/27/2019 05:49 AM Vitals
02/27/2019 06:01 AM Purchase
02/27/2019 06:32 AM Treatment

02/27/2019 06:32 AM Vitals
02/27/2019 06:32 AM Vitals
02/27/2019 06:32 AM Treatment
02/27/2019 06:32 AM Vitals
02/27/2019 06:33 AM Vitals
02/27/2019 07:17 AM Treatment

B6

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

Patient History

02/27/2019 07:17 AM Vitals
02/27/2019 07:17 AM Vitals
02/27/2019 07:18 AM Treatment
02/27/2019 07:18 AM Vitals
02/27/2019 07:40 AM Treatment

02/27/2019 07:40 AM Treatment

02/27/2019 07:40 AM Vitals

02/27/2019 07:41 AM Treatment

02/27/2019 09:08 AM Treatment

02/27/2019 09:08 AM Vitals
02/27/2019 09:08 AM Vitals
02/27/2019 09:08 AM Treatment
02/27/2019 09:08 AM Vitals
02/27/2019 09:09 AM Treatment
02/27/2019 09:09 AM Vitals
02/27/2019 09:19 AM Treatment
02/27/2019 09:19 AM Vitals
02/27/2019 09:49 AM Purchase
02/27/2019 10:12 AM UserForm

02/27/2019 10:15 AM Treatment

02/27/2019 10:15 AM Vitals
02/27/2019 10:15 AM Vitals
02/27/2019 10:16 AM Treatment
02/27/2019 10:16 AM Vitals
02/27/2019 10:26 AM Purchase
02/27/2019 10:26 AM Treatment
02/27/2019 10:46 AM Purchase
02/27/2019 10:46 AM Labwork
02/27/2019 10:51 AM Treatment

02/27/2019 11:06 AM Treatment

02/27/2019 11:06 AM Vitals
02/27/2019 11:06 AM Vitals
02/27/2019 11:17 AM Purchase
02/27/2019 11:17 AM Treatment

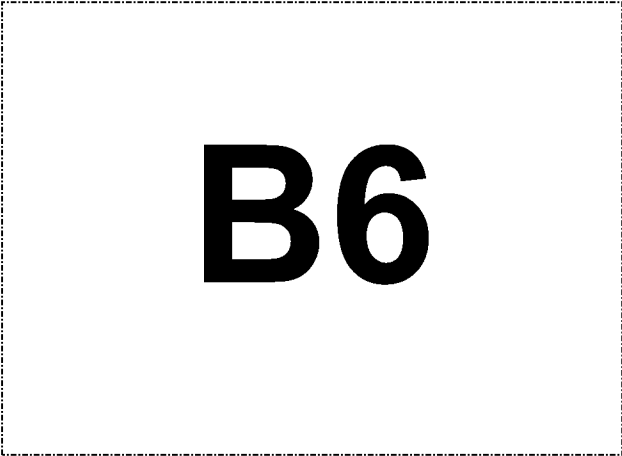
02/27/2019 11:24 AM Treatment
02/27/2019 11:24 AM Vitals
02/27/2019 11:51 AM Treatment

02/27/2019 11:51 AM Vitals
02/27/2019 11:51 AM Vitals
02/27/2019 11:51 AM Treatment

B6

Patient History

02/27/2019 11:51 AM	Vitals
02/27/2019 12:30 PM	Vitals
02/27/2019 01:18 PM	Treatment
02/27/2019 01:18 PM	Vitals
02/27/2019 01:18 PM	Vitals
02/27/2019 01:18 PM	Treatment
02/27/2019 01:18 PM	Vitals
02/27/2019 01:22 PM	Treatment
02/27/2019 01:22 PM	Vitals
02/27/2019 01:23 PM	Treatment
02/27/2019 01:23 PM	Treatment
02/27/2019 01:23 PM	Vitals



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

Canine Doberman Pinscher Black

B6

B6

Dear **B6**

B6 was seen at Tufts' ER for **B6**. Please see attached discharge instructions for more information.

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

Thank you,

B6

Notice of Patient Admit

Date: 2/25/2019 4:21:36 PM

Case No: B6

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: DOM, CHF

If you have any questions regarding this particular case, please call 508-887-4988 to reach the Cardiology 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> **B6**

B6

B6 Male
Canine Doberman Pinscher Black
B6

Daily Update From the Cardiology Service

Today's date: 2/26/2019

Dear **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
- might be discharged from the hospital today

Today's treatments include:

- bloodwork planned/pending
- echocardiography -
- DCM with active CHF r/o breed-related vs. diet related.
- 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**

Faculty Clinician: **B6**

Senior student:

B6

PL ①
WB ②

B6

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:

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: Email:

Billing Contact Phone: Tax ID: _____

Patient Name: Species: Canine

Breed: Doberman Owner's Name:

Current Diet: CANIDAE

Sample type: Plasma Whole Blood Urine Food Other _____

Test: Taurine Complete Amino Acids Other: _____

Taurine Results (lab use only)

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.

B6

PL ①
WB ②

B6

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

2/25/2019 6:10 PM
SHIP w ICE PACKS, TAURINE
PANEL
Lithium Heparin

B6

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: Doberman Owner's Name: **B6**

Current Diet: CANIDAE

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.

Client:
Patient:

B6

ECG from Cardio

B6

3/8/2019 2:51:01 PM

Page 1 of 2

Tufts University
Tufts Cummings School of Vet Med
Cardiology

12-Lead, Standard Placement

B6

Client:
Patient:

B6

ECG from Cardio

B6

3/8/2019 2:51:01 PM

Page 2 of 2

Tufts University
Tufts Cummings School of Vet Med
Cardiology

B6