

18563 WB

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: VMD
Company Name:
Address:

Email:
Tel: Fax:

Billing Contact: TAX ID:
Email: Tel:

Patient Name:
Species: Dog
Owner's Name:

Sample Type: Plasma Whole Blood Urine Food Other: _____
Test Items: Taurine Complete Amino Acid Other: _____

Taurine Results (nmol/ml)
Plasma: Whole Blood: 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

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180-81

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<http://www.vetmed.ucdavis.edu/vmb/aal/aal.html>

Vet/Tech Contact: **B6**
Company Name: **B6**
Address: **B6**
B6

Email: **B6**
Tel: **B6** Fax: **B6**

Billing Contact: **B6** TAX ID:
Email: **B6** Tel: **B6**

Patient Name: **B6**
Species: dog
Owner's Name: **B6**
B6 **B6**
Sample Type: Plasma Whole Blood Urine Food Other: _____
Test Items: Taurine Complete Amino Acid Other: _____

Taurine Results (nmol/ml)
Plasma: **B6** Whole Blood: **B6** Urine: _____ Food: _____

Reference Ranges (nmol/ml)

	Plasma		Whole Blood	
	Normal Range	No Known Risk for Taurine Deficiency	Normal Range	No Known Risk for Taurine Deficiency
Cat	80-120	>40	300-600	>200
Dog	60-120	>40	200-350	>150

B6

B6

PATIENT INFORMATION

Patient: B6	Exam Date: 08/29/2017	Previous Study: 04/19/2016
Species: Canine Breed: Golden Retriever	Weight: 32.8 kg	DOB: B6 Sex: M
Reason for Study: Re check evaluation.		Referring Veterinarian: B6

2D Measurements	
LA SAX	cm
Ao DIA SAX	cm
LA SAX : Ao DIA SAX	B6
IVSd	cm
LVIDd	cm
LVPWd	cm

M-Mode Measurements	
IVSd	cm
LVIDd	cm
LVPWd	cm
IVSs	cm
LVIDs	cm
LVPWs	B6
% FS	%
EPSS	cm
EDV	ml
ESV	ml
% EF	%

Doppler Measurements:	
Mitral Valve	
MR V Max	m/s
MR Max PG	mmHg
Tricuspid Valve	
TR V Max	m/s
TR Max PG	mmHg
RA Press	
Aortic Valve	B6
Peak Velocity	m/s
Max PG	mmHg
AI End Dias Vel	m/s
LVOT Velocity	m/s
LVOT PG	mmHg
Pulmonic Valve	
Peak Velocity	m/s
Max PG	mmHg

Doppler Qualitative:	
Mitral Regurgitation:	
Tricuspid Regurgitation:	B6
Aortic Regurgitation:	

B6

B6

B6

Patient: **B6**
Patient ID #: **B6**
Exam Date: 08/29/2017

ECHOCARDIOGRAPHIC FINDINGS

Thin walled, dilated left ventricular chamber with poor wall motion.
Increased LVIDs **B6** as well as an increased **B6**, %FS (**B6**%).
Increased EPSS **B6**.
Left atrial enlargement.
Annular dilation with secondary mitral and tricuspid regurgitation.
Trivial tricuspid regurgitation with PFV revealing normal pulmonary pressures
There is flow across the septum beneath the aortic valve and into the RV with some prolapse of the aortic cusp with secondary aortic insufficiency.
The VSD flow is **B6** m/s L>R (**B6** mmHg).

DIAGNOSIS

Dilated Cardiomyopathy--fairly stable

B6

B6

Electronically Signed **B6** VMD, DACVIM 8/29/2017 1:10 PM

B6

B6

Document properties

Title: Vet Echo
Author: ULTRASOUND02
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Category: AccessPoint
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Page count: 2
Paragraph count: 103
Line count: 125
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Character count (spaces excluded): 1526
Character count (spaces included): 1752

B6

Patient		Client	
B6 Male, Canine Breed: Retriever, Golden (Gold) Age: B6		B6	
B6 Doctor: B6, VMD, DACVIM (Cardiology), Chief of Cardiology	pDVM: B6		
Location: B6			

Diagnosis:

B6 ---Stable on the current medications

Weight:

Vital Sign	B6	B6
Weight	2:04 PM	12:15 PM
	B6	B6
	B6	

Presenting Concern:

B6 is here for a recheck Echocardiogram, radiographs and blood work. He is doing well at home with no clinical signs. He does pant frequently as he is very active. His respiratory rates are normal at rest.

History:

Past pertinent history - B6 Dilated Cardiomyopathy

Recent history -

- Coughing/gagging/wheezing: no
- Breathing changes: no
- Sleeping RR: 16, 24, 28 breaths per minute (some sleeping / some at rest), pants frequently - very active
- Sleep quality: normal
- Exercise intolerance: no
- Appetite: normal
- V/D/U/BM: no
- Fainting/Episodes: no
- Diet: Orijen - freeze dried, Acana - dry
- Heartworm test: yes
- Heartworm preventative: Interceptor every 45 days
- Vaccine status: current

Medications Upon Presentation:

B6

B6

Client: B6

Patient: B6

Page: i

Previous Diagnostics:

- **B6** Radiographs: 1. There is generalized cardiomegaly, a large proportion of which is likely right-sided, consistent with the historical septal defect and cardiomyopathy. There is no evidence of cardiac decompensation at this time. This report was created using dictation software and, as a result, minor typographical and grammatical errors can occur and may be confusing or misleading. Please do not hesitate to contact me about any such errors that may have occurred in this report.
- **B6** Bloodwork: BUN **B6** Creat **B6** Potassium **B6**
- **B6** Echocardiogram: Dilated cardiomyopathy, **B6** and does not impact any volume load on the left heart

Cardiovascular Examination:

Auscultation: Grade 4-5/6 coarse ejection quality murmur at the left heart base with a grade 4-5/6 holosystolic murmur more blowing quality at the right . Heart rate 140bpm with a normal rhythm. Lungs clear.

Thrill: faint right

PMI: left and right

Femoral Artery: good bilaterally, symmetrical synchronous

Other Physical Exam Findings: BAR

Radiographic Interpretation:

Cardiomegaly (VHS 12.0), globoid and primarily right sided. Normal vessels cranially and caudally. Exhalation films confound the parenchymal changes.

B6 Diagnostics:

Date/Time	Test	Result	Reference Range
9/19/2016	ALB	B6	2.5 - 4.0
9/19/2016	ALB/GLOB		
9/19/2016	ALKP		0 - 140
9/19/2016	ALT		0 - 120
9/19/2016	BUN		9.0 - 29.0
9/19/2016	BUN/Creat		
9/19/2016	Ca		9.0 - 12.2
9/19/2016	Chloride		102 - 120
9/19/2016	CHOL		120 - 310
9/19/2016	CREA		0.4 - 1.4
9/19/2016	GGT		0 - 14
9/19/2016	GLOB		2.0 - 3.6
9/19/2016	GLU		75 - 125
9/19/2016	Na/K		
9/19/2016	PHOS		1.9 - 5.0
9/19/2016	Potassium		3.8 - 5.3
9/19/2016	Sodium		141 - 152
9/19/2016	TBIL		0.0 - 0.5
9/19/2016	TP		5.5 - 7.6

Lab Comments:

Species: Dog AnalyzerType: DriChem AnalyzerName: DRI-CHEM_1

B6

Client: **B6**

Patient: **B6**

Page: 2

Release Notes:

1. **B6** murmur is the same in intensity and quality on today's physical examination as previously noted.
2. The chest radiographs are stable with no sign of congestive heart failure.
3. **B6** blood work is normal in terms of kidney function and electrolytes.
4. The echocardiogram reveals a stable left ventricular and left atrial size no change in the flow dynamics of the **B6**
4. Please continue to track the sleeping respiratory rates and call with any questions or concerns

Medications upon Discharge:

Please continue the following medications (please note any changes):

B6

rDVM prescribed medications:

B6

Please contact your primary veterinarian or **B6** for refills. When calling for medication refills, please provide 48 hours notice to allow the Cardiology Department time to review your records. We are in the office Monday through Friday 8am – 6pm. Medications are not filled during appointment hours while we are caring for our patients. Thank you for your consideration.

Recheck Recommendations:

Recheck blood work in 6 months

Recheck radiographs in 6 months

Recheck echocardiogram in 10 months, sooner if any problems

For your convenience, you may schedule any follow-up tests (other than an echocardiogram) either here as a cardiology nurse appointment or with your regular veterinarian. If you choose to have your radiographs taken by your regular veterinarian, there will be a small consultation fee for the cardiologist to evaluate those radiographs and make treatment recommendations. The consultation will be shared with both you and your regular veterinarian to assure the best care possible for your pet.

B6

Client: **B6**

Patient: **B6**

Page: 3

Attending Veterinarian:

B6

B6, VMD, DACVIM (Cardiology), Chief of Cardiology

Thank you for allowing the **B6** to participate in the care of **B6**. If you have any questions or concerns regarding the treatments or recommendations for **B6**, please call **B6**. The **B6** is open 24 hours each day for the care and treatment of your pet.

B6

Client: **B6**

Patient: **B6**

Page: 4

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Dog	60-120	>40	200-350	>150

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
<http://vetnutrition.tufts.edu/>
vetnutrition@tufts.edu



Nutrition Consultation

Date: 7/7/17 (Phone consultation)

Pet Name: [B6]

Signalment: 1 ½ year old castrated male Boxer

Weight: 69 pounds (31 kg), body condition score 4/9 (ideal), muscle condition score: Normal

Diagnosis/Problems: Dilated cardiomyopathy with low taurine level; possible food sensitivities, bee and environmental allergies

Medications: [B6]

RDVM: Dr. [B6]

[B6]

Recommendations below are based on information obtained from owner and referring veterinarians.

Diet History:

- Current diet: Petcurean Go! Limited Ingredient dry, Petcurean Now Fresh, Stella & Chewy's raw patties, Lean Treats, Wellness Core treats; bread or banana for medication administration. Just started transitioning to Purina Pro Plan Focus Adult Sensitive Skin and Stomach salmon and rice dry based on Dr. [B6] recommendations
- Petcurean Now Fresh large breed puppy dry; initially on Iams Smart Puppy Small and Toy Breed dry (8-12 weeks of age), Go Salmon (not finishing food)
- Supplements: Taurine 1000 mg 3 times daily, L-carnitine 2000 mg 2 times daily (NOW or Whole Foods)

Nutritional Goals

- Complete and balanced diet
- Adequate calorie intake to maintain ideal body weight (approximately 70 pounds)
- Reduced sodium
- Moderate protein
- Taurine and L-carnitine supplementation
- Omega-3 fatty acid supplementation

Recommendations:

- I'm happy that we were able to talk about [B6] diet to ensure he's getting optimal nutrition. Nutrition is an integral part of the treatment for a dog with heart disease. This is especially important for [B6] because we're suspicious of taurine and/or carnitine deficiencies playing a role in his disease. Hopefully, the taurine and carnitine supplementation and a diet we can be more confident in will be helpful for his heart!
- As we discussed, there's a lot of misinformation about pet foods so I'll only be recommending diets that meet all the criteria for being of the highest quality: <http://vetnutrition.tufts.edu/2016/12/questions-you-should-be-asking-about-your-pets-food/>
- My estimate of [B6] daily calorie needs is approximately 1700 calories per day (based on the average of 2 cups twice daily that he was getting from the Go Fresh Now dry food). This is an initial estimate to keep him at a weight 70 pounds. However, since every dog is an individual, I'd like to have you weigh him in 2 weeks to be sure he's maintaining his weight. If he's losing weight, you should increase the amount of food and continue to weigh him and if he's gaining weight, you should reduce the amount of food and continue to weigh him. Let me know if you need help with adjusting the amounts.
- The current diet you're feeding (Purina Pro Plan Sensitive Skin and Stomach) is of excellent quality, high in omega-3 fatty acids, and not too high in sodium. Since [B6] not in heart failure, the dietary sodium doesn't

need to be quite as low so I'm comfortable having him continue to eat the Pro Plan (especially since he seems to enjoy it!). However, I'm providing a few other options that are also high in omega-3 fatty acids. Please note the variable calorie density of these foods and adjust the number of cups accordingly to provide our starting point for calories of 1700 calories/day.

Dry Food	Calories/cup	Sodium (mg/100 calories)
Pro Plan Focus sensitive skin & stomach salmon & rice (dry)	447	128
Purina JM (dry)*	408	100
Purina DRM Naturals (dry)*	418	80
Royal Canin Boxer (dry)	335	73
Royal Canin Mobility Support JS (dry)*	324	70

Diets with an asterisk are ones that must be purchased from Dr. B6 or, if not available, from an online pet food store (eg, Chewy.com, Petfooddirect.com) with a prescription or approval from her. The other 2 diets are available over-the-counter

- Make all changes gradually over 5-7 days to avoid gastrointestinal upset.
- We didn't discuss this on our call but I strongly urge you to discontinue the raw patties immediately. There is no evidence of any health benefit of raw meat diets and there are many, many documented risks. In addition, raw meat diets put you, your family, and your dogs at risk for bacterial infections because of high rates of bacterial contamination of raw meat diets.

Supplements:

- Unfortunately, there is little regulation of supplements for people or animals (safety, effectiveness, and quality control do not have to be proven for them to be sold), and some of these products may be harmful rather than helpful. Therefore, I am very selective when it comes to recommending specific supplements that have undergone independent quality control testing. Looking for the USP logo or using Consumerlab.com is very helpful for finding products with independent testing of quality.
- Taurine and L-carnitine: Because of his low plasma taurine and the potential for some Boxers to have carnitine deficiency, I support Dr. B6 recommendations for supplementation. Since results of independent testing of taurine and carnitine are not available on Consumerlab, we tested a number of products in 2009. Although I don't know that the results are still true 8 years later, the products that did well in our testing were:
 - o Taurine: Solgar, Twinlab, Swanson, NOW, Country Life, and GNC
 - o L-carnitine: Solgar, Country Life, Jarrow. Although we did not test the liquid L-carnitine from Solgar, I think that would be a reasonable one to try if it's easier to get him to take it as a liquid.
 - o The doses that you're giving, B6 are appropriate.
 - o We have some additional information on these supplements on our HeartSmart website: <http://vet.tufts.edu/heartsmart/diet/important-nutrients-for-pets-with-heart-disease/>
- Omega-3 fatty acids: Fish oil, which is high in the omega-3 fatty acids, EPA and DHA, can have modest benefits in reducing inflammation, maintaining muscle mass, reducing abnormal heart rhythms, and improving appetite. The diets above all contain sufficient omega-3 fatty acids but if we do need to use a supplement in the future, we have brands with independent testing on our HeartSmart website: http://vet.tufts.edu/wp-content/uploads/omega-3_supplementation.pdf

Treats:

- Some good treat options
 - Hill's Ideal Balance Breakfast Medleys with Country Chicken & Egg Dog Treat
 - Hill's Ideal Balance Oven-Baked Naturals with Chicken & Apples Dog Treat
 - Science Diet Grain Free treat with Chicken & Apples Dog Treat
 - Hill's Ideal Balance Soft-Baked Naturals with Chicken & Carrots Dog Treat
 - Hill's Science Diet Baked Light Biscuits with Real Chicken Small Dog Treat
 - Royal Canin Veterinary Diets Original Dog Treats
 - Frosted Mini Wheats (original)
 - Fresh vegetables/fruit – eg, carrots, green beans, apple, orange, bananas, berries (except ones listed below)
- Avoid macadamia nuts, avocado, garlic, onions, grapes, raisins, and other foods known to be toxic to dogs

Medication Administration

- Dog tablet sized Greenies Pill Pockets are relatively low in sodium (just be sure to avoid Duck and Pea flavor which is high in sodium) but try to limit the total to 4-5/day
- You can also insert medications into one of the following foods:
 - Low-sodium canned pet food (I can give you some specific canned foods if you want to try this option)
 - Mini marshmallows
 - Fruit such as banana, orange, melon, or berries (avoid grapes)
 - Peanut butter (labeled as "no salt added")
 - Pro Plan Additions Puree (Chicken and berries or chicken and pumpkin). This also works well for some dogs to give them pills

Follow Up:

- Monitor body weight to ensure he stays at an ideal weight of about 70 pounds (it may take some adjustment of the new food)
- Please let me know how things go at [B6] recheck cardiology evaluation at the end of August. Hopefully, there will be an improvement in his heart function!

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 (FAQs and other resources)



Network Procedures for Veterinary Laboratory Investigation and Response Network Case Investigations

Network Procedures for Owners

The purpose of this Network Procedure is to help you, the owner, understand how the Veterinary Laboratory Investigation and Response Network (Vet-LIRN) Program Office conducts case investigations (follow up to consumer complaints).

The following items are explained below:

- General Introduction
- Billing
- Step by Step Process
- Types of Services and Tests

1. General Introduction:

1.1. What is the goal of the case investigation?

The goal of the case investigation is to determine if the product is causing your pet's illness. Our case investigation MAY NOT provide a definitive diagnosis for your pet's illness, although we may rule out several other potential reasons for your pet's illness.

1.2. What is the focus of a case investigation?

Most case investigations focus on diagnostic samples (such as blood, urine or tissue from the pet), although we occasionally request and test pet food samples.

1.3. What is my veterinarian's role during the case investigation?

Your veterinarian helps our investigation into FDA- regulated products by providing information about your pet's medical history and by obtaining any diagnostic samples like blood, urine or tissue.

1.4. What will Vet-LIRN ask of me during a case investigation?

We may ask that your veterinarian perform certain tests or services or provide diagnostic samples to FDA or a Vet-LIRN cooperating laboratory.



Network Procedures for Veterinary Laboratory Investigation and Response Network Case Investigations

1.5. Will Vet-LIRN pay for tests or services requested?

Yes, we will pay veterinarians or laboratories *for tests or services requested by Vet-LIRN* and approved through our government purchasing system. We cannot, however, reimburse owners for tests already performed or not specifically requested by Vet-LIRN. We recommend that you discuss with your veterinarian which tests and services will be billed to you and which will be covered by Vet-LIRN. For instance, Vet-LIRN may request that your veterinarian perform a urinalysis on your pet while he or she is hospitalized. Vet-LIRN will pay for the collection and testing of the sample, but would not cover the cost of your pet's stay in the hospital.

1.6. Is the information received in the consumer complaint confidential?

Generally, the information received in the consumer complaint is not kept confidential. In most cases, only protected personal information (such as names and addresses) is withheld in an effort to prevent the complaint from being traced back to the individual who submitted it.

2. Billing:

2.1. Will Vet-LIRN pay for bills related to the case investigation?

Vet-LIRN will cover the cost of services and testing that we specifically request. You should understand that Vet-LIRN *CANNOT* reimburse owners for any veterinary bills. Services *MUST* be pre-authorized and paid directly to the veterinarian.

2.2. Will Vet-LIRN pay for testing that was not requested by Vet-LIRN?

No, we will only pay for testing that we request and authorize.

2.3. Will Vet-LIRN pay for treatments or private cremation?

No, we cannot pay for treatment or cremation.



Network Procedures for Veterinary Laboratory Investigation and Response Network Case Investigations

2.4. If I allow my veterinarian to submit my pet's body for testing, will I be able to have back his or her remains?

Each Vet-LIRN member laboratory has its own procedures for handling remains. Some Vet-LIRN member laboratories offer private cremation services for a fee payable directly to the laboratory. We advise you to discuss directly with the member laboratory the possibilities and costs for obtaining your pet's remains after examination are complete.

3. Step by Step Process:

Vet-LIRN will do the following during a case investigation:

- 3.1. Assign a case number which **MUST** be included in all correspondences
- 3.2. Discuss the case with you and your veterinarian
- 3.3. Request medical records from your veterinarian
- 3.4. Coordinate with your veterinarian and you to obtain and submit samples for testing
- 3.5. Provide results to your veterinarian who will discuss the results with you.

Vet-LIRN requests that:

- 3.6. Any follow-up veterinary visits related to the investigation are reported to Vet-LIRN
- 3.7. Additional laboratory reports are reported to Vet-LIRN by your veterinarian.

4. Types of Services and Tests:

4.1. What may a veterinary examination include once the case investigation is started?

A veterinary examination may include:

- an office visit and physical examination to assess your animals current health
- collection of clinical samples from your animal (blood, urine, feces).

4.2. Will your animal be tested more than once?



Network Procedures for Veterinary Laboratory Investigation and Response Network Case Investigations

It is possible that Vet-LIRN may request additional tests or examinations depending on results from initial testing.

4.3. Will Vet-LIRN need to conduct a necropsy in the event of an animal death?

Yes, if you are willing, we may request that your veterinarian or another Vet-LIRN cooperating laboratory to conduct a necropsy to collect samples for testing. The samples collected may be tested right away or may be held for future testing or archiving. If the veterinarian completes the necropsy then the remains will be handled according to the veterinarian's normal procedures. If a Vet-LIRN cooperative laboratory completes the necropsy the remains are usually disposed of by that laboratory. Vet-LIRN cannot pay for private cremation. You are welcome to discuss normal procedures with the laboratory.

4.4. Will Vet-LIRN ask for a food sample?

Our main focus is on testing diagnostic tissue or fluid samples from the animal, but we may need to test the food. Please hold all food samples once the consumer complaint is submitted. If needed, we will make arrangements to collect the food.

4.5. What are some general tests that Vet-LIRN may request?

General tests that we may request include, but are not limited to:

- Hematology
- Microbial cultures
- Urinalysis
- Fecal examination
- Necropsy/Histology/Toxicology

4.6. Will I get results from Vet-LIRN requested tests?

Results of testing on your animal's diagnostic tissue or fluid samples will be forwarded to your veterinarian who will be asked to share the results with you.

Client:

B6

Address:

All Medical Records

Patient: B6

Breed: Doberman

DOB: B6

Species: Canine
Sex: Female
(Spayed)

Home Phone:
Work Phone:
Cell Phone:

B6

Referring Information

B6

Client:

B6

Patient:

Initial Complaint:

Cardiology Study Appointment

SOAP Text Aug 20 2018 1:58PM

B6

Initial Complaint:

Recheck B6 - DCM study

SOAP Text Dec 12 2018 12:23PM

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
Sex:	Female (Spayed)
Age:	B6 Years Old

Lab Results Report

Accession ID:

Test	Results	Reference Range	Units
------	---------	-----------------	-------



3/28

B6

B6

Printed Thursday, December 27, 2018

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

B6 Taurine Level

B6

Sample Submission Form

B6

B6

B6

Client/Owner Information (Name, Address, Phone)

Vet/Tech Contact: **B6**

Company Name: **B6**
Address: **B6**

Email: **B6**
Tel: **B6**

Billing Contact: **B6**

Email: **B6** Tel: **B6**

Patient Name: **B6**

Species: **B6**

Owner's Name: **B6**

Sample Type: Plasma Whole Blood Urine Food Other
Test Name: Taurine Complete Ammonia And Other

Taurine Results (nmol/ml)

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

Reference Ranges (nmol/ml)

	Plasma		Whole Blood	
	Normal Range	Low Values May Indicate Taurine Deficiency	Normal Range	Low Values May Indicate Taurine Deficiency
Cat	80-120	<45	300-500	>200
Dog	60-120	<45	250-450	>150

Client:
Patient:

B6

Lab Results IDEXX CARDIOPET proBNP 12/12/18

B6

Client: **B6**
Patient:

Diet history 12/12/18

CARDIOLOGY DIET HISTORY FORM

B6

Client:
Patient:

B6

Diet history 8/20/18

CARDIOLOGY DIET HISTORY FORM

Please answer the following questions about your pet

Pet's name: **B6** Owner's name: **B6** Today's date: **8/20/18**

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



2. Have you noticed a change in your pet's appetite over the last 1-2 weeks? (check all that apply)

- Eats about the same amount as usual
- Eats less than usual
- Eats more than usual
- Seems to prefer different foods than usual
- Other

3. Over the last few weeks, has your pet (check one)

- Lost weight
- Gained weight
- Stayed about the same weight
- Don't know

4. Please list below ALL pet foods, people food, treats, snacks, dental chews, rawhides, and any other food item that your pet currently eats. Please include the brand, specific product, and flavor so we know exactly what your pet is eating.

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

Food (include specific product and flavor)	Form	Amount	How often?	Fed since
Arroz Gran Pavo Chicken, Lemon & Sweet Potato Adult	dry	1 1/2 cup	2x/day	Jan 2018
80% lean hamburger	meat/pawed	3 oz	1x/week	Jan 2018
MuscleWise original beef flavor	meat	2x	1x/day	Aug 2018
MuscleWise	meat	4 inch hot	1x/week	Jan 2018
Vanilla French Vanilla Ice Cream		1.5 cups	2x/day	7/18
Blueberry Greek Yogurt		1/2 cup	1x/week	7/18
Apple, organic, prepped		1/2	1x/week	7/18
Carrots		1/2	1x/week	7/18
Organic peach butter		1/2	1x/week	7/18
Boiled eggs		1	1x/week	7/18
Cooked chicken		1/2	1x/day	7/18

*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	
Glucosamine	<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 regular food
- I put them in a Pill Pocket or similar product
- I put them in foods (list foods): in peanut butter / banana / canned food

Client:
Patient:

B6

Vitals Results

8/20/2018 1:25:17 PM

Weight (kg)

38.1000

Client: **B6**
Patient:

ECG from Cardio

B6

B6

08/10/2019 Page 9 of 13
FDA/CDER
Center for Drug Evaluation and Research
1401 Rockville Pike
Rockville, MD 20852

B6

Client:
Patient:

B6

ECG from Cardio

B6

B6

U.S. Food & Drug Administration
Center for Drug Evaluation and Research
10101 Rockville Pike
Rockville, MD 20855
301-793-3000

B6

Client:
Patient:

B6

ECG from Cardio

B6

B6

U.S. DEPARTMENT OF HEALTH & HUMAN SERVICES
CENTERS FOR MEDICAL RESEARCH AND REGULATORY AFFAIRS
FOIA b7(D)

B6

Client:
Patient:

B6

Patient History

B6

UserForm
Treatment
UserForm

Vitals
Purchase
Purchase
Purchase
Appointment

Appointment

UserForm
Treatment

Purchase
Purchase
UserForm

Purchase
Appointment

B6

Discharge Instructions

Patient:

B6

B6
Name:
Address:

B6

Patient ID: B6

Attending Cardiologist:

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

B6

Cardiology Resident:

B6

Student:

B6

Cardiology Technician:

B6

Admit Date: B6 12:44:33 PM

Discharge Date: B6

Diagnosis: B6

Clinical Findings:

B6

B6

Dry Food:

Royal Canin Early Cardiac diet

Purina Canin Buser

Purina Pro Plan Adult Weight Management (this does not have low calories in spite of the name of the food)

Canned Food:

Hill Science diet adult beef and barley entrée

B6

Thank you for entrusting us with **B6** care. Please contact our Cardiology team at (408) 357-4625 or email us at cardiovet@vetsofts.com for scheduling and non-emergent questions or concerns.

Please visit our HeartSmart website for more information

<http://vetsofts.com/heartsmart/>

Prescription Drug 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 (408 357-4625) to ensure the food is in stock. Alternatively, veterinary diets can be ordered from online retailers with a prescription or inquiry approved.

Clinical Trials:

Clinical trials are studies in which our veterinary doctors work with you and your pet to investigate a specific disease process or in pursuing new drug or treatment. Please see our website: vetsofts.com/clinical-trials

B6

Exchange Instructions

Cummings Veterinary Medical Center

AT TUFTS UNIVERSITY

Cardiology Division 508-851-6296

B6

Patient ID: **B6**

B6

B6 Years Old Female (Spayed) Doberman
Black/Tan

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:

Brother from same litter was unexpectedly diagnosed with DCM with secondary CHF recently

Concurrent Diseases:

B6 (for 3 yrs) - medically managed

Spay incontinence:

History of **B6** managed with diet

General Medical History:

Acting normally, eating and drinking normally, no changes in bathroom habits, coughing occasionally (randomly), no vomiting, diarrhea, or sneezing noticed.

Diet and Supplements:

Alana Free-Range Poultry Formulation 1.5-2 cups BID

Cardiovascular History:

Prior CHF diagnosis? No

Prior heart murmur? No

Prior ATE? No

Prior arrhythmia? No

Monitoring respiratory rate and effort at home? Yes, occasionally

Cough? Occasionally, random events

Shortness of breath or difficulty breathing? No
Syncope or collapse? No
Sudden onset lameness? No
Exercise intolerance? No

Current Medications Pertinent to CV System:

B6

Cardiac Physical Examination:

B6

Normal IV sounds

Abdominal exam:

- Normal
- Hepatomegaly
- Abdominal distension

- Mild ascites
- Marked ascites

Problems:

Apparently healthy animal
Genetic predisposition to DCM

Differential Diagnoses:

DCM

Diagnostic plan:

- Echocardiogram
- Chemistry profile
- ECG
- Renal profile
- Blood pressure
- Diagnostics profile
- Thoracic radiographs
- NT-proBNP
- Troponin I
- Other tests

Echocardiogram Findings:

B6

Assessment and recommendations:

Normal cardiac structure, although the contractile function is mildly decreased. This may be indicative of early cardiomyopathy. Urine levels were submitted for analysis, and the patient will be switched off of the grain-free diet. If contractile function is not improved at the 4 month rechecked despite change in diet, then we should submit a NT-proBNP to help us diagnose if the changes is indicated of primary DCM and not diet related.

Final Diagnosis:

Mild MMVD

R/O diet-related vs. primary DCM related mild decrease in contractile function vs normal variation

Heart Failure Classification Score:

ISACH Classification:

- Ia
- IIa

- Ib
- II

IIb

ACVIM Classification:

- A
- B1
- B2

- C
- D

M-Mode

IVSd

LVIDd

LVPWd

IVSs

LVIDs

LVPWs

%FS

Ao Diam

LA Diam

LA/Ao

Max LA

M-Mode Normalized

IVSdN

LVIDdN

LVPWdN

IVSsN

LVIDsN

LVPWsN

Ao Diam N

LA Diam N

Z0

SA LA

Ao Diam

SA LA / Ao Diam

LVID MOD A4C

LVEDV MOD A4C

LVEs A4C

LVESV MOD A4C

LVEF MOD A4C

SV MOD A4C

Doppler

MV E Vel

MV Dec:T

MV A Vel

MV E/A Ratio

E'



cm

cm

cm

cm

cm

cm

%

cm

cm

cm

(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)

cm

cm

cm

ml

cm

ml

%

ml

m/s

ms

m/s

m/s

A'
L/E'
PV Vmax
PV maxPG
AV Vmax
AV maxPG

B6

m/s
m/s
mmHg
m/s
mmHg

Discharge Instructions

Patient:

Name: B6

Species: Canine

Breed/sex: Female (spayed) Doberman

Birthdate: B6

B6

Name: B6

Address: B6

Patient ID: B6

Attending Cardiologist:

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

B6

Cardiology Resident:

B6

Cardiology Technician:

B6

Student:

B6

Admit Date: B6 12:44:33 PM

Discharge Date: B6

Diagnosis:

Mild decreased contractile function

Clinical Findings:

Thank you for bringing B6 to Tufts for her recheck echocardiogram (ultrasound of the heart).

On physical examination today B6's vital parameters (heart rate, respiratory rate, and temperature) were within normal limits. We performed an echocardiogram (ultrasound of the heart) in order to re-evaluate her mild decreased contractile function. As we discussed, just by looking at the pictures everything appeared stable. However, when we got the official measurements, the chambers of her heart measured slightly bigger than previously and her contractile function measures slightly lower as well.

As we discussed it is possible that these changes are just a variation of normal for B6. However, we cannot rule out that this is the early sign of dilated cardiomyopathy. In order to get more information on her cardiac status, we submitted a blood test called NT-proBNP. We will have the results by tomorrow and will call you in order to discuss the next step for

B6

Monitoring at home:

1. We would like you to monitor your dog's breathing rate and effort at home, ideally during sleep or at a time of rest. If you noticed any trends or abnormalities, please contact us.
2. 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.

3. If you have any concerns, please call or have your dog evaluated by a veterinarian. Our emergency clinic is open 24 hours/day.

Diet Recommendations:

B6

Exercise Recommendations:

B6

Recommended Medications:

B6

Recheck Visits:

A recheck appointment March 6th 11 am with B6. At this time we will recheck an echocardiogram.

Thank you for entrusting us with B6 care. Please contact our Cardiology B6 or email us at B6

Sincerely,

B6

Please visit our HeartSmart website for more information

<https://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 (08 857-4625) 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 drug or treatment. Please see our website: vet.tufts.edu/center/clinical-trials

Case: B6

Owner: B6

Discharge Instructions

Cummings Veterinary Medical Center

AT TUFTS UNIVERSITY

Cardiology Division: 508-851-6296

B6

Patient ID: **B6**

B6

Gender:

an Old Female (spayed) Doberman
Black/Tan

Cardiology Appointment Report

Date: 12/12/2018

Attending Cardiologist:

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

B6

Cardiology Resident:

B6

(primary)

Cardiology Technician:

B6

Student:

B6

Presenting Complaint:

Mild MMVD

Mild decreased contractile function R/O diet-related vs. primary DCM related mild decrease in contractile function vs normal variation

DCM Study

Concurrent Diseases:

B6

General Medical History:

Normal behavior, eating and drinking well, no v/d/s, occasional coughing, no more than normal

No more vomiting uncontrollably in sleep, some leaking, but O feels urinary incontinence has greatly improved with diet

Diet and Supplements:

Purina Pro Plan (Weight Management) 1.5c AM w/ Hill's Sci Diet canned (1/4 can) AM and PM, 1 cup afternoon

Has stopped Fish Oil - has questions about causing bloot

Cardiovascular History:

Prior CHF diagnosis? N

Prior heart murmur? N

Prior ATE? N

Prior arrhythmia? Sinus arrhythmia

Monitoring respiratory rate and effort at home? Not as much, frequent panting

Cough? Occasional, no change from prior

Shortness of breath or difficulty breathing? N

Syncope or collapse? N

Sudden onset lameness? N

Exercise intolerance? N - will occasionally wheeze with cold

Current Medications Pertinent to CV System:

B6

Muscle condition:

Normal

Mild muscle loss

Moderate cachexia

Marked cachexia

Cardiovascular Physical Exam:

Murmur Grade:

None

I/VI

II/VI

III/VI

IV/VI

V/VI

VI/VI

Jugular vein:

Bottom 1/3 of the neck

Middle 1/3 of the neck

1/2 way up the neck

Top 2/3 of the neck

Arterial pulses:

Weak

Fair

Good

Strong

Bounding

Pulse deficits

Pulse paradoxus

Other:

Arrhythmic:

None

Sinus arrhythmia

Premature beats

Bradycardia

Tachycardia

Gallop:

Yes

Pronounced

- No
- Intermittent

Other:

Pulmonary assessments:

- Turgor:
- Mild dyspnea
- Marked dyspnea
- Normal IV sounds

- Pulmonary crackles
- Wheezes
- Upper airway stridor

Abdominal exam:

- Normal
- Hepatomegaly
- Abdominal distension

- Mild ascites
- Marked ascites

Problems:

Mild MMVD

Mildly decreased contractile function r/o diet related vs. primary DCM related mild decrease in contractile function vs normal variation

Diagnostic plan:

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

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

Echocardiogram Findings:

General/2-D findings:

B6

Mitral inflow:

- Summated
- Normal
- Delayed relaxation

- Pseudonormal
- Restrictive

ECG findings:

Sinus rhythm during the echocardiogram.

Assessment and recommendations:

Subjectively today's echo appeared very similar than previously but when comparing the number it appears that the contractile function is slightly decreased. Depending on which measurement is assess, the IV cavity appears stable to slightly bigger. It is unclear if the changes visualized today are just a variant of normal for this patient versus true progression of a heart disease. The patient was switched

LVPWv
 ESV(Teich)
 EF(Teich)
 N/S
 SV(Teich)
 LVld A4C
 LVEDV MOD A4C
 LVls A4C
 LVESV MOD A4C
 LVEF MOD A4C
 SV MOD A4C

Doppler
 MV E Vel
 MV DecT
 MV Dec Slope
 MVA Vel
 MV E/A Ratio
 E'
 E/T'
 A'
 AV Vmax
 AV maxPG
 PV Vmax
 PV maxPG

B6

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Cummings
Veterinary Medical Center
AT TUFTS UNIVERSITY

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

B6

B6

B6

Dear **B6**

Thank you for referring **B6**

If you have any questions, or concerns, please contact us at **B6**

Thank you.

B6

Cummings
Veterinary Medical Center
AT TUFTS UNIVERSITY

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

B6

B6

B6

Dear Dr:

B6

Thank you for referring:

B6

If you have any questions, or concerns, please contact us at:

B6

Thank you,

B6

B6

Patient ID: B6

B6 Canine
Years Old Male (Neutered) Doberman
Black/Tan

Cardiology Appointment Report

Date: B6

Attending Cardiologist:

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

B6

Cardiology Resident:

B6

Cardiology Technician:

B6

Presenting Complaint:

Work up of DCM/CHF

Concurrent Diseases:

B6

General Medical History:

Owner has had him for 5 years. Was obese and behavioral issues. Owner has worked well with the behavior issues. Owner has noticed that he used to be energetic and play a lot, and now he is not, however, after starting medications, is slightly better.

Diet and Supplements:

Acana

Cardiovascular History:

Prior CHF diagnosis?	YES
Prior heart murmur?	YES
Prior ATE?	NO
Prior arrhythmia?	NO
Monitoring respiratory rate and effort at home?	YES
Cough?	YES (hacking, throat clearing)
Shortness of breath or difficulty breathing?	YES

Syncope or collapse?
Sudden onset lameness?
Exercise intolerance?

NO
YES (LFL)
YES

Current Medications Pertinent to CV System:

B6

Cardiac Physical Examination:

B6

Muscle condition:

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

Cardiovascular Physical Exam:

Murmur Grade:

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

Murmur location/description: systolic; left apical systolic

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
- Bradycardia
- Tachycardia

Premature beats

Gallop:

- Yes
- No
- Intermittent

- Pronounced
- Other:

Pulmonary assessments:

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

Abdominal exam:

- Normal
- Hepatomegaly
- Abdominal distension
- Mild ascites
- Marked ascites

Problems:

murmur, shortness of breath, lameness, historical ascites and pleural effusion)

Differential Diagnoses:

DCM, DMVD, CHF secondary to DCM

Diagnostic plan:

- Echocardiogram
- Chemistry profile
- ECG
- Renal profile
- Blood pressure
- Dialysis profile
- Thoracic radiographs
- NT-proBNP
- Troponin I
- Other tests: Taurine level

Echocardiogram Findings:

General/2-D findings:

Decreased LV thicknesses with dilated LV cavity size. Decreased contractile function. Moderately enlarged LA. Mild amount of pleural effusion. Mild thickening of the MV and TV. No ascites.

B6

ECG findings:

Sinus tachycardiac with isolated VPC

Assessment and recommendations:

DCM with signs of active CHF, although he is better than prior to starting medication (no more ascites). However, given that there is still some pleural effusion, the diuretic dose that the patient is on right now is not sufficient.

B6

B6

in 2 weeks. Recheck echocardiogram in 3-4 months.

Final Diagnosis:

DCM with CHF

Heart Failure Classification Score:

ISACHC Classification:

- Ia
- Ib
- II
- IIIa
- IIIb

ACVIM Classification:

- A
- B1
- B2
- C
- D

2D

- SA LA
- Ao Diam
- SA LA / Ao Diam
- IVSd
- LVIDd
- LVPWd
- EDV(Teich)
- IVSs
- LVIDs
- LVPWs
- ESV(Teich)
- EF(Teich)
- %FS
- SV(Teich)
- LVLd A4C
- LVEDV MOD A4C
- LVLs A4C
- LVESV MOD A4C
- LVEF MOD A4C
- SV MOD A4C

B6

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M-Mode

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

B6,

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Doppler

MV E Vel
MV DecT
MV A Vel
MV E/A Ratio
PV Vmax
PV maxPG
AV Vmax
AV maxPG

B6

m/s
ms
m/s

m/s
mmHg
m/s
mmHg

Client:

B6

Address:

All Medical Records

Patient: **B6**

Breed: Boxer

DOB: **B6**

Species: Canine

Sex: Male
(Neutered)

Home Phone:
Work Phone:
Cell Phone:

B6

Referring Information

B6

B6

B6

B6

Client:

B6

Patient:

Initial Complaint:

ARVC vs. DCM with active CHF and uncontrolled Vtach.

SOAP Text: **B6** 9:34AM - Clinician, Unassigned FHSA

Subjective

NEW VISIT (ER)

Doctor: **B6**

Student: **B6**

Presenting complaint: wheezing

Referral visit: **B6**

Diagnostics completed prior to visit - saw this morning but referred straight here

B6 records in email

HISTORY:

Signalment: **B6** y/o MN Boxer

Current history:

In July primary vet noticed heart arrhythmia during appointment, was seen then due to symptom of wheezing **B6**. Started on **B6**, owners gave that for a couple of weeks and wheezing resolved, owners then stopped **B6** 1 week ago started wheezing again (sporadic), became clingy and lethargic. Owner had been out of town for a week, **B6** was at home with husband and owner is unsure what other symptoms **B6** has. Owner's husband did restart **B6** on Tuesday. No vomiting/heaving. Owner reports that he is drinking water normally, but didn't finish his food this morning which is abnormal for him. Unknown diarrhea, appetite status while owner was gone.

Prior medical history: none, known **B6**

Client: **B6**
Patient:

Current medications: 1/2 tablet BID (owner unsure strength), did start it on Tuesday. Took months long break of **B6** due to symptoms resolving.

Diet: royal canin boxer, dry , unknown length of time (last 1.5-2 yrs)

Vaccination status/flea & tick preventative use: UTD

Travel history: none

EXAM:

B6

C/V: II-III/VI left apical systolic murmur, arrhythmia (premature beats, intermittent gallop), fair arterial pulses

B6

ASSESSMENT:

A1: Severe cardiomegaly with poor contractile function - r/o primary DCM, diet-induced cardiomyopathy, ARVC, tachycardiac induced cardiomyopathy.

A2: Malignant ventricular arrhythmia - non-sustained VTach and frequent polymorphic VPCs

A3: Left sided congestive heart failure.

PLAN:

B6

Treatments:

B6

Diagnostics completed:

- Thoracic radiographs:

- Cardiopulmonary changes are consistent with left-sided congestive heart failure. Given moderate generalized cardiomegaly and moderate left atrial enlargement, consider DCM given breed. Echocardiography is

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

recommended and repeat thoracic radiographs to monitor response to therapy.
- Impression of faint rounded soft tissue opacities mixed in with the intersitial pattern may represent peribronchial cuffing and end on vessels, pulmonary nodules are thought less likely. Follow-up radiographs to reassess the lungs are recommended after resolution of cardiogenic pulmonary edema.
- Concurrent mild diffuse bronchial pattern likely represents a component of lower airway disease.

- Echocardiogram:

Findings consistent with DCM with active CHF and frequent ventricular arrhythmia. Patient has enough malignant arrhythmia that hospitalization and **B6** is recommended.

B6

PLAN (cardio consult):

B6

Client communication:

Discussed hospitalizing for supportive care, diagnosis (cardio consult, echo) and start treatment for CHF and underlying condition. O ok with plan. New doctor to give call in am. P enrolled in DCM study.

Deposit & estimate status: **B6**

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

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

SOAP Text **B6** 8:27AM **B6**

Day 2 Hospitalization

B6 yo MN Boxer

HISTORY:

Client: **B6**
Patient:

Current history:

In July primary vet noticed heart arrythmia during appointment, when he was seen then due to symptom of wheezing. rDVM started **B6** and owners gave that for a couple of weeks and wheezing resolved, owners then stopped **B6** (they didn't know they were supposed to continue). About 1 week ago started wheezing again (sporadic), becoming more clingy and lethargic. Owner had been out of town for a week, **B6** was at home with husband and owner is unsure what other symptoms **B6** has. Owner's husband did restart **B6** on Tuesday. No vomiting/heaving. Owner reports that he is drinking water normally, but didn't finish his food this morning which is abnormal for him. Unknown diarrhea, appetite status while owner was gone.

Prior medical history: none, known **B6**

Current medications: 1/2 tablet BID (owner unsure strength), did start it on Tuesday. Took months long break of **B6** due to symptoms resolving.

Diet: royal canin boxer, dry , unknown length of time (last 1.5-2 yrs); was on grain free diet before this

Vaccination status/flea & tick preventative use: UTD on vaccines

Travel history: none

Overnight update: AIVR and occasional VPCs. Not interested in food. Nauseaus last night, was given one dose of **B6** that helped a little bit. Also had 2 episodes of vtach around 7am, resolved on own.

EXAM:

B6

C/V: II-III/VI left apical systolic murmur, arrhythmia (premature beats, intermittent gallop), fair arterial pulses

B6

ASSESSMENT:

A1: Severe cardiomegaly with poor contractile function - r/o primary DCM, diet-induced cardiomyopathy, ARVC, tachycardiac induced cardiomyopathy

A2: Malignant ventricular arrhythmia - non-sustained VTach and frequent polymorphic VPCs

A3: Left sided congestive heart failure

PLAN:

Treatment Plan **B6):**

B6

Client: **B6**
Patient:

B6

Diagnosics completed:

- Thoracic radiographs **B6**

- Cardiopulmonary changes are consistent with left-sided congestive heart failure. Given moderate generalized cardiomegaly and moderate left atrial enlargement, consider DCM given breed. Echocardiography is recommended and repeat thoracic radiographs to monitor response to therapy.
- Impression of faint rounded soft tissue opacities mixed in with the intersitital pattern may represent peribronchial cuffing and end on vessels, pulmonary nodules are thought less likely. Follow-up radiographs to reassess the lungs are recommended after resolution of cardiogenic pulmonary edema.
- Concurrent mild diffuse bronchial pattern likely represents a component of lower airway disease.

- Echocardiogram/ Cardio recommendations **B6**

Findings consistent with DCM with active CHF and frequent ventricular arrhythmia. Patient has enough malignant arrhythmia that hospitalization **B6** is recommended.

B6

PLAN:

B6

B6

Plan **B6**

B6

Client: B6
Patient: B6

B6

B6
SOAP Text B6 9:19AM - Clinician, Unassigned FHSA

Day 3 Hospitalization

B6 yo MN Boxer

HISTORY:

Current history:

In July primary vet noticed heart arrhythmia during appointment, when he was seen then due to symptom of wheezing. rDVM started B6 and owners gave that for a couple of weeks and wheezing resolved, owners then stopped B6 (they didn't know they were supposed to continue). About 1 week ago started wheezing again (sporadic), becoming more clingy and lethargic. Owner had been out of town for a week, B6 was at home with husband and owner is unsure what other symptoms B6 has. Owner's husband did restart B6 on Tuesday. No vomiting/heaving. Owner reports that he is drinking water normally, but didn't finish his food this morning which is abnormal for him. Unknown diarrhea, appetite status while owner was gone.

Prior medical history: none, known B6

Current medications: 1/2 tablet BID (owner unsure strength), did start it on Tuesday. Took months long break of B6 due to symptoms resolving.

Diet: royal canin boxer, dry, unknown length of time (last 1.5-2 yrs); was on grain free diet before this

Vaccination status/flea & tick preventative use: UTD on vaccines

Travel history: none

Overnight update:

Patient starting to be a little interested in food. Arrhythmia still not well under control -- HR ~ 170-180 with intermittent R on T, pauses and AIVR, multiforme VPCs.

EXAM:

B6

C/V: II-III/VI left apical systolic murmur, arrhythmia (premature beats), ssfn
B6

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

B6

ASSESSMENT:

- A1: Severe cardiomegaly with poor contractile function - r/o primary DCM, diet-induced cardiomyopathy, ARVC, tachycardiac induced cardiomyopathy
- A2: Malignant ventricular arrhythmia - non-sustained VTach and frequent polymorphic VPCs
- A3: Left sided congestive heart failure

PLAN:

Diagnosics completed:

- Thoracic radiographs **B6**
 - Cardiopulmonary changes are consistent with left-sided congestive heart failure. Given moderate generalized cardiomegaly and moderate left atrial enlargement, consider DCM given breed. Echocardiography is recommended and repeat thoracic radiographs to monitor response to therapy.
 - Impression of faint rounded soft tissue opacities mixed in with the intersitital pattern may represent peribronchial cuffing and end on vessels, pulmonary nodules are thought less likely. Follow-up radiographs to reassess the lungs are recommended after resolution of cardiogenic pulmonary edema.
 - Concurrent mild diffuse bronchial pattern likely represents a component of lower airway disease.
- Echocardiogram/ Cardio recommendations **B6**

Findings consistent with DCM with active CHF and frequent ventricular arrhythmia. Patient has enough malignant arrhythmia that hospitalization and **B6** recommended.

B6

- BNP **B6**
- NOV **B6**
- PCV **B6**
- CBC **B6**
- Chemistry **B6**
- Chemistry **B6**
- Chemistry **B6**

B6

BUN	creat	Na	K	Cl	ALT
B6					

Client: B6
Patient: B6

B6

Treatment Plan B6

B6

Plan B6

B6

Plan B6

B6

SOAP Text B6 7:17AM - Clinician, Unassigned FHSA

History:

B6 MN Boxer presented to rDV B6 for wheezing and decreased appetite at home for 1 week. B6 referred to Tufts ER. O were on vacation and are unclear on exact symptoms and duration. Pt was previously seen at B6 for wheezing in July where arrhythmia was noted and pt was started on B6 1/2 tab BID (O unclear on dose). O discontinued B6 when wheezing resolved. Was on grain-free diet until B6 years ago.

Subjective:

B6

Client: **B6**
Patient:

Overall impression since arrival or since last exam: Improved since admission to ER on **B6** The RR are back to normal and his has no RE. Ate for us a small amount this morning which is good. Seems slightly brighter. Telemetry revealed persistent multiform ventricular tachycardia with fast rate with no obvious improvement compared to previously.

Appetite: No immediate interest in food, ate when stimulated and hand fed.

Objective:

B6

Heart: Grade II-II/VI left apical systolic murmur. Multiple premature beats with short runs of sustained tachycardia. Jugular veins bottom 1/3 of the neck. Femoral pulses fair with pulses deficits.

B6

Treatments in hospital

B6

Diagnostics

- Thoracic rads **B6** Moderate generalized cardiomegaly and moderate left atrial enlargement onsistent with left-sided congestive heart failure/DCM. Cardiogenic pulmonary edema. Concurrent mild diffuse bronchial pattern likely represents a component of lower airway disease.
- Echo (Abridged due to dyspnea **B6**) Findings consistent with DCM with active CHF and frequent ventricular arrhythmia. Severe cardiomegaly with poor contractile function.

- NOVA
- BNP (2)
- PCV/T **B6**
- CBC (2)
- Chemistry (
- Chemistry (
- Chemistry (

B6

Assessments

- A1: DCM vs. ARVC with DCM phenotype with history of active LCHF
- A2: Malignant ventricular arrhythmia - non-sustained VTach and frequent polymorphic VPCs

Plan

1. **B6**
- 2.
- 3.

Client:
Patient:

B6

B6

Disposition/Recommendations

Client: **B6**
Patient:

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

Cummings
Veterinary Medical Center
 AT TUFTS UNIVERSITY

Foster Hospital for Small Animals

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

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

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

Lab Results Report

Nova Full Panel-ICU **B6** 30:25 AM **Accession ID: B6**

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



12/85

B6

Printed Monday, February 25, 2019

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

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

Nova Full Panel-ICU **B6** 9:36:12 AM Accession ID: **B6**

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

Nova Full Panel-ICU **B6** 9:56:25 AM Accession ID: **B6**

Test	Results	Reference Range	Units
GLUCOSE	B6	67 - 135	mg/dL
UREA		8 - 30	mg/dL
CREATININE		0.6 - 2	mg/dL
PHOSPHORUS		2.6 - 7.2	mg/dL
CALCIUM2		9.4 - 11.3	mg/dL
MAGNESIUM 2+		1.8 - 3	mEq/L
T. PROTEIN		5.5 - 7.8	g/dL
ALBUMIN		2.8 - 4	g/dL
GLOBULINS		2.3 - 4.2	g/dL
A/G RATIO		0.7 - 1.6	
SODIUM		140 - 150	mEq/L
CHLORIDE		106 - 116	mEq/L
POTASSIUM		3.7 - 5.4	mEq/L
tCO2 (BICARB)		14 - 28	mEq/L
AGAP		8 - 19	
NA/K		29 - 40	
T BILIRUBIN		0.1 - 0.3	mg/dL
ALK PHOS		12 - 127	U/L
GGT		0 - 10	U/L
ALT		14 - 86	U/L
AST		9 - 54	U/L
CK		22 - 422	U/L
CHOLESTEROL		82 - 355	mg/dL
TRIGLYCERIDES		30 - 338	mg/dl
AMYLASE		409 - 1250	U/L

1930 Result(s) verified



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

OSMOLALITY (CALCULATED) **B6** 291 - 315 mmol/L

Nova Full Panel-ICU **B6** 12:18:25 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	
iCO2 (BICARB)		14 - 28	mEq/L	
AGAP		8 - 19		
NA/K		29 - 40		
T BILIRUBIN		0.1 - 0.3	mg/dL	
ALK PHOS		12 - 127	U/L	
GGT		0 - 10	U/L	
ALT		14 - 86	U/L	
AST		9 - 54	U/L	
CK		22 - 422	U/L	
CHOLESTEROL		82 - 355	mg/dL	
TRIGLYCERIDES		30 - 338	mg/dl	
AMYLASE		409 - 1250	U/L	
2888 Result(s) verified				
OSMOLALITY (CALCULATED)			291 - 315	mmol/L



Client: **B6**
Patient:

B6 7/17/16-2/22/19

B6

TAX COVER SHEET

Date: **B6**

To: TDAS ER

Comments: **B6**

Pages: _____

If you have received this fax in error, please contact
B6
Thank you, and have a nice day!



01 / 1 #

B6

B6

02-22-18:09:58AM, From:

Client: **B6**
Patient:

B6 medical records 7/17/16-2/22/19

Patient Chart

B6
B6

Printed: **B6** at 8:51a

CLIENT INFORMATION

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

PATIENT INFORMATION

Name	B6	Species	Canine
Sex	Male, Neutered	Breed	Boxer
Birthday	B6	Age	10y
ID	B6	Rabies	1959-16
Color	Brown	Weight	57.40 Lbs
Reminded	02-18-19	Codes	

Reminders for: B6	Last done
06-12-20	06-13-17
07-24-19	07-24-18
07-24-19	07-24-18
07-24-19	07-24-18
05-26-19	05-26-16
02-23-19	07-24-18
08-14-18	
07-07-17	07-07-16

B6 weight history

02-22-19	57.40
12-26-17	53.60
09-08-17	55.40
06-13-17	53.30
11-07-16	54.00
07-07-16	60.00
05-26-16	63.00
07-17-15	63.70
05-30-14	60.80
10-28-13	58.70
10-28-13	58.70
05-06-13	59.30
01-06-11	55.00

MEDICAL HISTORY - S.O.A.P. View

Date	By	Code	Description	Qty (Variance)	Photo
B6	B6	B6	Non-Wellness Medical Record		

Age: 10y Weight: 57.40
BCS: **B6**

SUBJECTIVE SECTION

01 / 2 / #

B6

B6

02-22-19:09:56AM:From:

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

B6 medical records 7/17/16-2/22/19

B6

Patient Chart for **B6**
Date **B6** Time: 8:51a

Client: Ms **B6** Page: 2

Date	By	Code	Description	Qty (Variance)	Photo
------	----	------	-------------	----------------	-------

B6 (owner) brought **B6** in today... she just got home from a business trip and her husband told her that **B6** has been coughing at night and generally not doing well. There are notes of collapsing episodes in 2014 in our records (owner doesn't remember these) and we have auscultated an arrhythmia at visits since 2015. ARVC and cardiologist intervention has been discussed on numerous occasions but has always been declined. **B6** started **B6** in July 2018 due to a profound arrhythmia, but the owners were unaware that this was something they should have continued long-term and stopped it a long time ago because **B6** had been doing well at home. His condition at home has declined in the last week or two and now they are seeing:

- a light wheeze-like outward coughing/chuffing intermittently throughout the day, but mostly at night
- generalized lethargy and exercise intolerance on walks
- appetite is decreased

OBJECTIVE SECTION

B6

Heart
irregular cardiac arrhythmia with variable pulse quality and dropped beats, grade I-II murmur, slightly pale mm for a nervous dog

B6

ASSESSMENT SECTION

NOTES

10yo CM Boxer
- hx cardiac arrhythmia (not worked up): suspect ARVC
- new heart murmur, pulmonary crackles: suspect CHF... r/o primary pulmonary pathology

PLAN SECTION

NOTES

Discussed with **B6**, **B6** certainly has ARVC which has never been worked up with a cardiologist and I fear that he is currently in heart failure. He needs to be evaluated by a cardiologist ASAP to get him started on medication which may help improve heart function and lessen frequency of arrhythmia. Things are now an emergency. **B6** will bring him to Tufts. Discussed that if he seems "stable" (understanding dogs with ARVC are ALWAYS at risk of sudden death) and/or owner has **B6** **B6** he may be able to be evaluated as a day-case (admit through the ER for the day to facilitate

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

B6 hosp medical records 7/17/16-2/22/19

B6

Patient Chart for **B6**
Date **B6** Time: 8:51a

Client: **B6** Page: 3

Date	By	Code	Description	Qty (Variance)	Photo
07-24-18	B6	WELL	cardiac workup and home on oral meds). If he seems unstable they may recommend admission for monitoring overnight. Did not take CXR or perform diagnostics since Tufts will repeat these anyway. Wellness Annual Medical Record		

Age: 9y

SUBJECTIVE SECTION

Annual exam. O does not take dog on long walks or runs anymore after the collapsing episode. Hx of arrhythmia, not seen a cardiologist. **B6**
B6 O complains of **B6**

OBJECTIVE SECTION

B6

Heart
HR 200 bpm. Pulses absent NMA

B6

ASSESSMENT SECTION

NOTES

- 1. Ventricular tachycardia
- 2. mass

PLAN SECTION

NOTES

B6

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

B6 hosp medical records 7/17/16-2/22/19

B6

Patient Chart for **B6**
Date **B6** Time: 8:51a

Client **B6** Page: 4

Date	By	Code	Description	Qty (Variance)	Photo
12-26-17	B6	B6	NONWELL Non-Wellness Medical Record		

Age: 9y Weight: 53.60
BCS: **B6**

SUBJECTIVE SECTION

Has had an eye problem for several days. No known trauma. Condition stable otherwise.

OBJECTIVE SECTION

Examination Results:
Eyes

B6

PLAN SECTION

NOTES

B6

NONWELL Non-Wellness Medical Record

Age: 9y

SUBJECTIVE SECTION

See 2nd EMR above

09-08-17 **B6** PRO Recheck /or Brief Medical Record

Age: 9y Weight: 55.40

06-13-17 **B6** WELL Wellness Annual Medical Record

Age: 8y Weight: 53.30

BCS: **B6**

SUBJECTIVE SECTION

Annual exam. Doing well for an older dog. History of arrhythmia, no recent signs of weakness or collapse. He does tremble sometimes but o thinks that is due to nervousness. A couple new **B6** **B6** would like the **B6** **B6** also checked, eating fine. Lost 6 lbs since last year but

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

B6 hosp medical records 7/17/16-2/22/19

B6

Patient Chart for **B6**
Date: **B6** Time: 8:51a

Client: **B6** Page: 5

Date	By	Code	Description	Qty (Variance)	Photo
------	----	------	-------------	----------------	-------

they intentionally reduced the food

OBJECTIVE SECTION

BAR

Examination Results:

Coat & Skin

B6

Heart

sinus arrhythmia and some ectopic beats. PSS, NMA

Oral / Nasal

marked **B6**

Normal Systems: Eyes, Ears, Lungs, Abdominal Palpation, Gastrointestinal, Lymph Nodes, Urogenital, Neurologic, Musculoskeletal

ASSESSMENT SECTION

NOTES

arrhythmia r/o ARVC vs DCM

B6

PLAN SECTION

NOTES

Since **B6** is not experiencing anything that sounds like heart disease, elects to hold off on diagnostics and medication.

B6

B6 to just leave alone.

11-08-15

B6 NONWELL Non-Wellness Medical Record

Client instructions - Please keep **B6** rested for the next week (on a leash for short bathroom breaks then back inside). Avoid running/jumping/stairs if possible.

Give the **B6** as directed for discomfort.

B6

Age: 8y Temp: 100.70 Pulse: 136.00
BCS: **B6**

SUBJECTIVE SECTION

B6

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

B6 hosp medical records 7/17/16-2/22/19

B6

Patient Chart for **B6**
Date: 02-22-19, Time: 8:51a

Client: Ms. **B6** Page: 6

Date	By	Code	Description	Qty (Variance)	Photo
			B6		

OBJECTIVE SECTION

B6

ASSESSMENT SECTION

NOTES

B6

PLAN SECTION

NOTES

Exercise restriction for the next week
B6 75 to 100mg PO q8-12 for next week
Discussed **B6** but O to hold for now
Call if doesn't improve, can consider x-rays for further workup (would recommend bloodwork first ideally for further evaluation of weight loss)

11-07-16 **B6** PRO Recheck for Brief Medical Record

Age: 8y Weight: 54.00

SUBJECTIVE SECTION

B6

OBJECTIVE SECTION

BAR

Examination Results:
Coat & Skin

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

B6 hosp medical records 7/17/16-2/22/19

B6

Patient Chart for **B4**
Date: 02-22-19, Time: 8:51a

Client: Ms. **B6** Page: 7

Date	By	Code	Description	Qty (Variance)	Photo
			B6		

PLAN SECTION

NOTES

B6

07-07-16

Client Instructions - We will call tomorrow if there are any issues with his **B6** testing results (no call means clear). Please call if you would like to further discuss or schedule an echocardiogram and EKG to check his heart.

Age: 7y Weight: 60.00 Respiration: 28.00 Pulse: 132.00
CRT: 2 secs. BCS: **B6**

SUBJECTIVE SECTION

7yo CM Boxer. Here for annual. Doing well for age. History of collapsing during runs but hasn't done this in over a year. O noticing more **B6** but not bothering him. Occasionally has **B6** and when standing only. Good appetite/energy. On HW prevention.

OBJECTIVE SECTION

B6

ASSESSMENT SECTION

NOTES

7yo CM Boxer. Arrhythmia, history of collapsing episodes (none recently) r/o ARVC. Gingival hyperplasia. Suspect neurogenic tremor in hind.

PLAN SECTION

NOTES

01 / 8 #

B6

02-22-19 08:58AM From:

Client: **B6**
Patient:

B6 hosp medical records 7/17/16-2/22/19

B6

Patient Chart for **B6**
Date: 02-22-19, Time: 8:51a

Client: **B6**

Page: 8

Date	By	Code	Description	Qty (Variance)	Photo
------	----	------	-------------	----------------	-------

05-26-16	B6	B6	Recommend echo/EKG, warned about collapsing episodes or sudden death WELL Wellness Annual Medical Record		
Age: 7y		Weight: 63.00			

SUBJECTIVE SECTION

B6

PLAN SECTION

NOTES

07-17-15 **B6**

Age: 6y Weight: 63.70 Pulse: 136.00
CRT: 2 secs. BCS: **B6**

SUBJECTIVE SECTION

6yo CM Boxer. Doing well at home with no concerns. Hx collapsing episodes reported last year seem to have resolved but O's wife no longer takes him on runs anymore. No obvious exercise intolerance. On HW and **B6**. Good appetite/energy. O uses **B6**.

OBJECTIVE SECTION

B6

ASSESSMENT SECTION

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

B6 p medical records 7/17/16-2/22/19

B6

Patient Chart for: **B6**
Date: 02-22-19, Time: 8:51a

Client: **B6** Page: 9

Date	By	Code	Description	Qty (Variance)	Photo
------	----	------	-------------	----------------	-------

NOTES

6yo CM Boxer. Hx collapsing episodes during exercise r/o ARVC.

PLAN SECTION

NOTES

B6

05-30-14		CONWW	Converted Weight	0	
	Age: 5y	Weight: 60.80			
10-28-13		CONWW	Converted Weight	0	
	Age: 5y	Weight: 58.70			
		CONWW	Converted Weight	0	
	Age: 5y	Weight: 58.70			
05-06-13		CONWW	Converted Weight	0	
	Age: 4y	Weight: 59.30			
01-06-11		CONWW	Converted Weight	0	
	Age: 2y	Weight: 55.00			

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

CBC/Chem - **B6**



Tufts Cummings School Of Veterinary Medicine

200 Westboro Road
North Grafton, MA 01536

DUPLICATE

Name/DOB:	B6	Sex:	CM	Provider:	B6
Patient ID:	B6	Age:	10	Order Location:	V320559 Investigation into
Phone number:		Species:	Canine	Sample ID:	B6
Collection Date:	B6 12:37 PM	Breed:	Boxer		
Approval date:	B6 1:35 PM				

CBC, Comprehensive, Sm Animal (Research)

		Ref. Range/Males
SMACHUNSKI		
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
02/22/19 1:35 PM		
Mean Platelet Volume (Advia)	B6	8.29-13.20 fl
02/22/19 1:13 PM		
Platelet Cnt	B6	0.129-0.403 %
02/22/19 1:13 PM		
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)

		Ref. Range/Males
SMACHUNSKI		
Seg Neuts (%)	B6	43-86 %
Lymphocytes (%)	B6	7-47 %
Monocytes (%)	B6	1-15 %
Nucleated RBC	B6	0-1 /100 WBC
B6 1:13 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	

Sample ID: 19022200721
This report continues... (Final)

Reviewed by: _____

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

CBC/Chem **B6**



Tufts Cummings School Of Veterinary Medicine

200 Westboro Road
North Grafton, MA 01536

DUPLICATE

Name/DOB:	B6	Sex:	CM	Provider:	B6
Patient ID:	B6	Age:	10	Order Location:	V320559: Investigation into
Phone number:		Species:	Canine	Sample ID:	B6
Collection Date:	B6 12:37 PM	Breed:	Boxer		
Approval date:	B6 1:35 PM				

Microscopic Exam of Blood Smear (Advia) (cont'd)

B6 Ref. Range/Males
Echinocytes **B6**

Research Chemistry Profile - Small Animal (Cobas)

	B6	Ref. Range/Males
CSTCYR		
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: **B6**
REPRINT: Orig. printing on 2/22/2019 (Final)

Reviewed by: _____
Page 2

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

IDEXX BNP **B6**

IDEXX Reference Laboratories

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

Client: **B6**
Patient: **B6**
Species: CANINE
Breed: BOXER
Gender: MALE NEUTERED
Age: 11Y

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

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

CARDIOPEP I proBNP - CANINE

Test	Result	Reference Range	Abnormality
CARDIOPEP I proBNP - CANINE	B6	0 - 900 pmol/L	HIGH B6

Comments:

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.

Result is greater than 10000 pmol/L

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

Diet history **B6**

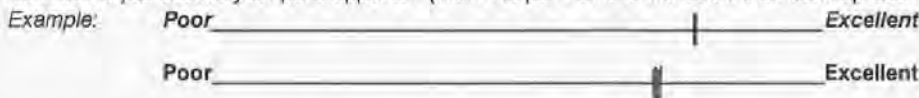
CARDIOLOGY DIET HISTORY FORM

B6

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
Wellness Complete Health - Sweet Potato & Fish	dry	1 cup	2x/day	2012-2018
Mother Hubbard's Grainfree	dry	1 cup	2x/day	2018-2012
Milkbone brushing chews	treat		1x/day	2018-2019
Milkbone treat	treats		2-3x/day	long-time
Royal Canine Baker	Dry	1 cup	2x/day	6/2018-present
Wellness Soft Bites Lamb & Salmon Grainfree	treats		1x/day	long-time

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

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

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

3. How do you administer pills to your pet?
 I do not give any medications *with sweet to RC canine*
 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): Cheese, Peppersoni

Client: **B6**
Patient:

Vitals Results

10:25:01 AM
10:36:48 AM
10:58:00 AM

12:43:21 PM
12:43:37 PM

12:44:22 PM
12:50:46 PM
12:50:47 PM
12:52:26 PM
1:00:33 PM
1:10:19 PM
1:10:20 PM
12:03:55 PM
12:03:56 PM
12:04:50 PM
12:25:32 PM
12:40:57 PM
1:00:23 PM
1:00:24 PM
1:01:00 PM
1:49:48 PM
1:49:49 PM
1:50:33 PM
1:05:52 PM
1:07:29 PM

1:07:44 PM

1:31:46 PM
15:00:16 PM
15:00:17 PM
15:05:10 PM
15:38:29 PM
15:38:44 PM
15:55:28 PM
15:03:19 PM
15:03:20 PM
15:04:06 PM
15:24:06 PM

B6

B6

Client: **B6**
Patient:

Vitals Results

6:24:07 PM
6:51:37 PM
6:51:38 PM
6:51:49 PM
7:51:32 PM
7:52:03 PM
7:52:04 PM
7:53:44 PM
8:45:01 PM
8:52:50 PM
8:52:51 PM
8:59:02 PM
9:25:37 PM
9:25:38 PM
9:49:17 PM
9:49:18 PM
9:56:13 PM
10:51:19 PM
10:51:20 PM
10:52:28 PM
11:34:01 PM
11:55:25 PM
11:55:36 PM
11:55:46 PM
11:55:47 PM
1:00:00 AM
1:00:01 AM
1:00:21 AM
1:52:25 AM
1:52:38 AM
1:53:31 AM
1:53:43 AM
1:53:44 AM
1:54:09 AM
1:54:10 AM
2:16:55 AM
2:33:32 AM
2:39:52 AM
2:39:53 AM
3:36:15 AM
3:36:16 AM

B6

B6

Client: **B6**
Patient:

Vitals Results

3:41:17 AM
3:41:27 AM
4:49:07 AM
4:49:08 AM
4:49:51 AM
5:28:53 AM
5:29:07 AM
5:29:08 AM
5:36:36 AM
5:56:48 AM
5:56:49 AM
6:56:08 AM
6:56:09 AM
6:56:56 AM
7:37:07 AM
7:37:52 AM

7:58:21 AM
7:58:22 AM
7:59:12 AM
9:09:20 AM
9:09:21 AM
9:33:45 AM
10:02:14 AM
10:02:15 AM
10:05:31 AM
10:05:43 AM
10:05:50 AM
11:06:13 AM
11:06:14 AM
11:07:32 AM
11:27:21 AM

11:27:43 AM
12:23:03 PM
12:23:04 PM
12:26:12 PM
1:04:31 PM
1:04:32 PM
1:05:24 PM
1:20:37 PM

B6

B6

Client: **B6**
Patient:

Vitals Results

1:55:09 PM
1:55:10 PM
1:55:50 PM
2:52:23 PM
2:52:24 PM
2:53:23 PM
3:12:08 PM
3:50:24 PM
3:50:40 PM
3:50:41 PM
4:49:31 PM
4:54:01 PM
4:54:02 PM
5:22:43 PM
5:33:09 PM
5:46:40 PM
5:46:52 PM
5:46:53 PM
6:00:15 PM
6:20:32 PM
6:30:51 PM
7:00:21 PM
7:00:22 PM
7:08:36 PM
8:00:49 PM
8:07:32 PM
8:07:33 PM
8:08:32 PM
9:00:28 PM
9:00:29 PM
9:06:37 PM
9:17:59 PM
9:36:52 PM
9:40:20 PM
9:41:25 PM
9:41:26 PM
11:21:33 PM
11:21:34 PM
11:22:05 PM
11:24:38 PM
11:27:39 PM

B6

B6

Client: **B6**
Patient:

Vitals Results

12:10:14 AM
12:10:15 AM
12:10:41 AM
1:02:51 AM
1:03:53 AM
1:03:54 AM
1:04:19 AM
1:05:57 AM
1:22:13 AM
1:22:23 AM
1:22:32 AM
1:57:47 AM
2:00:09 AM
2:00:10 AM
2:59:53 AM
2:59:54 AM
3:03:46 AM
3:04:41 AM
3:51:27 AM
3:58:14 AM
3:58:15 AM
4:58:50 AM
5:06:40 AM
5:06:48 AM
5:06:59 AM
5:08:17 AM
5:08:18 AM
5:08:31 AM
5:14:08 AM
5:48:40 AM
5:48:41 AM
5:48:58 AM
6:48:56 AM
6:48:57 AM
6:49:50 AM
7:40:17 AM
8:00:06 AM
8:00:07 AM
8:01:08 AM
9:04:42 AM
9:10:17 AM

B6

B6

Client: **B6**
Patient:

Vitals Results

9:10:18 AM
9:53:51 AM
9:53:52 AM
10:00:19 AM
10:01:02 AM
10:01:17 AM
10:02:17 AM
11:05:02 AM
11:06:36 AM
11:06:37 AM
11:31:26 AM

12:11:21 PM
12:11:22 PM
12:13:06 PM
12:55:17 PM
12:55:33 PM
12:55:34 PM
12:59:07 PM
12:59:18 PM
1:49:53 PM
1:50:09 PM
1:50:10 PM
3:10:31 PM
3:11:24 PM
3:11:25 PM
4:04:23 PM
4:04:24 PM
4:04:40 PM
5:04:41 PM
5:04:42 PM
5:04:55 PM
5:11:38 PM
5:19:41 PM

5:31:53 PM
5:35:31 PM
5:57:20 PM
5:57:21 PM
5:57:37 PM

B6

B6

Client: **B6**
Patient:

Vitals Results

7:23:42 PM
7:23:43 PM
7:24:28 PM
7:56:19 PM
7:56:20 PM
7:56:35 PM
8:11:41 PM
8:11:50 PM
8:46:12 PM
9:17:13 PM
9:17:21 PM
9:18:03 PM
9:18:04 PM
9:19:25 PM
9:23:52 PM
9:24:05 PM
9:53:36 PM
9:53:37 PM
9:53:49 PM
11:08:13 PM
11:08:14 PM
11:08:51 PM
11:09:13 PM
12:11:22 AM
12:11:23 AM
12:12:14 AM
12:50:11 AM
12:50:12 AM
12:50:28 AM
12:50:56 AM
2:11:35 AM
2:11:36 AM
2:12:04 AM
2:15:50 AM
3:09:06 AM
3:09:07 AM
3:09:21 AM
4:42:38 AM
4:42:39 AM
4:42:59 AM
5:32:29 AM

B6

B6

Client: **B6**
Patient:

Vitals Results

5:32:40 AM
5:32:49 AM
5:32:50 AM
5:41:15 AM
5:41:26 AM
5:45:16 AM
5:45:27 AM
5:58:53 AM
5:58:54 AM
5:59:10 AM
7:26:07 AM
7:28:28 AM
7:28:29 AM
7:52:07 AM
7:52:08 AM
7:54:41 AM
9:01:52 AM
9:01:53 AM
9:09:06 AM
9:22:41 AM
10:03:30 AM
10:03:31 AM
10:21:53 AM
10:22:05 AM
10:25:31 AM
10:51:49 AM
10:51:50 AM
10:57:46 AM
12:03:00 PM
12:03:01 PM
12:03:41 PM
12:59:10 PM
12:59:11 PM
1:00:11 PM
1:06:35 PM

1:07:04 PM
1:58:26 PM
1:58:27 PM
1:59:52 PM
2:49:26 PM

B6

B6

Client: **B6**
Patient:

Vitals Results

B6
2:49:27 PM
2:49:40 PM
3:47:30 PM
3:47:31 PM
3:47:42 PM

B6

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

ECG from Cardio

B6

B6

1:43:38 AM

Tufts University
Tufts Cummings School of Vet Med
Cardiology

B6

Client: **B6**
Patient:

ECG from Cardio

B6

B6 11:45:45 AM Page 1 of 2
Tufts University
Tufts Cummings School of Vet Med
Cardiology

B6

Client: **B6**
Patient:

ECG from Cardio

B6

B6

11:45:45 AM

Page 2 of 2

Tufts University
Tufts Cummings School of Vet Med
Cardiology

B6

Client: **B6**
Patient:

ECG from Cardio

B6

B6

4:06 AM
Tufts University
Tufts Cummings School of Vet Med
Cardiology

B6

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

ECG from Cardio

B6

B6

:46:06 AM
Tufts University
Tufts Cummings School of Vet Med
Cardiology

B6

Client: **B6**
Patient:

ECG from Cardio

B6

B6

4:48:08 AM

Tufts University
Tufts Cummings School of Vet Med
Cardiology

B6

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

ECG from Cardio

B6

B6

11:50:34 AM

Tufts University
Tufts Cummings School of Vet Med
Cardiology

B6

Client: **B6**
Patient:

Patient History

09:15 AM UserForm
09:30 AM Purchase
09:36 AM Labwork
09:36 AM Purchase
10:10 AM UserForm
10:16 AM Purchase
10:16 AM Treatment
10:25 AM Vitals
10:34 AM UserForm

10:36 AM Vitals
10:46 AM UserForm

10:52 AM Deleted Reason

10:52 AM Deleted Reason

10:52 AM Treatment
10:58 AM Vitals
11:36 AM Treatment
11:47 AM Purchase
12:01 PM Prescription

12:02 PM Prescription
12:43 PM Vitals
12:43 PM Vitals
12:44 PM Vitals

12:50 PM Purchase
12:50 PM Purchase
12:50 PM Treatment

12:50 PM Vitals
12:50 PM Vitals
12:52 PM Treatment
12:52 PM Vitals
01:00 PM Treatment
01:00 PM Vitals
01:00 PM Treatment
01:10 PM Treatment
01:10 PM Vitals

B6

B6

Client: **B6**
Patient:

Patient History

01:10 PM	Vitals
01:26 PM	Purchase
01:26 PM	Purchase
01:26 PM	Purchase
01:42 PM	Purchase
01:42 PM	Purchase
02:03 PM	Treatment
02:03 PM	Vitals
02:03 PM	Vitals
02:04 PM	Treatment
02:04 PM	Vitals
02:11 PM	Purchase
02:11 PM	Purchase
02:25 PM	Vitals
02:40 PM	Treatment
02:40 PM	Vitals
03:00 PM	Treatment
03:00 PM	Vitals
03:00 PM	Vitals
03:01 PM	Treatment
03:01 PM	Vitals
03:49 PM	Treatment
03:49 PM	Vitals
03:49 PM	Vitals
03:50 PM	Treatment
03:50 PM	Vitals
04:05 PM	Vitals
04:07 PM	Vitals
04:07 PM	Vitals
04:24 PM	Deleted Reason
04:30 PM	Deleted Reason
04:31 PM	Vitals
04:32 PM	Prescription
05:00 PM	Treatment
05:00 PM	Vitals
05:00 PM	Vitals
05:05 PM	Treatment
05:05 PM	Vitals

B6

B6

Client: **B6**
Patient:

Patient History

05:16 PM	Treatment
05:38 PM	Treatment
05:38 PM	Vitals
05:38 PM	Treatment
05:38 PM	Vitals
05:39 PM	Treatment
05:55 PM	Vitals
06:03 PM	Treatment
06:03 PM	Vitals
06:03 PM	Vitals
06:04 PM	Treatment
06:04 PM	Vitals
06:24 PM	Treatment
06:24 PM	Vitals
06:24 PM	Vitals
06:49 PM	Prescription
06:51 PM	Treatment
06:51 PM	Vitals
06:51 PM	Vitals
06:51 PM	Treatment
06:51 PM	Vitals
07:51 PM	Treatment
07:51 PM	Treatment
07:51 PM	Vitals
07:52 PM	Treatment
07:52 PM	Vitals
07:52 PM	Vitals
07:53 PM	Vitals
07:53 PM	Treatment
08:45 PM	Vitals
08:52 PM	Treatment
08:52 PM	Treatment
08:52 PM	Vitals
08:52 PM	Vitals
08:59 PM	Treatment
08:59 PM	Vitals
09:09 PM	Treatment
09:09 PM	Treatment
09:25 PM	Treatment
09:25 PM	Vitals
09:25 PM	Vitals

B6

B6

Client: **B6**
Patient:

Patient History

	09:49 PM	Treatment
	09:49 PM	Vitals
	09:49 PM	Vitals
	09:56 PM	Treatment
	09:56 PM	Vitals
	10:51 PM	Treatment
	10:51 PM	Vitals
	10:51 PM	Vitals
	10:52 PM	Treatment
	10:52 PM	Vitals
	11:34 PM	Treatment
	11:34 PM	Vitals
	11:55 PM	Treatment
	11:55 PM	Vitals
	11:55 PM	Treatment
	11:55 PM	Vitals
	11:55 PM	Treatment
	11:55 PM	Vitals
	11:55 PM	Vitals
	12:00 AM	Purchase
	01:00 AM	Treatment
	01:00 AM	Vitals
	01:00 AM	Vitals
	01:00 AM	Treatment
	01:00 AM	Vitals
	01:00 AM	Treatment
	01:52 AM	Vitals
	01:52 AM	Treatment
	01:52 AM	Vitals
	01:53 AM	Treatment
	01:53 AM	Vitals
	01:53 AM	Treatment
	01:53 AM	Vitals
	01:53 AM	Vitals
	01:54 AM	Treatment
	01:54 AM	Vitals
	01:54 AM	Vitals
	02:16 AM	Vitals
	02:33 AM	Vitals
	02:39 AM	Treatment
	02:39 AM	Vitals

B6

B6

Client: **B6**
Patient:

Patient History

02:39 AM Vitals
03:36 AM Treatment

03:36 AM Vitals
03:36 AM Vitals
03:41 AM Treatment
03:41 AM Vitals
03:41 AM Treatment
03:41 AM Vitals
04:49 AM Treatment

04:49 AM Vitals
04:49 AM Vitals
04:49 AM Treatment
04:49 AM Vitals
05:25 AM Treatment
05:28 AM Treatment
05:28 AM Vitals
05:29 AM Treatment
05:29 AM Vitals

05:29 AM Vitals

05:29 AM Treatment

05:36 AM Treatment
05:36 AM Vitals
05:36 AM Treatment

05:56 AM Treatment

05:56 AM Vitals
05:56 AM Vitals
06:56 AM Treatment

06:56 AM Vitals
06:56 AM Vitals
06:56 AM Treatment
06:56 AM Vitals
07:37 AM Treatment
07:37 AM Vitals
07:37 AM Treatment
07:37 AM Vitals

07:38 AM Treatment

07:58 AM Treatment

07:58 AM Vitals
07:58 AM Vitals
07:59 AM Treatment

B6

B6

Client: **B6**
Patient:

Patient History

07:59 AM	Vitals
09:02 AM	Treatment
09:05 AM	Prescription
09:09 AM	Treatment
09:09 AM	Vitals
09:09 AM	Vitals
09:12 AM	Treatment
09:27 AM	Deleted Reason
09:29 AM	Purchase
09:29 AM	Treatment
09:33 AM	Treatment
09:33 AM	Vitals
09:46 AM	Treatment
09:56 AM	Purchase
10:02 AM	Treatment
10:02 AM	Vitals
10:02 AM	Vitals
10:05 AM	Treatment
10:05 AM	Vitals
10:05 AM	Treatment
10:05 AM	Vitals
10:05 AM	Vitals
10:06 AM	Treatment
11:06 AM	Treatment
11:06 AM	Vitals
11:06 AM	Vitals
11:07 AM	Treatment
11:07 AM	Vitals
11:27 AM	Treatment
11:27 AM	Vitals
11:27 AM	Treatment
11:27 AM	Vitals
11:53 AM	UserForm
12:02 PM	Purchase
12:02 PM	Purchase
12:23 PM	Treatment
12:23 PM	Vitals
12:23 PM	Vitals
12:26 PM	Treatment

B6

B6

Client: **B6**
Patient:

Patient History

12:26 PM	Vitals
01:04 PM	Treatment
01:04 PM	Vitals
01:04 PM	Vitals
01:05 PM	Treatment
01:05 PM	Vitals
01:05 PM	Treatment
01:20 PM	Treatment
01:20 PM	Vitals
01:55 PM	Treatment
01:55 PM	Vitals
01:55 PM	Vitals
01:55 PM	Vitals
01:55 PM	Treatment
01:55 PM	Vitals
02:52 PM	Treatment
02:52 PM	Vitals
02:52 PM	Vitals
02:53 PM	Treatment
02:53 PM	Vitals
03:12 PM	Treatment
03:12 PM	Vitals
03:50 PM	Treatment
03:50 PM	Vitals
03:50 PM	Treatment
03:50 PM	Vitals
03:50 PM	Vitals
04:49 PM	Treatment
04:49 PM	Vitals
04:54 PM	Treatment
04:54 PM	Vitals
04:54 PM	Vitals
05:16 PM	Treatment
05:22 PM	Treatment
05:22 PM	Treatment
05:22 PM	Vitals
05:28 PM	Treatment
05:29 PM	Treatment
05:33 PM	Treatment
05:33 PM	Vitals
05:46 PM	Treatment

B6

B6

Client: **B6**
Patient:

Patient History

05:46 PM	Vitals
05:46 PM	Treatment
05:46 PM	Vitals
05:46 PM	Vitals
06:00 PM	Vitals
06:20 PM	Vitals
06:21 PM	Treatment
06:21 PM	Treatment
06:30 PM	Vitals
06:45 PM	Treatment
06:51 PM	Treatment
07:00 PM	Vitals
07:00 PM	Vitals
07:08 PM	Treatment
07:08 PM	Treatment
07:08 PM	Vitals
08:00 PM	Vitals
08:07 PM	Treatment
08:07 PM	Vitals
08:07 PM	Vitals
08:08 PM	Treatment
08:08 PM	Vitals
09:00 PM	Vitals
09:00 PM	Vitals
09:06 PM	Treatment
09:06 PM	Vitals
09:14 PM	Treatment
09:17 PM	Treatment
09:17 PM	Vitals
09:18 PM	Treatment
09:36 PM	Treatment
09:36 PM	Treatment
09:36 PM	Vitals
09:40 PM	Treatment
09:40 PM	Vitals
09:41 PM	Treatment
09:41 PM	Vitals
09:41 PM	Vitals
11:21 PM	Treatment
11:21 PM	Vitals
11:21 PM	Vitals

B6

B6

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

Patient History

B6	1:22 PM	Treatment	
	1:22 PM	Vitals	
	1:24 PM	Treatment	
	1:24 PM	Vitals	
	1:27 PM	Vitals	
	2:00 AM	Purchase	
	2:10 AM	Treatment	
	2:10 AM	Vitals	
	2:10 AM	Vitals	
	2:10 AM	Treatment	
	2:10 AM	Vitals	
	1:02 AM	Treatment	
	1:02 AM	Treatment	
	1:02 AM	Vitals	
	1:03 AM	Treatment	
	1:03 AM	Vitals	
	1:03 AM	Vitals	
	1:04 AM	Treatment	
	1:04 AM	Vitals	
	1:05 AM	Vitals	
	1:22 AM	Treatment	
	1:22 AM	Vitals	
	1:22 AM	Treatment	
	1:22 AM	Vitals	
	1:22 AM	Vitals	
	1:57 AM	Vitals	
	1:58 AM	Treatment	
	2:00 AM	Treatment	
	2:00 AM	Vitals	
	2:00 AM	Vitals	
	2:59 AM	Treatment	
	2:59 AM	Vitals	
	2:59 AM	Vitals	
	3:03 AM	Treatment	
	3:03 AM	Vitals	
	3:04 AM	Vitals	
	3:51 AM	Treatment	
	3:51 AM	Vitals	
	3:58 AM	Treatment	
	3:58 AM	Vitals	
	3:58 AM	Vitals	
	3:58 AM	Vitals	
	4:58 AM	Treatment	

Client: **B6**
Patient:

Patient History

04:58 AM	Treatment
04:58 AM	Treatment
04:58 AM	Vitals
04:59 AM	Treatment
04:59 AM	Treatment
05:06 AM	Treatment
05:06 AM	Vitals
05:06 AM	Treatment
05:06 AM	Vitals
05:06 AM	Treatment
05:06 AM	Vitals
05:08 AM	Treatment
05:08 AM	Vitals
05:08 AM	Vitals
05:08 AM	Treatment
05:08 AM	Vitals
05:14 AM	Treatment
05:14 AM	Vitals
05:48 AM	Treatment
05:48 AM	Vitals
05:48 AM	Vitals
05:48 AM	Treatment
05:48 AM	Vitals
06:48 AM	Treatment
06:48 AM	Vitals
06:48 AM	Vitals
06:49 AM	Treatment
06:49 AM	Vitals
07:40 AM	Vitals
08:00 AM	Treatment
08:00 AM	Vitals
08:00 AM	Vitals
08:01 AM	Treatment
08:01 AM	Vitals
09:04 AM	Treatment
09:04 AM	Vitals
09:05 AM	Treatment
09:10 AM	Treatment
09:10 AM	Vitals
09:10 AM	Vitals
09:53 AM	Treatment

B6

B6

Client: **B6**
Patient:

Patient History

09:53 AM	Vitals
09:53 AM	Vitals
10:00 AM	Treatment
10:00 AM	Vitals
10:00 AM	Treatment
10:01 AM	Vitals
10:01 AM	Treatment
10:01 AM	Treatment
10:01 AM	Vitals
10:02 AM	Vitals
10:24 AM	Purchase
11:05 AM	Treatment
11:05 AM	Vitals
11:06 AM	Treatment
11:06 AM	Vitals
11:06 AM	Vitals
11:31 AM	Treatment
11:31 AM	Vitals
12:02 PM	Purchase
12:02 PM	Purchase
12:11 PM	Treatment
12:11 PM	Vitals
12:11 PM	Vitals
12:13 PM	Treatment
12:13 PM	Vitals
12:17 PM	Treatment
12:18 PM	Purchase
12:54 PM	Treatment
12:55 PM	Treatment
12:55 PM	Vitals
12:55 PM	Treatment
12:55 PM	Vitals
12:55 PM	Vitals
12:59 PM	Treatment
12:59 PM	Vitals
12:59 PM	Treatment
12:59 PM	Vitals
01:49 PM	Treatment
01:49 PM	Vitals
01:50 PM	Treatment
01:50 PM	Vitals

B6

B6

Client: **B6**
Patient:

Patient History

	01:50 PM	Vitals
	03:10 PM	Treatment
	03:10 PM	Vitals
	03:11 PM	Treatment
	03:11 PM	Vitals
	03:11 PM	Vitals
	04:04 PM	Treatment
	04:04 PM	Vitals
	04:04 PM	Vitals
	04:04 PM	Treatment
	04:04 PM	Vitals
	05:04 PM	Treatment
	05:04 PM	Vitals
	05:04 PM	Vitals
	05:04 PM	Treatment
	05:04 PM	Vitals
	05:07 PM	Treatment
	05:11 PM	Treatment
	05:11 PM	Vitals
	05:19 PM	Treatment
B6	05:19 PM	Vitals
	05:24 PM	Prescription
	05:24 PM	Prescription
	05:31 PM	Treatment
	05:31 PM	Treatment
	05:31 PM	Vitals
	05:35 PM	Treatment
	05:35 PM	Vitals
	05:57 PM	Treatment
	05:57 PM	Vitals
	05:57 PM	Vitals
	05:57 PM	Treatment
	05:57 PM	Vitals
	07:23 PM	Treatment
	07:23 PM	Vitals
	07:23 PM	Vitals
	07:24 PM	Treatment
	07:24 PM	Vitals
	07:56 PM	Treatment
	07:56 PM	Vitals

B6

Patient History

07:56 PM	Vitals
07:56 PM	Treatment
07:56 PM	Vitals
08:11 PM	Vitals
08:11 PM	Vitals
08:46 PM	Treatment
08:46 PM	Vitals
09:17 PM	Treatment
09:17 PM	Treatment
09:17 PM	Vitals
09:17 PM	Vitals
09:17 PM	Treatment
09:18 PM	Treatment
09:18 PM	Vitals
09:18 PM	Vitals
09:19 PM	Treatment
09:19 PM	Vitals
09:23 PM	Vitals
09:24 PM	Treatment
09:24 PM	Vitals
09:53 PM	Treatment
09:53 PM	Vitals
09:53 PM	Vitals
09:53 PM	Treatment
09:53 PM	Vitals
1:08 PM	Treatment
1:08 PM	Vitals
1:08 PM	Vitals
1:08 PM	Treatment
1:08 PM	Vitals
1:09 PM	Treatment
1:09 PM	Vitals
2:00 AM	Purchase
2:11 AM	Treatment
2:11 AM	Vitals
2:11 AM	Vitals
2:12 AM	Treatment
2:12 AM	Vitals
2:50 AM	Treatment
2:50 AM	Vitals
2:50 AM	Vitals
2:50 AM	Treatment
2:50 AM	Vitals

B6

B6

Client:
Patient: **B6**

Patient History

	12:50 AM	Treatment	
	12:50 AM	Treatment	
	12:50 AM	Vitals	
	02:11 AM	Treatment	
	02:11 AM	Vitals	
	02:11 AM	Vitals	
	02:12 AM	Treatment	
	02:12 AM	Vitals	
	02:15 AM	Treatment	
	02:15 AM	Vitals	
	03:09 AM	Treatment	
	03:09 AM	Vitals	
	03:09 AM	Vitals	
	03:09 AM	Treatment	
	03:09 AM	Vitals	
	04:42 AM	Treatment	
	04:42 AM	Vitals	
	04:42 AM	Vitals	
	04:42 AM	Treatment	
	04:42 AM	Vitals	
B6	05:32 AM	Treatment	B6
	05:32 AM	Vitals	
	05:32 AM	Treatment	
	05:32 AM	Vitals	
	05:32 AM	Treatment	
	05:32 AM	Vitals	
	05:32 AM	Treatment	
	05:32 AM	Vitals	
	05:32 AM	Vitals	
	05:33 AM	Treatment	
	05:35 AM	Treatment	
	05:35 AM	Treatment	
	05:41 AM	Treatment	
	05:41 AM	Vitals	
	05:41 AM	Treatment	
	05:41 AM	Vitals	
	05:45 AM	Treatment	
	05:45 AM	Vitals	
	05:45 AM	Treatment	
	05:45 AM	Vitals	
	05:58 AM	Treatment	
	05:58 AM	Vitals	
	05:58 AM	Vitals	
	05:59 AM	Treatment	

Client: **B6**
Patient:

Patient History

05:59 AM	Vitals
07:26 AM	Treatment
07:26 AM	Vitals
07:28 AM	Treatment
07:28 AM	Vitals
07:28 AM	Vitals
07:52 AM	Treatment
07:52 AM	Vitals
07:52 AM	Vitals
07:54 AM	Treatment
07:54 AM	Vitals
08:32 AM	Deleted Reason
08:33 AM	Purchase
09:01 AM	Treatment
09:01 AM	Vitals
09:01 AM	Vitals
09:09 AM	Treatment
09:09 AM	Vitals
09:22 AM	Treatment
09:22 AM	Vitals
09:43 AM	Treatment
10:03 AM	Treatment
10:03 AM	Vitals
10:03 AM	Vitals
10:21 AM	Treatment
10:21 AM	Vitals
10:22 AM	Treatment
10:22 AM	Vitals
10:22 AM	Treatment
10:25 AM	Vitals
10:26 AM	Treatment
10:51 AM	Treatment
10:51 AM	Vitals
10:51 AM	Vitals
10:57 AM	Treatment
10:57 AM	Vitals
12:02 PM	Purchase
12:02 PM	Purchase
12:02 PM	Treatment
12:03 PM	Vitals
12:03 PM	Vitals

B6

B6

Client: **B6**
Patient:

Patient History

12:03 PM	Treatment
12:03 PM	Vitals
12:59 PM	Treatment
12:59 PM	Vitals
12:59 PM	Vitals
12:59 PM	Treatment
01:00 PM	Treatment
01:00 PM	Vitals
01:06 PM	Treatment
01:06 PM	Vitals
01:07 PM	Treatment
01:07 PM	Vitals
01:19 PM	Prescription
01:33 PM	Purchase
01:33 PM	Treatment
01:58 PM	Treatment
01:58 PM	Vitals
01:58 PM	Vitals
01:59 PM	Treatment
01:59 PM	Vitals
02:49 PM	Treatment
02:49 PM	Vitals
02:49 PM	Vitals
02:49 PM	Treatment
02:49 PM	Vitals
03:40 PM	Prescription
03:40 PM	Prescription
03:41 PM	Prescription
03:41 PM	Prescription
03:47 PM	Treatment
03:47 PM	Vitals
03:47 PM	Vitals
03:47 PM	Treatment
03:47 PM	Vitals
03:53 PM	Purchase
04:34 PM	UserForm

B6

B6

B6

B6

B6

Male (Neutered)

Canine Boxer Brindle

Patient ID:

B6

STANDARD CONSENT FORM

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

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

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

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

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

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

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

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

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

B6

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

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

Owner's name:

Owner's address:

Date: _____

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

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

Authorized Agent - Please Print

Agent's Signature

Street Address

Date

Town/City State Zip

Treatment Plan

Estimated Charges

B6

B6

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

Patient	Description	Low Qty	Low Extended	High Qty	High Extended
B6	Hospitalization for a few days of supportive care (EKG monitoring, medications) and diagnostic tests (bloodwork, x-rays, cardiology consultation, echocardiogram, EKG)	B6			

B6

Doctor of Record **B6**

I understand that no guarantee of successful treatment is made. I certify that I have read and fully understand the authorization for medical and/or surgical treatment, the reason for why such medical and/or surgical treatment is considered necessary, as well as its advantages and possible complications, if any. I also assume financial responsibility for all charges incurred to this patient(s). I agree to pay 75% of the estimated cost at the time of admission. Additional deposits will be required if additional care or procedures are required. I further agree to pay the balance of the charges when this patient(s) is released.

Procedural billing is inclusive up to and including the estimated duration of hospitalization. There will be additional expenses if hospitalization extends beyond the specified duration. I have read, understand, and agree to accept the conditions of this treatment plan.

Thank you for entrusting us with your pet's care.

High Total
 Low Total
 75% Deposit

B6

Radiology Request & Report

Patient

Name: B6

Species: Canine

Breed: Male (Neutered) Boxer

Birthdate: B6

Owner

Name: B6

Address: B6

Patient ID: B6

Date of request: B6

Attending Clinician: B6

Student:

Date of exam: B6

Patient Location: Ward/Cage:

Weight(lbs) 0.00

- Inpatient
- Outpatient Time:
- Waiting
- Emergency

Sedation

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

Examination Desired:

3 view chest

Presenting Complaint and Clinical Questions you wish to answer:

Emergency

Pertinent History:

Arrhythmia

FROM SOAP: "owner has been gone for a week. B6 was at home with husband. In July primary vet noticed heart arrhythmia due to symptom of wheezing. rDMM Started on B6 owners gave that for a couple weeks and wheezing resolved, stopped B6. 1 week ago started wheezing again (sporadic), became clingy and lethargic. No vomiting/heaving, drinking water, didn't finish food this morning which is abnormal. unknown diarrhea, appetite status while owner was gone. Did restart B6 on Tuesday."

Findings:

THORAX, THREE VIEWS.

B6

B6

B6

B6

Conclusions:

- Cardiopulmonary changes are consistent with left-sided congestive heart failure. Given moderate generalized cardiomegaly and moderate left atrial enlargement, consider DCM given breed. Echocardiography is recommended and repeat thoracic radiographs to monitor response to therapy.
- Impression of faint rounded soft tissue opacities mixed in with the interstitial pattern may represent peribronchial cuffing and end on vessels, pulmonary nodules are thought less likely. Follow-up radiographs to reassess the lungs are recommended after resolution of cardiogenic pulmonary edema.
- Concurrent mild diffuse bronchial pattern likely represents a component of lower airway disease.

Radiologists

Primary: B6

Reviewing:

Dates

Reported: B6

Finalized:

Discharge Instructions

Patient

Name: B6
Signalment: B6 Years Old Brindle Male (Neutered) Boxer

Owner

Name:
Address:

B6

Patient ID: B6
Emergency Clinician: B6
Consulting Clinician: B6

ER Supervisor:

B6

Admit Date: B6 12:55 AM
Check Out Date: B6

Diagnosis:

1. Dilated cardiomyopathy (DCM) with congestive heart failure
2. Malignant ventricular arrhythmia

Case 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 (like B6) which can be life-threatening and also require medical management. The heart enlargement has now progressed to the point of congestive heart failure, meaning that fluid is backing up into the lungs or belly. Unfortunately this is a progressive disease and we cannot reverse the changes to the heart muscle, however we can use cardiac medications and some changes to the diet to make your dog comfortable and have him breathing easier.

Diagnostic test results and findings:

- o Chest radiograph (x-ray) findings: The heart is enlarged and there is fluid in the lungs
- o Echocardiogram findings: All chambers of the heart are enlarged and there is fluid in the lungs
- o ECG findings: The ECG showed irregular heart rhythm
- o Labwork findings: The kidney values are mildly elevated; Liver values (ALT) slightly elevated

History:

B6 presented to Tufts ER on B6 for further evaluation of a one week history of wheezing. You report that your family vet noted a heart arrhythmia in July (was evaluated for wheezing) and B6 was started on B6. The wheezing resolved and the medication was discontinued. B6 didn't finish his breakfast the morning before presentation to ER, and this is abnormal for him.

Physical exam:

On presentation, B6 was bright and alert and his vital were normal except an elevated heart rate (160). He was noted to have a grade 2-3/6 heart murmur and an arrhythmia. He had moderate respiratory difficulty, and some wheezing and

coughing was noted intermittently. The rest of his physical exam was unremarkable.

Diagnostic/Treatment plan:

B6 had x-rays of his chest that showed evidence of left sided congestive heart failure and a moderate cardiomegaly (enlarged heart). He also had an echocardiogram which showed findings consistent with dilated cardiomyopathy (poor contractile function of the heart), active congestive heart failure, and frequent ventricular arrhythmia. B6 also had bloodwork which showed mild elevations in one of his liver values (ALT). On re-check bloodwork the next day, the liver value (ALT) was improved by still elevated. His kidney values also increased slightly, suspect due to the B6

B6

Monitoring at home:

B6

Recommended Medications:

B6

Diet suggestions:

Dogs with arrhythmia may benefit from the addition of omega-3 fatty acids (fish oil) to the diet. Diets such as the Royal Canin Boxer or Early Cardiac diet or Hill's j/d have ample fish oil and may not require much (or any) additional supplementation.

Dogs with heart failure accumulate more fluid in their body if they eat large amounts of sodium (salt). Sodium can be found in all foods, but some foods are lower in sodium than others.

Many pet treats, people foods, and supplements used to give pills often have more sodium than is desirable - a sheet that has suggestions for low sodium treats can be found on the HeartSmart web site (<http://vet.tufts.edu/heartsmart/diet/>). You can also find additional information on supplements such as fish oil or other supplements that you might have questions about may be found on the Tufts HeartSmart web site: (<http://vet.tufts.edu/heartsmart/diet/>).

- The FDA is currently investigating an apparent association between diet and a type of heart disease called dilated cardiomyopathy. The exact cause is still unclear, but it appears to be associated with boutique diets and those containing exotic ingredient or are grain-free. Therefore, we are currently recommending that dogs do not eat these types of diets.
- We recommend switching **B6** to commercial diet made by a well-established company that is not grain-free and does not contain any exotic ingredients, such as kangaroo, duck, lamb, venison, lentils, peas, beans, buffalo, tapioca, barley, and chickpeas.
- The FDA issued a statement regarding this issue (<https://www.fda.gov/AnimalVeterinary/NewsEvents/CVMUpdates/ucm613305.htm>) and a recent article published by Dr. Lisa Freeman on the Cummings School's PetFoodology blog can further explain these findings (<http://vetnutrition.tufts.edu/2018/06/a-broken-heart-risk-of-heart-disease-in-boutique-or-grain-free-diets-and-exotic-ingredients/>).
- Our nutritionists have compiled a list of dog foods that are good options for dogs with heart disease.

Dry Food Options:

Royal Canin Early Cardiac (veterinary diet)

Royal Canin Boxer

Purina Pro Plan Adult Weight Management

Purina Pro Plan Bright Mind Adult Small Breed Formula

Canned Food Options:

Hill's ScienceDiet Adult Beef and Barley Entree

Hill's Science Diet Adult 1-6 Healthy Cuisine Roasted Chicken, Carrot, and Spinach Stew

Royal Canin Mature 8+

We recommend slowly introducing one of the diets on the above list as follows: 25% of the new diet mixed with 75% old diet for 2-3 days, then 50:50, etc.

Hopefully you can find a diet on the list that **B6** will enjoy!

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

Exercise recommendations:

For the first 7 to 10 days after starting anti-arrhythmic medications and medications for heart failure, and until we know that the medications are effectively controlling arrhythmia, we recommend very **limited activity**. Leash walk only is ideal, and short walks to start. Once the arrhythmia and heart failure has been well controlled then slightly longer walks are acceptable. However, repetitive or strenuous high-energy activities (repetitive ball chasing, running fast off-leash, etc.) are not recommended as these activities may result in worsened arrhythmia or even sudden death.

Recheck/Follow-up:

A recheck exam is usually recommended in 7 to 14 days to check and see if the arrhythmia and heart failure is well controlled. If you wish to have the Cardiology service at Tufts assist with ongoing care of your pet's heart disease, please contact the Cardiology service by sending an email to cardiovet@tufts.edu within 24-48 hours after your pet has been discharged to set up an appointment. After you have made an appointment with the Cardiology service, the Cardiology service will then be able to answer questions regarding the care of your pet. If instead you would like to continue care with

your primary care veterinarian, then please have your veterinarian contact us with any questions regarding the treatment of your pet. As always, if your pet again encounters an emergency, the Emergency Service is available to see you 24 hours a day, 365 days a year.

Thank you for entrusting us with [B6] care. Please contact our Cardiology liaison at (508)-887-4696 or email us at cardiovet@unhhs.edu for scheduling and non-emergent questions or concerns. Our emergency clinic is also open 24 hours/day.

Thank you for entrusting us with [B6] care. He is such a sweet boy!

Cummings Veterinary Medical Center

AT TUFTS UNIVERSITY
Cardiology Liaison: 508-887-4696

B6

Patient ID: **B6**

B6 Canine

B6 Years Old Male (Neutered) Boxer
Breed BW: Weight(lbs) 0.00

Cardiology Inpatient ENROLLED IN DCM DIET STUDY

Date: **B6**

Weight: Weight(lbs) 25kg

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:

ER

Presenting complaint and important concurrent diseases:

Previously diagnosed arrhythmia at rDVM in July, was started on **B6** but discontinued after a few weeks due to resolution of symptoms (wheezing). Owner reports that while she was away last week his wheezing returned. Owner started **B6** again last Tuesday. Now lethargic, decreased appetite. No other significant history.

Current medications and doses:

B6 (unknown concentration): 1/2 tab BID

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

Royal canin boxer dry

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

Historical arrhythmia

Questions to be answered:

Does he have current heart disease/heart failure? degree of arrhythmia?

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

- Yes (explain):
- No, owner waiting in lobby

STOP - remainder of form to be filled out by Cardiology

Physical Examination

B6

Muscle condition:

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

Cardiovascular Physical Exam

Murmur Grade:

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

Murmur location/description: left, apical, systolic

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

Abdominal exam:

- Normal
- Abdominal distension

Hepatomegaly

Mild ascites

Echocardiogram Findings:

B6

Radiographic findings:

Cardiac silhouette is enlarged in correspondence to LV and LA. There is dorsal displacement of the trachea and compression of the left mainstem bronchi is also visualized. Pulmonary vessels are not obviously dilated. There is patchy interstitial infiltrate in the caudal lung lobes, more obvious in the peri-hilar area consistent with cardiogenic pulmonary edema.

Assessment and recommendations:

Findings consistent with DCM with active CHF and frequent ventricular arrhythmia. Patient has enough malignant arrhythmia that hospitalization and and telemetry monitoring is recommended.

B6

Addendum **B6**

The patient continues to have persistent ventricular tachycardia despite being on the **B6** for almost 3 days. It was elected to add **B6** 30 mg PO BID. The owner elected to take the patient home today despite poor arrhythmia controlled. Recheck ECG is recommended in 7-10 days.

Treatment Plan:

0
0
0
0
0
0
0
B6

Final Diagnosis:

Severe cardiomegaly with poor contractile function - r/o primary DCM, diet-induced cardiomyopathy, ARVC, tachycardiac induced cardiomyopathy.

Malignant ventricular arrhythmia - non-sustained VTach and frequent polymorphic VPCs;

Left sided congestive heart failure.

Heart Failure Classification Score:

ISACHC Classification:

- Ia
- Ib
- II
- IIIa
- IIIb

ACVIM CHF Classification:

- A
- B1
- B2
- C
- D

M-Mode

IVSd

LVIDd

LVPWd

IVSs

LVIDs

LVPWs

EDV(Teich)

ESV(Teich)

EF(Teich)

%FS

SV(Teich)

M-Mode Normalized

IVSdN

LVIDdN

LVPWdN

B6

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

{0.290 - 0.520}
{1.350 - 1.730}!
{0.330 - 0.530}

IVSsN
LVIDsN
LVPWsN

2D

SA LA
Ao Diam
SA LA / Ao Diam
IVSd
LVIDd
LVPWd
EDV(Teich)
IVSs
LVIDs
LVPWs
ESV(Teich)
EF(Teich)
%FS
SV(Teich)
LVld LAX
LVAd LAX
LVEDV A-L LAX
LVEDV MOD LAX
LVls LAX
LVAs LAX
LVESV A-L LAX
LVESV MOD LAX
HR
EF A-L LAX
LVEF MOD LAX
SV A-L LAX
SV MOD LAX
CO A-L LAX
CO MOD LAX

Doppler

MR Vmax
MR maxPG
PV Vmax
PV maxPG

B6

{0.430 - 0.710} !
{0.790 - 1.140} !
{0.530 - 0.780} !

cm
cm

cm
cm
cm
ml
cm
cm
ml
%
%
ml
cm
cm
ml
ml
cm
cm
ml
ml
BPM
%
%
ml
ml
l/min
l/min

m/s
mmHg
m/s
mmHg

Cardiology Liaison: 508-887-4696

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

Discharge Instructions

Patient

Name: B6

Species: Canine

Brindle Male (Neutered) Boxer

Birthdate: B6

Owner

Name: B6

Address: B6

Patient ID: B6

Attending Cardiologist:

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

B6

Cardiology Resident:

B6

B6

Cardiology Technician:

B6

Student:

Admit Date: B6 9:12:55 AM

Discharge Date: B6

Diagnoses:

- Suspected Arrhythmogenic right ventricular cardiomyopathy (ARVC) versus Dilated cardiomyopathy
- Active Congestive heart failure
- Ventricular arrhythmia - Not currently controlled -

Clinical findings:

Thank you for bringing B6 to Tufts University.

He presented to our ER last Friday after it was noticed that he had a decreased appetite and overall was not feeling like his normal self. He was previously diagnosed with an arrhythmia (irregular heart rate) back in July by your primary care veterinarian but had never been seen by a cardiologist.

Upon presentation to the ER, B6 was noticed to have increased respiratory effort and rate in addition to a non-productive cough. Also, his heart rate was faster than normal and he had very frequent irregular premature beats. Chest radiographs were then performed and were suspicious for accumulation of fluid within the lungs, a condition consistent with active congestive heart failure.

B6 was then seen by the Cardiology department where an echocardiogram (ultrasound of the heart) was performed. B6 has been diagnosed with a primary heart muscle disease called arrhythmogenic right ventricular cardiomyopathy (ARVC). This disease is common in Boxers and bulldogs and is also sometimes referred to as "Boxer Cardiomyopathy". The condition is characterized by replacement of the normal heart muscle by fat and/or scar tissue which may result in serious ventricular arrhythmias (abnormal heart rhythms originating from the lower chamber of the heart), cardiac enlargement

and congestive heart failure, or both. Dogs with ARVC may experience syncope (fainting) or sudden death as the result of ventricular arrhythmia.

As we discussed over the phone, another possibility to explain the changes within [B6] heart is a type of heart 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.

[B6] was then admitted to the hospital for further monitoring and management of his cardiac disease. Over the course of his stay in the hospital, it was noted that [B6]'s respiratory rate and effort progressively improved to the point of being back to normal today. However, his arrhythmia is fairly resistant to our current treatment. However, as we discussed every dog is different and require a different antiarrhythmic management at home. At this point of time, we are trying a new combination of medications with the hope that this will decrease the frequency of his arrhythmia.

Though we cannot reverse the changes in the heart muscle, we can control the arrhythmias with medical management and dogs without serious cardiac dilation can do well for months to even years after diagnosis with appropriate therapy and careful monitoring.

B6

B6

Diet suggestions: Dogs with ARVC may benefit from the addition of omega-3 fatty acids (fish oil) to the diet. Diets such as the Royal Canin Boxer or Early Cardiac diet, or Hill's j/d have ample fish oil and may not require much (or any) additional supplementation. Additional information on supplements such as fish oil or other supplements that you might have questions about may be found on the Tufts HeartSmart web site: (<http://vet.tufts.edu/heartsmart/diet/>).

- The FDA is currently investigating an apparent association between diet and a type of heart disease called dilated cardiomyopathy. The exact cause is still unclear, but it appears to be associated with boutique diets and those containing exotic ingredient or are grain-free. Therefore, we are currently recommending that dogs do not eat these types of diets.
- We recommend switching B6 to commercial diet made by a well-established company that is not grain-free and does not contain any exotic ingredients, such as kangaroo, duck, lamb, venison, lentils, peas, beans, buffalo, tapioca, barley, and chickpeas.
- The FDA issued a statement regarding this issue (<https://www.fda.gov/AnimalVeterinary/NewsEvents/CVMUpdates/uom613305.htm>) and a recent article published by Dr. Lisa Freeman on the Cummings School's Pet Foodology blog can further explain these findings (<http://vetnutrition.tufts.edu/2018/06/a-broken-heart-risk-of-heart-disease-in-boutique-or-grain-free-diets-and-exotic-ingredients/>).
- Our nutritionists have compiled a list of dog foods that are good options for dogs with heart disease

Dry Food Options:

Royal Canin Early Cardiac (veterinary diet)

Royal Canin Boxer

Purina Pro Plan Adult Weight Management

Purina Pro Plan Bright Mind Adult Small Breed Formula

Canned Food Options:

Hill's Science Diet Adult Beef and Barley Entree

Hill's Science Diet Adult 1-6 Healthy Cuisine Roasted Chicken, Carrot, and Spinach Stew

Royal Canin Mature 8+

We recommend slowly introducing one of the diets on the above list as follows: 25% of the new diet mixed with 75% old diet for 2-3 days, then 50:50, etc.

Hopefully you can find a diet on the list that B6 will enjoy!

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

Exercise recommendations: For the first 7 to 10 days after starting anti-arrhythmic medications, and until we know that the medications are effectively controlling arrhythmia, we recommend very limited activity. Leash walk only is ideal, and

short walks to start. Once the arrhythmia has been well-controlled then slightly longer walks are acceptable. However, repetitive or strenuous high energy activities (repetitive ball chasing, running fast off-leash, etc.) are not recommended as these activities may result in worsened arrhythmia or even sudden death.

Recheck visits:

A recheck ECG is recommended 1-2 weeks after any antiarrhythmic medication adjustments are made.

[B6] was enrolled in the DCM study, we will need to see him back in 3, 6, and 9 months.

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

Sincerely,

[B6]

Please visit our HeartSmart website for more information

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

Prescription Refill Disclaimer:

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

Ordering Food:

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

Clinical Trials:

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

[B6]

Discharge Instructions

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/>
Referring Vet Direct Line 508-887-4988

Notice of Patient Admit

Date: 9:12:55 AM

Case No:

Referring Doctor:

Client Name:

Patient Name:

Dear Colleague,

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

The attending doctor is:

The reason for admission to the FHSA is: ARVC, poor systolic function, L-CHF

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

Thank you for your referral to our Emergency Service.

Cummings
Veterinary Medical Center
AT TUFTS UNIVERSITY

Foster Hospital for Small Animals
55 Willard Street
North Grafton, MA 01536
Telephone (508) 839-5395
Fax (508) 839-7951
<http://vetmed.tufts.edu/>
Referring Vet Direct Line 508-887-4988

Notice of Patient Admit

Date: B6 9:12:55 AM

Case No: B6

Referring Doctor: B6

Client Name:

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 B6

The reason for admission to the FHSA is: ARVC, L 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
B6 Male (Neutered)
Canine Boxer Brindle
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
- discharged from the hospital today

Today's treatments include:

- bloodwork planned/pending
- echocardiography -
Severe cardiomegaly with poor contractile function - r/o primary DCM, diet-induced cardiomyopathy, ARVC, tachycardiac induced cardiomyopathy. Left sided congestive heart failure.
- cardiac catheter procedure planned
- ongoing treatment for CHF secondary to DCM
- ongoing treatment for thrombosis
- ongoing treatment for arrhythmia - Malignant ventricular arrhythmia - non-sustained VTach and frequent polymorphic VPCs

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: [Redacted] B6
Faculty Clinician: [Redacted] B6
Senior student: [Redacted]

Iron Laboratory Studies in Pediatric Patients With Heart Failure from Dilated Cardiomyopathy



David Higgins, MD^a, Jessica Otero, PharmD^b, Christa Jefferis Kirk, PharmD^b, Jennifer Pak, PharmD^b, Neal Jorgensen, MS^c, Mariska Kemna, MD^d, Erin Albers, MD^a, Borah Hong, MD^b, Joshua Friedland-Little, MD^d, and Yuk Law, MD^{a,*}

Iron deficiency (FeD), with or without anemia, in adults with heart failure (HF) is associated with poor outcomes, which can be improved with replacement therapy. A similar therapeutic opportunity may exist for children; however, iron laboratory measurements and FeD have not been described in pediatric patients with HF. A single-center, retrospective study was conducted on 28 patients <21 years old with a diagnosis of dilated cardiomyopathy and HF who had iron laboratories (serum iron, iron saturation, and ferritin) performed. The mean (standard deviation) age at time of laboratory collection was 10.3 (5.5) years. Twenty-seven patients (96.4%) met the criteria for FeD. Serum iron and iron saturation were significantly associated with inpatient hospitalization, being on inotropic medications, or having stage D HF. Low-serum iron was associated with a higher left ventricular end-diastolic dimension and left ventricular end-systolic dimension z-score by echocardiography (β -2.58, 95% confidence interval [CI] -4.76, -0.40, $p = 0.02$) and (β -2.43, 95% CI -4.70, -0.17, $p = 0.04$), respectively. Low ferritin was associated with higher mortality (relative risk 0.29, 95% CI 0.12, 0.70, $p = 0.006$). In conclusion, FeD was common in this pediatric cohort with more advanced HF. Iron profile abnormalities were associated with worse HF severity and outcomes including mortality. © 2017 Elsevier Inc. All rights reserved. (Am J Cardiol 2017;120:2049–2055)

B4

B4

B4

B4

B4

B4

B4

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

B6 echo report **B6**

B6

Echocardiogram Report

Date: **B6**
Name: **B6**
Age: 10
Breed: Dober
Sex: Male
Weight: 40.8 kg (90.0 lbs)
Vet: **B6**
B6

2-D		M-Mode		Doppler	
Ao Diam	B6	IVSd	B6	MV E Vel	B6
LA Diam		LVIDd			
LA/Ao		LVPWd			
Ao/LA		IVSs			
LVLd A4C		LVIDs			
LVA d A4C		LVPWs			
LVEDV A-L A4C		%FS	RVOT Vmax		
LVEDV MOD A4C			RVOT maxPG		
LVLs A4C					
LVA s A4C					
LVESV A-L A4C					
LVESV MOD A4C					
HR					
EF A-L A4C					
LVEF MOD A4C					
SV A-L A4C					
SV MOD A4C					
CO A-L A4C					
CO MOD A4C					

Physical exam: **B6**

Client:
Patient:

B6

B6 echo report

B6

B6

Page 2 of 2

B6

Echocardiographic Assessment:

Dilated cardiomyopathy - severe

Plan - Cardiac:

- There is severe heart disease present. The risk for CHF and supraventricular arrhythmias (ie atrial fibrillation) is increased. Please consider treating with:

B6

- A serum chemistry is recommended prior to beginning medications and in 5-7 days after starting.
- A contemporary assessment of BP is recommended.
- A Holter monitor is strongly recommended.
- Thoracic rads are recommended.
- A recheck echo is recommended in 4-6 months or sooner as dictated by clinical signs, PE, ECG or radiographic findings.
- Consider mild sodium restriction - Royal Canin Early Cardiac.
- Given the severity of the heart disease, the owners should monitor the dog for clinical signs of CHF. Have the owners keep a resting/sleeping log of the dog's respiratory rate. If the RR persists above 44 breaths per minute, have the dog return for recheck evaluation and repeat thoracic radiographs.

B6

DVM, Dipl ACVIM (Cardiology)

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

CBC/Chem - **B6**



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:	10	Order Location:	B6
Phone number:		Species:	Canine	Sample ID:	1812050071
Collection Date:	B6 10:26 AM	Breed:	Doberman Pinscher		
Approval date:	B6 12:38 PM				

CBC, Comprehensive, Sm Animal (Research)

SMACHUNSKI		Ref. Range/Males
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
MCHC (ADVIA)	B6	31.9-34.3 g/dL
RDW (ADVIA)	B6	11.9-15.2
Platelet Count (Advia)	B6	173-486 K/uL
12/05/18 12:38 PM	B6 Platelets per 100x field (estimated count of 200,000-500,000/uL)	
Mean Platelet Volume (Advia)	B6	8.29-13.20 fl
12/05/18 11:06 AM	Platelet clumps (if present) and sample age (greater than 4 hours) can result in a falsely increased MPV.	
Platelet Cnt	B6	0.129-0.403 %
12/05/18 11:06 AM	Platelet Cnt is invalid when clumped platelets are present. Interpretation of PltCt is unclear in species other than canines.	
Reticulocyte Count (Advia)	B6	0.20-1.60 %
Absolute Reticulocyte Count (Advia)	B6	14.7-113.7 K/uL

Microscopic Exam of Blood Smear (Advia)

SMACHUNSKI		Ref. Range/Males
Seg Neuts (%)	B6	43-86 %
Lymphocytes (%)	B6	7-47 %
Monocytes (%)	B6	1-15 %
Eosinophils (%)	B6	0-16 %
Seg Neutrophils (Abs) Advia	B6	2.80-11.50 K/uL
Lymphs (Abs) Advia	B6	1.00-4.80 K/uL
Mono (Abs) Advia	B6	0.10-1.50 K/uL
Eosinophils (Abs) Advia	B6	0.00-1.40 K/uL
WBC Morphology	No Morphologic Abnormalities	
Echinocytes	Occasional	

Research Chemistry Profile - Small Animal (Cobas)

SMACHUNSKI		Ref. Range/Males
Glucose	B6	67-135 mg/dL
Urea	B6	8-30 mg/dL
Creatinine	B6	0.6-2.0 mg/dL
Phosphorus	B6	2.6-7.2 mg/dL

Sample ID: 1812050071/1
This report continues... (Final)

Reviewed by: _____

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

CBC/Chem - **B6**



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:	10	Order Location:	B6
Phone number:		Species:	Canine	Sample ID:	1812050071
Collection Date:	B6 10:26 AM	Breed:	Doberman Pinscher		
Approval date:	B6 12:38 PM				

Research Chemistry Profile - Small Animal (Cobas) (cont'd)

		Ref. Range/Males
SMACHUNSKI		
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		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
Comments (Chemistry)	H B6 Slight hemolysis	

Sample ID: **B6**
END OF REPORT (Final)

Reviewed by: _____
Page 2

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

IDEXX BNP - B6

IDEXX Reference Laboratories

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

Client: **B6**
Patient: **B6**
Species: CANINE
Breed: DOBERMAN_PINSCH
Gender: MALE NEUTERED
Age: 10Y

Date: **B6**
Requisition #: 330320
Accession #: **B6**
Ordered by: **B6**

IDEXX VetConnect 1-888-433-9967
TUFTS UNIVERSITY
200 WESTBORO RD
NORTH GRAFTON, Massachusetts 01536
508-839-5395
Account #88833

CARDIOPET proBNP- CANINE

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

Comments:

1
B6

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

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

Holter Monitor Diary B6

PATIENT INFORMATION AND INSTRUCTIONS

Your physician has prescribed you a Holter Electrocardiogram to determine how your heart functions during normal daily activity.

It's important to keep an accurate diary of your symptoms only if you begin to feel symptoms related to why your monitor was prescribed such as chest pain, shortness of breath, unusual heartbeats or dizziness, note in your diary the time of day they began, what you were doing and how you were feeling. Use this diary to record:

Time of day: Enter the time as displayed on the recorder. Do NOT use your personal watch.

Symptoms: After manually pushing the ENTER button on your device, write down in your diary the symptoms related to why your monitor was prescribed: such as dizziness, heart pounding, nausea, shortness of breath, or pain in your chest, neck, arm or face. Note in the diary any abnormal symptoms to ensure the study captures the important events and help your physician diagnose your rhythm problem.

Activity: For each diary entry, write down what you were doing when you experienced a symptom: sitting, eating, walking, exercise, bowel movement, etc.

IMPORTANT NOTES TO PATIENT

- To insure an accurate evaluation of this recording, **FIRST** you **MUST** include any Symptoms accompanied by the Activity when you were feeling that symptom. This diary must include the time as shown on the display of the recorder, how you were feeling (your symptoms) and your activity at the time of the event, if you are unsure of the significance of a feeling, write it down.
- Keep the recorder away from water. Do not bathe, shower, or swim during this monitoring period.
- Do NOT open or tamper with the device battery compartment or the lead wire connection. If the battery becomes dislodged for any reason after the study has started, the monitor will stop recording. The device cannot be restarted and the study is finished.
- If a wire is disconnected from an electrode, simply re-connect it by snapping the wire onto the electrode. If an electrode falls off, simply re-attach it in the same location.

Following these instructions will help your physician analyze the results of your recording and diagnose your problem.

- SAMPLE DIARY -

TIME	SYMPTOMS	ACTIVITY
9:20	Chest Pain	While I was Mowing Lawn
10:30	Shortness of breath	Used bathroom to urinate
12:00	Heart beats fast	Driving
9:00	Palpitations	Went to sleep

B6

is Asymptomatic

B6

TIME	SYMPTOMS	ACTIVITY	TIME	SYMPTOMS	ACTIVITY	
B6			B6			

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

Holter Monitor Diary B6

PATIENT INFORMATION AND INSTRUCTIONS

Your physician has prescribed you a Holter Electrocardiogram to determine how your heart functions during normal daily activity.

It's important to keep an accurate diary of your symptoms only, if you begin to feel symptoms related to why your monitor was prescribed such as chest pain, shortness of breath, uneven heartbeats or dizziness, note in your diary the time of day they began, what you were doing and how you were feeling. Use this diary to record:

Time of day: Enter the time as displayed on the recorder. Do NOT use your personal watch.

Symptoms: After manually pushing the ENTER button on your device, write down in your diary the symptoms related to why your monitor was prescribed; such as dizziness, heart pounding, nausea, shortness of breath, or pain in your chest, neck, arm or face. Note in the diary any abnormal symptoms to ensure the study captures the important events and help your physician diagnose your rhythm problem.

Activity: For each diary entry, write down what you were doing when you experienced a symptom; sitting, eating, walking, exercise, bowel movement, etc.

IMPORTANT NOTES TO PATIENT

- To insure an accurate evaluation of the recording, FIRST you MUST include any symptoms accompanied by the Activity when you were feeling that symptom. This diary must include the time as shown on the display of the recorder, how you were feeling (your symptoms), and your activity at the time of the event. If you are unsure of the significance of a feeling, write it down.
- Keep the recorder away from water. Do not bathe, shower, or swim during this monitoring period.
- Do NOT open or tamper with the device battery compartment or the lead wire connection. If the battery becomes dislodged for any reason after the study has started, the monitor will stop recording. The device cannot be restarted and the study is finished.
- If a wire is disconnected from an electrode, simply re-connect it by snapping the wire onto the electrode. If an electrode falls off, simply re-attach it in the same location.

Following these instructions will help your physician analyze the results of your recording and diagnose your problem.

- SAMPLE DIARY -

TIME	SYMPTOMS	ACTIVITY
9:20	Chest Pain	While I was Mowing Lawn
10:30	Shortness of breath	Used bathroom to urinate
12:00	Heart beats fast	Diving
9:00	Pulsations	Went to sleep

B6 *is asymptomatic* **B6**

TIME	SYMPTOMS	ACTIVITY	TIME	SYMPTOMS	ACTIVITY
B6					
B6					

Client: B6
Patient: B6

Holter Monitor Diary B6

TIME	SYMPTOMS	ACTIVITY	HOLTER ECG Patient Diary		
			<input checked="" type="checkbox"/> 24 HOUR		
			<input type="checkbox"/> 48 HOUR		
			PATIENT:	B6	
			PHYSICIAN:		
			HOSPITAL OR OFFICE LOCATION:		
			SEX: M	AGE: B6	HEIGHT: 89 lbs
				WEIGHT: 12/5	
			DATE OF RECORDING:		
			RECORDER S/N NO:		
			TIME OF TEST	START: 11/30 AM	STOP: 11/30 AM
				12/5 PM	12/6 PM
			MEDICATIONS:		
-3-	-4-	-5-			

Client: **B6**
Patient:

Texas A & M Cardiac Troponin - 12/5/2018



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: Cardiovet@tufts.edu OR clinpath@tufts.edu

GI Lab Assigned Clinic ID: 11405

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

Phone: 508 887 4669
Fax: 9 508 839 7936
Animal Name:
Owner Name: **B6**
Species: Canine
Date Received: Dec 06, 2018

Tufts University-Clinical Pathology Lab
Tracking Number: 1812050074

GI Lab Accession **B6**

Test	Result	Reference Interval	Assay Date
Ultra-Sensitive Troponin I Fasting	B6 ng/mL	≤0.06	12/06/18

Interpretation: Increased troponin I value. If clinical signs of heart disease are present, additional diagnostic work-up is recommended. Patients who are being supplemented with biotin may exhibit a slightly higher ultra-sensitive troponin result (10% or lower); however, the ability of the assay to detect serial increases or decreases of ultra-sensitive troponin is maintained.

Comments:

GI Lab Contact Information

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

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

Client:
Patient:

B6

Texas A & M Cardiac 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



**Important
Notices:**

Ongoing studies

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

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

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

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

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

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

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

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

GI Lab Contact Information

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

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

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

UCDavis Taurine Level - **B6**

25757

Amino Acid Laboratory Sample Submission Form

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

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

Email: ucd.aminoacid.lab@ucdavis.edu

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

B6
B6 Taurine
110:26 AM
TAURINE (WHOLE BLOOD)
Lithium Heparin

Veterinarian Contact: **B6**

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

Address: 200 Westboro Road, North Grafton, MA, 01538

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

Telephone: **B6** Fax: **B6**

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

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

Patient Name: **B6** Species: Canine

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

Current Diet: home cooked diet - lamb & protein, broccoli Balance's yeast 265

Sample type: ~~Plasma~~ Whole Blood Urine Food Other _____

Test: Taurine Complete Amino Acids Other: _____

Taurine Results (lab use only)

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

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

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

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

Anesthesia Record and Checklist **B6**

Tufts University Cummings School of Veterinary Medicine
ANESTHESIA RECORD

B6

B6

Species: Canine Patient ID: **B6**
Breed: Doberman Pinscher Sex: Male () City: **B6**
Weight kg: 40.90 Home Phone: **B6**
Date of Birth: **B6** Cell Phone: **B6**
Color: Black/Tan Ref Facility: **B6**
Check-in Date: **B6** 07:38 PM Ref Phone: **B6**

Page 1 of 1
PRE-MED. RESULTS
Sedation Resistance
 None
 Slight
 Moderate
 Marked
Vomited: Yes No

B6

B6

B6

SIGNATURE ANESTHESIOLOGIST/TECHNICIAN
B6

INVOICED SCANNED

TU V0011 Rev. 01-2015 Reorder Copy Center 617-636-5373 (Form #240)

Client:
Patient:

B6

Anesthesia Record and Checklist

B6

Date	Patient																	Weight	Kg	Page	of
Time	.00	15	30	45	:00	15	30	45	:00	15	30	45	:00	15	30	45	:00	15	30	45	
Isoflurane (%)	5																				
Sevoflurane (%)	4																				
	3																				
	2																				
	1																				
	0																				
O ₂ (L/M)	220																				
CODE	200																				
▪ Pulse Rate	180																				
° Respiratory Rate	160																				
v Systolic B.P.	140																				
- Mean B.P.	120																				
^ Diastolic B.P.	100																				
C IPPV	80																				
* ET CO ₂	60																				
Blood Pressure measured by:	40																				
<input type="checkbox"/> Oscillometric	20																				
<input type="checkbox"/> Doppler	Light																				
<input type="checkbox"/> Direct	Med.																				
Depth of Anes.	Deep																				
Fluids																					
SpO ₂																					
Temperature																					

REMARKS:

Blood Gas Values etc.	ar _i , ven	Time	pH	PCO ₂	PO ₂	Na ⁺	K ⁺	iCa ⁺⁺	HCO ₃	BE

SIGNATURE ANESTHESIOLOGIST/TECHNICIAN

INVOICED SCANNED

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

Anesthesia Record and Checklist **B6**

Veterinary Medicine 54 Anesthesia Surgical Checklist

B6

Additional notes:

Species: Canine Patient ID: **B6**
 Breed: Doberman Pinscher City: **B6**
 Sex: Male (Home Phone: **B6**
 Weight kg: 40.90 Cell Phone: **B6**
 Date of Birth: **B6** Ref Facility: **B6**
 Color: Black/Tan Ref Phone: **B6**
 Check-in Date: **B6** 1:07:38 PM

Before Premedication of Patient	After Induction in Prep Area	Prior to Leaving OR
Confirmed by Anesthesia Team <input checked="" type="checkbox"/> Patient ID, procedure, & procedure site <input checked="" type="checkbox"/> Blood work and SOAP complete <input checked="" type="checkbox"/> Body weight matches patient size <input checked="" type="checkbox"/> Work-up sheet reviewed & signed by anesthesiologist	Initiated by Anesthesia Team <input checked="" type="checkbox"/> Radiology work-up completed <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> N/A <input checked="" type="checkbox"/> Cefazolin (or other antibiotic) requested and available <input type="checkbox"/> Yes <input type="checkbox"/> Hold <input checked="" type="checkbox"/> N/A <input checked="" type="checkbox"/> Number of catheters placed is appropriate for patient needs <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No, additional catheters placed	Initiated by Anesthesia Team <input checked="" type="checkbox"/> Phone call to radiology <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> N/A Anesthesia Service States <input checked="" type="checkbox"/> Any concerns for patient recovery? Surgeon States <input checked="" type="checkbox"/> Any concerns for patient recovery?
Before Induction of Patient Confirmed by Anesthesia Team <input checked="" type="checkbox"/> Met check cleared <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> N/A <input checked="" type="checkbox"/> Red line cleared by accounting <input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A <input type="checkbox"/> Anesthesia machine checked and pop-off valve open <input checked="" type="checkbox"/> Difficult airway or aspiration risk? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes, nec. equipment available <input type="checkbox"/> Yes, Surgeon must be present <input checked="" type="checkbox"/> Risk of significant blood loss <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/> Yes, blood type (+/- crossmatch) and appropriate blood available	<input checked="" type="checkbox"/> Does patient need T-set? <input checked="" type="checkbox"/> Yes (place T set in induction) <input type="checkbox"/> No Before Skin Incision Initiated by Anesthesia Team <input checked="" type="checkbox"/> Patient's ID, procedure, & procedure site confirmed <input checked="" type="checkbox"/> Cefazolin (or other a/b) requested & given within the prev. 60 min <input type="checkbox"/> Yes <input type="checkbox"/> Hold <input checked="" type="checkbox"/> N/A Anesthetist States <input checked="" type="checkbox"/> Any specific anesthetic concerns Surgeon States <input checked="" type="checkbox"/> Critical or non-routine steps <input checked="" type="checkbox"/> Anticipated blood loss Surgery Technician States <input checked="" type="checkbox"/> Sterilization indicators confirmed	<input checked="" type="checkbox"/> Ward where patient will spend the evening <u>ICU</u> <input checked="" type="checkbox"/> If patient can receive NSAIDs <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Which NSAID? _____ Additional analgesics surgery will use <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Which analgesic? _____ Bladder <input type="checkbox"/> Express <input type="checkbox"/> U cath
This form remains with the patient through recovery.		Surgeon/ Resident: B6 Anesthetist Tech./Student: B6 Surgeon Tech: B6 Date: B6

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

Anesthesia Record and Checklist B6

Patient ID Sticker

Patient Name: _____

Event Documentation

Date: _____ Time: _____
 Doctor: _____
 Code Leader: _____
 Catheter Method: IO / Cutdown / In Place Pre-Event
 Catheter Details: _____
 CPR: Open Chest / Closed Chest Est. Weight: _____

Describe Event: _____

Monitoring	Time	ECG Rhythm				EtCO ₂			Notes / Other				
		PEA / Asystole / VT / VFib											
		PEA / Asystole / VT / VFib											
		PEA / Asystole / VT / VFib											
		PEA / Asystole / VT / VFib											
		PEA / Asystole / VT / VFib											
Drugs / Fluids	Drug/Fluid	Time	Dose	Route	Time	Dose	Route	Time	Dose	Route	Time	Dose	Route
	Epinephrine												
	Atropine												
Defib	Time	ECG Rhythm				Joules			Notes / Other				
		VT / VFib							Internal / External				
		VT / VFib							Internal / External				
		VT / VFib							Internal / External				

ROSC? Yes / No Time: _____ Added to CPR Log? Yes / No

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

Diet history **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)
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) **NO**
 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
maybe gained tiny bit due to exercise restriction

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
Lamb meat (fresh from Grocery)	cooked	2 oz	3x/15/d	April 2008
egg (organic fresh)	boiled/cooked	1 egg	5x/15/week	same as
broccoli (organic)	microwaved	1/2 cup	3x/15/d	same as above
Safflower oil	Grassy liquid	1/2 Tspoon	2x/15/d	same as above
Cod Liver oil	Grassy store liquid	3/4 TSP	1x/15/d	same
Vitamin E Supplement	oil	2 pills	once daily	same
Seaweed Calcium	powder	1 1/2 Tspoon	1x/d	same
Special powder made up of:	powder	2 TSP	2x/15/d	same
Primarily Nutritional Yeast, Lecithin, Kelp, E. Seaweed, Chicken	granules			

*Any additional information can be listed on the back of this sheet
see reverse side please

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 Yes No *(think Whole Foods Brand) JUST STARTED* 500 mg - 2/dy
Camitine Yes No *LEARNIT-AP (JUST STARTED)* 500 mg - 2/dy
Antioxidants Yes No
Multivitamin Yes No
Fish oil Yes No *cod LIVER of Nordic Brand (whole Foods)* 3/4 TSP/dy
Coenzyme Q10 Yes No *(JUST STARTED)* 100 mg/dy
Other (please list) Yes No
Example: Vitamin C *Nature's Bounty 500 mg tablets - 1 per day*

B6

6. 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):

B6

Client:
Patient:

B6

Diet history **B6**

ALSO AS TREATS AFTER MEALS:

currently Beef (dried) (single ingredient) bites - for first 6 months
maybe 1-1/2 oz's 3x's/day

for many years prior (7-8 years) gave - have not given recently

Bison (ground) TREATS (petco) had sweet potato in them
2-3 small biscuits after every meal

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

Lab Results Amino Acid Laboratory **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

B6
B6
10 25 AM
WHOLE BLOOD
Clinical Medicine

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: **B6** Fax: **B6**

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

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

Patient Name: **B6** Species: Canine

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

Current Diet: home cooked diet - lamb, potato, broccoli, Biscuits
Sample type: ~~Plasma~~ Whole Blood Urine Food Other _____ Yeast
25g

Test: Taurine Complete Amino Acids Other: _____

Taurine Results (lab use only)

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

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

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

Client:
Patient:

B6

Prescription Refill: **B6** caps (#60)

Tufts University
Foster Hospital for Small Animals
Hospital for Large Animals
55 Willard Street • North Grafton, MA 01536 • (508) 839-5395

B6

INTERCHANGE IS MANDATED UNLESS THE
PRACTITIONER INDICATES "NO SUBSTITUTION"
IN ACCORDANCE WITH THE LAW

Client: **B6**
Patient:

Prescription Refill: **B6** (#120)

Tufts University
Foster Hospital for Small Animals
Hospital for Large Animals
55 Willard Street • North Grafton, MA 01536 • (508) 839-5395

B6

INTERCHANGE IS MANDATED UNLESS THE PRACTITIONER INDICATES "NO SUBSTITUTION" IN ACCORDANCE WITH THE LAW

Client:
Patient:

B6

Nutrition Client Diet Hx Form

Client Diet History Form

Submitted: **B6**

PET INFORMATION

Pet Name: **B6**
Pet Last Name: **B6**
Pet Species/Breed: Dog / Doberman
Pet's Color: Black
Pet's Birthdate: **B6**
Pet's Sex: Male
Spayed or Neutered?: Yes

CLIENT INFORMATION

Client Name: **B6**
Client Address: **B6**
Client Phone: **B6**
Client Email: **B6**

CONSULT INFORMATION

Type of Consult: In person
HCD Being Requested?: Yes

Reasons & Goals for Consult: **B6** has been on a home cooked (veterinarian provided) diet his whole life. He was recently dx'd wit DCM and although he is a Doberman & almost 11, I want some information on what I can do to vary his diet in case nutritional deficiencies have played a role in the dvp of his DCM. I also have another dog (non-Doberman) that has been on same diet for past 4 years and I don't want to cause harm to her.

Attachments

PRIMARY VETERINARIAN INFORMATION

rDVM Name: **B6**
rDVM Clinic: **B6**
rDVM Phone:
rDVM Fax:
rDVM Email:

Client:
Patient:

B6

Nutrition Client Diet Hx Form

Diet History Form - updated

Agree to Terms

Date Submitted

B6

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?

Yes

About the Pet Owner

Pet owner name

B6

Pet owner email

B6

Address

B6

United States

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

Spouse/partner/co-owner's email

Spouse/partner/co-owner's phone

How did you hear about our service?

- Other

Client:
Patient:

B6

Nutrition Client Diet Hx Form

If other, how did you find out about us?

B6 is being seen by the cardiology dept at Tufts for DCM. **B6** recommended a consult.

Your Pet's Primary Veterinarian

Primary veterinarian

B6

Primary veterinarian's clinic name

B6

Primary veterinarian's clinic phone

Primary veterinarian's clinic fax

Primary veterinarian's clinic email

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

Fax for 2nd veterinarian's clinic

Email for 2nd veterinarian's clinic

What is this second veterinarian's role in your pet's care?

2nd Vet when spending time in **B6**

Should this 2nd veterinarian receive a copy of any written reports that result from working with our service?

No

Is your pet being seen by a 3rd veterinarian?

Yes

Information About Your Third Veterinarian

Name of 3rd veterinarian

Tufts Cardiology and Tufts Oncology Dept

Client:
Patient:

B6

Nutrition Client Diet Hx Form

Clinic name of 3rd veterinarian

B6

Phone for 3rd veterinarian's clinic

Fax for 3rd veterinarian's clinic

Email for 3rd veterinarian's clinic

What is this third veterinarian's role in your pet's care?

Cardiology & Oncology

Should this 3rd veterinarian receive a copy of any written reports that result from working with our service?

Yes

Is your pet being seen by a 4th veterinarian?

No

About Your Pet

Pet's name

B6

What is your pet's species?

Dog

Breed

Doberman

Color

Black

Sex

Male

Spayed/neutered?

Yes

Do you know your pet's exact birthdate?

Yes

Pet's Birthdate

B6

What is your pet's current weight

87

Pounds or kilograms?

lbs

Has your pet gained or lost weight within the past 6 months?

Stayed the same

Client:
Patient:

B6

Nutrition Client Diet Hx Form

Which category best describes your pet?

ideal weight

Reason and goals for consultation

B6 has been on a home cooked (veterinarian provided) diet his whole life. He was recently dx'd w/ DCM and although he is a Doberman & almost 11, I want some information on what I can do to vary his diet in case nutritional deficiencies have played a role in the dev of his DCM. I also have another dog (non-Doberman) that has been on same diet for past 4 years and I don't want to cause harm to her.

Details About Your Pet's Habits

Questions about your pet

Is your pet housed:

- Indoors

Please describe your pet's activity level:

Low

Do you have any other pets?

Yes

What are your other pets?

Species How many?

Dog Pitbull Mix

Do any pets have access to other pets' food?

No

How many people (including yourself) live in your household?

2

Who feeds your pet?

Mostly me but sometimes my husband

How many times per day do you feed your pet?

Three

Does your pet finish all food that is offered?

Yes

Does your pet have any difficulty with the following?

Does your pet have any of the following?

- Food allergies
- Environmental allergies

Please explain about your pet's conditions

Have not done extensive testing but licks feet often 7-8 mo's out of Year

Not a food allergy but after giving beef as primary protein source for 2-3 yrs, loose stool dev'd so I have been giving

Client:
Patient:

B6

Nutrition Client Diet Hx Form

lamb for past 7-8 years. He does well with lamb. Lately I have added some beef back and he is ok.

Have you observed any changes in any of the following?

- Activity level

Please explain the changes you have observed

Low exercise tolerance- DCM related

Have you made any recent changes in diet (last 4 weeks)?

Yes

Please explain the changes in your pet's diet

Been giving some beef again. Takes pills/ meds better when put in small pieces of beef

Your Pet's Diet

Do you feed your pet DRY (e.g., kibble) pet food?

No

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)?
Lamb	7 oz's	3 times daily	7-8 years
Broccoli	1/2 cup	3 times daily	10 years
Eggs	1 egg	5 per week	10 3/4 years
Safflower Oil	1 teaspoon	3 times daily	10 3/4 years
Cod Liver Oil	3/4 teaspoon	1 time per day	10 3/4 years
Seaweed Calcium	1 1/4 teaspoon	1 time per day	10 3/4 years
Vitamin E	2 (200 iu) pills	1 time per day	10 3/4 years
Mixed powder- Nutritional Yeast, seaweed calcium, Lecithin Granules, & Kelp Granules	2 teaspoons	3 times daily	10 3/4 years

Do you feed your pet TREATS?

No

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
B6		

Client: **B6**
Patient:

Nutrition Client Diet Hx Form

Product Name	Amount	Frequency
B6		

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?

No

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.

Food	Approximate Dates	Reason for discontinuing
Used to feed Bison/ Sweet potato treats- can't remember brand	5-7 years	Weight gain, processed food concern

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

- Ground beef
- Egg

What is your pet's preferred protein?

Lamb & beef

Carbohydrate Sources

- Oats
- Potato
- Rice
- Sweet potato

Client:
Patient:

B6

Nutrition Client Diet Hx Form

What is your pet's preferred carbohydrate?

Rice or sweet potatoes

Medical Records & Test Results

Requested Items

Would you like to upload and attach anything else to this form?

Client:
Patient:

B6

RDVM

B6

labs - CBC

B6

JAN/23/2019/WED 02:15 PM

FAX No.

P. 001

B6

B6

Fax

To:

Cardiologist

From:

B6

Fax:

B6

Pages:

5

Phone:

Date:

Re:

B6

cc:

Urgent For Review Please Comment Please Reply Please Recycle

Comments:

Client:
Patient:

B6

RDVM

B6

labs - CBC

B6

JAN/23/2019/WED 02:15 PM

FAX No.

P. 003
Page 1 of 4

B6

Patient Info:

ID: **B6**
Name: **B6**
Owner: **B6**
Provider: 8

Species: Canine
Breed: Doberman Pinscher
Birthdate: **B6**
Sex: MN

Clinic:

B6

Accession Result ID

B6

Superchem

Total Protein	5.0-7.4 g/dL
Albumin	2.7-4.4 g/dL
Globulin	1.6-3.6 g/dL
A/G Ratio	0.8-2.0
AST (SGOT)	15-66 IU/L
ALT (SGPT)	12-118 IU/L
Alk Phosphatase	6-131 IU/L
GGTP	1-12 IU/L
Total Bilirubin	0.1-0.3 mg/dL
Urea Nitrogen	6-31 mg/dL
Creatinine	0.5-1.6 mg/dL
BUN/Creatinine Ratio	4-27
Phosphorus	2.5-6.0 mg/dL
Glucose	70-138 mg/dL
Calcium	8.9-11.4 mg/dL
Corrected Calcium	

B6

B6

B6

B6

Magnesium		1.5-2.5 mEq/L	<input type="checkbox"/>
Sodium		138-154 mEq/L	<input type="checkbox"/>
Potassium		3.8-5.5 mEq/L	<input type="checkbox"/>
Na/K Ratio		27-38	<input type="checkbox"/>
Chloride	B6	102-120 mEq/L	<input type="checkbox"/>
Cholesterol		92-324 mg/dL	<input type="checkbox"/>
Triglycerides		29-291 mg/dL	<input type="checkbox"/>
Amylase		290-1125 IU/L	<input type="checkbox"/>
Precision PSL		24-140 U/L	<input type="checkbox"/>
Pancreatitis is unlikely, but a normal Precision PSL result does not completely rule out pancreatitis as a cause for gastrointestinal signs.			
CPK	B6	59-895 IU/L	<input type="checkbox"/>
Complete Blood Count			
WBC		4.0-15.5 $10^6/\mu\text{L}$	<input type="checkbox"/>
RBC		4.8-9.3 $10^6/\mu\text{L}$	<input type="checkbox"/>
Hemoglobin		12.1-20.3 g/dL	<input type="checkbox"/>
Hematocrit	B6	36-60 %	<input type="checkbox"/>
MCV		58-79 fL	<input type="checkbox"/>
MCH		19-28 pg	<input type="checkbox"/>
MCHC		30-38 g/dL	<input type="checkbox"/>
Platelet Count		170-400 $10^6/\mu\text{L}$	<input type="checkbox"/>
Platelet EST	Adequate		

B6

B6

P.004

FAX No.

JAN/23/2019/WED 02:15 PM

B6

labs - CBC

B6

RDVM

B6

Client: Patient:

Client:
Patient:

B6

RDVM

B6

labs - CBC

B6

JAN/23/2019/WED 02:16 PM

FAX No.

P. 005
Page 3 of 4

Neutrophils	60-77 %	<input type="checkbox"/>
Bands	0-3 %	<input type="checkbox"/>
Lymphocytes	12-30 %	<input type="checkbox"/>
Monocytes	3-10 %	<input type="checkbox"/>
Eosinophils	2-10 %	<input type="checkbox"/>
Basophils	0-1 %	<input type="checkbox"/>
Absolute Neutrophils	2060-10600 / μ L	<input type="checkbox"/>
Absolute Lymphocytes	690-4500 / μ L	<input type="checkbox"/>
Absolute Monocytes	0-840 / μ L	<input type="checkbox"/>
Absolute Eosinophils	0-1200 / μ L	<input type="checkbox"/>
Absolute Basophils	0-150 / μ L	<input type="checkbox"/>

B6

B6

T4

T4

B6

0.8-3.5 μ g/dL

The Total T4 result is less than 1.0 mcg/dl. A Free-T4 by equilibrium dialysis may be helpful in supporting the diagnosis of hypothyroidism in patients demonstrating clinical signs compatible with hypothyroidism. Please contact Customer Service for this additional testing.

Urinalysis-Complete

Collection Method

Natural Voiding

Color

Yellow

Appearance

Cloudy

Specific Gravity

B6

1.015-1.050

pH

B6

5.5-7.0

B6

B6

B6

Client:
Patient:

B6

RDVM:

B6

labs - CBC 1/23/19

JAN/23/2019/WED 02:16 PM

FAX No.

P.006

B6

B6

B6

Microalbuminuria testing is recommended (if sediment is inactive) to help determine the clinical significance of proteinuria.

Protein Trace HIGH Negative

Page 4 of 4

Client:
Patient:

B6

B6 signed Estimate

Cummings
Veterinary Medical Center
AT TUFTS UNIVERSITY

Treatment Plan

Foster Hospital for Small Animals

55 Willard Street
North Grafton MA 01536
(508) 839-5395
<http://vetmed.tufts.edu/>

Estimated Charges

B6

B6

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

Patient	Description	Low Qty	Low Extended	High Qty	High Extended
B6					

B6

Client Signature

Doctor of Record

B6

I understand that no guarantee of successful treatment is made. I certify that I have read and fully understand the authorization for medical and/or surgical treatment, the reason for why such medical and/or surgical treatment is considered necessary, as well as its advantages and possible complications, if any. I also assume financial responsibility for all charges incurred to this patient(s). I agree to pay 75% of the estimated cost at the time of admission. Additional deposits will be required if additional care or procedures are required. I further agree to pay the balance of the charges when this patient(s) is released.

Procedural billing is inclusive up to and including the estimated duration of hospitalization. There will be additional expenses if hospitalization extends beyond the specified duration.

I have read, understand, and agree to accept the conditions of this treatment plan.

Thank you for entrusting us with your pet's care.

High Total
Low Total
75% Deposit

B6

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

Anesthesia Record and Checklist **B6**

Tufts University Cummings School of Veterinary Medicine
ANESTHESIA RECORD

B6

B6

Species: Canine
Breed: Doberman Pinscher
Sex: Male
Weight kg: 40.00
Date of Birth: **B6**
Color: Black/Tan
Check-in Date: **B6** 7:46:58 AM
Patient ID: **B6**
City: **B6**
Home Phone: **B6**
Cell Phone: **B6**
Ref Facility: **B6**
Ref Phone: **B6**

Page <u> </u> of <u> </u>	Discarded Drugs:
PRE-MED. RESULTS	ANESTHETIC INDUCTION:
Sedation Resistance	Date: _____ Time: _____
<input type="checkbox"/> None	B6
<input checked="" type="checkbox"/> Slight	
<input type="checkbox"/> Moderate	
<input type="checkbox"/> Marked	
Vomited: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	

B6

B6

SIGNATURE ANESTHESIOLOGIST/TECHNICIAN

B6

INVOICED

SCANNED

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

Anesthesia Record and Checklist B6

Date	Patient	Weight	Kg	Page _____ of _____
------	---------	--------	----	---------------------

Time	00	15	30	45	00	15	30	45	:00	15	30	45	:00	15	30	45
Isoflurane (%)																
Sevoflurane (%)																
O ₂ (L/M)																
CODE																
* Pulse Rate																
o Respiratory Rate																
v Systolic B.P.																
- Mean B.P.																
^ Diastolic B.P.																
C IPPV																
* ET CO ₂																
Blood Pressure measured by:																
<input type="checkbox"/> Oscillometric																
<input type="checkbox"/> Doppler																
<input type="checkbox"/> Direct																
Depth of Anes.																
Light																
Med.																
Deep																
Fluids																
SpO ₂																
Temperature																

REMARKS:

Blood Gas Values etc.	a _r /v _{en}	Time	pH	PCO ₂	PO ₂	Na ⁺	K ⁺	iCa ⁺⁺	HCO ₃	BE

SIGNATURE ANESTHESIOLOGIST/TECHNICIAN

INVOICED SCANNED

Client:
Patient:

B6

Anesthesia Record and Checklist **B6**

Form CVM-100 (Rev. 10/15) - Veterinary Medicine SA Anesthesia Surgical Checklist

B6

Additional notes:

Species: Canine
Breed: Doberman Pinscher
Sex: Male ()
Weight kg: 40.00
Date of Birth: **B6**
Color: Black/Tan
Check-in Date: **B6** 4:58 AM

Patient ID: **B6**

City:
Home Phone:
Cell Phone:
Ref Facility:
Ref Phone:

B6

<i>Before Premedication of Patient</i>	<i>After Induction in Prep Area</i>	<i>Prior to Leaving OR</i>
Confirmed by Anesthesia Team	Initiated by Anesthesia Team	Initiated by Anesthesia Team

B6

Client:
Patient:

B6

Anesthesia Record and Checklist: **B6**

Patient ID Sticker

Patient Name: _____

Event Documentation

Date: _____ Time: _____
 Doctor: _____
 Code Leader: _____
 Catheter Method: IO / Cutdown / In Place Pre-Event
 Catheter Details: _____
 CPR: Open Chest / Closed Chest Est. Weight: _____

Describe Event: _____

Monitoring	Time	ECG Rhythm			EtCO ₂			Notes / Other					
		PEA / Asystole / VT / VFib											
		PEA / Asystole / VT / VFib											
		PEA / Asystole / VT / VFib											
		PEA / Asystole / VT / VFib											
		PEA / Asystole / VT / VFib											
Drugs / Fluids	Drug/Fluid	Time	Dose	Route	Time	Dose	Route	Time	Dose	Route	Time	Dose	Route
	Epinephrine												
	Atropine												
Defib	Time	ECG Rhythm			Joules			Notes / Other					
		VT / VFib						Internal / External					
		VT / VFib						Internal / External					
		VT / VFib						Internal / External					

ROSC? Yes / No Time: _____

Added to CPR Log? Yes / No

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

IDEXX BNP B6

IDEXX Reference Laboratories

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

Client: **B6**
Patient: **B6**
Species: CANINE
Breed: DOBERMAN_PINSCH
Gender: MALE NEUTERED
Age: 10Y

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

IDEXX VetConnect 1-888-433-9967

TUFTS UNIVERSITY
200 WESTBORO RD
NORTH GRAFTON, Massachusetts 01536
508-839-5395

Account #88833

CARDIOPET proBNP- CANINE

Test	Result	Reference Range	Unit	Method	Flag
CARDIOPET proBNP- CANINE	B6	0-966 pmol/L	HIGH		B6

Comments:

1 **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:
Patient:

B6

Commercial Diet Plan

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

Cummings
Veterinary Medical Center
AT TUFTS UNIVERSITY

Commercial Diet Plan

B6 /phone appointment **B6**
Pet Name: **B6**
Signalment: 11 year old neutered male Doberman pinscher
Weight: 83.8 pounds (38.1 kg)
Body condition score: 5-6/9, Muscle condition score: Normal
Relevant health conditions: high grade **B6** DCM, a **B6**
deficiency, history **B6** upset
Referring veterinarians: **B6** and **B6** FHSA, **B6** **B6**

Diet History (at time of appointment):

- Current diet: Lamb, broccoli, eggs, mixed powder – nutritional yeast, seaweed calcium, lecithin granules, kelp granules
- Medications: **B6**
- Supplements: safflower oil, cod liver oil, seaweed calcium, vitamin E, taurine, L-carnitine, CoQ10, Vetclassic Cardiovascular, Vetclassics ArtiEaseGold, Vetclassics S.O.D & Boswellia joint support
- Medication administration: N/A
- Estimated intake: unable to estimate

Nutritional Goals

- Meet calorie needs to maintain body weight
- Meet essential nutrient needs
- Low sodium (< 80 mg/100 kcal)
- Moderate to high protein
- Omega-3 fatty acid supplementation

Recommendations:

- **B6** home-cooked diet at the time of his appointment was not meeting his nutritional needs as it was deficient in a number of essential nutrients. You ended up with this diet through experimentation, trying to avoid signs of skin allergies as well as poor stool quality and other gastrointestinal signs. Since your appointment, **B6** appetite has been much more variable – he has been unwilling to eat the same things every day.
- For dogs with heart disease who have not yet experienced heart failure, we recommend avoiding high sodium diets and treats and considering fish oil supplementation. Some dogs develop muscle loss with or without fat loss as their heart disease progresses. Feeding a higher protein diet and supplementing with fish oil may have benefit in preventing or treating this condition. There may also be some benefit of **B6** taurine, and carnitine supplementation, but ideal doses are unknown. **B6** taurine level came back high normal, so his DCM is less likely to be related to taurine deficiency, but it is fine to continue supplementation if you prefer.
- Both cancer and heart disease can cause changes in appetite and muscle and weight loss in dogs, so it is hard to know which is contributing the most to **B6** current appetite issues. In addition to appetite stimulants like Entyce, there are other "tricks" that may help increase **B6** calorie intake:
 - Rotating diets when **B6** gets picky may help ensure that a nutritionally balanced diet is eaten in appropriate amounts. Other techniques that you can utilize to optimize **B6** appetite include:
 - Changing the temperature of the food – every dog is a little bit different and some dogs

Commercial Diet Plan

prefer their food warmed, while others like it chilled. You can put canned food in the microwave for 10-15 seconds or put it in the freezer for 15 minutes to see if temperature makes a difference.

- A change of scenery - sometimes changing the feeding location can improve appetite. Try to offer food in a different room or outside. Sometimes feeding next to another pet can also encourage eating, although you need to ensure that fights do not occur over food.
- A different dish - try to offer **B6** meal on one of your dinner plates or in a different type of bowl. Some dishes, particularly plastic, can retain unpleasant odors or flavors.
- Palatability enhancers can be used to encourage him to eat the appropriate diets if necessary, but ideally should not be used at every meal. Many dogs like sweet things and maple syrup, brown sugar, applesauce or fruit yogurt may be appealing as well as fats such as butter, lard, etc. Ideally, the total calories (noted below) from these foods and treats should not exceed **B6** 10% treat allowance (see treat section) on regular basis.
- We discussed making a balanced home-cooked diet for **B6** at your appointment, but his changes in appetite since then make this an impractical option as he is not currently willing to eat any food items consistently enough to be worth formulating a nutritionally complete recipe for him (all ingredients bring with them different nutrient profiles and are not interchangeable in a recipe). Therefore, we recommend mixing and matching commercial foods as needed to meet his energy needs, monitoring him for an increase in allergy signs or poor stool quality. If his appetite becomes more consistent, we can revisit the idea of a home-cooked diet if desired.
- Our estimate of **B6** daily calorie requirements is around 1500 kilocalories (kcal) per day, with no more than 150 of these calories in the form of treats. One kilocalorie is equivalent to one human Calorie.
- We have a list of low sodium commercial diets on our "Heartsmart" website: <http://vetmed.tufts.edu/wp-content/uploads/Low-sodium-diet-list-2019-dog.pdf>
- Below are some additional commercial foods that meet our nutritional goals. You can mix and match the canned and dry based on Brom's preference.

Diet	Kcal/cup or can	Sodium mg/100kcal	Daily Feeding Amount (cups or cans)
Wellness Simple Duck & Oatmeal (dry)	450	23	3
Wellness CORE Senior (dry)	359	55	3 3/4
Nutro Wholesome Essentials Adult Chicken, Brown Rice & Sweet potato (dry)	343	80	3 7/8
Purina ONE SmartBlend True Instinct Tender Cuts in Gravy with real chicken (can)	427	52	3 1/8
Wellness Core 95% Beef with Carrots (12.5 oz can)	427	69	3 1/8

Supplements:

- Unfortunately, there is little regulation of supplements for people or animals (neither safety nor efficacy has to be proven prior to marketing) and some of these products may be harmful rather than helpful. Therefore, we are quite selective when it comes to recommending specific supplements. We usually only recommend a product where there is adequate data to show that it is safe and has a reasonable expectation of efficacy.
- While taurine, carnitine, and **B6** may have some benefits for dogs with heart disease, Vetclassic supplement contains all of these ingredients that you are supplementing separately, plus others. Feeding multiple supplements with the same ingredients is not ideal as it could lead to excess nutrient levels and makes it hard to keep track of how much he is getting. Likewise, both the ArtiEase Gold and the SOD & Boswellia joint products have overlapping ingredients both with each other, and with the cardiac supplement. We recommend stopping all of the Vetclassic supplements. It is fine to continue the taurine, carnitine, and **B6** separately.
- Glucosamine, chondroitin, and MSM supplements are intended to slow the degradation of joint cartilage and the development of arthritis and provide some relief to dogs that already have it. The data to support benefits of these products is currently equivocal, but they are unlikely to be harmful. Brands that we can recommend that are validated and have research behind them include the veterinary brands Cosequin or Dasuquin and we would recommend these products over the joint supplements that you have been using.
- The nutritional yeast, safflower oil, kelp, and other supplements for his home-cooked diet can be

Commercial Diet Plan

discontinued.

- Quality control of fish oil supplements can vary widely; we recommend using one of the following brands as these supplements have been independently validated to contain the appropriate amount of omega fatty acids and are concentrated to reduce the number of capsules that must be given:
 - GNC Triple Strength Fish Oil 1500 (1000 mg EPA + DHA per softgel): 2-3 softgels per day
 - Swanson EFA's Super EPA (500 mg EPA + DHA per softgel): 5 softgels per day
- Although omega-3 fatty acids may have some benefits, if Brom doesn't like the taste, you'll either need to administer as capsules like a medication so they aren't chewed, or discontinue giving them so this doesn't adversely affect appetite.

Treats/Palatability enhancers:

- B6** should ideally receive a maximum of 10% of the daily calorie intake (150 kcal/day) from treats. These extra calories can be given as treats or mixed in with the diet for variety. If the total amount of the diet being fed is altered, the treat allowance should be adjusted accordingly so that treats never exceed 10% of total calories to avoid unbalancing the home-cooked diet (or a commercial diet) by nutrient dilution.
- The calorie and nutrient information for human foods can be found on the packaging or on the USDA database: <http://www.nal.usda.gov/fnic/foodcomp/search/>. Please note that calories are listed as "energy" with units of kcals. Some treat suggestions include:

Food (raw unless noted)	Amount	Calories
Honey	1 tbsp	64
Maple Syrup	1 tbsp	52
Brown Sugar	1 packed tsp	17
Chicken fat	1/2 tbsp	57
Lard	1/2 tbsp	57
Molasses	1 tbsp	58
Butternut or acorn winter squash (cooked)	1/4 cup cubes	15
Baby carrots	1 baby carrot	4-5
Green beans	1 green bean	2
Sweet red peppers	1/2 cup chopped	23
Broccoli	1/2 cup chopped or diced	15
Green peas	1/8 cup green peas	15
Cucumbers	1 cup slices	16
Apples	1/4 cup chopped	15
Strawberry	1 medium 1.5 inch strawberry	6
Blueberries	1/4 cup blueberries or 25 berries	20
Bananas	1/8 cup bananas	17

- You can also use lamb, salmon, beef, or other meats that you know that **B6** likes to top dress commercial food if needed, trying to stay within his treat allowance.
- Additional treat suggestions are available online: <http://vetmed.tufts.edu/wp-content/uploads/low-salt-treats-and-med-administration-2018.pdf>

Foods to AVOID:

- Avoid macadamia nuts, avocado, garlic, onions, grapes, raisins, xylitol, and other foods known or suspected to be toxic to dogs.
- High sodium foods - most bread products, cheese, deli or processed meats, fast food, crunchy human snack foods, pizza.
- Commercial canned broths should also be avoided as even the low sodium options are too high in salt for **B6** you would like to put a small amount of broth on **B6** food, it is best to boil meat in plain water with no seasoning and use this broth without the meat. Alternatively, you can try the broths made for dogs by the Fruitables company.

Medication Administration:

- The best foods for giving medications would be one of the above noted canned diets. You can roll the canned food into a meatball and put the pill in the middle of the meatball. However, this does run the risk of

Client:
Patient:

B6

Commercial Diet Plan

causing a food aversion, so please proceed cautiously. Alternately, you can use small pieces of white bread, mini marshmallows, marshmallow Fluff, or fruit (such as a banana or melon). Pill Pockets can also be used (9 kcal per tablet size, 23-29 kcal per capsule size). The calories from all foods used to administer medications should be subtracted from Brom's treat allowance. Please let us know if you need additional options for administering medications.

Follow Up:

- -
 -
 -
- # B6

Please contact us if you have any questions about **B6** nutritional plan.

Sincerely,

B6 VMD, MS, DACVN
Clinical Nutrition Service

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

Diet Hx: **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: Liver / Turkey & Beef

3. Over the last few weeks, has your pet (check one)

- Lost weight Gained weight Stayed about the same weight Don't know
4 lbs

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
Beef <u>Beef</u> Beef Stew meat <u>Beef Stew meat</u>	fresh/cooked <u>fresh/cooked</u>	only 1oz max <u>10oz</u>	1x/day <u>1x/day</u>	PAST 2 wks <u>PAST 3 wks</u>
Lamb <u>Lamb</u> Lamb Stew meat <u>Lamb Stew meat</u>	fresh/cooked <u>fresh/cooked</u>	5-6oz <u>5-6oz</u>	1x/day <u>1x/day</u>	PAST 2 wks <u>PAST 3 wks</u>
NOT eating broccoli anymore				
<u>egg</u>	<u>hard boiled</u>	<u>whole egg</u>	<u>1-2/wk</u>	<u>PAST 2 wks</u>

*Any additional diet information can be listed on the back of this sheet stopped eating BMDO TREATS feeding ASD, I no longer add oil or powder to his food, very sensitive to smell

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:

Supplement	Yes	No	Brand/Concentration	Amount per day
Taurine ✓	<input type="checkbox"/>	<input type="checkbox"/>		
Carnitine ✓	<input type="checkbox"/>	<input type="checkbox"/>		
Antioxidants	<input type="checkbox"/>	<input type="checkbox"/>		
Multivitamin	<input type="checkbox"/>	<input type="checkbox"/>		
Fish oil ✓ <u>cod liver</u>	<input type="checkbox"/>	<input type="checkbox"/>		
Coenzyme Q10 ✓	<input type="checkbox"/>	<input type="checkbox"/>		
Other (please list): Example: Vitamin C			<u>Nature's Bounty</u>	<u>500 mg tablets - 1 per day</u>

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): in Beef cubes or Lamb cubes but BMDO do not work anymore

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

Registration



Tufts Veterinary Emergency
Treatment & Specialties

B6

Client and Pet Registration Form

Client Name: **B6**

Spouse/Partner: **B6**

Address: **B6**

City, State, Zip: **B6**

Home Phone: **B6**

Work Phone: **B6**

Cell Phone: **B6**

Email: **B6**

Pager: () -

Pet Name: **B6**

Patient ID: **B6**

Date of Birth: **B6**

Age: **B6** Years Old

Species: Canine

Breed: Doberman Pinscher

Color: Black/Tan

Sex: Male (Neutered)

Weight: Weight (kg) 38.10 kg

Rabies Date:

Referring Veterinarian:

B6

B6

Tufts Veterinary Emergency Treatment & Specialties Agreement and Consent:

- I agree to pay for all services rendered to my pet at the end of today's examination.
- I understand that payment is required at the time of service.
- I understand that the cost of the initial exam **does not** cover any further diagnostics, treatments, or medications that may be necessary for my pet.
- I understand that if further diagnostics or treatments are recommended by the doctor I may request an estimate of those charges first.
- I understand that I have the right to refuse any treatments, diagnostics, or medications that have been recommended to me by the doctor.

Signature: **B6**

Date: **B6**

You and your doctor will be provided with a report from the doctor for every examination performed on your pet at Tufts VETS. Thank you for trusting us to care for your pet!

Client:
Patient:

B6

Vitals Results

4:00:07 PM	Heart Rate (/min)
4:00:08 PM	Respiratory Rate
4:00:09 PM	Temperature (F)
4:00:10 PM	Weight (kg)
4:33:00 PM	Nursing note
9:11:25 PM	Nursing note
9:18:15 PM	Weight (kg)
9:22:01 PM	Nursing note
9:38:48 PM	Weight (kg)
9:39:07 PM	Interest in water
9:43:31 PM	Eliminations
11:59:09 PM	Respiratory Rate
11:59:35 PM	Heart Rate (/min)
11:59:48 PM	Eliminations
11:59:54 PM	Eliminations
3:50:51 AM	Eliminations
3:51:12 AM	Respiratory Rate
3:51:21 AM	Eliminations
3:51:30 AM	Heart Rate (/min)
7:15:01 AM	Weight (kg)
7:21:38 AM	Heart Rate (/min)
7:21:53 AM	Respiratory Rate
7:37:07 AM	Eliminations
11:27:43 AM	Eliminations
11:51:09 AM	Notes
2:33:23 PM	Notes
2:46:01 PM	Anesthesia Notes
3:15:39 PM	Eliminations
3:16:39 PM	Respiratory Rate
3:16:52 PM	Heart Rate (/min)
7:47:02 PM	Temperature (F)
7:47:09 PM	Eliminations
7:47:24 PM	Amount eaten
7:47:46 PM	Respiratory Rate
7:47:53 PM	Heart Rate (/min)

B6

B6

Client:
Patient:

B6

Vitals Results

11:26:08 PM	Heart Rate (/min)
11:26:13 PM	Respiratory Rate
11:26:33 PM	Eliminations
3:25:33 AM	Respiratory Rate
3:25:44 AM	Heart Rate (/min)
3:25:52 AM	Eliminations
3:30:48 AM	Amount eaten
7:25:36 AM	Weight (kg)
7:26:23 AM	Eliminations
7:40:47 AM	Nursing note
8:08:14 AM	Temperature (F)
8:08:28 AM	Respiratory Rate
8:08:43 AM	Heart Rate (/min)
11:41:13 AM	Respiratory Rate
11:49:35 AM	Heart Rate (/min)
12:17:48 PM	Eliminations
12:20:33 PM	Amount eaten
3:05:57 PM	Eliminations
3:30:20 PM	Respiratory Rate
3:30:28 PM	Heart Rate (/min)
7:21:10 PM	Eliminations
7:38:23 PM	Amount eaten
7:48:48 PM	Temperature (F)
7:49:31 PM	Heart Rate (/min)
7:49:43 PM	Respiratory Rate
10:35:56 PM	Eliminations
12:01:58 AM	Eliminations
12:09:36 AM	Heart Rate (/min)
12:09:41 AM	Respiratory Rate
4:15:02 AM	Respiratory Rate
4:27:58 AM	Nursing note
4:34:44 AM	Amount eaten
4:40:11 AM	Eliminations
4:40:24 AM	Heart Rate (/min)
7:28:16 AM	Eliminations
7:30:45 AM	Notes

B6

B6

Client:
Patient:

B6

Vitals Results

7:35:16 AM	Temperature (F)
7:35:24 AM	Respiratory Rate
7:35:32 AM	Heart Rate (/min)
9:35:36 AM	Weight (kg)
8:06:54 AM	Nursing note
9:07:11 AM	Nursing note
9:28:36 AM	Body Condition Score (BCS)
9:28:37 AM	Temperature (F)
9:28:39 AM	Heart Rate (/min)
9:28:40 AM	Respiratory Rate
9:28:41 AM	Muscle Condition Score (MCS)
9:28:42 AM	Pain assessment
11:31:47 AM	Heart Rate (/min)
11:31:56 AM	Respiratory Rate
11:32:05 AM	Eliminations
12:56:10 PM	Anesthesia Notes
1:22:46 PM	Incision check
1:23:10 PM	Pain assessment
3:29:03 PM	Cardiac rhythm
3:29:04 PM	Heart Rate (/min)
3:36:49 PM	Eliminations
3:37:07 PM	Respiratory Rate
3:38:27 PM	Interest in water
2:33:50 PM	Weight (kg)
8:31:42 AM	Eliminations
8:32:12 AM	Weight (kg)
8:33:08 AM	Interest in water
8:37:04 AM	Temperature (F)
8:37:06 AM	Heart Rate (/min)
8:37:07 AM	Respiratory Rate
8:48:04 AM	Body Condition Score (BCS)
9:37:17 AM	Notes
11:29:12 AM	Respiratory Rate
11:31:48 AM	Heart Rate (/min)
11:31:54 AM	Eliminations
2:12:01 PM	Anesthesia Notes
0:32:38 AM	Weight (kg)
10:17:26 AM	Weight (kg)
7:58:08 AM	Weight (kg)

B6

B6

Client:
Patient:

B6

Vitals Results

B6	7:59:28 AM	Nursing note
	8:56:05 AM	Body Condition Score (BCS)
	8:56:06 AM	Temperature (F)
	8:56:07 AM	Weight (kg)
	8:56:08 AM	Heart Rate (/min)
	8:56:09 AM	Respiratory Rate
	8:56:10 AM	Muscle Condition Score (MCS)
	8:56:11 AM	Pain assessment
9:23:07 AM	Interest in water	

B6

Client:
Patient:

B6

ECG from Cardio

B6

B6

11:21:48 AM

Tufts University
Tufts Cummings School of Vet Med
Cardiology

12 Lead: Standard Placement

B6

Client: **B6**
Patient:

ECG from Cardio

B6

B6

11:22:50 AM

Page 1 of 2

Tufts University
Tufts Cummings School of Vet Med
Cardiology

B6

Client:
Patient:

B6

ECG from Cardio

B6

B6

11:22:50 AM

Page 2 of 2

Tufts University
Tufts Cummings School of Vet Med
Cardiology

B6

Client:
Patient:

B6

ECG from Cardio

B6

B6

11:23:04 AM

Tufts University
Tufts Cummings School of Vet Med
Cardiology

B6

Client: **B6**
Patient:

ECG from Cardio

B6

B6

11:23:32 AM

Page 1 of 2

Tufts University
Tufts Cummings School of Vet Med
Cardiology

12 Lead: Standard Placement

B6

Client: **B6**
Patient:

ECG from Cardio

B6

B6

11:23:32 AM

Page 2 of 2

Tufts University
Tufts Cummings School of Vet Med
Cardiology

B6

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

Alba Holter

CANINE HOLTER MONITORING REPORT

HOLTER MONITOR REPORT

Patient Name: B6	Interp. Physician:
Date of Birth:	Scan Number: Tufts - Clinic
ID : B6	Date Recorded: B6 @ 11:33
Age:	Date Processed:
Sex: M	Recorder Num:
Analyst:	HookupTech:
Physician:	Medications:
Indications:	

The patient was monitored for a total of 23.59 hours. The total time analyzed was 22:40 hours. Start time was 11:33am. There was a total of 110400 beats. **B6** were Ventricular beats, **B6** were Supraventricular beats, and patient is not paced.

Mean Heart Rate: B6	Total Beats: B6
Maximum Heart Rate: B6	Tachycardia beats: B6
Minimum Heart Rate: B6	Bradycardia beats: B6
Pauses: B6	Longest RR at: B6

Ventricular Ectopy

Total:	B6
Singles:	
Pairs:	
Total Runs:	
Beats in Runs:	
Longest Run:	
Fastest Run:	
RunT:	
RR Variability	
SDNN:	
pNN50:	
RMSSD:	
SDSD:	

Supraventricular Ectopy

Total:	B6
Single:	
Pairs:	
Total Runs:	
Beats in Runs:	
Longest Run:	
Fastest Run:	
Aberrant:	

COMMENTS:

B6

Physician's Signature: _____

_____ Date

Client: **B6**
Patient:

Alba Holter

Patient: **B6** ID: **B6** Date Recorded: **B6** @ 11:33 Page: 2

GENERAL PROFILE

Interval	Heart Rate			Total VPB Beats	VPB Runs Pairs VT	SVPB Total	SVPB Pairs SVT	Runs SVT	Time Pauses Analyzed
	Lo	Mean	Hi						
Starting									
11:33am1									
12:00pm1									
1:00pm1									
2:00pm1									
3:00pm1									
4:00pm1									
5:00pm1									
6:00pm1									
7:00pm1									
8:00pm1									
9:00pm1									
10:00pm1									
11:00pm1									
12:00am2									
1:00am2									
2:00am2									
3:00am2									
4:00am2									
5:00am2									
6:00am2									
7:00am2									
8:00am2									
9:00am2									
10:00am2									
11:00am2									
Summary:									

B6

Client:
Patient:

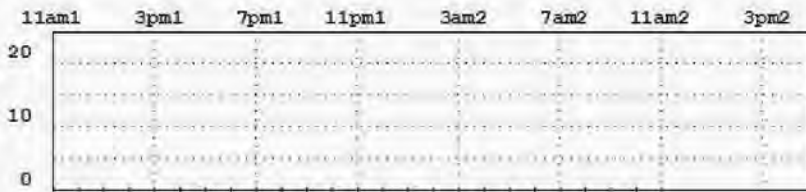
B6

Alba Holter

Patient: **B6** ID: **B6** Date Recorded: **B6** @ 11:33 Page: 3

CRITICAL EVENTS

B6



Pauses not Present

Total
0



Foster Hospital for Small Animals

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

Client: [B6]
Address: [B6]

All Medical Records

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

Species: Canine
Sex: Female
(Spayed)

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

Referring Information

[B6]

Client: [B6]
Patient: [B6]

Initial Complaint:

Scanned Record

Initial Complaint:

New [B6] - arrhythmia

SOAP Text [B6] 11:18AM [B6]

Initial Complaint:

Holter Removal and X-rays

Disposition/Recommendations

Client:
Patient:

B6

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:	Female (Spayed)
Age:	B6 Years Old

Lab Results Report

Heartworm Antigen (K9)	B6	11:20:00 AM	Accession ID:	B6
Test	Results	Reference Range	Units	
HW ANTIGEN-CANINE	B6	0 - 0		



4/69

B6

Printed Tuesday, January 15, 2019

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

CBC/CHEM - **B6**



Tufts Cummings School Of Veterinary Medicine
 300 Woburn Road
 South Oyster, MA 01918

DUPLICATE

Name DOB Patient ID	B6	Sex SP Age	Female 12	Provider Order Location	B6 V120119, Cummings Center
Phone number Collection Date Approval Date	B6 11:57 AM 10 FEB	Special. Cause Breeds Status		Sample ID	B6

CBC, Comprehensive, Sm Animal (Research)

WBC (ADVA)	B6	Ref Range/Female	6.45-15.10 K/uL
RBC (ADVA)	B6		1.80-3.00 M/uL
Hemoglobin (ADVA)	B6		11.5-20.7 g/dL
Hematocrit (ADVA)	B6		39-51 %
MCV (ADVA)	B6		84.7-77.5 fL
MCH (ADVA)	B6		21.3-25.0 pg
MCHC (ADVA)	B6		11.8-14.3 g/dL
RDW (ADVA)	B6		11.9-15.2
Platelet Count (ADVA)	B6		173-400 K/uL
DIFFERENTIAL	B6		
Mean Platelet Volume (ADVA)	B6		8.29-11.26 fL
Frank Cell	B6		0.129-0.407 %
Reticulocyte Count (ADVA)	B6		0.26-1.00 %
Atypical Reticulocyte Count (ADVA)	B6		0.7-11.7 K/uL
Comment (Hematology)	Lignin present		

B6

B6

B6

B6

Microscopic Exam of Blood Smear (ADVA)

Seg Neut (%)	B6	Ref Range/Female	43-84 %
Lymphocytes (%)	B6		7-47 %
Monocytes (%)	B6		1-11 %
Seg Neutrophils (ADVA)	B6		1.80-11.00 K/uL
ADVA	B6		
Platelets (ADVA)	B6		1.00-4.00 K/uL
Platelets (ADVA)	B6		0.80-1.00 K/uL
WBC Morphology	B6		
Atypical	B6		
Eosinophils	B6		

B6

B6

Research Chemistry Profile - Small Animal (Cobas)

Sample ID: **B6**
B6

Reference Range

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

CBC/CHEM **B6**



Tufts Cummings School Of Veterinary Medicine
230 Westboro Road
North Grafton, MA 01534

DUPLICATE

Name (DOB) **B6** Sex: SP Number **B6**
Patient ID **B6** Age: 22 Order Location: V1200700 Barnstable, MA
Phone number: Special: Cancer Sample ID: **B6**
Collection Date: 10/27/14
Approval Date: 10/27/14

Research Chemistry Profile - Small Animal (Cobas) (cont'd)

Parameter	Value	Ref. Range/Units
Glucose	175	80-175 mg/dL
Urea	10	8-20 mg/dL
Creatinine	1.2	0.5-1.4 mg/dL
Phosphorus	2.8	2.0-2.8 mg/dL
Calcium	10.5	9.5-11.5 mg/dL
Magnesium	1.8	1.0-2.0 mg/dL
Total Protein	5.5	5.0-7.0 g/dL
Albumin	3.5	2.8-4.0 g/dL
Globulin	2.0	1.5-3.0 g/dL
A/G Ratio	1.75	1.0-1.8
Bilirubin	0.2	0.0-0.2 mg/dL
Chloride	110	100-115 mEq/L
Potassium	4.5	3.5-5.0 mEq/L
Sodium	145	135-145 mEq/L
ACAP	0.0	0.0-0.5
UA E	0.0	0.0-0.5
Total Bile acids	0.0	0.0-0.70 mg/dL
Aspartate Aminotransferase	10	10-127 U/L
ALT	10	0-15 U/L
ALP	140	14-40 U/L
AST	10	0-14 U/L
Creatine Kinase	20	0-450 U/L
Chestnut	10	0-100 mg/dL
Triglycerides	10	10-150 mg/dL
Amylase	10	100-1000 U/L
Cholesterol (total)	10	0-110 mg/dL
Cholesterol (HDL)	10	0-110 mg/dL

B6

Sample ID: **B6**
Request: **B6**

Signature: _____
Date: _____

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

B6 BNP **B6**

B6

B6 **B6**

Client: **B6**
Patient: **B6**
Specialty: **B6**
Board: **B6**
Gender: **B6**
Age: **B6**

Board: **B6**
Supervisor: **B6**
Account: **B6**
Ordered by: **B6**

B6
SERVICES/DEPARTMENT
20000000000000000000
NORTH CAROLINA
JANUARY 2019

CARDIOLOGY - **B6**

CARDIOLOGY - **B6** [REDACTED] **B6**

B6

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

Holter results from cardio

CANINE HOLTER MONITORING REPORT	
HOLTER MONITOR REPORT	
Patient Name: B6	Interp. Physician:
Date of Birth: B6	Scan Number:
ID: B6	Date Recorded: B6
Age:	Date Processed:
Sex:	Recorder Num:
Analyst:	Hookup Tech:
Physician:	Medications:
Indications:	

The patient was monitored for a total of 23.58 hours. The data time obtained was 22.40 hours. Start time was 11:20am. There was a total of 75000 beats. Less than 1% were Ventricular beats. More than 5 Supraventricular beats. (and comment is not present)

Mean Heart Rate: B6	Total Beats: B6
Maximum Heart Rate: B6	Tachycardia Beats: B6
Minimum Heart Rate: B6	Bradycardia Beats: B6
Pause: B6	Longest RR Int: B6

Ventricular Ectopy

None	
Early A-Beat	
Pace	
Total Beats: B6	Supraventricular - Not Present
Beats in Run	
Longest Run	00:03:40 (240 BPM)
Fastest Run	00:03:40 (240 BPM)
Count	

HR Variability

SDNN: B6	
pnV50	
RMSSD	
SDSD	

COMMENTS

The underlying rhythm is sinus bradycardic with an average heart rate of 68 bpm. Occasional VECs were noted with 15 paces and 2 runs. No atrial ectopy was noted. No events were recorded while wearing monitor.

Physician's Signature: _____

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

Holter results from cardio

Patient: **B6** ID: **B6** Date Recorded: **B6** 11/14 Page: 1

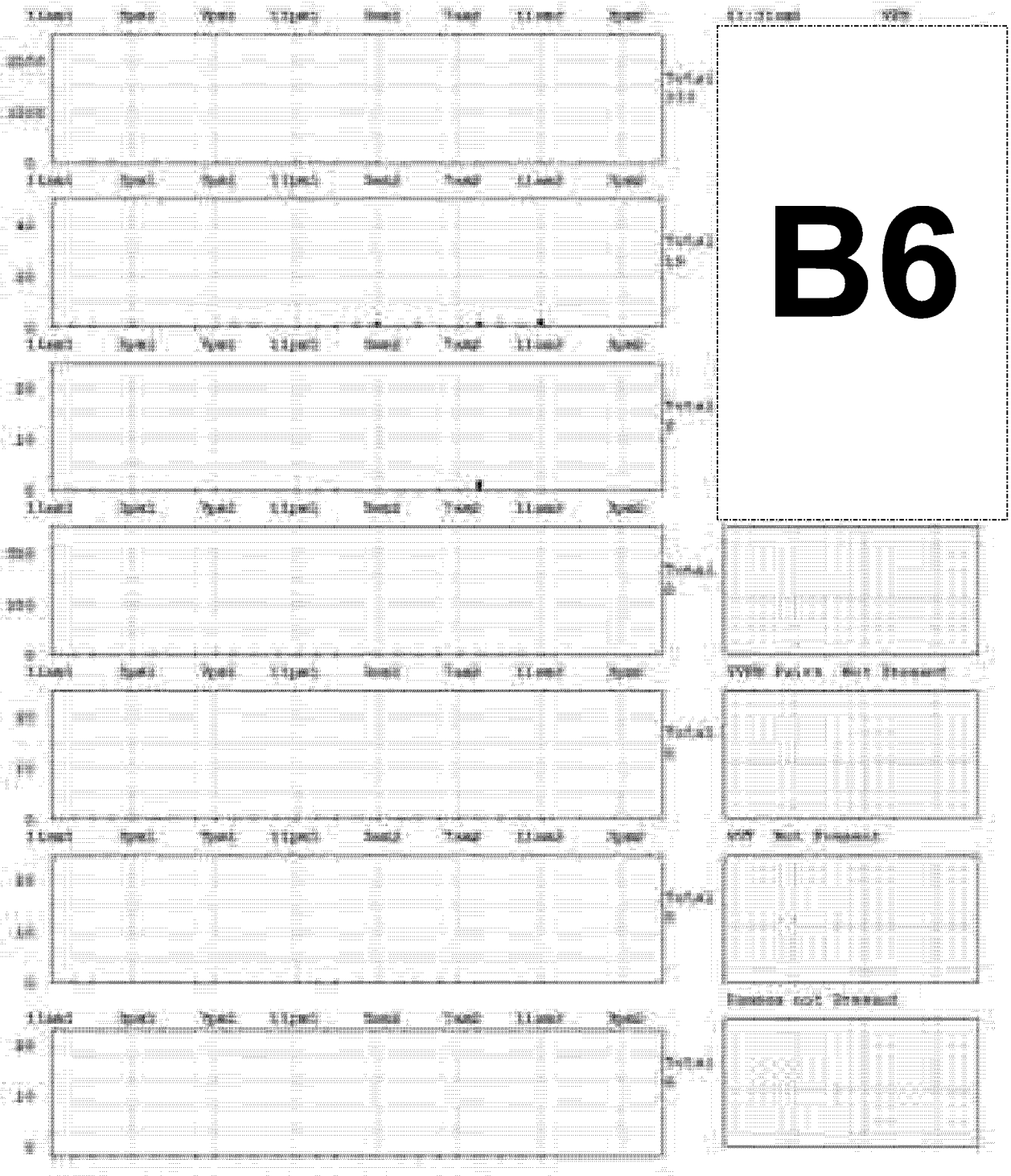
GENERAL PROFILE

Interval	Start Date	Total YTB	YTB	Rate YTB	YTB	Rate	Time
B6							

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

Holter results from cardio

CRITICAL EVENTS



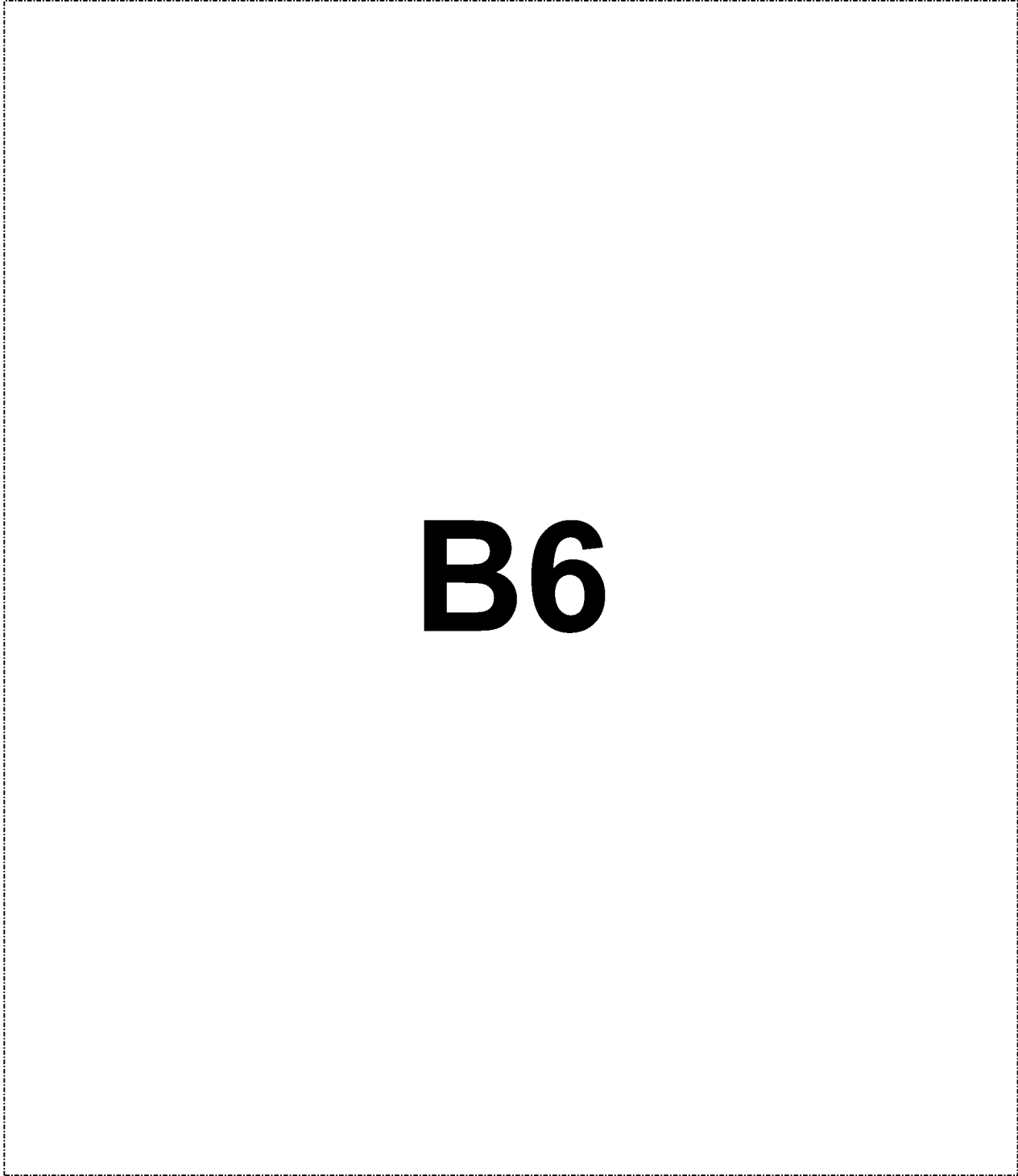
Client: **B6**
Patient: **B6**

Holter results from cardio

Patient: **B6** ID: **B6** Date Recorded: **B6** Page: 1

FULL-SIZED STRIPS

From 6:50 am to 7:00 am (ALL)



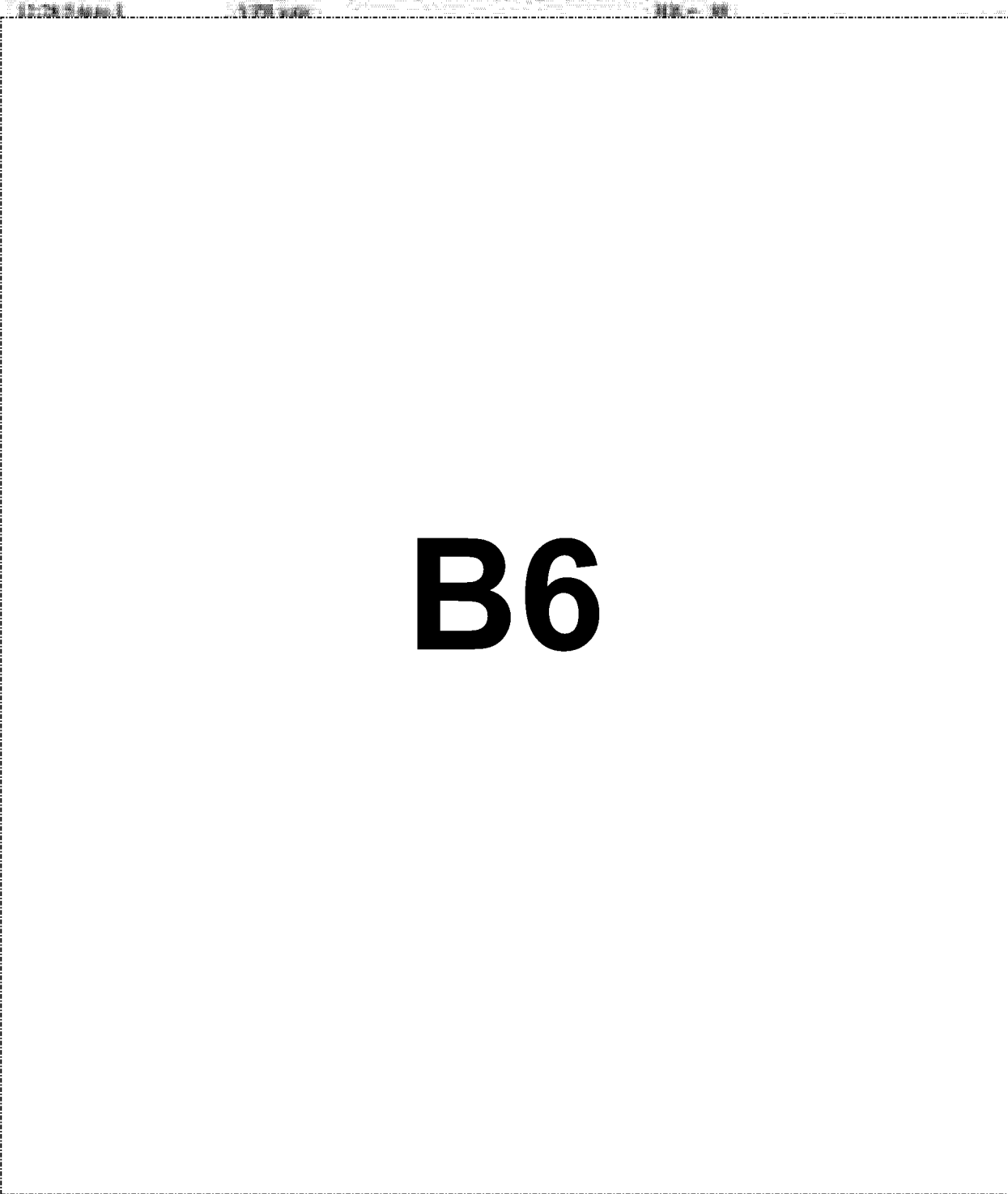
Client:
Patient: **B6**

Holter results from cardio

Patient Name: **B6** ID: **B6** Date Recorded: **B6** Page: 1

FULL-SIZED STRIPS

From 6:50 am to 11:59 pm (ALL)



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

Holter results from cardio

Patient: **B6** ID: **B6** Date Recorded: **B6** @ 11:14 Page: 8

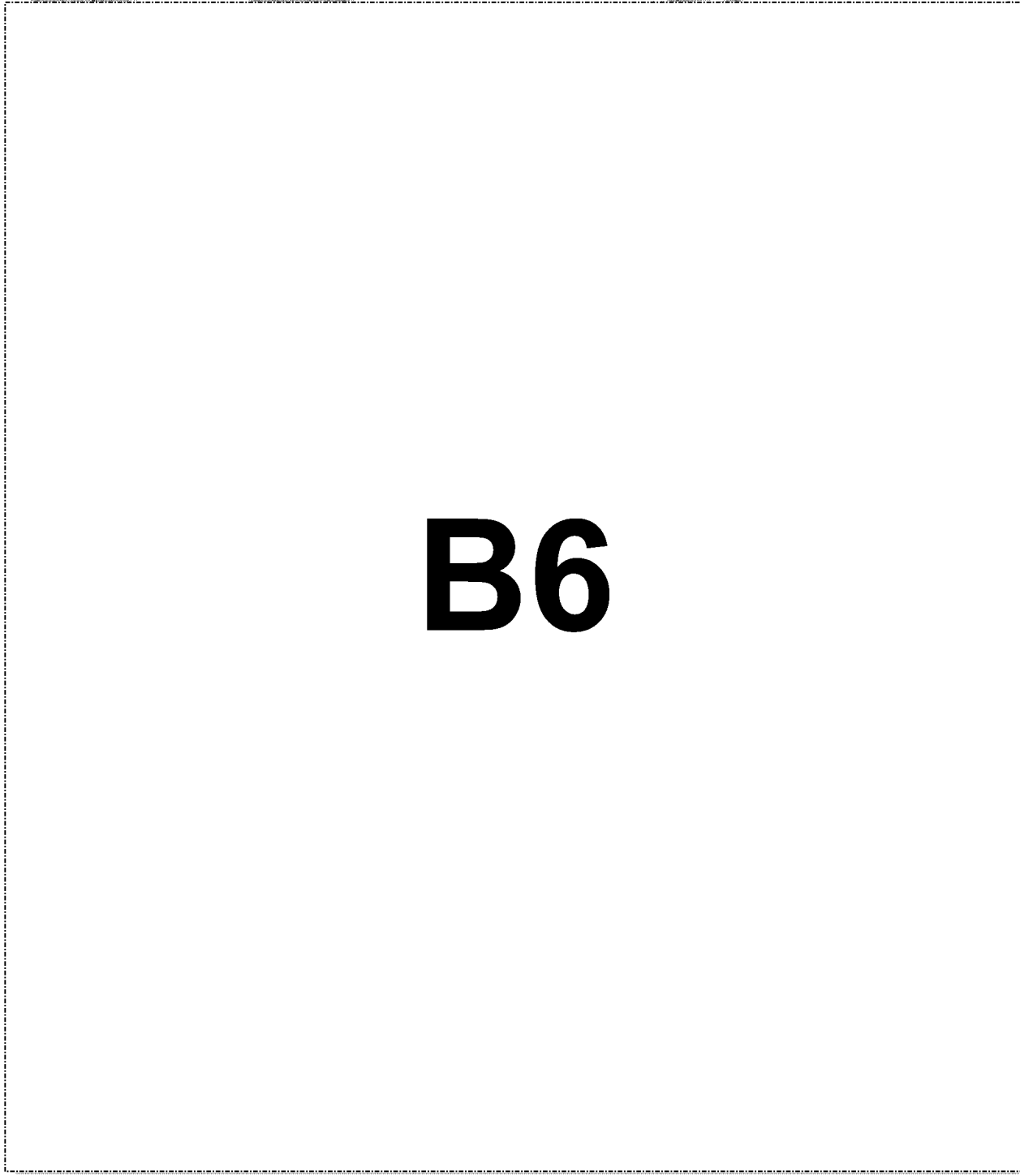
FULL-SIZED STRIPS

From 6:50 am to 7:00 am (ALL)

11/17/2014

11/17/2014

11/17/2014



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

Holter results from cardio

Patient: **B6** ID: **B6** Date Recorded: **B6** Page: **14**

FULL-SIZED STRIPS

Case 650000000 ECG 24 hours (ALL)

1/11/2000

1200:00:00

HR: 14

B6

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

Holter results from cardio

Patient: **B6** ID: **B6** Date Recorded: **B6** Page: **1**

FULL-SIZED STRIPS

From 6:50 am to 7:00 am (ALL)

6:50:00pm

0.000000

HR = 60

B6

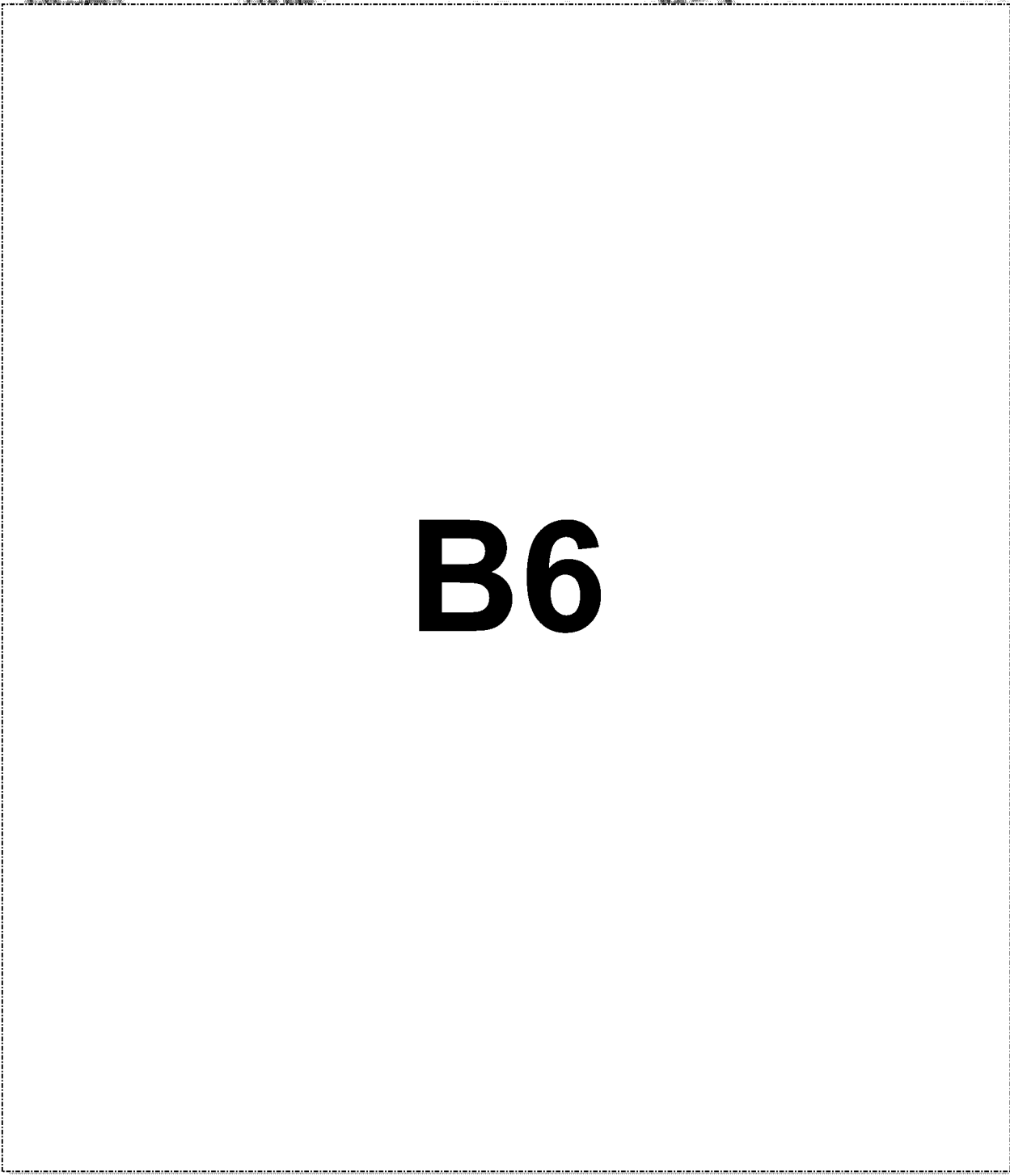
Client: **B6**
Patient: **B6**

Holter results from cardio

Patient:	B6	ID:	B6	Date Recorded:	B6	Page:	1
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FULL-SIZED STRIPS

From 6:50 am to 7:00 am (ALL)



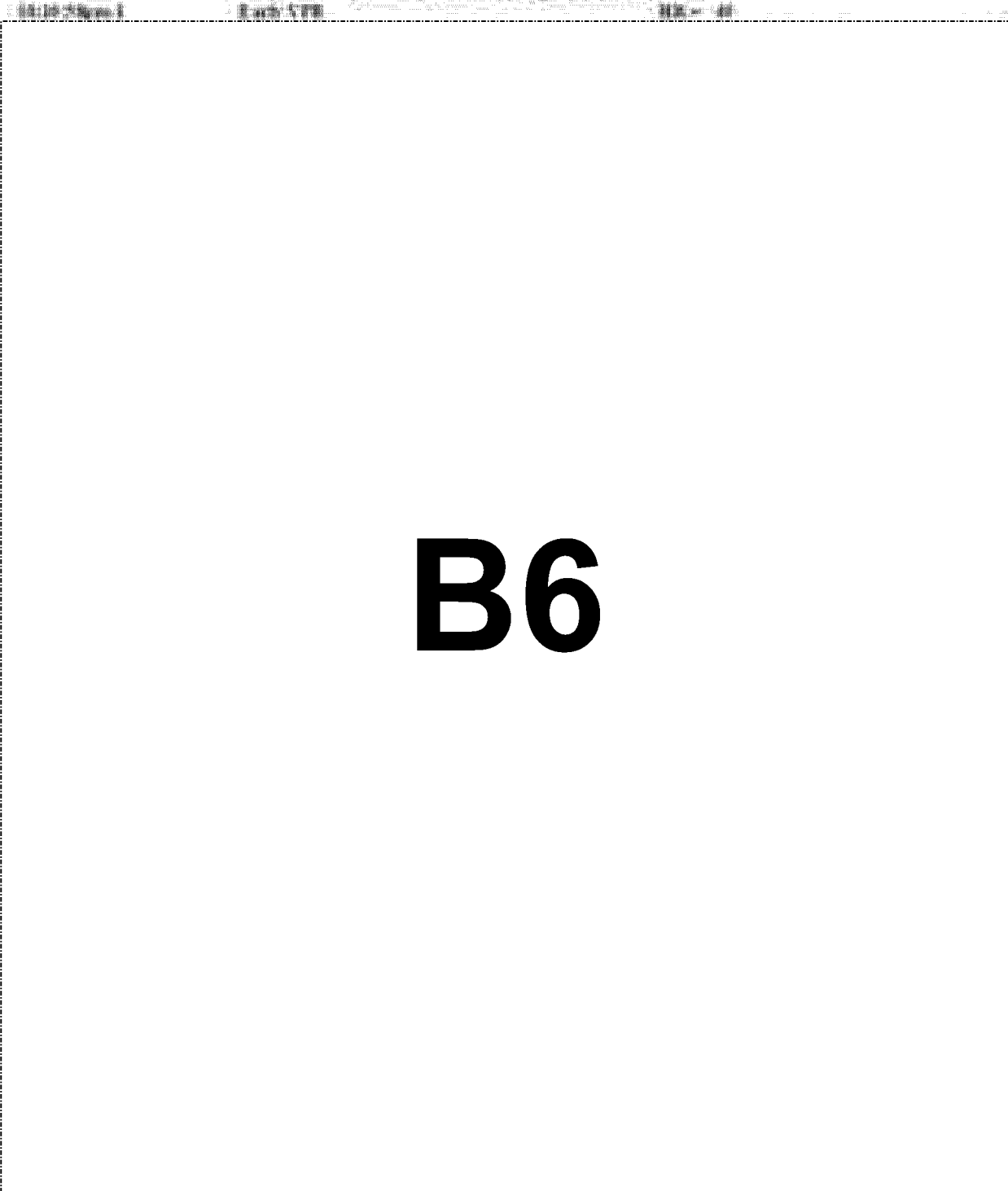
Client: **B6**
Patient: **B6**

Holter results from cardio

Patient: **B6** ID: **B6** Date Recorded: **B6** Page: **17**

FULL-SIZED STRIPS

From 6:50 am to 7:00 am (ALL)



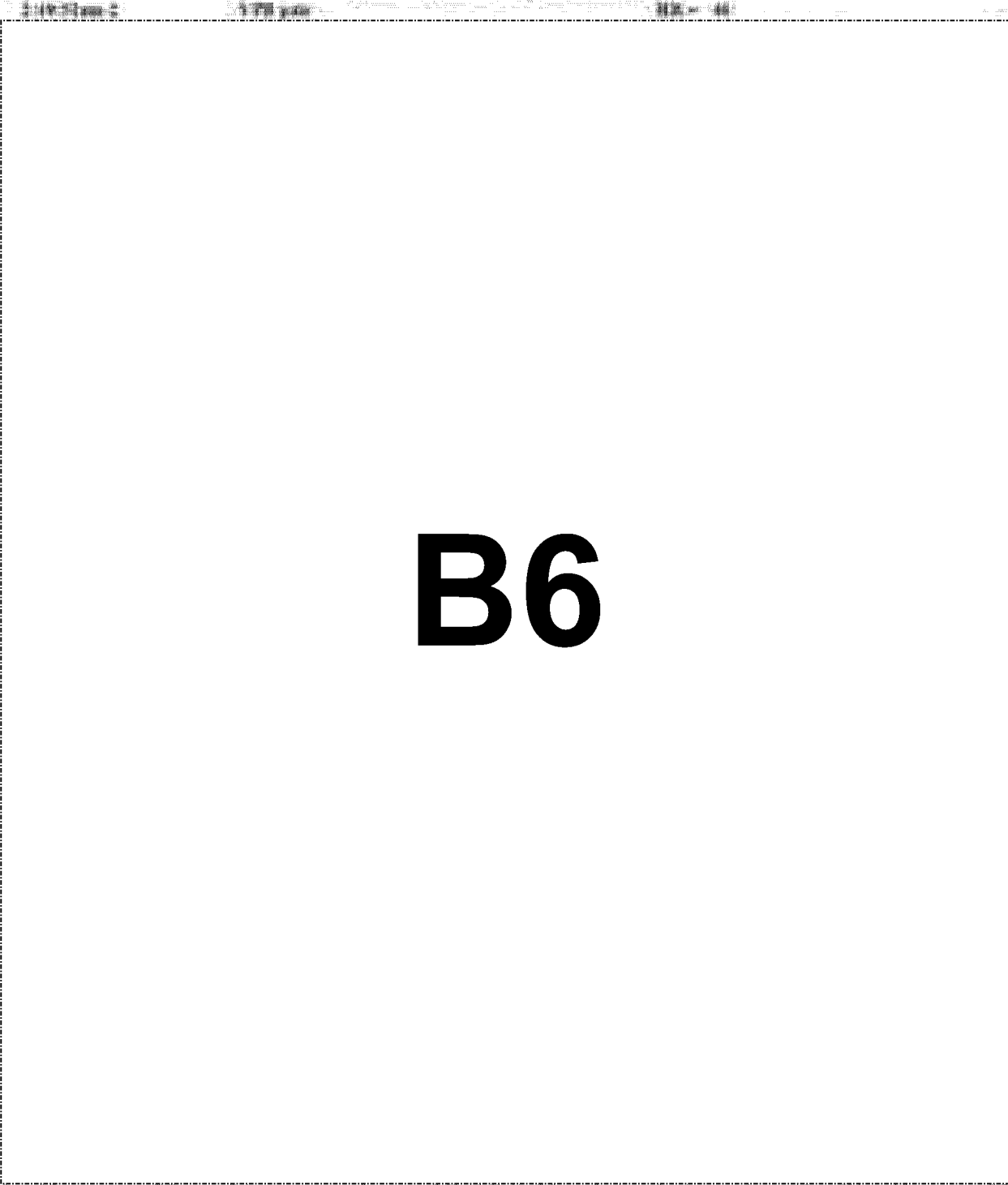
Client:
Patient: **B6**

Holter results from cardio

Patient: **B6** ID: **B6** Date Recorded: **B6** Page: **12**

FULL-SIZED STRIPS

From 6:50 am to 7:00 am (ALL)



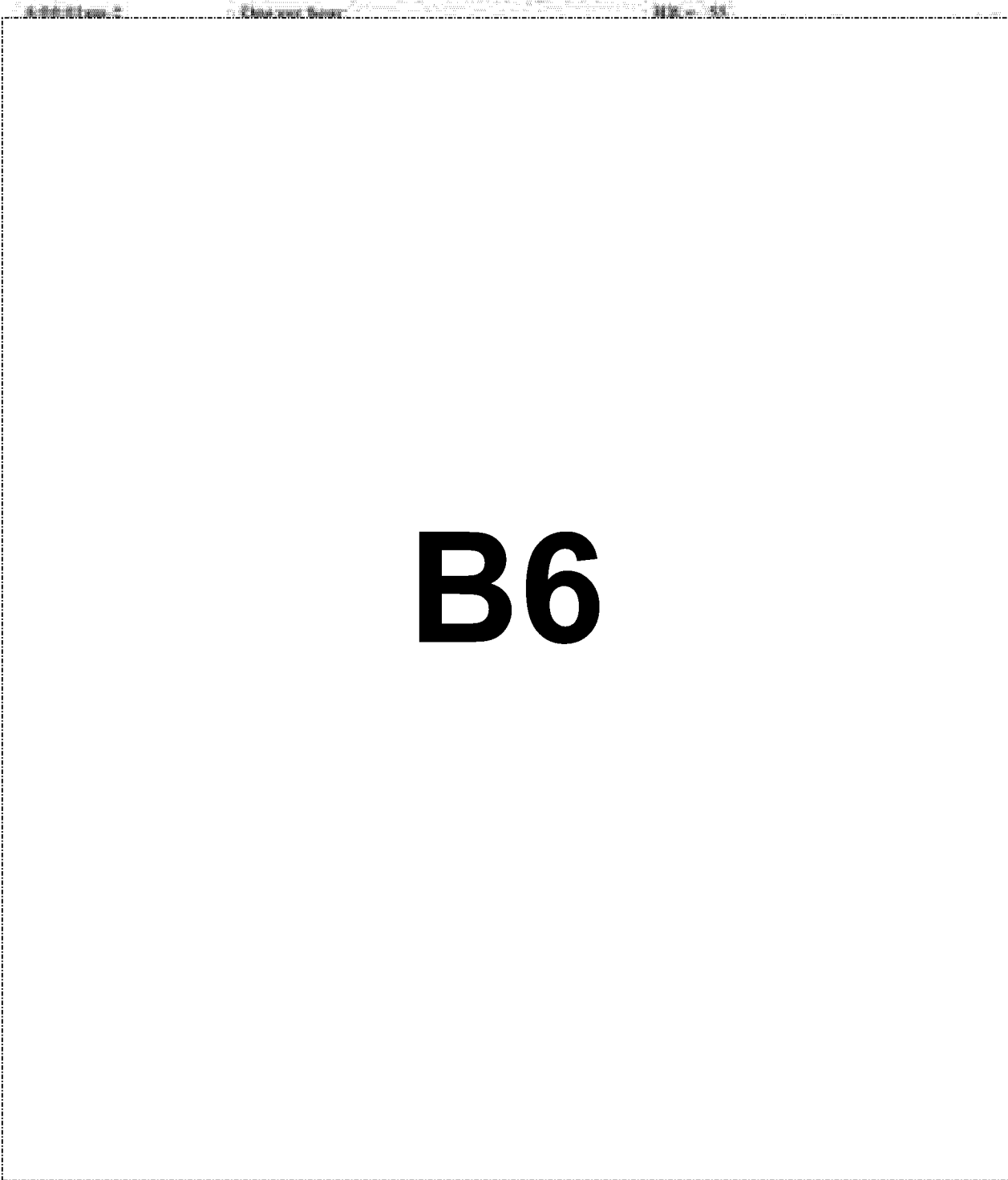
Client: **B6**
Patient: **B6**

Holter results from cardio

Patient: **B6** ID: **B6** Date Recorded: **B6** Page: **12**

FULL-SIZED STRIPS

From 6:50 am to 7:00 am (ALL)



Client:
Patient: **B6**

Holter results from cardio

Patient: **B6** ID: **B6** Date Recorded: **B6** Page: **12**

FULL-SIZED STRIPS

From 0.50 sec to ECG 25 sec (ALL)

ECG Case: 2

STAC:

HR = 44

HR2 = 128

B6

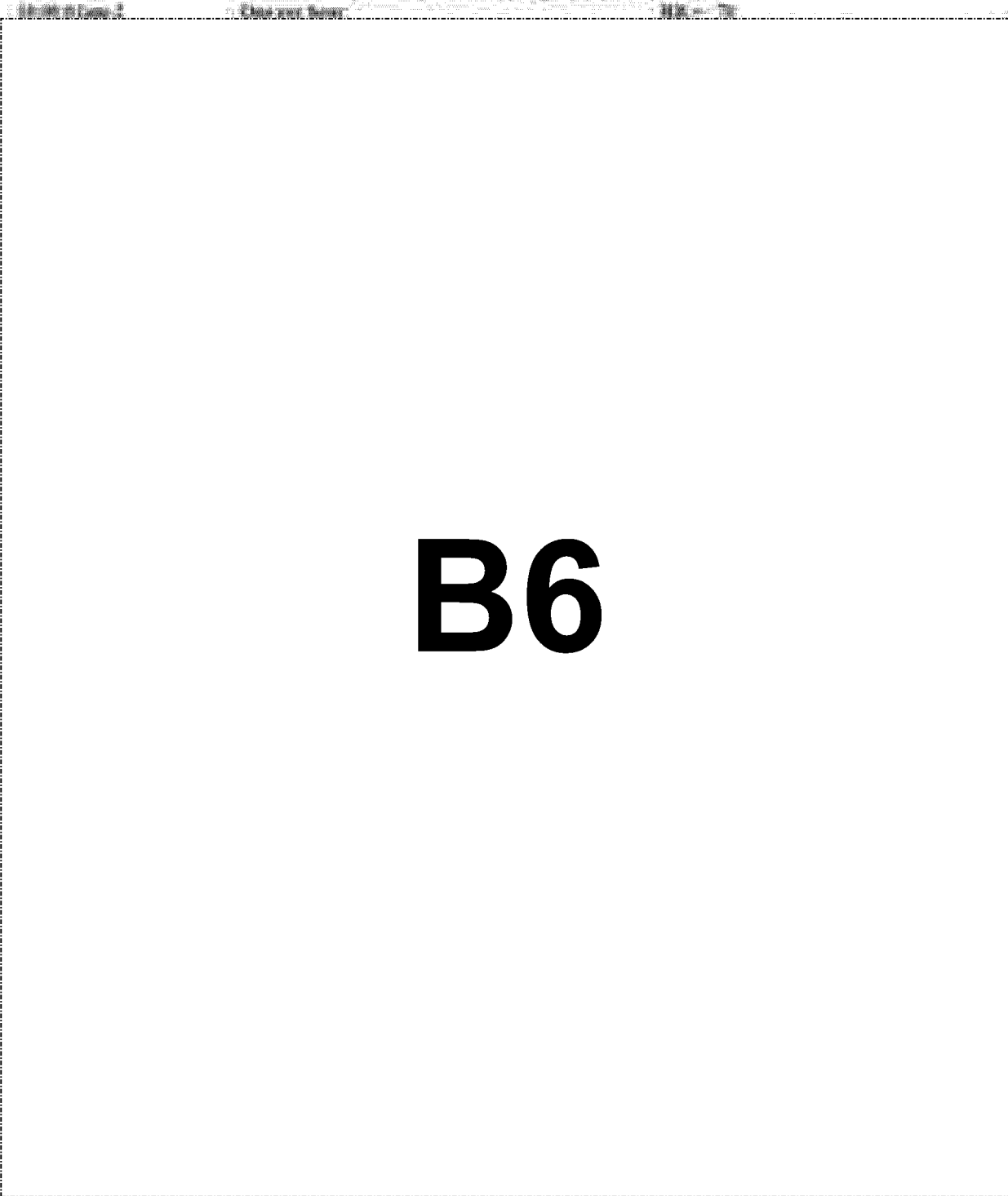
Client: **B6**
Patient: **B6**

Holter results from cardio

Patient: **B6** ID: **B6** Date Recorded: **B6** Page: **12**

FULL-SIZED STRIPS

From 6:50 am to 7:00 am (ALL)



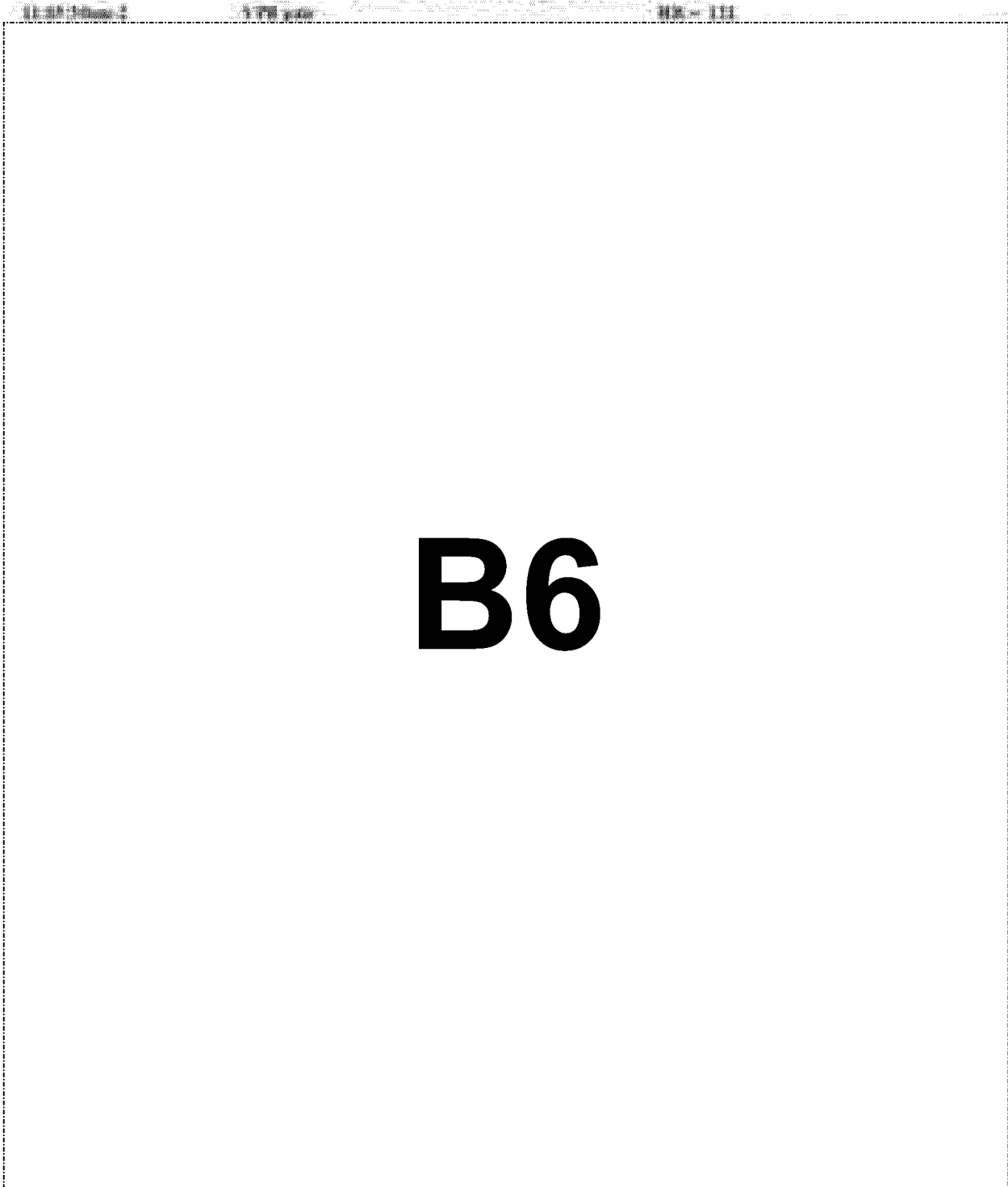
Client: **B6**
Patient: **B6**

Holter results from cardio

Patient: **B6** ID: **B6** Date Recorded: **B6** Page: 12

FULL-SIZED STRIPS

From 6:50 cardiac ECG 25 sec (ALL)



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

Holter results from cardio

Patient: **B6** ID: **B6** Date Recorded: **B6** Page: **18**

FULL-SIZED STRIPS

Cont. 6-50 sec/strip ECG 25 mm/sec (ALL)

11/18/2008 2

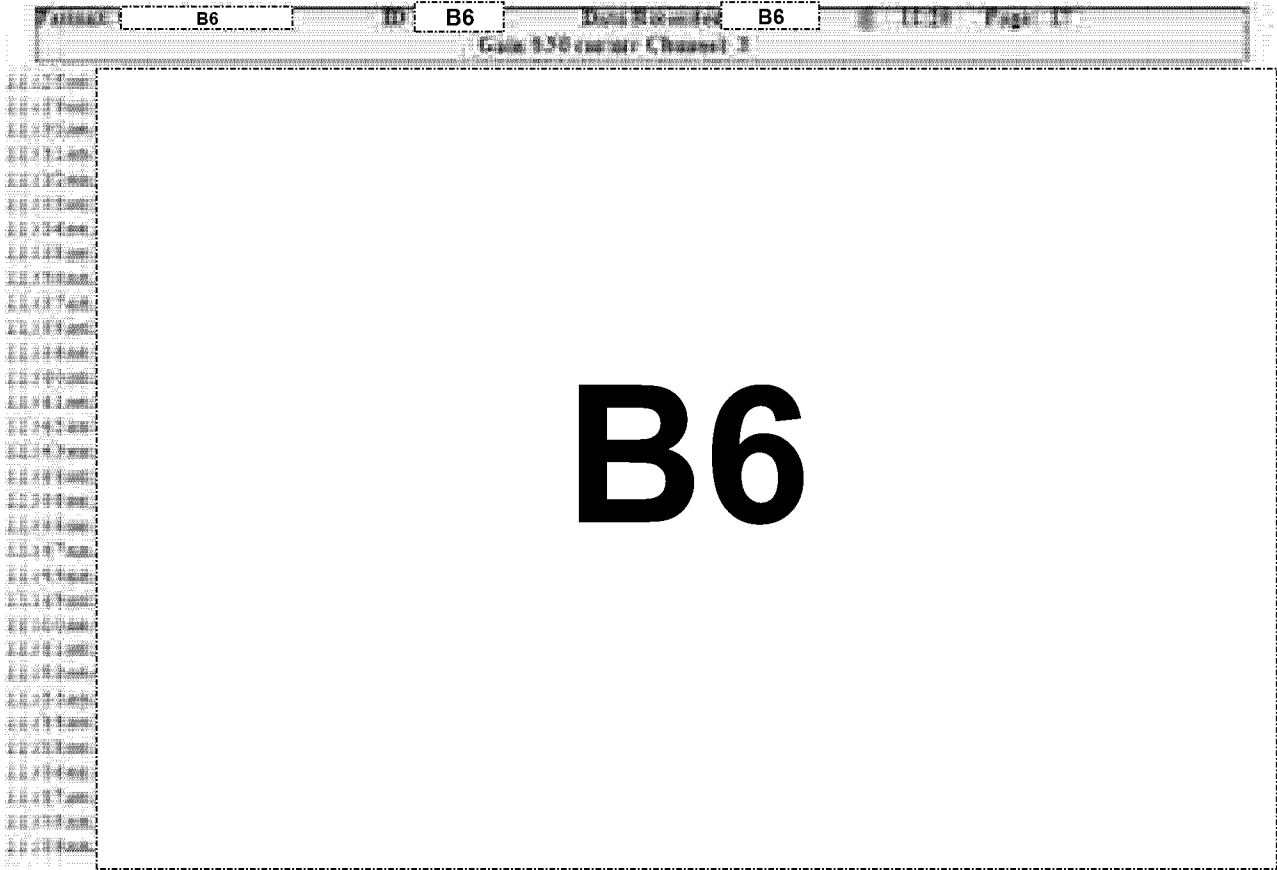
Max. Heart rate

HR = 187

B6

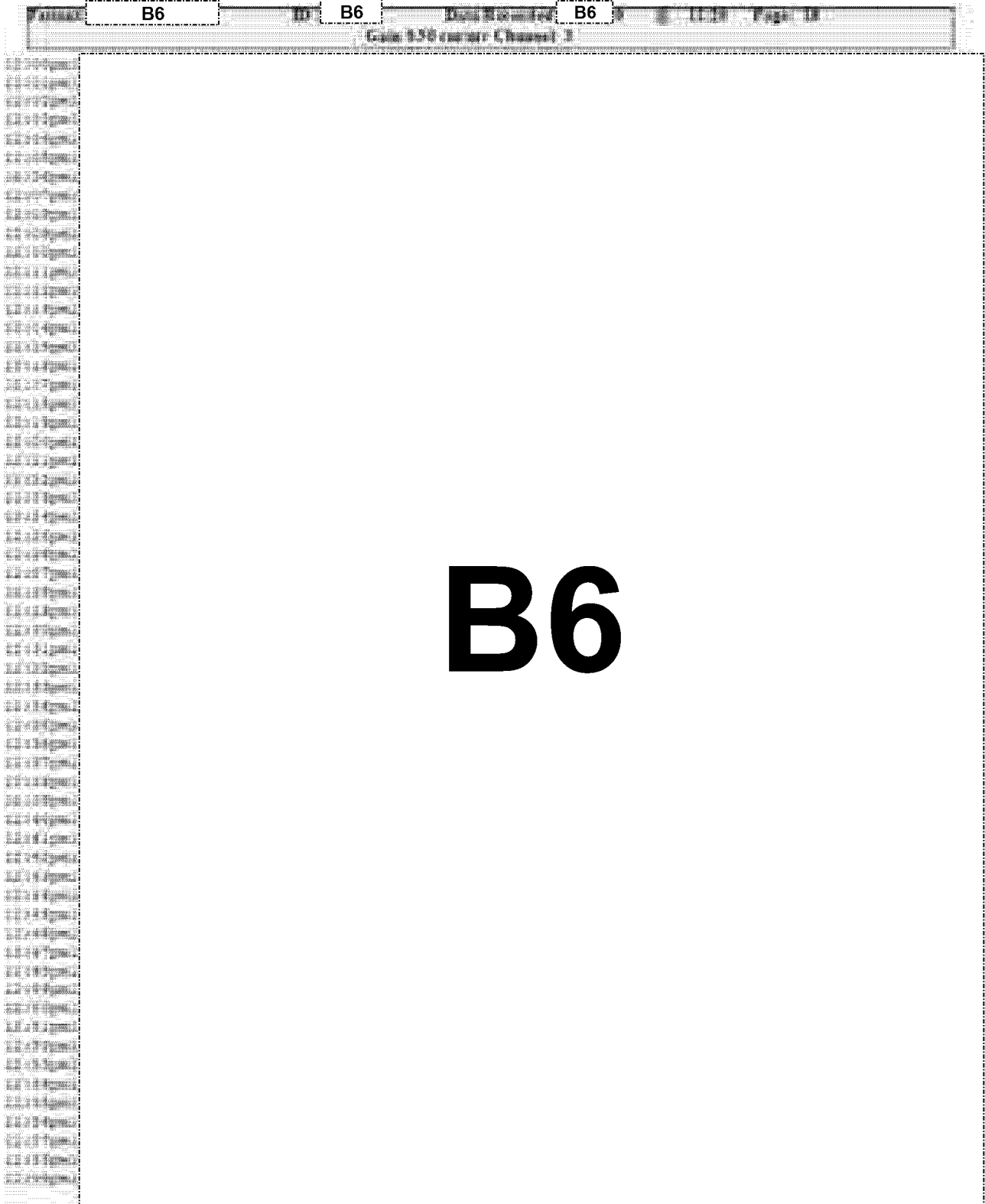
Client: **B6**
Patient: **B6**

Holter results from cardio



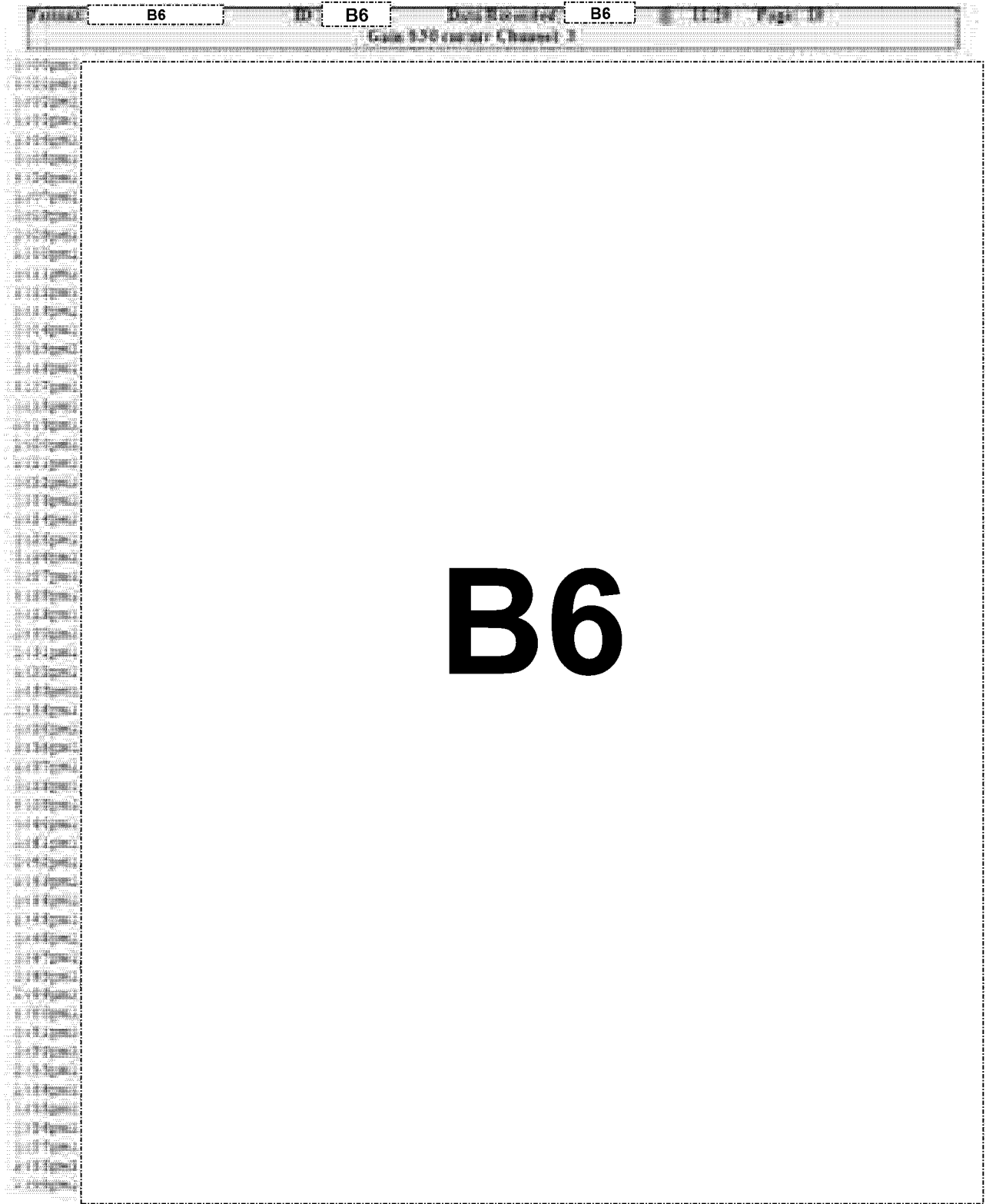
Client: **B6**
Patient: **B6**

Holter results from cardio



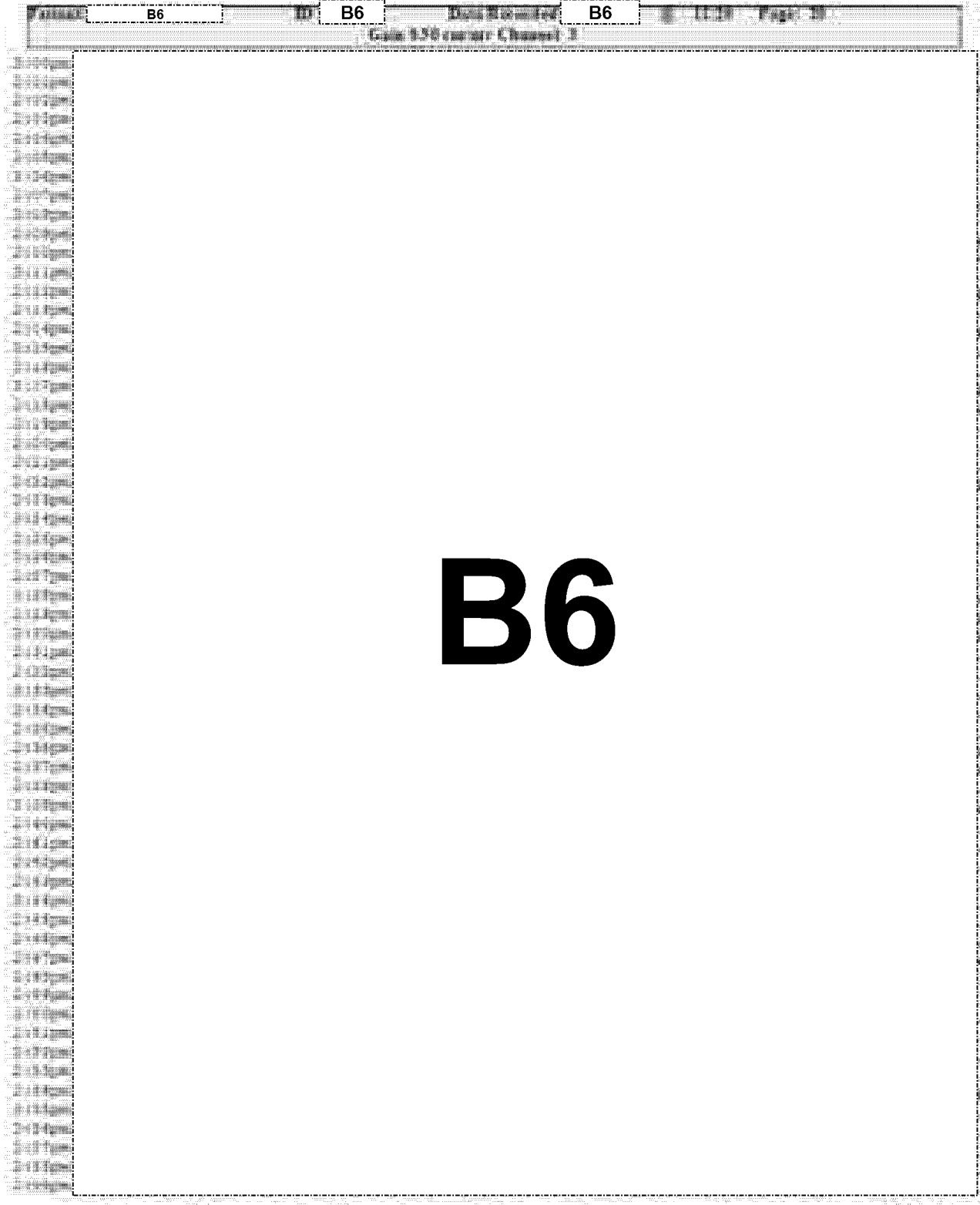
Client: **B6**
Patient: **B6**

Holter results from cardio



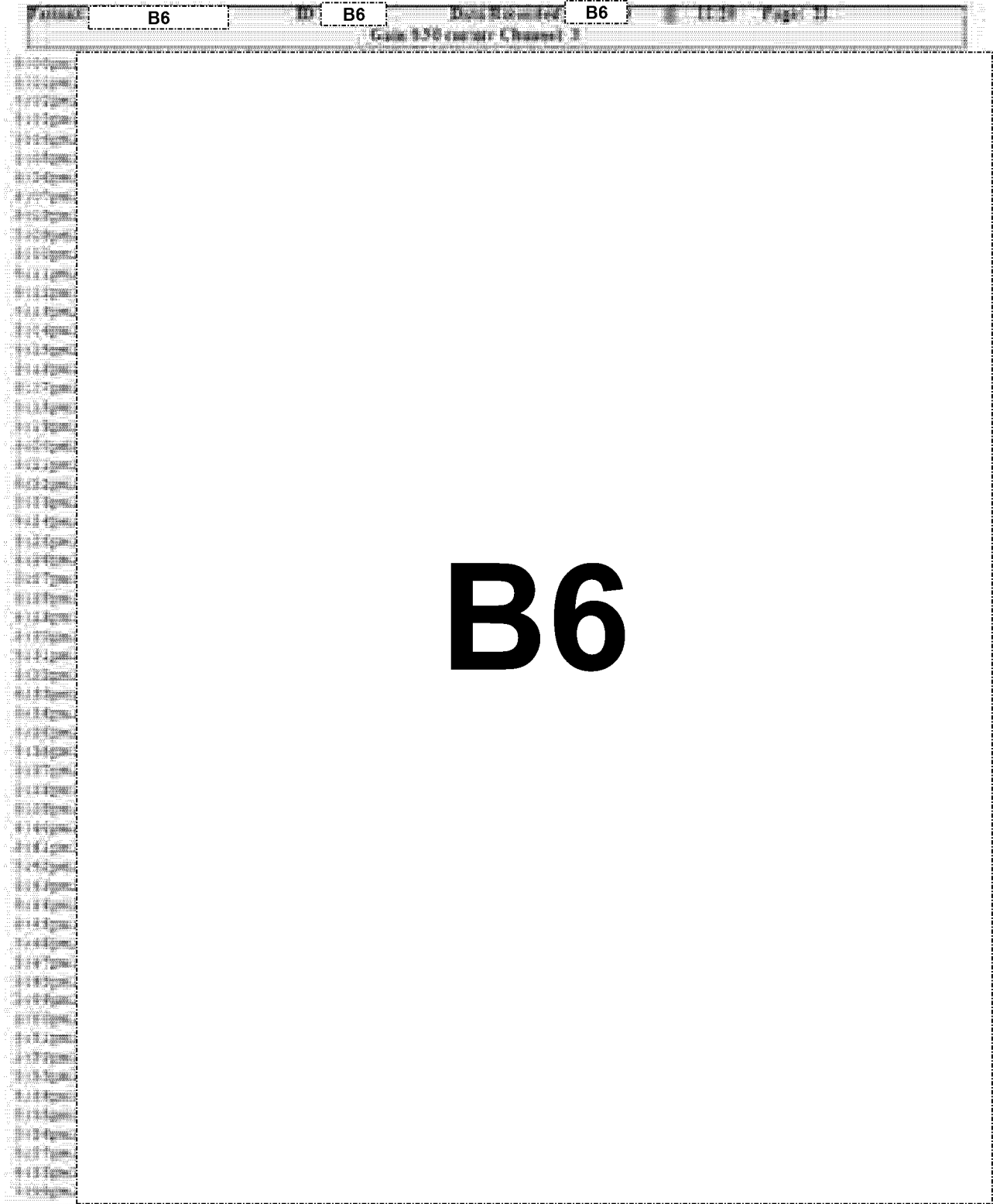
Client: **B6**
Patient: **B6**

Holter results from cardio



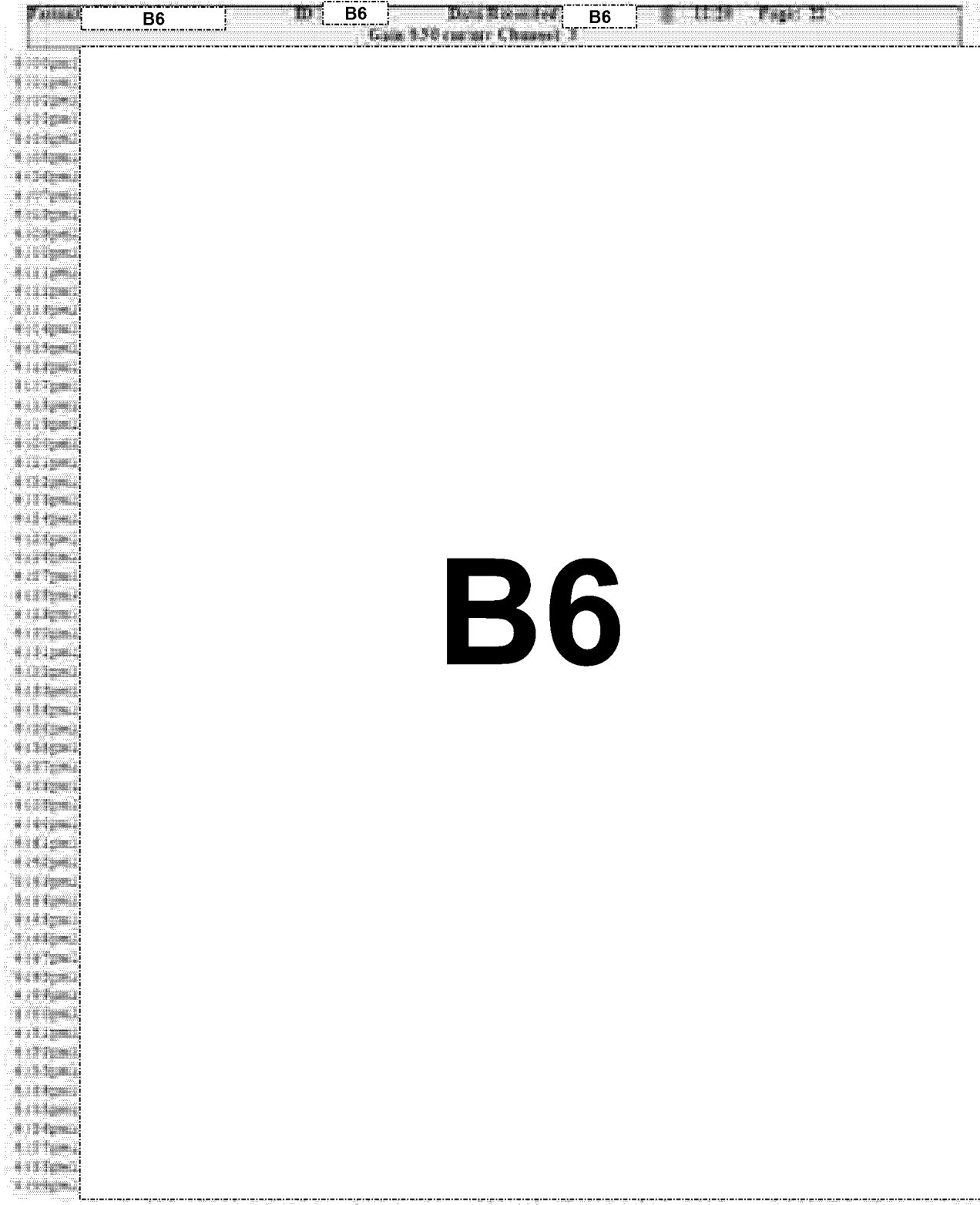
Client: **B6**
Patient: **B6**

Holter results from cardio



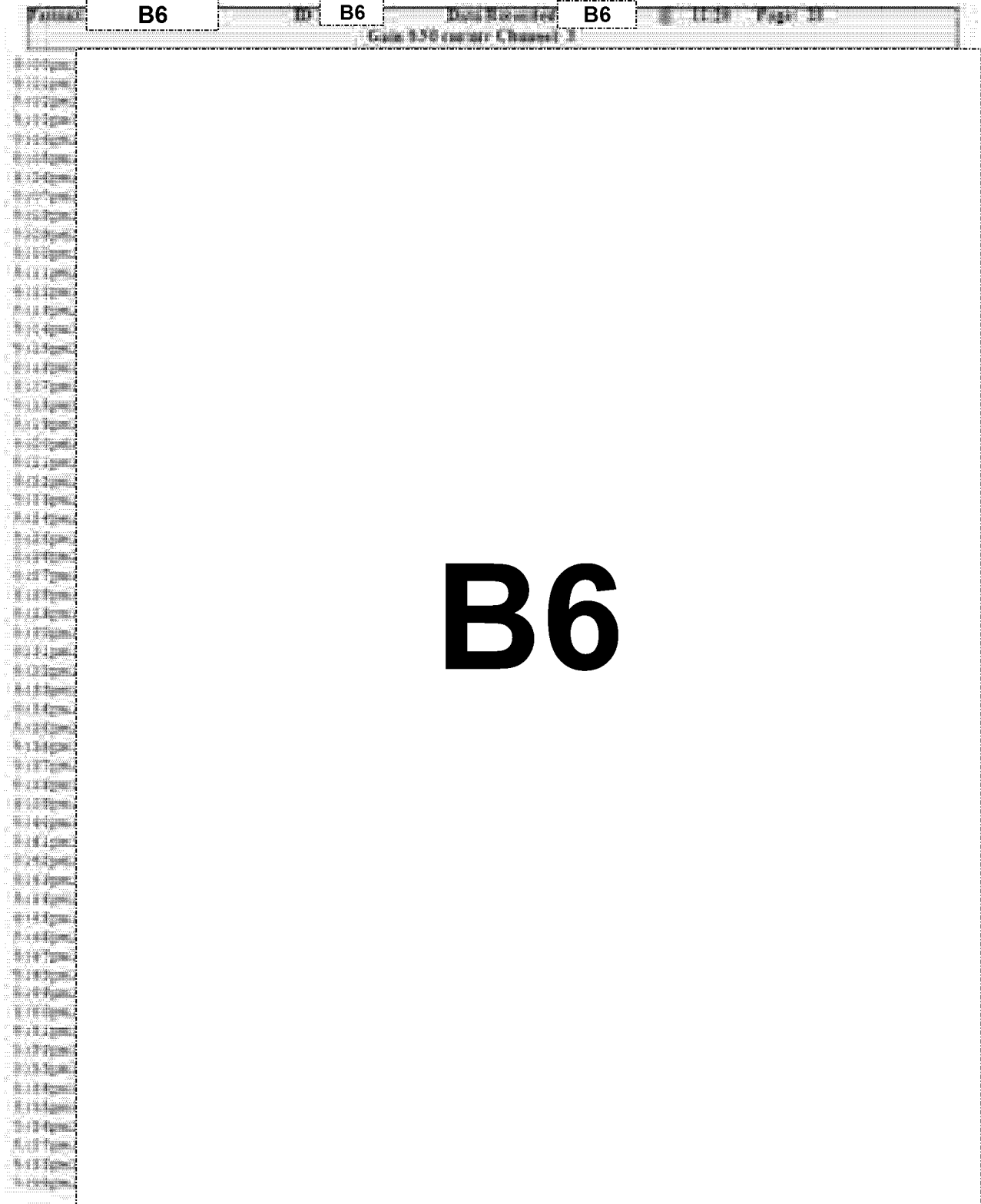
Client: **B6**
Patient: **B6**

Holter results from cardio



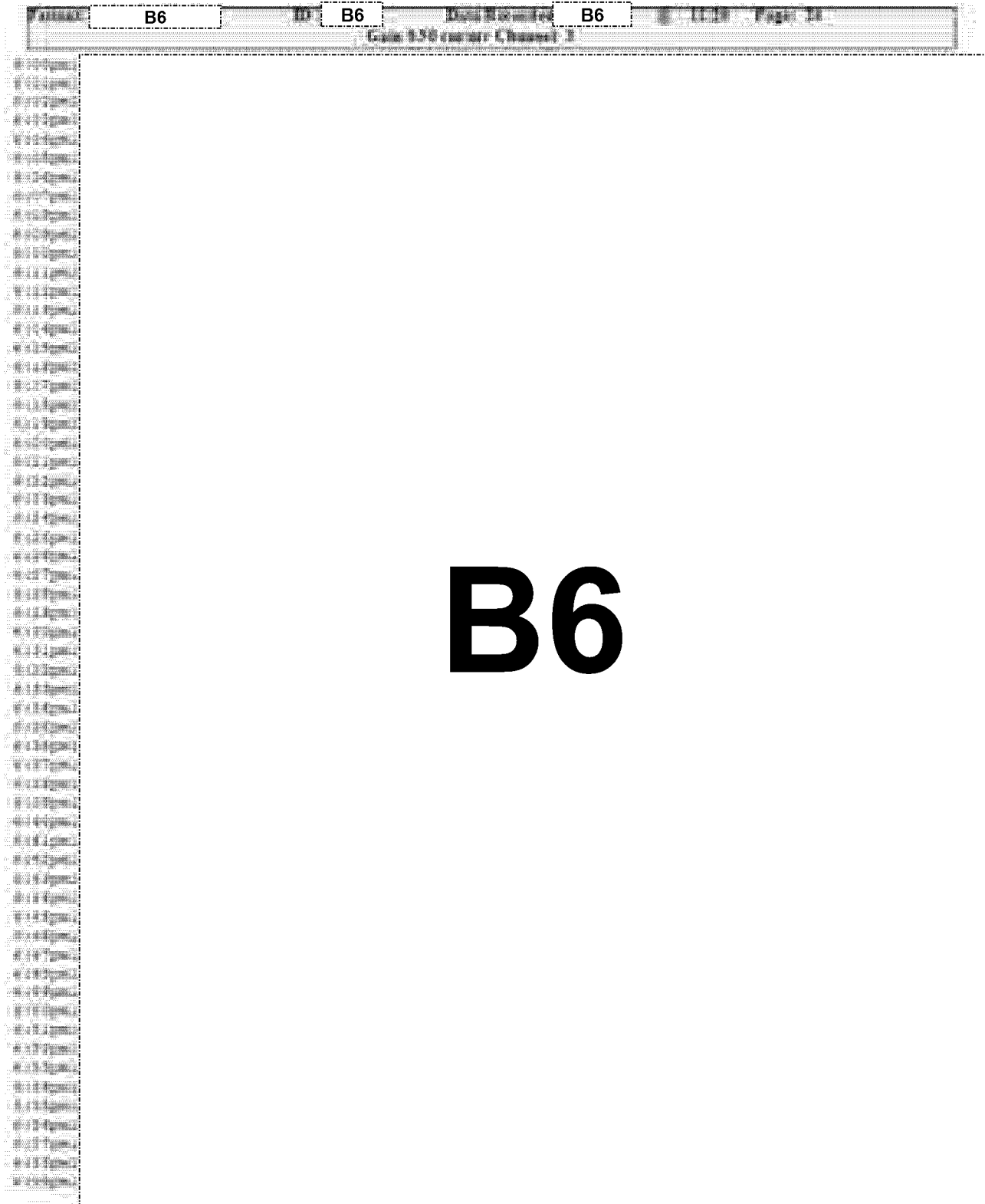
Client: **B6**
Patient: **B6**

Holter results from cardio



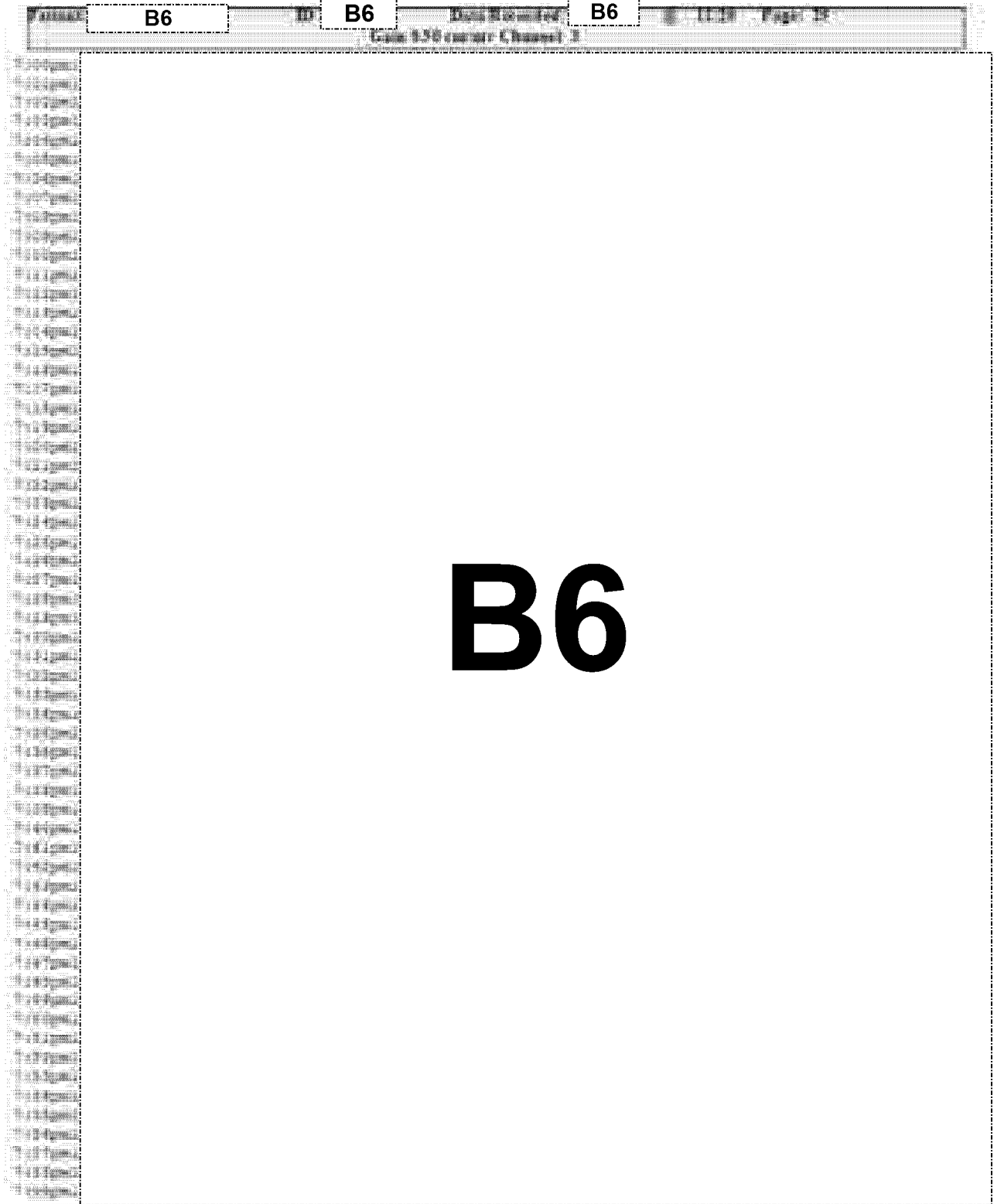
Client: **B6**
Patient: **B6**

Holter results from cardio



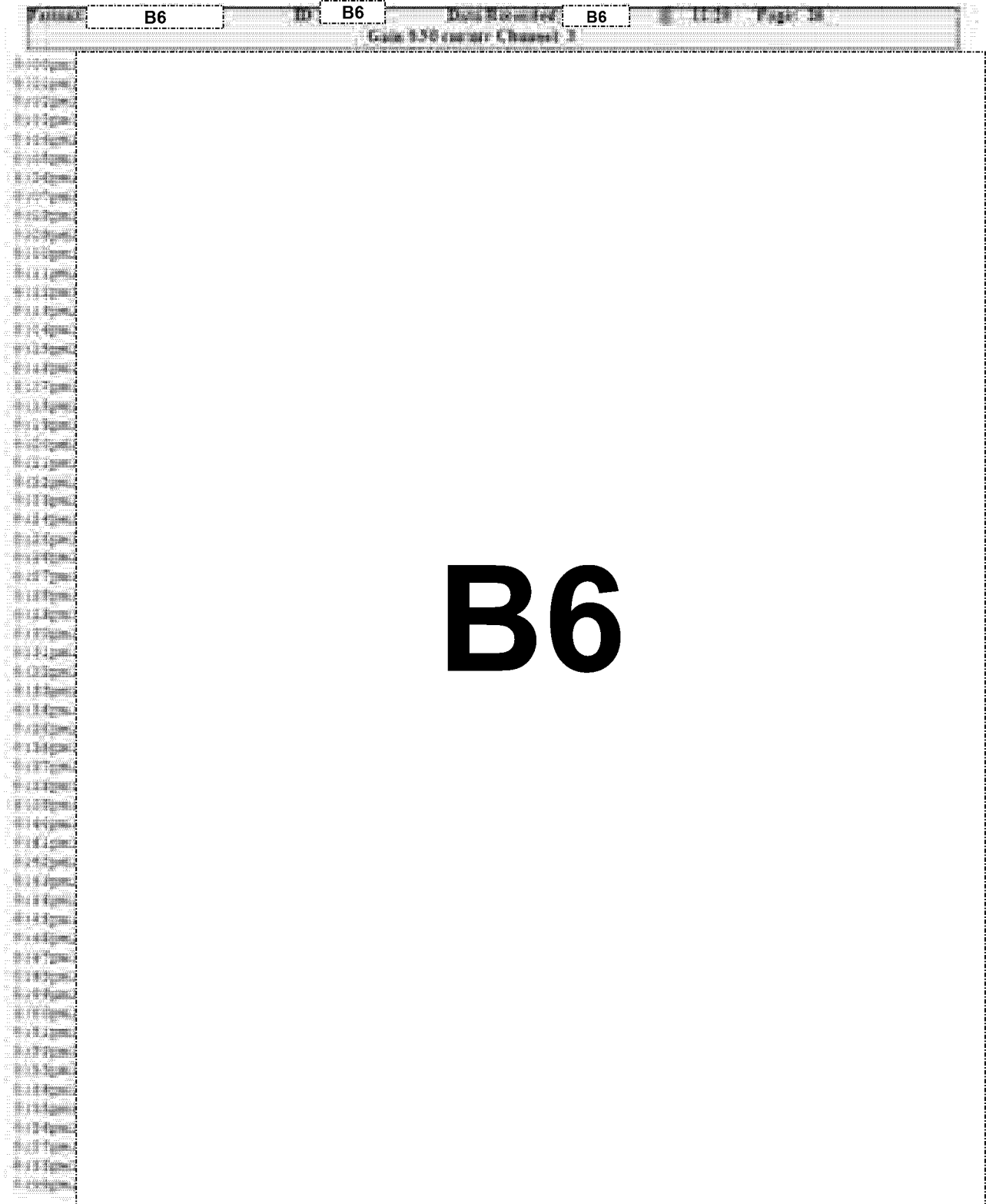
Client: **B6**
Patient: **B6**

Holter results from cardio



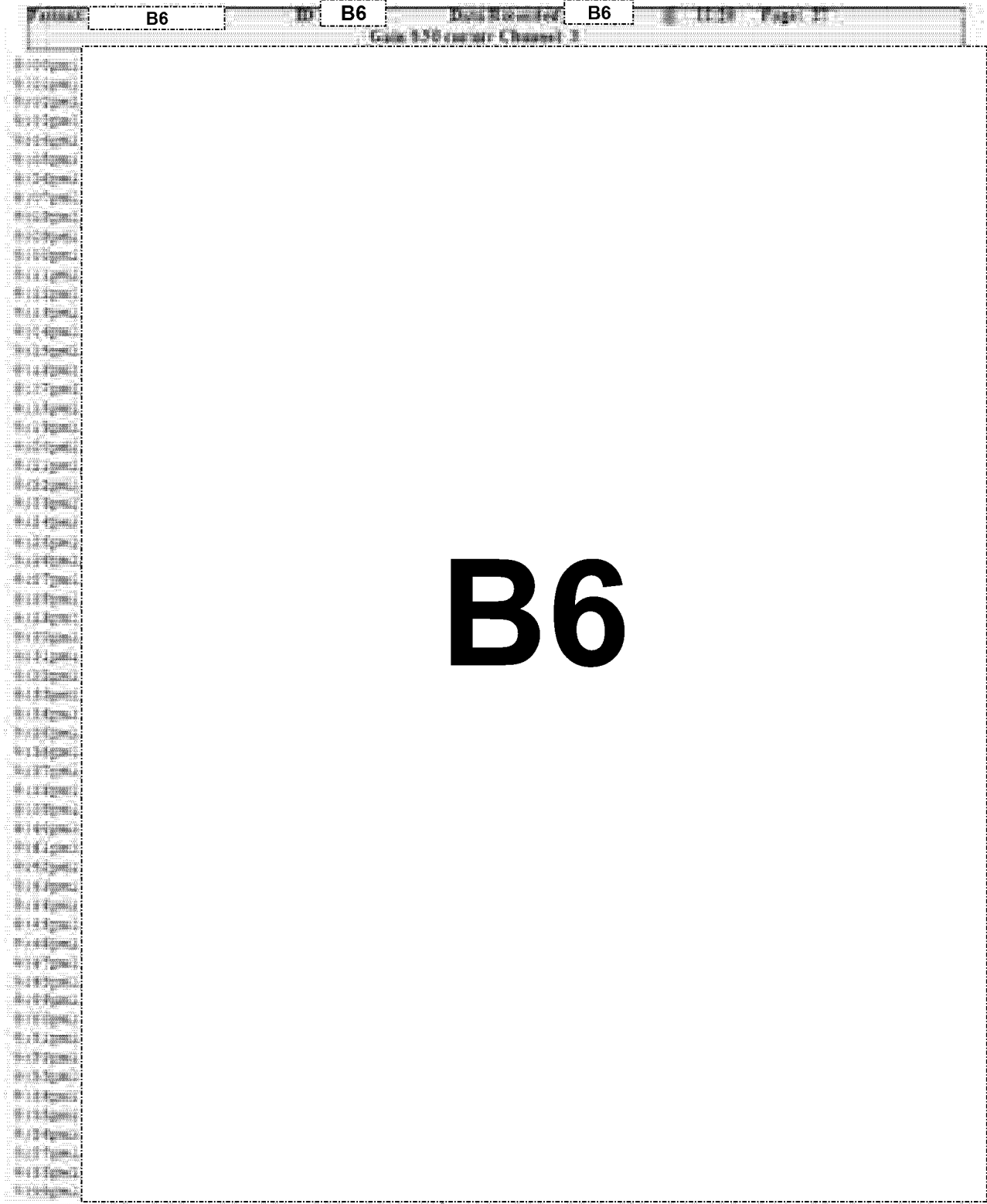
Client: **B6**
Patient: **B6**

Holter results from cardio



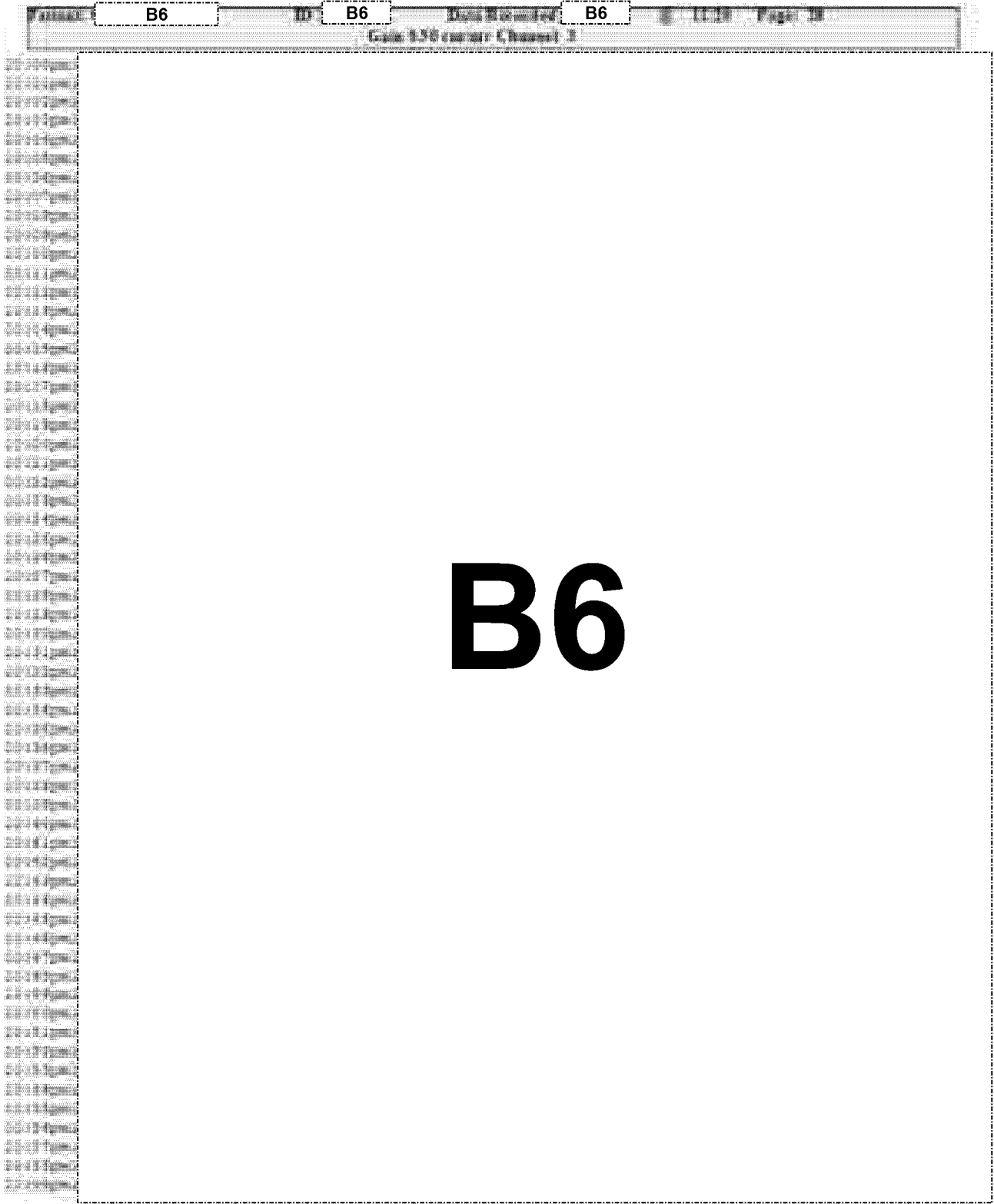
Client: **B6**
Patient: **B6**

Holter results from cardio



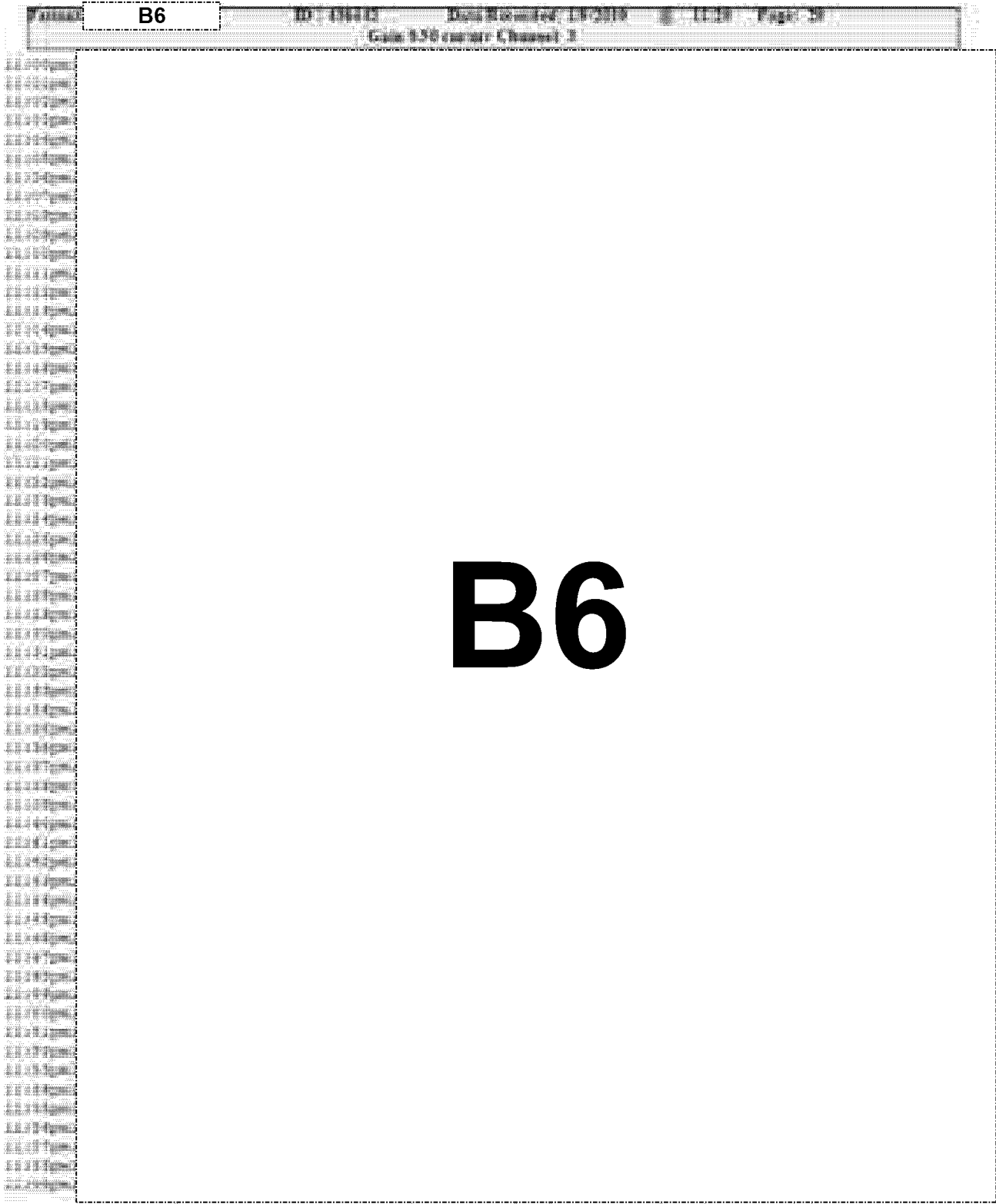
Client: **B6**
Patient: **B6**

Holter results from cardio



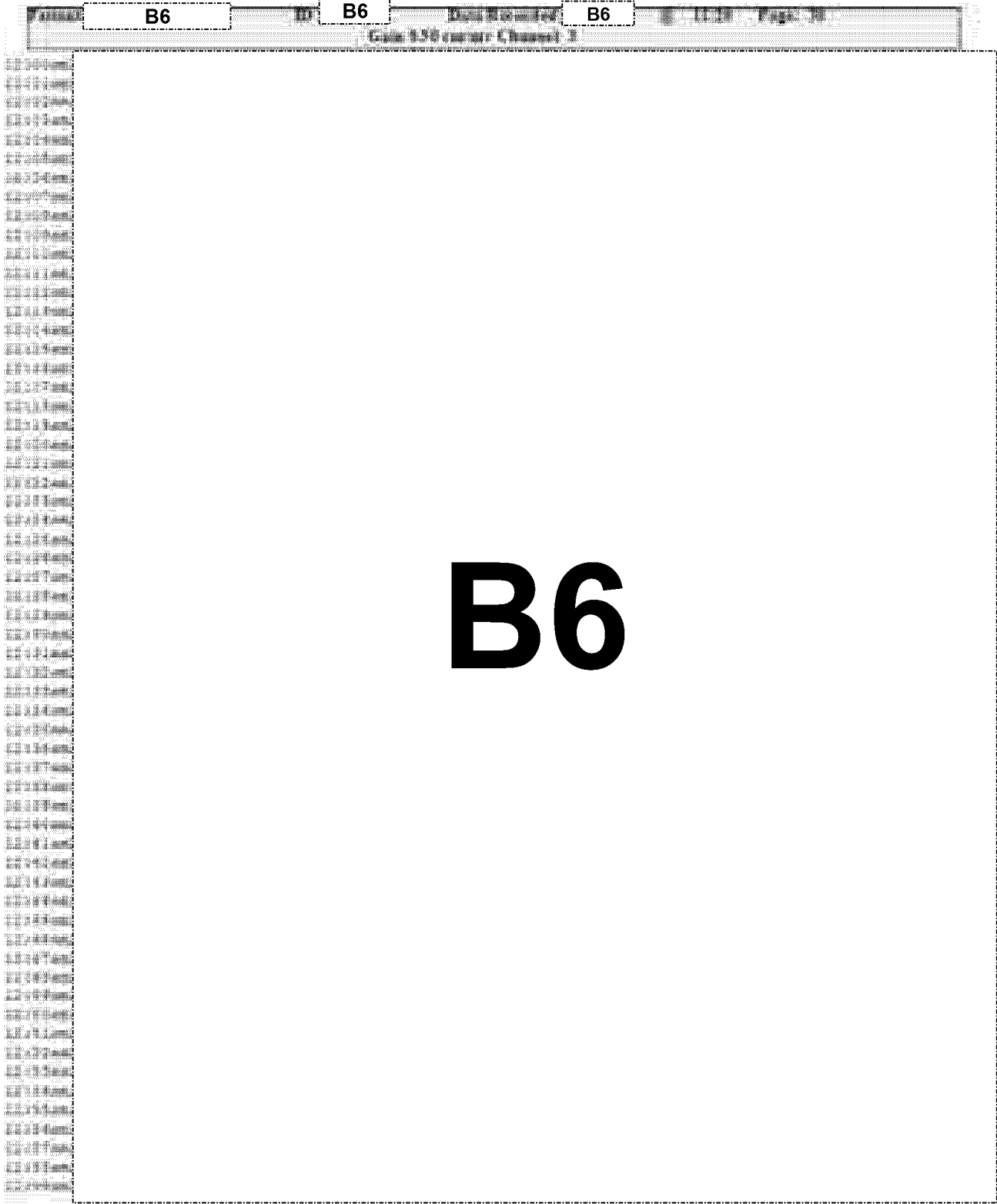
Client: **B6**
Patient:

Holter results from cardio



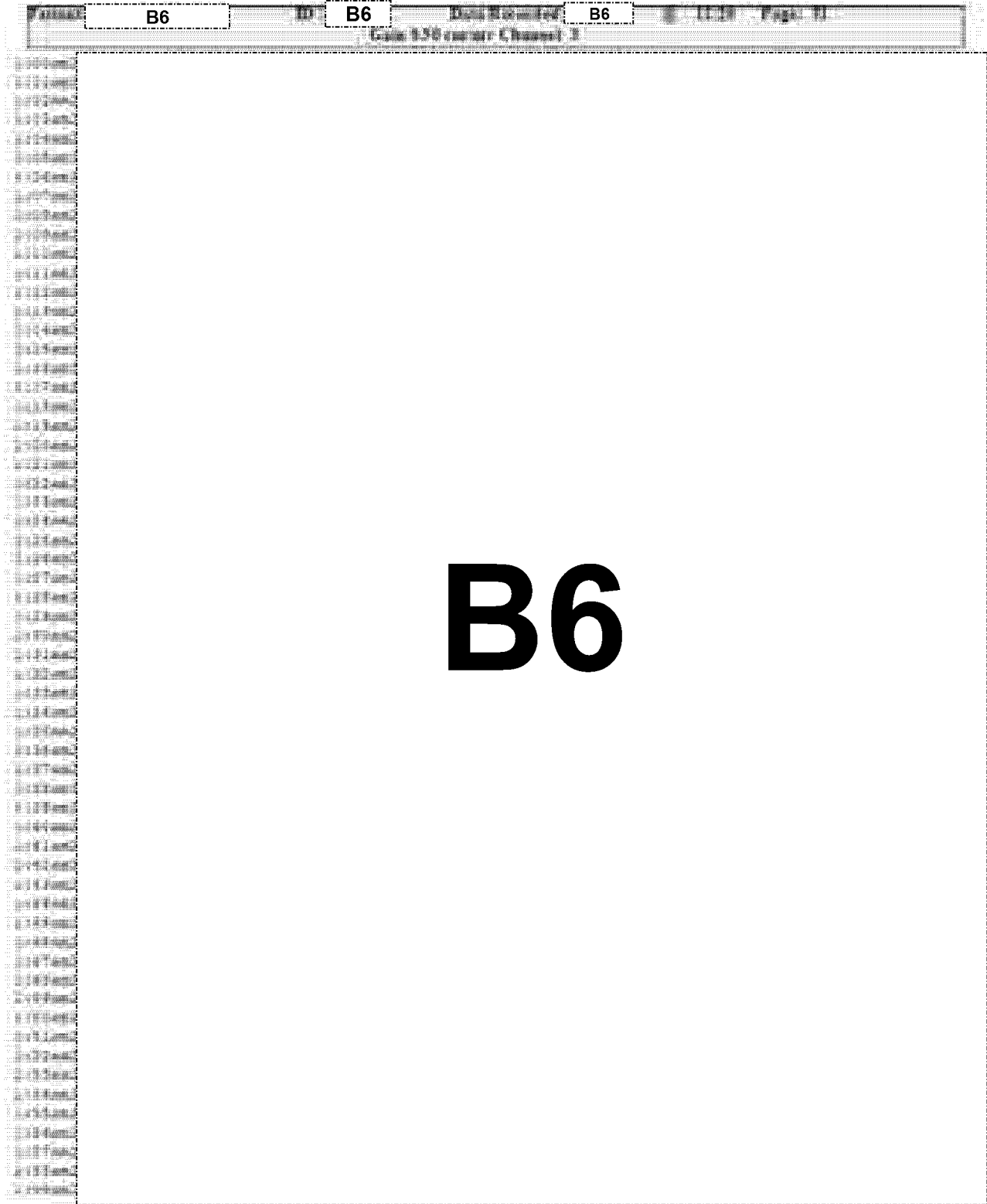
Client: **B6**
Patient: **B6**

Holter results from cardio



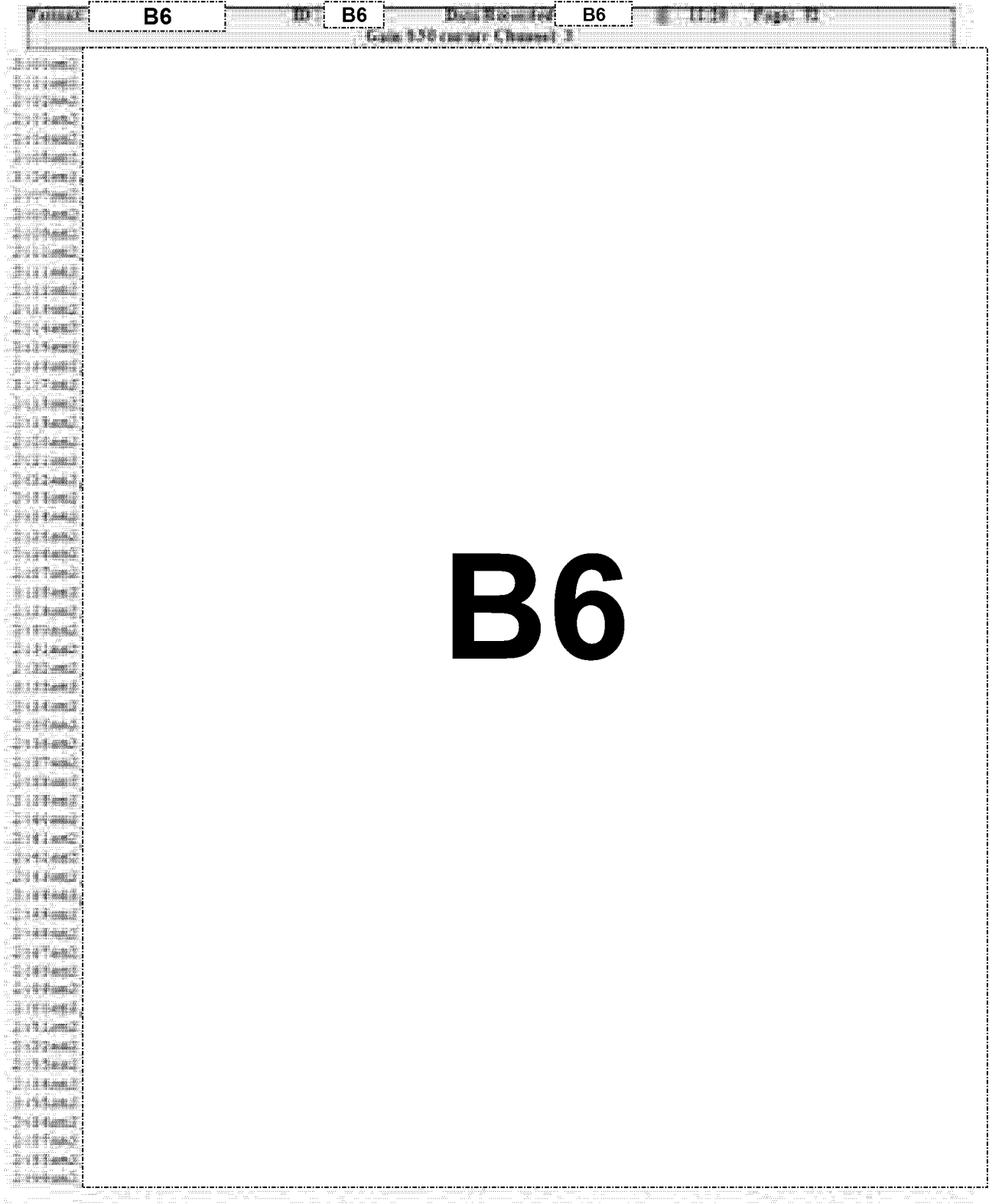
Client: **B6**
Patient: **B6**

Holter results from cardio



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

Holter results from cardio



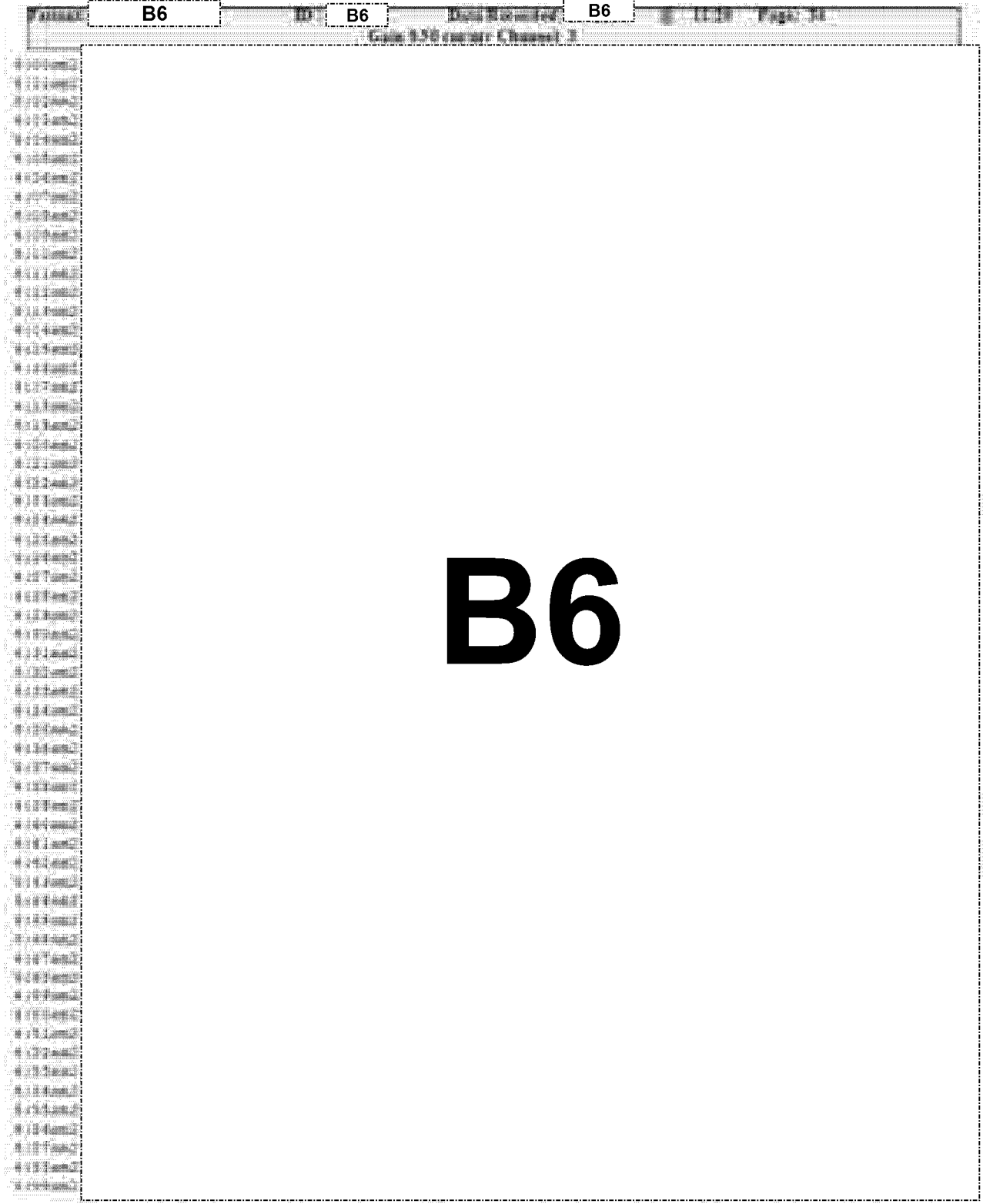
Client: **B6**
Patient: **B6**

Holter results from cardio

Time	B6	ID	B6	Data	B6	Page 11
B6						

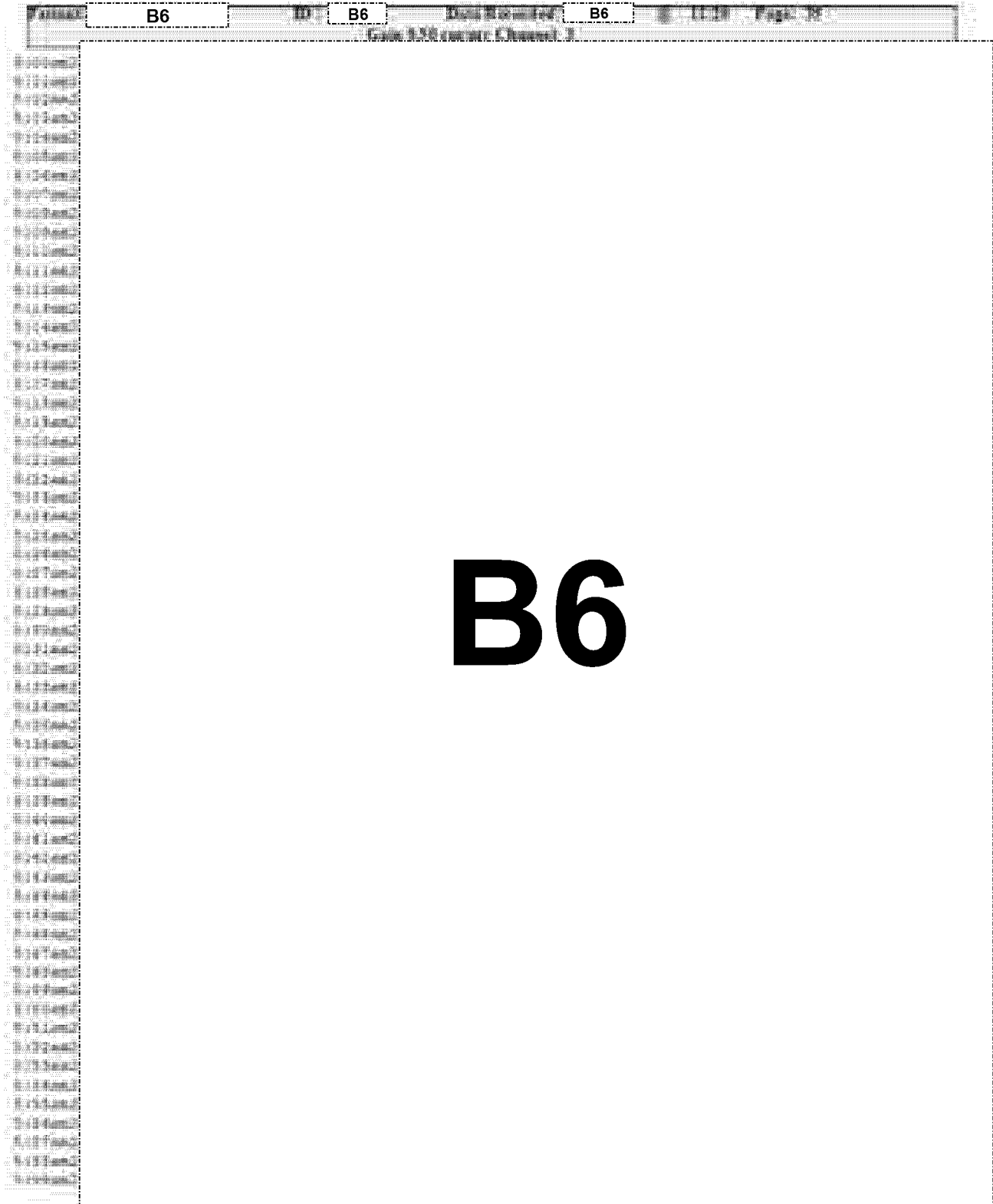
Client: **B6**
Patient:

Holter results from cardio



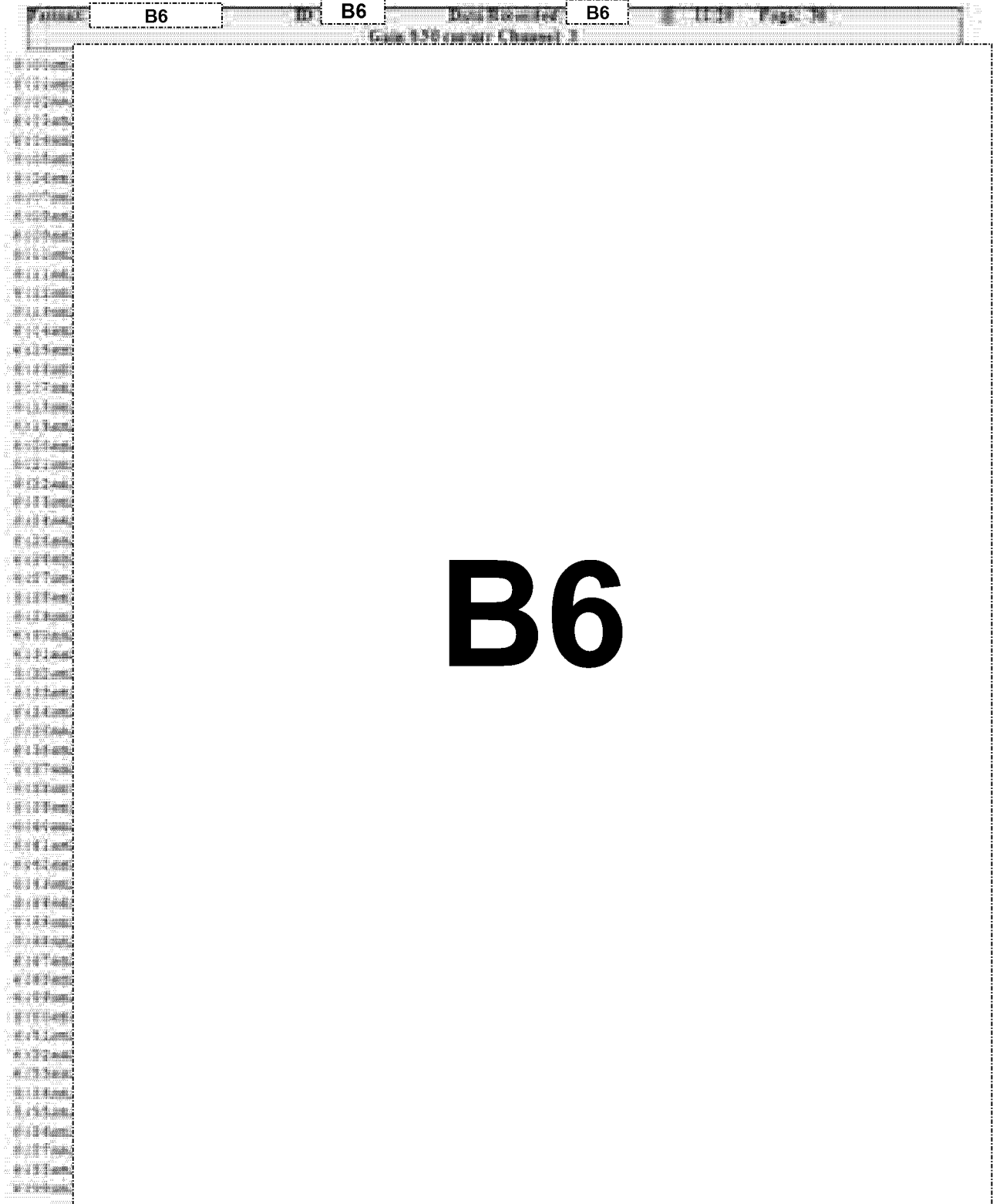
Client: **B6**
Patient: **B6**

Holter results from cardio



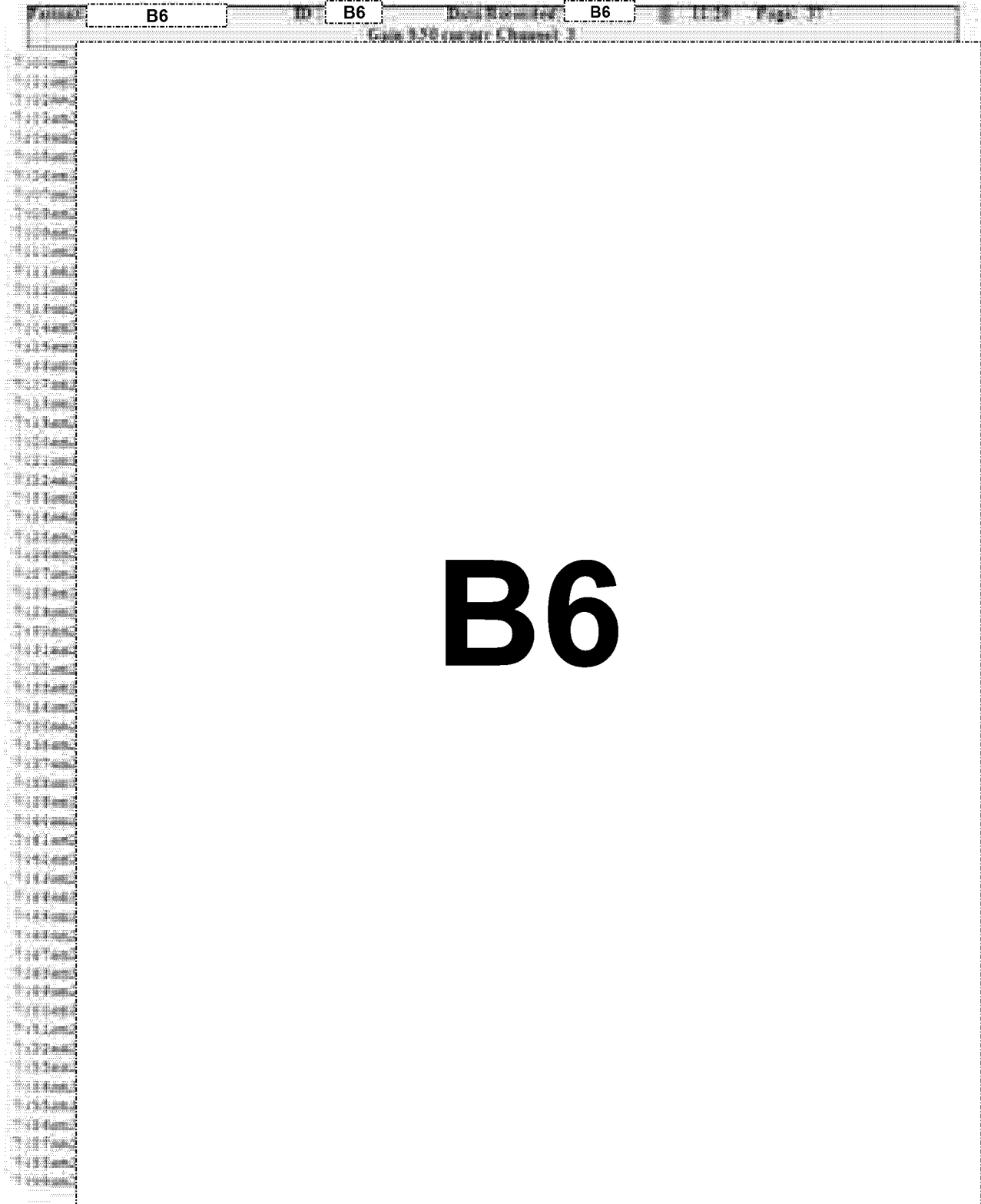
Client: **B6**
Patient: **B6**

Holter results from cardio



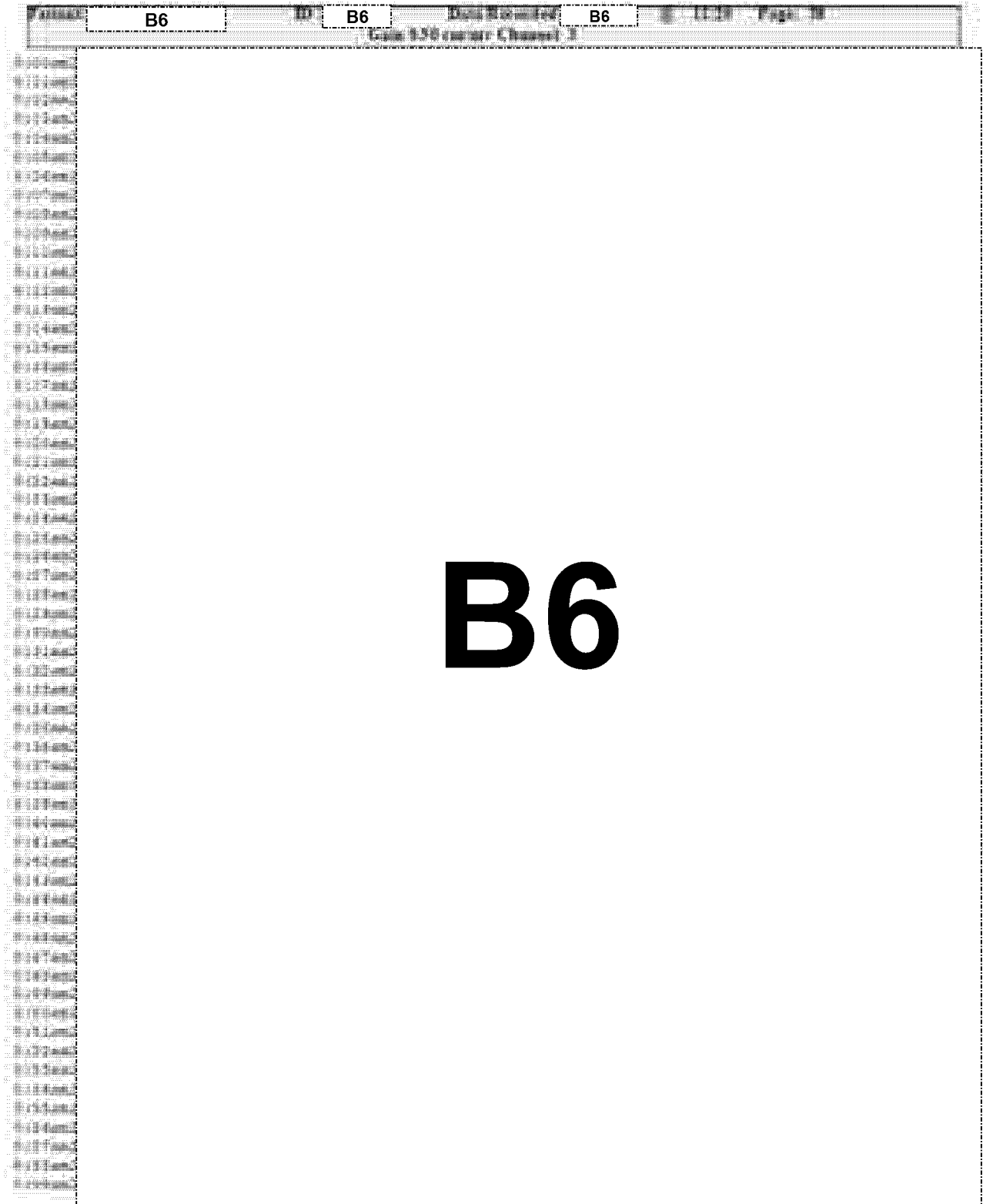
Client: **B6**
Patient:

Holter results from cardio



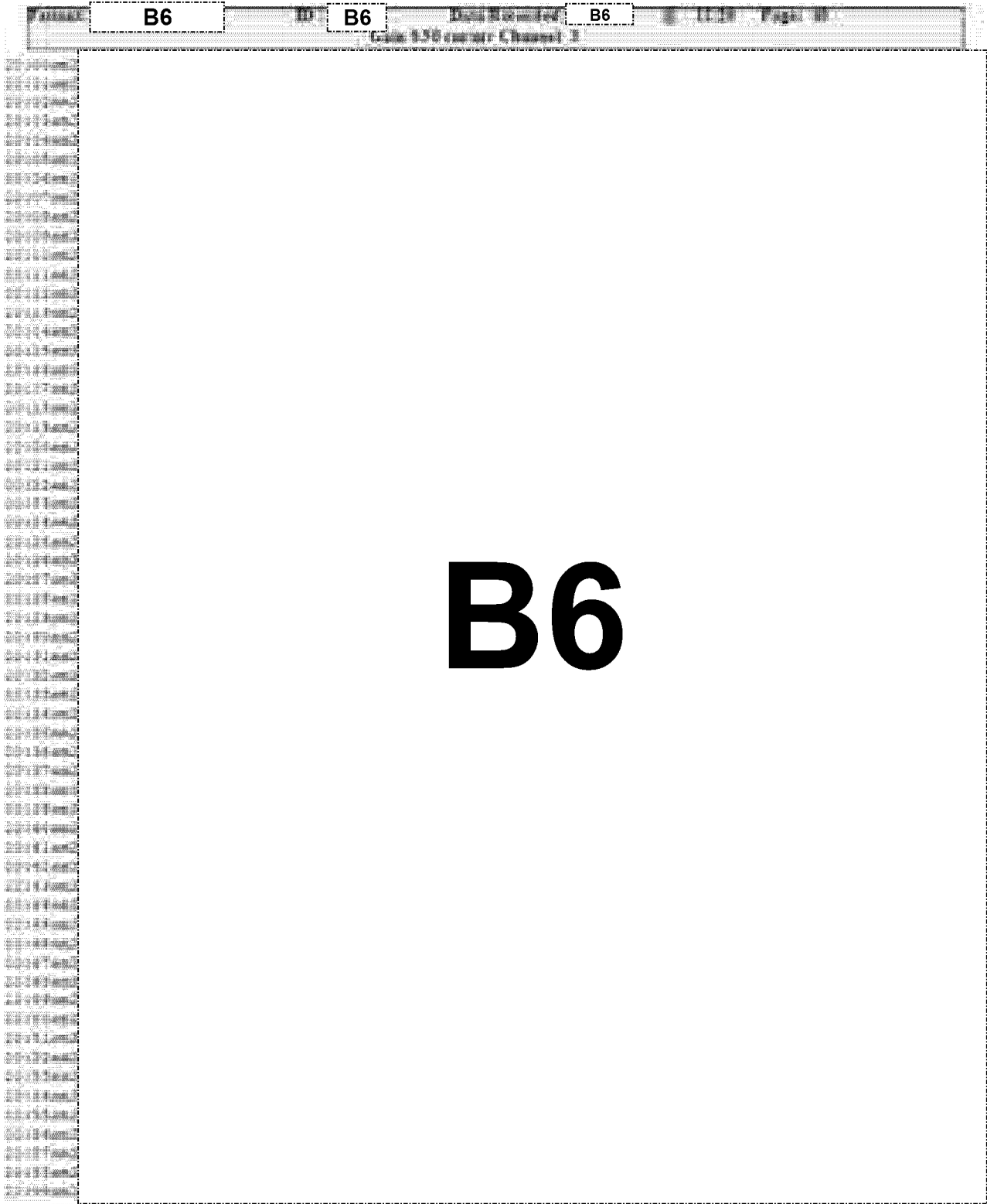
Client: **B6**
Patient:

Holter results from cardio



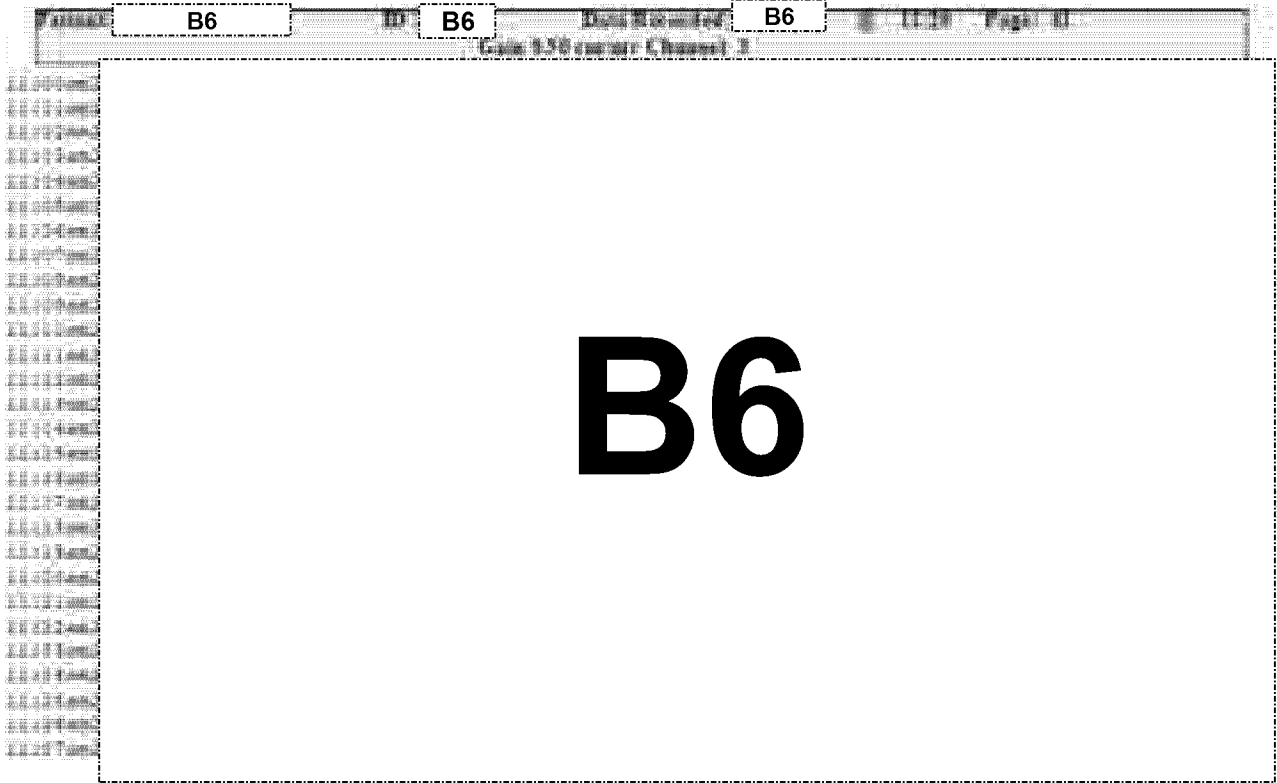
Client: **B6**
Patient: **B6**

Holter results from cardio



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

Holter results from cardio



Client:
Patient:

B6

Vitals Results

B6	9:03:05 AM	Weight (kg)	21.0000
-----------	------------	-------------	---------

Client:
Patient:

B6

ECG from Cardio

B6

B6

11:00:00 AM
Full Screen
Print Page
Close

B6

Client: **B6**
Patient:

ECG from Cardio

B6

B6

11:00:00 AM
ECG Summary
This message is not intended for you.
12/20/2019

B6

Client: **B6**
Patient:

ECG from Cardio

B6

B6 ELECTROCARDIOGRAM
DATE: 11/11/2019
TIME: 10:00 AM
PATIENT: [REDACTED]

B6

Client: **B6**
Patient:

ECG from Cardio

B6

B6

11 OCT 2018 10:00 AM Page 1 of 1
Full Screen
Print Screen
Close

B6

Client: **B6**
Patient:

ECG from Cardio

B6

B6 11:48:12 AM
Pulse Oximetry
Pulse oximetry reading of 98%
12/18/2019

B6

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

Holter Monitor Diary No Date

INSTRUKSI PENGGUNAAN
Ampul Holter Pasien

INSTRUKSI PENGGUNAAN
TUGAS PASIEN

AMPLITUDE

WAKTU

ANALISA

CONTOH DIARI

Waktu	Gejala	Gejala
08:00		
09:00		
10:00		
11:00		
12:00		
13:00		
14:00		
15:00		
16:00		
17:00		
18:00		
19:00		
20:00		
21:00		
22:00		
23:00		
00:00		
01:00		
02:00		
03:00		
04:00		
05:00		
06:00		

B6

Client: **B6**
Patient:

Patient History

B6	10:57 AM	Appointment
	06:04 PM	Appointment
	09:00 AM	UserForm
	09:00 AM	Treatment
	09:03 AM	Vitals
	10:41 AM	UserForm
	10:47 AM	Deleted Reason
	10:55 AM	UserForm
	11:17 AM	Purchase
	11:18 AM	Purchase
	11:19 AM	Purchase
	11:23 AM	Prescription
	11:34 AM	Purchase
	11:43 AM	Appointment
	12:24 PM	Purchase
	12:24 PM	Purchase
	10:58 AM	Prescription
	11:08 AM	Purchase
	12:08 PM	Purchase
	12:26 PM	Purchase
12:27 PM	Treatment	
05:11 PM	Appointment	

B6

Discharge Instructions

Patient

Name: B6

Species: Canine

Sex: Female (Spayed) Breed:

Birthdate: B6

Owner

Name: B6

Address: B6

Patient ID: B6

Attending Cardiacologist

B6

Cardiology Resident

B6

Cardiology Technician

B6

Date: B6

Diagnosis:

Suspected Arrhythmogenic right ventricular cardiomyopathy (ARVC)

Reduced contractile function either related to ARVC or a nutritional cardiomyopathy contribution

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.

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 (408-867-8623) 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 dieticians work with you and your pet to investigate a specific disease process or a promising new diet or treatment. Please see our website: vet.buff.roku.com/clinical-trials

Case: B6

Disease: B6

Exchange transactions:

Radiology Request & Report

Patient

Name: B6

Species: Canine

Sex: Female (Spayed) Breed:

Birthdate: B6

Owner

Name: B6

Address: B6

B6

Patient ID: B6

Date of request: B6

Attending Clinician: B6 DVM (Cardiology)

Student:

Date of exam: B6

Patient Location: Ward/Cage: cardio

Weight (kg) 21.00

- Inpatient
- Outpatient Time:
12PM
- Waiting
- Emergency

Sedation

- IMG
- OIAG
- 1/2 dose OIAG
- DexDormitor/Butorphanol
- Anesthesia to sedate/anesthetize

Examination Desired: DV and right lateral chest. Coming to have Holter monitor removed by cardio at 12PM.

Presenting Complaint and Clinical Questions you wish to answer:
ARVC/DCM

Pertinent History:

Collapse episodes (?) last summer. Otherwise doing well.

Findings:

THORAX, TWO VIEWS:

Cardiovascular structures: the left ventricle is mildly enlarged. No left atrial enlargement is detected on the lateral view. On the DV view, the left atrial appendage appears prominent, which might be overestimated by mild obliquity. The pulmonary vasculature is normal.

Pulmonary parenchyma: normal

Renal space: normal

Medastinum: normal

Musculoskeletal structures: multilevel vertebral spondylosis deformans is noted.

Included abdomen: the stomach contains a large amount of ingesta.

Conclusions:

Mild left ventricular enlargement with possible left atrial enlargement. Given breed and clinical signs, arrhythmogenic right ventricular cardiomyopathy is suspected. Given left-sided cardiomegaly, this may have led to dilated cardiomyopathy. Cardiac consultation is recommended.

Radiologist:

Primary: B6 DVM

Reviewing:

Date:

Reported: B6

Finalist:

B6

Patient ID: B6

B6

Gender:

1 year Old Female (spayed) Boxer
Red

**Cardiology Appointment Report
ENROLLED IN DCM STUDY**

Date: B6

Attending Cardiologist:

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

B6

Cardiology Assistant:

B6

Cardiology Technician:

B6

Presenting Complaint: Just moved back from B6 in October. Last June jumped on the couch got stiff fell over, unresponsive. Recovers right away. Happened again a few weeks later, fell off the bed. Has not had an episode since. Both episodes happened in the morning after waking. No twitching. No increased RR. Not on heart worm preventative, no recent test but had a negative one about a year ago. No V/D, eating and drinking normally.

Week before moving got echo (~October 2018), heart size was fine, saw arrhythmia.

Concurrent Diseases: Bowel colitis, separation anx., lost 2 other siblings: with in the last year (one had advanced DCM) and moved back October. Mother dog passed of cancer.

General Medical History: Back legs have been stiffer recently. Had bilateral rhinoplasty. Ulcer in left eye 3-4 years ago

Diet and Supplements: Zignature, different flavors, kangaroo and other unusual proteins. No chickens, beef, fish, 3 cups a day. Unova multi vit and fish oil, and coxagain.

Cardiovascular History:

Prior CHF diagnosis? N

Prior heart murmur? Y

Prior AF? N

Prior arrhythmia? Y

Monitoring respiratory rate and effort at home? N

Cough? Just started when moved back out here, random hacking

Shortness of breath or difficulty breathing? N

Syncope or collapse? Y

Sudden onset lameness? N

Exercise intolerance? N

Current Medications Pertinent to CV System:

Medication: None

Cardiac Physical Examination:

B6

Muscle conditions:

Normal

Mild muscle loss

Moderate cachexia

Marked cachexia

Cardiovascular Physical Exam:

Murmur Grade:

None

I/V

II/V

III/V

IV/V

V/V

VI/V

Murmur location/description: systolic left basilar

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

Pulse paradoxus

Other:

Arrhythmic:

None

Sinus arrhythmia

Premature beats

Bradycardia

Tachycardia

Gallop:

Yes

No

Intermittent

Pronounced

Other: Split S2 varying with respiration

Pulmonary assessments:

Expansive/mild crackle

Mild dyspnea

Marked dyspnea

Normal RV sounds

Pulmonary crackles

Wheezes

Upper airway stridor

Abdominal exam:

- Normal
- Hepatomegaly
- Abdominal distension
- Mild ascites
- Marked ascites

Problems:

Collapse- r/o DCM, arrhythmia, non-cardiac

Diagnostic plan:

- Echocardiogram
- Chemistry profile
- ECG
- Renal profile
- Blood pressure
- Diagnostics profile
- Thoracic radiographs
- NT-proBNP
- Troponin I
- Other tests: Holter

B6

Assessment and recommendations:

Echocardiogram reveals DCM like changes that could be related to ARVC or primary DCM or nutritional cardiomyopathy, and ECG reveals RV origin VPCs consistent with ARVC. There is enough cardiac dilation to warrant starting B6. Baseline thoracic radiographs were obtained to ruled out active CHF. 24 hour Holter monitor was performed to assess need to ventricular antiarrhythmic medication. Patient was enrolled in the DCM study, and CMC/chem/NTproBNP/troponin/taurine levels were submitted through the study. Recommend diet change and continuing fish oil supplementation unless they decide to feed a diet high in fish oil. Taurine supplementation was started until taurine results come back. Recheck in 3 and 6 months, or sooner if clinical signs occur such as increased RR/RE, cough, collapse, or exercise intolerance.

Final Diagnosis:

DCM-like changes (r/o ARVC with DCM phenotype v primary DCM v nutritional DCM)

RV origin VPCs - suspect ARVC

2 collapse episodes several months ago (r/o arrhythmia v DCM v vasovagal syncope v other)

Heart Failure Classification Score:

ISACH Classification:

- Ia
- Ib
- II
- IIIa
- IIIb

ACVIM Classification:

- A
- B1
- B2
- C
- D

M-Mode

IVSd	cm
LVIdd	cm
LVPWd	cm
IVSs	cm
LVIdS	cm
LVPWs	cm
EDV(Teich)	ml
ESV(Teich)	ml
EF(Teich)	%
%FS	%
SV(Teich)	ml
Ao Diam	cm
LA Diam	cm
LA/Ao	
Max LA	cm
TAPSE	cm
EPSS	cm

M-Mode Normalized

IVSdN	(0.290 - 0.520)
LVIddN	(1.350 - 1.730) †
LVPWdN	(0.330 - 0.530)
IVSsN	(0.430 - 0.710)
LVIdSN	(0.790 - 1.140) †
LVPWSN	(0.530 - 0.790)
Ao Diam N	(0.680 - 0.890) †
LA Diam N	(0.640 - 0.900) †

2D

SA LA	cm
Ao Diam	cm
SA LA / Ao Diam	
IVSd	cm
LVIdd	cm
LVPWd	cm

B6

EDV(Teich)
IVSs
IVDs
IVPWs
ESV(Teich)
EF(Teich)
%FS
SV(Teich)
IVId LAX
IVAd LAX
IVEDV A-L LAX
IVEDV MOD LAX
IVIs LAX
IVAs LAX
IVESV A-L LAX
IVESV MOD LAX
HR
EF A-L LAX
IVEF MOD LAX
SV A-L LAX
SV MOD LAX
CO A-L LAX
CO MOD LAX

Doppler
MR Vmax
MR maxPG
MV E Vel
MV DecT
MV Dec Slope
MV A Vel
MV E/A Ratio
E'
E_a/E'
A'
AV Vmax
AV maxPG
PV Vmax
PV maxPG

B6

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BPM
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l/min
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mmHg

Cummings
Veterinary Medical Center
AT TUFTS UNIVERSITY

Frontier Hospital for Small Animals
55 Willard Street
North Grafton, MA 01526
Telephone (508) 829-5395
Fax (508) 829-7953
<http://vetmed.tufts.edu/>

B6

B6

Female (Spayed)

Canine Heart Red

B6

B6

Dear **B6**:

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

If you have any questions, or concerns, please contact us at 508-829-4981.

Thank you,

B6 DVM (Cardiology)

Cummings
Veterinary Medical Center
AT TUFTS UNIVERSITY

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

B6

B6

Female (Spayed)

Coarse Brown Red

B6

B6

Dear **B6**

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

If you have any questions, or concerns, please contact us at 508-829-4981.

Thank you,

B6 DVM (Cardiology)

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

B6 NT-proBNP **B6**

B6

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

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

Date: **B6**
Requisition #: 427813
Accession #: **B6**
Ordered by: **B6**

B6
TUFTS UNIVERSITY
200 WESTBORO RD
NORTH GRAFTON, Massachusetts 01536
508-839-5395
Account #88833

CARDIOPET proBNP-CANINE

Test	Result	Reference Range	Unit	Method	Flag
CARDIOPET proBNP-CANINE	B6	0-900 pmol/L	HIG		B6

Comments:

B6

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

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

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** @tufts.edu

GI Lab Assigned Clinic ID: 23523

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

Phone: 508 887 4696

Fax: **B6**

Animal Name:

Owner Name:

Species: Canine

Date Received: **B6**

Tufts Cummings School of Vet Med -
Cardiology/Nutrition Tracking Number:
427813

GI Lab Accession: **B6**

Test	Result	Reference Interval	Assay Date
Ultra-Sensitive Troponin I Fasting	B6 ng/mL	≤0.06	B6

B6

Comments:

GI Lab Contact Information

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

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

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

Plasma taurine **B6**

30670

B6
B6
2:14 PM
Lithium Heparin

Amino Acid Laboratory Sample Submission Form

Amino Acid Laboratory, 1089 Veterinary Medicine Drive, Davis, Ca 95616
Telephone: 530-752-5058, Fax: 530-752-4698
Email: ucd.aminoacid.lab@ucdavis.edu
www.vetmed.ucdavis.edu/labs/amino-acid-laboratory

Veterinarian Contact: **B6**

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

Address: 200 Westboro Road, North Grafton, MA 015369

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

Telephone: 508-887-4669 Fax: **B6**

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

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

Patient Name: **B6** Species: Canine

Breed: Irish Wolfhound Owner's Name: **B6**

Current Diet: Poulina Lamb and Rice dry * Sample from **B6** stored in -80 freezer

Sample type: Plasma Whole Blood Urine Food Other _____

Test: Taurine Complete Amino Acids Other: _____

Taurine Results (lab use only)

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

++ OD **B6**

	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.

Foster Hospital for Small Animals

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

All Medical Records

Client: [B6]
Address: [B6]

Patient: [B6]
Breed: Golden Retriever
DOB: [B6]

Species: Canine
Sex: Female

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

Referring Information

[B6]

Client: [B6]
Patient: [B6]

Initial Complaint:

Scanned Record

Initial Complaint:

New [B6] - DCM study

SOAP Text [B6] 11:10AM [B6]

Initial Complaint:

Drop Off Lab Sample

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:	Golden Retriever
Sex:	Female
Age:	B6 Years Old

Lab Results Report

Accession ID:			
Test	Results	Reference Range	Units



3/23

B6

Printed Monday, January 14, 2019

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

RDVM **B6** records

Clinical History for **B6**
Client **B6**
Breed Golden Retriever
Sex Female
Colour white
Age **B6**
Desexed Y
Alive Y

B6

13-Dec-2018 at 08:11 am
B6 DVM

Notes

Multiple emails with 3 nr. options for cardiology consults in area and pet food labels (feeding trials vs formulation to meet AAFCO guidelines; all stage diets vs maintenance; tartar supplementation is not going to "fix" a grain free diet...)

Notified that I have heard confirmation from Dr. Freeman at Tufts that **B6** qualifies for a new study there. I gave permission to send Tufts Nutrition office her contact info and they will reach out directly to her to set up a visit. Her other dogs may also qualify for study, based on **B6** results. Kenn **B6** and her other dogs on original diet until **B6** is evaluated there, and they direct her to transition to new diet.

I stated **B6** and several of her other dogs had normal echoes when they were approx 1-1/2 yo, so she wanted to screen before considering breeding. I to bring all records with her in case Tufts would like to see baseline echo measurements; also collect all labels of food she has fed in past year or so, including dry/canned/treats and list of any people foods she feeds them even just as treats or snacks.

B6

07-Dec-2018 at 02:49 am
B6 DVM

Notes

See labwork results: CBC wnl, Chem wnl, HWT neg, proBNP elevated at **B6**

Rec echo to r/o DCM

PCTC/rfbc results: **B6** can do him with IM specialist (not specific to cardiology) but would have to delay until next semester; can refer for outpatient echo **B6** or full-time cardiologist. I would like to go to Tufts if not too pricey - will enquire about consult/echo fee. Will also enquire about contacts for golden retriever study mentioned in Dr. Freeman's Javis article from 12/1 edition.

B6

04-Dec-2018 at 09:06 am
B6 DVM

Notes

B6

Examination Report Canine

Presenting For: recheck values from this summer

B6

History/Owners Concerns: Rechecking labwork as rec'd by **B6** this summer. Doing well. Only concern is that she eats things she shouldn't - chews on carpet, was eating soil with all the other dogs recently (near droppings?), coprophagic. Wears a basket muzzle to prevent ingestion. Last heat cycle Sept? (or not sure) Would like to breed in future. 7 dogs at home. No further travel by **B6** back planned.

Current Meds & Supplements: none

Client: **B6**
Patient:

RDVM **B6** records

Flea & Tick Prevention: k-9 advantix monthly year round
Heartworm Prevention: Ivermectin monthly year round

Physical Exam: Attitude: BAR

Hydration Status: normal If Abnormal: %

Mouth: <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Abnormal <input type="checkbox"/> Did Not Examine	Cardiovascular: <input checked="" type="checkbox"/> Normal/NMA MSP neg <input type="checkbox"/> Abnormal <input type="checkbox"/> Did Not Examine	Musculoskeletal: <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Abnormal <input type="checkbox"/> Did Not Examine
Eyes: <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Abnormal <input type="checkbox"/> Did Not Examine	Respiratory: <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Abnormal <input type="checkbox"/> Did Not Examine	Integument: <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Abnormal <input type="checkbox"/> Did Not Examine
Ears: <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Abnormal <input type="checkbox"/> Did Not Examine	Abdomen: <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Abnormal <input type="checkbox"/> Did Not Examine	Neurologic: <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Abnormal <input type="checkbox"/> Did Not Examine
Nose/Throat: <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Abnormal <input type="checkbox"/> Did Not Examine	Urogenital: <input checked="" type="checkbox"/> Normal, intact, no disc, no mgf <input type="checkbox"/> Abnormal <input type="checkbox"/> Did Not Examine	Lymph Nodes: <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Abnormal <input type="checkbox"/> Did Not Examine

Other: verified microchip
Exam Notes:

DDx: 3 yo FI Eng GRet-acc healthy, grain free diet, hx labwork abnormalities improved in 8/18- but low K and pti values are being rechecked today

Recommendations/Plan: Rec grad change to different diet; gave a article on diet related cardiomyopathy in dogs; avoid grain-free and "boutique" or "exotic ingredient" diets until more is understood about this correlation. Will run proBNP to determine if further work up is necessary at this time (no HM, no clinical signs heart dz).

O requests cPL to find out if "enzymes" would help her digestive issues- no diarrhea at this time. Disc EPL she does not have clinical signs consistent with this dz; but can run test if o is interested in result- ideally should be fasted. O will pursue in future (consider with a wellness panel, as the stand alone test is **B6** and add-on not an option at this time with the panel we are running today.) Also consider proviable in future.

Meds Dispensed: none

Tech: **B6**
Veterinarian: **B6** JVM

Qty	Product / Service	Price	Staff	Date
1.00	Bio Hazard Waste Disposal Fee			
1.00	Canine Young w/ Cardipal proBNP B6 Standard CDC, Chem: B6 HW AG			
1.00	Physical Exam / Office Visit - Brief/Recheck			

B6

04-Dec-2018 at 09:53 am

B6 JVM

Notes
Appointment reason: consult to discuss blood work performed on **B6** and going forward.

04-Sep-2018 at 01:14 pm

B6

Notes
Date and Time: 1:10 pm **B6**

Client Communication Notes: left message with owner with pricing for recheck tests: **B6** test code 3099 platelet count manual if indicated **B6** test code 7- electrolyte panel 2, plus tech appt charge, owner advised call back to schedule or if any questions.

Client: **B6**
Patient:

RDVM: **B6** records

Initial: **B6**

04-Sep-2018 at 12:00 pm

B6

Notes
Date and Time: 9/4/18

Client Communication Notes: spoke with owner regarding lab results, see below, owner had been away, per owner no concerns at home, owner interested in scheduling to recheck lyles and platelets as a precaution, to check pricing for owner and have reception call back to schedule tech appt.

Initial: **B6**

20-Aug-2018 at 09:53 am

B6

Notes
Date and Time: 8/20/18 9:53 am

Client Communication Notes: see enclosed lab results, 4DX neg4, lvs overall much improved compared to previous, slight decrease K+ 3.8 and slight increase Na/K ratio, **B6** platelet counts which may affect counts, platelets may be slight decreased on blood film, otherwise WNL, consider recheck platelets and lyles in 2-3 weeks as precaution, at least recheck prior to any surgery or if any health concerns, left message for owner

Initial: **B6**

14-Aug-2018 at 11:07 am

B6

Notes

B6
Examination Report Canine

Presenting For: PE, 4DX, update vaccines

B6

History/Owners Concerns: originally from **B6** owner got as a puppy, owner planning on breeding, no litters yet, last heat @ 1 year old, per owner OPA cardiac, tylosis/biopsy were good, history negative exploratory @ 1 year age, no problems since

Current Meds & Supplements:

Client: **B6**
Patient:

RDVM **B6** records

Flea & Tick Prevention: Adventis II

Heartworm Prevention: monthly **B6** (product that owner gets for **B6** (owner travels there))

Physical Exam: Attitude: BAR

Hydration Status: Normal **If Abnormal:** %

Mouth:

Normal
 Abnormal
 Did Not Examine

Cardiovascular:

Normal
 Abnormal
 Did Not Examine

Musculoskeletal:

Normal
 Abnormal
 Did Not Examine

Eyes:

Normal
 Abnormal
 Did Not Examine

Respiratory:

Normal
 Abnormal
 Did Not Examine

Integument:

Normal
 Abnormal
 Did Not Examine

Ears:

Normal
 Abnormal
 Did Not Examine

Abdomen:

Normal
 Abnormal
 Did Not Examine

Neurologic:

Normal
 Abnormal
 Did Not Examine

Nose/Throat:

Normal
 Abnormal
 Did Not Examine

Urogenital:

Normal
 Abnormal
 Did Not Examine

Lymph Nodes:

Normal
 Abnormal
 Did Not Examine

Other:

Exam Notes:

slight tartar

DDx: mild, appears healthy

Recommendations/Plan: teeth brushing, DVH when done brushing, focal - owner to drop off. from past history some bw abnormalities about 1 year ago, owner opt recheck bw as precision, send out CBC, Chem, 4DX

Meds Dispensed:

Tech **B6**

Veterinarian **B6**

Qty	Product / Service
1.00	Physical Exam / Office Visit - (Annual reminder)
1.00	*DHAPP Vaccination (1 yr) (Includes Fixed Fee- 3.00 Exc Tax) Batch No: 9160313A
1.00	*DHAPP vaccine B6 (inv) Batch No: 9160313A
1.00	Canine Standard CRC, Chem 25, 4DX (25049999)

Provider Staff Date
B6

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

RDVM: **B6** records

Ordered • Updated Status Order Source
B6 **B6** Final Canine Young w/ Cardiotop proBNP (2024090) Standard CBC Chem **B6** HW AG **B6**

Final | Accession # **B6**

[View in VETConnect Plus](#)

HEMATOLOGY

RBC	5.39 - 8.70 Mm ³
Hemoglobin	38.3 - 56.5 %
Hemoglobin	13.4 - 22.7 g/dL
MCV	59 - 76 fL
MCH	21.9 - 26.1 pg
MCHC	32.6 - 39.2 g/dL
% Reticulocyte	%
Reticulocyte	10 - 110 KUL
Reticulocyte Hemoglobin	22.3 - 29.6 pg
WBC	4.9 - 17.6 KUL
% Neutrophils	%
% Lymphocytes	%
% Monocytes	%
% Eosinophils	%
% Basophils	%
Neutrophils	2,940 - 12,071 /uL
Lymphocytes	1,080 - 4,950 /uL
Monocytes	130 - 1,150 /uL
Eosinophils	70 - 1,490 /uL
Basophils	0 - 100 /uL
Platelets	143 - 448 KUL

B6

B6

CHEMISTRY

Glucose	62 - 114 mg/dL
B6	0 - 14 ug/dL
Creatinine	0.5 - 1.5 mg/dL
BUN	6 - 31 mg/dL
Potassium	4.0 - 9.4 mmol/L
Total Protein	5.5 - 7.5 g/dL
Albumin	2.7 - 3.9 g/dL
Globulin	2.4 - 4.0 g/dL
Albumin: Globulin Ratio	0.7 - 1.0
ALT	18 - 121 U/L
ALP	5 - 180 U/L
Hemolysis Index	
Lipemia Index	
Cardiotop proBNP - Canine	0 - 300 pmol/L

B6

Client: **B6**
Patient:

RDVM: **B6** records

CHEMISTRY

- 1. BOTH SDMA AND CREATININE ARE WITHIN THE REFERENCE INTERVAL WHICH INDICATES kidney function is likely good. Evaluate a complete urinalysis and confirm there is no other evidence of kidney disease.
- 2. Index of N, 1+, 2+ exhibits no significant effect on chemistry values.
- 3. Index of N, 1+, 2+ exhibits no significant effect on chemistry values.

4. Cardiac troponin (TnI) = 1500 pmol/L
Normal NT-proBNP concentration is compatible with increased stretch and stress on the myocardium. Clinically significant heart disease is likely at this time. If clinical signs are present (i.e. respiratory signs, exercise intolerance), additional diagnostics are necessary to determine the cause. Additional diagnostics including thoracic radiographs, electrocardiogram and echocardiogram are recommended to diagnose and assess severity of cardiac disease.

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

SEROLOGY

Heartworm Antigen by **B6**

- 1. NEGATIVE
- 2. The American Heartworm Society recommends that a confirmatory test be run on all positive antigen test results prior to therapy, especially when a positive test result is unexpected. For a positive result on a Heartworm Antigen by ELISA, we recommend submission of a new sample for a second Heartworm Antigen by ELISA (test code 713) as a confirmatory test.

collopy result ▲

B6 **B6**

Final Canine Standard CBC, Chem 25, 4DX (20049999)

B6

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

RDVM **B6** records

Ordered	Updated	Status	Order
04-Dec-2018 10:13 am	05-Dec-2018 10:41 am	Final	Canine Young w/ Cardipap proBNP (20240905) Bloodwork CBC, Chem 10, HW AG
14-Aug-2018 11:27 am	15-Aug-2018 04:11 am	Final	Canine Standard CBC, Chem 25, ADA (20040901)

Source

B6
B6

Final | Accession # **B6**

↳ View in VETConnect Plus

HEMATOLOGY

RBC	6 - 6.70 MIL
Hematocrit	0 - 56.5 %
Hemoglobin	0 - 20.7 g/dL
MCV	78 fL
MCH	0 - 26.1 pg
MCHC	0 - 36.2 g/dL
% Reticulocyte	
Reticulocytes	110 K/L
Reticulocyte Hemoglobin	0 - 29.6 pg
WBC	17.6 K/L
% Neutrophils	
% Lymphocytes	
% Monocytes	
% Eosinophils	
% Basophils	
Neutrophils	60 - 12,670 /dL
Lymphocytes	60 - 4,960 /dL
Monocytes	- 1,150 /dL
Eosinophils	1,490 /dL
Basophils	100 /dL
Platelets	- 448 K/L

B6

B6

Platelet Comment

PLATELET CLUMPS SEEN ON SLIDE - PLATELET COUNT AND BLOOD FILM ESTIMATES MAY BE FAUSELY DECREASED.
PLATELET ADHESION SLIGHTLY DECREASED ON THE BLOOD FILM (SEE SEE MICROSLIDES FOR ADHESION).
Slide resistant for platelet estimate. For a full slide review, including cell morphology, a slide evaluation kit-in (code 9996) is available.

↳ AUTOMATED CBC

↳ SEE PLATELET COMMENT

CHEMISTRY

Glucose	63 - 114 mg/dL
B6	0 - 14 ug/dL
Creatinine	0.5 - 1.5 mg/dL
BUN	0 - 31 mg/dL
BUN: Creatinine Ratio	
Phosphorus	2.5 - 6.1 mg/dL
Calcium	8.4 - 11.8 mg/dL
Bilirubin	142 - 152 mmol/L

B6

B6

Client: **B6**
Patient:

RDVM **B6** records

CHEMISTRY	
Potassium	4.0 - 5.4 mmol/L
Na: K Ratio	28 - 37
Chloride	108 - 118 mmol/L
TCO2 (Bicarbonate)	13 - 27 mmol/L
Anion Gap	11 - 26 mmol/L
Total Protein	5.5 - 7.5 g/dL
Albumin	2.7 - 3.9 g/dL
Globulin	2.4 - 4.0 g/dL
Albumin: Globulin Ratio	0.7 - 1.5
ALT	18 - 121 U/L
AST	16 - 55 U/L
ALP	3 - 160 U/L
GST	0 - 13 U/L
Bilirubin - Total	0.0 - 0.3 mg/dL
Bilirubin - Unconjugated	0.0 - 0.2 mg/dL
Bilirubin - Conjugated	0.0 - 0.1 mg/dL
Cholesterol	131 - 345 mg/dL
Creatinine Kinase	10 - 200 U/L
Hemostasis Index	
Leukemia Index	

B6

B6

1. K

2. K

3. Both Kine and creatinine are within the reference intervals which indicates kidney function is likely good. Evaluate a complete urinalysis and confirm there is no other evidence of kidney disease.

4. Index of K, 1+, 2+ exhibits no significant effect on chemistry values.

5. Index of K, 1+, 2+ exhibits no significant effect on chemistry values.

SEROLOGY	
Histomon Antigen	
Ehrlichia canis / ewingi	
Lyme (Borrelia burgdorferi)	
Anaplasma phagocytophilum / oleria	

B6

Client: **B6**
Patient:

RDVM **B6** records

SEROLOGY

- * The American Heartworm Society recommends that a confirmatory test be run on all positive antigen test results prior to therapy, especially when a positive test result is unexpected. For a positive heartworm result on a 4Dx Plus, we recommend test code J25, Heartworm Antigen by **B6** as a confirmatory test.

The Ehrlichia canis/Ehrlichia ewingii antibody portion of the test uses peptides from each organism that are sensitive and specific for detecting exposure to these pathogens. If positive, submission of a fresh whole blood sample with an air-dried smear for a comprehensive CBC, test code 388, is recommended to identify abnormalities consistent with infection, primarily thrombocytopenia and anemia. PCR testing is complementary to serology and may be useful for confirmation of infection and for detection of infection in patients early in infection prior to seroconversion, especially in patients with clinical signs. Consider test code 2834, Ehrlichia spp RealPCR Test, or test code 28781, Tick/Vector Comprehensive RealPCR Panel Add-on (preferred).

The Lyme (Borrelia burgdorferi) antibody portion of the test detects Lyme C6 antibodies. A positive Lyme C6 antibody response indicates infection in dogs, rather than exposure or vaccination. This test may detect antibodies before clinical signs of joint disease. The quantitative assay for Lyme C6 antibodies (Lyme Quant C6 Antibody by ELISA, test code 7246) is preferred for assessing response to treatment. A measurable decline in quantitative Lyme C6 antibody levels within 6 months correlates with effective treatment, whereas the 4Dx Plus test may remain positive. For more information on Lyme, please visit <https://www.idexx.com/usa/animal/facts-about-lyme.html>

The Anaplasma phagocytophilum/Anaplasma platys antibody portion of the test uses a peptide that is sensitive and specific for detecting exposure to these organisms. If positive, submission of a fresh whole blood sample with an air-dried smear is recommended to identify abnormalities consistent with infection, primarily thrombocytopenia. PCR testing is complementary to serology and may be useful for confirmation of infection and for detection of infection in patients early in infection prior to seroconversion, especially in patients with clinical signs. Consider test code 2824, Anaplasma spp RealPCR Test, or test code 28781, Tick/Vector Comprehensive RealPCR Panel Add-on (preferred).

20240501.0001

Client:
Patient:

B6

RDVM

B6

Client Information:

B6

Patient Information:

B6

Canine, golden retriever, Female, . Gold

Birthdate:

Neutered: N

Cardiovascular Examination Summary

for **B6**
B6

Dear **B6**,

B6 was evaluated at **B6** on **B6** by **B6** in the **B6** office. The results of that evaluation are found below:

Referred by: **B6**

Presenting Complaint: Congenital cardiac OFA certification

History: **B6** has no history of a murmur with no clinical signs of cardiac disease or heart failure

Cardiovascular Physical Examination: BCS 2/5, BAR, MM pink; moist, CRT 2.0 sec, no jugular pulsations, RR 36 BPM, lung sounds slightly increased but no crackles or wheezes noted, HR 60-80 BPM with a regularly regular rhythm, no murmur is noted, femoral pulse is regular, symmetrical, and equal.

Diagnostics Performed:

Laboratory Findings: Not recommended or performed at this evaluation.

Imaging:

Thoracic Radiographs: Not recommended or performed at this evaluation.

Echocardiogram: Not recommended or performed at this evaluation.

Other:

Electrocardiogram: Not recommended or performed as part of this evaluation

Client:
Patient:

B6

RDVM

In-Hospital Treatments: None

Diagnostics Pending: None

Cardiovascular Case Assessment: Normal cardiovascular physical exam

Medical Therapy/Treatment Recommendations: None

Diet Recommendations: No change in diet is recommended at this time.

Exercise Limitations: No specific limitations are recommended based on this evaluation. Please allow **B6** to continue to set the pace and rest as needed.

Follow-up: No follow-up evaluation is indicated.

If you have any questions or concerns, please feel free to call.
Sincerely,

B6 DVM
Diplomate ACVIM – Cardiology

MEDICATIONS MAY HAVE PRICE CHANGES THAT ARE BEYOND OUR CONTROL. WE APOLOGIZE FOR ANY INCONVENIENCE.

MEDICATION REFILLS (only for medications from **B6** with a refill option):
*Refill requests can be called into the Specialty Center during normal business hours: Mon-Fri 8am-5pm. We will not always be able to accommodate refill requests after hours or on weekends. You can pick the prescriptions up after hours only if you call before 6pm on Friday.

WEEKEND OR AFTER HOURS MEDICATION REFILLS WILL HAVE A \$20 FEE IF CALLED IN AFTER 5PM ON FRIDAY**
IF YOU CALL BEFORE 5PM ON FRIDAY, WE WILL HAVE IT READY FOR PICK UP ANYTIME, EVEN AFTER HOURS AND WEEKENDS
Thank you for your understanding!

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

B6 BNP - **B6**

B6

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

Client: **B6**
Patient: **B6**
Species: CANINE
Breed: GOLDEN_RETRIEVE
Gender: FEMALE SPAYED
Age: 0Y

Date: **B6**
Requisition #: 434853
Accession #: **B6**
Ordered by: **B6**

B6
TUFTS UNIVERSITY
200 WES TBORO RD
NORTH GRAFTON, Massachusetts 01536
508-839-5395
Account #88933

CARDIOPET proBNP - CANINE

Test	Result	Reference Range	Unit	Method	Flag
CARDIOPET proBNP - CANINE	B6	0 - 900 pmol/L	HIGH		B6

Comments:

B6

Please note: Complete interpretive comments for all concentrations of Cardiacpet 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**

CBC/CHEM **B6**



Tufts Cummings School Of Veterinary Medicine

200 Westboro Road
North Grafton, MA 01536

DUPLICATE

Name/DOB: **B6** Sex: F Provider: **B6**
Patient ID: **B6** Age: 3 Order Location: **B6**
Phone number: Species: Canine Sample ID: 1901020129
Collection Date: 1/2/2019 11:22 AM Breed: Golden Retriever
Approval date: 1/2/2019 1:17 PM

CBC, Comprehensive, Sm Animal (Research)

Test	Result	Ref. Range/Females
SMACHUNSKI		
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
MCHC (ADVIA)	B6	31.9-34.3 g/dL
RDW (ADVIA)	B6	11.9-15.2
Platelet Count (Advia)	B6	173-486 K/uL
B6 1:17 PM	platelets per 100x field (estimated count of 200,000-500,000/uL)	
Mean Platelet Volume (Advia)	B6	8.29-13.20 fl
B6 11:41 AM	Platelet clumps (if present) and sample age (greater than 4 hours) can result in a falsely increased MPV.	
Platelet Cnt. B6 11:41 AM	Platelet Crit is invalid when clumped platelets are present. Interpretation of PltCt is unclear in species other than canines.	0.129-0.403 %
Reticulocyte Count (Advia) B6		0.20-1.60 %
Absolute Reticulocyte Count (Advia)		14.7-113.7 K/uL

Microscopic Exam of Blood Smear (Advia)

Test	Result	Ref. Range/Females
SMACHUNSKI		
Seg Neuts (%)	B6	43-86 %
Lymphocytes (%)	B6	7-47 %
Monocytes (%)	B6	1-15 %
Eosinophils (%)	B6	0-16 %
Nucleated RBC B6 11:41 AM	White blood cell count has been corrected for the presence of nucleated red blood cells	0-1 / 100 WBC
Seg Neutrophils (Abs) Advia B6		2.80-11.50 K/uL
Lymphs (Abs) Advia B6		1.00-4.80 K/uL
Mono (Abs) Advia B6		0.10-1.50 K/uL
Eosinophils (Abs) Advia B6		0.00-1.40 K/uL
WBC Morphology B6		
Echinocytes B6		

Research Chemistry Profile - Small Animal (Cobas)

Sample ID: 1901020129/1
This report continues... (Final)

Reviewed by: _____

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

CBC/CHEM - **B6**



Tufts Cummings School Of Veterinary Medicine

200 Westboro Road
North Grafton, MA 01536

DUPLICATE

Name/DOB: B6	Sex: F	Provider: B6
Patient ID: B6	Age: 3	Order Location: B6
Phone number:	Species: Canine	Sample ID: 1901020129
Collection Date: 1/2/2019 11:22 AM	Breed: Golden Retriever	
Approval date: 1/2/2019 1:17 PM		

Research Chemistry Profile - Small Animal (Cobas) (cont'd)

		Ref. Range/Females
DNOYES		
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	L	0.7-1.6
Sodium	H	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: 1901020129/2
REPRINT: Omg. printing on 1/2/2019 (Final)

Reviewed by: _____
Page 2

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

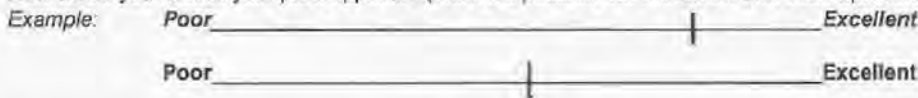
diet history **B6**

CARDIOLOGY DIET HISTORY FORM

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

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
Taste of the Wild Sierra Mountain Dry Hills Science Adult Salmon Veggie	dry	1 1/2 cup	2x/day	June 2018
Thorough Small Original Biscuits	treat	1 biscuit	10x/day	Sept 2018
Oravet Dental Through Chews	treat	1	1/week	July 2018
American Tourist Salmon & Sweet Potato	dry	1 1/2 cup	2x/day	Nov 2017 - May 18
Old Mother Hubbard Classic Biscuit	treat	1 bisc	10x/day	Jul 17 / May 18
Victor Hero Grain Free	dry	1 1/2	2x/day	Feb 2018
Whole Earth Farm	dry	1 1/2	2x/day	Jun 17 - Jul 17
Perina Heritage Free Run Poultry	dry	1 1/2	2x/day	Jul 15 - Jun 17

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

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

	Brand/Concentration	Amount per day
Taurine	<input type="checkbox"/> Yes <input type="checkbox"/> No	_____
Carnitine	<input type="checkbox"/> Yes <input type="checkbox"/> No	_____
Antioxidants	<input type="checkbox"/> Yes <input type="checkbox"/> No	_____
Multivitamin	<input type="checkbox"/> Yes <input type="checkbox"/> No	_____
Fish oil	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	1 spoon
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
_____	_____	_____
_____	_____	_____
_____	_____	_____

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 *after they eat regular 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): *dry food*

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

diet history: **B6**

Peara Wild Atlantic July 14 - June 2015

Blue Buffalo Wilderness,
Feb 14 - July 2014

Home Food

Bread
Cheese
Steak
Ham
Banana
Squash
Sweet Potato
Liver
Chicken Gizzards & Hearts
Tripe
Chicken Breast

Supplement

American Journey Wild Alaskan
Salmon Oil
Nov 2018 - present

B6

for large dogs

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

UCDavis Taurine Level

26344 PL
26345 WB

Amino Acid Laboratory Sample Submission Form

Amino Acid Laboratory, 1089 Veterinary Medicine Drive, Davis, Ca 95616
Telephone: 530-752-5058, Fax: 530-752-4698
Email: ucd.aminoacid.lab@ucdavis.edu
www.vetmed.ucdavis.edu/labs/amino-acid-laboratory

B6
B6 Canine
THYROID PANEL
Lithium Heparin

Veterinarian Contact: **B6**

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

Address: 200 Westboro Road, North Grafton, MA 01538

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

Telephone: 508-887-4689 Fax: 508-838-7838

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

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

Patient Name: **B6** Species: Canine

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

Current Diet: taste of the wild

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: **B6**
Patient:

Vitals Results

B6	10:17:06 AM	Weight (kg)
-----------	-------------	-------------

Patient History

B6	10:44 AM	Appointment
	12:24 PM	Appointment
	10:00 AM	UserForm
	10:17 AM	Vitals
	10:21 AM	Treatment
	11:06 AM	Purchase
	11:06 AM	Purchase
	11:42 AM	UserForm
	11:45 AM	Purchase
	11:45 AM	Purchase
	12:14 PM	Email

B6

Cummings
Veterinary Medical Center
AT TUFTS UNIVERSITY

B6

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

B6 Female
Canine Golden Retriever Cream
B6

B6

Dear **B6**

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

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

Thank you,

B6 DVM, DACVIM (Cardiology)

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

Female

Canine Golden Retriever Cream

B6

B6

Dear None

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

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

Thank you,

B6

DVM, DACVIM (Cardiology)