



# Orthopedic Foundation for Animals

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www.offa.org, A not-for-profit organization

# Application for Advanced Cardiac Database

Performed in association with the Orthopedic Foundation for Animals (OFA) and the American College of Veterinary Internal Medicine-Cardiology (ACVIM)



Registered name: \_\_\_\_\_

Call name: \_\_\_\_\_ Weight:  kg  lbs  Estimate

Breed: \_\_\_\_\_ Gender: \_\_\_\_\_

Sire Registration #: \_\_\_\_\_ Dam Registration #: \_\_\_\_\_

ID Number (if any):  Tattoo  Microchip

Registration Number:  AKC  Other

Date of Birth: (MMDDYY) \_\_\_\_\_ Date of Exam: (MMDDYY) \_\_\_\_\_

Owner Name: \_\_\_\_\_

Co-Owner Name: \_\_\_\_\_ Phone: \_\_\_\_\_

Owner Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip/postal code: \_\_\_\_\_

E-Mail (use both lines if needed): \_\_\_\_\_

I hereby certify that the animal examined is the animal described on this application, and understand that the results of this exam will be submitted by the examining cardiologist to the database for statistical gathering purposes. I understand that only passing results will be released to the public unless the initials of a registered owner or authorized agent appear in the authorization box below which permits the OFA to release non-passing results to the public.

Signature of owner or authorized agent/representative

I hereby authorize the OFA to release equivocal or abnormal results to the public. (initials) \_\_\_\_\_

Cardiologist Name: \_\_\_\_\_

Phone #: \_\_\_\_\_ OFA Examiner #: \_\_\_\_\_

E-Mail (use both lines if needed): \_\_\_\_\_

Genetic Test Status: Test \_\_\_\_\_  
 Negative  Abnormal: Heterozygous  Homozygous

**EXAMINATION FINDINGS**

**AUSCULTATION**

Normal  Abnormal  Arrhythmia

Murmur Grade: I  II  III  IV  V  VI

PMI: Left  Right  Base  Apex

Timing: Systolic  Diastolic  Continuous

Extra Sounds: Click  Gallop  Split S1  Split S2

**ECHOCARDIOGRAM**  NOT PERFORMED

RA: Normal  Enlarged \_\_\_\_\_mm RV: Normal  enlarged \_\_\_\_\_mm

TV: Normal  Abnormal: Mild  Moderate  Severe

TR: None  Trivial  Mild  Moderate  Severe  Vel. \_\_\_\_\_m/s

LA: Normal  Enlarged: Mild  Moderate  Severe

LAd \_\_\_\_\_mm: SAx  LAx  (MM  2D

MV: Normal  Abnormal: Mild  Moderate  Severe

MR: None  Trivial  Mild  Moderate  Severe  Vel. \_\_\_\_\_m/s

LV: Normal  Enlarged: Mild  Moderate  Severe

LVIDd: \_\_\_\_\_mm MM  2D  LVIDs: \_\_\_\_\_mm MM  2D

SF: \_\_\_\_\_% (MM  2D  EF: \_\_\_\_\_% (MM  2D  volumetric)

ESVI: \_\_\_\_\_mL/m<sup>2</sup> Sphericity Index \_\_\_\_\_ EPSS: \_\_\_\_\_mm

IVS: IVSd \_\_\_\_\_mm Normal  Abnormal  (MM  2D

PW: PWd \_\_\_\_\_mm Normal  Abnormal  (MM  2D

PapMuscle: Normal  Abnormal

LVOT Normal  Abnormal  Ridge  Other \_\_\_\_\_

AoV: Normal  Abnormal: Mild  Moderate  Severe

Ao Diameter: \_\_\_\_\_mm LA/Ao: \_\_\_\_\_ Method: \_\_\_\_\_

AoV/LVOT Vel: Normal  Abnormal  (Apical  Subcostal ) \_\_\_\_\_m/s

DLVOTO:  Vmax \_\_\_\_\_m/s SAM:

AR: None  Mild  Moderate  Severe  \_\_\_\_\_m/s

RVOT: Normal  Infundibular narrowing  Vmax (if abnormal) \_\_\_\_\_m/s

DRVOTO:  Vmax \_\_\_\_\_m/s

PV: Normal  Abnormal  Mild  Moderate  Severe

PV Vel: Normal  Abnormal  (Right  Left apex ) \_\_\_\_\_m/s

**ELECTROCARDIOGRAM (ECG)**

normal  abnormal  not performed

Date: \_\_\_\_\_ Method: \_\_\_\_\_

HR: \_\_\_\_\_bpm Rhythm: \_\_\_\_\_

**HOLTER ECG**

Date performed: \_\_\_\_\_  pending  not performed

normal:  equivocal:  abnormal:  (see Holter report for details)

**EXAMINATION RESULTS**

NORMAL

No evidence for congenital heart disease

No evidence for adult onset inherited heart disease

**Valid for 1 year** (In Dobermans and Boxers preliminary clearance only. Holter required within 3 months of today for final clearance)

EQUIVOCAL

Congenital or adult onset inherited heart disease cannot be definitively diagnosed or excluded

ABNORMAL (evidence of congenital or adult onset inherited heart disease)

Diagnosis:  ARVC  ASD  DCM  HCM  MVD  MMVD  PDA  PS  SAS/AS  TVD  VSD  Other \_\_\_\_\_

Severity:  Mild  Moderate  Severe

Comments (additional findings which would not result in a final abnormal diagnosis): \_\_\_\_\_

I DID verify microchip/tattoo on this dog

I DID NOT verify microchip/tattoo on this dog

NO MICROCHIP/TATTOO PRESENT

Signature \_\_\_\_\_ Date \_\_\_\_\_

Diplomate ACVIM (American College of Veterinary Internal Medicine - Cardiology), or Diplomate ECVIM (European College of Veterinary Internal Medicine - Cardiology)

Fees and credit card information on back of WHITE sheet.

### OFA Advanced Cardiac Clearance Database Fees

- Animals over 12 months of age ..... \$15.00
- Litter of 3 or more submitted together ..... \$30.00
- Kennel Rate—Minimum of 5 individuals submitted as a group, owned/co-owned by same person. .... \$7.50 ea.
- Submission of non-passing results in the open database:  
NO CHARGE

### Credit Card Payment Information

*Payments can be made by check, money order (U.S. funds drawn on a U.S. bank), cash, Visa, or Mastercard, payable to the Orthopedic Foundation for Animals. To pay by credit card, fill out the following information.*

Visa/Master Card Number (1 digit per cell, no dashes)

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Cardholder name:

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Exp. (MM|YY)

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CVV

### Abbreviations of diseases listed on front page

**ARVC:** Arrhythmogenic right ventricular cardiomyopathy

**ASD:** Atrial septal defect

**DCM:** Dilated cardiomyopathy

**HCM:** Hypertrophic cardiomyopathy

**MMVD:** Myxomatous mitral valve disease

**PDA:** Patent ductus arteriosus

**PS:** Pulmonic stenosis

**SAS/AS:** Subaortic stenosis/aortic stenosis

**TVD:** Tricuspid valve dysplasia

**VSD:** Ventricular septal defect

### Purpose of cardiac health screening in dogs

- To identify dogs free from any cardiac abnormality
- To ascertain the prevalence of heart murmurs, abnormal rhythms or specific heart defects in specific breeds
- To confirm the cause of heart murmurs or abnormal rhythms by further investigation of affected animals
- To collate data for investigation of a possible genetic basis to a specific heart problem in a given breed
- To advise the owner, breeder and dog’s veterinarian when an abnormality has been identified and recommendations about any further investigation, if indicated

### Methods of heart testing

#### 1. Auscultation: examination with a stethoscope

Auscultation allows detection of heart murmurs, the specific timing and localization as well as grading of intensity (grade 0 - 6). The heart rhythm is also assessed during auscultation. Heart murmurs occur with many congenital heart defects and adult onset inherited cardiac diseases such as myxomatous mitral valve disease (MMVD). Some common forms of congenital heart disease include subaortic stenosis (SAS), patent ductus arteriosus (PDA), pulmonic stenosis (PS) and tricuspid valve dysplasia (TVD). Abnormal heart rhythms may occur in animals without murmurs in dilated cardiomyopathy (DCM) or arrhythmogenic right ventricular cardiomyopathy (ARVC). It may be difficult for the veterinarian to detect a soft murmur in a noisy room or in a dog that is squirmy. Some murmurs may change intensity at different heart rates, after exercise or excitement.

#### 2. Electrocardiogram (ECG)

This is always indicated if an abnormal heart rhythm is detected. It is most often used to screen certain breeds of dogs for DCM or ARVC.

#### 3. Echocardiogram (with Doppler)

Echocardiography allows visualization the heart chambers and valves in real-time. M-mode is used for measurements to be taken and compared with normal values for breed or size of dog. Doppler is required to confirm the diagnosis of a specific type of congenital defect and to identify mildly versus severely affected animals. In some cases, it is difficult to be certain whether a dog has mild disease or an “innocent” murmur.

#### 4. Holter ECG (separate report required)

This test is indicated in breeds predisposed to DCM or arrhythmogenic right ventricular cardiomyopathy. Affected dogs may display ventricular arrhythmias early in the disease process, when the echocardiogram does not reveal any abnormalities yet. A Holter (24h ECG) allows detection of infrequent, but significant arrhythmias.

**For final clearance a 24 hour Holter is required in Boxers and Doberman Pinschers.**

Adult onset of inherited heart disease can appear at any age of an adult dog or cat. Testing for DCM, ARVC, MMVD and HCM is thus only valid for 1 year, after which time retesting is required to screen for onset of new abnormalities.