

OFA Cardiac Screening – The Advanced Cardiac Database

by Nancy Hopkins

Those of us who have been doing OFA cardiac screenings on our dogs are familiar with the one-page *Application for the Congenital Cardiac Database* and the auscultation that was required. As of April 2016, there is a new cardiac database offered by OFA: the Advanced Cardiac Database (ACA) which will eventually replace the old single-page application and the Congenital Cardiac Database. The ACA will include certification for both congenital cardiac diseases as well as adult-onset cardiac diseases. It is important to understand how the ACA compares to the Congenital Cardiac Database so you understand how this change will impact you and your dogs.

Before we compare the two different types of OFA clearances it is important to understand the difference between congenital cardiac disease and adult-onset (developmental) cardiac disease. Congenital cardiac diseases are those that are present at birth

and may worsen with age. They include malformation of any of the heart's chambers or valves, or the blood vessels going from and coming into the heart. Examples of congenital cardiac defects include: patent ductus arteriosus (PDA), pulmonic stenosis (PS) and subaortic stenosis (SAS). Adult-onset (developmental) cardiac diseases are those that are seen later in life. These include endocardiosis (mitral valve disease/myxomatous valve degeneration), dilated cardiomyopathy and arrhythmogenic right ventricular cardiomyopathy.

Based on the Borzoi health survey at OFA (<https://www.ofa.org/about/educational-resources/health-surveys>) we see Borzoi suffer from both congenital cardiac defects and adult-onset cardiac disease. This means that both types of OFA cardiac certification—congenital and adult-onset—have value for Borzoi breeders.

OFA considers a careful clinical evaluation with auscultation of the heart as ideal for

congenital heart defect screening due to its low price and convenience. Auscultation is useful because almost all congenital heart problems commonly found in dogs are associated with murmurs. One will miss a portion of congenital malformations because they are sometimes hard to hear. Some dogs will also be found to have a murmur that with further investigation will be found to be physiologic (functional or innocent) murmurs. No dog should be considered to have a congenital malformation based on auscultation alone. Any abnormal finding should always be further investigated with an echocardiogram to identify the nature of the murmur and its relevance to your dog.

However, once a dog has passed an auscultation and received an OFA congenital cardiac clearance through the ACA, the dog should move to evaluations focusing on adult onset diseases. OFA certification for congenital cardiac defects is not sufficient

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for clearing a dog as a breeding prospect due to the significant presence of adult-onset cardiac disease in our breed.

According to the Borzoi health survey at OFA, the top adult-onset cardiac disease impacting Borzoi is cardiomyopathy. Endocardiosis may be a significant issue for our breed as well, though this is not clear from the statistics. A review of recommendations for large-breed dogs, that are known to have a high incidence of cardiomyopathy, shows that echocardiography is recommended for screening breeding animals, usually starting at the ages of three or four years. Because of this, echocardiography should be sought whenever

possible for screening Borzoi for adult-onset cardiac disease, as auscultation alone will be insufficient.

The benefit of the new ACA will be better data collection to support breeders' efforts toward improving Borzoi health. One improvement is the triplicate format of the ACA application. One of the pages will be mailed to OFA by the cardiologist whether or not the owner elects to send in the form for OFA certification. This is critical as the statistics provided by the Congenital Cardiac Database is incomplete because it depends on owner mail-in. Also, the ACA application provides much more information

about both the auscultation findings and the examination details of the echocardiogram. This improves the quality of information gathered for the benefit of Borzoi.

The chart below provides a side-by-side comparison of the two types of OFA cardiac clearance schemes.

For more information:

<https://www.ofa.org/diseases/other-diseases/cardiac-disease>

https://www.ofa.org/pdf/ACA_Announcement.pdf

	Congenital Cardiac Database – phasing out	Advanced Cardiac Database – phasing in	Notes
At what age will an OFA certification be awarded?	12 months or older	12 months or older	This is considered the optimum age for catching the majority of congenital cardiac defects.
Can dogs younger than 12 months be evaluated?	Yes, for the owner's information but this will not result in an OFA certification.	Yes, for the owner's information but this will not result in an OFA certification.	If you want to screen puppies before they go to their new homes, 8-10 weeks of age is ideal. However, final certification should be sought once the dog matures (12 months or older)
Who can do the test?	Any licensed veterinarian	Boarded veterinary cardiologist (ACVIM or ECVIM diplomates)	OFA certifications for the Congenital Cardiac Database are designated with the practitioner's expertise (P=practitioner; S=specialist; C=cardiologist)
What type of clearance is included?	Congenital cardiac disease only	Congenital cardiac disease and adult-onset cardiac disease	
How long is the clearance good for?	Permanent	Congenital disease – permanent	
Adult-onset disease- One year, starting from the exam date			
Must this screening test be repeated to maintain clearance?	No	Congenital – No Adult-onset - Yes	
Will the dog get an auscultation?	Yes – this is the main requirement.	Yes – this is the minimum required	
Will the dog get an echocardiogram?	Maybe – if a murmur is heard	Yes – in breeds with adult-onset cardiac diseases needing an echocardiogram for an accurate diagnosis.	ACA – an echocardiogram may be included if desired even if no murmur is heard.
Will the dog need a Holter test?	No	Only Boxers and Doberman Pinschers - must get a Holter test within 90 days of the examination.	ACA-This may be included if desired for other breeds other than Boxers and Doberman Pinschers.
Can I print out the OFA Application form for this test?	Yes	No, it is a triplicate form. The cardiologist will have forms.	