SUBVALVULAR AORTIC STENOSIS

Understanding the Genetics in Bullmastiffs

Looking for SAS affected Bullmastiffs

Background & Purpose

- Subvalvular aortic stenosis (SAS) is one of the most common heart defect diagnosed in dogs, and the Bullmastiff breed is over-represented in incidence of SAS. Moderate and severely affected cases are at risk for developing severe cardiac complications, and have an average lifespan of 19 months. Furthermore, there is no surgical treatment available that results in an increased life expectancy for affected cases.
- The aim of this study is to identify genes/ variants associated with SAS in Bullmastiffs that can be used to develop a genetic test. At this time, we are in the final stage of sample collection and need to collect additional SAS affected Bullmastiffs. If you own a Bullmastiff diagnosed with SAS by veterinary cardiologist please contact us. We can provide pre-paid FedEx slips for sample shipments. Participation in this study is confidential and the identities of affected Bullmastiffs will not be disclosed.

Participation Requirements

- Bullmastiffs that have been diagnosed with SAS via echocardiogram by a board certified veterinary cardiologist.
- Parents and/or littermates of dogs diagnosed with SAS

Procedures

- An echocardiogram performed by a board certified veterinary cardiologist
- Collection and submission of 2-3 ml of whole blood by the owner or veterinarian.

Owners Responsibilities

- Submission of the following items:
 - 2 to 3 ml of whole blood in a EDTA tube (purple top)
 - A copy of the 3-5 generation pedigree (if available)
 - A copy of the echocardiogram report
 - A completed enrollment form

Benefits

- Results for this study can be utilized to produce an SAS genetic test for the Bullmastiff breed. A genetic test can be used to screen predisposed dogs and guide breeding practices to reduce disease prevalence in this breed.



For additional information contact us at: Email: *sterngenetics@ucdavis.edu* **Phone:** (530)752-4892



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