

# SUBVALVULAR AORTIC STENOSIS

## Understanding the Genetics in Dogue de Bordeaux

### Background & Purpose

- Subvalvular aortic stenosis (SAS) is the second most common heart defect diagnosed in dogs, and the Dogue de Bordeaux 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 Dogue de Bordeaux that can be used to develop a genetic test.

### Participation Requirements

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

### 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 Dogue de Bordeaux. A genetic test can be used to screen predisposed dogs and guide breeding practices to reduce disease prevalence in this breed.



### Principal Investigator

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