

# GSD Inherited Arrhythmia

## Client Information Sheet



### What is inherited ventricular arrhythmia of the German Shepherd Dog (IVAGSD) ?

The heart is a complex organ composed of multiple electrical cells and pathways. Briefly, the heart can be divided in two main portions: the upper portion and the lower portion of the heart. Each portion has a specific and crucial role in the cardiac cycle.

Inherited Ventricular Arrhythmia of German Shepherd Dogs (IVAGSD), as its name states, is an inherited disease seen in young German Shepherd Dogs that causes an irregular heart rhythm (arrhythmia). This arrhythmia usually manifests as a ventricular arrhythmia when dogs are sleeping. Ventricular arrhythmia is an irregular rhythm caused by abnormal electrical impulses originating from the lower portion of the heart.

IVAGSD is an age-dependent disease. Patients start to show symptoms at approximately 3 months of age and signs worsen until approximately 6-7 months of age. It is generally observed that affected dogs will outgrow the disease by the age of 18 months, meaning that past that age, they are unlikely to be affected by the disease.



#### Cardiologists



Dr. Jean-Sebastien Boileau

Dr. Catherine Belanger

#### Need more information?

Please contact your veterinarian for additional recommendations regarding your pet's heart disease.

#### Appointments

Regular visit:

Cardiology visit:



## How is IVAGSD diagnosed?

IVAGSD is considered a **diagnosis of exclusion**, meaning that other diseases, such as structural heart disease, metabolic/systemic disease, electrolyte imbalance, drugs/toxins, stress or pain and idiopathic causes, must be excluded. Other diagnostic tests performed during the visit:

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### Affected animals can be:

 <b>ASYMPTOMATIC</b> Not experiencing any symptoms	 <b>WEAKNESS/COLLAPSE</b> Seen in patients with an abnormal heart rhythm	 <b>SUDDEN DEATH</b> Usually preceded by a collapse episode
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## TREATMENT OPTIONS

There is unfortunately no treatment that has been shown to decrease the risk of sudden death with this disorder. That being said, medications that decrease heart rate and prevent the number of abnormal beats are usually started.

It is also strongly recommended to avoid any anesthetic procedures (i.e. spay, neuter, dental) before 18 months of age.

