

# Evaluation of Potential Novel Biomarkers for Feline Hypertrophic Cardiomyopathy

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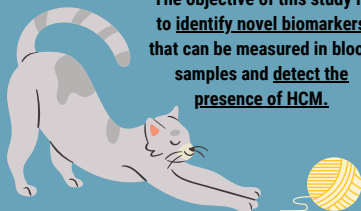
## Clinical Trial Purpose



Hypertrophic Cardiomyopathy (HCM) is the most common heart disease of cats. It is characterized by thickening of the heart muscle and impaired heart function. HCM can progress to heart failure and potentially a life-threatening emergency. In order to diagnose HCM, a referral to a specialty hospital and ultrasound of the heart is often required.

Researchers at OVC have identified a set of genes that are differently expressed in hearts from cats with HCM compared to healthy cats. The products of these genes are known to be released into the blood and might therefore be useful as markers for HCM. Some of these genes have already been evaluated in human and mice heart failure studies and have shown promise as markers for heart disease.

The objective of this study is to identify novel biomarkers that can be measured in blood samples and detect the presence of HCM.



## Is Your Pet Eligible?

Inclusion criteria (two groups):

1. Healthy, male cats  $\geq 2$  years
2. Male cats  $\geq 2$  years with HCM and no concurrent medical conditions

## Financial Incentives (Supported by OVC Pet Trust)

Physical exam, ultrasound investigation of the heart and bloodwork (complete blood count, biochemistry profile and total T4) are included with study participation.

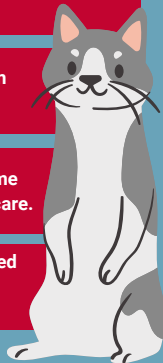
## The Process

**1** If your cat is eligible, a study appointment will be scheduled. On arrival to the hospital, your cat will be examined by one of the research team clinicians.

**2** Small squares will be shaved on your cat's armpits and neck. A numbing cream called EMLA will be applied to the neck where blood will be collected.

**3** Using an ultrasound machine, an ultrasound investigation of the heart (the same procedure in humans) will be performed and your cat will be returned to your care.

**4** The collected blood samples will be analyzed in the laboratory using specialized equipment. You and your veterinarian will be informed about the ultrasound findings and blood results.



Questions about this study can be sent to: [cscardio@uoguelph.ca](mailto:cscardio@uoguelph.ca)