

Title: Rapamycin Treatment in Preclinical Canine Dilated Cardiomyopathy (The REPAIR Study)



Contact Email: VTHCardiology@vetmed.illinois.edu please add 'REPAIR Study' to the subject line

Species: Dog

Inclusion Criteria: Dogs with a prior diagnosis of occult dilated cardiomyopathy (ODCM) and being treated with pimobendan may be eligible to undergo a number of screening tests to confirm their eligibility for enrollment.

Background: Dilated cardiomyopathy (DCM) is the second most common acquired cardiac diseases in dogs. The preclinical phase of DCM, often referred to as occult DCM (ODCM), can last for ~2-3 years. Current optimal management of dogs with ODCM includes pimobendan and/or antiarrhythmic medication. Once dogs with ODCM progress to the clinical phase of the disease, dogs often experience congestive heart failure and have limited (<1 year) life spans with diminished quality of life. This study aims to investigate if a new treatment, rapamycin, can reduce heart size and improve function during the occult/preclinical stage of dilated cardiomyopathy (ODCM) in dogs already receiving pimobendan. Dogs that pass the echocardiographic and full screening tests are eligible to enroll in this 6-month study.

Exclusion Criteria: Dogs will NOT be eligible for enrollment if

- They have been diagnosed other cardiac diseases (congenital or acquired).
- They have/had signs of congestive heart failure.
- They have undergone general anaesthesia in the last 30 days.
- They are receiving diuretics
- They have fainted in the last 3 months.
- They have atrial fibrillation.

Owner Commitments: Owners must be able to make a trip to Illinois veterinary school to participate in the study at the time of screening for enrollment, and again at 2, 4, and 6 months after enrollment.

·Owners must be able to answer questions regarding their dog's health at each of the screening visits.

Financial Incentives: All enrolled dogs will have diagnostic tests required by the study including blood work (complete blood count, biochemistry panel), ECG/Holter, and an echocardiogram (a cardiac ultrasound) conducted at no cost to the owner. In addition, the study will provide pimobendan at no cost to the owner during the course of the study. A Holter monitor deposit fee is charged and refunded when the Holter is returned.