Background
• Sotalol is considered by most veterinary cardiologists to be one of the most effective and well-tolerated medications for long-term control of potentially life-threatening ventricular arrhythmias (abnormal and rapid heartbeats arising from the pumping chambers). Sotalol may decrease heart function (pumping ability) but it is currently unknown to what extent, if any, it does so. Therefore, the purpose of this clinical trial is to determine the effect of a single standard dose of sotalol on heart function and rhythm in dogs diagnosed with ventricular arrhythmias.

Participation Requirements
• Dogs that have been diagnosed with a ventricular arrhythmia (abnormal and rapid heartbeats originating in the pumping chambers of the heart by a veterinarian)
• Dogs will be considered ineligible for the study if they weigh less than 10 kg (20 lbs), are already taking sotalol, are taking heart medications that affect heart function (e.g., pimobendan or beta-blockers), and if they are affected with significant kidney disease.

Procedures
• Review of your dog’s medical and medication history, and any clinical signs (symptoms) your dog may be experiencing
• Completion of a physical examination with special attention to the cardiovascular system
• Complete echocardiogram (cardiac ultrasound) without the use sedatives, which involve your dog being gently restrained while lying on their side and usually last 20-25 minutes
• Immediately following the echocardiogram, your dog will be administered a single dose of sotalol by mouth and monitored by direct observation.
• 2-4 hours after your dog received the sotalol medication (allows time for the drug to take effect), your dog will have another echocardiogram performed.
• Blood may be collected to look for genetic mutations that may cause a lack of response to the drug.

Owner Responsibilities
• Bringing your dog in to the scheduled study-related appointment
• Discount on the price of the echocardiogram

Benefits
• Results from this study will hopefully allow us to better guide medical care for your dog and future dogs affected with arrhythmias.