

# PROGRESS REPORT



## Investigating a Novel Drug Therapy for Heart Disease

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Morris Animal Foundation-funded researchers at the University of California, Davis, are conducting a clinical trial to find out if the drug rapamycin can reverse negative heart changes associated with subvalvular aortic stenosis (SAS). SAS is one of the most common congenital heart defects in dogs and causes physical and functional changes in the heart, heart arrhythmias and frequently results in sudden death.

No current medical therapy prolongs the lifespan of dogs with severe SAS beyond 4 to 5 years of age. The team hopes this novel rapamycin therapy may reduce disease severity and improve outcomes and quality of life for dogs with this devastating disease.

The study currently is in the recruitment and enrollment phase and the team has partnered with regional cardiologists to help with screening and enrollment efforts. This includes making sure patients meet criteria of a minimum age, minimum disease severity, and many exclusionary criteria that must be screened prior to qualifying for study participation.

The project is conducted on dogs with severe congenital SAS. Due to the inherited nature of SAS, commonly seen breeds include golden retrievers, German shepherds, Boxers, Newfoundland's, among others.

So far, the team has enrolled 16 of 36 dogs needed to complete the study. Once enrolled, each patient completes a six-month follow-up over three visits. The investigators are blinded, so preliminary data is not available at this time.

If rapamycin is successful in reducing the hypertrophy (the thickening of the heart muscle), this may have implications on long-term survival of dogs with severe SAS and potentially help other dogs and cats with similar diseases involving concentric hypertrophy and risk of heart failure.

**Thanks to the generous sponsors of this study!**