



## GVHD TREATMENT FOR CANINES

# Canine Anti-ICOS Antibody for the Treatment of Chronic GVHD

## Brief Description of Technology

Monoclonal antibody against ICOS significantly increase survival of canines with chronic graft vs. host disease [GVHD].

### BUSINESS OPPORTUNITY

Exclusive license  
 Nonexclusive license  
 Sponsored research

### TECHNOLOGY TYPE

Therapeutic  
 Antibody  
 Research tool

### STAGE OF DEVELOPMENT

Preclinical *in vivo*

### INVESTIGATOR

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 Clinical Research Division

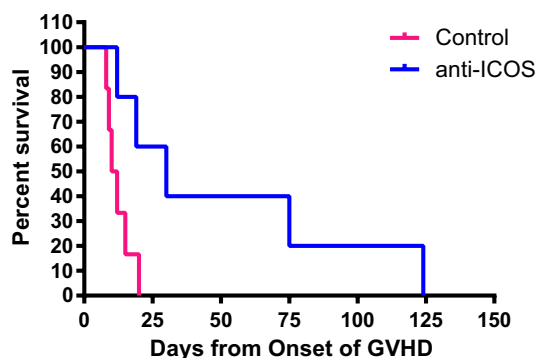
### LEARN MORE

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## Technology Overview

In canines, lymphoma comprises up to 24% of all canine cancers. Hematopoietic cell transplantation [HCT] is increasing in popularity as a treatment for lymphoma, however there is a significant risk of graft-versus-host disease [GVHD] as a result. The Storb lab developed a model system for producing chronic GVHD in canines given HCT and have identified an anti-canine ICOS monoclonal antibody which significantly extends canine survival [Figure 1]. Progression of chronic GVHD in canines was halted or even completely eliminated after treatment with anti-ICOS. This antibody can be used as a therapeutic for GVHD treatment in canines.

**Survival of canines with GVHD after anti-ICOS treatment**



**Figure 1.** Anti-ICOS extends survival of canines with GVHD. Two groups of canines given DLA non-identical HCT were evaluated for the time between diagnosis of chronic GVHD and euthanasia. In the control group (n=8), canines were untreated during this period aside from antibiotic and fluid support. In the anti-ICOS-treated group (n=5), canines received either one or two courses IV of anti-canine ICOS consisting of three injections each of anti-ICOS iv at 4 mg/kg, days 0, 3, 6. The difference in the survival periods of the two groups was significant [two tailed Student's T test p<0.028].

## Applications

- Canine GVHD therapeutic
- Research tool