

NCSU, COLLEGE OF VETERINARY MEDICINE
CARDIAC GENETICS LABORATORY
<http://www.cvm.ncsu.edu/vhc/csds/vegl/index.html>
 R462A 1060 William Moore Drive
 RALEIGH, NC 27607
 Phone: 9195138279 Fax:

Owner: RICHARD & IRENE WILCOX

Accession Number: CG12-00203

ADA, MI 49301

Received: 01/31/2012 **Reported:** 02/13/2012

DR.

Species: CANINE

Veterinarian:

WILCOX KENNEL

Breed: DOBERMAN PINSCHER

1012 CONSERVATION CT. NE

Sex: M **Age:** 1Y10M

ADA, MI 49301

Animal ID: ADAMAS SHOCK AND AWE

Phone 6166769094

Case Ref#:

Fax

Specimen: SWB

Results:

GENETIC INFO DILATED CARDIOMYOPATHY MUTATION (DCM) IS A FORM OF HEART DISEASE IN THE DOBERMAN PINSCHER DOG. IT IS INHERITED AND OUR LABORATORY HAS IDENTIFIED A MUTATION RESPONSIBLE FOR THE GENE IN SOME DOBERMAN PINSCHER. HOWEVER, IT SHOULD BE NOTED THAT IN HUMAN BEINGS WITH THE SAME DISEASE, THERE ARE MANY DIFFERENT GENETIC MUTATIONS WHICH CAN CAUSE THIS DISEASE. WE DO NOT YET KNOW IF THIS IS THE ONLY MUTATION IN THE DOBERMAN PINSCHER OR IF THERE WILL BE MANY DIFFERENT MUTATIONS. PLEASE KEEP IN MIND THAT WE ARE CONTINUALLY LEARNING ABOUT THIS DISEASE AND RECOMMENDATIONS WILL BE ALTERED AS WE OBTAIN MORE INFORMATION.

CURRENTLY OUR INTERPRETATION OF THE TEST IS:

NEGATIVE RESULTS:

THE ABSENCE OF THE MUTATION IN THIS DOG, DOES NOT MEAN THAT IT WILL NEVER DEVELOP THE DISEASE. IT MEANS THAT IT DOES NOT HAVE THE ONLY KNOWN MUTATION THAT CAN CAUSE THE DISEASE IN THE DOG AT THIS TIME.

POSITIVE RESULTS:

DOGS THAT ARE POSITIVE FOR THE TEST WILL NOT NECESSARILY DEVELOP SIGNIFICANT HEART DISEASE AND DIE FROM THE DISEASE. SOME DOGS WILL DEVELOP A VERY MILD FORM OF THE DISEASE AND WILL LIVE QUITE COMFORTABLY, SOME MAY NEED TREATMENT.

IMPORTANTLY, BREEDING DECISIONS SHOULD BE MADE CAREFULLY. AT THIS TIME WE HAVE DO NOT YET KNOW WHAT PERCENTAGE OF DOBERMAN PINSCHER WILL BE POSITIVE FOR THE MUTATION. HOWEVER, REMOVAL OF A SIGNIFICANT NUMBER OF DOGS FROM THE BREEDING POPULATION COULD BE VERY BAD FOR THE DOBERMAN PINSCHER BREED. REMEMBER THAT DOGS THAT CARRY THIS MUTATION ALSO CARRY OTHER IMPORTANT GOOD GENES THAT WE DO NOT WANT TO LOSE FROM THE BREED.

**DOBERMAN
DCM**

Positive - Heterozygous

COMMENTS

Positive Heterozygous (1 copy of the mutated gene and 1 copy of a normal gene) Dogs that are positive heterozygous should be carefully evaluated for signs of disease (Holter monitor and an echocardiogram). If abnormalities are detected, possible treatment options should be discussed with your veterinarian. Adult dogs that do not show signs of disease and that have other positive attributes could be bred to mutation negative dogs. Puppies may be screened for the mutation and over a few generations, mutation negative puppies may be selected to replace the mutation positive parent and gradually decrease the number of mutation positive dogs in the population.

