

MDR1 DRUG SENSITIVITY

(MDR1)

At Risk



MDR1

NN

DD , ND

GENE NAME

CLEAR

AT RISK

Attaway Lord of the Dance has one copy of a variant at the MDR1 gene and is at risk for displaying adverse drug reactions. While he may not be as severely affected as a dog with two copies of the MDR1 drug sensitivity allele, normal dosages of drugs could still have potentially severe effects on Attaway Lord of the Dance. Please inform your veterinarian that Attaway Lord of the Dance carries this variant; it is essential that they know this information before prescribing drugs.

DESCRIPTION

Sensitivity to certain classes of drugs, notably the parasiticide ivermectin, as well as certain gastroprotectant and anti-cancer medications, occurs in dogs with mutations in the MDR1 gene. Symptoms can range from vomiting and diarrhea to lethargy, seizures, or coma. MDR1 mutations are particularly common in herding breeds including Australian Shepherds, Collies, and Border Collies, though many other dog breeds are affected. Please note that the dosage of problem drugs in commercially available heartworm, flea, and tick preventatives should not cause symptoms in MDR1 dogs.

More information

To learn more about this condition, you can visit <http://www.vetstreet.com/dr-marty-becker/multidrug-sensitivity-what-you-need-to-know> (<http://www.vetstreet.com/dr-marty-becker/multidrug-sensitivity-what-you-need-to-know>).

CITATIONS

Mealey et al 2001 (<http://www.ncbi.nlm.nih.gov/pubmed/11692082>), Han et al 2010 (<http://www.ncbi.nlm.nih.gov/pubmed/21113104>), Neff et al 2004 (<https://www.ncbi.nlm.nih.gov/pubmed/15289602>), Barbet et al 2009 (<https://www.ncbi.nlm.nih.gov/pubmed/19171022>), Gramer et al 2011 (<http://www.ncbi.nlm.nih.gov/pubmed/20655253>)