

Platelet Disorder in Greater Swiss Mountain Dogs

A platelet disorder has recently been identified in Greater Swiss Mountain Dogs at the functional and molecular level. The first dog documented to have the disorder bled excessively following a routine spay.

Platelets are small, circulating cytoplasmic fragments that are the first line of defense in stopping the flow of blood from injured blood vessels. An important aspect of platelet function is their ability to stick to each other and plug holes in damaged vessels until blood clotting and tissue repair can occur. The platelets in affected Greater Swiss Mountain dogs are unable to respond properly to a specific platelet activating agent because of a dysfunctional or missing receptor. Therefore, these dogs are at increased risk for spontaneous hemorrhage and they are also at high risk for excessive hemorrhage as a result of injury or surgery. Post operative hemorrhage may be life threatening. The types of spontaneous bleeding that may occur include excessive gingival bleeding during tooth eruption, nose bleeds, and superficial skin bleeds.

By using DNA testing, affected and carrier animals can be identified by submitting a blood sample through the mail. Carrier detection is vital in controlling spread of inherited defects and DNA testing is the only reliable method of detecting these animals.

The sample required for testing for the platelet disorder in Greater Swiss Mountain dogs is a 2 ml EDTA tube (purple top) containing at least 1 ml of whole blood. Care should be taken to not cross contaminate samples during collection, particularly if more than one dog is collected at the same time. Samples should be labeled clearly so that there is no confusion regarding sample identification. Samples should be kept cold (ice packs) and shipped overnight to the address below. Take care to make sure tubes are protected well to prevent breakage during shipping. Please do not ship on Friday or the day before a holiday. The fee for testing is \$100 per sample. **Make checks payable to: Auburn University, Department of Pathobiology.**

Please provide the following information on each dog being tested:

Name and Registration Number _____

Male or Female (Circle one)

Age at time of sampling or Date of Birth _____

Registration Number of Sire _____

Registration Number of Dam _____

I am hereby requesting this sample be tested for the mutation causing an inherited platelet disorder in Greater Swiss Mountain dogs. I understand that my individual test results will only be released to me. I certify that I am the owner of this dog. I understand and agree that the results of this test may be confidentially combined with those of other owners and used in aggregate result form for research purposes including publication. I understand in aggregate result form my individual results will not be identifiable specifically to my dog. I release Dr. Boudreaux and any associates working with her and Auburn University from all liability regarding this sample.

Owner's Signature

Date

Owner's Name (print clearly or type)

Telephone number/Email Address

Address Results should be sent to:

Send samples to: Mary K. Boudreaux, DVM, PhD
Department of Pathobiology
166 Greene Hall
College of Veterinary Medicine
Auburn University, Alabama 36849-5519
(334) 844-2692