

P2Y12 Receptor 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 [1]. 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.

- 1. Boudreaux MK, Martin M. P2Y12 receptor gene mutation associated with postoperative hemorrhage in a Greater Swiss Mountain dog. Vet Clin Pathol 40(2):202-6, 2011.**

Specimen requirements: At least 1ml EDTA whole blood (purple top tube). Do not cross contaminate samples during collection particularly if more than one dog is collected at the same time. Label all specimens clearly. Protect the tubes to prevent breakage during shipping. All methods of shipping are acceptable. Blood samples do not require ice.

Ship to: Hemostasis Laboratory, Peter W. Christopherson
166 Greene Hall
Auburn University, AL 36849-5519

Fee for testing: \$125.00 (payment options listed below)

Make checks payable to: Auburn University, Department of Pathobiology

Credit Card payments accepted by phone: 334-844-2690

Wire transfers: Email chrispw@auburn.edu for wire transfer instructions



Hemostasis Laboratory
 Department of Pathobiology
 Dr. Peter W. Christopherson, DVM, PhD, DACVP
 166 Greene Hall
 Auburn, AL 36849-5519
<http://www.vetmed.auburn.edu/about/dept-of-pathobiology/diagnostic-services/>
 PH: 334-844-2797 Fax: 334-844-2652
 Email: chrispw@auburn.edu

OFFICE USE ONLY	
Accession # _____	
Rec'd _____	Assigned _____

HEMOSTASIS LABORATORY

SAMPLE DATE: _____ AGE AT TIME OF SAMPLING OR DATE OF BIRTH: _____

ANIMAL NAME: _____ BREED: _____ SEX: _____ MALE _____ FEMALE _____

ANIMAL REGISTRATION NUMBER (if applicable): _____

NAME OF SIRE (if applicable): _____

REGISTRATION NUMBER OF SIRE (if applicable): _____

NAME OF DAM (if applicable): _____

REGISTRATION NUMBER OF DAM (if applicable): _____

PERTINENT HISTORY: _____

<p>OWNER'S INFORMATION</p> <p>NAME: _____</p> <p>ADDRESS: _____</p> <p>CITY/TOWN: _____</p> <p>PROVINCE: _____</p> <p>POSTAL CODE: _____</p> <p>COUNTRY: _____</p> <p>PHONE: _____</p>

<p>VETERINARIAN'S INFORMATION (BILLING INFORMATION)</p> <p>REFERRING VETERINARIAN: _____</p> <p>CLINIC: _____</p> <p>ADDRESS: _____</p> <p>CITY/TOWN: _____</p> <p>PROVINCE: _____</p> <p>POSTAL CODE: _____ COUNTRY: _____</p> <p>PHONE: _____ FAX: _____</p> <p>EMAIL: _____</p> <p>FAX RESULTS: _____ EMAIL RESULTS: _____</p>	
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RESULTS (if you would like the results sent to additional emails and/or faxes please list below):

EMAIL 1: _____ FAX 1: _____

EMAIL 2: _____ FAX 2: _____

SPECIMEN REQUIREMENTS: EDTA WHOLE BLOOD (1ML)
 TURNAROUND TIME FOR RESULTS: TYPICALLY 4 TO 5 WORKING DAYS UPON ARRIVAL
 HARD COPIES OF REPORTS AVAILABLE UPON REQUEST