Evaluation of platelet surface-associated antibody binding patterns in canine patients with immune-mediated thrombocytopenia

We are looking at patterns of IgG, IgM, and C3 bound to platelet surface antigens in dogs with primary immune-mediated thrombocytopenia (IMT) in comparison to normal dogs. The ultimate goal (achieved in subsequent studies) is to determine binding patterns specific for primary IMT.

Eligibility:
- Recently performed CBC, chemistry, and urinalysis (with urine culture as deemed indicated by the clinician)
- Significant thrombocytopenia (<50,000/uL PLT)
- Untreated with immunosuppressant therapy (glucocorticoids, purine antagonist, leflunomide, vincristine, cyclosporine), human IV immunoglobulin or doxycycline within the past 48 hours
- Negative for active infection by *Ehrlichia canis*, *Rickettsia rickettsii*, *Anaplasma phagocytophilum*, and *DiroFilaria immitis* as determined by convalescent titers, positive antigen tests, PCR, or 4DX snap test at minimum. Titers will be obtained through use of a reference or university laboratory.
- Thoracic and abdominal imaging (thoracic radiographs, abdominal radiographs, and abdominal ultrasound) to rule out apparent neoplasia or underlying disease that may serve as a trigger for IMT
- No history of exposure to medications and intoxicants associated with triggering IMT
- Absence of a concurrent immune-mediated disorder, unless a previously identified condition was in remission
- Absence of documented consumptive process
- Based at minimum on prothrombin time (PT) and partial thromboplastin time (PTT) within or below 25% above the upper reference range

For all of the above, diagnostic results must be interpreted and a definitive diagnosis of pIMT must be reached by a board certified internal medicine specialist, or a medicine resident under the direct supervision of the specialist.

Cases enrolling in the study must sign an enrollment form consenting to the above work-up. There is no financial incentive except that clients with dogs with <50,000/uL PLT and a reasonable clinician suspicion of primary IMT will receive a free flow cytometry blood test.

**Goal:** To enroll 14 pIMT patients.

**Contact:** Dr. Michael Lane ([mlane15@utk.edu](mailto:mlane15@utk.edu))