Full Title: Evaluation of Immune Response and Antigen Signature of Patients with Babesia Infection in Pennsylvania with the Aim of Developing a Rapid Diagnostic Test

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Study Objectives: The purpose of this study is to gather data for the development of a bedside rapid diagnostic test for the detection of Babesia microti infection. Identify the major antigens that are targets of IgM antibody responses in patients with Babesia at the time of diagnosis and after treatment via proteomic microarrays.

Inclusion Criteria: Patients are eligible to be included in the study if they are capable of providing informed consent, are a male or female at least 18 years of age at the time of consent, and have a confirmed diagnosis of Babesiosis per the CDC case definition of Babesiosis.

Exclusion Criteria: For patients with acute Babesiosis, excluded patients will include:
- Do not meet the CDC criteria for Babesiosis or patients that have negative blood smears or negative PCR at the time of initial blood draw

For our healthy control patients, excluded patients will include:
- History of splenectomy
- History of HIV
- On immunosuppressive medications
- History of liver disease
- History of kidney disease
- History of diabetes

Affiliations & Sponsors: Penn State University, Hershey

Status: Open to enrollment

Keywords: Babesia, babesia microti infection, babesiosis