

**Title:**

Targeting macrophage adhesion molecules in the treatment of feline Cytauxzoonosis

**Investigators:**

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**Study description:**

Cytauxzoonosis is an emerging, highly fatal disease of domestic and wild cats in the South-central, Southeastern, and mid-Atlantic United States. The causative organism, *Cytauxzoon felis*, is a hemoprotozoal parasite proposed to be transmitted to cats by certain species of infected ticks. Most infected cats become acutely ill, with anorexia, lethargy, and fever and do not survive for more than a few weeks. Anti-protozoal drugs that have been tested against *C. felis* have shown inconsistent efficacy in naturally-infected cats, creating an imperative need for other treatment modalities. The purpose of this study is to improve survival and clinical signs in cats infected with the disease through the use of neutralizing antibodies to macrophage adhesion molecules.

To participate in the study, approximately 9 ml blood will be collected from each cat using routine blood collection techniques for use as healthy experimental controls. Real-time polymerase chain reaction (RT-PCR) and enzyme-linked immunosorbent assays (ELISA) will be performed on these samples to determine if differences in mRNA and cytokines between *C. felis*-infected and healthy cats exist. The cost of the blood sample analysis will be paid for by the study.

**Duration of study:**

The study is ongoing and is expected to be completed by August 2010.

**Potential benefits to veterinary medicine:**

If this line of research improves survival and quality of life in *C. felis* infected cats, we will be aiding the veterinary and cat-owning community by providing an alternative treatment option.