Background & Purpose
- Small cell GI lymphoma is commonly diagnosed in older cats and recommended treatment involves the combination of oral chemotherapy drug (chlorambucil) and prednisolone or prednisone. Despite the wide use of chlorambucil in cats, the pharmacokinetic parameters (i.e. how the body absorbs, metabolizes and eliminates the drug) have not been studied in cats. Therefore, the purpose of the study is to comprehend the pharmacokinetics of chlorambucil so we can understand why some cats experience side effects with chlorambucil therapy and determine if variability in the metabolism of chlorambucil contributes to treatment failure.

Participation Requirements
- Cats diagnosed with small cell (low-grade) gastrointestinal (GI) lymphoma, or another form of small cell lymphoma, and you have elected to pursue treatment with chlorambucil with or without an oral steroid medication

Procedures
- Collection of blood and urine samples followed by assignment into one of four groups to determine the blood sampling schedule for Day 0
- Fasting the day before Day 0
- **Day 0**: Blood collection throughout the day, and chlorambucil administration (may require a night of hospitalization depending on which group your cat is in)
- Administration of chlorambucil by the owner every other day for 2 weeks
- **Day 14**: Recheck examination and blood sample collection

Owner Responsibilities
- Keeping all scheduled appointments, including being able to make the 8am Day 0 appointment
- Administering an oral chemotherapy pill to your cat every other day
- Reporting any possible side effects of the drug to your doctor in a timely manner
- Covering chlorambucil prescriptions if needed after the 14-day study period

Benefits
- The study will cover all costs associated with the study, including the blood work and urinalysis required for eligibility and the first 2 weeks of chlorambucil chemotherapy, and up to $500 to treat/manage study-related side effects as long as the treatment occurs at UC Davis.
- Participation in this trial may resolve the clinical signs that have developed secondary to your cat’s small cell lymphoma.