

## *Lanthanum (Catney One®) as a Phosphate Binder for Cats with CKD*

Phosphorus is a substance that builds up in the body due to decreased removal by the kidney. It is increased in patients with chronic kidney disease (CKD) and correlates to severity and progression of disease. Controlling phosphorus using diet and phosphate-binders is an important part of management of CKD. Lanthanum (Catney One®) is a newly available non-aluminum, non-calcium-based phosphate binder. It works by binding phosphorus in the intestinal tract so that it cannot be absorbed in the body and instead it is excreted in the feces, thus decreasing the workload of the kidneys. The purpose of this study is to assess its efficacy to decreased serum phosphorus and increase fecal phosphorus in cats with CKD.

Your cat will need to be in the same fed state for every visit (either fasted or fed). At the time of screening, a complete history of diet and medications will be discussed. Your cat will receive a physical examination and comprehensive laboratory screening to confirm stage of CKD, and exclude other newly diagnosed conditions (eg. hyperthyroidism, hypertension). A small amount of extra blood will also be collected to assess calcium-phosphorus metabolism. In addition, please bring a fecal sample to each visit which will allow us to evaluate the effect of the phosphate binder on fecal phosphorus content.

After confirmation of enrollment, your cat will be entered into the study. Lanthanum (Catney One®) will be administered sprinkled into wet food or cat snack (e.g. Churu) once a day for a total of 8 weeks. The daily dose should be split between all meals fed during the day as the binder needs to be present with the food in the gut in order to bind the phosphorus in the food. Administration should be greater than two hours from the time other medications are given. Your cat will then be rechecked at one month and two months after starting the phosphate binder. Blood, urine and fecal samples will be collected to monitor the effect of the phosphate binder.

**Client Compensation:** Your cat will receive complimentary assessment and management of disease overseen by a board-certified specialist in feline CKD as well as laboratory monitoring and phosphate binder for 8 weeks.

**Potential Medical Benefits:** Control of phosphorus is an important part of the management of feline CKD.

**Potential Medical Risks:** No significant drug-related adverse events have been identified to date with Catney One®, it is not systemically absorbed and stays in the GI tract. Adding the product to the food might affect consumption, so this will be monitored closely and your cat may be removed from the study for its best interest if this is a concern.

### **What qualifies my pet for enrollment?**

**Inclusion Criteria:** Cats with stable IRIS stage 2-4 CKD (serum creatinine  $\geq$  1.6 - 8.0 mg/dL) and high serum phosphorus are potentially eligible to participate. Cats need to have been on a consistent diet for at least one month prior to enrollment. If dietary restriction has been unsuccessful in reaching serum phosphorus goals, the cat is then eligible to enroll to receive the phosphate binder.

**Exclusion Criteria:** Exclusion criteria include other uncontrolled systemic illnesses, complications of CKD such as kidney infection or ureteral obstruction, severe anemia (PCV < 20%), and decompensated CKD requiring hospitalization and intravenous fluid therapy. Other concurrent therapies such as potassium supplementation, anti-hypertensive medications and subcutaneous fluids are acceptable if they were initiated at least 14 days prior to enrollment and are given consistently throughout the study period.

**Diagnosis/Condition Being Studied:** Chronic Kidney Disease

**Intervention to Be Studied:** Phosphate binder

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**If you believe your pet may be eligible for this study, please fill out a pre-screening questionnaire.**

