

## **CLINICAL STUDY: INFORMATION FOR OWNERS**

### **Evaluation of a Liquid Formulation of L-T4 (Leventa<sup>®</sup>) for Treating Hypothyroidism in Cats**

At the Animal Endocrine Clinic, we are enrolling cats for a study to investigate the usefulness of a liquid thyroid hormone medication formulation (Leventa<sup>®</sup> Merck Animal Health; [www.leventa.com](http://www.leventa.com)) for treatment of cats with hypothyroidism (an underactive thyroid condition).

In cats, hypothyroidism can develop after any of the common treatments used for hypothyroidism. It appears that subclinical forms of hypothyroidism may be more common than previously thought and that treating cats may be of benefit to their overall health.

Leventa is a synthetic levothyroxine liquid formulation that may have many advantages over other L-T4 preparations for use in cats. Note that it is approved for use in dogs, but it is not approved for use in cats (but no other L-T4 preparations are approved either!).

- Leventa is readily accepted by most cats (it appears to be tasteless).
- This preparation is most effective when administered twice daily but once daily may be effective in some cats.
- The liquid formulation of Leventa facilitates precise dosing and flexibility.
- Since the concentration of Leventa is quite concentrated, most cats only need a tiny volume (a few drops) twice a day.
- Leventa can either be given orally or placed into the cat's food.
  - However, since L-T4 appears to be absorbed better on an empty stomach, we recommend either administering the Leventa an hour before feeding.
  - If the Leventa must be given with food, then we recommend placing the L-T4 into a small amount of the cat's favorite food (or pill pocket), waiting an hour, and then feeding the remainder of the meal an hour later.

To be eligible to enroll in this study, your cat must be documented as being hypothyroid, based on the results of a complete thyroid panel (serum T4, T3, free T4, and TSH) and then confirmed with thyroid scintigraphy (a thyroid scan is considered the "gold standard" diagnostic technique for thyroid dysfunction).

If accepted into the study, we will do the **thyroid scan and follow-up thyroid panel testing (see below) at no charge** to you (the cat owner) or your veterinarian.

In all cats with documented hypothyroidism, we will supply you with **1 bottle of Leventa at no charge** as part of this study. Each bottle contains 30 ml (30 mg) of L-T4 solution, so a single bottle should be adequate to treat a hypothyroid cat for many weeks to months.

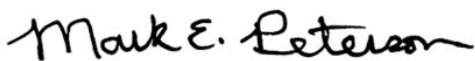
Listed is the protocol we recommend for Leventa (L-T4) dosing, monitoring, and making dose adjustments for your cat:

- The Leventa is best stored in a refrigerator.
- A starting dose rate of 75-100 microgram Leventa per cat is recommended, administered twice daily before each meal.
- The dose can be given either during fasting or with food (see above), but you must be consistent in the method and time of dosing.
- Cats should be reexamined and retested 4 weeks after initiating Leventa. Your appointment with your vet should be made such that the blood testing for a serum chemistry profile and complete serum thyroid panel is done 3-4 hours after the morning dose of the Leventa.
- 
- If your veterinarian uses either Antech or IDEXX labs (the two major veterinary laboratories located in the New York area), we will pay for this lab testing so you will have these **test results at no charge**. We expect that your veterinarian should charge you for a recheck visit (physical exam), as well as a blood draw/medical waste fee, but the serum chemistry profile and complete thyroid panel (a value of approximately \$250) will be done at no cost to you or your veterinarian.
- All of the test results will be forwarded to you and your veterinarian, along with my interpretation. I will help you tailor the dose rate and regime for each individual cat, as needed.
- Further assessment of hormonal responses and dose adjustment should be repeated at 1-3 month intervals, as directed. Again, we will pay for this thyroid hormone testing, so you will have the **test results at no charge**.

Please do not hesitate to call (212-362-2650; 914-864-1631) or email us ([info@animalendocrine.com](mailto:info@animalendocrine.com)) if you have any questions regarding this study.

Thank you for helping us all learn more about this important feline endocrine disorder.

Sincerely,



Mark E. Peterson, DVM, Dip. ACVIM