



**Angell Animal Medical Center**  
**350 S. Huntington Ave., Boston, MA 02130 617-541-5186**  
**Jean M. Duddy, DVM**

**AAMC I-131 PROGRAM: Information for Clients**

**HOW RADIOIODINE (I-131) THERAPY WORKS:**

- Feline hyperthyroidism is caused by spontaneously occurring thyroid masses. Approximately 98% of these nodules are benign (called adenoma) and the condition frequently (70%) involves both lobes of the thyroid gland. Fortunately, the incidence of thyroid malignancy (carcinoma) is rare (1-2%). Both thyroid conditions are treatable with radioiodine (I-131), however the dose we give and the results of therapy are different. The goal in treating benign disease is to destroy only the small thyroid nodule(s), and spare the rest of the thyroid gland. Ideally this should result in normal thyroid hormone levels and correction of weight loss and other clinical signs. Usually, there is no need for daily thyroid medication after I131 treatment. The goal in treating the rarer, thyroid adenocarcinoma is to destroy all the thyroid tissue. After treatment, these patients will need daily thyroid supplementation for life.
- I-131 is radioactive and when injected into the body it is taken up by the thyroid gland. The normal thyroid tissue is relatively “protected” from the effects of the radioiodine because the I-131 is preferentially taken up by abnormal, hyperfunctional tissue. Once the abnormal nodule is destroyed, the remainder of the thyroid tissue performs normally again.
- The success rate of I-131 is approximately 95-98%. A few patients may require an additional treatment with I-131 if they do not return to normal thyroid function within 3-6 months. A small percentage of cats will become hypothyroid (not produce enough thyroid hormone) and if this occurs, may be a temporary problem, or in rare cases such cats may require a daily pill to supplement thyroid hormone.

**ABOUT OUR PROGRAM**

- Your cat will be admitted from the appointment, and will be carefully screened for other disease conditions before being treated with radioiodine treatment. The screening will consist of blood work, urinalysis, radiographs (x-rays), and possibly additional tests such as ultrasound of the heart or abdomen. Occasionally there is a waiting list for scheduling treatment. This should not be a problem as most cats can be managed on medication until their treatment date is scheduled. Priority for treatment is given to those patients who cannot wait; however, this is solely at our discretion.

**COST OF TREATMENT IS \$1,914-\$2,225.00**

- This will vary depending upon tests needing to be done at Angell; a full estimate will be given at the first appointment.

**BEFORE THE TREATMENT**

- Dr. Duddy must examine your cat on or before the scheduled admission date. At that time it will be determined if your cat is suitable for this treatment and any necessary additional testing will be arranged. To schedule please call **(617) 541-5186**.
- If your cat is on antithyroid medication such as Tapazole (methimazole), this **must be discontinued at least one week before your cat’s scheduled admission date for**

**treatment. If your cat is on Hill's prescription Y/D diet, that will need to be discontinued at least 2 weeks prior to coming in for I-131 treatment. You will need to speak with your vet about discontinuing Tapazole or Y/d, as other medications may be recommended.**

- **Please discontinue all supplements one week prior to your appointment.**

#### **I-131 TREATMENT**

- Length of hospitalization varies from 4-6 days to approximately two weeks. Initially a special imaging study called a thyroid scan will be performed to help us determine the appropriate dose of I-131 and to ensure that the treatment is appropriate for your cat. Once the I-131 treatment is administered (by injection) your cat cannot be released any earlier than 3 days post-treatment under any circumstances. No visitation is permitted due to radiation safety concerns, but you can call in daily for a report on your pet.
- The I-131 ward is a limited access ward staffed by personnel trained to work with radioactive materials. The ward has a high flow ventilation system to avoid spread of respiratory infections. Your cat will be in a comfortable cage away from noise and dogs, and will be fed twice daily. If there is a special diet that you would like us to feed, please let us know. You may leave a favorite toy or blanket with us for your cat. **However, please understand that such items cannot be returned to you after your cat goes home because they become contaminated with I-131.**

#### **AFTER I-131 TREATMENT**

- AAMC offers the flexibility of variable release dates. We recommend that your cat stay at least 1 week post administration of the isotope, but our license does permit release on the 4<sup>th</sup> day after treatment provided that your cat's radiation level is below the allowable limit. The nuclear medicine technician will confirm that your cat is ready to go home with the client liaison office. **After you take your cat home, there will be a two-week period of limited contact that you will need to observe.** The details are clearly outlined in the "Safety Precautions Following I-131 Hyperthyroid Therapy" release form (which you will have opportunity to read and discuss before your cat is admitted for treatment). If you feel that you cannot comply with the restrictions, we can arrange to board your pet at Angell instead at no additional cost.
- After the additional two-week restriction period, you and your cat can resume your normal lifestyle. If successful, the treatment usually results in permanent correction of the hyperthyroid state.

#### **SCHEDULING AND INFORMATION**

- To schedule I-131 treatment, to make an appointment with Dr. Duddy, or for more information on our program please contact **the scheduling office at (617) 541-5186.**
- You may also email us at [i131@angell.org](mailto:i131@angell.org) or call our main number (617) 522-7282.

#### **ADDITIONAL READING**

- For more information:
  - “About Hyperthyroidism”
  - “I-131 Admissions Information”
  - “Safety Precautions Following I-131 Hyperthyroid Therapy”
- Web site information (general) can be found at [www.marvistavet.com](http://www.marvistavet.com)

## **Angell Animal Medical Center**

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## **I-131 Admissions Information**

Your cat has just been admitted to the I-131 program here at Angell Animal Medical Center. This document will give you some information on what to expect during treatment.

**Monday/Tuesday:** We will admit your cat from the appointment on Monday. Blood screening is done to be sure nothing has changed since your veterinarian did the tests. Also 2 x-rays are taken if your referring veterinarian did not provide them. We are trying to make sure your cat is as healthy as possible. If any significant abnormalities arise with these tests, I will call to discuss if further testing is suggested etc. If we need to get further tests we do those on Tuesday.

**Wednesday:** A technetium 99m thyroid scan is done to determine if one or both lobes of the thyroid gland are involved. If your cat is too difficult to handle, a tranquilizer may be given, however this is rare. After all the information has been gathered, the dose of radioactive iodine (I-131) is determined and then administered as one injection.

From this point on, your cat is boarding here as the amount of radiation decreases. All we expect is for your cat to relax and eat. As we discussed, we try to provide all the comforts of home and we try to feed their normal diet. You can bring in a specific type of food. You can also drop off a cassette tape of your voice, and we will play it for your cat. If your cat has any music preferences for our radio, let me know!

While your cat is here during the treatment, full physical exams are not done daily due to radiation exposure and this is a locked ward. All cats are observed at least three times daily and all appetite, bowel movements, etc are recorded. If you have any questions about this please feel free to ask.

I will make arrangements to talk to you directly every 2-3 days. In addition, there is a daily written report available after 10:30am. You can call our main number (617) 522-7282 for this update.

### ***Discharge and Home Restrictions***

- At the time of discharge we will give you a safety precaution instruction sheet just like the one you were given at admission. At this time the form will document the dose of isotope given and specific dates indicating the duration of home restrictions. You will need to sign this form prior to release of your cat.
- **It is imperative that you follow the restrictions as indicated both for your own safety and to avoid problems at your local trash processing facility.** If you dispose of any contaminated litter in your trash can during the 2-week restriction period, radiation monitors at the trash disposal facility will likely detect it. This has resulted in costly expenditures of labor for cities and towns necessitated by isolating and analyzing the radioactive materials. Should the radioactive trash be traced back to you, it could result in substantial financial liability.

We will call you on the day your cat is ready to go home. We do allow a 48-hour grace period for picking up your cat before boarding charges begin. Boarding charges do not begin until 48 hours after your cat's full restriction period is over. If you are planning to board your cat beyond this time, please let us know. The financial office can give you exact charges per day. If your cat remains hospitalized until all the litter restrictions are up (1.0mR/hour at 6 inches from the thyroid- approximately 10 days) there would be no

litter flushing restrictions. This was our original release limit and is still what we would recommend for maximum safety.

Hours for discharge are: **Mon – Fri 9:30AM – 12PM, and 1PM – 4:30PM**

**Sat & Sun 10AM – 12PM, and 1PM – 4PM**

**\*\*Please note, no discharges are done between Noon and 1PM**

**\*\*No exceptions unless prior arrangements have been made with Dr Duddy**

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### **I-131 Discharge Kit Information**

If you are taking your cat home prior to 17 days post isotope administration, or if the cat's radiation levels are above 1mR/hour at 6 inches, you will need to get the following items:

1. **Flushable litter** – Check local pet supply stores for availability prior to release

Brands include: *World's Best Litter*  
*Safe to Flush*  
*Yesterday's News*  
*Premium Choice*  
*Katgo*  
*Cat Country*

2. **Plastic (rubber) gloves**
3. **Plastic bag** (to line a container where you will need to store items for 3 months before disposal)

### **Safety Precautions Following I-131 Hyperthyroid Therapy**

Your cat received \_\_\_\_\_ millicuries of radioactive iodine (I-131) on \_\_\_\_\_. After receiving <sup>131</sup>I therapy, your cat will contain residual radioactivity which is excreted primarily via urine and feces. To justify early release of your cat, you must agree to follow these **safety precautions for 2 weeks** or as otherwise indicated.

1. Use a plastic liner in the litter box before adding litter, or use a box that will be dedicated to this 2-week period and then isolated for 3 months before disposal. Keep the box out of occupied bedrooms, kitchen, and away from unsupervised animals and children. Wear dedicated rubber gloves when removing soiled litter from box (use gloves only for this purpose; segregate for future use).
2. Use **flushable litter only** in box. For the 2-week period, dispose of soiled litter into toilet and flush. **(Do not discard litter via normal trash for this 2-week period).**
3. If your cat vomits or soils outside the litter box, wear your special gloves and use normal cleaning procedures with toilet paper or flushable tissue. Flush all such waste in the toilet.
4. **Pregnant woman or persons less than 18 years old** should not change the soiled litter or clean up such spills. These people should not hold the cat or allow the cat to sit in their lap for the 2 weeks. They should avoid prolonged contact (i.e.: stroke the cat for 5 min., no longer than 20 minutes total per day). They should wash their hands anytime they touch the cat and especially before eating.
5. **All other persons** should also avoid prolonged face-to-face contact with the cat or hand contact with your cat's saliva and footpads. Keep your cat isolated at night, out of your bedroom. You may hold, pet and stroke your cat for short periods (e.g. pet and stroke for 5 minutes, no more than a total of 20 minutes per day; hold for no more than 1 minute, no more than 5 minutes per day). **Wash your hands after each time you handle your cat.** Wear your gloves to administer pills to the cat, if needed.
6. Keep your cat **away from food preparation areas** and your dinner plate. If your cat can gain access to kitchen countertops, be sure to wash them thoroughly before food preparation.
7. **Do not let your cat out.** This is to avoid spread of radioactive excreta outside.

If medical attention is required during these 2 weeks, return to Angell Memorial. If this is not possible, inform other veterinary hospital personnel of the radioactive iodine that your pet has received, show them this form and notify Dr. Duddy.

After 2 weeks, your cat will have essentially lost all radioactivity and you may return to your normal routine. **Segregate any remaining soiled materials and your gloves in a secure area for 3 months, and then discard in normal trash.**

**If you encounter any problems, please call Dr. Duddy at Angell Animal Medical Center at (617) 522-7282.**

**I understand and agree to follow the safety precautions listed above.**

**Sign:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Release Date:** \_\_\_\_\_ **Restrictions end:** \_\_\_\_\_