

# I-131 information for Vets



# I-131

Is the gold standard treatment for most cats with hyperthyroidism.

## What's involved?

Cats being referred for radioiodine, will initially be booked in for a consultation with a medicine vet to assess their suitability for I-131 treatment. It is not uncommon for cats with hyperthyroidism, to have concurrent disease that preclude them from this treatment.

## What needs to be done before the initial appointment at WAVES?

- Cats need to be confirmed as hyperthyroid based on a total thyroxine (T4) concentration above the laboratory reference range at an external laboratory. Free T4 measurements can be high in normal cats and therefore might be misleading and likewise In-house tests for T4 can also be unreliable.
- Cats should have full bloods (CBC and biochemistry) and simultaneously obtained urinalysis and culture at a reference laboratory in the preceding month. This is to assess for

possible concurrent disease and assess for renal disease. This can be performed at WAVES at the initial consultation if it has not been performed already.

- If you have concerns about suitability of a patient for radioiodine, you are welcome to contact us to discuss prior to referral.

## What happens after the initial consultation?

Once the cat is assessed as being a suitable candidate, an appointment for admission for the I-131 treatment is made. Admission into the unit is on Mondays.

- Three weeks prior to this admission date, the owner must stop any thyroid medication or y/d diet.
- One week prior to the admission date the cat must present to WAVES for a total T4 measurement at a reference laboratory (as in house bloods are not suitable). It is critical for

this to happen on the correct date to allow us accurately calculate a dose of I-131 for the cat..

- 5 days prior to treatment the I-131 is ordered.
- If the owner lives in regional WA, please call us to discuss T4 testing before treatment.

### **What happens when the cat is admitted?**

On the day of admission, the patient will be reassessed. Maropitant will be administered and gabapentin if required. A single dose of radioactive iodine (I-131) is given in a capsule form by mouth. Cats must stay with us in an isolation facility for 5 days after the dosing. They are checked, fed, watered and have their litter changed daily. In between they are monitored by webcam.

### **How does I-131 work?**

The radioiodine is concentrated in the thyroid gland where it emits beta-radiation, destroying the surrounding hyper-functioning cells. I-131 also emits gamma radiation. Parathyroid gland function is unaffected. The iodine that is not concentrated in the thyroid gland is very rapidly eliminated in the urine, saliva and sweat in the first couple of days following treatment. The remainder is slowly eliminated with thyroid hormone turnover, which is excreted in the urine and due to decay of the isotope..

### **What happens after discharge?**

After the mandatory 5-day hospitalisation, the cat is discharged into the owner's care. The cat must be kept indoors and have minimal handling for 2 weeks after treatment and should have no contact with pregnant owners or children. The owner will be given full instructions at the time of discharge.

### **Why choose WAVES for my patient's I-131 treatment?**

The assessment and treatment of your cat will be overseen by one of WAVES Internal Medicine Specialists, in a state-of-the-art radioiodine treatment facility. WAVES is the only Radioactive iodine unit for cats that is run by specialists in internal medicine.

### **What are the side effects?**

- There are virtually no reported side effects of treatment. The overwhelming majority of cats (95%) are cured by a single treatment with only a small percentage of cats requiring additional radioiodine therapy. Hypothyroidism that requires treatment, can occur in about 2% of cats, these cats either develop clinical signs of hypothyroidism or have developed concurrent kidney disease.
- Treatment of hyperthyroidism can unmask chronic kidney disease or worsen chronic kidney disease that is already evident on blood work. Cats are thoroughly screened prior to treatment and radioiodine is not recommended in patients with evidence of advanced kidney disease.
- Many cats in the age range that cats develop hyperthyroidism, also develop other diseases. We do our best to screen patients prior to admission so that cats are not treated if they have significant other disease.
- Recurrence of hyperthyroidism following successful treatment may affect approximately 2% of cases with a mean interval of 3 years.

### **Which cats aren't suitable for treatment?**

Not all cats are suitable for radioiodine treatment. Cats with certain other diseases may either become worse with correction of hyperthyroidism or are unable to undergo the treatment process. An example for diseases that are likely to worsen with correction of hyperthyroidism is chronic renal disease (see above). If severe, I-131 treatment is not recommended in these cats. Patients with diseases such as diabetes mellitus or advanced heart disease requiring daily medications are not suitable candidates for I-131 treatment as no direct contact between cat and attending staff (ie administration of drugs) is allowed during hospitalization. Therefore, we do not accept cats that are known to have other serious concurrent problems..

### **How successful is it?**

A single radioactive iodine treatment is successful in about 95% of cats.

## What follow-up appointments are required?

Follow up examination including clinical examination, blood pressure assessment and blood tests are required at 6 weeks and 3 months after treatment to check renal function and thyroid hormone concentrations. A further check at 6 months may also be required. These rechecks can occur at WAVES or at your clinic. If follow up is performed at your clinic, our specialists can discuss these results and collaborate with you to advise on any necessary follow up that might be necessary. If you need us to discuss ongoing management with the owner, they will need to come in for a recheck at WAVES.

## What does it cost?

The initial consultation to assess cats' suitability for treatment is \$250. This is for up to an hour consultation with a medic. It does not include cost of any additional diagnostic tests indicated or bloods/ urine if these have not already been performed. The current cost of radioiodine treatment is \$ 2750 including GST. Three weeks prior to the appointment for treatment, your

client will be contacted to confirm and finalise instructions and they will be required to pay a deposit of \$1000 which will be non-refundable unless a cancellation is made more than one week before the admission date.

## My client has questions, where can I direct them?

Please direct owners to our website for further information. They can also be booked in for a consult to discuss the treatment.

Call WAVES  
on 94125700  
or email  
[medicine@wavets.com.au](mailto:medicine@wavets.com.au)  
if you have any questions!

Prior to initial appointment
Bloods confirming diagnosis with a high total T4 at external laboratory
Full CBC, biochemistry, and urinalysis / culture at external laboratory, within the last 4 weeks This can be done at the initial appointment if not already performed
Send full history and lab results to WAVES prior to consultation
Prior to admission for I-131
3 weeks prior to admission stop methimazole/ carbimazole/ Hills y/d
1 week prior to admission blood test for TT4 taken at WAVES
5 days prior to admission I-131 is ordered for cat
Day of admission, cat is fasted overnight

