**The Importance of a Methimazole Trial and Assessing Renal/Kidney Function Prior to Treatment**

Your regular veterinarian may recommend a Methimazole trial before we treat with I-131. The reason for this recommendation is that the medication will return your pet’s thyroid hormone values to normal range, which will then give us an idea of your pet’s true kidney function when not in the hyperthyroid state.

One of the effects of thyroid hormone is to increase blood pressure, which is especially felt in the kidneys. Even in cats with a normal blood pressure, increased blood flow (i.e. renal hypertension) is almost always present in the hyperthyroid state. The result of this sustained increase in renal/kidney blood flow is an artificial decrease in the kidney values (BUN and Creatinine) assessed on blood work. This means we cannot adequately assess your cat’s true kidney function when excess thyroid hormone is present. By returning the thyroid levels to normal, elevated blood pressure is resolved and actual kidney function can be better assessed. If your pet’s kidney values remain in the normal range while on Methimazole, or even if they reveal an elevation which is IRIS Stage 2 CKD/CRF (ie: kidney “failure) or below, your cat will likely do well with radioiodine treatment. That is, the underlying kidney disease present will not alter your cat’s prognosis and returning the cat to a euthyroid state with be beneficial to longevity.

Cats that are unable to take methimazole due to unacceptable side effects are a special issue regarding candidacy for I-131 treatment. The decision to proceed with treatment in these cases is based on past lab work prior to hyperthyroid diagnosis. These cats are considered higher risk overall because the kidney function cannot be assessed prior to therapy and so pre-treatment prognosis is more difficult to assess. However, cats that have NOMRAL kidney values (especially those with low-normal BUN and Creatinine) at the time of diagnosis likely do not pose a special risk, as statistically the kidney function will not progress past Stage 2 CKD/CRF). Cats that have kidney function in this range, for the most part, do not have a change in either the quality of life or life expectancy, and so return to the normal thyroid state will be a health benefit to the patient.