#### **Radiographic findings of the thorax:**

Right and left lateral and ventrodorsal views are provided for interpretation. There are multiple variably sizes well-defined soft tissue nodules throughout the lung fields. Pulmonary nodules measure in size from 3mm to 7mm. There is rounding of the caudal margin of the heart in the lateral projections. There is a soft tissue bulge at the caudal dorsal aspect of the cardiac silhouette consistent with left atrial enlargement. There is bowing of the caudal lobe stem bronchi in the ventrodorsal view. Pulmonary vessels are normal. There is rounding of the caudal ventral liver margin. There is a small amount of ventral new bone production at the cranial lumbar spine.

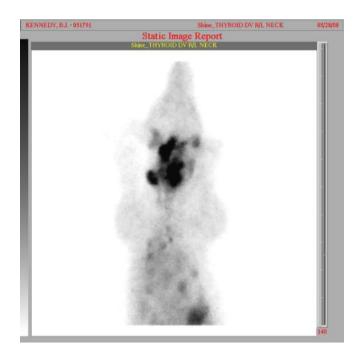
# Radiographic Impressions:

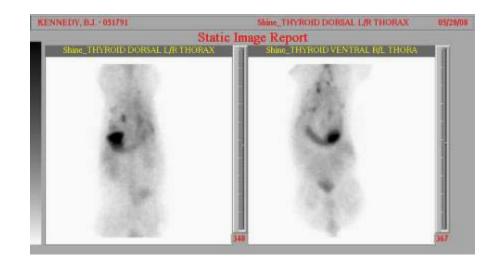
- 1. Pulmonary metastatic disease.
- 2. Left-sided heart enlargement, rule out mitral valvular insufficiency, echocardiography is recommended for further evaluation if clinically indicated.
- 3. Hepatomegaly: hepatopathy secondary to chronic Phenobarbital administration, nodular regeneration, neoplasia, metabolic/endocrine disease, an infectious/inflammatory disease.

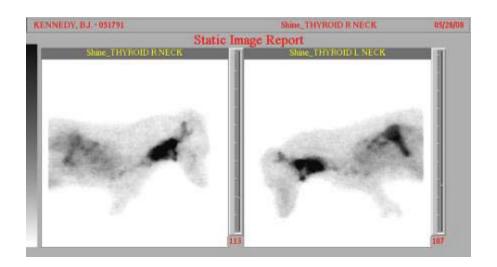
# Next step

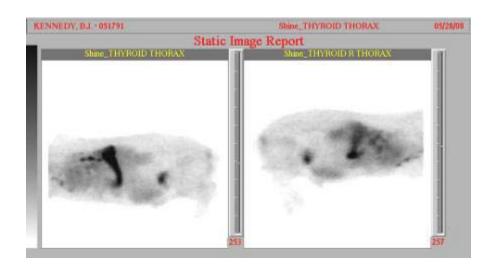
- o Treat with one dose Carboplatin- Due to metastases into thorax...
- o Technetium scan- evaluate responsiveness of mass to I131.

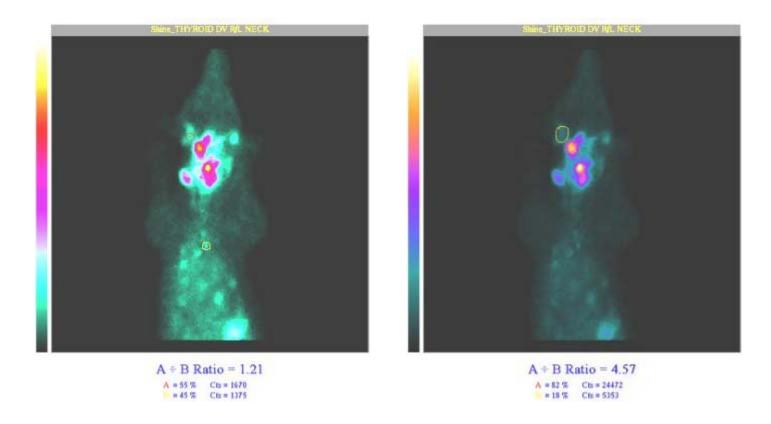
### **Technetium Scan Interpretation**











# **Nuclear Medicine Study Findings:**

### Thyroid Glands:

Static images were acquired after the intravenous administration of 148 MBq (4mCi) 0f 99m-technetium pertechnetate. There are irregular, multifocal, poorly defined areas of radiopharmaceutical uptake involving the ventral midline cervical soft tissues. There is extension of radiopharmaceutical uptake into the cranial cervical soft tissues. Normal thyroid glands are not identified. There is also increased radiopharmaceutical uptake in the left parotid salivary gland with a left to right parotid salivary gland ratio of 1.37:1. On evaluation of the thorax, there are multifocal areas of pulmonary radioactivity that have variable intensity.

### Scintigraphic Impressions:

- 1. Thyroidal neoplastic mass(es) with extension into the cranial cervical soft tissues.
- 2. Multifocal pulmonary metastases.

# Follow Up

- o Treated with radioactive I131 therapy.
- o Total T4 decreased so thyroid hormone supplementation was sent home.