**Background**
- Mammary tumors are malignant in approximately 50% of cases.
- Early spay significantly decreases the risk of developing mammary tumors and the mortality associated with them.
- Contraceptives increase the risk of benign tumors.
- Rare in males.

**Clinical Signs**
- Mass in or near a mammary gland.
- Typically, subcutaneous and painless; sometimes ulcerated and painful.

**Diagnosis**
- Cytology can be used to rule out other skin or subcutaneous tumors or non-neoplastic lesions.
- Histology required for definitive diagnosis.

**Staging**
- 3-view thoracic radiographs.
- Fine needle aspirate of enlarged lymph nodes.
- Abdominal ultrasound or a total body CT scan (for staging/planning).

**Treatment**
- Surgery (nodulectomy, regional or ipsilateral mastectomy, depending on the size, number and distribution in the mammary chain).
- Potentially use adjuvant chemotherapy (carboplatin- or doxorubicin-based protocols) if high grade, if lymph node metastasis, and/or with lymphatic or vascular invasion.
- Potentially, metronomic chemotherapeutic protocols (cyclophosphamide plus Cox-2 inhibitors).

**Negative Prognostic Factors**
- Tumor (> 3 cm), distant or lymph node metastases, lymphatic and vascular invasion; high histological grade.

**Prognosis**
- Depends on clinical stage and grade. Smaller tumors without metastasis can often be cured by surgery alone.