TABLE 1.2
Common Cancers of Cats

Tumor Type *[Common Primary Anatomic Locations]*	**Behavior**	**Staging Tests**	**Treatment Options**	**Prognosis**	**Known Negative Prognostic Factors**
Lymphoma **[Mediastinum, gastrointestinal, liver, spleen, kidney]**	• Considered a systemic disease except for rare solitary sites (e.g., nasal or skin lymphoma, which can be localized). Some forms may be indolent and slow to progress (e.g., spleen, lymph node, small cell lymphoma).	• FeLV/FIV testing • 3-view thoracic radiographs • AUS • Advanced imaging (CT/MRI if suspected CNS involvement) • Immunophenotype not critical in feline lymphoma	• Prednisolone alone • Prednisolone/ chlorambucil (low-grade GI) • Single-agent chemotherapy: CCNU (lomustine) • Multiagent chemotherapy: COP (cyclophosphamide, vincristine, prednisolone), CHOP (cyclophosphamide, doxorubicin, vincristine, prednisolone) • RT	Prednisolone alone: • MST ~2–3 mo • Single agents: highly variable response and durability but MST ~4–6 mo CHOP protocols: • MST ~6–9 mo • Nasal lymphoma may have >2 yr controls with RT • Low-grade GI 8 mo to >2 yr	• FeLV+ • Grade/large cell • Stage • Substage b; most cats are b
Mammary gland cancer	• Incidence of feline mammary tumors is dependent on when OVH is performed. Cats who undergo OVH prior to 6 months of age have a 91% reduced risk of developing mammary cancer. • Locally aggressive. • Highly metastatic (80–90% to nodes, liver, lungs).	• 3-view thoracic radiographs • AUS • Regional LN FNA (even if normal size) • CT/MRI for surgical planning	Primary tumor • Surgery if possible. Unilateral radical mastectomy with regional node removal or staged bilateral radical mastectomy with 1 mo between sides (simultaneous bilateral not recommended) Systemic therapy • Chemotherapy value uncertain (doxorubicin, carboplatin, toceranib) • NSAIDs	• Guarded to poor prognosis. • Tumor size: <2 cm MST >3 years • Tumor size: >3 cm MST 4-12 mo • Surgery +/- chemotherapy: MST ~1 yr	• Tumor size >3cm • Lymphatic invasion • Higher clinical stage • High histologic grade • HER2 expression

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TABLE 1.2, CONTINUED
Common Cancers of Cats

Tumor Type *[Common Primary Anatomic Locations]*	**Behavior**	**Staging Tests**	**Treatment Options**	**Prognosis**	**Known Negative Prognostic Factors**
Squamous cell carcinoma **[Oral (mandible, maxilla, sublingual, gingival), retrobulbar, oropharynx, cutaneous, nasal planum, ear pinna, multifocal cutaneous in situ (Bowens)]**	• Locally aggressive. • Low metastatic rate. • Oral tends to be extremely aggressive. • Cutaneous is often slowly progressive.	• 3-view thoracic radiographs vs thoracic CT • Regional LN aspirate (even if normal size) • Biopsy • CT scan vs skull/oral radiographs • CT/MRI for surgical or RT planning	Oral primary tumor • Surgery if possible (small rostral lesions, but variable outcomes with eating). • Adjuvant RT if resection is known or suspected to be incomplete. • Primary RT (palliative or curative intent) provides poor local control for unresectable disease even if combined with chemotherapy. Systemic treatment (unproven survival benefit) • Carboplatin • Mitoxantrone • Toceranib phosphate • NSAIDs • Metronomic chemotherapy • Bisphosphonates (zoledronate, pamidronate and others) may help with bone integrity. Cutaneous primary tumor • Surgery, if possible, provides the best chance for cure. • Adjuvant RT if resection is known or suspected to be incomplete. • Strontium (for very superficial lesions). • Photodynamic therapy, electrochemotherapy are local options. • Topical imiquimod for early superficial lesions.	Oral • MST ~ 3–6 mo Cutaneous • Outcome associated with stage. • Early superficial lesions can be cured. • Bulky invasive lesions often cannot be surgically removed, rendering RT outcomes much more guarded.	• Oral location • Stage • Invasion beyond basement membrane (cutaneous)

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TABLE 1.2, CONTINUED
Common Cancers of Cats

Tumor Type *[Common Primary Anatomic Locations]*	Behavior	Staging Tests	Treatment Options	Prognosis	Known Negative Prognostic Factors
Soft tissue sarcomas (including injection site sarcoma) **[Cutaneous and subcutaneous tissue, interscapular, hind limb, flank]**	• Locally aggressive, especially injection site, with high (>50%) local recurrence. • Non-injection site sarcoma is less aggressive and location and grade dependent. Metastatic rate is <10% for low grade, non–injection site. • Metastatic rate >25% for high grade and/or injection-site sarcoma.	• CT/MRI for surgical and RT planning • Biopsy • +/- 3-view thoracic radiographs and AUS	Primary tumor • Surgery, if possible, is the initial treatment of choice. Preoperative radiation should be considered if gross disease is in a complex anatomic location. Adjuvant RT if resection is known or suspected to be incomplete. • Primary RT alone provides poor local control for unresectable disease but can provide palliation of signs. Systemic treatment • Doxorubicin • Carboplatin • NSAIDs • Metronomic chemotherapy	Injection site sarcoma • Median DFI <12 mo for wide surgery alone, even shorter for larger, more marginally excised tumors. Surgical cures possible with radical surgery (amputation or hemipelvectomy). • MST 1–2 yr with surgery and RT (pre- or postoperative) or surgery and doxorubicin.	• Injection-site location • Size ≥2 cm • Mitotic index >6 • Incomplete surgical excision • Malignant fibrous histiocytoma histology
Nasal tumors **[lymphoma, carcinoma, adenocarcinoma]**	• Local invasion/ destruction with risk for regional and distant metastasis.	• FeLV/FIV testing • 3-view thoracic radiographs • AUS • CT/MRI • Biopsy	• RT • CCNU (lomustine), COP or CHOP for lymphoma • NSAID/carboplatin for carcinoma	• MST 1–2 yr or normal lifespan for lymphoma • MST ~6–15 mo for carcinoma/ adenocarcinoma	• Clinical stage
Mast cell tumor **[Visceral, cutaneous (head, neck, trunk, limbs)]**	Intestine • Aggressive with metastasis to mesenteric LN and liver ± spleen, lung, and bone marrow. Visceral organ • Reported in ~20% of cats with cutaneous MCT.[a,b,c] Skin • Mastocytic: generally benign.	• AUS • FNA • Biopsy	• Surgery +/- chemotherapy with anecdotal efficacy • Medical therapy alone (lomustine, toceranib) associated with response rates >50%	Intestine • MST ~6 mo (one study has reported median survival times of 17+ months)[d] Spleen • MST ~ 1-2 yr Skin • Generally benign with excellent prognosis	• Clinical stage • Histologic grade • Anorexia • Weight loss

AUS, abdominal ultrasound; CNS, central nervous system; CT, computed tomography; DFI, disease-free interval; FeLV, feline leukemia virus; FIV, feline immunodeficiency virus; FNA, fine needle aspirate; MST, median survival time; NSAID, nonsteroidal anti-inflammatory drug; OVH, ovariohysterectomy; RT, radiation therapy.

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b Henry C, Herrera C. Mast cell tumors in cats: Clinical update and possible new treatment avenues. *Journal of Feline Medicine and Surgery*. 2012;15(1):41–7.

c Dobromylskyj M. Feline cutaneous mast cell tumours; where are we now with prognostication? CVE Control & Therapy Series. 2016;284:45–9. Available at https://www.researchgate.net/profile/Melanie-Dobromylskyj/publication/312121164_Feline_cutaneous_mast_cell_tumours_-_where_are_we_now_with_prognostication/links/587006d008aebf17d3a9c2ed/Feline-cutaneous-mast-cell-tumours-where-are-we-now-with-prognostication.pdf. Accessed July 23, 2025.

d Barrett LE, Skorupski K, Brown DC, et al. Outcome following treatment of feline gastrointestinal mast cell tumours. *Vet Comp Oncol*. 2018;16(2):188–93.