

**TABLE 3.3**  
**Overview of Cytologic Versus Histopathologic Examination**

	Cytologic Examination	Histopathologic Examination
Sampling	Minimally invasive, often requires no sedation or anesthesia	Curative-intent surgery vs several incisional biopsy options (e.g., needle core, punch, wedge)
Results turnaround time	0–2 days	3–7 days
Information provided	<ul style="list-style-type: none"> <li>• Epithelial, mesenchymal, or round cell appearance</li> <li>• Benign vs malignant</li> </ul>	<ul style="list-style-type: none"> <li>• Specific tumor histology in most cases</li> <li>• Benign vs malignant with higher confidence than cytology</li> <li>• Width of surgical margins</li> <li>• Tumor grade +/- other prognostic factors (if relevant for that specific tumor type)</li> </ul>
Allows grading	No (rare exceptions for cytologic grading schemes)	Yes
Allows determination of tumor type	Commonly allows determination of tumor category (e.g., round cell, epithelial, and mesenchymal) and sometimes allows a specific diagnosis	Nearly all tumors (special stains or immunohistochemistry may be required)

**The 2026 AAHA Oncology Guidelines for Dogs and Cats are available at [aaha.org/oncology-guidelines](https://aaha.org/oncology-guidelines).**

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