

# ANTECH

JOHNSON VET SERVICES

Received 04/19/2024  
Reported 04/24/2024 10:25 AM

Doctor JOHNSON

Owner	Pet Name	Species	Breed	Sex	Pet Age	Chart#
		Canine	Boxer	CM	5Y	
Test Requested	Results	Reference Range	Units			
Histopathology						

Right pectoralis. Right "chest" over collarbone, fairly acute onset, had an angry surface at first. Lots of subcutaneous "changes" (friable almost crumbly "fat", so I dug deeper). You will not have clean margins, I bet.

Received: A 2.5 cm x 2.3 cm skin biopsy, with a 1.2 cm x 1.0 cm mass.

**MICROSCOPIC FINDINGS:**

GRADE 2/LOW-GRADE MAST CELL TUMOR

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High / Low Grade: LOW

Patnaik grade: 2

Mitotic count: 3 in 10 HPF(2.37 mm<sup>2</sup>)

Angiolymphatic invasion: NO

Histologic Margins: Extends to tissue edges

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**COMMENTS:**

This neoplasm is a grade 2/low-grade mast cell tumor. The median survival time for low-grade mast cell tumors (MI<7) in the 2-tiered system is greater than 2 years (3). A recent study shows no association between histologic clean margin width and local recurrence of canine mast cell tumors. Twenty-nine percent of low-grade tumors had histologic margins of less than 3mm and none recurred. Narrow histologic margins (</=3 mm) are likely adequate to prevent local recurrence of low-grade tumors (4).

**MICROSCOPIC DESCRIPTION:**

The neoplasm is within the dermis and extends into the subcutaneous tissue. The neoplastic cells are round with distinct cell borders, a moderate amount of basophilic granular cytoplasm, and round central nuclei. There is mild nuclear and cellular pleomorphism and the mitotic index is 3 (MI = mitoses per 10 consecutive high power fields). Admixed are numerous eosinophils and sclerotic collagen. The neoplasm extends to tissue edges.

**References:**

(1)Romansik EM, et al. Mitotic Index Is Predictive for Survival for

Accession No.	Doctor	Owner	Pet Name
	JOHNSON		

Test Requested	Results	Reference Range	Units
Canine Cutaneous Mast Cell Tumors. Veterinary Pathology 44:335-341 (2007).			

(2) Patnaik et al. Canine Cutaneous Mast Cell Tumor: Morphologic Grading and Survival Time in 83 Dogs. Vet Path. 21:469 - 474, 1984.

(3) Kiupel M, et al. Proposal of a 2-Tier Histologic Grading System for Canine Cutaneous Mast Cell Tumors to More Accurately Predict Biological Behavior. Veterinary Pathology 48(1) 147-155 (2011).

(4) Donnelly et al. Evaluation of histological grade and histologically tumour-free margins as predictors of local recurrence in completely excised canine mast cell tumours. Veterinary Comparative Oncology 2015 Mar;13(1):70-6.

**PATHOLOGIST:**

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Available during regular business hours (Pacific Time Zone),  
 Sunday--Wednesday. If I am unavailable and you need immediate  
 assistance

**VETERINARIANS ONLY:** Questions or concerns? Please contact your  
 pathologist directly (see signature for hours and contact  
 information). For non-pathology questions such as clinical advice and  
 treatment options, Antech provides free consultations with  
 board-certified specialists, available through Client Services  
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