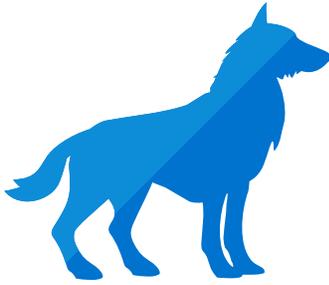# COAST *Canine OsteoArthritis Staging Tool*

Canine osteoarthritis (OA) often goes unnoticed. Subtle changes in your patients' behavior can be warning signs for OA. COAST can help you recognize and treat canine OA from its earliest diagnosed stages to keep your patients comfortable and active throughout their lives.

Summary

- Grading is performed by obtaining both pet owner and veterinarian/veterinary staff evaluations of the patient as indicated.

- For pet owner input, use of a validated Clinical Metrology Instrument (CMI) is recommended by the COAST Development Group. Examples of CMIs include:

    - Liverpool Osteoarthritis in Dogs Index (LOAD)

    - Canine Brief Pain Inventory (CBPI)

    - Helsinki Chronic Pain Index (HCPI-E2)

- Pre-clinical dogs (Stage 0-1) are differentiated by the presence of OA risk factors: breed, intense activity, joint injury or surgery, excess body weight and age.[1]

Instructions

- The highest input for "Grade the Dog" and "Grade the Joint" will determine the overall grade for that section.

- The highest grade from evaluating the dog or the joint equates to the patient's final COAST stage.

- Re-evaluate if there is a disparity of two or more grades between the dog and joint results.

Please contact your local Elanco representative for further information about in-clinic tools designed to support and simplify the use of COAST in the veterinary clinic.

COAST Development Group

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1. Cachon T, Frykman O, Innes J, et al. Face validity of a proposed tool for staging canine osteoarthritis: Canine OsteoArthritis Staging Tool (COAST). Vet J. 2018;235:1-8.

NAME _____ DATE _____

Grade the Dog

	Not Clinically Affected 0	Mildly Affected 1-10	Moderately Affected 11-20	Severely Affected 21+
Clinical Metrology Instrument (CMI)	○	○	○	○

	None	Low	Moderate	High
Degree of Dog's Discomfort	○	○	○	○

EVALUATION BY VETERINARIAN

	Normal	Mildly Abnormal	Moderately Abnormal	Severely Abnormal
Static Posture	○	○	○	○
	Breed-appropriate with proper limb loading and normal body weight distribution between forelimbs and hindlimbs.	Subtle abnormality in limb loading and light shift in body weight distribution.	Clear abnormality in limb loading and obvious shift in body weight distribution.	Stands with difficulty and unease. Severe shift in body weight distribution.

	Normal	Mildly Abnormal	Moderately Abnormal	Severely Abnormal
Motion	○	○	○	○
	Fluent and symmetric gait with appropriate weight bearing and body weight distribution.	Subtle lameness, asymmetry and gait stiffness. Possible impact with some activities, yet no difficulty getting up.	Consistent gait abnormalities and some difficulty getting up, obvious stiffness, change in body weight, and reduction in use of affected limb.	Severe weight shift and lameness. Has difficulty getting up and struggles to move.

Grade the Joint

EVALUATION BY VETERINARIAN

	None	Mild	Moderate	Severe
Pain Upon Manipulation	○	○	○	○

	Normal	Mildly Abnormal	Moderately Abnormal	Severely Abnormal
Passive Range of Movement	○	○	○	○
		Slight joint thickening with minimal ROM reduction and no crepitus.	Clear joint thickening with obvious ROM reduction and muscle atrophy.	Extremely limited ROM with severe muscle atrophy, joint thickening and crepitus. Anatomical misalignment and loss of normality on palpation.

	No Signs of OA	Mild Signs of OA	Moderate Signs of OA	Severe Signs of OA
Radiography	○	○	○	○
	If preclinical "at risk," the dog may have evidence of risk factors such as dysplasia and/or trauma.	Early signs of OA and minimal osteophytes.	Clear osteophytes.	Advanced osteophytes and remodeling.

Stage of OA*

STAGE 0-1 PRE-CLINICAL	STAGE 2 MILD	STAGE 3 MODERATE	STAGE 4 SEVERE

COAST Stage of Canine Osteoarthritis

DOG GRADE

JOINT GRADE

*Re-evaluate if there is disparity of two or more grades between dog and joint results.

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