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) and Helsinki Chronic Pain Index (HCPI-E2).

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

COAST Stage

<table>
<thead>
<tr>
<th>Pre-clinical</th>
<th>Clinical</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Clinically normal. No OA risk factors.</td>
</tr>
<tr>
<td>1</td>
<td>Clinically normal, but OA risk factors present.</td>
</tr>
<tr>
<td>2</td>
<td>Mild OA.</td>
</tr>
<tr>
<td>3</td>
<td>Moderate OA.</td>
</tr>
<tr>
<td>4</td>
<td>Severe OA.</td>
</tr>
</tbody>
</table>

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.
Grade the Dog

**Clinical Metrology Instrument (CMI)**

- **Not Clinically Affected**: 0
- **Mildly Affected**: 1-10
- **Moderately Affected**: 11-20
- **Severely Affected**: 21+

**Degree of Dog's Discomfort**

- **None**: None
- **Low**: None
- **Moderate**: None
- **High**: None

**Static Posture**

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

**Motion**

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

Grade the Joint

**Pain Upon Manipulation**

- **None**: None
- **Mild**: None
- **Moderate**: None
- **Severe**: None

**Passive Range of Movement**

- **Normal**: Slight joint thickening with minimal ROM reduction and no crepitus.
- **Mildly Abnormal**: Clear joint thickening with obvious ROM reduction and muscle atrophy.
- **Moderately Abnormal**: Extremely limited ROM with severe muscle atrophy, joint thickening and crepitus. Anatomical misalignment and loss of normality on palpation.

**Radiography**

- **No Signs of OA**: Presence of risk factors such as dysplasia or trauma may be evident.
- **Mild Signs of OA**: Early signs of OA and minimal osteophytes.
- **Moderate Signs of OA**: Clear osteophytes.
- **Severe Signs of OA**: Advanced osteophytes and remodeling.

Stage of OA*

<table>
<thead>
<tr>
<th>STAGE 0</th>
<th>STAGE 1</th>
<th>STAGE 2</th>
<th>STAGE 3</th>
<th>STAGE 4</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CLINICALLY NORMAL</strong></td>
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*Re-evaluate if there is disparity of two or more grades between dog and joint results.