

# Osteoarthritis Report



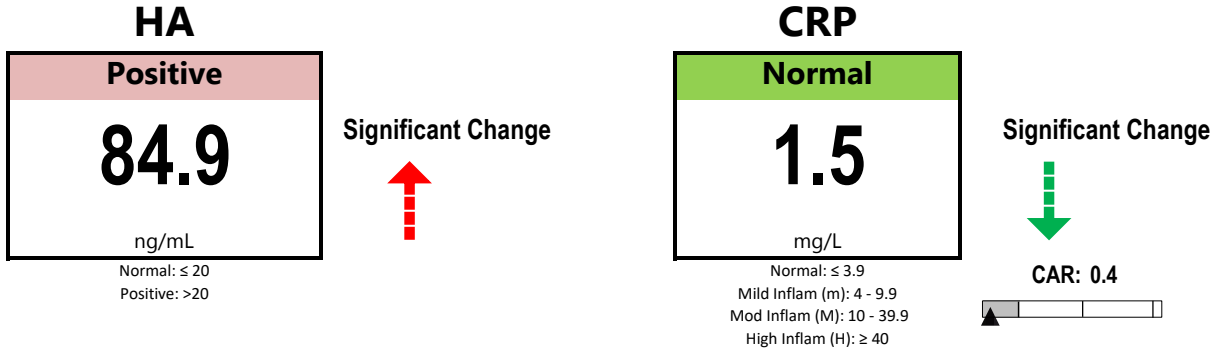
VDI Lab Services  
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<b>PATIENT NAME:</b> Dozer Marklow	<b>MRN:</b> 1092343	<b>VETERINARIAN:</b>
<b>SPECIMEN ID:</b> 479696	<b>DRAW DATE:</b> 16-Feb-23	<b>FACILITY:</b>
<b>SPECIES:</b> Canine	<b>RECEIVED DATE:</b> 17-Feb-23	
<b>GENDER:</b> Male Neutered	<b>REPORT DATE:</b> 17-Feb-23	
<b>AGE:</b> 1.5	<b>SAMPLE TYPE:</b> Dried Serum - 2	<b>PH:</b>
<b>WEIGHT:</b> 80 lb	<b>PATIENT STAGE:</b> unknown	<b>FAX:</b>
<b>BREED:</b> Olde English Bulldog	<b>TREATMENT:</b> unknown	

## Osteoarthritis Panel

### Relevant Context (provided on TRF)

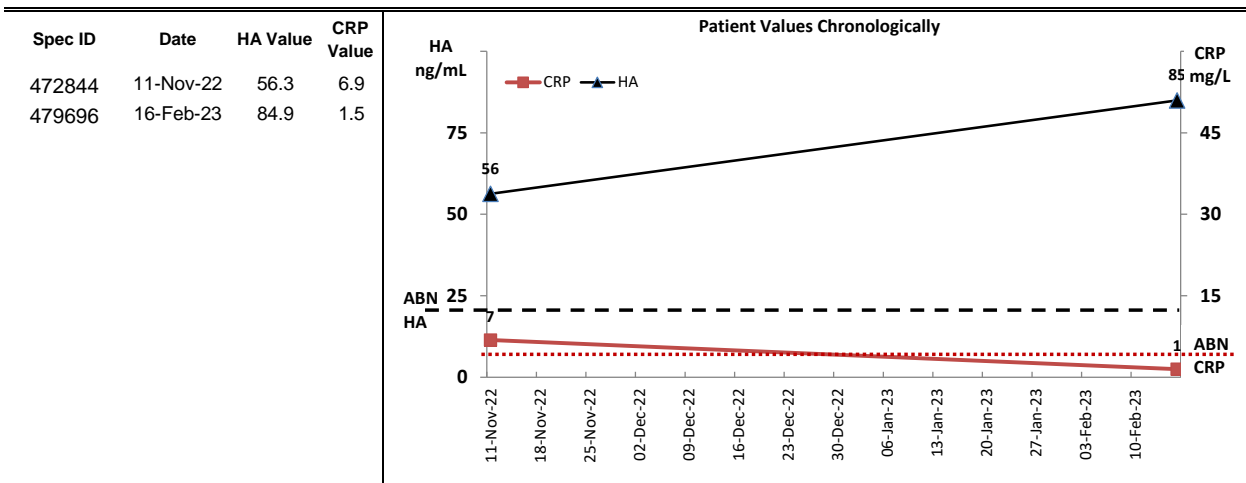
<input type="checkbox"/> Corticosteroids	<input type="checkbox"/> Antibiotic	<input type="checkbox"/> Suspected Mass	<input type="checkbox"/> Hypercalcemia
<input type="checkbox"/> NSAIDs	<input type="checkbox"/> Anemia	<input type="checkbox"/> Enlarged Node	<input type="checkbox"/> B12 Deficiency
<input type="checkbox"/> Chemotherapy	<input type="checkbox"/> GI Signs	<input type="checkbox"/> Fever	<input type="checkbox"/> Known Disease



### Intpretative Comment

Patient values for HA are highly elevated consistent with severe degenerative joint disease (OA, IVDD). While CRP is typically elevated in OA with advanced disease, patients being treated with NSAIDs or corticosteriods may have normal levels of inflammation. HA may be elevated in wounds, ACL/CCL injury, severe liver disease, and in patients being treated with PSGAG (ie, Adequan).

TRENDING - sHA has significantly rising with CRP remaining low. In an untreated patient, disease is advancing. In a treated patient with improved clinical signs, may represent an increase in production of synovial fluid.



### Additional Reviewer Comments - need consult? email [consult@vdiilab.com](mailto:consult@vdiilab.com)

code 41522

All comments are general in nature and in absence of detailed knowledge of patient status or treatment.  
For case-specific consultations, please contact VDI.

Reviewer: RR



## Hyaluronic Acid Report

**PATIENT NAME:** Dozer Marklow  
**SPECIMEN ID:** 479696  
**SPECIES:** Canine  
**GENDER:** Male Neutered  
**AGE:** 1.5  
**WEIGHT:** 80 lb  
**BREED:** Olde English Bulldog

**MRN:** 1092343  
**DRAW DATE:** 16-Feb-23  
**RECEIVED DATE:** 17-Feb-23  
**REPORT DATE:** 17-Feb-23  
**SAMPLE TYPE:** Dried Serum - 2

**VETERINARIAN:**  
**FACILITY:**  
  
**PH:**  
**FAX:**

### Hyaluronic Acid (ng/mL)

**Positive**  
  
**84.9**

Normal: ≤20  
Positive: >20

Change from Previous

Significant Change



### Patient History

ID	Date	Result ng/mL
472844	11/11/2022	56.3

### Interpretive Comments - need consult? email consult@vdi lab.com

Hyaluronic acid is above the reference interval and is indicative of degenerative joint disease, however, severe liver disease can elevate hyaluronic acid. Evaluate liver function. sHA may be elevated in wounds, ACL/CCL injury, severe liver disease, and in patients being treated with PSGAG (ie, Adequan) and oral HA supplement. Supplementing with oral HA has been shown to improve joint function. Follow recommendations below.

TRENDING - sHA has increased significantly from prior. In a treated patient (PSGAG, oral HA), this may represent an increase in the production of synovial fluid. In an untreated patient, it may represent an advancement of disease. Evaluate patient.

### Phases of Degenerative Joint Disease

Pre-/Early	Mild	Moderate	Severe
HA: Serum HA (sHA) below the positive cutoff. HA is being produced and maintained inside the joints.  CRP: Typically absent, except in IMPA	HA: sHA above positive cutoff. HA is being produced but early degeneration allows some HA to leak into peripheral blood.  CRP: Typically absent, except in IMPA.	HA: Moderate to high levels of sHA increasing with disease severity. HA is being produced but significant degeneration causes HA to leak into peripheral blood. Joint cushioning & lubrication is negatively affected.  CRP: Mild inflammation may be present in moderate OA, IVDD, due to mechanical damage inside the joint. IMPA presents with elevated CRP.	HA: High to declining sHA levels. In severe DJD, chondrocyte cell death limits the production of HA. HA that is produced is leaked into the peripheral blood. Joint cushioning & lubrication is severely affected.  CRP: Moderate to high inflammation may be present in OA, IVDD. Elevated CRP in IMPA.
No clinical signs present, but dog may be predisposed or at high risk of DJD.	Dog may begin showing some stiffness or rigidity. Doesn't interfere with day-to-day activity, but gait may change during exercise.	Dog may be showing noticeable pain, stiffness, lethargy with dog being uncomfortable, crying, or becoming increasingly reluctant to walk around.	Dog is typically reluctant to walk, go to the bathroom, or perform daily activities due to increased pain that has become unbearable.

### Supplementation Guide

Dosing Guidelines - Twice Per Day				
PRODUCT NAME	Active Ingredient	PRODUCT STRENGTH	# of Pumps	mL/Day
<b>Trixsyn® Canine Hyaluronan</b>	Sodium Hyaluronate	13mg/pump	2 pumps, twice daily	N/A
<b>Trixsyn® Canine Performance</b>	Sodium Hyaluronate Astaxanthin	13mg/pump 1mg/pump	2 pumps, twice daily	2 pumps, twice daily
<b>Other</b>				