



**PATIENT NAME:** Charles Song  
**SPECIMEN ID:** 471694  
**SPECIES:** Canine  
**GENDER:** Male Neutered  
**AGE:** 15.0  
**WEIGHT:** 2.2 kg  
**BREED:** Chihuahua

**MRN:** 1101241  
**DRAW DATE:** 2-Feb-23  
**RECEIVED DATE:** 10-Feb-23  
**REPORT DATE:** 13-Feb-23  
**SAMPLE TYPE:** Dried Serum - 2

**INARIAN:**  
**FACILITY:**  
**HOSPITAL #:**

**Pre-Stem Cell Therapy Panel**

**REPORT DATE: 13-Feb-2023**

**Relevant Context (provided on TRF)**

<input type="checkbox"/> Corticosteroids	<input type="checkbox"/> Antibiotics	<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

**Neoplasia Index®**

**Negative**

**4.1**

Index

Negative: <5.3  
Equivocal: 5.3  
Positive: 5.4 - 8.9  
High Positive: ≥ 9.0

**TK1**

**Equivocal**

**8.1**

U/L

Normal: ≤ 3.0  
Equivocal: < 9.0  
High (H): 9.0 - 24.9  
Highly Elevated (HE): ≥ 25

**cCRP**

**Normal**

**3.2**

mg/L

Normal: ≤ 3.9  
Mild Inflammation (m): 4 - 9.9  
Moderate Inflammation (M): 10 - 39.9  
High Inflammation (H): ≥ 40

**Interpretive Comments**

The Neoplasia Index is negative because TK1 is only mildly elevated with no inflammation (CRP). Provided the patient is not on corticosteroids this can be considered a "rule-out" for neoplasia. It is important that there are no detectable masses present.

**Interpretive Comments**

TK1 is slightly elevated but below the critical threshold. Provided there are no masses, the presence of cancer is unlikely.

**Interpretive Comments**

CRP is within the normal interval and below the critical threshold of 4mg/L.

**Hyaluronic Acid**

**Positive**

**40.4**

ng/mL

Normal: ≤20  
Positive: >20

**Comments**

Hyaluronic acid is highly elevated and indicative of severe degenerative joint disease. This is useful as a baseline for therapeutic monitoring.

**Contextual Comments - need consult? email consult@vdi lab.com**

code 121



## Hyaluronic Acid Report

**PATIENT NAME:** Charles Song  
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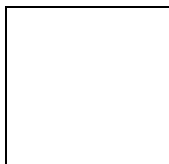
**VETERINARIAN:**  
**FACILITY:**  
**HOSPITAL #:**

### Hyaluronic Acid (ng/mL)

**Positive**  
**40.4**

Normal: ≤20  
Positive: >20

Change from Previous



### Patient History

ID	Date	Result ng/mL

### 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.

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	1 pump, twice per day	N/A
<b>Trixsyn® Canine Performance</b>	Sodium Hyaluronate Astaxanthin	13mg/pump 1mg/pump	1 pump, twice per day	1 pump, twice per day
<b>Other</b>	_____	_____	_____	_____

# Vitamin D Report



VDI Lab Services  
4685 Runway St. Ste K Simi Valley, CA 93063  
ph: 805-577-6742 fax: 805-426-8115

**PATIENT NAME:** Charles Song

**VETERINARIAN:**

**SPECIMEN ID:** 471694

**MRN:** 1101241

**FACILITY:**

**SPECIES:** Canine

**DRAW DATE:** 2-Feb-23

**GENDER:** Male Neutered

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**AGE:** 15.0

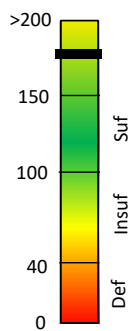
**REPORT DATE:** 13-Feb-23

**HOSPITAL #:**

**WEIGHT:** 2.2 kg

**SAMPLE TYPE:** Dried Serum - 2

**BREED:** Chihuahua



**25(OH)D**  
(ng/mL)

**Elevated**  
**178.2**

Deficient:  $\leq 40.0$   
Insufficient: 40.1 - 99.9  
Sufficient: 100 - 150  
Elevated:  $\geq 150$

**Dose at time of draw:**

**Not Provided**

**decrease dose by**

**0 IU/day**



**New Recommended Dose Range**

**Low End Sufficiency**  
(~100 ng/mL)

**High End Sufficiency**  
(~130 ng/mL)

**Not Required**

**Not Required**

For most patients without underlying conditions, or taking corticosteroids

For patients that warrant a higher VitD level and/or those on corticosteroids.

**Patient History**

ID	Date	Result ng/mL	Known Dose iu/day

**Interpretive Comments - need consult? email consult@vdlab.com**

Your patient is found to have elevated vitamin D levels. Call VDI to provide supplementation details to receive accurate dosing guidelines. If patient is unsupplemented and below 200 ng/mL and with normal calcium, maintain on current diet. If patient is above 200 ng/mL, consider diet alternatives.

**If any of the following occur, wait 2 months from the date of change, then retest:**

Major Diet Change

Change in Health Status (eg PLE)

Change of Vitamin D supplement or daily treats

Supplementation is stopped for longer than 4 weeks

Patient is put on Corticosteroids

Patient is put on NSAIDS

**Supplementation Guide**

**Total Dose Recommended:**

**Not Required**

**Not Required**

\*Choose only one product for supplementation

PRODUCT NAME	PRODUCT STRENGTH	PRODUCT FORMAT	Low End Dose	High End Dose
<b>RxD3</b> <i>Rx Vitamins</i>	100 IU/ drop	Liquid Drops <i>Applied to food</i>	<input type="checkbox"/>	<input type="checkbox"/>
<b>RxD3 Forte</b> <i>Rx Vitamins</i>	500 IU/ drop	Liquid Drops <i>Applied to food</i>	<input type="checkbox"/>	<input type="checkbox"/>

**Retest NO SOONER THAN:**

**April 24, 2023**