

#### **Gastrointestinal Disease Report**

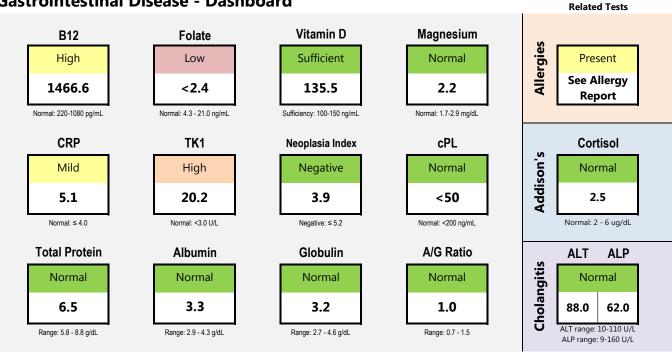


**PATIENT NAME: Tori Alvarez** MRN: 1102269 **VETERINARIAN:** SPECIMEN ID: 177193 DRAW DATE: 4-Mar-23 FACILITY:

RECEIVED DATE: 7-Mar-23 SPECIES: Canine GENDER: Female REPORT DATE: 8-Mar-23 AGE: 0.8 SAMPLE TYPE: Frozen Serum

WEIGHT: 3 lb BREED: Pomeranian

#### **Gastrointestinal Disease - Dashboard**



**Pancreatitis** 

#### Interpretation of results based upon patient exhibiting GI signs

# **Chronic Enteropathy** 2240

IBD	High Co	onfidence
LSA clinical score: Wt Loss, Vomiting, \( \sqrt{Diarrhea}, \) Inappetance	1 out of 4	
Pattern is consistent with IBD. A recommended.	n ultrasound is	

Protein Losing Enteropathy						
Normal	No Action					
There is no evidence the patient	has PLE.					

# Not Detected No Action Pancreatitis clinical score: 0 out of 4 Negative pancreatic lipase and other parameters are not supportive of pancreatitis.

#### **Essential Vitamins** 1143 **Deficiencies Detected** Evaluate B12 / Folate Patient has a folate deficiency with elevated B12 - see report for possible reasons. Elevated B12 may be associated with excess supplementation, underlying GI disease, and/or hepatobiliary disease.

# Reviewer Comments - need consult? email consult@vdilab.com

1440

# **Canine GI Lymphoma Panel**

AGE:



**PATIENT NAME: Tori Alvarez VETERINARIAN:** MRN: 1102269 SPECIMEN ID: 177193 DRAW DATE: 4-Mar-23 FACILITY: RECEIVED DATE: 7-Mar-23 SPECIES: Canine GENDER: Female REPORT DATE: 8-Mar-23

9

50

>100

> 100

1

SAMPLE TYPE: Frozen Serum

0.8 WEIGHT: 3 lb BREED: Pomeranian

FAX:

REPORT DATE: 8-Mar-2023

#### Relevant Context (provided on TRF)



Other Recommended Tests or Procedures to Perform ultrasound

need consult? email consult@vdilab.com

# Neoplasia Index®

#### cGI.LSA



#### **Interpretive Comments**

#### Results are INCONSISTENT with GI LSA

PH:

Patient's Neoplasia Index is negative and inconsistent with intestinal lymphoma. This profile of TK1/ CRP/ B12 is consistent with inflammatory bowel disease. An ultrasound is recommended.

#### Equivocal: 5.3 Positive: 5.4 - 8.1 High Positive: ≥ 8.2

# High 20.2

TK1

Normal: ≤ 3.0 Equivocal: ≤ 6.6 High: 6.6 - 24.9 Highly Elevated: ≥ 25.0

# CRP Mild 5.1 mg/L Normal: < 3.9

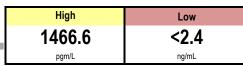
Mild Inflam: 4 - 9.9 Mod Inflam: 10 - 39.9 High Inflam: ≥ 40

# **Interpretive Comments**

#### Results are consistent with: IBD

TK1 is highly elevated with a mild inflammatory response and commonly found in inflammatory bowel disease. If the patient is on corticosteroids, both TK1 and CRP may be higher as these medications suppress the inflammatory and proliferative response.

#### Cobalamin **Folate**



Low: <220 Low Normal: 220 - 400 Normal: 220 - 1080 High: ≥1080

Low: <4.3 Normal: 4.3 - 21.0 High: >21.0

#### **Interpretive Comments**

Patient has high B12 levels and low folate. High B12 is usually associated with dietary intake or excess supplementation. Low Folate and High B12 is sometimes seen with proximal SI damage or antibiotic use.

Contextual Comments (If needed)

**IBD** profile code 12250

\* The classificication of LSA is based upon test result profiling and should not be considered definitive. It is most reliable in the untreated dog. Patient disease classification will be affected if the patient is on corticosteroids or other anti-inflammatory or anti-proliferative medications. An ultrasound is always recommended and should be supportive of test results. If ultrasound and test results conflict, it is recommended the test be repeated in 3-4 weeks with the patient off of corticosteroids. If the test requisition indicates the patient is on corticosteroids, the Neoplasia Index will be adjusted for the effect medication may have on TK1/HPT. For definitive disease classification (eg, small cell, large cell), a biopsy is required.

#### **Allergy Panel Dashboard**



PATIENT NAME: Tori Alvarez MRN: 1102269 VETERINARIAN: SPECIMEN ID: 177193 DRAW DATE: 4-Mar-23 FACILITY:

SPECIES: Canine RECEIVED DATE: 7-Mar-23 REPORT DATE: 8-Mar-23 GENDER: Female SAMPLE TYPE: Frozen Serum AGE: 8.0

PH: WEIGHT: 3 lb FAX: BREED: Pomeranian

# **Food Allergens**

Duck meat Furkey meat	1	Group	Class
Turkey meat		Meat	
	1	Meat	
Corn	1	Grain	
<sup>D</sup> ea	1	Veg	
Sweet Potato	1	Veg	
Pumpkin	1	Veg	
Egg white	1	Egg	
Peanut	1	Nut	
Oat	1	Grain	
Blueberry	1	Fruit	
Parsely	1	Veg	

## **Environmental Allergens**

Class	Group	Allergen	Class	Group
1	Mite			
1	Mite			
1	Tree			
1	Tree			
1	Tree			
1	Weed			
1	Animal			
	Class  1 1 1 1 1 1 1 1 1	1 Mite 1 Mite 1 Tree 1 Tree 1 Tree 1 Weed	Class         Group         Allergen           1         Mite           1         Mite           1         Tree           1         Tree           1         Tree           1         Weed	Class         Group         Allergen         Class           1         Mite         1         Mite           1         Tree         1         Tree           1         Tree         1         Tree           1         Weed         1

#### **Total Class 1**

18

**Total Class 2** 0

# **Total Class 3** 0

#### Responsive Groups

Tree

Inflammation

Mild

5.1

Normal:  $\leq 4.0$ 

#### 5+ is consistent with canine AD

Clinical Signs Associated with Canine AD

#### Criteria Not Provided

- Affected ear pinnae
- Affected front feet
- ☐ Age of onset <3 years
- Chronic/recurring yeast infections
- □ Corticosteroid-responsive pruritis
- Mostly indoor lifestyle

Vitamin D

Sufficient 135.5

100-150 ng/ml

 Nonaffected dorsolumbar area Pruritis without skin lesions at onset

Mark criteria above. 5+ is significant

Canine atopic dermatitis (CAD) is typically associated with hypersensitivity to environmental allergens, although food allergies may coexist. Prior to a diagnosis of CAD, fleas and other ectoparasites should be ruled-out. Clinical criteria have been developed to help distinguish CAD. Allergen tests are not diagnostic in isolation. Rather, they support a clinical diagnosis of CAD and are used to indicate which allergens may be triggering the disease.

The most common CAD associated environmental allergens are pollens (grass, weed and/or tree), dust, mites, and mold, and common food allergens are beef, chicken, dairy, and wheat.

IgE has a relatively short half-life therefore class 1 allergens may represent weak allergic responses unrelated to CAD or prior allergy that the patient is not currently exposed to (ie, seaonal allergies) - care should be given to class 1 allergens accordingly. Class 2 and 3 allergens are moderate/strong reaction and worthy of immediate investigation.

Vitamin D plays an important role in the immune regulatory process and patients low in Vitamin D should be supplemented. If Vitamin D is deficient, a change in food may be warranted. Food changes require a 60-day equilibrium and retesting prior to D3 supplementation. Vitamin D has been shown to have a steroid sparing effect.

Roviowor	Comments -	need consult	2 amail con	eult@vdilah	com







PATIENT NAME: Tori Alvarez MRN: 1102269 VETERINARIAN: SPECIMEN ID #: 177193 COLLECTION DATE: 4-Mar-23 FACILITY:

SPECIES / SEX: Canine / F RECEIVED DATE: 7-Mar-23
BREED Pomeranian REPORT DATE: 8-Mar-23
AGE: 0.8 SAMPLE TYPE: Serum

WEIGHT: 3 lb

Class	Response	IU/mL		Respons	es	TOTAL ALLERGEN	
0	None	≤ 0.34	NT = Not Tested	Class 1:	18	RESPONSES	
1	Low	0.35 - 3.49		Class 2:	0	18	
2	Medium	3.5 - 49.99		Class 3:	0	10	
3	High	≥ 50				See page 2 for more info	

#### **FOOD ALLERGENS**

	Meat		Respons	es:	2
No	Name	Panel	IU/mL		Class
1	Pork	Allergy I	<0.15	0	
2	Beef	Allergy I	<0.15	0	
3	Duck	Allergy I	0.63	1	
4	Chicken	Allergy I	<0.15	0	
5	Lamb	Allergy I	<0.15	0	
6	Turkey	Allergy I	0.7	1	
7	Red deer	Allergy I	<0.15	0	
8	Rabbit	Allergy II	<0.15	0	

	Vegetable, Fruit,	Nut	Respons	es:	6
9	Pea	Allergy I	0.38	1	
10	Soy bean	Allergy I	<0.15	0	
11	Carrot	Allergy I	<0.15	0	
12	Potato	Allergy I	<0.15	0	
13	Sweet Potato	Allergy I	0.70	1	
14	Pumpkin	Allergy I	0.8	1	
29	Parsely	Allergy II	0.7	1	
30	Cabbage	Allergy II	<0.15	0	
31	Cucumber	Allergy II	<0.15	0	
32	Broccoli	Allergy II	<0.15	0	
33	Cauliflower	Allergy II	<0.15	0	
34	Radish	Allergy II	<0.15	0	
35	Paprika	Allergy II	<0.15	0	
36	Spinach	Allergy II	<0.15	0	
15	Tomato	Allergy I	<0.15	0	
16	Apple	Allergy I	<0.15	0	
17	Orange	Allergy II	<0.15	0	
18	Strawberry	Allergy II	<0.15	0	
19	Blueberry	Allergy II	0.55	1	
20	Kiwi	Allergy II	<0.15	0	
21	Melon	Allergy II	<0.15	0	
22	Mango	Allergy II	<0.15	0	
23	Banana	Allergy II	<0.15	0	
24	Peach	Allergy II	<0.15	0	
25	Pear	Allergy II	<0.15	0	
26	Pineapple	Allergy II	<0.15	0	
27	Plum	Allergy II	<0.15	0	
28	Watermelon	Allergy II	<0.15	0	
37	Peanut	Allergy I	1.46	1	

<sup>\*</sup>Only groups marked with an asterisk are included in the responsive group classification on the first page.

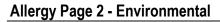
	Dairy*		Response	s:	0
No	Name	Panel	IU/mL		Class
38	Milk	Allergy I	<0.15	0	
39	Cheddar/gouda cheese	Allergy I	<0.15	0	
40	α-lactalbumin	Allergy II	<0.15	0	
41	β-lactoglobulin	Allergy II	<0.15	0	
42	Casein	Allergy II	<0.15	0	
43	Buttermilk	Allergy II	<0.15	0	

	Egg		Response	s:	1
44	Egg white	Allergy I	0.7	1	
45	Egg yolk	Allergy I	<0.15	0	

	Yeast		Response	s:	0
46	Yeast, baker's	Allergy I	<0.15	0	
47	Yeast, brewer's	Alleray II	<0.15	0	

	Grain*		Response	s:	2
48	Wheat	Allergy I	<0.15	0	
49	Corn	Allergy I	1.18	1	
50	Rice	Allergy I	<0.15	0	
51	Gluten	Allergy II	<0.15	0	
52	Barley	Allergy II	<0.15	0	
53	Oat	Allergy II	0.48	1	
54	Buckwheat	Allergy II	<0.15	0	
55	Millet	Allergy II	<0.15	0	
56	Lentil	Allergy II	<0.15	0	
57	Sweet chestnut	Allergy II	<0.15	0	
58	Linseed (Flax seed)	Allergy II	<0.15	0	

	Shellfish* & Fish*			s:	0
59	Crab / Shrimp	Allergy I	<0.15	0	
64	Blue mussel / Clam	Allergy II	<0.15	0	
60	Codfish	Allergy I	<0.15	0	
61	Tuna	Allergy I	<0.15	0	
62	Salmon	Allergy I	<0.15	0	
63	Mackerel	Allergy I	<0.15	0	
65	Trout	Allergy II	<0.15	0	
66	Herring	Allergy II	<0.15	0	
67	Sardine	Allergy II	<0.15	0	
68	Anchovy	Allergy II	<0.15	0	
69	Sea bass	Allergy II	<0.15	0	





PATIENT NAME: Tori Alvarez MRN: 1102269 VETERINARIAN:

Class 0	Response None	<b>IU/mL</b> ≤ 0.34	NT = Not Tested	Responses Class 1: 18	TOTAL ALLERGEN RESPONSES
1	Low	0.35 - 3.49		Class 2: <b>0</b>	10
2	Medium	3.5 - 49.99		Class 3: <b>0</b>	18
3	High	≥ 50			

#### **ENVIRONMENTAL ALLERGENS**

Animal			Respons	1	
No	Name	Panel	IU/mL	Class	
70	Cat Epithelium/Dander	Allergy I	0.76	1	
71	Wool, Sheep	Allergy I	<0.15	0	
72	Feather Mix	Allergy I	<0.15	0	
73	Cattle Epithelium	Allergy II	<0.15	0	

	Insect* & Mite*			es:	2
74	Flea	Allergy I	<0.15	0	
75	Cockroach	Allergy I	<0.15	0	
76	Bee venom	Allergy II	<0.15	0	
77	Fire ant	Allergy II	<0.15	0	
78	Mosquito	Allergy II	<0.15	0	
79	Silkworm pupa	Allergy II	<0.15	0	
80	American dust mite <sup>1</sup>	Allergy I	<0.15	0	
81	European dust mite <sup>2</sup>	Allergy I	0.5	1	
82	Flour mite <sup>3</sup>	Allergy I	<0.15	0	
83	Cheese/mold mite <sup>4</sup>	Allergy I	0.6	1	
84	Storage mite <sup>5</sup>	Allergy II	<0.15	0	
85	Tropical dust mite <sup>6</sup>	Allergy II	<0.15	0	

Mold*			Respons	es:	0
86	Penicillium notatum	Allergy I	<0.15	0	
87	C. herbarum	Allergy I	<0.15	0	
88	Aspergillus fumigatus	Allergy I	<0.15	0	
89	Candida albicans	Allergy I	<0.15	0	
90	Alternaria alternata	Allergy I	<0.15	0	
91	M. pachydermatis	Allergy I	<0.15	0	

	Other		Respons	es:	0
92	House dust	Allergy II	<0.15	0	
93	CCD	Allergy II	<0.15	0	
94	Hevea latex	Allergy II	<0.15	0	

	Grass*		Response	s:	0
No	Name	Panel	IU/mL		Class
95	Bermuda Grass	Allergy I	<0.15	0	
96	Orchard/Timothy Grass	Allergy I	<0.15	0	
97	Ryegrass	Allergy I	<0.15	0	
98	Cultivated rye	Allergy I	<0.15	0	
99	Sweet vernal grass	Allergy II	<0.15	0	
100	Common reed grass	Allergy II	<0.15	0	
101	Bent grass	Allergy II	<0.15	0	

	Tree*		Response	s:	3
102	Alder/Birch	Allergy I	0.7	1	
103	Hazel	Allergy I	<0.15	0	
104	Maple leaf sycamore	Allergy I	0.5	1	
105	Willow/Cottonwood	Allergy I	<0.15	0	
106	Oak	Allergy I	0.48	1	
107	White Pine	Allergy I	<0.15	0	
108	Acacia	Allergy I	<0.15	0	
109	White Ash	Allergy I	<0.15	0	
110	Japanese cedar	Allergy II	<0.15	0	

	Weed*		Response	s:	1
111	Common ragweed	Allergy I	<0.15	0	
112	Plantain	Allergy I	<0.15	0	
113	Mugwort	Allergy I	0.43	1	
114	Sheep's sorrel	Allergy I	<0.15	0	
115	Japanese hop	Allergy II	<0.15	0	
116	Ox-eye daisy	Allergy II	<0.15	0	
117	Dandelion	Allergy II	<0.15	0	
118	Russian thistle	Allergy II	<0.15	0	
119	Goldenrod	Allergy II	<0.15	0	
120	Common pigweed	Allergy II	<0.15	0	

#### **Additional Information**

- 1 Dermatophagoides pteronyssinus
- 2 Dermatophagoides farinae
- 3 Acarus siro

- 4 Tyrophagus putrescentiae
- 5 Glycyphagus domesticus
- 6 Blomia tropicalis

\* Only groups indicated with an asterisk are included in the responsive group classification on the first page.

#### Vitamin D Report



PATIENT NAME: Tori Alvarez VETERINARIAN: SPECIMEN ID: 177193 MRN: 1102269 FACILITY:

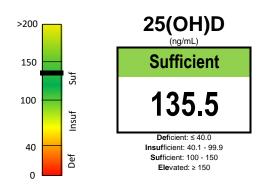
 SPECIES:
 Canine
 DRAW DATE:
 4-Mar-23

 GENDER:
 Female
 RECEIVED DATE:
 7-Mar-23

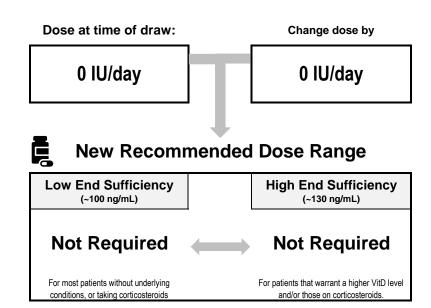
 AGE:
 0.8
 REPORT DATE:
 8-Mar-23
 PH:

 WEIGHT:
 3 lb
 SAMPLE TYPE:
 Frozen Serum
 FAX:

BREED: Pomeranian



# Patient History ID Date Result Known Dose ng/mL iu/day



## Interpretive Comments - need consult? email consult@vdilab.com

Reference intervals for patients under 1 year of age have not been evaluated, however your patient has been found to be within adult intervals.

Maintain diet.

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

Major Diet Change Supplementation is stopped for longer than 4 weeks Change in Health Status (eg PLE) Patient is put on Corticosteroids

Change of Vitamin D supplement or daily treats Patient is put on NSAIDS

#### **Supplementation Guide**

Total Dos	e Recommended:	Not Required	Not Red	quired
1 '	oduct for supplementation	DDODUCT FORMAT	Law End Dage	High Food Door
PRODUCT NAME	PRODUCT STRENGTH	PRODUCT FORMAT	Low End Dose	High End Dose
RxD3 Rx Vitamins	100 IU/ drop	<b>Liquid Drops</b> Applied to food		
RxD3 Forte Rx Vitamins	500 IU/ drop	<b>Liquid Drops</b> Applied to food		

# **B12 (Cobalamin) Report**



PATIENT NAME:Tori AlvarezMRN:1102269VETERINARIAN:SPECIMEN ID:177193DRAW DATE:4-Mar-23FACILITY:SPECIES:CanineRECEIVED DATE:7-Mar-23

 SPECIES:
 Canine
 RECEIVED DATE:
 7-Mar-23

 GENDER:
 Female
 REPORT DATE:
 8-Mar-23

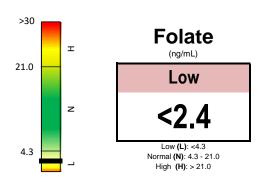
 AGE:
 0.8
 SAMPLE TYPE:
 Frozen Serum

WEIGHT: 3 lb BREED: Pomeranian

Cobalamin
(pg/mL)

High

Low (L): <220
Low Normal (LN): 220 - 400
Normal (N): 220 - 1080
High (H): ≥1080



#### **Folate vs Cobalamin Plot** SIBO Excess Supplementation **Excess Dietary Folate** Excess Low Dietary B12 Supplementation CP / EPI / IBD / LSA Distal SI Damage Cholangitis Proximal SI Proximal SI Damage Small Intestinal Damage Damage ntibiotics / LSA / CP / EPI / IBD / LSA Dysbiosis Cholangitis Antibiotics No Low High

**Cobalamin** chart assumes unsupplemented patient

B12 Dose at time of draw:

Increase B12 dose by:

0 mcg/day

0 mcg/day



# **New Recommended B12 Dose**

PH:

FAX:

Fasted Sample?	Fasted				
0 mcg/day					
B12 dosing recommendations are for daily supplementation. Continue indefinitely unless changes in health or diet require modification.					

#### **Patient History**

ID	Date	<b>B12</b> pg/mL	rolate ng/mL	Known B12 Dose mcg/day

need consult? email consult@vdilab.com

#### Comments

Patient has high B12 levels and low folate. High B12 is usually associated with dietary intake or excess supplementation. Low Folate and High B12 is sometimes seen with proximal SI damage or antibiotic use.

# **Total B12 Dose Recommended:**

# 0 mcg/day

DDODUGT NAME	DDODUOT CTDENOTU	PROPUST FORMAT	Drawa Daga	ml Daga	
PRODUCT NAME	PRODUCT STRENGTH	PRODUCT FORMAT	Drops Dose	mL Dose	
RxB12 Rx Vitamins	<b>250 mcg/mL</b> 6.5 mcg/drop	<b>Liquid Drops</b> Applied to food			
RxB12 Forte Rx Vitamins	<b>1000 mcg/mL</b> 33 mcg/drop	<b>Liquid Drops</b> Applied to food			

<sup>\*</sup>Choose only one product for supplementation

#### **Magnesium Report**



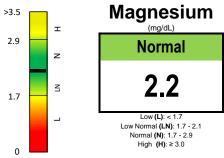
PATIENT NAME: Tori Alvarez MRN: 1102269 **VETERINARIAN:** SPECIMEN ID: 177193 DRAW DATE: 4-Mar-23

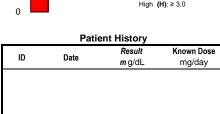
SPECIES: Canine RECEIVED DATE: 7-Mar-23 GENDER: Female REPORT DATE: 8-Mar-23 AGE: 0.8 SAMPLE TYPE: Frozen Serum

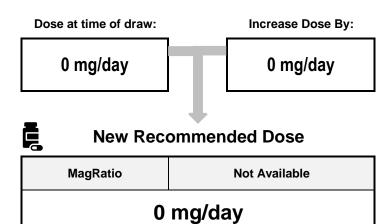
WEIGHT: 3 lb BREED: Pomeranian

# FACILITY:

PH: FAX:







Magnesium dosing recommendations are for daily supplementation. Continue indefinitely unless changes in health or diet require modification.

#### Interpretive Comments - need consult? email consult@vdilab.com

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Reference intervals for patients under 1 year of age have not been evaluated, however your patient has been found to be within adult intervals. Maintain diet.

#### **Supplementation Guide**

Total Dose	e Recommended:	0 mg/day		
PRODUCT NAME	PRODUCT STRENGTH	PUMP VOLUME	PRODUCT FORMAT	Dose
Magnesium Lotion for Pets Magnum Solace	50 mg/mL	<b>0.23 mL/pump</b> 11.5 mg/pump	Topical Lotion	
Other				

Additional Reviewer Comments - need consult? email consult@vdilab.com

**Retest NO SOONER THAN:**