



Lab Report For:

PATIENT NAME: Rosie Stephanus

SPECIMEN ID #: 145555

SPECIES: Canine

GENDER: Male Neutered

BREED: Australian Shepherd

AGE: 5.0

WEIGHT: 59 lb

DRAW DATE: 30-Sep-14

RECEIVED DATE: 1-Oct-14

SAMPLE TYPE: Serum

COMMENTS: none

PATIENT STAGE: unknown

TREATMENT: none

VETERINARIAN: Dr. Michael Brown

FACILITY: Main Street Animal Hospital

11 Main Street

Fairview, CA 99999

PH: 555-555-5151

FAX: 555-555-5252

HPT_{CANINE}

REPORT DATE: 3-Oct-2014

TEST NAME	RESULT	UNITS	FLAG	REFERENCE INTERVAL
c-HPT canine specific haptoglobin	<10.0	mg/dL	D	Decreased (D): <30 Normal: 30 - 250 Mod Inflam (M): 250.1 - 400 High Inflam (H): ≥ 400.1

Flag Interpretation

Decreased: RBC hemolysis, severe liver disease

Moderate: Inflammatory diseases such as cancer, IBD, heart, kidney disease

High: Diseases that cause severe inflammatory response such as cancer, IBD, infection, and autoimmune conditions. Infection often triggers HPT levels in excess of 500 mg/dL.

General Comments

HPT_{canine} measures canine-specific haptoglobin (c-HPT), an acute phase protein, produced mainly in the liver as a response to inflammation and the release of cytokines. Serum HPT has been shown to be an effective measure of general inflammation. The concentration of HPT correlates to both the severity and duration of the inflammatory stimuli.

Acute phase proteins constitute a group of proteins (e.g., CRP, haptoglobin, serum amyloid A) which are part of the innate host defense system. Their blood concentration changes in response to any tissue damaging causes such as infection, immune-mediated disorders, neoplasia, trauma, and others. In dogs, HPT, in contrast to CRP, increases and decreases more slowly to inflammatory stimuli.

A low inflammatory state is healthy, however HPT has a role in removing free hemoglobin to prevent kidney damage and to return iron stores. Therefore, HPT levels can be decreased in hemolytic anemia, particularly intravascular. HPT is produced in the liver and may be decreased in severe liver disease.

HPT measurements may be useful for:

Diagnosis of Hemolytic Anemia: HPT binds free hemoglobin levels will be decreased with red cell hemolysis. HPT can be useful in the diagnosis and therapeutic monitoring of hemolytic anemia.

Monitoring Disease Progression/Response to Treatment: HPT has been shown to be an effective marker for disease activity and response to therapy in a wide range of inflammatory conditions such as infection, inflammatory bowel disease, IMHA, heart disease, kidney disease and other systemic disorders. In IMHA or other causes of red cell hemolysis, HPT levels will increase as red cell hemolysis abates.

Tech: RR