

Test Report of Hematology Analysis

Hospital Address: Contact number:

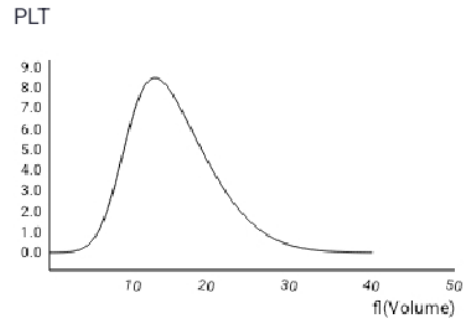
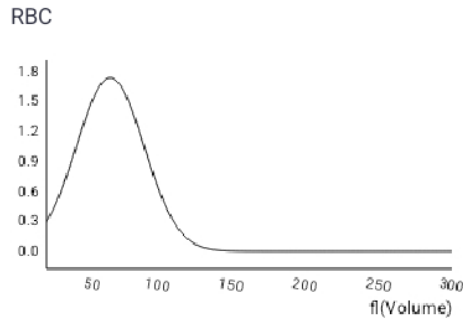
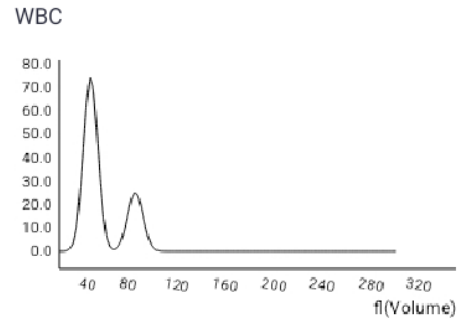
Report No.:2605090014	Medical No.:	Test Time:2026.05.09 20:23:33
Pet Name:dog8-813	Pet type:Canine	Gender:Male
Age: Year	Sample Type:Whole blood	Owner:

Parameters	Result	Reference range	Low	Normal	High
01. WBC (White blood cell count)	22.63 10^9/L↑	5.05-16.76			
NEU# (Neutrophil count)	5.74 10^9/L	2.95-11.64			
NST# (Band neutrophil count)	0.08 10^9/L	0.00-0.80			
NSG# (Segmented neutrophil count)	5.49 10^9/L	2.50-11.30			
NSH# (Hypersegmented neutrophil count)	0.18 10^9/L	0.00-0.40			
LYM# (Lymphocyte count)	14.72 10^9/L↑	1.05-5.10			
SLYM# (Small lymphocyte count)	14.62 10^9/L↑	1.05-5.10			
LLYM# (Large lymphocyte count)	0.10 10^9/L↑	0.00-0.00			
MON# (Monocyte count)	0.95 10^9/L	0.16-1.12			
EOS# (Eosinophil count)	1.22 10^9/L	0.06-1.23			
BAS# (Basophil count)	0.00 10^9/L	0.00-0.10			
NEU% (Neutrophil ratio)	25.36 %↓	52.00-78.00			
NST/WBC% (Band neutrophil ratio)	0.33 %	0.00-10.00			
NST/NEU% (Band neutrophil ratio)	1.32 %	0.00-20.00			
NSG% (Segmented neutrophil ratio)	24.25 %↓	50.00-75.00			
NSH/WBC% (Hypersegmented neutrophil ratio)	0.78 %	0.00-5.00			
NSH/NEU% (Hypersegmented neutrophil ratio)	3.08 %	0.00-7.00			
LYM% (Lymphocyte ratio)	65.05 %↑	16.00-41.50			
MON% (Monocyte ratio)	4.18 %	1.00-13.00			
EOS% (Eosinophil ratio)	5.41 %	0.50-11.85			
BAS% (Basophil ratio)	0.00 %	0.00-0.90			
02. RBC (Red blood cell count)	5.94 10^12/L	5.65-8.87			
HGB (Hemoglobin concentration)	141.26 g/L	131.00-205.00			
HCT (Hematocrit)	40.54 %	37.30-61.70			
MCV (Mean red cell volume)	68.22 fL	61.60-73.50			
MCH (Mean Hb per RBC)	23.77 pg	21.20-25.90			
MCHC (Mean Hb conc in RBC)	348.44 g/L	320.00-379.00			
RDW-CV (RBC dist width-CV)	13.05 %	11.20-17.10			
RDW-SD (RBC dist width-SD)	29.86 fL	25.60-41.60			
HDW-CV (Hb dist width-CV)	27.10 %↑	7.00-20.00			
HDW-SD (Hb dist width-SD)	6.44 g/L	2.00-8.00			
RET# (Reticulocyte count)	106.71 10^9/L	3.00-110.00			
RET% (Reticulocyte ratio)	1.80 %↑	0.00-1.50			
ETG# (Shadow red cell count)	0.00 10^12/L	0.00-0.05			
ETG% (Shadow red cell ratio)	0.00 %	0.00-1.65			
SPH# (Spherocyte count)	11.42 10^9/L	0.00-130.10			
SPH% (Spherocyte ratio)	0.19 %	0.00-1.54			
ACA# (Acanthocyte count)	0.00 10^9/L	0.00-0.00			
NRBC# (Nucleated red cell count)	0.62 10^9/L↑	0.00-0.00			
NRBC/WBC% (Nucleated red cell ratio)	2.74 %↑	0.00-0.00			
AGG# (Agglutinated red cell count)	54.33 10^9/L↑	0.00-0.15			
03. PLT (Platelet count)	292.78 10^9/L	148.00-484.00			
MPV (Mean platelet volume)	10.64 fL	8.70-13.20			
PDW (Platelet distribution width)	17.47 fL	9.10-19.40			
PCT (Plateletcrit)	0.31 %	0.14-0.46			
APLT# (Aggregated platelet count)	0.00 10^9/L	0.00-0.15			
P-LCC (Large platelet count)	19.76 10^9/L	0.00-66.00			
P-LCR (Large platelet ratio)	6.75 %	0.00-25.00			

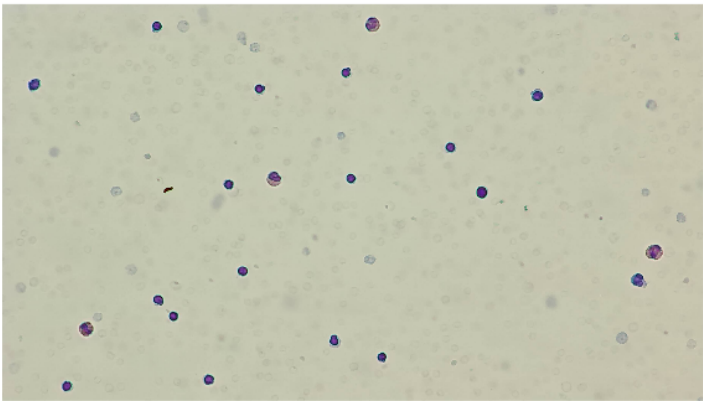
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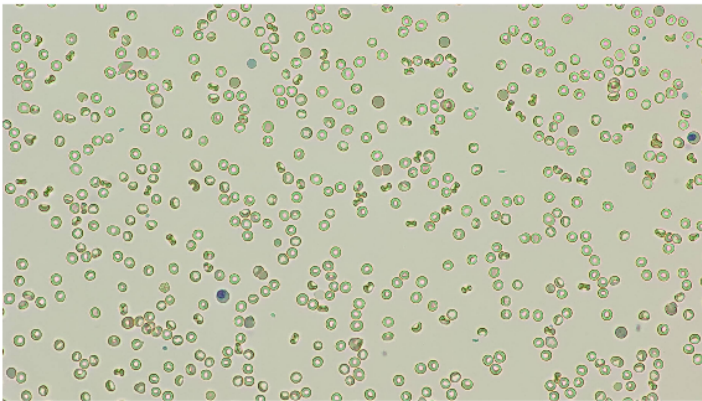
Report No.:2605090014	Pet Name:dog8-813	Pet type:Canine
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WBC images

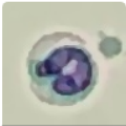


RBC&PLT images



NST#

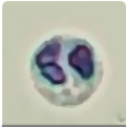
0.08 10⁹/L



Number: 8 sheets/143 images/614 images

NSG#

5.49 10⁹/L



Number: 559 sheets/143 images/614 images

NSH#

0.18 10⁹/L



Number: 15 sheets/143 images/614 images

SLYM#

14.62 10⁹/L



Number: 1449 sheets/143 images/614 images

Test Report of Hematology Analysis

Hospital Address: Contact number:

Report No.:2605090014

Pet Name:dog8-813

Pet type:Canine

LLYM# 0.10 10⁹/L



STD image

Number: 11 sheets/36 images/614 images

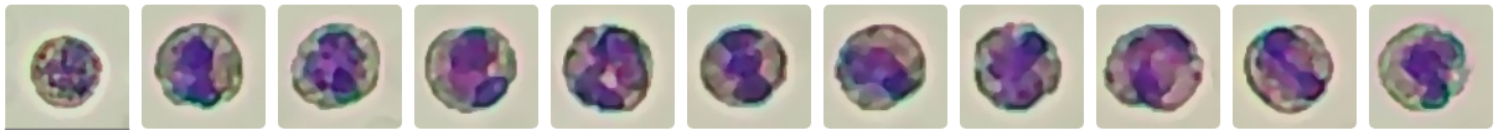
MON# 0.95 10⁹/L



STD image

Number: 93 sheets/143 images/614 images

EOS# 1.22 10⁹/L



STD image

Number: 121 sheets/143 images/614 images

RET# 106.71 10⁹/L



STD image

Number: 1038 sheets/143 images/614 images

ETG# 0.00 10¹²/L



STD image

Number: 11 sheets/36 images/614 images

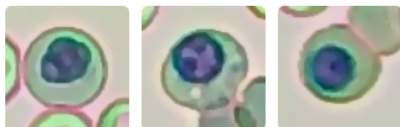
SPH# 11.42 10⁹/L



STD image

Number: 37 sheets/36 images/614 images

NRBC# 0.62 10⁹/L



STD image

Number: 2 sheets/36 images/614 images

Test Report of Hematology Analysis

Hospital Address: Contact number:

Report No.:2605090014

Pet Name:dog8-813

Pet type:Canine

AGG# 54.33 10⁹/L



STD image

Number: 176 sheets/36 images/614 images

P-LCC 19.76 10⁹/L



STD image

Number: 873 sheets/425 images/614 images

1.Viral infection / Chronic antigenic stimulation (e. g. , chronic infection, immune-mediated disease) / Mixed infection

Basis for judgment:The body's immune response is dominated by lymphocytes, representing an acute or chronic immune activation state without significant neutrophil involvement. The logic for this blood profile is: a significant increase in the absolute value of lymphocytes is the sole core driver pushing the total White Blood Cell count up.

2.Bone Marrow Compensatory Hyperplasia

Basis for judgment:Elevated Reticulocytes reflect bone marrow compensatory hyperplasia, common in Hemolytic Anemia or the recovery phase after blood loss. Within Normal Range RBC parameters suggest no obvious anemia or RBC morphological abnormalities.

3.Possible abnormal lymphatic reaction or lymphoproliferative disease.

Basis for judgment:Occasional lymphoblasts in peripheral blood can be seen in strong immune stimulation; persistent or large numbers require vigilance for lymphoproliferative diseases, requiring bone marrow/immunophenotyping correlation.

4.Anemia or stress-related state.

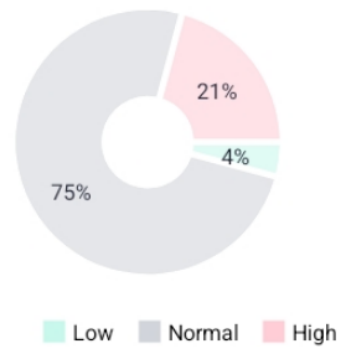
Basis for judgment:NRBC are immature erythrocytes; elevation suggests bone marrow compensation or severe stress, requiring exclusion of sampling effects.

5.Anemia or hypoxia-related status

Basis for judgment:Elevated ratio suggests enhanced erythropoiesis, but clinical significance must be judged in conjunction with absolute counts

6.Possible immune or non-immune mediated agglutination

Basis for judgment:RBC agglutination may be antibody-mediated, cold agglutination, or sampling_ID___ID___ID 3 related; microscopic confirmation is mandatory



WBC 22.63 10⁹/L ↑ (5.05-16.76)

-Clinical indication:Presence of acute inflammation or infection (bacterial infection is most typical), tissue injury/necrosis, drug/hormone effects, stress response, or myeloproliferative disorders.

-Basis for judgment:Bacterial infection stimulates the bone marrow to accelerate the release of White Blood Cells to fight pathogens; inflammatory reactions caused by trauma, surgery, burns, pancreatitis, etc. ; use of drugs such as glucocorticoids and colony-stimulating factors can induce elevated White Blood Cells; physiological or pathological stress leads to redistribution of White Blood Cells, resulting in transient elevation; abnormal proliferation of hematopoietic stem cells leads to persistent and significant elevation of White Blood Cells (mostly malignant lesions).

LYM# 14.72 10⁹/L ↑ (1.05-5.10)

-Clinical indication:Commonly seen in viral infectious diseases, lymphocytic leukemia, acute infectious diseases, and the recovery phase of acute poisoning; physiological: young animals, excitement (especially in cats), related to hypoadrenocorticism or immune response.

-Basis for judgment:Physiological/reactive lymphocytosis (most common) is the body's normal immune response to stimuli; viral infection (antigenic stimulation) with long-term, continuous immune system activation (canine distemper, feline rhinotracheitis, parvovirus, feline panleukopenia, etc.); cortisol deficiency caused by hypoadrenocorticism (Addison's disease); lymphoproliferative diseases (most critical to watch for): neoplastic proliferation of the lymphoid lineage itself.

RET% 1.80 % ↑ (0.00-1.50)

-Clinical indication:Elevation indicates that the bone marrow is accelerating RBC production to compensate for the loss or destruction of peripheral RBCs.

-Basis for judgment:1. Compensatory elevation (accompanied by anemia, HGB↓, HCT↓): Hemolytic Anemia, hemorrhagic anemia: Most common, massive loss/destruction of peripheral RBCs, compensatory hematopoiesis in bone marrow, significantly elevated Reticulocyte Percentage, suggesting Within Normal Range bone marrow hematopoietic function; 2. Relative elevation (without anemia, HGB, HCT Within Normal Range): Rare, due to a slight decrease in peripheral mature RBC count (e. g. , after dehydration correction, anemia recovery phase, drug/hormone stimulation), Reticulocyte Percentage is relatively Elevated without bone marrow hyperfunction.

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Report No.:2605090014

Pet Name:dog8-813

Pet type:Canine

LLYM# 0.10 10⁹/L ↑ (0.00-0.00)

- Clinical indication:Suggests lymphocyte activation or reactive/proliferative changes in the lymphatic system (clinical correlation required).
- Basis for judgment:Elevated absolute count of large lymphocytes suggests possible immune system activation or abnormal proliferation.

NRBC# 0.62 10⁹/L ↑ (0.00-0.00)

- Clinical indication:Suggests bone marrow stress or increased release of immature erythrocytes (clinical correlation required).
- Basis for judgment:Elevated nucleated red blood cells (NRBC) suggest bone marrow compensation or barrier disruption.

NRBC/WBC% 2.74 % ↑ (0.00-0.00)

- Clinical indication:Suggests active bone marrow hematopoiesis (must correlate with NRBC absolute value)
- Basis for judgment:Elevated NRBC/WBC ratio suggests enhanced hematopoietic compensation

AGG# 54.33 10⁹/L ↑ (0.00-0.15)

- Clinical indication:Suggests RBC agglutination (requires microscopic confirmation and exclusion of in vitro factors)
- Basis for judgment:Elevated RBC aggregation count; confirm via blood smear and saline dispersion test

Possible diseases and basis for inference

Acute viral infection / Mixed bacterial and viral infection High

Canine distemper, feline panleukopenia, canine parvovirus, canine parainfluenza virus infection, feline coronavirus infection, etc. During viral infection, the body mainly relies on lymphocytes (especially T lymphocytes) to recognize and clear virus-infected cells, thus stimulating lymphocyte proliferation and leading to an increase in the total count, which in turn pushes up the total White Blood Cell count. Canine distemper secondary to bacterial pneumonia/ bronchitis, feline upper respiratory tract infection syndrome (feline herpesvirus, calicivirus) secondary to bacterial infection, canine infectious hepatitis (adenovirus) or parainfluenza virus infection recovery phase with secondary infection, chronic viral infection (such as feline leukemia virus, feline immunodeficiency virus) patients with secondary opportunistic bacterial infections, etc.

Acute Hemolytic Anemia High

Significant elevation of RET% is a typical manifestation of bone marrow compensation after Hemolysis; other Within Normal Range RBC parameters support early or compensatory stages.

Chronic viral infection High

Persistent viral stimulation of the lymphatic system leads to reactive increase in large lymphocytes.

[1]Boden,E. Andrews,A. (2015). The Black Veterinary Dictionary (22nd Edition). London: Bloomsbury Press.

[2]Latimer,K.S. (2011). Duncan & Plath Veterinary Laboratory Medicine: Clinical Pathology (5th Edition). Ames, Iowa: Willy Blackwell Publishing House.

[3]Merck Veterinary Manual (2025). Clinical Hematology - Clinical Pathology and Operating Procedures.[4]Weiss,D.J. and Wardrop,K.J. (2010). Schalm Veterinary Hematology (6th Edition). Ames, Iowa: Willy Blackwell Publishing House.