



TooToo Meditech Co., Ltd.

# AI-100Vet Elite

**Veterinary Analyzer**

**Your Lab,Your Way**

**The Configurable Alyeterinary Analyzer**

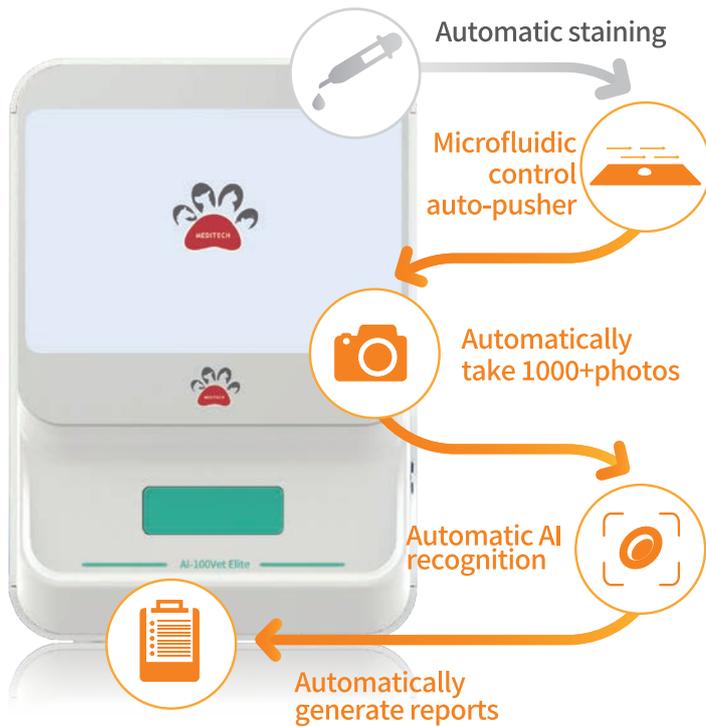


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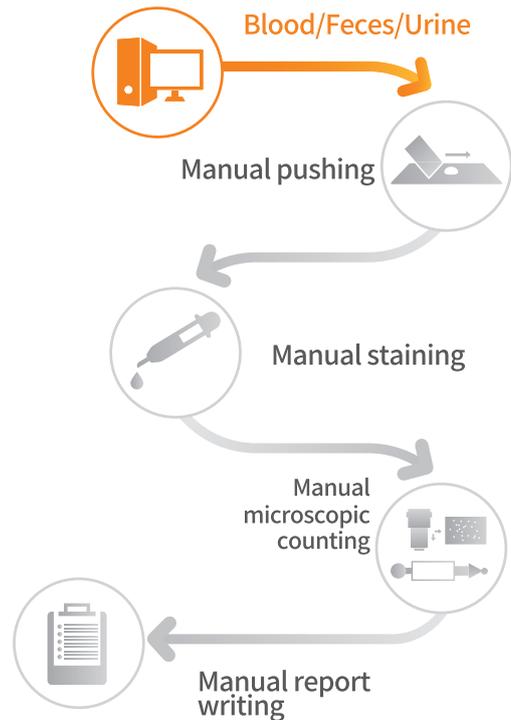


# INNOVATOR

## Veterinary Diagnostic Innovator



**AI-100Vet Elite**



**Traditional Method**



## ADVANCED TESTING:

### Multi-Species & Multi-Samples

#### 1 Widely Applicable



Dog



Cat

\*For detailed information, please contact your local distributor.



#### 2 Multi-Sample Parameter Detection



Blood  
46+ parameters



Feces  
32+ parameters



Urine  
21+ parameters



Fluid  
19+ parameters

#### 3 User Friendly



Automatic staining, microscopy, classification, counting, and slide preparation



One-click analysis for standard reports and morphology reports



Comprehensive diagnostic insights based on mega data



# 10 Min

## AI-powered blood smear test

**NST & NSG & NHG:** Distinguishing inflammation and stress/excitement

**RET & NRBC:** Identifying regeneration of anemia

**ETG:** Assessing intravascular hemolysis

**SPH:** Red blood cell membrane damage

**Agglutinated PLT:** Revealing more accurate state of platelet

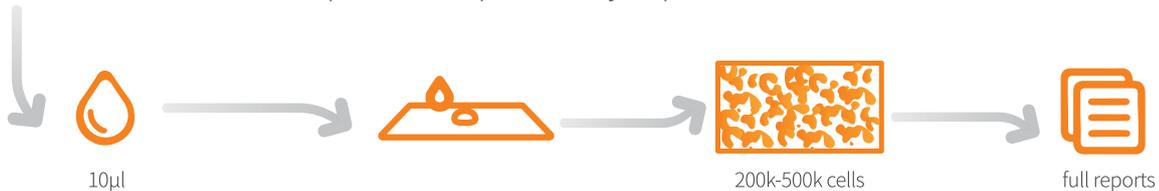
**Large PLT:** Indicating the regeneration of platelet

**AGG:** Immune system issues



### More Count

- 10 $\mu$ l blood, allows instant capture of 200,000 to 500,000 cells, with full reports
- Nano-precision optic swiftly captures 500+ fields within 10 min



### More Accurate Interpretation

- **Microfluidic technology:** allows the formation of a single layer of blood cells, enhancing the precision of cell classification and counting.

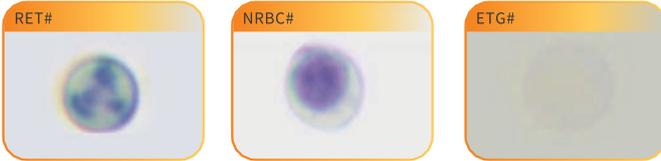
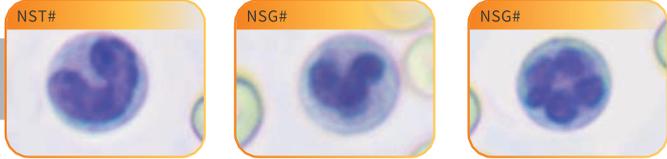




# Gold Standard 46+ parameters

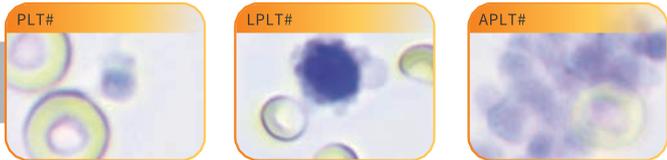
The AI-100Vet Elite analyzer provides more comprehensive findings, empowering vets to make confident diagnoses

## White Blood Cells (WBC): 7-Part Differential



## Red Blood Cells (RBC): 5-Parameter Analysis

## Platelets (PLT): 3-Parameter Analysis



### White Blood Cells (WBC)

- White blood cell count (WBC)
- Neutrophils (NEU)
- Neutrophil stab granulocyte (NST)
- Eosinophil (EOS)
- Neutrophil segmented granulocyte (NSG)
- Neutrophil hypersegmented granulocyte (NSH)
- Lymphocyte (LYM)
- Basophil (BAS)
- Monocyte (MON)

### Platelets (PLT)

- Platelet count (PLT)
- Plateletcrit (PCT)
- Mean platelet volume (MPV)
- Large platelet (LPLT)
- Agglutinated platelet count (APLT)
- Platelet distribution width (PDW)

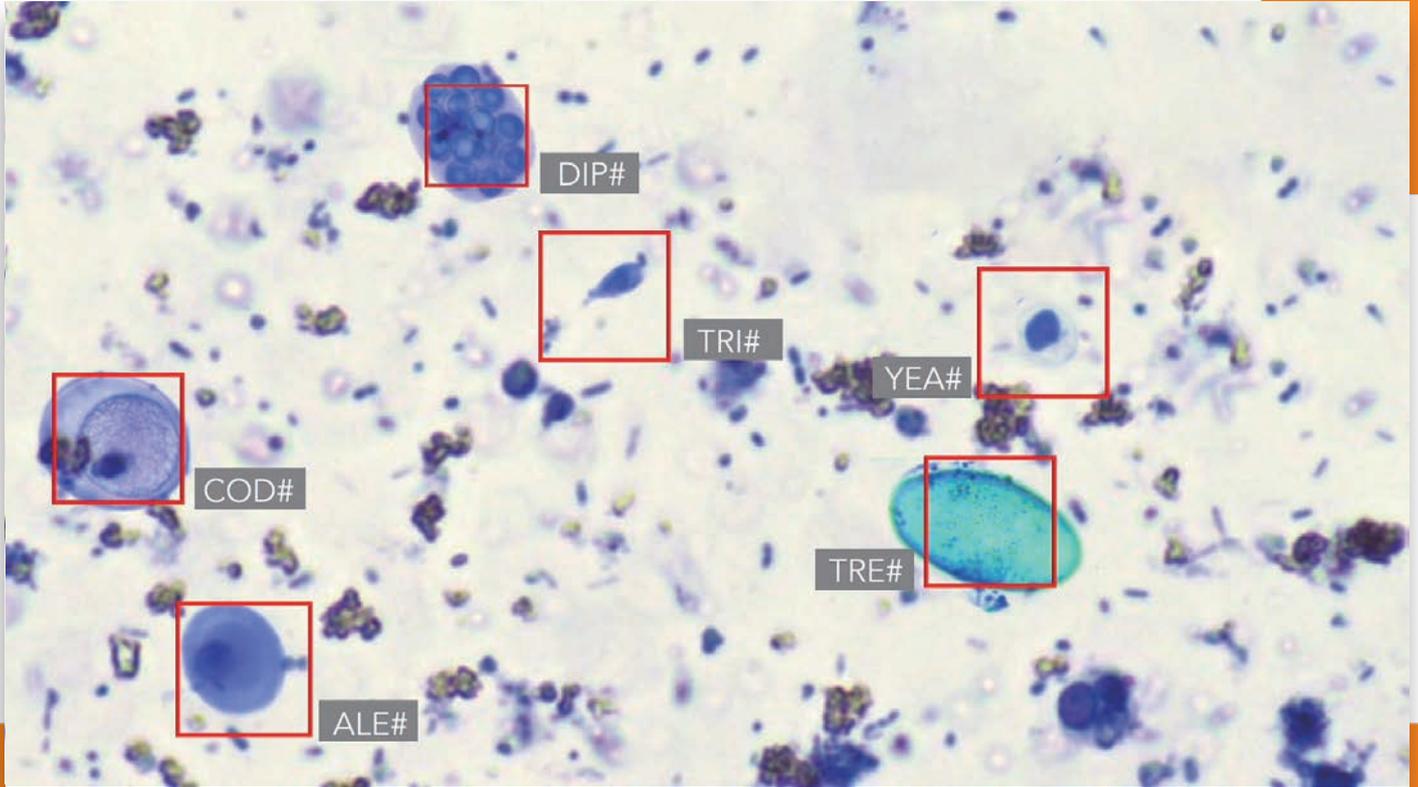
### Red Blood Cells (RBC)

- Red blood cell count (RBC)
- Hemoglobin concentration (HGB)
- Mean red blood cell volume (MCV)
- Mean corpuscular hemoglobin concentration (MCHC)
- Red Cell Distribution Width (RDW)
- Mean corpuscular hemoglobin (MCH)
- Hemoglobin Distribution Width (HDW)
- Hematocrit (HCT)
- Erythrocyte ghost (ETG)
- Reticulocyte (RET)
- Nucleated red blood cell (NRBC)
- Reticulocyte Distribution Width (RDW)
- Mean Reticulocyte Volume (MRV)



# FECES

## From Repetitive Inefficiency to Simple Efficiency



### Time & Cost Saving

Tests are completed within 12 minutes, giving valuable time back to veterinarians



### Professional and Comprehensive Report

32-parameter report, with image insights and diagnostic cues for pet owners' easy comprehension

Suspected Parasite Egg Report Section for streamlined re-diagnosis by veterinarians



### More Accuracy

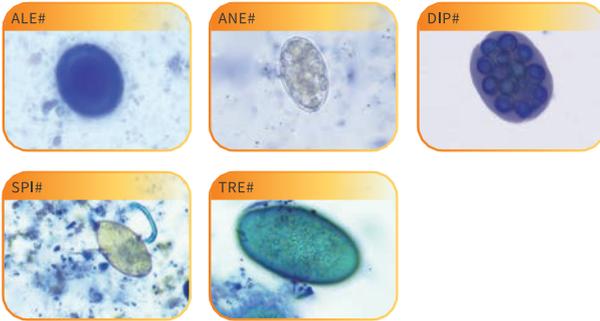
Quantitative microbiome assessment report for efficient analysis of the gastrointestinal system

Scanning 1000+/3000+ fields to enhance detection rates

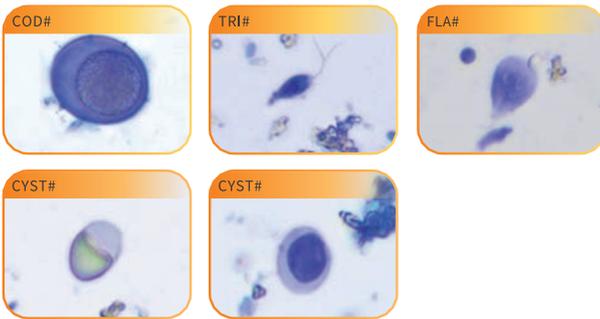


Awalife Staining System: Fecal Examination Atlas

### Parasite Eggs



### Intestinal Protozoa



### Pathogenic Microorganism



### Cell



### Digestive Function



# FECES

The unique automatic device allows detection of feces in a single run, during the veterinary visit

## Parasite Eggs

- Ascaris egg
- Spirometra egg
- Hookworms egg
- Alaria egg
- Dipylidium caninum egg

## Intestinal Protozoa

- Trichomonas
- Giardia cyst
- Giardia
- Coccidia
- Giardia trophozoite

## Pathogenic Microorganism

- Campylobacter
- Spirochete
- Bacillus
- Yeast
- Helicobacter

## Cell

- RBC
- Epithelial cell
- WBC

## Digestive Function

- Starch granules
- Plant fibers
- Fat droplets
- Muscle fibers



# URINE

## High-Quality Urine Sediment Examination



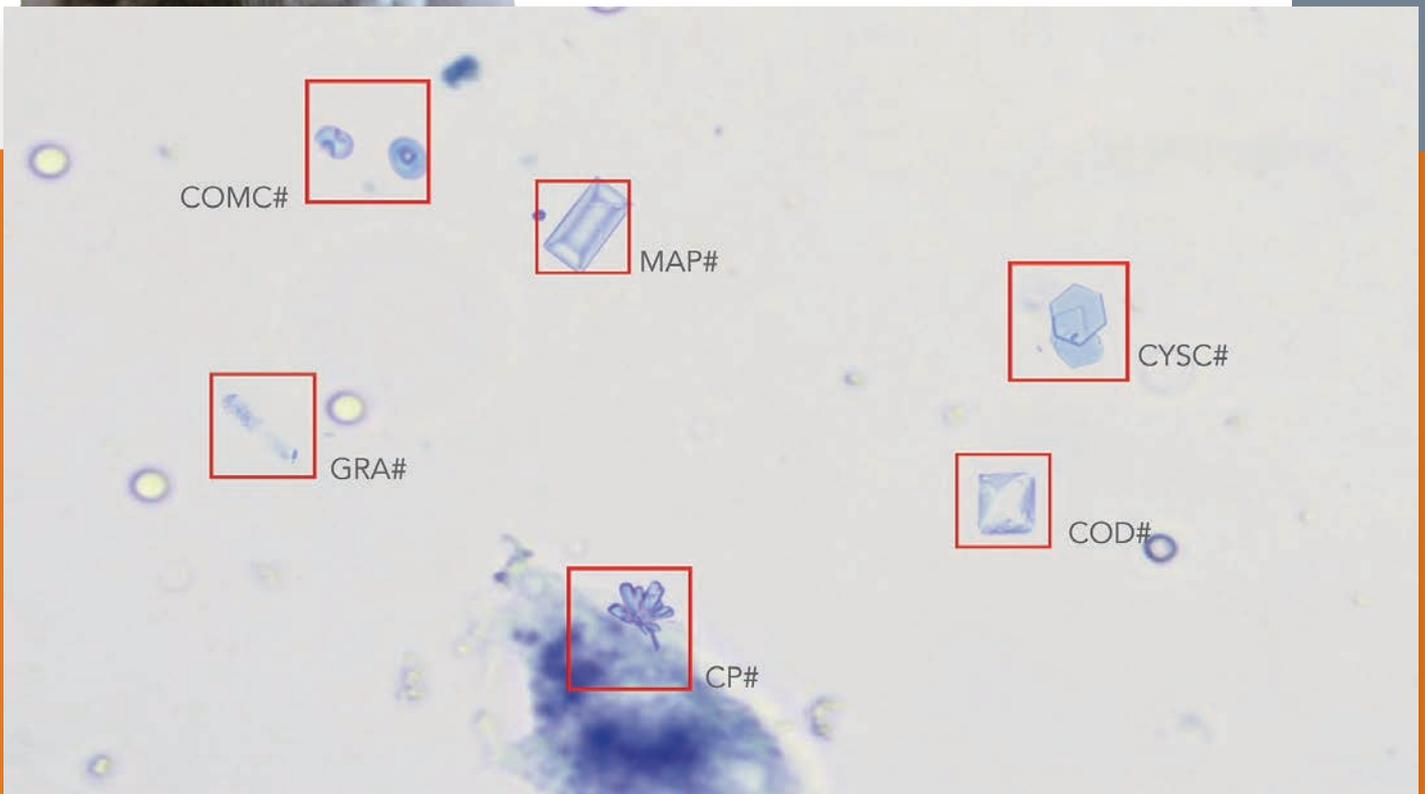
### Less Time

- Sample addition within 15 seconds
- Automatic report generated within 11 minutes, minimum manual intervention required



### More Accuracy

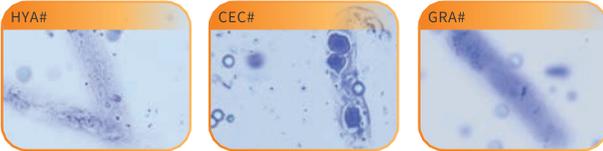
- AI recognizes 4 types of casts, 6 types of crystals, epithelial cells, sperms and mucus
- Scanning 1000+ fields to enhance detection rates



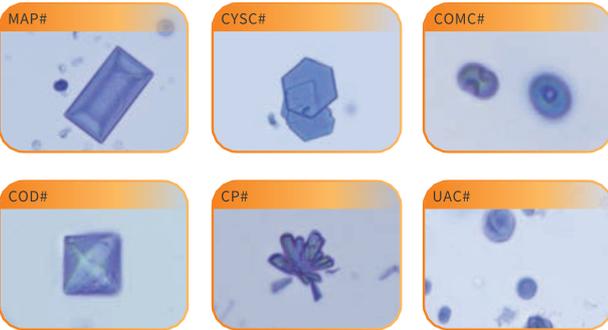


Awalife Staining System: Urine Sediment Staining Atlas

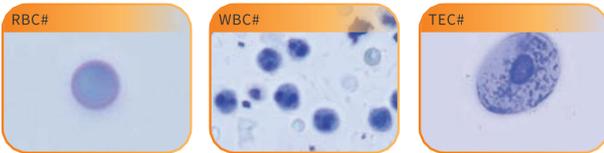
Cast



Crystal



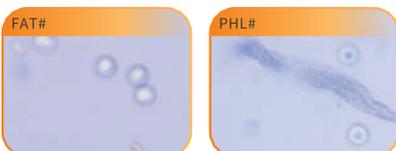
Cell



Pathogenic Microorganism



Other



# URINE

More comprehensive results, providing the most clinical relevant elements, thus assisting to accelerate clinical diagnosis

## Cast

- Hyaline cast
- Cellular cast
- Waxy cast
- Granular cast

## Crystal

- Struvite
- Uric acid
- Cystine
- Calcium oxalate monohydrate
- Calcium oxalate dihydrate
- Calcium phosphate

## Cell

- Renal tubular epithelial cells
- Squamous epithelial cells
- Transitional epithelial cells
- Sperm

## Pathogenic Microorganism

- Cocci
- Rods
- Yeast

## Others

- Lipid droplet
- Mucus



# Popularize morphological examination of pleural and ascitic fluids

Fluid: 19+ parameters



Determine the nature of body cavity fluids



Assess bacterial infection status



Support differential diagnosis of pleural and ascitic fluids

## 1 Atlas of Ascites Examination Under the Staining System

### Nucleated Cells

Total Nucleated Cell (TNCC#)  
Total Inflammatory Cell (INC#)  
Total Granulocyte (GRL#)  
Neutrophils(NEU#)  
Lymphocytes (LYM#)

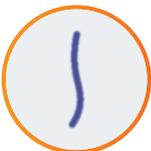
Macrophages (MAPC#)  
Mesothelial Cell(MCs#)  
Phagocytic Cell(PHC#)  
Unclassified Nucleated Cells(UCC#)

### Erythrocytes

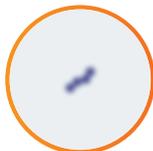
Total Red Blood Cell Count (RBC#)  
Packed Cell Volume (PCV%)

### Microorganisms

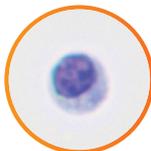
Bacilli (BAC#)  
Cocci (COS#)



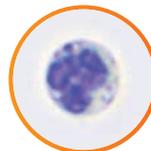
Bacillus



Coccus



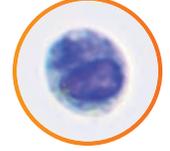
Lymphocyte



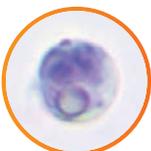
Neutrophil



Eosinophil



Macrophage



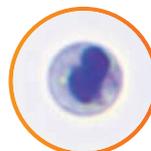
Phagocytic cell



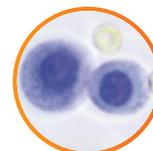
Red blood cell



Aggregated cell cluster



Degenerative granulocyte



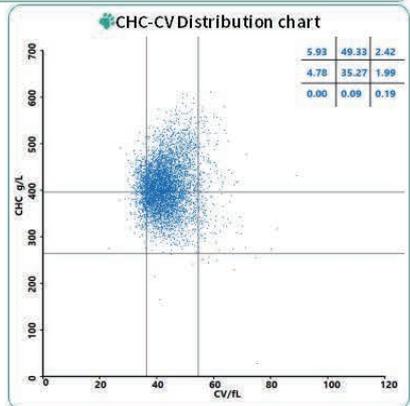
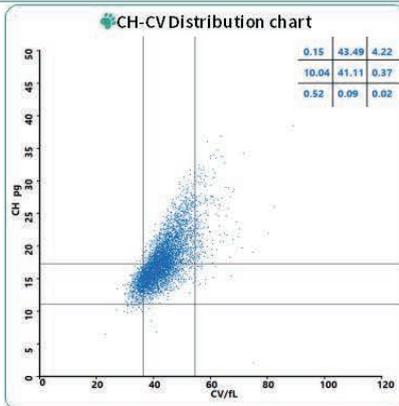
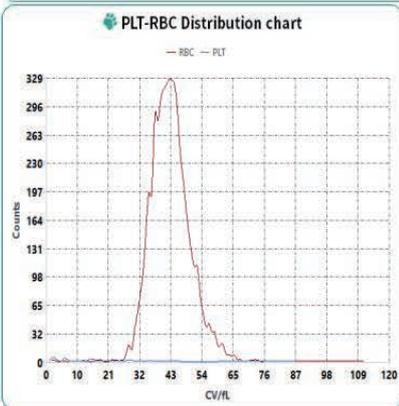
Mesothelial cell



### Blood Report

No.: \_\_\_\_\_ LIS: \_\_\_\_\_ Doctor: \_\_\_\_\_ Sample: \_\_\_\_\_ Owner: \_\_\_\_\_  
 Pet name: \_\_\_\_\_ Species: \_\_\_\_\_ Gender: \_\_\_\_\_ Pet age: \_\_\_\_\_ Weight: \_\_\_\_\_

Parameters				
Detection items	Result	Unit	Reference	
<b>1.WBC</b>	<b>125.52</b>	<b>10<sup>9</sup>/L</b>	<b>3.50-17.90</b>	
1-1.NEU#	0.79	10 <sup>9</sup> /L	2.30-12.58	
1-2.NST#	0.09	10 <sup>9</sup> /L	0.00-0.80	
1-3.NSG#	0.70	10 <sup>9</sup> /L	2.30-12.50	
1-4.NHG(NSH#)	0.00	10 <sup>9</sup> /L	0.00-0.30	
1-5.LYM#	105.71	10 <sup>9</sup> /L	0.73-6.60	
1-6.MON#	18.30	10 <sup>9</sup> /L	0.00-0.90	
1-7.EOS#	0.73	10 <sup>9</sup> /L	0.00-1.20	
1-8.BAS#	0.00	10 <sup>9</sup> /L	0.00-0.12	
1-9.NEU%	0.63	%	38.00-80.00	
1-10.NST/WBC%	0.07	%	0.00-10.00	
1-11.NSG%	0.55	%	35.00-75.00	
1-12.NSH/WBC%	0.00	%	0.00-3.00	
1-13.LYM%	84.22	%	20.00-50.00	
1-14.MON%	14.58	%	1.00-7.20	
1-15.EOS%	0.58	%	1.00-11.20	
1-16.BAS%	0.00	%	0.00-0.20	
1-17.NST/NEU%	11.54	%	0.00-15.00	
1-18.NSH/NEU%	0.00	%	0.00-4.00	
<b>2.RBC</b>	<b>3.06</b>	<b>10<sup>12</sup>/L</b>	<b>5.60-12.60</b>	
2-1.HGB	54.26	g/L	98.00-178.00	
2-2.HCT	14.36	%	26.00-47.00	
2-3.MCV	46.88	fL	38.70-52.50	
2-4.MCH	17.72	pg	11.80-16.50	
2-5.MCHC	377.92	g/L	280.00-380.00	
2-6.RDW-SD	20.00	fL	16.00-31.90	
2-7.RDW-CV	14.52	%	15.50-24.20	
2-8.HDW-SD	11.00	g/L	5.80-9.80	
2-9.HDW-CV	20.85	%	13.20-23.00	
2-10.RET#	0.00	10 <sup>9</sup> /L	0.00-9.60	
2-11.RET%	0.00	%	0.00-0.15	
2-12.NRBC#	0.00	10 <sup>9</sup> /L	0.00-0.00	
2-13.NRBC/WBC%	0.00	%	0.00-0.00	
2-14.ETG#	0.04	10 <sup>12</sup> /L	0.00-0.06	
2-15.ETG%	1.18	%	0.00-2.50	
2-16.SPH#	0.00	10 <sup>9</sup> /L	0.00-193.66	
2-17.SPH%	0.00	%	0.00-2.71	
2-18.AGG#	0.00	10 <sup>9</sup> /L	0.00-0.15	
<b>3.PLT</b>	<b>34.42</b>	<b>10<sup>9</sup>/L</b>	<b>140.00-547.00</b>	
3-1.PCT	0.06	%	0.20-0.80	
3-2.MPV	18.35	fL	8.20-21.30	
3-3.LPLT#	7.46	10 <sup>9</sup> /L	0.00-103.00	
3-4.P-LCR	21.67	%	0.00-30.00	
3-5.APLT#	0.20	10 <sup>9</sup> /L	0.00-0.15	
3-6.PDW-SD	15.00	fL	7.10-31.10	
3-7.PDW-CV	97.90	%	43.70-73.40	

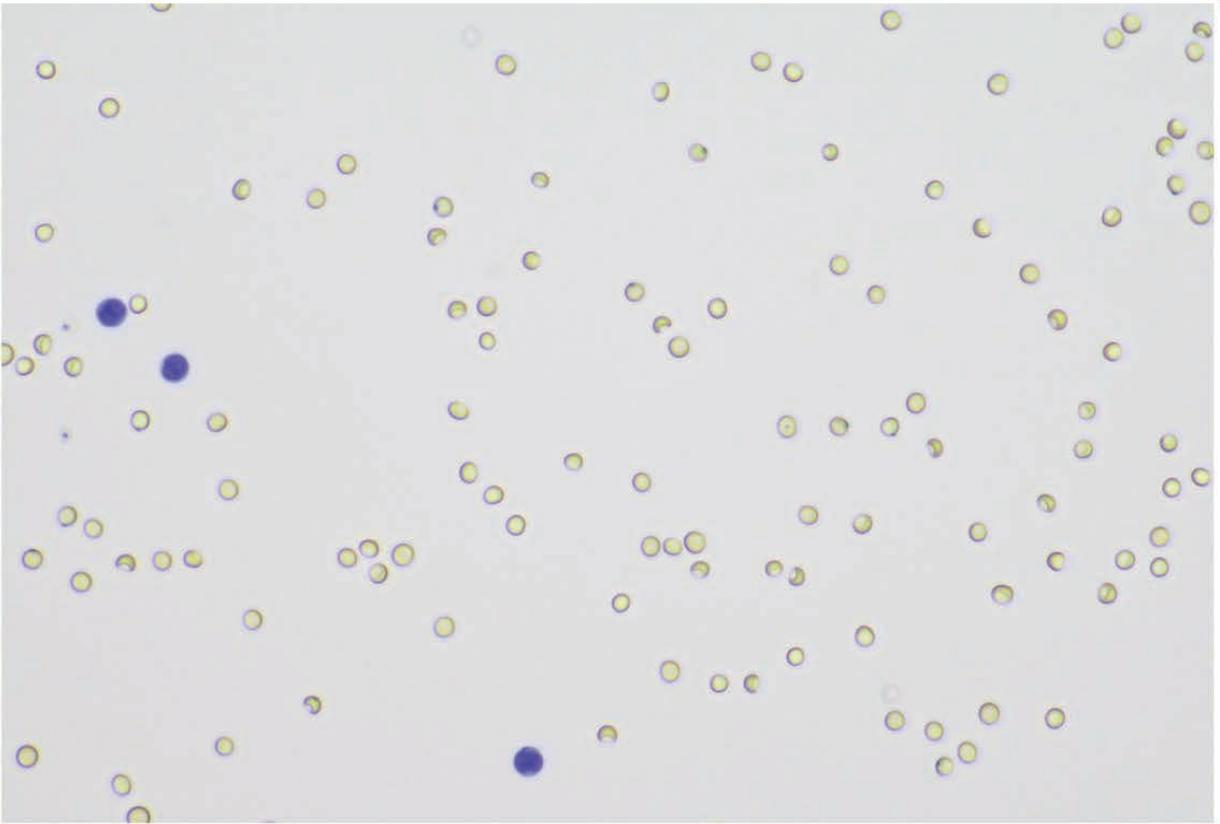




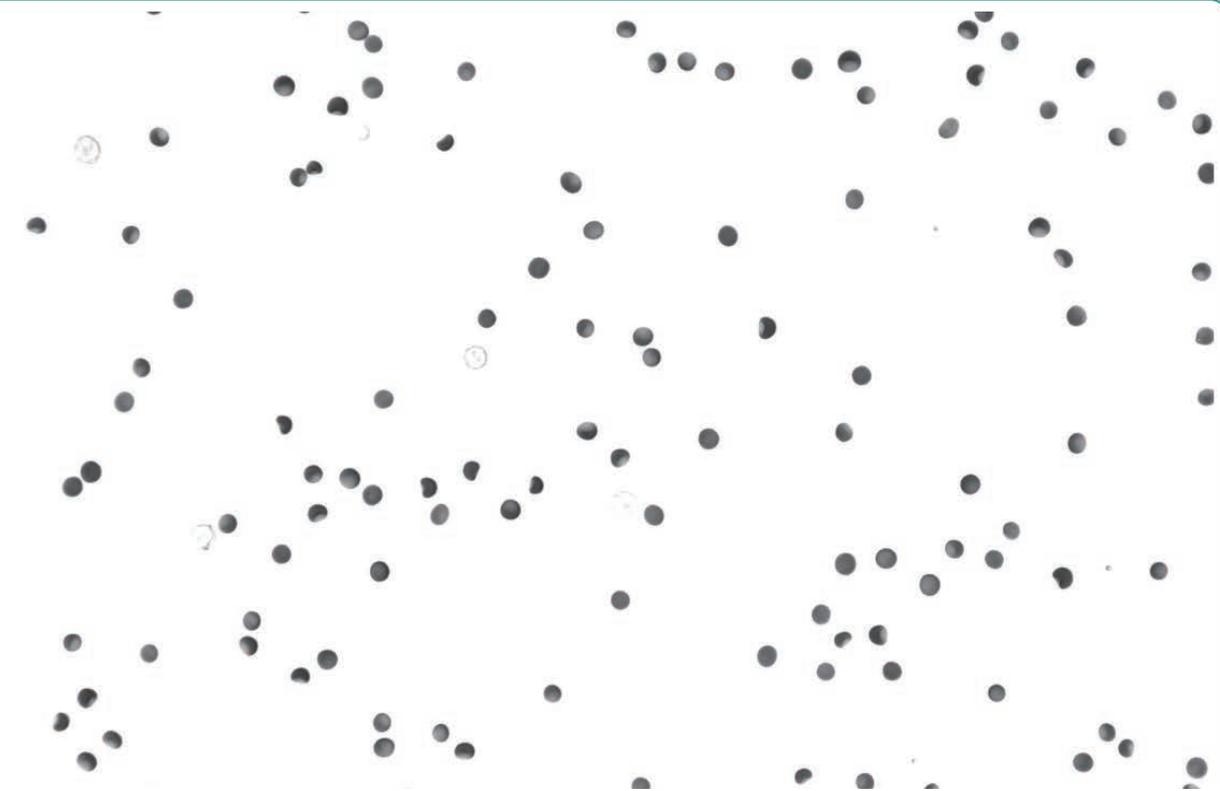
### Blood Morphology Report

No.:	LIS:	Doctor:	Sample:	Owner:
Pet name:	Species:	Gender:	Pet age:	Weight:

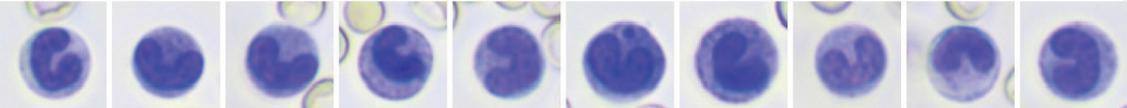
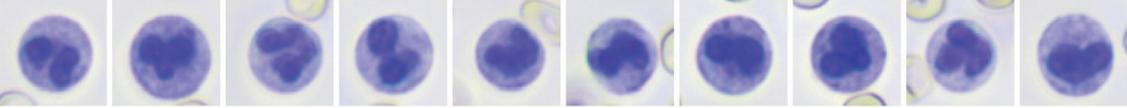
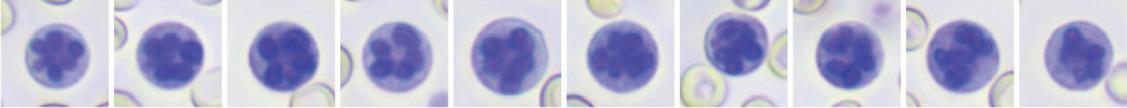
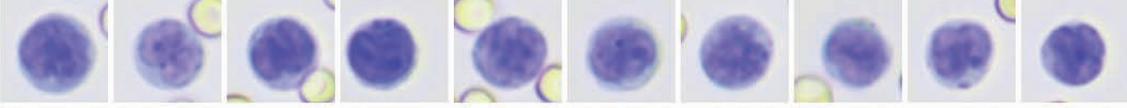
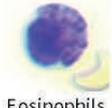
RBC & PLT distribution chart



HGB distribution chart





 neutrophil stab granulocyte		QTY.: 13/378photos	Co.: $0.09 \times 10^9/L$	PCT: 0.07 NST#/WBC
 Neutrophil segmented granulocyte		QTY.: 23/378photos	Co.: $0.70 \times 10^9/L$	PCT: 0.55 NSG#/WBC
 Neutrophil hypersegmented granulocyte		QTY.: 19/378photos	Co.: $0.00 \times 10^9/L$	PCT: 0.00 NSH#/WBC
 Lymphocyte		QTY.: 3495/378photos	Co.: $105.71 \times 10^9/L$	PCT: 84.22 LYM#/WBC
 Monocyte		QTY.: 605/378photos	Co.: $18.30 \times 10^9/L$	PCT: 14.58 MON#/WBC
 Eosinophils		QTY.: 24/378photos	Co.: $0.73 \times 10^9/L$	PCT: 0.58 EOS#/WBC
 Basophil		QTY.: 0/378photos	Co.: $0.00 \times 10^9/L$	PCT: 0.00 BAS#/WBC




**Normocyte**  
QTY.: 4008 /30photos | Co.:  $2.30 \times 10^{12}/L$  | PCT: 74.53 Normocyte#/RBC



**Normochromic**  
QTY.: 1997 /48photos | Co.:  $1.42 \times 10^{12}/L$  | PCT: 41.24 Normochromic#/RBC



**Macrocyte**  
QTY.: 309 /30photos | Co.:  $0.18 \times 10^{12}/L$  | PCT: 6.05 Macrocyte#/RBC



**Hyperchromic erythrocyte**  
QTY.: 2607 /48photos | Co.:  $1.85 \times 10^{12}/L$  | PCT: 53.84 Hyperchromic#/RBC



**Microcyte**  
QTY.: 500 /30photos | Co.:  $0.29 \times 10^{12}/L$  | PCT: 9.80 Microcyte#/RBC



**Hypochromic erythrocyte**  
QTY.: 18 /48photos | Co.:  $0.01 \times 10^{12}/L$  | PCT: 0.37 Hypochromic#/RBC



**Reticulocyte**  
QTY.: 0 /30photos | Co.:  $0.00 \times 10^9/L$  | PCT: 0.00 RET#/RBC



**NRBC**  
QTY.: 0 /378photos | Co.:  $0.00 \times 10^9/L$  | PCT: 0.00 NRBC#/RBC



**Erythrocyte Ghost**  
QTY.: 63 /56photos | Co.:  $0.04 \times 10^{12}/L$  | PCT: 1.18 ETG#/RBC



**Spherocyte**  
QTY.: 0 /56photos | Co.:  $0.00 \times 10^9/L$  | PCT: 0.00 SPH#/RBC



**Agglutinated RBC**  
QTY.: 0 /30photos | Co.:  $0.00 \times 10^9/L$  | PCT: 0.00 AGG#/RBC



**Large platelet**  
QTY.: 13 /56photos | Co.:  $7.46 \times 10^9/L$  | PCT: 21.67 LPLT#/PLT



**Agglutinated platelets**  
QTY.: 9 /378photos | Co.:  $0.20 \times 10^9/L$  | PCT: 0.59 APLT#/(APLT#+PLT)

**Diagnostic Recommendation**

**Single diagnosis:**

- I. **[WBC>17.90]** It is common in inflammation, hematological diseases, malignant tumors and so on.
  1. **[NEU#<2.30]** It is common in serious disease consumption, poisoning, physical and chemical damage and so on.
  2. **[LYM#>6.60]** It is common in viral infection, lymphoma, lymphatic leukemia and so on.
  3. **[MON#>0.90]** It is common in chronic infectious diseases, convalescence of diseases, and the use of glucocorticoid drugs.
- II. **[RBC<5.60]** It is common in acute / chronic hemorrhagic anemia, hemolytic anemia, nutritional anemia, aplastic anemia and so on.
  1. **[HGB<98.00]** It is common in acute / chronic hemorrhagic anemia, hemolytic anemia, nutritional anemia, aplastic anemia and so on.
  2. **[HCT<26.00]** It is common in anemia or bleeding caused by various causes, and the increase in plasma volume caused by various causes.
  3. **[HDW-SD>9.80]** It is suggested that the hemoglobin content of single red blood cell is not uniform, which can be seen in hereditary red blood cell abnormality and so on.
- III. **[PLT<140.00]** It is common in sample agglutination, hemorrhage, platelet destruction, organ detention, insufficient bone marrow formation, drug induction and so on.
  1. **[PCT<0.2]** It suggests thrombocytopenia.
  2. **[APLT#>0.15]** It is common in samples where micro-agglutination is not visible to the naked eye, Commonly seen in pathological conditions such as immune-mediated thrombocytopenia, azotemia, infectious diseases, malignant tumours, heart disease, drug-induced disorders.

**Combined diagnosis:**

1. **[WBC>17.90. MON#>0.9]** It is suggested that chronic inflammation or the middle and later stage of inflammation.
2. **[RBC<5.60. HGB<98.00]** It is suggested that positive cell anemia is common in aplastic anemia, acute blood loss within 40 hours, hemolysis within 40 hours, low hematopoietic function, leukemia and so on.
3. **[HGB<98.00. RET#>9.60]** It is suggested that non-regenerative anemia is common in primary / secondary erythropoietic dysfunction (such as inflammation, tumor, chronic nephropathy, chronic liver disease, thyroid / adrenocortical dysfunction, etc.), iron / copper / folic acid / VB12 deficiency, lead poisoning, bone marrow fibrosis, osteosclerosis, hypoplastic anemia and so on.
4. **[LYM#>50. LYM%>70%]** It is strong suspicion of lymphoma, and it is recommended to combine imaging studies with pathological examinations for a comprehensive diagnosis.



### Feces Report

No.:	LIS:	Doctor:	Sample:	Owner:
Pet name:	Species:	Gender:	Pet age:	Weight:

Texture: Formed stool

Smell: Smelly

Color: Sepia

#### Parameters

Detection items	Result/Unit	Result/Unit	Reference	Negative	Positive
<b>1.Parasite egg</b>					
1-1.Ascaris(i)	0.00	0.00/LPF	0-0		
1-2.Hookworm(ANE#)	0.00	0.00/LPF	0-0		
1-3.Tapeworm(CEE#)	0.00	0.00/LPF	0-0		
1-4.Dipylidium caninum(DIP#)	0.00	0.00/LPF	0-0		
1-5.Spirometra (SPI#)	0.00	0.00/LPF	0-0		
1-6.Alaria alata(TRE#)	0.00	0.00/LPF	0-0		
<b>2.Intestinal protozoa.</b>					
2-1.Trichomonas(TRI#)	0.00	0.00/LPF	0-0		
2-2.Giardia (FLA#)	0.00	0.00/LPF	0-0		
2-3.Isosporium coccidia(COD#)	0.00	0.00/LPF	0-0		
2-4.Isosporium coccidia 0(COD0#)	0.00	0.00/LPF	0-0		
2-5.Isosporium coccidia 1(COD1#)	0.00	0.00/LPF	0-0		
2-6.Isosporium coccidia 2(COD2#)	0.00	0.00/LPF	0-0		
<b>3.Germ</b>					
3-1.Cocci(COS#)	1019.41/ug	116.32/HPF	145-729/ug		
3-2.Rods(BACI#)	3877.61/ug	442.45/HPF	510-13904/ug		
3-3.Brevibacterium(SBAC#)	3517.86/ug	401.40/HPF	321-12462/ug		
3-4.Crude bacilli(CBAC#)	156.28/ug	17.83/HPF	15-1650/ug		
3-5.Thin bacilli (TBAC#)	203.46/ug	23.22/HPF	0-185/ug		
3-6.Cocci/Rods(C/B)	0.263	0.263	0.017-0.156		
3-7.Campylobacter(CAM#)	0.00/ug	0.00/HPF	0-30/ug		
3-8.Bacillus(BAC#)	25.83/ug	2.95/HPF	0-40/ug		
3-9.Serpentine spirochete(SS1#)	0.00/ug	0.00/HPF	0-0/ug		
3-10.Helicobacter(SS2#)	0.00/ug	0.00/HPF	0-0/ug		
3-11.Yeast(YEA#)	6.81/ug	0.78/HPF	0-150/ug		
<b>4.Cells</b>					
4-1.RBC#	0.00/ug	0.00/HPF	0-5/ug		
4-2.WBC#	0.00/ug	0.00/HPF	0-0/ug		
4-3.Epithelial cells(EPC#)	0.00/ug	0.00/HPF	0-12/ug		
<b>5.Digestive function</b>					
5-1.Starch granule(STA#)	0.00/ug	0.00/HPF	0-9/ug		
5-2.Lipid drop(LFAT#)	0.00/ug	0.00/HPF	0-1/ug		
5-3.Plant fiber(PLA#)	0.16/ug	0.07/HPF	0-0/ug		
5-4.Muscle fiber(AF#)	0.00/ug	0.00/HPF	0-0/ug		

#### Diagnostic recommendation

- 1、 [Formed stool] The fecal texture is normal.
- 2、 [Smelly] The fecal odor is normal.
- 3、 [Sepia] The stool color is normal.
- 4、 [C/B>0.156] This condition is commonly observed in intestinal flora disorders resulting from diseases and antibiotic use.
- 5、 [PLA#>0.1] It is common in high-volume crude fiber diet.

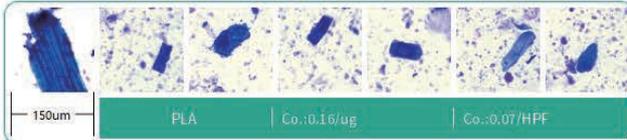
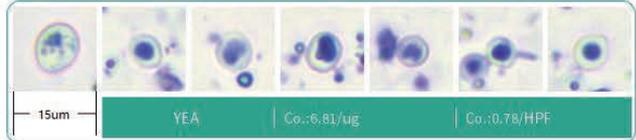
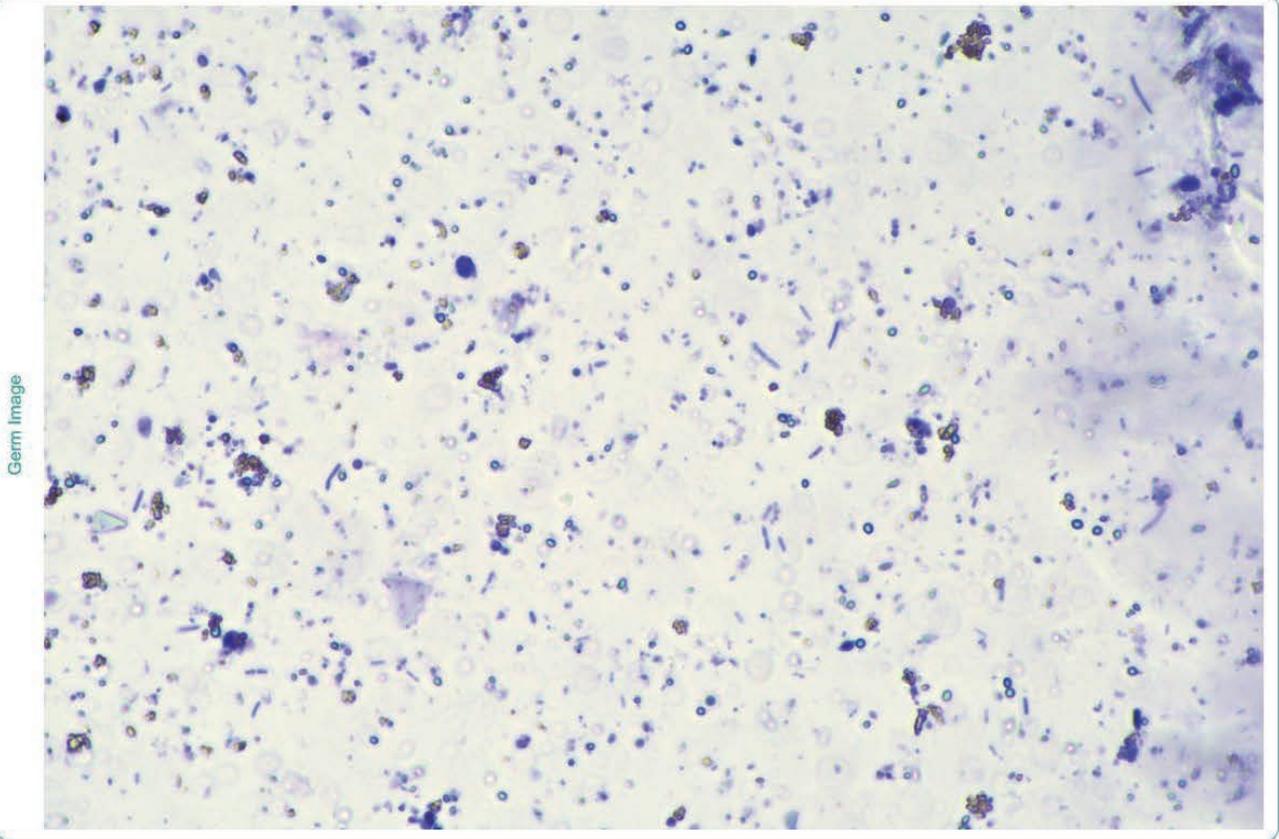
Due to various factors such as different stages of parasite infection, different parasite sites and different methods, operations and sites of specimen collection, eggs and bodies may be missed. It is recommended to reexamine fecal samples at different sites and at different times to improve the detection rate.

— 《Methods for laboratory examination of parasitic diseases》



### Feces Morphology Report

No.: \_\_\_\_\_ LIS: \_\_\_\_\_ Doctor: \_\_\_\_\_ Sample: \_\_\_\_\_ Owner: \_\_\_\_\_  
Pet name: \_\_\_\_\_ Species: \_\_\_\_\_ Gender: \_\_\_\_\_ Pet age: \_\_\_\_\_ Weight: \_\_\_\_\_





### Urine Report

No.:	LIS:	Doctor:	Sample:	Time:
Pet name:	Species:	Gender:	Pet age:	Owner:
<b>Color: Yellowish</b>		<b>Transparency: Turbid</b>		<b>Co.: 1x</b>
Parameters				
Detection items	Result/Unit	Result/Unit	Reference	
				Negative Positive
<b>1.Cast</b>				
1-1.Hyaline cast	0.00/uL	0.00/LPF	0-0.8/uL	—
1-2.Cellular cast	0.00/uL	0.00/LPF	0-0/uL	—
1-3.Granular cast	0.24/uL	0.22/LPF	0-0/uL	+
1-4.Waxy cast	0.00/uL	0.00/LPF	0-0/uL	—
<b>2.Crystal</b>				
2-1.Struvite#	56.80/uL	3.34/HPF	0-5/uL	+
2-2.Calcium oxalate monohydrate#	0.00/uL	0.00/HPF	0-0/uL	—
2-3.Calcium oxalate dihydrate#	0.57/uL	0.03/HPF	0-3/uL	—
2-4.Calcium phosphate#	0.61/uL	0.04/HPF	0-0/uL	+
2-5.Uric acid	0.00/uL	0.00/HPF	0-0/uL	—
2-6.Cystine	0.00/uL	0.00/HPF	0-0/uL	—
<b>3.Cells</b>				
3-1.RBC	0.00/uL	0.00/HPF	0-25/uL	—
3-2.WBC	0.00/uL	0.00/HPF	0-25/uL	—
3-3.Renal tubular epithelial cell	0.00/uL	0.00/HPF	0-0/uL	—
3-4.Squamous epithelial cell	0.00/uL	0.00/HPF	0-7/uL	—
3-5.Transitional epithelial cell	0.00/uL	0.00/HPF	0-3/uL	—
3-6.Sperm	0.00/uL	0.00/HPF	0-0/uL	—
<b>4.Germ</b>				
4-1.Cocci	119.29/uL	7.03/HPF	0-0/uL	+
4-2.Bacillus	19.65/uL	1.16/HPF	0-0/uL	+
4-3.Yeast	0.00/uL	0.00/HPF	0-0/uL	—
<b>5.Others</b>				
5-1.Lipid drop	667.64/uL	52.42/HPF	0-160/uL	+
5-2.MUCUS	0.00/uL	0.00/LPF	0-3/uL	—

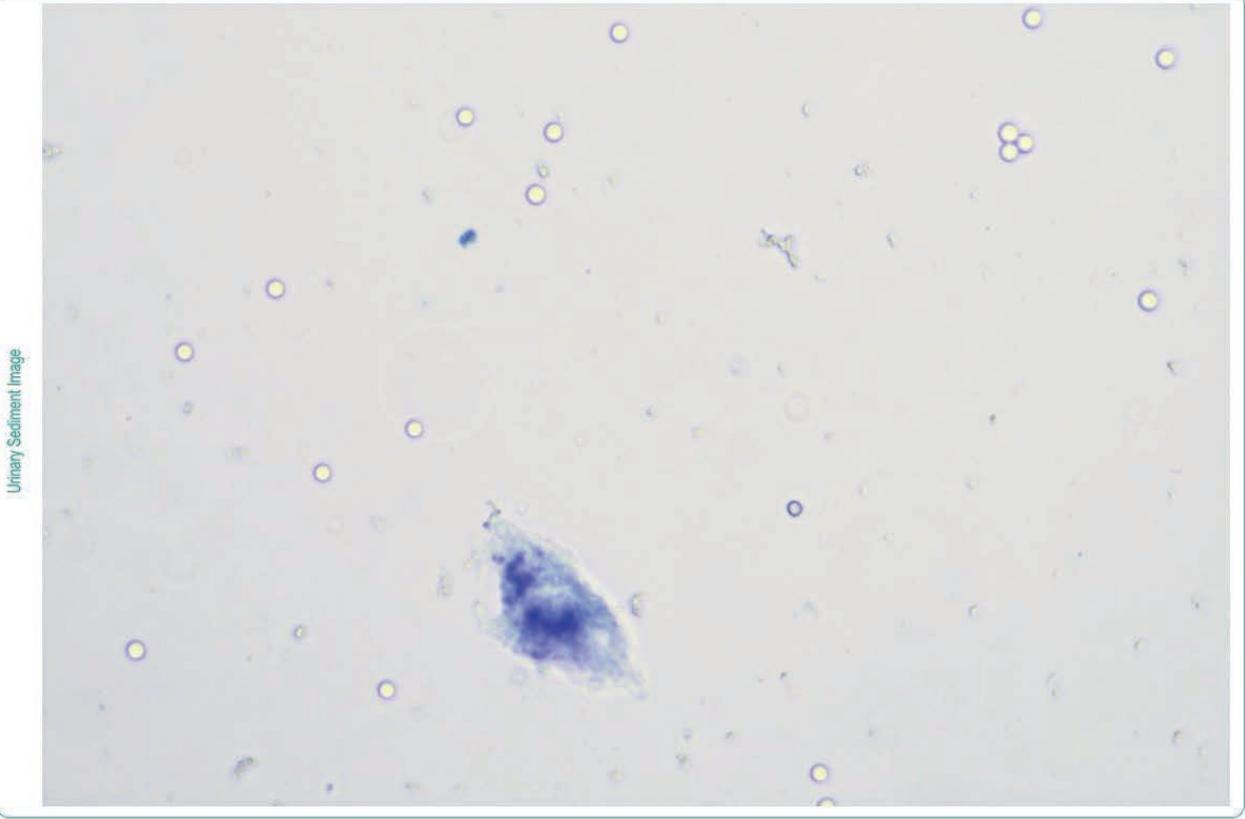
### Diagnostic recommendation

- 1、【Yellowish brown】 It is common in concentrated urine, bilirubin urine or biliverdin urine, excessive bile pigment in urine.
- 2、【MAP#>5】 It is common in urinary tract bacterial infection, low urine volume, alkaline urine or elevated magnesium level in diet.
- 3、【CP#>0】 It is commonly associated with conditions that cause hypercalciuria or hyperphosphatemia.
- 4、【COS#>0】 There are many interference factors (such as amorphous crystallization, etc.) in bacterial detection of suspected cocci overgrowth or urinary tract cocci infection. This result is for reference only. It is recommended to confirm bacterial culture.
- 5、【BAC#>0】 It is suspected that there are many interference factors in bacterial detection (such as amorphous crystallization, etc.). This result is for reference only, and it is recommended to confirm bacterial culture.
- 6、【GRA#>0】 It is common in accelerated renal tubular degeneration and glomerular disease.
- 7、【FAT#>160】 It can be seen in the urine of normal cats and is often caused by obesity, cystitis, hypothyroidism, diabetes or artificial catheterization.



### Urine Morphology Report

No.:	LIS:	Doctor:	Sample:	Time:
Pet name:	Species:	Gender:	Pet age:	Owner:



120um	GRA	Co.:0.24/uL	Co.:0.22/LPF		

40um	MAP	Co.:56.80/uL	Co.:3.34/HPF			

40um	COD	Co.:0.57/uL	Co.:0.03/HPF		

40um	CP	Co.:0.61/uL	Co.:0.04/HPF			

15um	COS	Co.:119.29/uL	Co.:7.03/HPF		

15um	BAC	Co.:19.65/uL	Co.:1.16/HPF		

15um	FAT	Co.:667.64/uL	Co.:52.42/HPF		

	Suspected cast(SCAS#)			QTY:1/960 photos
120um				



### Fluid Report

No.:	L I S:	Doctor:	Sample:	Owner:
Pet name:	Species:	Gender:	Pet age:	Weight:
Color: Pink	Clarity: Mild	Smell: Odorless	Protein concentration: 2.5-5g/dL	

Parameters					
Detection items	Result	Unit	Reference	Negative	Positive
<b>1. Nucleated cell</b>					
1-1. Total Nucleated Cell Count(TNCC#)	5.18	10 <sup>3</sup> /μL	0-0		+++
1-2. Inflammatory Cell Count(INC#)	0.30	10 <sup>3</sup> /μL	0-0		+
1-3. Total granulocyte count(GRL#)	0.13	10 <sup>3</sup> /μL	0-0		+
1-4. Neutrophils(NEU#)	0.13	10 <sup>3</sup> /μL	0-0		+
1-5. Degenerative neutrophil count(D-NEU#)	0.00	10 <sup>3</sup> /μL	0-0	-	
1-6. Neutrophils (NEU%)	100.00	%			
1-7. Degenerative neutrophil count (D-NEU%)	0.00	%			
1-8. Lymphocytes(LYM#)	0.08	10 <sup>3</sup> /μL	0-0		+
1-9. Macrophage(Mφ#)	0.09	10 <sup>3</sup> /μL	0-0		+
1-10. Granulocyte percentage(GRL#/TNCC#)	2.49	%			
1-11. Lymphocytes percentage(LYM#/TNCC#)	1.54	%			
1-12. Macrophage percentage(Mφ#/TNCC#)	1.69	%			
1-13. Mesothelial cell count(MCs#)	3.83	10 <sup>3</sup> /μL	0-0		+++
1-14. Phagocytic cell(PHC#)	0.00	10 <sup>3</sup> /μL	0-0	-	
1-15. Unclassified nucleated cells(UCC#)	4.89	10 <sup>3</sup> /μL			
<b>2. Erythrocytes</b>					
2-1. Red Blood Cells(RBC#)	174.80	10 <sup>3</sup> /μL	0-0		++++
2-2. Pack Cell Volume(PCV%)	1.14	%			
<b>3. Microorganisms</b>					
3-1. Rods(BAC#)	0.00	/uL	0-0	-	
3-2. Cocci(COS#)	0.00	/uL	0-0	-	

**Diagnostic Recommendation**

1. [Protein 2.5-5 g/dL, TNCC#>5, TNCC#<10] Indication of modified transudate or exudate. A comprehensive evaluation should be made considering the specific protein content, specific gravity, and cellular component proportions of the sample.

Diagnostic criteria:  
 - Modified transudate: Total protein between 2.5 and 5 g/dL, specific gravity between 1.017 and 1.025.  
 - Exudate: Total protein > 3 g/dL, specific gravity > 1.025.

The primary difference in cellular components lies in the proportion of neutrophils, with neutrophils being the predominant cells in exudates.

Reference: "Clinical Laboratory Diagnostics for Small Animals," 5th edition.

Exudates are typically associated with inflammatory, necrotic, infectious, or malignant conditions. They can be classified as septic or non-septic, with septic exudates involving bacterial and/or fungal infections.

Septic exudates are commonly seen in cases such as purulent pleural or abdominal effusions, gastrointestinal perforations, abscesses, late-stage bile peritonitis, late-stage uroperitoneum, ruptured pyometra, pancreatitis, sepsis, and postoperative infections.

Non-septic exudates are often found in feline infectious peritonitis, tumors, physical trauma, chronic chylous effusions, eosinophilic granulomas, and similar conditions.

When bacterial or fungal infection is strongly suspected, it is recommended to perform microbial culture to confirm the diagnosis.

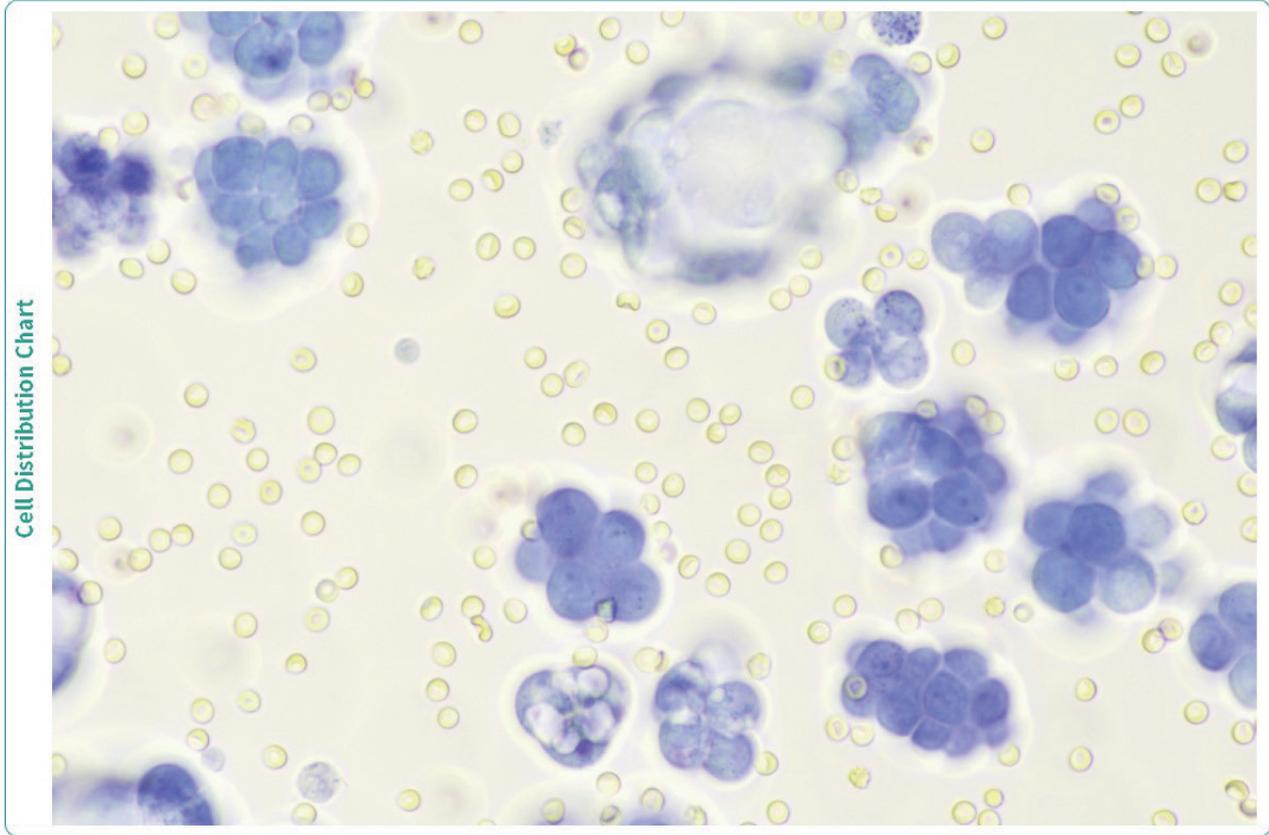
Modified transudates are a specialized form of transudate, characterized by an increase in protein or cellular content from non-inflammatory or mildly inflammatory sources. These are commonly associated with cardiovascular disease, tumors, feline infectious peritonitis, chylous leakage (chyllothorax/abdomen), uroperitoneum, bile peritonitis, intrathoracic or intra-abdominal hemorrhage, liver dysfunction, lung lobe torsion, diaphragmatic hernia, hyperthyroidism, and glomerular nephropathy.

For accurate diagnosis, it is advised to consider the animal's life history, medical history, and physical examination findings. Key diagnostic considerations should include cellular parameters in thoracic or abdominal effusion analysis, biochemical analysis of peritoneal fluid, and urinary protein levels. Additionally, results from cardiac and abdominal imaging should be integrated for a comprehensive evaluation.



### Fluid Morphology Report

No.:	LIS:	Doctor:	Sample:	Owner:
Pet name:	Species:	Gender:	Pet age:	Weight:



15um Granulocytes(GRL#) QTY: 60/288 photos Co.: 0.13 x10<sup>3</sup>/μL

15um Lymphocytes(LYM#) QTY: 37/288 photos Co.: 0.08 x10<sup>3</sup>/μL

30um Epithelial cell(EPC)

30um Isothelial cells(MEC#)/(MEC+ QTY: 1782/288 photos Co.: 3.83 x10<sup>3</sup>/μL

15um RBC QTY: 21987/294 photc Co.: 174.80 x10<sup>3</sup>/μL

15um ? Unclassified nucleated cells(UCC#) QTY: 2272/288 photos Co.: 4.89 x10<sup>3</sup>/μL

15um ? Unclassified nucleated cells(UCC#) QTY: 2272/288 photos Co.: 4.89 x10<sup>3</sup>/μL