



So innovative, we even innovate our innovations.

Your IDEXX inVue Dx™ Cellular Analyzer was built to evolve. And month after month, that's exactly what it's done. Every software update listed below has been inspired and adopted by professionals just like you, to simplify your workflow and increase the value it brings to your practice.

Most upgrades for your IDEXX inVue Dx analyzer are installed automatically. So be sure to stay connected and update your IDEXX VetLab™ Station software if prompted, to ensure you're always getting the newest features.

Menu and performance upgrades

Blood morphology

- + [Feline results are now available.](#)
Deeper insights into feline hematologic conditions bring confidence and clarity to treating sick cats.
- + [Finding acanthocytes in dogs.](#)
Your reports now detect the presence, or absence, of acanthocytes so that serious, underlying health issues can be addressed sooner.
- + [Canine schistocytes and keratocytes results are now available.](#)
These new parameters enhance diagnostic insight by identifying RBC fragmentation injury.

Ear cytology

- + Utilize [enhanced yeast sensitivity and advanced semiquantitative reporting scale](#), separating 0 and 1+ cytologic result categories.
- + [Diagnostic considerations for all yeast and bacteria](#) 0, 1+, 2+, and 3–4+ result classifications have also been updated.
- + [Stronger detection of white blood cells](#) with greater sensitivity and better recognition of inflammatory cells giving you more complete data for an actionable diagnosis.

Case management upgrades

Ear cytology

- Find everything you need in one place, with whole-case management for ear cytology.
- + [Capture presenting complaint, clinical history, and clinical signs](#) for IDEXX inVue Dx ear cytology via the IDEXX VetLab Station. Document otic findings without leaving your main workflow.
 - + Ear cytology visit notes are reported in VetConnect™ PLUS and practice management systems. [Find all your notes in one place](#) so nothing gets missed between tests and records for follow-up and repeat testing.
 - + Now get results 2 minutes faster for ear cytology.¹ So you can focus on care while the analyzer does the work.
 - + Powered by over 60 million images, the IDEXX inVue Dx analyzer delivers improved accuracy.
 - + Now you'll have [up to 10 images](#) for each IDEXX inVue Dx ear cytology result, with more labels for easier cell identification.

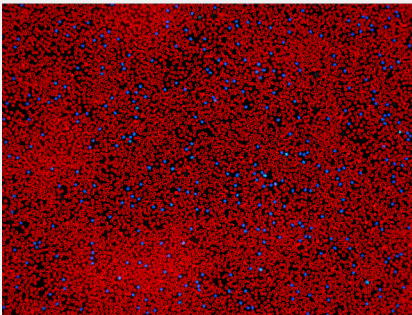
Experience upgrades

- + There are now [labels on report images for ears](#). Highlight key findings to support veterinarian recommendations and pet owner education.
- + [Improved ear image titles and viewing order](#) make reviewing and presenting cases faster and more intuitive, whether using IDEXX VetLab Station or VetConnect PLUS.
- + [Optimized feline blood morphology imaging](#) gives a fuller picture of feline samples so you can diagnose with more confidence.
- + [See mites in motion](#), emphasizing the value of ear cytology testing with pet owners and gaining buy-in on treatment plans.

Feline blood morphology.

As with canine patients, get a platelet estimate and white blood cell differential, including immature neutrophils, for your feline patients.

Blood morphology menu



Blood morphology.

Automated morphological assessment of critical parameters. And when the analyzer is used alongside the ProCyte One™ or ProCyte Dx™ hematology analyzer, it automatically integrates the numerical RBC, hematocrit, and WBC values with the morphological assessment to provide an enhanced hematology report with diagnostic guidance.

Red blood cell (RBC) types

- + Spherocytes (canine only)
- + Reticulocytes
- + Agglutination (canine only)
- + Acanthocytes (canine only)
- + Schistocytes (canine only)
- + Keratocytes (canine only)

White blood cell (WBC) types

- + Neutrophils (% and #)
- + Lymphocytes (% and #)
- + Monocytes (% and #)
- + Eosinophils (% and #)
- + Basophils (% and #)
- + Immature neutrophils (% and #)
- + Other nucleated cells

Platelets

- + Platelet estimate, even in the presence of clumped platelets

Why acanthocytes are important.

In dogs, the presence of acanthocytes is an abnormal finding that often signals an underlying, serious medical condition. Their formation may indicate a lipid metabolism disorder or fragmentation injury. The IDEXX inVue Dx™ Cellular Analyzer makes them easy to identify by showing the presence, or absence, as a percentage of the RBC value and diagnostic considerations. This addition enhances the IDEXX inVue Dx analyzer's morphology analysis, with more RBC cell types like schistocytes and keratocytes being added soon. Each report includes images to support your review and communication with clients.

☰
🩸
Hematology

2/5/2026
10:25 AM

ⓘ

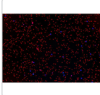
		RBC	a 3.40 M/μL	5.65 - 8.87 M/μL	
		Hematocrit	a 18.1 %	37.3 - 61.7%	
		Acanthocytes	6.1 % (Marked)		
		% Reticulocytes	3.2 %		
		WBC	b 26.03 K/μL	5.05 - 16.76 K/μL	
		% Neutrophils	87.0 %		
		% Immature Neutrophils	2.3 %		
		% Lymphocytes	4.0 %		
		% Monocytes	3.8 %		
		% Eosinophils	5.5 %		
		% Basophils	0.4 %		
		Neutrophils	22.64 K/μL	2.95 - 11.64 K/μL	
		Immature Neutrophils	0.60 K/μL		
		Lymphocytes	1.03 K/μL	1.05 - 5.10 K/μL	
		Monocytes	0.98 K/μL	0.16 - 1.12 K/μL	
		Eosinophils	0.83 K/μL	0.06 - 1.23 K/μL	
		Basophils	0.12 K/μL	0.00 - 0.10 K/μL	
		Platelet Estimate	>150 K/μL (Adequate)		

Diagnostic Considerations


Acanthocytes indicate alteration of the lipid composition of the RBC membrane or RBC fragmentation and are associated with such disease states as liver/splenic/kidney disease, iron deficiency, disseminated intravascular coagulopathy, cardiac disease and neoplasia.

This platelet estimate incorporates enumeration of individual platelets and platelets within clumps. Platelet count is above 150 K/μL.


Images



RBC/WBC Field of View



Acanthocytes



RBC/WBC (Zoomed in)

a: Results imported from ProCyte.
b: WBC results imported from ProCyte. the white blood cell differential has been updated based on cellular analysis.

Canine schistocytes and keratocytes detection

Schistocytes and keratocytes enhance diagnostic insight through the following benefits:

- + They quickly identify if underlying disease is causing injury to the red blood cell (RBC) or impacting the RBC membrane.
- + Even mild elevations in these parameters may indicate an underlying cause to be investigated.
- + **RBC shape changes can reveal disease processes not yet reflected on the complete blood count (CBC), supporting earlier clinical investigation,² so you can manage disease sooner.**

Here's an example of what you'll see when schistocytes and keratocytes are present in your blood morphology results:

Schistocytes and keratocytes are listed as a percentage of the total RBCs and are categorized as either mild (0.25%–0.75%), moderate (> 0.75%–5%), or marked (> 5%).

The diagnostic considerations will reflect the impact of the mild, moderate, or marked presence of schistocytes and keratocytes on potential underlying disease states.

Schistocytes and keratocytes appear in your result images (and can appear labeled in the image viewer).

Hematology 3/27/2026 10:25 AM

RBC	4.40 M/ μ L	5.65–8.87 M/ μ L	
Hematocrit	18.1%	37.3–61.7%	
Acanthocytes	6.1% (Marked)		
Schistocytes	5.3% (Marked)		
Keratocytes	3.6% (Moderate)		
% Reticulocytes	3.2%		
WBC	24.03 K/ μ L	5.05–16.76 K/ μ L	
% Neutrophils	87.0%		
% Immature Neutrophils	2.3%		
% Lymphocytes	4.0%		
% Monocytes	3.8%		
% Eosinophils	5.5%		
% Basophils	0.4%		
Neutrophils	22.64 K/ μ L	2.95–11.64 K/ μ L	
Immature Neutrophils	0.60 K/ μ L		
Lymphocytes	1.03 K/ μ L	1.05–5.10 K/ μ L	
Monocytes	0.98 K/ μ L	0.16–1.12 K/ μ L	
Eosinophils	0.83 K/ μ L	0.06–1.23 K/ μ L	
Basophils	0.12 K/ μ L	0.00–0.10 K/ μ L	
Platelet Estimate	>150 K/ μ L (Adequate)		

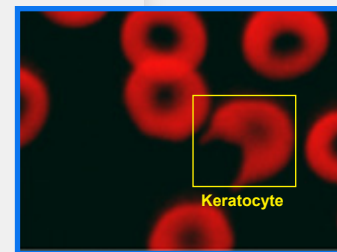
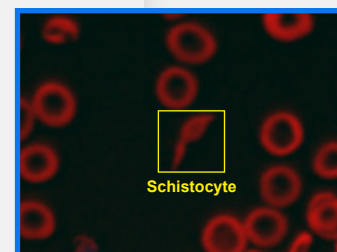
Diagnostic Considerations

Red blood cell changes may suggest **RBC fragmentation injury**. Causes of RBC fragmentation injury include RBC damage or shearing trauma (e.g., disseminated intravascular coagulopathy, vasculitis, and vascular neoplasms) and increased RBC fragility (e.g., liver disease, high cholesterol diet, and iron deficiency). Careful clinical evaluation, further diagnostics (e.g. imaging) and/or monitoring is warranted.

Images

RBC/WBC Field of View Acanthocytes +6

a: Results imported from ProCyte.
b: WBC results imported from ProCyte; the white blood cell differential has been updated based on cellular analysis.



Ear cytology.

Reports are now even more comprehensive. Get enhanced yeast sensitivity, diagnostic considerations for all yeast and bacteria, and left and right ears all in a single report.

Utilize enhanced yeast sensitivity and advanced semiquantitative reporting scale, separating 0 and 1+ cytologic result categories.

Diagnostic considerations for all yeast and bacteria 0, 1+, 2+, and 3–4+ result classifications have also been updated.

Pathology

3/25/26
10:11 AM

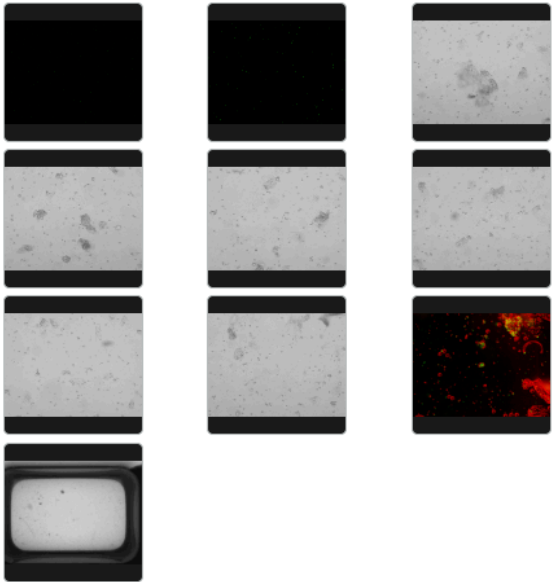
Site: Left Ear

Bacteria, Cocci	3-4+ Numerous coccoid-shaped bacteria seen.
Bacteria, Rods	2+ Moderate rod-shaped bacteria seen.
Yeast	2+ Moderate yeast seen.
WBC	Absent
Mites	Absent

Diagnostic Considerations

Results: Both bacteria and yeast seen. Consideration: The co-presence of yeast and bacteria should be interpreted in light of clinical signs and degree of burden. Low numbers of bacteria and yeast may represent commensal flora in unaffected ears, early dysbiosis in mildly affected ears, or true infection in clinically affected ears. As the bacteria and yeast burden increases, and if white blood cells are also present, true infection becomes more likely. Next Step(s): Address any primary and predisposing factors—such as atopic dermatitis, endocrinopathies, excessive hair in the ear canals, stenotic ear conformation, increased cerumen production, otic masses, or frequent ear cleaning. In cases of persistent or recurrent infections, especially those with pus or discharge, evaluate the patient for the presence of biofilms, which can make organisms resistant to antimicrobials and require thorough ear cleaning as part of treatment. Use clinical signs, history, and diagnostics to evaluate for deeper involvement of the middle or inner ear. Administer appropriate antimicrobial and anti-inflammatory therapies if warranted based on clinical assessment.

Images



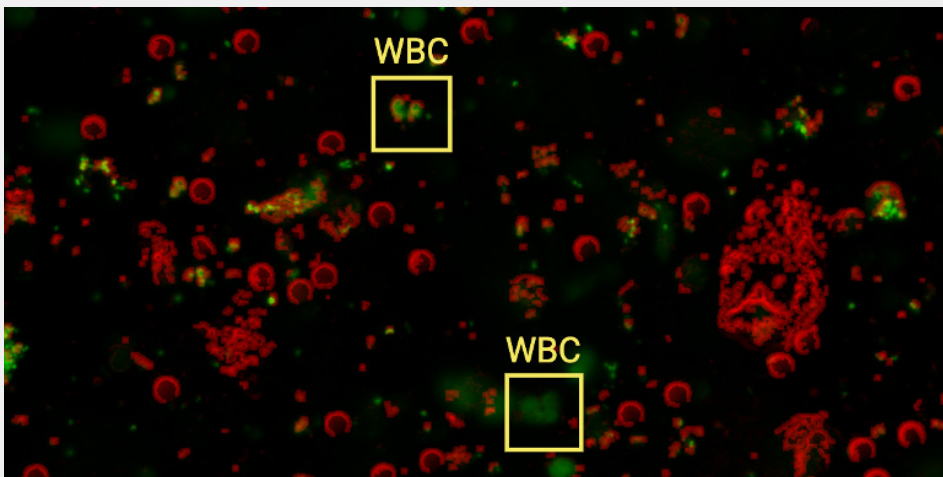
Visit type: **First time**. Case duration: **Chronic**. Clinical signs: Patient presented signs of otitis including:

- Left ear: itchy, pain, erythema (redness), discharge (waxy, watery).

Enhanced white blood cells for ears.

Improved detection of white blood cells, even when degraded or scarce. That means more reliable results in challenging cases. With the ability to recognize a wider range of degenerated cells, you'll get more complete data for stronger, actionable diagnoses. Plus, by creating a liquid sample instead of a traditional smear, the IDEXX inVue Dx™ Cellular Analyzer protects cells from damage and ensures even distribution, capturing more diagnostic insights.

The IDEXX inVue Dx ear cytology method demonstrates unmatched consistency and objectivity.

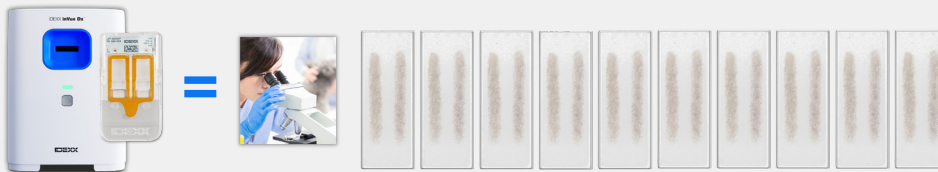


One run delivers the diagnostic depth of 10 glass slides.

+ A result of 2+ on a glass slide = 30 WBCs across 10 fields of view

+ A result of 2+ on inVue Dx = 270 WBCs across 27 fields of view.

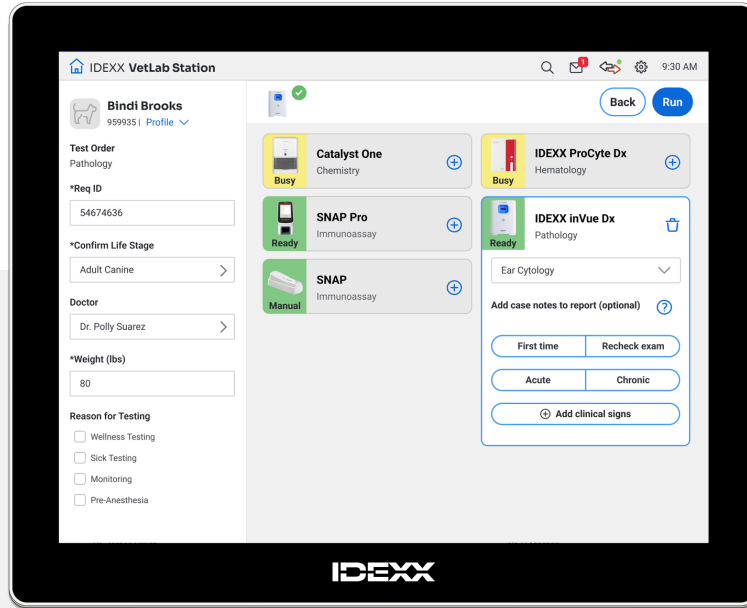
One IDEXX inVue Dx run provides diagnostic content equivalent to fully reading approximately 10 traditional ear cytology slides.¹



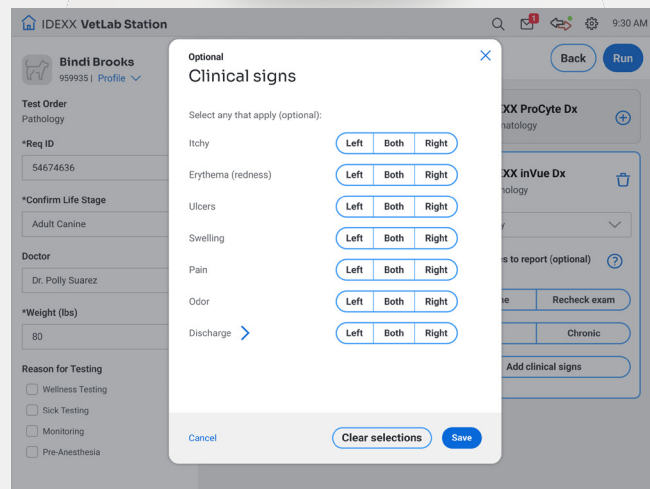
Track your ear cytology visit notes.

Easily save exam type, clinical signs, and more, right in the patient record for easy monitoring, tracking, and recheck visit trending.

Visit notes are now integrated with VetConnect™ PLUS and practice management systems. Keep all notes in one place so nothing gets missed between tests and records.



Intuitive questions on IDEXX VetLab™ Station allow case visit input with or without clinical signs.



Clinical signs for both right and left ears can be entered.

Ear exam observations.

For bacteria and yeast, the IDEXX inVue Dx™ Cellular Analyzer provides a consistent, objective, repeatable, and semiquantitative result that allows you to measure if there is a few, moderate, or numerous amount of bacteria or yeast present in the sample. Along with visit type and

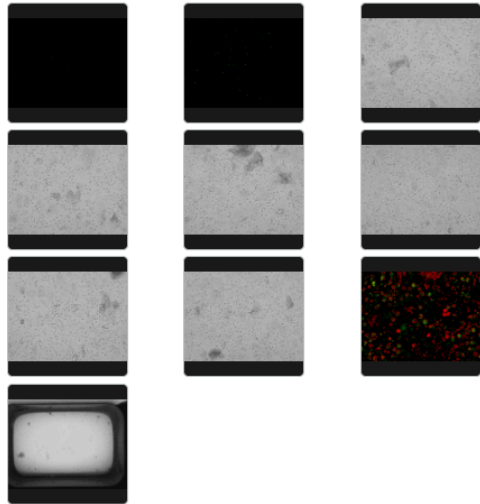
clinical signs, a comprehensive assessment of the patient condition for both left and right ears is provided and captured permanently in the patient record.

When initiating an IDEXX inVue Dx Cellular Analyzer ear cytology run

on the IDEXX VetLab™ Station, you'll be prompted to add optional visit type and clinical signs.* These are easy to enter, can inform the Diagnostic Considerations associated with the results, and are a great way to track ear cytology case information within the patient record.

To add visit notes:

1. Initiate the run on your IDEXX VetLab Station as you normally would.
2. On the Select Instruments screen, tap "IDEXX inVue Dx," select "Ear Cytology," and then tap the following options:
 - + Select the exam type ("First time" or "Recheck exam").
 - + Select the incidence of clinical signs ("Acute" or "Chronic").
 - + Tap "Add clinical signs," specify where the various signs apply (left ear, right ear, or both ears), and then tap "Save."
3. Tap "Run" and prepare/load the sample as you normally would.

Pathology	
Site:	Left Ear
Bacteria, Cocci	3-4+ Numerous coccoid-shaped bacteria seen.
Bacteria, Rods	2+ Moderate rod-shaped bacteria seen.
Yeast	1+ Few yeast seen.
WBC	Present
Mites	Absent
Diagnostic Considerations	<p>Results: Both bacteria and yeast seen. Consideration: The co-presence of yeast and bacteria should be interpreted in light of clinical signs and degree of burden. Low numbers of bacteria and yeast may represent commensal flora in unaffected ears, early dysbiosis in mildly affected ears, or true infection in clinically affected ears. As the bacteria and yeast burden increases, and if white blood cells are also present, true infection becomes more likely. Next Step(s): Address any primary and predisposing factors—such as atopic dermatitis, endocrinopathies, excessive hair in the ear canals, stenotic ear conformation, increased cerumen production, otic masses, or frequent ear cleaning. In cases of persistent or recurrent infections, especially those with pus or discharge, evaluate the patient for the presence of biofilms, which can make organisms resistant to antimicrobials and require thorough ear cleaning as part of treatment. Use clinical signs, history, and diagnostics to evaluate for deeper involvement of the middle or inner ear. Administer appropriate antimicrobial and anti-inflammatory therapies if warranted based on clinical assessment.</p> <p>Results: White blood cells present. Consideration: Consider underlying causes of otitis externa—such as atopic dermatitis (food or environmentally triggered), tumor, otitis media, foreign body presence, or contact otitis as from otic cleaners/medications or aggressive mechanical cleaning. Next Step(s): In ears undergoing treatment, persistent inflammation indicates the need to investigate for an underlying cause. Typically, these patients require more intensive/longer duration of treatment and more intensive diagnostics (otic irrigation, advanced imaging, and sometimes otic culture). Address any primary, predisposing, and perpetuating factors as part of the therapeutic regimen.</p>
Images	
Visit type:	First time. Case duration: Acute. Clinical signs: Patient presented signs of otitis including: <ul style="list-style-type: none"> • Left ear: itchy, pain, odor, erythema (redness).

Example ear cytology report with indicated visit type and clinical signs.

Improved image titles and gallery order.

Reviewing and presenting cases in VetConnect™ PLUS are now faster and more seamless.

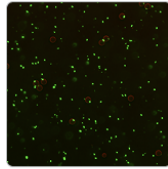
Image display order is more intuitive, and image gallery has been enhanced with improvements to titles and labels.



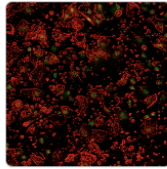
the presence of biofilms, which can make bacteria resistant to antibiotics and require thorough ear cleaning as part of treatment. Use clinical signs, history, and diagnostics to evaluate for deeper involvement of the middle or inner ear. Administer appropriate antimicrobial and anti-inflammatory therapies based on clinical assessment.

User has indicated that there is purulent discharge in this ear. Consider suppurative otitis: clinically characterized by erythema, ulceration, and a purulent discharge often with a biofilm. These cases usually involve a Pseudomonas spp. infection but can rarely be associated with Staphylococcus or Malassezia. Address potential primary, predisposing, and perpetuating factors such as atopic dermatitis (food or environmentally triggered), tumor, otitis media, foreign body presence, infection and its potential extension to the middle ear, and address biofilm as part of your elected treatment as these protect bacterial colonies from antimicrobial therapy.

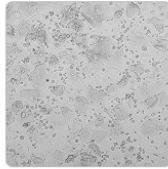
Images



Bacteria Assessment



Yeast and WBC Assessment (Composite)



Yeast and WBC Assessment (Brightfield)

Visit type: First time. Case duration: Chronic. Clinical signs: Patient presented signs of otitis including:
Left ear: pain, itchy, discharge (purulent (pus), bloody)

Pathology

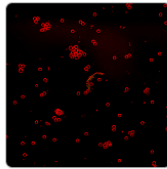
5/14/25
8:02 AM

Source	Right ear	
Bacteria, Rods	0	None
Bacteria, Cocci	0	None to trace seen
Yeast	0	None to trace seen
WBC	Absent	
Mites	Present	
Diagnostic Considerations	Results: Otodectes otitis. Consideration: Any co-presence of bacteria, yeast, and/or white blood cells is likely secondary to ear mite infestation. Next Step(s): Use an effective acaricide and manage any secondary infections or inflammation.	

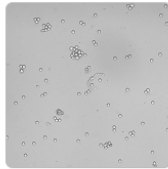
Images



Bacteria Assessment



Yeast and WBC Assessment (Composite)

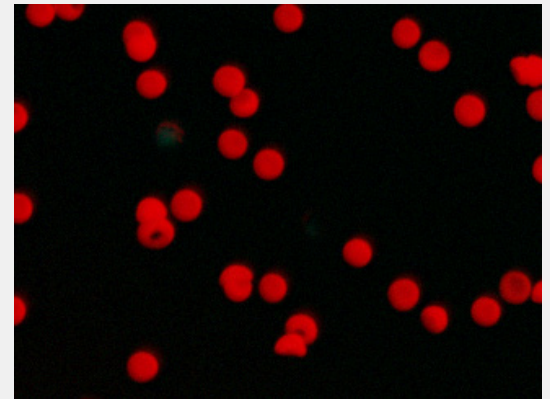
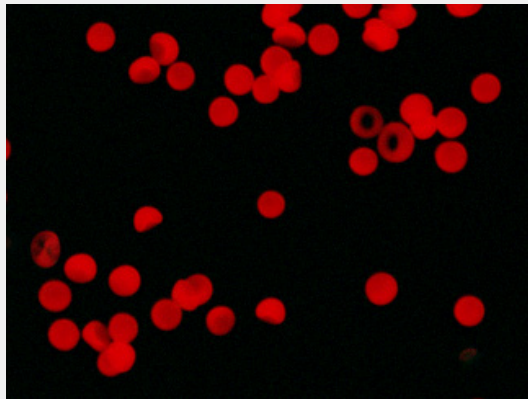
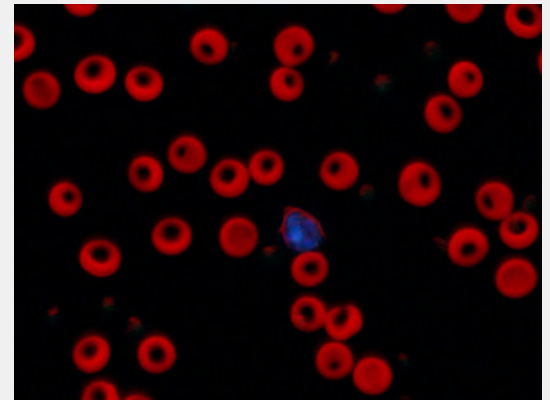
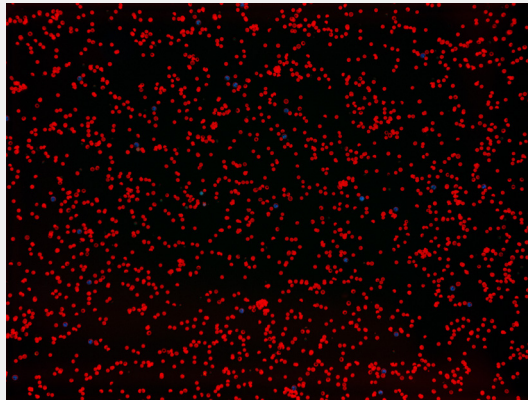


Yeast and WBC Assessment (Brightfield)

Visit type: First time. Case duration: Chronic. Clinical signs: Patient presented signs of otitis including:
Left ear: pain, itchy, discharge (purulent (pus), bloody)

Optimized feline blood imaging.

Get a fuller picture of feline blood samples so you can diagnose with more confidence. Feline blood image gallery features key analyzer findings as part of the comprehensive results. Similar to pathology reports from a reference laboratory, the images can help explain a diagnosis to pet owners and increase compliance with medical recommendations.



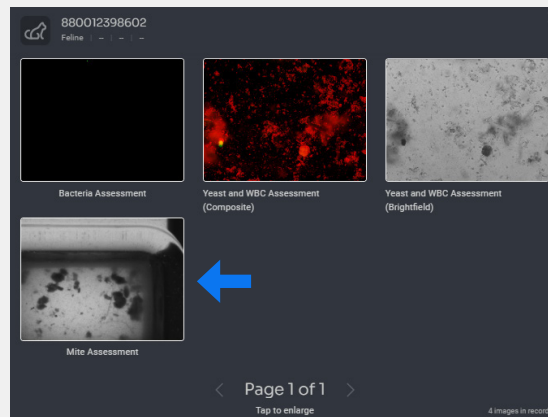
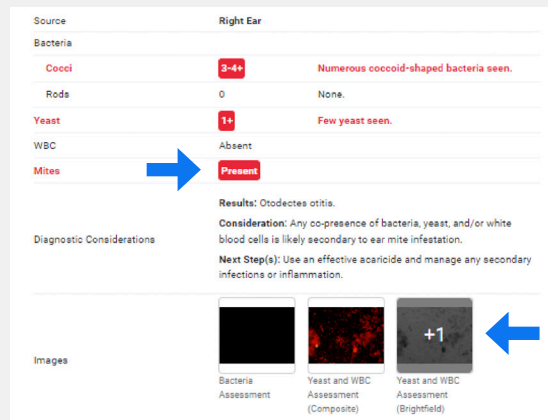
Images are visual examples of the representative pathology seen by the IDEXX inVue Dx™ analyzer's results. Examples show an RBC field of view.

See mites in motion.

Did you know that when moving mites are present in an IDEXX inVue Dx™ Cellular Analyzer ear cytology sample, you can view those mites in motion?

To see the mites in motion:



1. Access your patient results on the IDEXX VetLab™ Station. If mites are listed as “Present,” tap the “+1” image in the image gallery to open the image viewer.
2. Tap the “Mite Assessment” image for a full-screen, dynamic view of the mites in your patient’s sample as captured by the analyzer.



Now you'll have up to 10 images for each IDEXX inVue Dx ear cytology result, with more labels for easier cell identification.

Here's what you'll see:

- + 2 bacteria images
- + 2–6 brightfield yeast images
- + 1 composite white blood cell image
- + 1 animated GIF for mites, regardless of movement

Results Details ▾   [Manage Results](#)

WBC Absent

Mites Absent


Results: Both rods and cocci observed
Consideration: The co-presence of rods and cocci support bacterial otitis.
Next Step(s): In cases of persistent or recurrent infections, especially those with pus or discharge, evaluate the patient for the presence of biofilms, which can make bacteria resistant to antibiotics and require thorough ear cleaning as part of treatment. Use clinical signs, history, and diagnostics to evaluate for deeper involvement of the middle or inner ear. Administer appropriate antimicrobial and anti-inflammatory therapies based on clinical assessment.

Diagnostic Considerations

Images

Bacteria Assessment Bacteria Assessment Yeast and WBC Assessment (Brightfield) +7

Source Right Ear

 **Buxton Brooks**
 Canine | Poodle | Female | 4 y ✕

Bacteria Assessment Bacteria Assessment Yeast and WBC Assessment (Brightfield)

Yeast and WBC Assessment (Brightfield) Yeast and WBC Assessment (Brightfield) Yeast and WBC Assessment (Brightfield)

< 1 of 2 >

Tap to enlarge

10 images in record

A clearer hematology picture.

Provides both the percentage and the absolute number for white blood cell counts, giving you a clearer, more complete hematology picture in-house. This enhancement is especially valuable in cases prompted for morphologic review with flags from the ProCyte One™ and ProCyte Dx™ hematology analyzers. With advanced logic, the IDEXX inVue Dx™ Cellular Analyzer delivers deeper insights in more cases, helping you make faster, more confident clinical decisions.

The IDEXX inVue Dx analyzer leverages the power of the hematology analyzer by automatically integrating the RBC, hematocrit, and WBC values, informing morphological assessment.

Augmentation of the white blood cell differential is based on cellular analysis of the sample.

WBC differential results include absolute counts.

☐	WBC	11.99	5.05 - 16.76 K/uL		*13.28
☐	% Neutrophils	78.0	%		*70.4
☐	% Lymphocytes	10.3	%		*14.2
☐	% Monocytes	9.9	%		*14.3
☐	% Eosinophils	1.7	%		*1.1
☐	% Basophils	0.0	%		*0.0
☐	Neutrophils	9.35	2.95 - 11.64 K/uL		9.35
☐	Lymphocytes	1.24	1.05 - 5.10 K/pL		*1.89
☐	Monocytes	1.19	0.16 - 1.12 K/uL		1.90
☐	Eosinophils	0.21	0.06 - 1.23 K/pL		0.15
☐	Basophils	0.00	0.00 - 0.10 K/uL		0.00

References

1. Data on file at IDEXX Laboratories, Inc. Westbrook, Maine USA.
2. Barger AM. Erythrocyte morphology. In: Brooks MB, Harr KE, Seelig DM, Wardrop KJ, Weiss DJ, eds. *Schalm's Veterinary Hematology*. 7th ed. Wiley-Blackwell; 2022:188–197. doi:10.1002/9781119500537.ch24