# IDEXX inVue Dx Blood Morphology

# **Quick Reference Guide**

# Preparing blood samples for the IDEXX inVue Dx\* Cellular Analyser

Proper sample preparation with an IDEXX inVue Dx\* Blood Morphology QuickPrep Kit is essential. Follow these steps:

- 1. Remove the foil seal from the sample tube.
- Immediately after inverting the EDTA collection tube 10 times, use the first stop on the IDEXX inVue Dx\* Pipettor to draw 20 μl of the mixed EDTA sample from the middle of the collection tube and use the second stop to dispense it into the sample tube.
  Notes:
  - + Always use fresh, mixed whole blood at room temperature in an EDTA tube (samples should be less than 4 hours old and never more than 8 hours old).
  - + When pairing your blood morphology run with a complete blood count (CBC) for a comprehensive haematology report, **use the same sample for both tests.**
- 3. Remove the foil seal from the reagent cap and push the cap onto the sample tube until the cap is flush with the tube top.
- 4. Invert the tube 5–10 times (do not shake).
- 5. Twist off the tab on top of the cap and **dispense 6 drops** of the tube contents into the cartridge port.





## Get comprehensive haematology by combining IDEXX inVue Dx with a ProCyte CBC

The IDEXX comprehensive haematology report combines quantitative CBC results from the ProCyte haematology analyser with detailed morphological assessment from the IDEXX inVue Dx\* Cellular Analyser. Together they provide these results:

- + Red blood cell (RBC) morphologies (percentages and semiquantitative measure [mild, moderate, marked]), including reticulocytes.
- + A 6-part white blood cell (WBC) differential, augmented from the ProCyte haematology analyser and updated, when indicated, with immature neutrophils when present (percentage and quantitative).
- + Platelets estimate consistent with reference laboratory standards, particularly important when the automated analysis notes insufficient platelets or platelet clumping.

#### Workflow recommendations

#### For healthy patient visits



#### For sick patient visits or for comprehensive haematology



Run the IDEXX inVue Dx analyser whenever a ProCyte analyser shows an interpretive prompt (\*) or a value is out of the normal range.

Run the IDEXX inVue Dx analyser and the ProCyte analyser simultaneously with any sick patient or for a more efficient comprehensive haematology

#### **Reviewing IDEXX inVue Dx analyser results**

1. Evaluate the quantitative/qualitative results. The available blood morphology results vary depending on whether the IDEXX inVue Dx analyser was run in conjunction with a CBC:

Parameters available	IDEXX inVue Dx run + ProCyte CBC	IDEXX inVue Dx run only (no accompanying CBC)
RBCs (quantitative)	$\checkmark$	N/A
Haematocrit (percentage)	$\checkmark$	N/A
Spherocytes (percentage, semiquantitative; canine only)	$\checkmark$	$\checkmark$
Agglutination (semiquantitative; canine only)	$\checkmark$	$\checkmark$
Reticulocytes (percentage, quantitative)	$\checkmark$	✓ percentage
6-part WBC differential (percentage, quantitative)	$\checkmark$	✓ percentage
Immature neutrophils (percentage, quantitative)	$\checkmark$	✓ percentage
Platelet estimate (semiquantitative)	$\checkmark$	N/A

**Note:** You can also consolidate existing non-ProCyte CBC results with an IDEXX inVue Dx analysis. With this workflow, the IDEXX inVue Dx analyser will reference the manually entered RBC, HCT and WBC values from the non-ProCyte CBC during its blood morphology analysis; however, reference ranges will not be provided.

- 2. Review the diagnostic considerations under the images for information to consider alongside clinical and sample observations from the patient.
- 3. Explore the image gallery, which features key analyser findings as a part of the complete results. Images are a visual example of the representative pathology seen by the IDEXX inVue Dx analyser's results and do not require clinical interpretation. Similar to pathology reports from a reference laboratory, the images can help explain a diagnosis to pet owners. Below are examples of an RBC field of view.



### Reasons for dashes (--) in your results/suppressed results

Although most IDEXX inVue Dx analyser results are complete, sometimes a line item can be suppressed. In most cases, the footnotes (shown below the image gallery) address the suppression with next-step recommendations.

Dashes as results may indicate:

- + Improper sample preparation (e.g., improper collection tube/sample tube inversion), resulting in crowded or insufficient cells once loaded into the sample cartridge.
- An unexpected difference between the IDEXX inVue Dx analyser RBC count and the ProCyte haematology analyser's RBC count. This indicates a potential sample dilution error.
- + A WBC differential result could not be calculated because:
  - The ProCyte analyser WBC count was suppressed (noted with an asterisk or dashes). When this occurs, refer to the inVue Dx proportional (% diff) data for a statistically powerful cell assessment that provides meaningful differential insights even without absolute values. This percentage data can be especially useful when evaluating clinically unwell pets.
  - Other nucleated cells are detected in an abundance (>2%) and may be interfering with the white blood cells.

