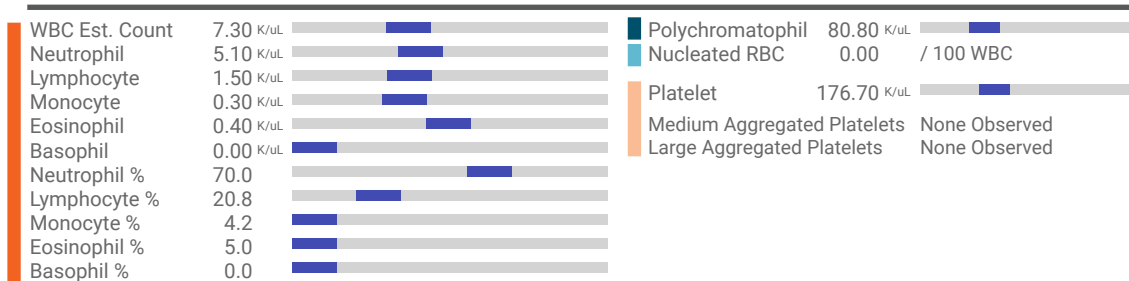


# VETSCAN IMAGYST™ AI Blood Smear Result Interpretation

## CBC and WBC Differential



**Grey Bands:** Generic reference intervals

**Blue Bands:** Result

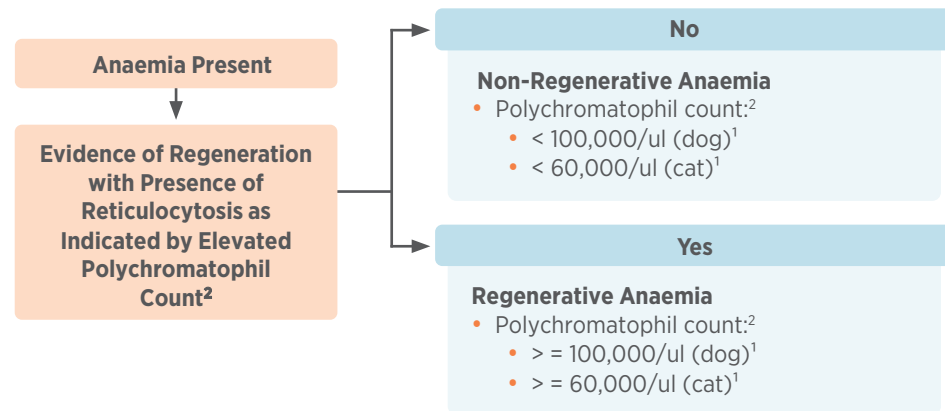
Evaluation of a blood smear generates ESTIMATED blood cell counts. For this reason, actual reference intervals for the included parameters are not listed - due to the variability of estimated counts.

For each parameter, the Blue band shown within the wider Grey band is a generic representation of the estimated CBC counts.

## WBC Differential+

Estimated WBC differential is based on 200 WBCs in the monolayer. Review results in conjunction with automated CBC results. If discrepancy occurs, assess the whole slide image for signs WBCs are pushed to the feathered edge. A result flag indicates a low WBC population in the monolayer. Consider Add on Expert Review to verify and rule out significant disease states.

## Polychromatophil



Polychromatophil count is equivalent to absolute reticulocyte count<sup>2</sup>.

If additional concerns remain after assessing the automated CBC result and IMAGYST AI blood film result, review the images and the slide. You may also request an Add-On Expert Review for comments from a Clinical Pathologist (additional cost).

## Nucleated RBC

- nRBC: value  $\geq 5$  nRBC / 100 WBC is important
- Most automated haematology analysers count nRBC as WBC, and the presence of high numbers of nRBC will affect the total WBC count
- If VETSCAN IMAGYST™ finds  $\geq 5$  nRBC / 100 WBC, the automated analyser WBC count needs to be corrected using this formula:<sup>3</sup>  
**Corrected WBC = initial WBC cell count x [100 ÷ (nRBC + 100)]**
- VETSCAN IMAGYST™ differentiates nRBC from WBC, so its estimated WBC count will not be affected by the presence of nRBC. Therefore, this formula does not need to be used with VETSCAN IMAGYST™ AI Blood Smear results

## Platelets

### If aggregated platelets are reported:

- Evaluate scanned image for PLT clumps, including the feathered edge
- Assess level of clumping with the platelet count measured by VETSCAN IMAGYST™
- Assess automated CBC and the PLT histogram or scatterplot for suggested presence of PLT clumps
  - Assess sample quality and handling
  - Consider drawing a fresh blood sample from the patient

1. Zoetis Reference Lab. Data on file. 2. Based on Zoetis Study on File DH7MR-US-21-038, Zoetis demonstrating PCM is an estimate for Reticulocytes on the VETSCAN VETSCAN IMAGYST AI 3. K. S. Latimer, E. et. al. Duncan & Prasse's Veterinary Laboratory Medicine: Clinical Pathology 5th Edition, Iowa State Press, Iowa City, 2011. p 59.