Changes to CBC and Differential

The Hematology Laboratory has upgraded its CBC and differential analyzers. As a result, effective February 10th, the following changes in reporting will be made:

- **Immature granulocytes (IG) will be reported as part of the automated differential:**

  IGs include bands, metamyelocytes, and myelocytes.

  With the exception of blood from neonates or pregnant women, the appearance of IGs in the peripheral blood indicate an early-stage response to infection, inflammation, and other stimuli of the bone marrow and in rare instances neoplastic conditions.

  The IG count alone does not predict sepsis or infection; however, it can support diagnosis and prediction together with other parameters.

  Age based reference ranges will be provided in CIS and on the lab report.

- **Changes to absolute neutrophil count (ANC) calculation:**

  The ANC calculation will now include the absolute immature granulocytes.

  \[ \text{ANC} = (\%\text{neutrophil count from analyzer} + \text{IG \% count from analyzer}) \times \text{WBC COUNT}. \]

- **RDW-CV and RDW-SD:**

  Red cell distribution width (RDW) is a parameter that measures variation in red blood cell size. RDW is elevated in accordance with variation in red cell size (anisocytosis). We will now be reporting the RDW-SD which is an actual measure of the distribution of red cell size.

  The RDW-CV that was previously reported was a calculation determined by taking the ratio of standard deviation of RDW-SD and the mean corpuscular volume (MCV) number.

  The reference range is <47.

If you have any questions regarding the information above please contact Dr. Vandita Johari, MD, Medical Director of Hematology at 413-794-4500 or Maureen Caraker, Hematology Supervisor at 413-794-1628.