



HEMATOLOGY INSTRUMENTATION CHANGE

Effective December 10, 2018, Northern Plains Laboratory (NPL) will be replacing our current hematology analyzers with Sysmex XN-Series automated hematology analyzers. These new analyzers have advanced technology that will allow additional hematologic parameters to be reported. These new parameters may provide additional information concerning the patient's hematologic status and should be correlated with other clinical findings.

Immature Granulocytes (IG)

The automated WBC differential, with the addition of Immature Granulocytes (IG), becomes a six-part WBC differential. Immature granulocytes (promyelocytes, myelocytes, metamyelocytes) >1.0% indicates the presence of immature white blood cells (left shift).

Reticulocyte Hemoglobin (RET-He)

Reticulocyte hemoglobin content (RET-He) measures the amount of hemoglobin in the reticulocytes. The reticulocyte hemoglobin content indicates cell hemoglobinization, reflecting the quality of the newly produced reticulocytes. Ongoing reticulocyte production in the absence of sufficient iron eventually yields microcytic, hypochromic RBCs. Therefore, low RET-He results may be an early indicator of iron deficiency.

Immature Reticulocyte Fraction (IRF)

Immature Reticulocyte Fraction (IRF) is the rate of production of reticulocytes which is largely dependent on the bone marrow response to erythropoietin. Values above the normal range indicate an increase in RBC production in the bone marrow.

Immature Platelet Fraction (IPF)

The Immature Platelet Fraction (IPF) is a direct cellular measurement of thrombopoiesis. An elevated IPF indicates increased platelet production. A low platelet count and low IPF is consistent with a platelet production disorder. A high IPF and low platelet count is consistent with a platelet destruction disorder.

For additional information, please contact NPL at 701-530-5700 or 1-800-645-1003.