



# Comprehensive Complete Blood Counts

## Parameters available in Sysmex XN Series using Fluorescent Flowcytometry

We at NDPC use Sysmex XN Series haematology Analyser that uses state of the art Fluorescent Flow Cytometry Technology to provide many Platelet, WBC and RBC parameters (related to all stages of transformation from immature to mature). This helps physicians to make critical clinical decisions and monitoring therapy.

Sysmex XN series is not only capable of providing precise and accurate results of all routine parameters, but it is also capable of generating advanced new parameters such as Immature Platelet Fraction (IPF), Fluorescent Platelet Count (PLT-F), Immature Granulocytes (IG), Nucleated RBCs (NRBC), Reticulocyte count including RET-He.



Cells	Parameters	Information Given	Useful in
Platelets	Platelet Count-F (Fluorescent)	Platelet count by fluorescent flowcytometry	<b>Dengue, ITP, Autoimmune thrombocytopenic Purpura etc.</b>
	Immature Platelet Fraction (IPF)	% of immature platelets (indicates <b>bone marrow platelet production</b> )	Differentiating <b>Consumptive</b> processes ( <b>Dengue, ITP</b> ) & Bone Marrow <b>Suppression</b> (Aplasia, MDS)
WBCs	Immature Granulocyte % (IG%)	IG% indicates severity of the <b>early immune response</b> (patients with suppressed immune system).	<b>Rapid discrimination</b> of bacterial from viral infections, particularly in children. <b>Early recognition</b> of bacterial infection and sepsis in adults ICU patients
Red Blood Cell	Nucleated RBCs (NRBC/100 WBC)	Reflection of extreme increases in erythropoietic activity	Assessment of <b>Acute hemolytic episodes, Thalassemia</b> syndromes, Hematological malignancies, Bone marrow metastases of solid tumors. <b>Extramedullary hematopoiesis, Hematopoietic stress</b> (sepsis, massive hemorrhages)
	Reticulocyte Hemoglobin (RET-He)	Direct measurement of red cell hemoglobin content for rapid evaluation of changing iron status	Precise monitoring of <b>treatment of Iron deficiency anemia</b> . Evaluation of iron status in persons suffering from <b>Kidney disease</b> (on dialysis) and <b>other chronic diseases</b> (chronic infection or malignancy)
	Reticulocyte Count	Current iron availability for erythropoiesis.	<b>Evaluate type of anemia</b> and response to iron therapy.



**Stop Dengue**

### Dengue, Platelet and IPF

Dengue, Platelet and IPF Thrombocytopenia in patients suffering from dengue may cause a steep fall in platelet count, requiring platelet transfusion. A reliable platelet count and IPF% hold a great promise of being a reliable predictor of recovery and objective evaluation and management (including blood transfusion) of the disease process. All blood counts are performed on the Sysmex System, which uses PLT-F reagent to distinguish platelets and fragmented erythrocytes. As a result, it enhances platelet-counting accuracy remarkably. The results reported are precise and reproducible (compared to impedance methods, especially in samples with platelet counts of less than 50 thous/cumm). They help make better decision for platelet transfusion.