

PAROXYSMAL  
NOCTURNAL  
HEMOGLOBINURIA ( PNH),  
CONFIRMATORY TEST  
(Flow Cytometry)

RED BLOOD CELLS ( RBC)

Type II (Partial CD59  
deficiency) %

Type III(Complete CD59  
deficiency) %

Type II & Type III  
(Combined deficiency)

**MONOCYTES** %  
FLAER & CD 55  
deficiency

**GRANULOCYTES** %  
FLAER & CD 55  
deficiency

Impression:

Free Text (Departmental Codes for positive & negative result)

Note:

1. This is a highly sophisticated assay which can detect even partial loss of CD59 on RBC
2. Small PNH clones can also be detected in Aplastic anemia & Myelodysplastic syndromes. This finding may not be significant, but these patients benefit from Immunosuppressive therapy
3. Patients with predominant percentage of Type II RBC are unlikely to show high levels of hemolysis, unlike patients with mainly Type III cells
4. Results should be correlated with clinical findings & other diagnostic investigations
5. Any potential difference in clone size between the white blood cells and the red blood cells may be due to hemolysis and/or recent transfusion
6. Test conducted on EDTA / Heparinized whole blood.

## Comment

Paroxysmal Nocturnal Hemoglobinuria (PNH) is an acquired hematologic disorder characterized by Nocturnal hemoglobinuria, chronic hemolytic anemia, Thrombosis, Pancytopenia & in some patients Myeloid malignancies. It is a hematopoietic stem cell disorder affecting erythroid, granulocytic & megakaryocytic cell lines. Flow cytometric based assays can detect the presence of the abnormal cells in PNH.

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