

# DAHL-CHASE DIAGNOSTIC SERVICES

417 State Street, Suite 540  
Bangor, Maine 04401

Phone: 877-PNH-FLOW

Fax: 207-941-8287

[www.dahlchase.com](http://www.dahlchase.com)

## FLOW CYTOMETRY REPORT – PNH EVALUATION

### SAMPLE REPORT

Name: **PNH, Positive** Pathology Number: **F-07-20349**  
 DOB: 7/31/1973 Sex: M MR #: 123456789 Date of Procedure: 6/15/2007  
 Facility: Ordering Facility Date of Accession: 6/15/2007  
 Dept: Outpatient

Physician: Ordering Provider, M.D. Copies to: Other providers/clinicians  
 Ordering Facility  
 Street Name  
 City, State Zip code  
 (999) 123-4567

TISSUE/SPECIMEN: Peripheral Blood in Heparin

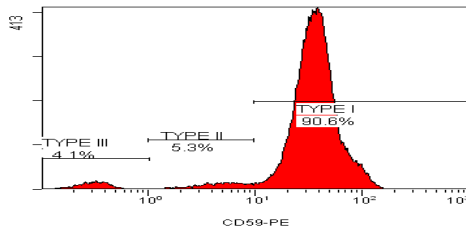
### DIAGNOSIS: PNH CLONE IDENTIFIED IN BOTH WBC AND RBC

**Comment:** Flow cytometric analysis shows a PNH clone within the granulocytes (60.9%), monocytes (61.5%) and RBC's (9.4%). These findings are consistent with a diagnosis of paroxysmal nocturnal hemoglobinuria (PNH). 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. The PNH clone in the monocytes and granulocytes showed a bimodal distribution, indicating Type II and Type III cells. The clinical significance of this finding is still under investigation.

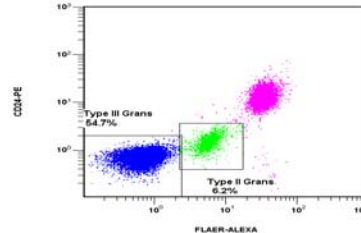
Reference: Richards et al: Diagnosis and Management of PNH, Blood 2005, 106 (12)

**Flow Results:** *Immunophenotypic analysis* was performed using gating antibodies CD45, CD15, CD33, CD64, GPI-linked antibodies CD59, CD14, CD24, as well as fluorescent Aerolysin (FLAER).

Cell Type	Deficiency	Result
RBC	Type II (partial CD59 deficiency)	5.3%
	Type III (complete CD59 deficiency)	4.1%
	PNH Clone size (Type II and Type III combined)	9.4%
WBC - Monocytes	FLAER/CD14 Deficiency	61.5% (57.2% Type III + 4.3% Type II)
WBC - Granulocytes	FLAER/CD24 Deficiency	60.9 (54.7% Type III + 6.2% Type II)



Type III and Type II PNH clone in RBC's



Type III (blue) and Type II (green) PNH Clone in Granulocytes

The markers used for this flow cytometric analysis are labeled as Analyte Specific Reagents (ASR) and are used for clinical purposes. The performance characteristics of these markers have been determined by DCDS-Flow Cytometry Laboratory. Their use has not been approved by the U.S. Food and Drug Administration; the FDA has determined that such approval is not necessary.

Electronic Signature  
 Pathologist/Technologist  
 Date

