500 Chipeta Way, Salt Lake City, Utah 84108-1221 phone: 801-583-2787, toll free: 800-522-2787 Tracy I. George, MD, Chief Medical Officer

Patient Age/Sex: 78 years Female

Specimen Collected: 17-Jun-22 14:19

PNH, High Sensitivity,	RBC Received:	17-Jun-22 15:48	Report/Verified: 17-Jun-22 15:50
Procedure	Result	Units	Reference Interval
RBC PNH Phenotype	Minor Detected		Detected
Total (II and III)	0.999 ^{H f1}	00	0.000008
CD59-deficient RBC			

Result Footnote

f1: Total (II and III) CD59-deficient RBC

INTERPRTIVE INFORMATION: PNH, High Sensitivity, RBC

This high-sensitivity RBC assay tests for CD59 expression on erythrocytes using flow cytometry. It was developed according to published guidelines (Cytometry B Clin. Cytom. 2010; 78:211) and as updated in 2018 (Cytometry B Clin. Cytom. 2018; 94B:49). The lower limit of quantification is 0.02 percent for PNH RBCs (based on 250,000 cells analyzed). The lower limit of detection for PNH RBCs is 0.008 percent.

RBC analysis quantifies Type II and Type III RBC clones when the percentage of PNH RBCs is greater than 1 percent. Glycophorin A (CD235a) is used to gate the RBC population, and CD59 is the GPI-linked antigen. Recent RBC transfusions may decrease the percentage of PNH cells measured in RBCs (Cytometry 2000; 42:223). The presence of a subclinical PNH population in myelodysplastic bone marrow disorders, such as aplastic anemia or refractory anemia, may correlate with a positive immunotherapeutic response (Blood 2006; 107, 1308-1314).

For the most accurate measurement of the PNH clone size, order Paroxysmal Nocturnal Hemoglobinuria, High Sensitivity, WBC (ARUP test code 2005003) to assist with therapeutic decisions in conventional PNH.

For initial diagnosis of PNH and analysis of both RBCs and WBCs, order Paroxysmal Nocturnal Hemoglobinuria (PNH), High Sensitivity, RBC and WBC (ARUP test code 2005006).

Patient Retesting Recommendations. The frequency of testing is dictated by clinical and hematological parameters. Repeat testing is indicated upon any significant change in clinical or laboratory parameters and is suggested at least annually for routine monitoring. In the setting of aplastic anemia, international guidelines recommend screening for PNH at diagnosis, and every 3 to 6 months initially, reducing the frequency of testing if the proportion of GPI-deficient cells has remained stable over an initial two year period (Int J Lab Hematol 2019;41 Suppl 1:73-81).

This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the US Food and Drug Administration. This test was performed in a CLIA certified laboratory and is intended for clinical purposes.

*=Abnormal, #=Corrected, C=Critical, f=Result Footnote, H-High, i-Test Information, L-Low, t-Interpretive Text, @=Performing lab

 ARUP Accession:
 22-168-900095

 Report Request ID:
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Unless otherwise indicated, testing performed at: ARUP Laboratories 500 Chipeta Way, Salt Lake City, UT 84108 Laboratory Director: Tracy I. George, MD
 ARUP Accession:
 22-168-900095

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