Client: Example Client ABC123

123 Test Drive Salt Lake City, UT 84108 UNITED STATES

Physician: Doctor, Example

**Patient: Patient, Example** 

**DOB** 7/31/2019 Gender: Female

**Patient Identifiers:** 01234567890ABCD, 012345

Visit Number (FIN): 01234567890ABCD **Collection Date:** 00/00/0000 00:00

## B-Lymphoblastic Leukemia (B-ALL) Minimum Residual Disease Detection by Flow Cytometry

ARUP test code 3000724

**Number of Markers** 

13 markers

**B-All MRD Interpretation** 

See Note

SAMPLE: Bone Marrow

**IMPRESSION:** 

Small atypical immature B-cell population (See comment).

COMMENT:
There is a small atypical immature B-lineage population with low CD13/CD33 expression, concerning for recurrent/persistent B lymphoblastic leukemia/lymphoma; however, there are some phenotypic differences between this population and the previously identified atypical population from September 2023. Correlation with the original diagnostic phenotype as well as with other molecular markers of MRD, if available, may be helpful for overall interpretation of these findings. This atypical population accounts for 0.16% of viable leukocytes (The COG result is 0.109% of mononuclear cells, COG day 29 protocol used in evaluation) used in evaluation).

In addition, an expanded population of myeloid blasts is also identified, accounting for approximately 10% of viable leukocytes. Clinical and morphologic correlation is needed.

Atypical B lineage population: Positive: partial CD9, CD10, CD19, CD38, dim CD45, low CD13/CD33, partial low CD20, slightly low to intermediate CD58 Negative: most lack CD34 Aberrant expression: low CD13/CD33

The limit of detection for B-ALL blasts is 0.01% of mononuclear cells.

1. A previous B-ALL MRD bone marrow study from 9-19-2023 (Accession #23-263-401411) reported an abnormal immature B cell population accounting for 0.0086% of total nucleated cells.

ANALYSIS: Nucleated cell differential: 35% Lymphocytes 5.5% Monocytes 9.3% Myeloid cells 40% Nucleated erythroid cells 10% CD34 positive myeloblasts

Viability: 100% Markers run: CD3, CD9, CD10, CD19, CD20, CD13, CD33, CD34, CD38, CD45, CD58, CD71, Syto 16

This result has been reviewed and approved by 11/27/2023

H=High, L=Low, \*=Abnormal, C=Critical



INTERPRETIVE INFORMATION: B-ALL MRD by Flow Cytometry

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.

VERIFIED/REPORTED DATES				
Procedure	Accession	Collected	Received	Verified/Reported
Number of Markers	23-325-401167	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
B-All MRD Interpretation	23-325-401167	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00

END OF CHART