Acute Myeloid Leukemia Panel by FISH

ARUP LABORATORIES

Patient: [redacted] DOB: [redacted] Age: [redacted] Gender: [redacted] **Patient Identifiers:** [redacted] **Visit Number (FIN):** [redacted]	Client: [redacted] Physician: [redacted]	ARUP Test Code: 2011132 Collection Date: 10/27/2016 Received in lab: 10/28/2016 Completion Date: 11/03/2016

Interpretation

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Specimen Received
Specimen Type:        Peripheral Blood
Reason for Referral:  Qualitative Platelet Defects
Test Performed:       FISH, AML Panel
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ABNORMAL FISH RESULTS
5q31 (EGR1): deletion present
11q23 (KMT2A; also known as MLL): amplification present

NORMAL FISH RESULTS
3q21.3q26.2 (RPN1/MECOM): translocation or inversion not detected
7cen (D7Z1), 7q31 (D7S486): deletion / monosomy not detected
t(8;21)(q22;q22) (RUNX1T1;RUNX1): translocation not detected
11q23 (KMT2A; also known as MLL): rearrangement not detected
16q22 (CBFB): rearrangement not detected

DIAGNOSTIC IMPRESSION:
Fluorescence in situ hybridization (FISH) analysis was performed
with the RPN1/MECOM, EGR1, D7Z1, D7S486, RUNX1/RUNX1T1 (also
known as AML1/ETO), KMT2A (MLL), and CBFB probes (Abbott
Molecular). 200 interphase cells were scored for each probe
combination.

This analysis showed evidence of:
- deletion 5q31 involving the EGR1 locus in 129/200 (64.5
percent) cells scored,
- 3-11 copies of the MLL locus at 11q23 in 154/200 (77.0
percent) cells scored. Examination of metaphase spreads present
on the interphase FISH slide used in this analysis showed a
signal pattern consistent with amplification of this locus.

FISH analysis with the remaining probes showed normal results.

MLL amplification is a recurrent abnormality in de novo and
therapy-related myeloid neoplasms. In general, MLL amplification
is associated with a poor prognosis. Please correlate these
results with clinical and other laboratory findings in this
patient

Reference:
Mohamed A. MLL amplification in leukemia. Atlas Genet Cytogenet
Oncol Haematol. May 2010. URL:
http://AtlasGeneticsOncology.org/Anomalies/MLLampliID1547.html


ISCN:
nuc ish(RPN1,MECOM)x2[200],
(EGR1x1)[129/200],(D7Z1,D7S486)x2[200],
(RUNX1T1,RUNX1)x2[200],
amp(KMT2A)[154/200],
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Chart continues on following page(s)

(CBFBx2)[200]

This result has been reviewed and approved by ,
Ph.D., FACMG
Electronic Signature

Test developed and characteristics determined by ARUP Laboratories. See Compliance Statement A: aruplab.com/CS

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