

Client: Example Client ABC123
123 Test Drive
Salt Lake City, UT 84108
UNITED STATES

Physician: Doctor, Example

Patient: Patient, Example

DOB: 2/5/1982
Gender: Male
Patient Identifiers: 01234567890ABCD, 012345
Visit Number (FIN): 01234567890ABCD
Collection Date: 00/00/0000 00:00

Eosinophilia Panel by FISH

ARUP test code 2002378

Eosinophilia Panel by FISH

See Note (Ref Interval: Normal)

Specimen Received
Specimen Type: Bone Marrow
Reason for Referral: Eosinophilia Panel
Test Performed: FISH, EOS P

ABNORMAL FISH RESULTS
4q12 (FIP1L1/CHIC2/PDGFR): rearrangement present

NORMAL FISH RESULTS
5q33.1 (PDGFRB): rearrangement not detected
8p12 (FGFR1): rearrangement not detected
16q22 (CBFB): rearrangement not detected

DIAGNOSTIC IMPRESSION:
Fluorescence in situ hybridization (FISH) analysis was performed with the eosinophilia panel probes PDGFRA, CBFB (Abbott Molecular), and PDGFRB, FGFR1 (Cytocell). 200 interphase cells were scored for each probe combination.

This analysis showed evidence of a deletion of the CHIC2 locus resulting in fusion of FIP1L1 with PDGFRA in 186/200 (93.0 percent) cells scored.

The remaining probes showed normal results.

This finding is consistent with a specific group of myeloproliferative and lymphoid neoplasms which result from formation of a fusion gene encoding an aberrant tyrosine kinase with rearrangements involving PDGFRA, PDGFRB, or FGFR1.

In PDGFRA-related disease, cases often present as chronic eosinophilic leukemia/ hypereosinophilic syndrome (CEL/HES) but can also present as acute myeloid leukemia or precursor T lymphoblastic lymphoma (T-LBL).

Reference:
Swerdlow SH, Campo E, Harris NL, Jaffe ES, Pileri SA, Stein H, Thiele J, Vardiman JW. (Eds.): WHO classification of Tumours of Haematopoietic and Lymphoid Tissues. IARC: Lyon 2008.

ISCN:
nuc ish(FIP1L1x2,CHIC2x1,PDGFRAX2)(FIP1L1 con PDGFRAX1)[186/200], (PDGFRBx2)[200],(FGFR1x2)[200], (CBFBx2)[200]

This result has been reviewed and approved by Xinjie Xu, PhD, FACMG

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

INTERPRETIVE INFORMATION: Eosinophilia Panel by FISH

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

EER FISH EOS P

See Note

[Redacted Note Content]

VERIFIED/REPORTED DATES

| Procedure | Accession | Collected | Received | Verified/Reported |
|----------------------------|---------------|------------------|------------------|-------------------|
| Eosinophilia Panel by FISH | 19-126-145081 | 00/00/0000 00:00 | 00/00/0000 00:00 | 00/00/0000 00:00 |
| EER FISH EOS P | 19-126-145081 | 00/00/0000 00:00 | 00/00/0000 00:00 | 00/00/0000 00:00 |

END OF CHART

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