To: Sehgal Path Lab Private Limited
103, Yashodhan Bldg 2, Four Bungalows,
Andheri West,
Mumbai- 400053
Maharashtra
Report Of: SHEFALI SANJAY SHAH

Sample ID	:	2400083401
Patient ID	:	1002427229
Collected on	:	30-05-2024
Received on	:	01-06-2024 10:30:00
Reported on	:	12-06-2024 05:40:28
Ref By	:	Sehgal Path Lab Private Limited

CONVENTIONAL KARYOTYPING REPORT

Patient Name	:	**SHEFALI SANJAY SHAH**	**Age**	:	**52 Years**
Physician Name	:	**-**	**Gender**	:	**Female**
Provisional Diagnosis	:	**N.A.**	**Specimen Status**	:	**Ok**
Specimen Type	:	**Bone Marrow Aspirate (BMA)**	**Disease Status**	:	**N.A**
Test Requested	:	**Multiple Myeloma on purified plasma cells FISH, Conventional Karyotype**			

Test	:	**Conventional Karyotype Analysis.**
Method	:	24-48 hr unstimulated culture of bone marrow aspirate followed by metaphase cells preparation, GTG Banding, karyotype analysis.
No. of Metaphase Cells Analyzed	:	20
No. of Metaphase Cells karyotyped	:	15
Result	:	46,XX[20]
ISCN	:	2020
Band Resolution	:	350

Interpretation: Conventional Karyotype analysis revealed normal diploid female karyotype 46,XX in all 20 cells.

FISH: Showed no evidence of *IGH*::? translocation.

Signal pattern showed no evidence of monosomy 13/del(13q), 17p deletion, 1q gain/amplification and 1p deletion.
There was no evidence of hyperdiploidy.

Additional FISH study with *IGH*/*MYC* probe showed no evidence of *IGH*::*MYC* translocation.

Previous History : 05-09-2020 At Diagnosis

FISH: Showed evidence of monosomy of chromosome 13 (Freq.5%).
Signal pattern showed evidence of trisomy of chromosome 5 (Freq. 12%), trisomy of chromosome 7 (Freq. 6%), trisomy of chromosome 9 (Freq. 12%).
There was no evidence of *IGH* translocation, 17p deletion, 1q amplification and 1p deletion.

CK: 46,XX[20]

References:

1. Kadam Amare P, Nikalje Khasnis S, Hande P, Lele H, Wable N, Kaskar S, Nikam Gujar N, Gardi N, Prabhudesai A, Todi K, Waghole R, Roy P. Cytogenetic Abnormalities in Multiple Myeloma: Incidence, prognostic significance andgeographic heterogeneity in Indian and western population. Cytogenet Genome Res. 2023 Feb 13. doi: 10.1159/000529191. Epub ahead of print. PMID: 36780889.
2. Kadam Amare PS, Jain H, Nikalje S, Sengar M, Menon H, Inamdar N, Subramanian PG, Gujral S, Sewth, T, Epari S, Nair R. Prevalence and clinico-pathological significance of various cytogenetic risk groups in multiple myeloma: the experience from India. Ind J Med Res , Indian J Med Res 144, pp 536-543, 2016. DOI:10.4103/0971-5916.200890.
3. Mitelman F, Johansson B, Mertens F (eds). Mitelman Database of Chromosome Aberrations and Gene Fusions in Cancer,2013, http://cgap.nci.nih.gov/Chromosomes/Mitelman.
4. Daniel A. Arber, Attilio Orazi, Robert Hasserjian, Jurgen Thiele, et al.The 2016revision to the World Health Organization classification of myeloid neoplasms and acute leukemia. Blood 127:2391-2405, 2016; doi: https://doi.org/10.1182/blood-2016- 03-643544.
5. Steven H. Swerdlow, Elias Campo, et al.THE UPDATED WHO CLASSIFICATION OF HEMATOLOGICAL MALIGNANCIES. The2016 revision of the World Health Organization classification of lymphoid neoplasms.Blood. 2016;127(20):2375-2390.

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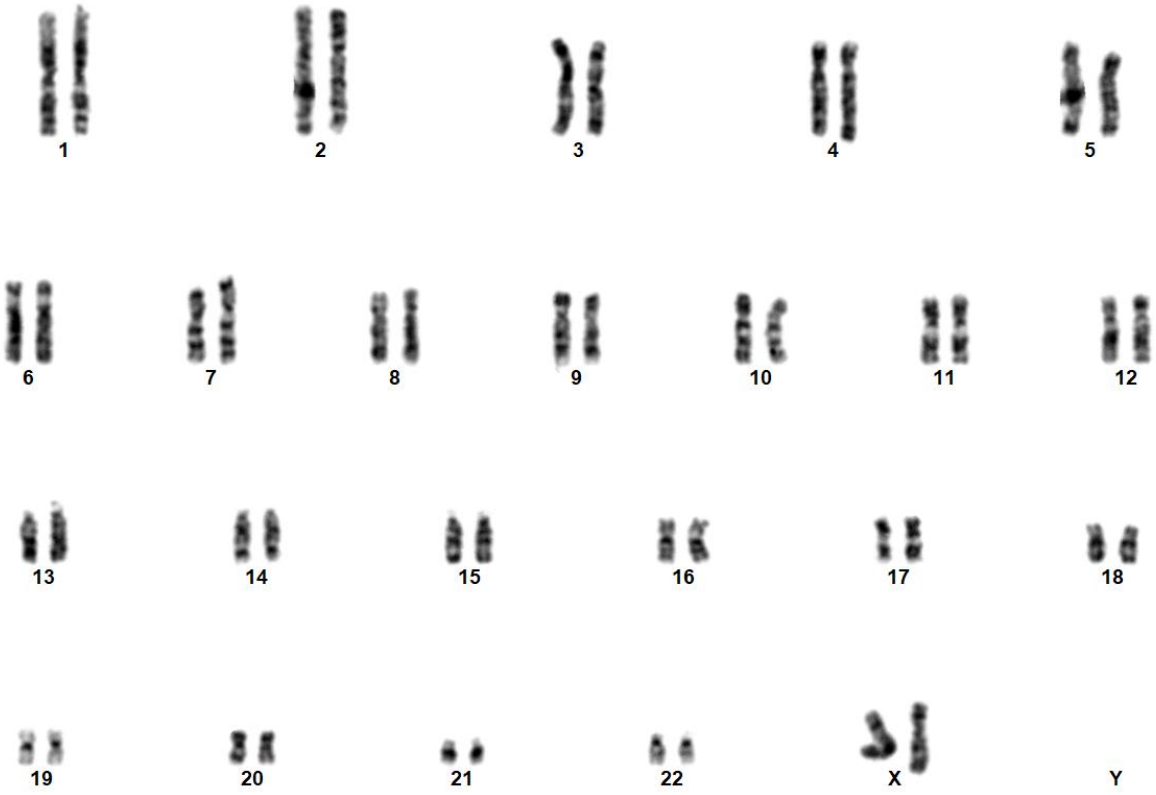

46,XX

Prepared By : **Snehal Kaskar**
Verified By : **Dr. Hrushikesh Lele**

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Chief & Lab Director "Cancer & Clinical Genetics"
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Sr. Scientific Officer
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Lilac Insights Pvt. Ltd.

- End of Report -

Conditions of Reporting/Disclaimer:

- The report relates only to the specimen submitted to the lab which was verified and confirmed at the time of specimen collection. Also it is presumed that the specimen belongs to the patient named or identified, such verification being carried out at the point of generation of the said specimen.
- Although Conventional karyotyping is a gold standard method of cytogenetics which gives a global whole genomic view of multiple known, unknown chromosomal abnormalities, small cryptic, subtle aberrations below 7-8 Mb resolution can be missed.
- In spite of known sensitivity and efficiency of the genetic test, the test results have to be correlated with other clinical and pathological finding for conclusive diagnosis and disease management.
- A test request may be revised or generated by Lilac geneticist with an intimation to an Oncologist if: 1) Incomplete requisition 2) After haematopathology Update.
- In 1-2 % of APL cases, FISH may turn out to be negative due to PML/RARA probe design which unable to detect cryptic insertion of PML to RARA. In such rare cases, It is advisable to check PML-RARA by molecular methods.
- In case of Multiple Myeloma, flowcytometry report indicating abnormal plasma cell population is important for reference, as small abnormal clones may get deduced as per limit of detection policy in FISH analysis.
- In case of FFPE FISH, if H & E stained slides &/or histopathology report is not provided by customer , LILAC proceed with H & E staining followed by histopathology remarks along with marking of tumor area by our consultant pathologist.
- Assays are performed in accordance with standard procedure on receipt. The reported results are dependent on individual assay methods, equipment used, method specificity, sensitivity and quality of specimen(s) received.
- Lilac Insights Pvt. Ltd. has policy to return the FFPE blocks within one month after final reporting with proper documentation of the dispatch of the block to customer from accession dept, Lilac. After dispatch, if there is no intimation from customer within two weeks, Lilac will not be responsible for the Dispatched FFPE block.
- Soft copies of oncocytogenetics reports are sent to customer by office mail ID. Also, Hardcopies are sent to customer only on the address provided by client.