Govt. of India

छुट्टी की पर्ची Discharge-Slip

कलावती सरन बाल अस्पताल

Kalawati Saran Children's Hospital

बंगला साहिब मार्ग, नई दिल्ली-110001
Bangla Sahib Marg, New Delhi-110001
दूरभाष / Tel. No. : 23344160, 23344162-65

युनिट Unit U2CG सी.आर. नं. C.R. No. 19321

नाम Name : Avartika.

आयु Age : 1 yr. लिंग Sex: F

पता Address : Ranipur. Gola. DIT- Gorakhpur - 273401 UP.

भर्ती की तारीख : Date of Addmission 8/7/2024

छुट्टी की तारीख : Date of Discharge 23/7/2024.

निदान

Final Diagnosis : Newly diagnosed Infantile Leukemia (AML-Minimal differentiation) c hyperLeucocytosis(-) not in TLS, Prephase-Day-8. [started on 16/07/2024]

Anthropometry

Wt. at Admission 7.6 kg Wt. at Discharge

Height/Length Head Circumference

Nutritional Status

Immunisation

BCG

Pentga/DPT/OPV 0 1 2 3 B1 B2

Hep. B 0 1 2 3

Measles / MMR / Typhoid

Govt. of India

KALAWATI SARAN CHILDREN'S HOSPITAL

INVESTIGATION RECORD SHEET

Name : Avantika. Age : 1y8|F Sex : C.R. No. 19521

Date	16/7	17/7	17/7	18/7	19/7	19/7	20/7	21/7	21/7	22/7	23/7	
HB/HCT	7.41 / 23.3	7.0 / 23.9	7.63 / 24.2	7.05 / 22.5	7.0 / 21.4	8.3 / 27.2	8.02 / 25.9	8.25 / 25.7	7.8 / 25.6		7.5 / 23.1	
TLC/DLC	46900 / 580	66400 / 1760	38500 / 640	25710 / 370	32150 / 1070	19440 / 990	19480 / 120	16990 / 570	19310 / 1000		11920 / 570	
Platelet Count	98.6K	49K	62.1K	41.7K	46.	65K.	89.4K	64K	71K		55K	
Urea	17	15.5	11.5	12.8		32	25.1	25	19	23	15	
Creatinine	0.43	0.26	0.25	0.26		0.49	0.28	0.13	0.18	0.3	0.29	
Na	140	139	140	141		138	136	150	136	136	138	
K ↑	3.4	4.1	3.9	3.2		4.8	4.7	5.4	4.4	4.5	4.4	
Serum Bilirubin Direct / Indirect	0.23 / 0.11	0.12 / 0.06	0.10 / 0.02	0.2 / 0.1		0.26 / 0.12	0.26 / 0.05		0.31 / 0.12	0.24 / 0.10	0.2 / 0.07	
SGOT	97	123	87.5	77.9		100	104.6			75	73	
SGPT	26	38.9	31.7	32.2.		50	57.2		11.5	59	60	
Alk Po.	114	109.	111	109		108	107	102	107	112	102	
S. Protein/Alb						7.4 / 4.3	6.49 / 2.54		6.17 / 3.5	6.9 / 3.7	6.1 / 3.4	
S. Calcium/I	8.4 / 4.1	8.2.	8.2 / 3.9	8.5		9.6 / 4.6	9.3 / 4.2	10.3	10.4 / 3.8	8.9 / 4.3	9.1 / 4.2	
Phosphate	3.5		3.63	2.94.		3.2	4.91	4.53	4.12	3.8	2.76	
RBS ~~qCRP~~	8.59	3.91	9.4.	2.9		3.25	1:1		3.4	3.1	6.5.	
Lipid Profile LA	3.5											
CSF M/E B/C									Viral marker - NR.			
Any Other Fluid Examination												
PS/RMAT DENGUE SEROLOGY												

Blast 85 Myo 2 St 1 N 5 L 7

P/S – Smears show marked leukocytosis with presence of 85 % Blast.

Blast are 3-4 times the size of small mature lymphocytes having scant to moderate agranular cytoplasm, high N/C ratio, round nucleus (few showing indentation), evenly dispersed chromatin and 1-2 prominent nucleoli

RBC – Predominantly normocytic normochromic with few leptocytes.

Platelets – Mildly reduced

Imp: Based on morphology, cytochemistry and immunophenotyping by flow cytometry, suggestive of Acute Myeloid Leukemia (AML), possibility of AML with minimal differentiation is suggested.

Dr Jyotsna
Prof
16/7/24

DOB – 3/8/2023

Sample No 29/6499
Patient ID
Name
Sample Comment
Ward Rack

Positive
Diff. Morph. Count

WBC	96.97 +	[10^3/uL]		
RBC	2.75 -	[10^6/uL]		
HGB	6.2 -	[g/dL]		
HCT	19.6 -	[%]		
MCV	71.3 -	[fL]		
MCH	22.5 -	[pg]		
MCHC	31.6	[g/dL]		
PLT-BF	115 +	[10^3/uL]		
RDW-SD	57.7 +	[fL]		
RDW-CV	25.9 +	[%]		
PDW	9.6 *	[fL]		
MPV	9.2 *	[fL]		
P-LCR	21.7 *	[%]		
PCT	0.09 *	[%]		
NRBC	0.16	[10^3/uL]	0.2	[%]
NEUT	9.76 *	[10^3/uL]	10.0 *	[%]
LYMPH	22.59 *	[10^3/uL]	23.3 *	[%]
MONO	64.55 *	[10^3/uL]	66.6 *	[%]
EO	0.01 *	[10^3/uL]	0.0 *	[%]
BASO	0.06	[10^3/uL]	0.1	[%]
IG	4.35 *	[10^3/uL]	4.5 *	[%]
RET	1.96	[%]	0.0539	[10^6/
IRF	31.1	[%]		
LFR	68.9	[%]		
MFR	15.5	[%]		
HFR	15.6	[%]		
RET-He	27.0	[pg]		
IPF	6.0 *	[%]		
WBC-BF		[10^3/uL]		
RBC-BF		[10^6/uL]		
MN		[10^3/uL]		[%]
PMN		[10^3/uL]		[%]
TC-BF#		[10^3/uL]		

WBC IP Message
WBC Abn Scattergram
Lymphocytosis
Monocytosis
Leukocytosis
IG Present
Blasts/Abn Lympho?
Left Shift?
Atypical Lympho?

RBC IP Message
Anisocytosis
Anemia
RET Abn Scatt

1- 19/3/24

Avantika
1y 1F
U_2 C_3
19524

Myeloid Markers			
CD13	58%	Dim to Moderate	Positive
CD33	30%	Dim	Positive
CD14	–	–	Negative
CD15	–	–	Negative
MPO	–	–	Negative
			Negative
Immaturity Markers			
HLA-DR	98%	Moderate	Positive
CD34	80%	Moderate	Positive
CD117	91%	Moderate	Positive
TdT			

Kalawati Saran Children's Hospital, New Delhi

Department of Biochemistry

Sample Id 22 **Date** 15-07-2024 11:42:50 **Ref. class** ADULT
UHID / CR No.
Name
Last name

Test Name	Result	Units	Normal Range	Low/High/Normal
Urea	17	mg/dL	15 - 45	Normal
Creatinine 0.3	0.13	mg/dL	0.59 - 1.45	Low
Uric Acid	3.7	mg/dL	2.4 - 7.5	Normal
Bilirubin Total	0.18	mg/dL	0.30 - 1.20	Low
Bilirubin Direct	0.14	mg/dL	0.00 - 0.40	Normal
AST/GOT	63	U/L	5 - 40	High
ALT/GPT	15	U/L	5 - 35	Normal
Alkaline Phosphata	114	U/L	25 - 125	Normal
Calcium	8.6	mg/dL	8.1 - 10.4	Normal
Phosphorus	3.8	mg/dL	2.6 - 4.5	Normal
C-Reactive Protein	5.24	mg/L	0.00 - 7.00	Normal

Na – 140
K – 3.6
Cl – 103 | mmol/L
Ical – 4.5 | mg/dL

Performed By

Verified By

CORE DIAGNOSTICS™

hemaCORE

MC-2256

Case ID	: 24030000410
Patient Name	: Ms. AVARTIKA
Age/DOB/Sex	: 1 Year / / Female
Hospital Name-1	: KSCH, Delhi
Physician Name	: DR.MUKESH
Registration On	: 15-Jul-2024 18:36
Collection On	: 15-Jul-2024 06:30
Reported On	: 20-Jul-2024 19:34
Process AT	: CORE-Gurugram
Ref ID	:
Sample Type	: Peripheral Blood
Report Status	: Final

UNIQUE PATIENT ID : 109821

TEST NAME

AML Multiplex Basic (BCR - ABL, PML RaRa, AML ETO, INV 16, NPM1, FLT3, KIT)

SPECIMEN INFORMATION

Peripheral Blood

CLINICAL HISTORY

NOT PROVIDED.

METHODOLOGY

Real Time Polymerase Chain Reaction + Gel electrophoresis

RESULTS

GENES COVERED	CHROMOSOMAL ALTERATION	RESULTS
PML - RARA	t(15;17)(q24.1;q21.1)	Not Detected
AML1-ETO	t(8;21)(q22;q22)	Not Detected
CBFB-MYH11	inv(16)(p13;q22)	Not Detected
BCR-ABL1	t(9;22)(q34:q11) (Major)	Not Detected
BCR-ABL1	t(9;22)(q34:q11) (Minor)	Not Detected
GENES COVERED	**ALLELE STATUS**	**RESULTS**
FLT3-ITD*	Wild Type	Not Detected
FLT3-TKD (D835Y/I836)	Wild Type	Not Detected
NPM1	Wild Type	Not Detected
c-KIT (Exon 17)	Wild Type	Not Detected

TEST ATTRIBUTES

CAP ACCREDITED
COLLEGE of AMERICAN PATHOLOGISTS
AU-ID-2010258

Dr. Shivani Sharma
DCP, DNB, DipRCPath.
Reg. No. 1906

Dr. Rahul Katara
Ph.D.

Dr.Sanjay Kumar
Ph.D

CORE DIAGNOSTICS™

Case ID	: **24030000410**
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- Qualitative analysis performed through Real Time PCR
- FLT3- ITD detection through RT-PCR followed by Gel Electrophoresis*

Disclaimer: This test is performed using in-house developed assay for AML Multiplex Panel. The assay is designed to perform the reactions at the specified analytical sensitivity given that the template DNA is not heavily fragmented and does not contain materials that could inhibit the amplification reaction.

TEST ATTRIBUTES

LIST OF DETECTABLE VARIANTS AND LIMIT OF DETECTION

COMPONENTS	VARIANT DETECTED	LIMIT OF DETECTION (LOD)
PML RARA	BCR1, BCR2, BCR3	LOD is equal to 10 copies of fusion transcript per PCR
AML1-ETO {t(8;21) (q22;q22)} &	RUNX1-RUNX1T1	
CBFB-MYH11 {inv (16) (p13;q22)}	Type A, E, D	
BCR ABL1	E13a2 & e14a2 (P210), e1a2 (p190)	
FLT3 Internal Tandem Duplication (ITD) & Tyrosine kinase domain (TKD)	TKD(D835), ITD	is equal to 2% mutant alleles in background of 98% wild type alleles
NPM1	Type A,B,D	
C-KIT	D816V	

COMMENTS

PML RARA	• Acute promyelocytic leukemia (APL) is a particularly aggressive subtype of AML, comprising approximately 10% of AML cases • The translocation of the PML gene on chromosome 15 to the RARA gene on chromosome 17 [ie, t(15;17)(q24.1;q21.1)] produces a PML-RARA fusion gene • Based on PML breakpoint location, the PML RARA transcripts subtype breakpoint cluster region (BCR)– BCR 1, BCR 2 (long transcript) BCR 3(Short Transcript type) may be formed • For diagnostic identification of PML RARA in cases of Acute Promyelocytic Leukemia • To assess molecular resistance & predict response to treatments containing ATRA and / or ATO
AML1- ETO	• AML1 (RUNX1 - Runt related Transcription Factor 1) is fused with ETO (RUNX1T1) in the t(8;21)(q21;q22) translocation • The AML1-ETO fusion transcription factor is generated by the t(8;21) translocation, which is present in approximately 4%-12% of adult and 12%-30% of pediatric acute

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	myeloid leukemia (AML) patients • The (8;21) translocation is associated with about 40% of cases of M2 AML with karyotypic abnormalities and represents the most frequent chromosomal anomaly in leukemia (18–20%) • For prognostic evaluation - Presence of this translocation is associated with a favorable prognosis
CBFB- MYH11	• The fusion gene CBFB/MYH11 results from a pericentric inversion of chromosome 16, inv(16)(p13.1q22), or less commonly from a t(16;16)(p13.1;q22) • This rearrangement is found in 6-8% of adult de novo AML cases and associated with favorable prognosis • For diagnostic identification of AML having morphological, immunophenotypic or clinical features strongly suggestive of M4eo FAB subtype
BCR ABL	• The Philadelphia chromosome, corresponding to the BCR ABL1 rearrangement, is found in 0.5-3 % of all acute myelogenous leukemia • BCR-ABL-positive acute myeloid leukemia (AML) is a rare subtype of AML that is now included as a provisional entity in the 2016 revised WHO classification of myeloid malignancies • AML with BCR-ABL1 rearrangement is a rare de-novo AML that may benefit from therapies that entail tyrosine kinase inhibitors • The most common BCR-ABL transcripts (p190 and p210) are nearly equally distributed. The prognosis of BCR-ABL+ AML seems to depend on the cytogenetic and/or molecular background rather than on BCR-ABL itself
NPM1	• Isolated NPM1 mutation, which localizes to the cytoplasm, confers a higher complete response (CR) rate and improved event-free survival (EFS) and OS compared with patients who are NK-AML and wild- • type NPM1, resulting in outcomes similar to patients with favorable cytogenetics (eg, CBF AML)Mutated NPM1 is associated with favorable prognosis without FLT3-ITD or with the low allelic ratio of FLT3-ITD
FLT3	• FLT3-ITD(internal tandem Duplication) mutations occur in approximately 30% of cases and FLT3-TKD (tyrosine kinase domain) mutations in approximately 10% of patients • Negative prognostic influence of FLT3-ITD in patients with AML, resulting in shorter remission durations (eg, decreased disease-free survival [DFS] in patients with a CR

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	and poorer survival outcomes compared with patients who have wild-type FLT3 • The FLT3-TKD mutations predominantly occur independently of FLT3-ITD, and most frequently involve mutations in the D835 residue of a TKD
KIT	• KIT mutations have been reported in approximately 20% of patients with CBF AML • KIT is a receptor tyrosine kinase involved in proliferation, differentiation, and survival • The presence of KIT mutations in core binding factor leukemia is generally accepted to be associated with a worse prognosis.

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KILKARI TRUST
Regd. No.464

KILKARI TRUST

You Think, You Care, You give.

Mob.: 8588981217

Ref. No.: .....

Date : 29/07/2024

सेवा में,
संस्थापक महोदया
किलकारी ट्रस्ट
नई दिल्ली,

महोदया,

मैं, अविनाश अवरतिका का पिता आपसे आवेदन करता हूँ कि मेरे बच्चे के इलाज में सहायता करें। मेरे बच्चे को ब्लड कैंसर हो रखा है दिन पे दिन इसकी परेशानी बढ़ती जा रही है। कैंसर बहुत जानलेवा बिमारी है। इसका इलाज कलावती हॉस्पिटल से चल रहा है, मैं बहुत दूर से आता हूँ बच्चे के इलाज के लिए, मेरा परिवार जिवन भर आपका आभारी रहेगा। कृप्या करके मेरे बच्चे पर अपना आशीर्वाद बनाएँ।

प्रार्थी
अविनाश

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