

Hematology

	<u>Result</u>		<u>Unit</u>	<u>Method</u>	<u>Reference Interval</u>
<u>C.B.C</u>					
<u>Cell Count</u>					
WBC	2.23	L	1000/ μ L		4-11
RBC	3.09	L	Mil/ μ L		4.7-6.1
Hemoglobin	10.1	L	g/dL		14-18
Hematocrit	30.1	L	%		42-52
MCV	97.4	H	fl		80-96
MCH	32.7	H	pg		27-32
MCHC	33.6		g/dL		33-36
RDW	14.2		%		11.5-14.5
Platelet	36	L	1000/ μ L		145-449
<u>RBC Morphology</u>					
Macrocytosis	1+				
Polychromasia	1+				
Ovalocytosis	1+				
Teardrop cells	1+				
Macro-ovalocytosis	Few				
<u>Leukocyte Differential Count</u>					
Neutrophil#	0.97	L	x 1000/ μ L		1.8-7
Lymphocyte#	0.87	L	x 1000/ μ L		1.5-4
Monocyte#	0.2		x 1000/ μ L		0.12-0.8
Eosinophil#	0.13		x 1000/ μ L		0.02-0.35
Basophil#	0		x 1000/ μ L		0.0-0.2
Neutrophil%	21	L	%		50-70
Lymphocyte%	56	H	%		20-40
Monocyte%	15	H	%		3-12
Band Cell%	4		%		0-6%
Myelocyte	1	H	%		0-1
Blast	3	H	%		0-0

Interpretation / Diagnosis: Cytomorphology & immunophenotyping of PB reveals presence of Blast (3%) which are CD13^{pos} CD33^{pos} CD34^{bright} CD38^{pos} CD117^{pos}. Normal B & T-cells were present. BM cytomorphology & immunophenotyping for definitive diagnosis or rule out of **Acute Myeloid Leukemia** and **MDS** recommended.

Leukemic Blast / Cells

Marker	%	Marker	%
B-Lymphoid		Myeloid	
CD10	<1	CD45	100
CD19	9	CD13	12
CD20	9	CD14	3
CD22	NR	CD33	17
CD23	NR	HLA-DR	29
CD25	NR	CD117	8
sIgM	NR	iMPO	NR
S.Kappa	NR	CD64	3
S.Lambda	NR	TdT	NR
HLA-DR	NR	CD11b	NR
TdT	NR	CD15	NR
CD34	NR	CD16	NR
CD103	NR	CD34	10
FMC7	NR	CD41	NR
CD11c	NR	CD42b	NR
T-Cells		CD123	17
CD1a	NR	CD235a	NR
CD2	72	Plasma Cell dyscrasia	
CD3	53	CD138	NR
iCD3	NR	CD38	52
CD56	NR	K/L	NR
CD4	NR	LGL Leukemia	
CD5	NR	CD56	NR
CD7	74	CD57	NR
CD8	NR		

*NR: Not requested

Immunophenotype:

Immunophenotyping of PB with gating (47%) on lymphocyte region. These cells have small size (based on forward-scatter signal). Normal B & T-cells were present (CD2, CD3, CD7, CD19, CD20).

PB smear; Blast: 3%.

