RML- Quality Assurance Program (RML-QAP)
Result Sheet
HAEMATOLOGY

(Filled by Participant)

Lab Code No. [2993]

Sample Receiving Date: 28/07/2023
Sample Testing Date: 23/07/2023

Dispatch Date:18-07-2023
Last Date for Result Submission- 02-08-2023

Sample-1: COMPLETE BLOOD COUNT

This specimen is an anticoagulated whole blood specimen. Determine its CBC by your usual method which may be manual or by Autoanalyser.

Report of CBC

Method: i) Automatic ☑   ii) Manual ☐

Note: (1) You must perform each test and **report the values in the prescribed columns.**

Test Parameters	Unit	Result					Instrument Name
Hb	g/dl.		1	1 . 4			Horiba – Yumizen H500
WBC	10^3 /µl.	0	0	7 . 1			Horiba – Yumizen H500
RBC	10^6 /µl.		0	4 . 0	0		"
HCT / PCV	%		3	4 . 5			"
MCV	fl.		8	4 . 3			"
MCH	Pg.		2	8 . 4			"
MCHC	g/dl		3	2 . 9			"
Platelet	10^3 / µl	3	0	0			∧

Sample-2: PERIPHERAL BLOOD SMEAR

One stained alcohol fixed and air dried Peripheral smear is provided. Please report D.L.C. and comment on R.B.C. morphology and Platelet i.e. report 3-5 noticeable/ relevant features observed. Only first five RBC morphology features will be included in your assessment. Reporting of diagnosis is essential.

Clinical Summary:-

A 40 year old female presented with chief complaints of fatigue & generalized weakness since 3 months, shortness of breath with physical activity since 2 months, Chronic daily headache since 2 months. On examination – Pallor(+). Hemogram is as follows: Hb – 5.8 gm%, TLC – 7.1x10³ cells /mm³, Platelet - 221x10³ /mm³, RBC- 3.72x10⁶/mm³, MCV- 58.9 fL, RDW-23.3%

Report of Blood Film

No. of cells counted __100__ Blasts%_____ Promylelocytes %_____ Myelocytes %_____

Meta myelocytes % __01__ Stabs % __01__ Polymorphs% __58__ Lymphocytes % __6__

Eosinophils __2__ Monocytes % __6__ Basophils __0__ NRBC/ 100 WBCs_____

Morphology & Other positive Findings:
RBC - microcytic hypochromic target cell, elliptocyte noted
WBC - Normal in number, distribution, but neutrophils show pelger huet anomaly changes with small uni orbilobed neutus, dense staned chromatin. Platelets noted.

Diagnosis: Microcytic hypochromic with neutrophilic granulocytic dysplasia (pelger huet cells).

Note: -
- It is mandatory to attach the machine printout along with the result.
- You are request to report the result only in above mentioned decimal point & units.
- You may also send your results through mail, to avoid any delay in result submission.

Page 1 of 1

RML
Research Foundation
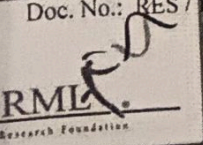
Continuous Efforts And Execution Leads To Quality Excellence

HEMATOLOGY

ALL METHOD REPORT

Cycle-12/2023
Round -4

Lab Code: 2993

Date: 31/08/2023

Complete Blood Count (CBC)

Parameters	No.of Participants	Robust Mean	Robust Standard deviation (SD)	Uncertainty of Assign Values	Range (± 2 SD)	Your Value	Z Score
Hb gm/dl	310	11.9	0.4	0.03	11.1-12.6	11.4	-1.2
WBC × 10³/µl.	308	11.3	0.8	0.06	9.7-13.0	*7.1	-5.1
RBC × 10⁶/µl.	309	4.1	0.1	0.01	3.8-4.4	4.00	-0.7
Hct%	309	36.1	2.6	0.18	31.0-41.2	34.5	-0.6
MCV fl.	308	87.7	4.9	0.35	77.9-97.5	86.3	-0.3
MCH pg.	308	28.9	1.0	0.07	26.9-30.8	28.4	-0.5
MCHC gm/dl	308	32.9	2.0	0.14	28.8-36.9	32.9	0.0
Platelet × 10³/µl.	309	272.6	18.8	1.34	235.0-310.3	300	1.5

Interpretation of Z Score:

Z Score Value(+/-)	[Z] ≤ 2.0	2.0< [Z] < 3.0	[Z] ≥ 3.0
Interpretation	Satisfactory Performance No signal	Questionable Warning Signal	Unsatisfactory Performance action Signal

Peripheral Blood Smear(PBS):

	Your Result	Consensus Result
DLC	Meta-01, S-01, P-58, L-06, E-02, Mono-06	P-47.7-68.4, L-23.9-45.9, E-1-3.6, Mono- 1.5-4.7
Morphology	RBC- Microcytic Hypochromic Target cells, Elliptocyte noted. WBC- Normal in number, distribution, but neutrophils show Pelger Huet anomaly changes with small uni or bilobed.Plt noted	Δ Microcytic/Microcytosis/Microcytes (276/288) Δ Hypochromia/ Hypochromic (259/288) Δ Anisocytosis (230/288) Δ Poikilocytosis (205/288) Δ Target Cells (176/288)
Diagnosis	Microcytic Hypochromic with Neutrophilic Granulocytic Dysplasia	Microcytic Hypochromic Anemia

Legends	(*) Excluded From Group Mean	{.} Not Reported	(#)Late Result Submission	($)Reported in other Unit

Chief Coordinator

Dr. Sanjay Mehrotra

Programme Director

Dr.Bandana Mehrotra

Checked By:

Doc. No.: ASS / FR / 06 / R 0 / Dt.: 05.01.2022

End of Report

Page 1 of 5

Sample ID	EQAS RML		Gender	Age
Last Name			First Name	

Run Date   07/23/2023 12:15:45 PM

RBC	4.00	10⁶/µL	PLT	300	10³/µL		RBC
HGB	11.4	g/dL	PCT	0.34	%		
HCT	34.5	%	MPV	11.3 h	µm³		
MCV	86.3	µm³	PDW	18.7	µm³		
MCH	28.4	pg	P-LCC	152 h	10³/µL		
MCHC	32.9	g/dL	P-LCR	50.8 h	%		
RDW-CV	14.5	%					
RDW-SD	49.9 h	µm³					
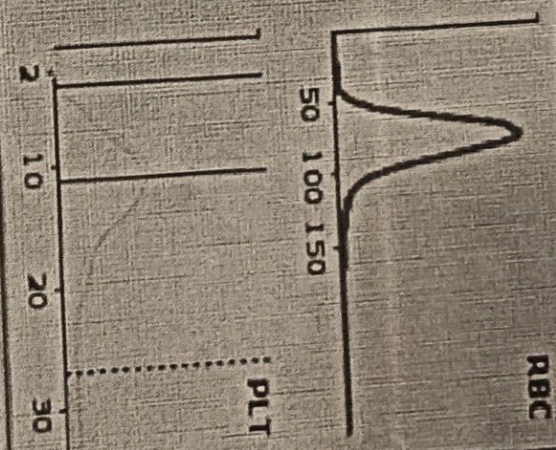
RBC graph axis: 50 100 150 — PLT

PLT graph axis: 2 10 20 30

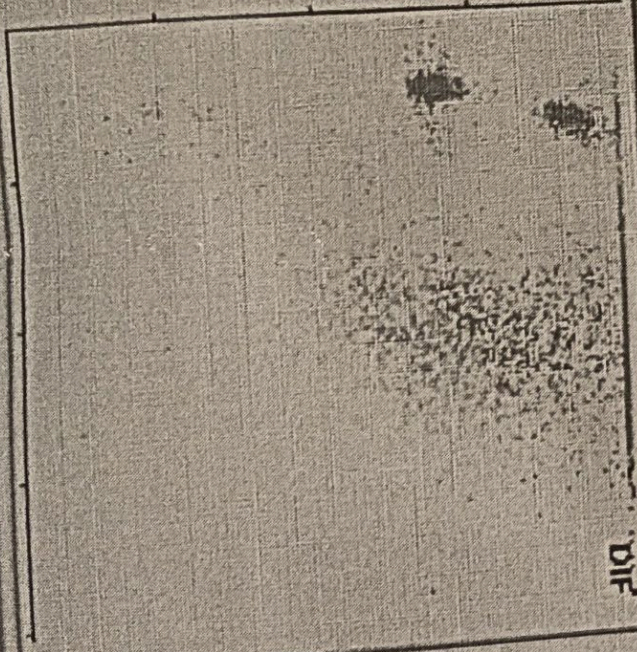|			
WBC	7.14 *	10³/µL	
	#	%	
NEU	1.80 *	25.6 l*	
LYM	0.01 L*	0.1 l*	
MON	0.00 l*	0.0 l*	
EOS	5.20 H*	74.2 h*	
BAS	0.01 *	0.1 *	
LIC	0.12 h*	1.6 h*	

DIF

Alarms

Recommended Actions
Slide review

WBC
Background Noise
Abnormal Differentation

Suspected Pathologies
Lymphopenia
Eosinophilia
Left shift

Investigation checklist/Form

Survey information: _____

Survey Name	RML - BAP	Analyzer name/Model	Horiba - Yumizen H500
Date survey received	21-07-23	Date of analysis performed	23-7-2023
Date survey result submitted	23-7-23	Date of report receipt	
Investigation performed by		Date of evaluation	31-08-2023

Date of retesting:

Unacceptable parameter Name: Specimen	Analyte	Reported value	Repeated value	Intended/peer group value
RML BAP	Total Count	7.1		11-3

Root cause Analysis	Yes	No	NA
Clerical			
1. Was the results correctly transcribed from instrument readout or report?	✓		
2. Was the correct instrument /method reagent reported on the result form?	✓		
3. Does the result reported on the result form match the result found on the proficiency testing evaluation report ?	✓		
Procedural			
1. Was the written procedure followed?	✓		
2. Were the reagents within their open stability limit during analysis?	✓		
3. Were Quality Control results acceptable and without bias?	✓		
4. Were dilutions performed correctly?	✓		
Analytical			
1. Was the most recent calibration acceptable and within established limits at the time of testing?	✓		
2. Does a review of the past proficiency testing results indicate evenly distributed data without bias?	✓		
3. Was the intended result within measuring range for the instrument?	✓		
4. Was instrument maintenance performed on schedule?	✓		
5. Does a review of records indicate that there were no related instrument test problems noted prior to or after the proficiency testing as performed?	✓		
PT /EQAS material			
1. Was proficiency testing material received in the laboratory within an appropriate time after shipment?	✓		
2. Was proficiency testing material received at the appropriate temperature?	✓		
3. Were results graded in the appropriate peer group based on the method reported on the result form?	✓		

Conclusion /Summary:

Type of error			
Method related		Survey evaluation problem	
Technical process related		Other (define below)	✓
Clerical			

Preventive actions (If any) Excluded from group mean.

Review and approval: Different 'NEQAAP' Survey we started with new cycle. And we submitted E-mail verification. Since there was no appropriate group for comparision, New EQAS provider has been identified to use from next available sample.