



**PROFICIENCY TESTING REPORT**  
**ISHTM-AIIMS EXTERNAL QUALITY ASSURANCE PROGRAMME**  
 NABL accredited program as per ISO/IEC 17043:2010 standard  
 Organized By Department of Hematology, AIIMS, New Delhi-110029



*Duration of stability testing - minimum upto 8 days at ambient temp. after dispatch of specimens*

EQAP CODE No. : 1716

Distribution No.: 163-D

Month/Year: March/2024

Instrument ID: GENURI

Model Name.: PCI 6610

Serial No.: 0802207281936

Name & Contact No. of PT Co-ordinator: Dr. Manoranjan Mahapatra ( Prof. & Head), Hematology, AIIMS, Delhi,  
 Tel: 9013085730 , E-Mail : info@ishtmaiimseqap.com

Date of issue &amp; status of the report: 01-05-2024[Final].

### CBC and Retic Assessment

Test Parameters	S.No.	Among Lab (Accuracy Testing)						Within Lab (Precision Testing)			
		Your Result 1	Your Result 2	Your Results Sum of 2 Value	Consensus result sum of 2 values (Assigned Value)	Uncertainty of Assigned Values	Z Score	Yours Results Diff. of 2 Values	Consensus Result Diff. of 2 values (Assigned Value)	Uncertainty of Assigned Values	Z Score
WBC x10 <sup>3</sup> /µl	1	4.44	4.43	8.87	8.82	0.037	0.05	0.01	0.1	0.006	-0.81
RBC x10 <sup>6</sup> /µl	1	3.9	3.82	7.72	8.56	0.008	-3.54	0.08	0.03	0.002	1.35
Hb g/dl	1	12.4	12.3	24.7	26.8	0.019	-3.54	0.1	0.1	0.007	0.00
HCT%	1	37	36.2	73.2	83.2	0.135	-2.47	0.8	0.3	0.022	1.35
MCV-fl	1	94.8	94.8	189.6	194.55	0.259	-0.60	0	0.3	0.020	-1.01
MCH-Pg	1	32.1	31.7	63.8	62.6	0.055	0.81	0.4	0.2	0.015	0.90
MCHC-g/dl	1	33.9	33.5	67.4	64.2	0.102	0.98	0.4	0.2	0.016	0.67
Plt. x10 <sup>3</sup> /µl	1	262	262	524	514	1.336	0.28	0	6	0.336	-1.01
Retic %	2	14.5	12.5	27	12.85	0.279	1.50	2	0.4	0.024	2.70

### P.S . Assesment

YOUR REPORT			CONSENSUS REPORT		
DLC%	3	Nrbcs=0 , Poly=12 L=12, E=0, Mono/Promono=1 , B1=75 P.M.=0, Mye=0, Meta=0, Other=Platelets markedly reduced on smear	Blast: 65-89, Poly: 4-9, Lympho: 3-8, Myelo/Mono/Promyelo/Meta/Eos/Baso: 0-5		
RBC Morphology	3		Predominantly: Normocytic/Normochromic; Moderate: Anisocytosis, Mild: Microcytosis, Poikilocytosis		
Diagnosis	3	Acute Leukemia	Acute Myeloid Leukemia(AML)		

**COMBINED DATA VALUES OF TOTAL PARTICIPANTS**

Test parameters	S.No.	Total participants covered in the current dist. 163--D	Total No. responded	% of Labs with Z Score 0-2		% of Labs with Z Score 2-3		% of Labs with Z Score >3	
				Among labs	Within lab	Among labs	Within lab	Among labs	Within lab
<b>WBC x10<sup>3</sup>/µl</b>	1	365	362	91.16	92.82	2.76	2.49	6.08	4.69
<b>RBC x10<sup>6</sup>/µl</b>	1	365	365	89.04	92.6	6.85	2.47	4.11	4.93
<b>Hb g/dl</b>	1	365	365	88.49	89.04	6.58	4.66	4.93	6.3
<b>HCT%</b>	1	365	362	93.65	91.16	4.7	3.59	1.65	5.25
<b>MCV-fl</b>	1	365	362	95.03	86.19	3.59	7.46	1.38	6.35
<b>MCH-Pg</b>	1	365	361	88.09	91.41	7.2	3.05	4.71	5.54
<b>MCHC-g/dl</b>	1	365	361	93.35	88.92	3.88	4.71	2.77	6.37
<b>Plt. x10<sup>3</sup>/µl</b>	1	365	362	90.06	92.54	6.35	3.59	3.59	3.87
<b>ReticCount%</b>	2	365	326	96.93	93.25	2.76	4.29	0.31	2.46
<b>PS Assessment</b>	3	365	338	Satisfactory :95.9%, Borderline Sat. :1.64%, Unsatisfactory :2.46%					

**\*Comments:**

1). **Among Lab (EQA) : CBC result for RBC & HB unacceptable, please check calibration/human error. Remaining results acceptable.**

2). **Within Lab (IQA) : Precision acceptable.**

**Note-1: EQA** (External Quality Assurance) : Your Performance among various of participating labs in PT, to determine the accuracy of your results.

**IQA** ( Internal Quality Assurance) : Your Performance of comparison of two consecutive measurement values within your lab to test the precision of your autoanalyzer.

**Note-2:** Z score among & within lab were calculated, as per to ISO/IEC 13528:2015 standard. Z score among lab (EQA)= (Your Result Sum of two values - Consensus Result sum of two values)/(Normalised IQR)

Z score within lab (IQA)= (Your Result Difference of two values - Consensus Result difference of two values)/(Normalised IQR)

IQR = Quartile 3 - Quartile 1 of participant data, Normalised IQR = 0.7413 x IQR

**Note-3:** Z score 0 to ±2: Acceptable, Z score ±2 to ±3 :Warning Signal, Z score > ±3 : Unacceptable [As per ISO/IEC 13528:2015 standard]

**Note-4:** Z score value between "0 to ±2" are texted in green colour. Z score value between "±2 to ±3" are texted in orange colour. Z score value > ±3 are texted in red colour.

**Note-5:** Homogeneity and stability testing of PT sample were done as per ISO 13528:2015 standard. To pass homogeneity test, between sample SD (Ss) should be smaller than the check value (0.3\*SDPA). To pass the stability test, average difference in measurement values of first and last day sample ( $\bar{x}-\bar{y}$ ) should be smaller than the check value (0.3\*SDPA).

**Note-6:** ISHTM-AIIMS-EQAP does not subcontract any task of its scheme

**Note-7:** Participants are free to use methods/analyzer of their own choice.

**Note-8:** Proficiency testing (PT ) samples are sent quarterly to each participant.

**Note-9:** All the necessary details regarding design and implementation of PT, are provided in the instruction sheet as well as on programme's website [www.ishtmaiimseqap.com](http://www.ishtmaiimseqap.com).

**Note 10:** Reports are kept confidential.

Report authorized by,



Dr. Manoranjan Mahapatra ( Prof. & Head)

PT Co-ordinator: ISHTM-AIIMS-EQAP

Department of Hematology, AIIMS, New Delhi

-----End Of Report-----



NAME	:MR TARSEM SINGH (HAV)	Requisition Date	:02/May/2024 09:47AM
DOB/Gender	:04-Jun-1965/M	Sample CollDate	:02/May/2024 10:16AM
UHID	:168576	Sample Rec.Date	:02/May/2024 10:16AM
Inv. No.	:4256699	Approved Date	:02/May/2024 11:18AM
Panel Name	:Ivy Hoshiarpur	Referred Doctor	:DR. GAURAV AGGARWAL
Bar Code No	:13146729		

Test Description	Observed Value	Unit	Reference Range
------------------	----------------	------	-----------------

**HAEMATOLOGY**

**COMPLETE BLOOD COUNT (Sample Type- Whole Blood EDTA)**

Haemoglobin (Noncyanmethaemoglobin)	10.0	gm/dl	13-18
Hematocrit(PCV) (Calculated)	27.1	%	36-48
Red Blood Cell (RBC) (Impedence/DC Detection)	3.30	10 <sup>6</sup> / μl	4.5-5.5
Mean Corp Volume (MCV) (Impedence/DC Detection)	81.4	fL	83-97
Mean Corp HB (MCH) (Calculated)	30.0	pg/mL	27-31
Mean Corp HB Conc (MCHC) (Calculated)	36.9	gm/dl	32-36
Red Cell Distribution Width -CV (Calculated)	14.7	%	11-15
Platelet Count (Impedence/DC Detection/Microscopy)	204	10 <sup>3</sup> /ul	150-450
Mean Platelet Volume (MPV) (Impedence/DC Detection)	12.6	fL	7.5-10.3
Total Leucocyte Count (TLC) (Impedence/DC Detection)	10.0	10 <sup>3</sup> / μl	4.0-11.0

**Differential Leucocyte Count (VCS/ Microscopy)**

Neutrophils	71	%	40-75
Lymphocytes	20	%	20-40
Monocytes	6	%	0-8
Eosinophils	3	%	0-4
Basophils	0	%	0-1
Absolute Neutrophil Count	7,100	μl	2000-7000
Absolute Lymphocyte Count	2,000	uL	1000-3000
Absolute Monocyte Count	600	uL	200-1000
Absolute Eosinophil Count	300	μl	20 - 500

\*\*\* End Of Report \*\*\*



*Aman*  
DR AMANDEEP KAUR KANG  
M. D. PATHOLOGY



IVY HOSPITAL  
Sector 71, Mohali, Punjab, 160071  
Ph: 9115115257, 9115115258,  
9115115624  
Email: lab@ivyhospital.com

NAME	:MR TARSEM SINGH (HAV)		
DOB/Gender	:04-Jun-1965/M	Requisition Date	:02/May/2024 09:47AM
UHID	:168576	Sample Coll.Date	:03/May/2024 08:15AM
Inv. No.	:4256699	Sample Rec.Date	:03/May/2024 8:16AM
Panel Name	:Ivy Mohali	Approved Date	:03/May/2024 10:30AM
Bar Code No	:13146729	Referred Doctor	:DR. GAURAV AGGARWAL

Test Description Observed Value Unit Reference Range

**HAEMATOLOGY**

**COMPLETE BLOOD COUNT (Sample Type- Whole Blood EDTA)**

Haemoglobin (Noncyanmethaemoglobin)	10.5	gm/dl	13-18
Hematocrit(PCV) (Calculated)	28.0	%	36-48
Red Blood Cell (RBC) (Impedance/DC Detection)	4.0	$10^6/\mu\text{l}$	4.5-5.5
Mean Corp Volume (MCV) (Impedance/DC Detection)	81.9	fL	83-97
Mean Corp HB (MCH) (Calculated)	30.0	pg/mL	27-31
Mean Corp HB Conc (MCHC) (Calculated)	36.0	gm/dl	32-36
Red Cell Distribution Width -CV (Calculated)	14.7	%	11-15
Platelet Count (Impedance/DC Detection/Microscopy)	205	$10^3/\text{ul}$	150-450
Mean Platelet Volume (MPV) (Impedance/DC Detection)	12.5	fL	7.5-10.3
Total Leucocyte Count (TLC) (Impedance/DC Detection)	10.1	$10^3/\mu\text{l}$	4.0-11.0
<b>Differential Leucocyte Count (VCS/ Microscopy)</b>			
Neutrophils	70	%	40-75
Lymphocytes	21	%	20-40
Monocytes	6	%	0-8
Eosinophils	3	%	0-4
Basophils	0	%	0-1
Absolute Neutrophil Count	7000	$\mu\text{l}$	2000-7000
Absolute Lymphocyte Count	2,100	uL	1000-3000
Absolute Monocyte Count	600	uL	200-1000
Absolute Eosinophil Count	300	$\mu\text{l}$	20 - 500

**\*\*End of Report\*\***



*Bhumika Bisht*  
DR BHUMIKA BISHT  
M. D. PATHOLOGY

The highlighted values should be correlated clinically  
Result Entered By:Bhumika Bisht P0025

Sample Analysis

Review

QC

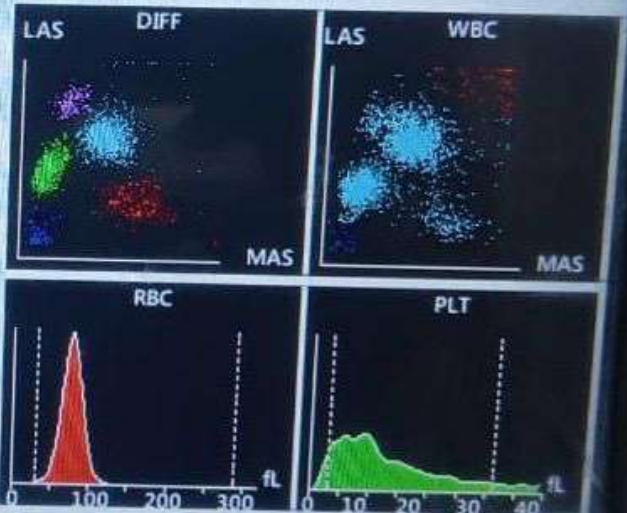
Reagent Setup

Diluent

Print

File No. 1 Lot No. DH2405 Level Low Exp.Date 05-07-2024  
 Mode Whole Blood QC Type LOW QC Sample ID DH2405

Para	Result	Unit	Para	Result	Unit
WBC	3.81	10 <sup>3</sup> /uL	HGB	6.3	g/dL
Neu#	2.03	10 <sup>3</sup> /uL	HCT	17.5	%
Lym#	1.35	10 <sup>3</sup> /uL	MCV	79.4	fL
Mon#	0.24	10 <sup>3</sup> /uL	MCH	28.5	pg
Eos#	0.19	10 <sup>3</sup> /uL	MCHC	35.9	g/dL
Bas#	0.01	10 <sup>3</sup> /uL	RDW-CV	16.3	%
Neu%	53.2	%	RDW-SD	47.8	fL
Lym%	35.4	%	PLT	61	10 <sup>3</sup> /uL
Mon%	6.4	%	MPV	10.4	fL
Eos%	5.0	%	PDW-CV	16.2	%
Bas%	0.2	%	PDW-SD	H 19.2	fL
NLR	1.50		PCT	0.064	%
PLR	45.19		P-LCC	21	10 <sup>3</sup> /uL
RBC	2.20	10 <sup>6</sup> /uL	P-LCR	34.0	%



LS 160

Setup

QC Table

QC Graph

Edit Result

Mode:Whole Blood-CBC+DIFF

Admin

10:15  
02-05-2024

ILC done - Report is satisfactory .

IQC done - Report is satisfactory .