



**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. :** 774

**Distribution No.:** 158-B

**Month/Year:** October/2022

**Instrument ID:** BC-6200

**Name & Contact No. of PT Co-ordinator:** Dr. Seema Tyagi (Prof.), Hematology, AIIMS, Delhi,  
 Tel: 9013085730 , E-Mail : accuracy2000@gmail.com

**Date of issue & status of the report:** 01-01-2023[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	4.66	4.57	9.23	10	0.0290	-1.00	0.09	0.1	0.0050	-0.11
RBC x10 <sup>6</sup> /µl	1	4.47	4.43	8.9	8.86	0.0060	0.22	0.04	0.04	0.0020	0.00
Hb g/dl	1	13.9	13.8	27.7	26.4	0.0190	2.19	0.1	0.1	0.0070	0.00
HCT%	1	45.2	45.1	90.3	82.6	0.1590	1.47	0.1	0.4	0.0230	-0.81
MCV-fl	1	102.1	101.1	203.2	186.5	0.3470	1.47	1	0.3	0.0230	1.57
MCH-Pg	1	31.3	30.9	62.2	59.7	0.0480	1.71	0.4	0.2	0.0120	0.90
MCHC-g/dl	1	30.6	30.6	61.2	63.8	0.1370	-0.58	0	0.3	0.0180	-1.01
Plt. x10 <sup>3</sup> /µl	1	239	218	457	414	1.59	0.89	21	7	0.40	1.89
Retic %	2	5	4.5	9.5	10.5	0.14	-0.25	0.5	0.3	0.02	0.86

### P.S . Assesment

YOUR REPORT			CONSENSUS REPORT		
<b>DLC%</b>	3	Nrbcs=0 , Poly=4 L=8, E=2, Mono/Promono=1 , B1=63 P.M.=10, Mye=4, Meta=8, Other=few smudge cell seen	Blast: 76-92, Lympho: 4-16, Poly: 1-3, nRBC/Eos/Baso/Mono/Myelo/Meta/ Promyelo: 0-5		
<b>RBC Morphology</b>	3	predominantly Normocytic Normochromic cells, few normocytic hypochromic cells and macrocytes	Predominantly: Normocytic/ Normochromic, Moderate: Anisocytosis, Microcytic		
<b>Diagnosis</b>	3	ACUTE LEUKEMIA	Acute Leukemia (AL)		

**COMBINED DATA VALUES OF TOTAL PARTICIPANTS**

Test parameters	S.No.	Total participants covered in the current dist. 158--B	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	358	357	87.11	92.72	5.32	3.36	7.57	3.92
<b>RBC x10<sup>6</sup>/µl</b>	1	358	358	90.5	90.78	4.19	4.47	5.31	4.75
<b>Hb g/dl</b>	1	358	358	89.66	91.06	5.87	4.19	4.47	4.75
<b>HCT%</b>	1	358	356	97.47	92.13	1.97	4.21	0.56	3.66
<b>MCV-fl</b>	1	358	355	98.03	92.96	1.69	2.82	0.28	4.22
<b>MCH-Pg</b>	1	358	355	92.68	75.21	3.94	17.18	3.38	7.61
<b>MCHC-g/dl</b>	1	358	354	97.18	88.14	1.98	3.67	0.84	8.19
<b>Plt. x10<sup>3</sup>/µl</b>	1	358	356	91.57	91.29	5.9	4.21	2.53	4.5
<b>ReticCount%</b>	2	358	337	90.5	83.38	8.01	0.59	1.49	16.03
<b>PS Assessment</b>	3	358	340	Satisfactory :97.5%, Borderline Sat. :1.11%, Unsatisfactory :1.39%					

**\*Comments:**

**1). Among Lab (EQA) : 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. Seema Tyagi (Prof.)

PT Co-ordinator: ISHTM-AIIMS-EQAP

Department of Hematology, AIIMS, New Delhi

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