



# PROFICIENCY TESTING REPORT





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

**EQAP CODE No. : 4777 Distribution No.:** 158-L Month/Year: January/2023

**Instrument ID:** yumizen 550

Name & Contact No. of PT Co-ordinator: Dr. Seema Tyagi (Prof.), Hematology, AIIMS, Delhi,

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# **CBC** and Retic Assessment

				Among Lab (Accuracy Testing)				Within Lab (Precision Testing)				
Test Parameters	S.No.	Your Result 1		Your Results Sum of 2 Value	Consensus result sum of 2 values (Assigned Value)	Uncertainty		Yours Results Diff. of 2 Values	Consensus Result Diff. of 2 values (Assigned Value)	Uncertainty of Assigned Values	Z Score	
WBC x10³/μl	1	1.18	1.17	2.35	9.2	0.028	-10.15	0.01	0.1	0.006	-0.81	
RBC x10 <sup>6</sup> /μl	1	4.77	4.73	9.5	9.42	0.013	0.23	0.04	0.05	0.003	-0.22	
Hb g/dl	1	13.8	13.6	27.4	26.9	0.028	0.75	0.2	0.1	0.008	0.67	
НСТ%	1	40	39.6	79.6	85	0.240	-0.69	0.4	0.4	0.024	0.00	
MCV-fl	1	83.9	83.8	167.7	183.2	0.409	-1.16	0.1	0.2	0.018	-0.34	
МСН-Рд	1	28.9	28.9	57.8	57.2	0.064	0.35	0	0.2	0.016	-0.90	
MCHC-g/dl	1	34.4	34.4	68.8	62.8	0.156	1.05	0	0.3	0.021	-1.01	
Plt. x10³/μl	1	221	216	437	452	1.514	-0.34	5	6	0.366	-0.17	
Retic %	2	20.5	19.8	40.3	20.5	0.368	1.78	0.7	0.7	0.046	0.00	

## P.S. Assesment

		YOUR REPORT	CONSENSUS REPORT				
DLC%	3		Poly: 28 - 51, Myelo: 12 - 22, Meta: 10- 20, Lympho: 3- 10, Eosino: 1-4, Promyelo: 2-8, nRBC/Blast/Baso/Mono: 0 - 5				
RBC Morphology	3		Predominantly: Normocytic/Normochromic; Moderate: Anisocytosis, hypochromia, Microcytosis; Mild: Macrocytosis, Poikilocytosis				
Diagnosis	3		Chronic Myeloid Leukemia (Chronic Phase)				

## **COMBINED DATA VALUES OF TOTAL PARTICIPANTS**

Test never eters	S.No.	Total participants covered in the current dist. 158L	Total No. responded	% of Labs with Z Score 0-2		% of Labs with Z Score 2-3		% of Labs with Z Score >3	
Test parameters				Among labs	Within lab	Among labs	Within lab	Among labs	Within lab
WBC x10³/μl	1	338	337	83.09	93.47	4.15	3.56	12.76	2.97
RBC x10 <sup>6</sup> /μl	1	338	338	88.17	88.76	6.51	4.44	5.32	6.8
Hb g/dl	1	338	338	86.98	84.32	5.62	6.21	7.4	9.47
HCT%	1	338	3 <mark>36</mark>	97.62	90.77	1.79	3.57	0.59	5.66
MCV-fl	1	338	337	99.11	85.76	0.89	3.86	0	10.38
MCH-Pg	1	338	337	91.69	<mark>8</mark> 9.91	4.45	5.34	3.86	4.75
MCHC-g/dl	1	338	337	98.52	88.43	0.89	5.64	0.59	5.93
Plt. x10³/μl	1	338	337	95.55	88.72	3.56	5.93	0.89	5.35
ReticCount%	2	338	217	97.7	92.17	1.84	3.23	0.46	4.60
PS Assessment	3	338	212	Satisfactory:93.14%, Borderline Sat.:3.43%, Unsatisfactory:3.43%					

### \*Comments:

1). Among Lab (EQA): CBC result for WBC unacceptable, may be due to random/human error.PS Diagnosis not reported, 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  $\pm 2$ : Acceptable, Z score  $\pm 2$  to  $\pm 3$ : Warning Signal, Z score  $> \pm 3$ : Unacceptable [As per ISO/IEC 13528:2015 standard]

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

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

Report authorized by,

Dr. Seema Tyagi (Prof.)

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