



# 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. : 2095 Distribution No.:** 155-E Month/Year: March/2022

Instrument ID: Horiba Yumizen H500 901YOXH02029

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: 29-04-2022[Final].

## **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		Results		Uncertainty of Assigned Values	Z Score	
WBC x10³/μl	1	4.14	4.1	8.24	6.4	0.0320	2.07	0.04	0.09	0.0050	-0.75	
RBC x10 <sup>6</sup> /μl	1	3.12	3.07	6.19	6.14	0.0070	0.27	0.05	0.03	0.0020	0.67	
Hb g/dl	1	11.2	11.1	22.3	22.4	0.0210	-0.18	0.1	0.1	0.0070	0.00	
НСТ%	1	35.2	34.9	70.1	69.4	0.1290	0.20	0.3	0.3	0.0230	0.00	
MCV-fl	1	113.8	112.9	226.7	225.1	0.3410	0.17	0.9	0.4	0.0310	0.84	
MCH-Pg	1	36.2	35.8	72	73.1	0.0970	-0.41	0.4	0.3	0.0220	0.34	
MCHC-g/dl	1	31.8	31.7	63.5	64.65	0.1280	-0.31	0.1	0.3	0.0150	-0.67	
Plt. x10³/μl	1	185	176	361	351	1.21	0.31	9	5	0.31	0.77	
Retic %	2	8	7.5	15.5	15.5	0.26	0.00	0.5	0.5	0.04	0.00	

## P.S. Assesment

		YOUR REPORT	CONSENSUS REPORT					
DLC%	3		Poly: 37 - 50, Myelo: 16 - 32, Meta: 8 - 16, Promyelo: 1-10, nRBC/Lympho/Blast/Eos/Baso/Mono: 0 - 5					
RBC Morphology	3		Predominantly: Normocytic/Normochromic; Moderate: Anisocytosis, hypochromia, Microcytosis; Mild: Macrocytosis, Poikilocytosis					
Diagnosis	3	Chronic Myeloid Leukaemia (CML)	Chronic Myeloid Leukemia (Chronic Phase)					

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

Test never eters	S.No.	Total participants covered in the current dist. 155E	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	320	318	89.94	90.25	5.66	3.77	4.4	5.98
RBC x10 <sup>6</sup> /μl	1	320	320	88.13	87.81	6.56	3.13	5.31	9.06
Hb g/dl	1	320	320	85	91.25	5.63	3.13	9.37	5.62
HCT%	1	320	3 <mark>18</mark>	93.4	88.36	5.03	5.97	1.57	5.67
MCV-fl	1	320	317	94.01	95.58	4.42	1.58	1.57	2.84
MCH-Pg	1	320	317	90.22	<mark>8</mark> 8.01	4.1	5.36	5.68	6.63
MCHC-g/dl	1	320	318	93.08	90.25	4.09	4.72	2.83	5.03
Plt. x10³/μl	1	320	318	89.94	88.99	6.92	5.66	3.14	5.35
ReticCount%	2	320	320	84.69	82.19	5.63	5.94	9.68	11.87
PS Assessment	3	320	300	Satisfactory:87.16%, Borderline Sat.:6.89%, Unsatisfactory:5.95%					

### \*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  $\pm 2$ : 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.

 $\textbf{Note-8:} \ \ \textbf{Proficiency testing (PT) samples are sent quarterly to each participant.}$ 

**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.

Report authorized by,

Dr. Seema Tyagi (Prof.)

PT Co-ordinator: ISHTM-AIIMS-EQAP

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