



# 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.:** 5820 **Distribution No.:** 160-0 Month/Year: July/2023

**Instrument ID:** PDC01

Name & Contact No. of PT Co-ordinator: Dr. Manoranjan Mahapatra ( Prof. & Head), Hematology, AIIMS, Delhi,

 $Tel: 9013085730 \; , \; E\text{-Mail}: accuracy 2000@gmail.com$ Date of issue & status of the report: 19-09-2023[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	3.43	3.41	6.84	6.85	0.043	-0.01	0.02	0.08	0.006	-0.81	
RBC x10 <sup>6</sup> /μl	1	4.93	4.81	9.74	9.51	0.016	0.74	0.12	0.05	0.004	1.35	
Hb g/dl	1	12.95	12.8	25.75	25.3	0.036	0.55	0.15	0.1	0.011	0.34	
НСТ%	1	43.2	42	85.2	80.7	0.256	0.84	1.2	0.4	0.045	1.35	
MCV-fl	1	87.6	87.3	174.9	169.3	0.451	0.57	0.3	0.3	0.030	0.00	
МСН-Рд	1	26.6	26.3	52.9	53	0.104	-0.05	0.3	0.2	0.018	0.45	
MCHC-g/dl	1	30.5	30	60.5	63.1	0.231	-0.57	0.5	0.3	0.027	0.54	
Plt. x10³/μl	1	156	150	306	318	2.317	-0.23	6	7	0.578	-0.15	
Retic %	2	0.7	0.5	1.2	1.59	0.054	-0.28	0.2	0.2	0.014	0.00	

## P.S. Assesment

		YOUR REPORT	CONSENSUS REPORT				
DLC%	3		Poly: 37 - 52, Myelo: 15 - 27, Meta: 9- 17, Promyelo: 2-8, Lympho: 2- 5, Blast: 1-4, Eosino: 1-3, Mono: 1-2, nRBC/ Baso: 0-5				
RBC Morphology	3		Predominantly: Normocytic/Normochromic; Moderate: Anisocytosis, hypochromic, Mild: Poikilocytosis				
Diagnosis	3	CML	Chronic Myeloid Leukemia (Chronic Phase)				

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

Test neverestors	C No	Total participants covered in the	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	5.NU.	current dist. 1600		Among labs	Within lab	Among labs	Within lab	Among labs	Within lab
WBC x10³/μl	1	200	199	86.43	92.96	3.52	1.01	10.05	6.03
RBC x10 <sup>6</sup> /μl	1	200	200	87	86.5	6	5.5	7	8
Hb g/dl	1	200	200	86.5	87.5	7	4.5	6.5	8
HCT%	1	200	1 <mark>99</mark>	92.96	89.95	2.51	3.02	4.53	7.03
MCV-fl	1	200	199	92.46	87.44	6.53	4.02	1.01	8.54
MCH-Pg	1	200	199	83.42	92.46	9.05	1.01	7.53	6.53
MCHC-g/dl	1	200	199	90.95	85.43	5.03	5.03	4.02	9.54
Plt. x10³/μl	1	200	199	88.94	92.96	6.53	3.52	4.53	3.52
ReticCount%	2	200	152	84.87	92.76	7.24	9.87	7.89	-2.63
PS Assessment	3	200	163	Satisfactory	:98.5%, Bor	derline Sat.	:0%, Unsati	sfactory :1.5	0%

### \*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.

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. Manoranjan Mahapatra ( Prof. & Head)

PT Co-ordinator: ISHTM-AIIMS-EQAP

Department of Hematology, AIIMS, New Delhi

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