



# PROFICIENCY TESTING REPORT

# ISHTM-AIIMS EXTERNAL QUALITY ASSURANCE PROGRAMME





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

**EQAP CODE No.:** 3268 **Distribution No.:** 159-I **Month/Year:** March/2023

**Instrument ID:** RBC21066

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:** 12-05-2023[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	2.8	2.8	5.6	6.39	0.076	-0.60	0	0.1	0.009	-0.96	
RBC x10 <sup>6</sup> /μl	1	3.89	3.88	7.77	7.6	0.012	0.83	0.01	0.03	0.003	-0.54	
Hb g/dl	1	11.8	11.8	23.6	23.4	0.030	0.39	0	0.1	0.011	-1.35	
НСТ%	1	37.6	37. <mark>5</mark>	75.1	72.1	0.202	0.70	0.1	0.3	0.033	-0.45	
MCV-fl	1	96.6	96.5	193.1	189	0.481	0.43	0.1	0.3	0.031	-0.54	
MCH-Pg	1	30.4	30.4	60.8	61.6	0.097	-0.53	0	0.3	0.026	-1.01	
MCHC-g/dl	1	31.5	31.5	63	65.5	0.184	-0.66	0	0.3	0.028	-0.81	
Plt. x10³/μl	1	189	187	376	370	1.993	0.16	2	6	0.505	-0.90	
Retic %	2	6	5	11	18	0.553	-0.65	1	0.6	0.063	0.67	

### P.S. Assesment

		YOUR REPORT	CONSENSUS REPORT				
DLC%	3		Poly: 45 - 60, Myelo: 13 - 25, Meta: 7- 15, Lympho: 2- 6, Eosino: 1-2, Promyelo: 1-6, Blast: 1-4, Mono: 1 - 2, nRBC/Baso: 0-5				
RBC Morphology	3		Predominantly: Normocytic/Normochromic; Moderate: Anisocytosis, hypochromia, Microcytosis; Mild: Macrocytosis, Poikilocytosis				
Diagnosis	3	Chronic myeloid leukaemia	Chronic Myeloid Leukemia (Chronic Phase)				

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

Test parameters	S.No.	Total participants covered in the current dist. 159I	Total No. responded	% of Labs with Z Score 0-2		% of Labs with Z Score 2-3		% of Labs with Z Score >3	
rest parameters				Among labs	Within lab	Among labs	Within lab	Among labs	Within lab
WBC x10³/μl	1	148	147	<mark>83</mark> .67	88.44	5.44	5.44	10.89	6.12
RBC x10 <sup>6</sup> /μl	1	148	148	84.46	91.22	10.14	4.73	5.4	4.05
Hb g/dl	1	148	148	87.84	86.49	5.41	6.08	6.75	7.43
HCT%	1	148	1 <mark>47</mark>	97.28	91.84	2.04	4.76	0.68	3.4
MCV-fl	1	148	147	95.24	85.71	4.08	7.48	0.68	6.81
MCH-Pg	1	148	147	82.31	90.48	9.52	5.44	8.17	4.08
MCHC-g/dl	1	148	147	95.92	95.24	2.04	2.72	2.04	2.04
Plt. x10³/μl	1	148	147	93.2	89.8	2.72	3.4	4.08	6.8
ReticCount%	2	148	130	96.15	83.85	2.31	12.31	1.54	3.84
PS Assessment	3	148	131	Satisfactory:95.28%, Borderline Sat.: 2.02%, Unsatisfactory: 2.70%					

### \*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. Seema Tyagi (Prof.)

PT Co-ordinator: ISHTM-AIIMS-EQAP

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