

# 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.:** 5947 **Distribution No.:** 159-0 **Month/Year:** April/2023

**Instrument ID:** 901PES15178

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:** 10-06-2023[Final].

# **CBC** and **Retic** Assessment

				Among Lab (Accuracy Testing)				Within Lab (Precision Testing)				
Test Parameters	S.No.	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 x10³/μl	1	24.6	24.4	49	51.04	0.259	-0.44	0.2	0.37	0.031	-0.57	
RBC x106/μl	1	5.89	5.85	11.74	11.36	0.019	1.55	0.04	0.04	0.005	0.00	
Hb g/dl	1	12.1	12	24.1	24.2	0.034	-0.15	0.1	0.1	0.012	0.00	
НСТ%	1	44.1	43.8	87.9	83.6	0.252	1.12	0.3	0.3	0.038	0.00	
MCV-fl	1	74.9	74.9	149.8	146.5	0.387	0.49	0	0.2	0.028	-0.90	
MCH-Pg	1	20.6	20.4	41	42.4	0.093	-0.94	0.2	0.1	0.016	1.35	
MCHC-g/dl	1	27.5	27.3	54.8	58.2	0.181	-1.07	0.2	0.2	0.024	0.00	
Plt. x10³/μl	1	341	335	676	683	3.645	-0.12	6	10	1.070	-0.34	
Retic %	2	3.8	3.2	7	12.5	0.250	-1.34	0.6	0.5	0.052	0.17	

### P.S. Assesment

		YOUR REPORT	CONSENSUS REPORT				
DLC%	3	Nrbcs=, Poly=45 L=02, E=00, Mono/Promono=0, B1=0 P.M.=03, Mye=24, Meta=05, Other=	Poly: 45 – 59, Myelo: 13 - 25, Meta: 8 – 15, Lympho: 2 – 5, Promyelo: 1 - 5, nRBC/ Baso/ Eos/ Mono /Blast: 0 – 5				
RBC Morphology		NCNC++,ANISO+,MACRO+,HYPO+	Predominantly: Normocytic/Normochromic; Moderate: Anisocytosis, hypochromia				
Diagnosis	3	CHRONIC MYELOID LEUKEMIA	Chronic Myeloid Leukemia				

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

Test manametons	S.No.	Total participants	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		covered in the current dist. 1590		Among labs	Within lab	Among labs	Within lab	Among labs	Within lab	
WBC x10 <sup>3</sup> /µl	1	125	125	84.8	92	2.4	3.2	12.8	4.8	
RBC x10 <sup>6</sup> /μl	1	125	125	80.8	86.4	8.8	5.6	10.4	8	
Hb g/dl	1	125	125	89.6	92.8	2.4	1.6	8	5.6	
НСТ%	1	125	125	83.2	89.6	8	2.4	8.8	8	
MCV-fl	1	125	1 <mark>25</mark>	88.8	97.6	5.6	0.8	5.6	1.6	
MCH-Pg	1	125	125	91.2	91.2	3.2	7.2	5.6	1.6	
MCHC-g/dl	1	125	125	90.4	87.2	2.4	8	7.2	4.8	
Plt. x10³/μl	1	125	125	91.2	93.6	7.2	4.8	1.6	1.6	
ReticCount%	2	125	112	89.29	94.64	8.04	6.25	2.67	-0.89	
PS Assessment	3	125	116	Satisfactory:93.56%, Borderline Sat.:3.22%, Unsatisfactory:3.22%						

### \*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  $\pm 2$ " 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

Department of Hematology, AIIMS, New Delhi

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