



## 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 atambient temp. after dispatch of specimens

**EQAP CODE No.**:2212 **Distribution No.**:162-F **Month/Year:** Dec/2023

**Instrument ID:** SNC/01 **Model Name.:** XN 330 **Serial No.:**11542

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

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Date of issue & status of the report: 03-02-2024 [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 resultsum of 2 values (AssignedValu e)	Uncertainty of Assigned Values		Yours Results Diff. of 2 Values	Consensus Result Diff. of 2 values (AssignedValu e)	Uncertainty of Assigned Values	Z Score	
WBC x 10³/μl	1	5.1	5.06	10.16	10.7	0.037	-0.56	0.04	0.1	0.005	-0.74	
RBC x 106/μl	1	5.17	5.12	10.29	10.22	0.011	0.25	0.05	0.05	0.003	0.00	
Hb g/dl	1	14.1	14	28.1	28.7	0.027	-0.90	0.1	0.1	0.008	0.00	
нст %	1	47.4	46.8	94.2	90.7	0.206	0.59	0.6	0.4	0.024	0.54	
MCV-fl	1	91.7	91.4	183.1	178.6	0.326	0.45	0.3	0.3	0.020	0.00	
MCH-Pg	1	27.3	27.3	54.6	56	0.068	-0.79	0	0.2	0.015	-0.90	
MCHC-g/dl	1	29.9	29.9	59.8	62.7	0.147	-0.65	0	0.3	0.018	-1.01	
Plt.x10³/μl	1	89	88	177	235.5	1.723	-1.30	1	5	0.331	-0.67	
Retic%	2	1	1	2	10.9	0.282	-0.99	0	0.5	0.034	-0.84	

## P. S. Assesment

		YOUR REPORT	CONSENSUS REPORT				
DLC%	3	Nrbcs=100, Poly=05 L=, E=, Mono/Promono=,B1=P.M.=,Mye=, Meta=, Other=	Blast:49-83,Lympho:3-10,Myelo:2-10,Poly:2-7,Promyelo:0-9,nRBC/ Mono/Eos/Baso/Meta:0-5				
RBC Morphology		NCNC++,ANISO++	Predominantly:Normocytic/Normochromic,Moderate:Anisocytosis,Microcytic				
Diagnosis	3	ACUTE MYELOBLASTIC LEUKAEMIA	Acute Leukemia (AL)				

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

To at more an atoms	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. 162F		Among labs	Within lab	Among labs	Within lab	Among labs	Within lab	
WBCx10 <sup>3</sup> /µl	1	326	324	85.49	90.12	6.17	5.25	8.34	4.63	
RBCx10 <sup>6</sup> /μl	1	326	326	87.42	91.72	7.98	2.76	4.6	5.52	
Hbg/dl	1	326	326	86.81	86.81	6.75	4.6	6.44	8.59	
НСТ%	1	326	323	95.05	83.59	2.79	6.19	2.16	10.22	
MCV-fl	1	326	323	95.67	85.14	3.1	9.29	1.23	5.57	
MCH-Pg	1	326	321	88.16	95.02	7.79	1.87	4.05	3.11	
MCHC-g/dl	1	326	323	95.98	<mark>9</mark> 1.33	3.41	4.64	0.61	4.03	
Plt.x10³/μl	1	326	324	91.67	91.98	7.1	4.94	1.23	3.08	
Retic Count%	2	326	273	93.77	88.64	4.03	8.06	2.2	3.30	
PSA ssessment	3	326	282	Satisfactory: 91.67%, Border line Sat.:2.16%, Unsatisfactory:6.17%						

### \*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 ownchoice.

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.

Note10: 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-----