

# 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.:** 5425 **Distribution No.:** 160-N Month/Year: July/2023

**Instrument ID:** ERBA H560(K1104B2211056)

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: 05-10-2023[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	Consensus Result Diff. of 2 values (Assigned Value)	Uncertainty of Assigned Values	Z Score	
WBC x10³/μl	1	3.99	3.87	7.86	9.3	0.036	-1.49	0.12	0.1	0.007	0.18	
RBC x10 <sup>6</sup> /μl	1	4.21	4.16	8.37	8.35	0.011	0.07	0.05	0.04	0.002	0.27	
Hb g/dl	1	10.5	10.4	20.9	21.5	0.026	-0.98	0.1	0.1	0.007	0.00	
НСТ%	1	33.3	32.7	66	68.4	0.163	-0.50	0.6	0.3	0.019	0.81	
MCV-fl	1	79.1	78.8	157.9	165.1	0.312	<b>-0.</b> 77	0.3	0.2	0.017	0.34	
МСН-Рд	1	24.9	24.8	49.7	51.7	0.071	-1.12	0.1	0.2	0.014	-0.45	
MCHC-g/dl	1	31.7	31.4	63.1	62.7	0.148	0.10	0.3	0.3	0.017	0.00	
Plt. x10³/μl	1	144	128	272	304	1.864	-0.66	16	6	0.361	1.69	
Retic %	2	3.1	2.9	6	6.85	0.131	-0.22	0.2	0.4	0.022	-0.90	

## P.S. Assesment

		YOUR REPORT	CONSENSUS REPORT				
DLC%	3	Nrbcs=01 , Poly=24 L=72, E=01, Mono/Promono=02 , B1= P.M.=, Mye=, Meta=, Other=MANY SMUDGE CELLS & FEW ATYPICAL LYMPHOID CELLSSEEN	Lymp: 68-79, Poly: 15-26, mono: 1-3,Eosino: 1-2, nRBC/blast/Myelo/Meta/: 0-5				
RBC Morphology	3	NORMOCYTIC NORMOCHROMIC TO MILD HYPOCHROMIC.	Predominantly: Normocytic/Normochromic; Moderate: Anisocytosis, Microcytic, Hypochromia; Mild: Poikilocytosis.				
Diagnosis	. 3	CHRONIC LYMPHOPROLIFERATIVE DISORDER	Chronic Lymphoproliferative Disorder/CLL				

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

Test parameters	S.No.	Total participants covered in the current dist. 160N	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	343	340	84.12	85.29	6.18	8.24	9.7	6.47	
RBC x10 <sup>6</sup> /μl	1	343	343	84.55	90.96	7	3.79	8.45	5.25	
Hb g/dl	1	343	343	86.88	90.09	5.83	4.66	7.29	5.25	
HCT%	1	343	341	91.5	87.1	4.4	5.57	4.1	7.33	
MCV-fl	1	343	341	93.26	87.1	3.81	3.23	2.93	9.67	
MCH-Pg	1	343	340	87.06	94.12	7.94	2.35	5	3.53	
MCHC-g/dl	1	343	341	92.38	86.51	4.69	5.28	2.93	8.21	
Plt. x10³/μl	1	343	341	88.27	89.74	7.62	5.57	4.11	4.69	
ReticCount%	2	343	266	90.98	80.08	6.77	14.29	2.25	5.63	
PS Assessment	3	343	256	Satisfactory: 95.03%, Borderline Sat.: 1.75%, 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  $\pm 2$ : 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

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