

## 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.**: 3400 **Distribution No.**: 162-I **Month/Year**: January/2024 **Instrument ID**: Mindray **Model Name.**: BC- 5000 **Serial No.**: SS- 75004270

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

Tel: 9013085730 , E-Mail : accuracy2000@gmail.com **Date of issue & status of the report:** 20-03-2024[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 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	4.8	4.72	9.52	9.5	0.047	0.03	0.08	0.1	0.009	-0.21	
RBC x10 <sup>6</sup> /μl	1	3.99	3.88	7.87	7.66	0.014	0.94	0.11	0.03	0.004	2.16	
Hb g/dl	1	12.9	12.9	25.8	25.5	0.039	0.51	0	0.1	0.012	-0.67	
НСТ%	1	42.4	41.2	83.6	80.7	0.289	0.48	1.2	0.4	0.038	2.16	
MCV-fl	1	106.5	106.2	212.7	209.6	0.687	0.24	0.3	0.3	0.034	0.00	
МСН-Рд	1	33.2	32.4	65.6	66.2	0.110	-0.31	0.8	0.3	0.024	2.25	
MCHC-g/dl	1	31.2	30.4	61.6	63.2	0.233	-0.35	0.8	0.3	0.028	1.69	
Plt. x10³/μl	1	191	188	379	382	2.344	-0.08	3	5	0.500	-0.34	
Retic %	2	10	9.5	19.5	18.2	0.462	0.17	0.5	0.5	0.054	0.00	

### P.S. Assesment

		YOUR REPORT	CONSENSUS REPORT				
DLC%	3	Nrbcs=, Poly=12 L=52, E=01, Mono/Promono=07, B1=23 P.M.=, Mye=02, Meta=02, Other=Smudge cells seen	Lymp: 84-92, Poly: 6.5-11, nRBC/Blast/Myelo/Meta/Mono/Eosino: 0-5				
RBC Morphology	3	Normocytic Normochromic	Predominantly: Normocytic/Normochromic with Mild Anisocytosis, Smudge Cells.				
Diagnosis		Chronic Lymphocytic leukemia in accelerated phase	Chronic Lymphoproliferative Disorder/CLL				

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

Test never eters	S.No.	Total participants covered in the current dist. 162I	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				Among labs	Within lab	Among labs	Within lab	Among labs	Within lab	
WBC x10³/μl	1	137	137	83.21	88.32	3.65	8.76	13.14	2.92	
RBC x10 <sup>6</sup> /μl	1	137	137	88.32	89.78	7.3	4.38	4.38	5.84	
Hb g/dl	1	137	137	86.13	86.13	9.49	7.3	4.38	6.57	
HCT%	1	137	1 <mark>37</mark>	93.43	87.59	4.38	7.3	2.19	5.11	
MCV-fl	1	137	137	95.62	94.16	3.65	2.19	0.73	3.65	
MCH-Pg	1	137	137	88.32	93.43	4.38	2.92	7.3	3.65	
MCHC-g/dl	1	137	137	92.7	93.43	6.57	4.38	0.73	2.19	
Plt. x10³/μl	1	137	137	90.51	91.97	7.3	5.11	2.19	2.92	
ReticCount%	2	137	125	92.8	88.8	4	8.8	3.2	2.40	
PS Assessment	3	137	126	Satisfactory:91.99%, Borderline Sat.:2.91%, Unsatisfactory:5.10%						

### \*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

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