



## 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.:** 3510 **Distribution No.:** 151-J Month/Year: December/2020

Instrument ID: Mindray BC 5000 Sr.No: SS-65002711

Name & Contact No. of PT Co-ordinator: Dr. Seema Tyagi (Prof.), Hematology, AIIMS, Delhi,

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## **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	4.18	4.09	8.27	8.4	0.0310	-0.20	0.09	0.1	0.0110	-0.08	
RBC x10 <sup>6</sup> /μl	1	4.74	4.71	9.45	10.21	0.0160	-1.92	0.03	0.04	0.0350	-0.17	
Hb g/dl	1	9.3	9.3	18.6	19	0.0310	-0.67	0	0.1	0.0080	-1.35	
НСТ%	1	28.6	28.4	57	60.2	0.1690	-0.83	0.2	0.3	0.0330	-0.22	
MCV-fl	1	60.4	60.3	120.7	118.4	0.2120	0.49	0.1	0.3	0.0270	-0.45	
МСН-Рд	1	19.8	19.7	39.5	37.4	0.0680	1.22	0.1	0.2	0.0120	-0.67	
MCHC-g/dl	1	32.8	32.6	65.4	63.5	0.1590	0.54	0.2	0.3	0.0260	-0.22	
Plt. x10³/μl	1	185	175	360	417.5	2.09	-1.17	10	8.5	0.65	0.16	
Retic %	2	8	6	14	17.4	0.41	-0.36	2	0.6	0.05	2.70	

### P.S. Assesment

		YOUR REPORT	CONSENSUS REPORT					
DLC%	3	Nrbcs=0 , Poly=3 L=0, E=0, Mono/Promono=0 , B1=95 P.M.=0, Mye=1, Meta=1, Other=	Blasts: 70-80, Lymph: 5-15, Poly: 2-5, nRBC/Eo/Mono/Pro/My/Meta: 0-5					
RBC Morphology	3		Predominantly: Normocytic Normochromic, Moderate: Anisocytosis, Mild: Microcytic.					
Diagnosis	3	Chronic Lymphocytic Leukemia	Acute Leukemia (Lymphoblastic).					

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

Test	S.No.	Total participants covered in the current dist.	Total No. responded	% of Labs with Z Score 0-2		% of Labs with Z Score 2-3		% of Labs with Z Score >3	
parameters				Among labs	Within lab	Among labs	Within lab	Among labs	Within lab
WBC x10³/μl	1	350	224	82.59	80.8	3.13	4.02	13.84	14.29
RBC x10 <sup>6</sup> /μl	1	350	224	88.39	89.29	4.02	3.57	6.7	6.25
Hb g/dl	1	350	224	82.59	91.07	6.7	3.57	10.27	4.91
HCT%	1	350	224	89.29	<mark>8</mark> 9.73	5.8	2.23	4.02	7.14
MCV-fl	1	350	224	87.05	90.18	6.7	4.02	5.36	4.91
MCH-Pg	1	350	224	86.61	85.27	7.14	4.46	5.36	9.38
MCHC-g/dl	1	350	224	88.39	87.05	8.48	6.25	2.23	5.8
Plt. x10³/μl	1	350	224	93.3	93.3	3.57	3.13	2.23	3.13
ReticCount%	2	350	199	93.97	81.91	4.52	16.08	1.51	4.02
PS Assessment	3	350	209	Acceptable:81.9%, Warning Signal:8.6%, Unacceptable:9.5%					

#### \*Comments:

- 1). Among Lab (EQA): Wrongly Reported PS , remaining 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 IOR)

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 standard1

**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.

Report authorized by,

Dr. Seema Tyagi (Prof.)

PT Co-ordinator: ISHTM-AIIMS-EQAP

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