

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.: 4582 **Distribution No.**: 157-L **Month/Year:** October/2022

Instrument ID: Mindray BC6200,TW-03000934

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:** 17-11-2022[Final].

CBC and Retic Assessment

				Among Lab (Accuracy Testing)				Within Lab (Precision Testing)				
Test Parameters	S.No.	Your Result 1	Your Result 2	_ Tour	Consensus result sum of 2 values (Assigned Value)	Uncertainty of Assigned Values	Z Score	Results	Consensus Result Diff. of 2 values (Assigned Value)	Uncertainty of Assigned Values	Z Score	
WBC x10³/μl	1	4.48	4.36	8.84	12.5	0.0700	-2.31	0.12	0.11	0.0090	0.07	
RBC x10 ⁶ /μl	1	3.36	3.31	6.67	8.41	0.0130	-4.80	0.05	0.04	0.0030	0.17	
Hb g/dl	1	10.8	9.7	20.5	23.6	0.0280	-4.65	1.1	0.1	0.0090	6.74	
НСТ%	1	31.9	31.5	63.4	74	0.1930	-2.07	0.4	0.4	0.0280	0.00	
MCV-fl	1	94.9	94.8	189.7	177.4	0.3730	1.18	0.1	0.3	0.0230	-0.54	
МСН-Рд	1	32.2	29.3	61.5	56.4	0.0820	2.55	2.9	0.2	0.0220	9.11	
MCHC-g/dl	1	34	30.9	64.9	63.7	0.1580	0.28	3.1	0.3	0.0220	9.44	
Plt. x10³/μl	1	235	218	453	593	3.16	-1.50	17	11	0.73	0.51	
Retic %	2	3.8	3.6	7.4	7.18	0.17	0.05	0.2	0.4	0.03	-0.30	

P.S. Assesment

		YOUR REPORT	CONSENSUS REPORT				
DLC%	3		Blast: 44-90, Lympho: 4-21, Poly: 1-6, nRBC/Eos/Baso/Mono /Myelo/Meta/ Promyelo: 0-5				
RBC Morphology	3	Normocytes,macrocytes,polychromatophils	Predominantly: Normocytic/ Normochromic, Moderate: Anisocytosis, Microcytic				
Diagnosis	3	Acute myeloblastic leukemia	Acute Leukemia (AL)				

COMBINED DATA VALUES OF TOTAL PARTICIPANTS

Test navameters	C 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	5.NU.	current dist. 157L		Among labs	Within lab	Among labs	Within lab	Among labs	Within lab
WBC x10³/μl	1	312	300	77. 33	90	6.33	2.33	16.34	7.67
RBC x10 ⁶ /μl	1	312	312	88.14	83.65	3.85	5.45	8.01	10.9
Hb g/dl	1	312	312	84.29	82.69	5.45	5.77	10.26	11.54
HCT%	1	312	3 <mark>01</mark>	90.03	87.04	6.31	5.65	3.66	7.31
MCV-fl	1	312	301	93.02	89.37	4.65	6.64	2.33	3.99
MCH-Pg	1	312	301	87.71	90.03	7.97	2.66	4.32	7.31
MCHC-g/dl	1	312	301	92.36	91.03	5.98	2.99	1.66	5.98
Plt. x10³/μl	1	312	297	93.27	92.26	4.38	3.7	2.35	4.04
ReticCount%	2	312	206	88.83	89.81	5.83	7.28	5.34	2.91
PS Assessment	3	312	199	Satisfactory	:90.04%, Bo	orderline Sat	:3.21%, Uı	nsatisfactory	:6.75%

*Comments:

- 1). Among Lab (EQA): CBC result for RBC & HB unacceptable, please check calibration/human error.Remaining results acceptable.
- 2). Within Lab (IQA): Difference in the CBC measurement values for HB, MCH & MCHC unacceptable, please check precision/human error.Remaining 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 $> \pm 3$: Unacceptable [As per ISO/IEC 13528:2015 standard]

Note-4: Z score value between "0 to ± 2 " are texted in green colour. Z score value between " ± 2 to ± 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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