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

PC-1002

Duration of stability testing - minimum upto 8 days at ambient temp. after dispatch of specimens

EQAP CODE No. : 4450 **Distribution No.:** 157-L **Month/Year:** October/2022

Instrument ID: Mindray BC 3000 Plus, 3 Part Diff Analyzer, S.N. RJ-19132041

Name & Contact No. of PT Co-ordinator: Dr. Seema Tyagi (Prof.), Hematology, AIIMS, Delhi,
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Date of issue & status of the report: 17-11-2022[Final].

CBC and Retic Assessment

Test Parameters	S.No.			Among Lab (Accuracy Testing)				Within Lab (Precision Testing)			
		Your Result 1	Your Result 2	Your Results Sum of 2 Value	Consensus result sum of 2 values (Assigned Value)	Uncertainty of Assigned Values	Z Score	Yours Results Diff. of 2 Values	Consensus Result Diff. of 2 values (Assigned Value)	Uncertainty of Assigned Values	Z Score
WBC x10^3/µl	1	6.1	5.8	11.9	12.5	0.0700	-0.38	0.3	0.11	0.0090	1.42
RBC x10^6/µl	1	4.31	4.13	8.44	8.41	0.0130	0.10	0.18	0.04	0.0030	2.36
Hb g/dl	1	12.2	12	24.2	23.6	0.0280	0.90	0.2	0.1	0.0090	0.67
HCT%	1	36.8	35.3	72.1	74	0.1930	-0.37	1.5	0.4	0.0280	2.47
MCV-fl	1	85.6	85.5	171.1	177.4	0.3730	-0.60	0.1	0.3	0.0230	-0.54
MCH-Pg	1	29	28.3	57.3	56.4	0.0820	0.45	0.7	0.2	0.0220	1.69
MCHC-g/dl	1	33.9	33.1	67	63.7	0.1580	0.78	0.8	0.3	0.0220	1.69
Plt. x10^3/µl	1	313	292	605	593	3.16	0.13	21	11	0.73	0.84
Retic %	2	3.1	2.8	5.9	7.18	0.17	-0.27	0.3	0.4	0.03	-0.15

P.S . Assesment

		YOUR REPORT	CONSENSUS REPORT
DLC%	3	Nrbcs=0 , Poly=01 L=06, E=01, Mono/Promono=01 , B1=91 P.M.=0, Mye=0, Meta=0, Other=	Blast: 44-90, Lympho: 4-21, Poly: 1-6, nRBC/Eos/Baso/Mono /Myelo/Meta/ Promyelo: 0-5
RBC Morphology	3	Mild Microcytic Hypochromic, Mild Anisopoikilocytosis, Occasional Tear Drop Cells present	Predominantly: Normocytic/ Normochromic, Moderate: Anisocytosis, Microcytic
Diagnosis	3	Acute Leukemia, ALL most likely. Advised BMA, Cytogenetics and Immunophenocyping for confirmation.	Acute Leukemia (AL)

Satisfactory Results
18/11/2022

COMBINED DATA VALUES OF TOTAL PARTICIPANTS

Test parameters	S.No.	Total participants covered in the current dist. 157--L	Total No. responded	% of Labs with Z Score 0-2		% of Labs with Z Score 2-3		% of Labs with Z Score >3	
				Among labs	Within lab	Among labs	Within lab	Among labs	Within lab
WBC $x10^3/\mu l$	1	312	300	77.33	90	6.33	2.33	16.34	7.67
RBC $x10^6/\mu l$	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	301	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. $x10^3/\mu l$	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%, Borderline Sat. :3.21%, Unsatisfactory :6.75%					

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 ±2: Acceptable, Z score ±2 to ±3 :Warning Signal, Z score > ±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 > ±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.

Reviewed & found Satisfactory
18/11/2022

Report authorized by,

Dr. Seema Tyagi (Prof.)
PT Co-ordinator: ISHTM-AIIMS-EQAP
Department of Hematology, AIIMS, New Delhi

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