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. : 984 **Distribution No.:** 164-D **Month/Year:** June/2024

Instrument ID: Mindray **Model Name.:** BC- 5130 **Serial No.:** TR 32007882

Name & Contact No. of PT Co-ordinator: Dr. Manoranjan Mahapatra (Prof. & Head), Hematology, AIIMS, Delhi, Tel: 9013085730 , E-Mail : info@ishtmaiimseqap.com

Date of issue & status of the report: 05-08-2024[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	5.17	5.17	10.34	11.1	0.071	-0.23	0	0.1	0.007	-0.79
RBC x10^6/µl	1	4.69	4.63	9.32	9.29	0.009	0.12	0.06	0.03	0.002	0.81
Hb g/dl	1	13.3	13.2	26.5	27.1	0.026	-0.90	0.1	0.1	0.007	0.00
HCT%	1	42.8	42.3	85.1	83.35	0.174	0.36	0.5	0.3	0.021	0.67
MCV-fl	1	91.4	91.4	182.8	180	0.309	0.34	0	0.2	0.018	-0.67
MCH-Pg	1	28.4	28.3	56.7	58.3	0.061	-0.94	0.1	0.2	0.014	-0.45
MCHC-g/dl	1	31.1	31	62.1	64.5	0.137	-0.61	0.1	0.3	0.017	-0.67
Plt. x10^3/µl	1	128	125	253	175	2.468	0.97	3	5	0.282	-0.39
Retic %	2	17	16	33	27.3	0.473	0.38	1	0.7	0.043	0.58

P.S . Assesment

		YOUR REPORT	CONSENSUS REPORT
DLC%	3	Nrbcs=2 , Poly=10 L=05, E=00, Mono/Promono=04 , B1=55 P.M.=17, Mye=05, Meta=04, Other=	Blast: 45-70, Poly: 08-16, Lympho: 7-16, , Mono: 2-12, Myelo/Meta/Eos/Mono/Promyelo/Baso : 0-5
RBC Morphology	3	Normocytic normochromic	Predominantly: Normocytic/ Normochromic, Moderate: Anisocytosis, Macrocytic
Diagnosis	3	PBS suggestive of Acute Leukemia likely Acute Myeloid Leukemia.	Acute Leukemia - (AML)

COMBINED DATA VALUES OF TOTAL PARTICIPANTS

Test parameters	S.No.	Total participants covered in the current dist. 164--D	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	353	350	84	88	7.71	5.43	8.29	6.57
RBC $x10^6/\mu l$	1	353	353	90.93	92.63	4.82	3.97	4.25	3.4
Hb g/dl	1	353	353	88.95	90.65	5.1	3.4	5.95	5.95
HCT%	1	353	352	90.06	91.76	5.68	3.41	4.26	4.83
MCV-fl	1	353	352	88.64	92.05	6.82	4.55	4.54	3.4
MCH-Pg	1	353	352	89.2	90.91	5.68	4.26	5.12	4.83
MCHC-g/dl	1	353	352	91.76	87.5	6.25	3.69	1.99	8.81
Plt. $x10^3/\mu l$	1	353	352	96.02	88.64	2.27	7.1	1.71	4.26
ReticCount%	2	353	329	95.74	80.85	3.65	12.16	0.61	6.99
PS Assessment	3	353	333	Satisfactory :94.33%, Borderline Sat. :1.13%, Unsatisfactory :4.54%					

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.

Report authorized by,

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