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. : 4317 **Distribution No.:** 159-K **Month/Year:** April/2023

Instrument ID: 705ESOH11486

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: 01-06-2023[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	5.9	5.9	11.8	10.41	0.067	**0.97**	0	0.1	0.010	**-0.79**
RBC x10^6/µl	1	3.51	3.5	7.01	7.07	0.010	**-0.26**	0.01	0.04	0.003	**-0.67**
Hb g/dl	1	11.4	11.4	22.8	23.5	0.031	**-1.05**	0	0.1	0.008	**-4.50**
HCT%	1	33.5	33.3	66.8	71.9	0.160	**-1.30**	0.2	0.4	0.028	**-0.45**
MCV-fl	1	95	95	190	203	0.412	**-1.21**	0	0.4	0.030	**-0.90**
MCH-Pg	1	32.5	32.4	64.9	66.5	0.119	**-0.51**	0.1	0.3	0.021	**-0.67**
MCHC-g/dl	1	34.1	34	68.1	65.4	0.156	**0.67**	0.1	0.3	0.023	**-0.54**
Plt. x10^3/µl	1	187	186	373	362	2.487	**0.19**	1	5	0.368	**-0.77**
Retic %	2	13	12.2	25.2	29	0.590	**-0.26**	0.8	1	0.067	**-0.18**

P.S . Assesment

YOUR REPORT			CONSENSUS REPORT
DLC%	3	Nrbcs= , Poly=08 L=81, E=01, Mono/Promono=02 , B1=08 P.M.=, Mye=, Meta=, Other=	Lympho: 60-83, Blast: 0-18, Poly: 4-13, Mono: 1-5, Eos: 1-2, nRBC//Baso/Myelo/Meta/ Promyelo: 0-5
RBC Morphology	3	Mild Anisocytosis predominantly normocytic normochromic	Predominantly: Normocytic/ Normochromic, Moderate: Anisocytosis, Microcytic
Diagnosis	3	Normocytic normochromic blood picture with relative lymphocytosis, with thrombocytopenia. Reactive lymphocytes seen. Differential diagnosis -: 1 - Rule out viral infection (P Dengue). 2 - Sub leukemic leukemia. Adv:- Bone marrow study to rule-out leuke	Acute Leukemia (AL)

COMBINED DATA VALUES OF TOTAL PARTICIPANTS

Test parameters	S.No.	Total participants covered in the current dist. 159--K	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 $x10^3$/µl	1	265	261	73.95	86.21	7.28	4.98	18.77	8.81
RBC $x10^6$/µl	1	265	265	83.77	88.68	9.43	5.28	6.8	6.04
Hb g/dl	1	265	265	87.55	85.66	6.79	7.55	5.66	6.79
HCT%	1	265	261	90.8	91.57	4.21	4.6	4.99	3.83
MCV-fl	1	265	261	93.87	94.64	3.83	3.07	2.3	2.29
MCH-Pg	1	265	261	94.64	88.12	2.3	7.66	3.06	4.22
MCHC-g/dl	1	265	261	93.1	91.19	4.21	4.21	2.69	4.6
Plt. $x10^3$/µl	1	265	261	86.97	92.34	10.34	4.21	2.69	3.45
ReticCount%	2	265	221	96.38	89.14	3.17	4.98	0.45	5.88
PS Assessment	3	265	200	Satisfactory :83.35%, Borderline Sat. :9.46%, Unsatisfactory :7.19%					

*Comments:

1). Among Lab (EQA) : Results acceptable.

2). Within Lab (IQA) : Difference in the CBC measurement values for *HB* unacceptable, may be due to random/human error.

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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