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. : 3719 **Distribution No.:** 158-J **Month/Year:** December/2022

Instrument ID: Fx19 T/3020ET01576

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: 15-02-2023[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	5.7	5.6	11.3	11.43	0.0380	**-0.14**	0.1	0.1	0.0070	**0.00**
RBC x10^6/µl	1	3.55	3.49	7.04	6.67	0.0080	**2.00**	0.06	0.03	0.0030	**1.01**
Hb g/dl	1	11.8	11.8	23.6	23.3	0.0230	**0.51**	0	0.1	0.0080	**-1.35**
HCT%	1	39.1	38.4	77.5	73.7	0.2040	**0.64**	0.7	0.4	0.0280	**0.81**
MCV-fl	1	110.3	110.2	220.5	220	0.5140	**0.03**	0.1	0.3	0.0240	**-0.54**
MCH-Pg	1	33.8	33.2	67	70.1	0.0850	**-1.55**	0.6	0.3	0.0240	**0.81**
MCHC-g/dl	1	30.7	30.1	60.8	63	0.1690	**-0.42**	0.6	0.3	0.0230	**0.81**
Plt. x10^3/µl	1	171	157	328	347	1.27	**-0.61**	14	5	0.29	**2.43**
Retic %	2	4	3	7	6	0.12	**0.30**	1	0.3	0.02	**3.15**

P.S . Assesment

		YOUR REPORT	CONSENSUS REPORT
DLC%	3	Nrbcs=0 , Poly=62 L=30, E=2, Mono/Promono=4 , B1=0 P.M.=0, Mye=0, Meta=2, Other=nil	Poly: 44-62, Lympho:14-29, Blast: 0-24, Myelo: 0-3, Mono: 3-8, RBC/Promyelo/Meta/Eos: 0-5
RBC Morphology	3	Predominantly microcytic hypochromic with normocytes and occasional macrocyte	Predominantly: Normocytic/Normochromic; Moderate: Microcytosis, Hypochromia; Mild: Anisocytosis, Macrocytosis
Diagnosis	3	Microcytic Hypochromic anemia with leukocytosis and thrombocytopenia	Acute Leukemia (likely AML)

COMBINED DATA VALUES OF TOTAL PARTICIPANTS

Test parameters	S.No.	Total participants covered in the current dist. 158--J	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	260	256	85.94	89.84	2.73	5.47	11.33	4.69
RBC $x10^6$/µl	1	260	260	88.08	91.15	7.31	4.23	4.61	4.62
Hb g/dl	1	260	260	91.54	91.15	5	2.69	3.46	6.16
HCT%	1	260	257	98.44	91.44	0.78	5.45	0.78	3.11
MCV-fl	1	260	257	98.83	91.83	0.78	2.33	0.39	5.84
MCH-Pg	1	260	257	86.77	91.44	7.39	4.67	5.84	3.89
MCHC-g/dl	1	260	257	97.67	92.22	2.33	4.67	0	3.11
Plt. $x10^3$/µl	1	260	257	91.44	92.22	6.61	3.89	1.95	3.89
ReticCount%	2	260	234	95.3	82.48	4.27	14.53	0.43	2.99
PS Assessment	3	260	217	Satisfactory :63.86%, Borderline Sat. :33.84%, Unsatisfactory :2.30%					

*Comments:

1). Among Lab (EQA) : PS Diagnosis partially correct, remaining results acceptable

2). Within Lab (IQA) : RETIC result is 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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