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. : 4768 **Distribution No.:** 160-L **Month/Year:** July/2023

Instrument ID: sysmex XN 1000 S No 21048

Name & Contact No. of PT Co-ordinator: Dr. Manoranjan Mahapatra (Prof. & Head), Hematology, AIIMS, Delhi, Tel: 9013085730 , E-Mail : accuracy2000@gmail.com

Date of issue & status of the report: 22-09-2023[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	8.34	7.72	16.06	15.9	0.077	**0.08**	0.62	0.14	0.009	**3.60**
RBC x10^6/µl	1	4.99	4.87	9.86	9.7	0.012	**0.53**	0.12	0.04	0.003	**1.54**
Hb g/dl	1	14.4	14.2	28.6	27.8	0.028	**0.98**	0.2	0.1	0.008	**0.79**
HCT%	1	44.6	43.4	88	86.6	0.206	**0.26**	1.2	0.4	0.025	**1.80**
MCV-fl	1	89.4	89.1	178.5	179.7	0.347	**-0.12**	0.3	0.3	0.019	**0.00**
MCH-Pg	1	29.2	28.9	58.1	57.55	0.066	**0.34**	0.3	0.2	0.012	**0.45**
MCHC-g/dl	1	32.7	32.3	65	64	0.138	**0.27**	0.4	0.3	0.012	**0.45**
Plt. x10^3/µl	1	183	173	356	313	2.475	**0.63**	10	8	0.522	**0.21**
Retic %	2	0.4	0.3	0.7	3.45	0.103	**-0.66**	0.1	0.24	0.023	**-0.31**

P.S . Assesment

		YOUR REPORT	CONSENSUS REPORT
DLC%	3	Nrbcs=1 , Poly=3 L=71, E=0, Mono/Promono=0 , B1=26 P.M.=0, Mye=0, Meta=0, Other=none	Blast: 1-69, Lympho: 22-88, Poly: 3-8, nRBC/ Mono/Eos/Baso/Myelo/Meta/ Promyelo: 0-5
RBC Morphology	3	normocytic hypochromic	Predominantly: Normocytic/ Normochromic, Moderate: Anisocytosis, Microcytic, poikilocytosis
Diagnosis	3	Acute leukemia favoring ALL	Acute Leukemia (AL)

COMBINED DATA VALUES OF TOTAL PARTICIPANTS

Test parameters	S.No.	Total participants covered in the current dist. 160--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/µl	1	324	323	87	91.95	2.48	1.55	10.52	6.5
RBC x10^6/µl	1	324	324	82.72	91.05	8.64	2.78	8.64	6.17
Hb g/dl	1	324	324	90.12	87.96	4.01	3.09	5.87	8.95
HCT%	1	324	323	91.02	89.47	6.19	4.64	2.79	5.89
MCV-fl	1	324	323	93.19	89.78	5.57	4.64	1.24	5.58
MCH-Pg	1	324	322	86.02	71.43	7.76	19.88	6.22	8.69
MCHC-g/dl	1	324	323	91.02	88.54	5.88	3.1	3.1	8.36
Plt. x10^3/µl	1	324	323	91.95	89.16	6.81	6.19	1.24	4.65
ReticCount%	2	324	198	89.9	93.43	5.56	5.05	4.54	1.52
PS Assessment	3	324	203	Satisfactory :75.79%, Borderline Sat. :5.27%, Unsatisfactory :18.94%					

***Comments:**

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

2). Within Lab (IQA) : Difference in the CBC measurement values for *WBC* 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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