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. : 2382 **Distribution No.:** 164-F **Month/Year:** June/2024

Instrument ID: TRANSASIA **Model Name.:** SYSMEX KX-21 **Serial No.:** B-2817

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: 10-08-2024[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	8	7.9	15.9	16.24	0.061	**-0.20**	0.1	0.13	0.008	**-0.29**
RBC x10^6/µl	1	4.65	4.55	9.2	9.69	0.011	**-1.61**	0.1	0.04	0.002	**1.35**
Hb g/dl	1	13.9	13.9	27.8	28	0.027	**-0.34**	0	0.1	0.007	**-1.35**
HCT%	1	40.6	39.8	80.4	86.4	0.165	**-1.38**	0.8	0.4	0.024	**1.08**
MCV-fl	1	87.5	87.3	174.8	177.3	0.291	**-0.30**	0.2	0.3	0.019	**-0.27**
MCH-Pg	1	30.5	29.9	60.4	58	0.058	**1.62**	0.6	0.2	0.011	**1.80**
MCHC-g/dl	1	34.9	34.2	69.1	65	0.128	**1.11**	0.7	0.3	0.017	**1.35**
Plt. x10^3/µl	1	153	153	306	288	1.600	**0.39**	0	5	0.324	**-0.84**
Retic %	2	14	12	26	33	0.446	**-0.56**	2	1	0.058	**0.84**

P.S . Assesment

		YOUR REPORT	CONSENSUS REPORT
DLC%	3	Nrbcs=2 , Poly=50 L=42, E=3, Mono/Promono=5 , B1=0 P.M.=0, Mye=0, Meta=0, Other=0	Poly: 50-62 , Lympho: 30-40.25,Eosino: 3-6 , Mono: 2-5, blast/Promyelo/Myelo/Meta: 0
RBC Morphology	3	Microcytic hypochromic wit macrocytes,target cells and few tear drop cells	Predominantly: Normocytic/Normochromic; Moderate: Anisocytosis, Microcytic, Hypochromic; Mild: Poikilocytosis, Target cells , Sickle cells, polychromatophils
Diagnosis	3		Sickle Cell Anemia

COMBINED DATA VALUES OF TOTAL PARTICIPANTS

Test parameters	S.No.	Total participants covered in the current dist. 164--F	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	340	339	88.2	89.09	4.13	5.01	7.67	5.9
RBC $x10^6$/µl	1	340	340	89.71	93.82	5.59	2.94	4.7	3.24
Hb g/dl	1	340	340	80.88	90.29	9.71	5	9.41	4.71
HCT%	1	340	339	89.38	92.04	6.49	5.31	4.13	2.65
MCV-fl	1	340	339	91.74	89.97	5.6	4.42	2.66	5.61
MCH-Pg	1	340	339	84.07	91.74	8.26	3.24	7.67	5.02
MCHC-g/dl	1	340	339	89.97	90.27	5.31	4.42	4.72	5.31
Plt. $x10^3$/µl	1	340	339	92.63	91.74	4.42	3.83	2.95	4.43
ReticCount%	2	340	292	93.49	93.49	6.16	2.4	0.35	4.11
PS Assessment	3	340	285	Satisfactory :90.3%, Borderline Sat. :6.47%, Unsatisfactory :3.23%					

*Comments:

1). Among Lab (EQA) : PS Diagnosis not reported, 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,

Dr. Manoranjan Mahapatra (Prof. & Head)
PT Co-ordinator: ISHTM-AIIMS-EQAP
Department of Hematology, AIIMS, New Delhi

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