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. : 3231 **Distribution No.:** 163-H **Month/Year:** March/2024

Instrument ID: Sysmex 5 part analyser **Model Name.:** XN 350 **Serial No.:** 11487

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: 24-05-2024[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	10.23	10.11	20.34	15.8	0.082	**3.29**	0.12	0.11	0.014	**0.07**
RBC x10^6/µl	1	4.68	4.57	9.25	9.15	0.013	**0.40**	0.11	0.04	0.004	**1.57**
Hb g/dl	1	12.4	12.3	24.7	24.2	0.030	**0.84**	0.1	0.1	0.010	**0.00**
HCT%	1	42.3	41.7	84	77.6	0.243	**1.25**	0.6	0.4	0.032	**0.54**
MCV-fl	1	91.2	90.4	181.6	168.7	0.425	**1.39**	0.8	0.2	0.026	**2.02**
MCH-Pg	1	27.1	26.3	53.4	52.8	0.083	**0.34**	0.8	0.2	0.022	**2.70**
MCHC-g/dl	1	29.7	29.1	58.8	62.2	0.191	**-0.88**	0.6	0.3	0.016	**1.01**
Plt. x10^3/µl	1	293	287	580	475	3.248	**1.73**	6	7	0.553	**-0.15**
Retic %	2	5.1	5	10.1	10.5	0.220	**-0.08**	0.1	0.5	0.034	**-0.90**

P.S . Assesment

YOUR REPORT		CONSENSUS REPORT
DLC%	3	Nrbcs=14 , Poly=60 L=34, E=01, Mono/Promono=05 , B1=0 P.M.=0, Mye=0, Meta=0, Other=Hypersegmented neutrophils seen. Cytoplasmic vacuolation seen	Poly: 60-68, Lympho: 24-33, Mono: 2-5, Eosino: 1-2, blast/Promyelo/Myelo/Meta: 0-5
RBC Morphology	3	Predominantly: Microcytic hypochromic and Normocytic normochromic; Mild anisocytosis, few macrocytes seen: Moderate: poikilocytosis, Target cells, few schistocytes, occasional spherocytes	Predominantly: Normocytic/Normochromic, Microcytic, Hypochromic, Moderate: Anisopoikilocytosis, Target cells Mild: Elliptocytes
Diagnosis	3	Dimorphic anemia with hemolytic component	Thalassemia

COMBINED DATA VALUES OF TOTAL PARTICIPANTS

Test parameters	S.No.	Total participants covered in the current dist. 163--H	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	167	165	80.61	89.7	5.45	3.64	13.94	6.66
RBC $x10^6/\mu l$	1	167	167	89.22	89.22	4.19	4.79	6.59	5.99
Hb g/dl	1	167	167	89.82	91.02	4.19	4.19	5.99	4.79
HCT%	1	167	165	96.97	89.09	3.03	4.85	0	6.06
MCV-fl	1	167	165	97.58	96.36	2.42		0	3.64
MCH-Pg	1	167	165	91.52	91.52	3.64	4.24	4.84	4.24
MCHC-g/dl	1	167	165	93.33	89.7	3.64	3.64	3.03	6.66
Plt. $x10^3/\mu l$	1	167	165	89.09	91.52	7.88	5.45	3.03	3.03
ReticCount%	2	167	135	96.3	93.33	3.7	5.19	0	1.48
PS Assessment	3	167	124	Satisfactory :90.43%, Borderline Sat. :2.39%, Unsatisfactory :7.18%					

*Comments:

1). Among Lab (EQA) : CBC result for *WBC* unacceptable, may be due to random/human error

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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