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. : 2141 **Distribution No.:** 164-E **Month/Year:** June/2024

Instrument ID: HORIBA **Model Name.:** YUMIZEN YH550 **Serial No.:** 207YAXH03887

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: 05-08-2024[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	0.71	0.68	1.39	28.28	0.639	**-1.25**	0.03	0.3	0.021	**-0.66**
RBC x10^6/µl	1	4.89	4.86	9.75	9.7	0.011	**0.17**	0.03	0.04	0.003	**-0.19**
Hb g/dl	1	13.6	13.5	27.1	27.6	0.029	**-0.62**	0.1	0.1	0.008	**0.00**
HCT%	1	42.7	42.4	85.1	86.8	0.235	**-0.25**	0.3	0.4	0.025	**-0.19**
MCV-fl	1	87.8	86.8	174.6	178.9	0.448	**-0.36**	1	0.3	0.023	**1.89**
MCH-Pg	1	28	27.6	55.6	56.95	0.082	**-0.63**	0.4	0.3	0.013	**0.34**
MCHC-g/dl	1	31.9	31.8	63.7	63.5	0.181	**0.04**	0.1	0.3	0.022	**-0.54**
Plt. x10^3/µl	1	84	83	167	175	2.475	**-0.11**	1	5	0.342	**-0.67**
Retic %	2	12	10	22	21.6	0.244	**0.06**	2	0.7	0.047	**1.35**

P.S . Assesment

		YOUR REPORT	CONSENSUS REPORT
DLC%	3	Nrbcs=10 , Poly=72 L=21, E=03, Mono/Promono=04 , B1=00 P.M.=00, Mye=00, Meta=00, Other=0	Poly: 53-64, Lympho: 28-38, Eosino: 1-3, Mono: 2-5, blast/Promyelo/Myelo/Meta: 0-5
RBC Morphology	3	Aniso poikilocytosis, Normocytic/Hypochromic, with few microcytes, pencil cells ,Tear drop cells, Schistocytes, Helmet cells , Target cells & Occasional Macro cytes.	Predominantly: Microcytic, Hypochromic, Moderate: Anisopoikilocytosis Mild:Target cells , Tear drop cells
Diagnosis	3	Hemolytic Anemia .Possibly Thalassemia	Thalassemia Hemoglobinopathy

COMBINED DATA VALUES OF TOTAL PARTICIPANTS

Test parameters	S.No.	Total participants covered in the current dist. 164--E	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	328	324	83.95	86.11	3.7	6.17	12.35	7.72
RBC $x10^6$/µl	1	328	328	87.2	92.07	7.93	3.96	4.87	3.97
Hb g/dl	1	328	328	86.59	82.32	6.1	8.84	7.31	8.84
HCT%	1	328	325	95.08	90.15	2.46	5.23	2.46	4.62
MCV-fl	1	328	324	92.28	94.44	4.63	2.16	3.09	3.4
MCH-Pg	1	328	324	88.58	90.12	5.25	6.79	6.17	3.09
MCHC-g/dl	1	328	324	92.9	92.59	4.32	2.78	2.78	4.63
Plt. $x10^3$/µl	1	328	326	92.94	89.57	3.07	5.52	3.99	4.91
ReticCount%	2	328	289	87.2	95.85	10.38	2.08	2.42	2.07
PS Assessment	3	328	289	Satisfactory :95.75%, Borderline Sat. :1.82%, Unsatisfactory :2.43%					

*Comments:

1). Among Lab (EQA) : 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

----------End Of Report----------