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. : 641 **Distribution No.:** 163-A **Month/Year:** January/2024

Instrument ID: Horiba **Model Name.:** Yumizen H550 **Serial No.:** 212YAXN05258

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: 05-04-2024[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	1.18	0.76	1.94	16.6	0.050	**-11.30**	0.42	0.11	0.007	**2.99**
RBC x10^6/µl	1	5.02	4.96	9.98	10.18	0.009	**-0.75**	0.06	0.04	0.003	**0.45**
Hb g/dl	1	13.2	13.1	26.3	26.53	0.019	**-0.44**	0.1	0.1	0.007	**0.00**
HCT%	1	40.3	39.5	79.8	83.9	0.145	**-0.94**	0.8	0.3	0.022	**1.35**
MCV-fl	1	80.3	79.6	159.9	165.2	0.234	**-0.72**	0.7	0.2	0.018	**1.69**
MCH-Pg	1	26.5	26.4	52.9	52.25	0.045	**0.49**	0.1	0.2	0.012	**-0.67**
MCHC-g/dl	1	33.3	32.8	66.1	63.1	0.111	**0.91**	0.5	0.2	0.015	**1.35**
Plt. x10^3/µl	1	46	45	91	116.5	1.599	**-0.51**	1	5	0.302	**-0.77**
Retic %	2	32	30	62	27.1	0.394	**3.12**	2	0.6	0.047	**1.89**

P.S . Assesment

YOUR REPORT			CONSENSUS REPORT
DLC%	3	Nrbcs=0 , Poly=45 L=52, E=01, Mono/Promono=02 , B1=0 P.M.=0, Mye=0, Meta=0, Other=	Poly: 56 – 65, Lympho: 30– 38, Mono: 2-4, Eosino: 1-3, Myelo/Meta/Promyelo/Blast/Baso: 0-5
RBC Morphology	3	Mild anisocytosis.Microcytic hypochromic,macrocytic hypochromic,microspherocytes,polychromatophils and schistocytes	Predominantly: Normocytic/Normochromic with Mild Anisocytosis
Diagnosis	3	Hereditary spherocytosis	SPherocytic Hemolytic Anemia

COMBINED DATA VALUES OF TOTAL PARTICIPANTS

Test parameters	S.No.	Total participants covered in the current dist. 163--A	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	357	356	86.24	91.29	7.3	1.69	6.46	7.02
RBC x10^6/µl	1	357	357	90.48	89.64	5.04	3.92	4.48	6.44
Hb g/dl	1	357	357	90.48	90.2	4.76	4.76	4.76	5.04
HCT%	1	357	356	93.26	91.29	4.49	1.97	2.25	6.74
MCV-fl	1	357	356	95.79	88.48	3.65	6.18	0.56	5.34
MCH-Pg	1	357	356	91.01	91.57	5.06	3.37	3.93	5.06
MCHC-g/dl	1	357	356	93.26	89.89	5.34	3.37	1.4	6.74
Plt. x10^3/µl	1	357	356	95.22	89.89	1.69	3.37	3.09	6.74
ReticCount%	2	357	335	93.13	92.24	5.07	3.58	1.8	4.18
PS Assessment	3	357	317	Satisfactory :89.64%, Borderline Sat. :5.32%, Unsatisfactory :5.04%					

***Comments:**

1). Among Lab (EQA) : CBC result for *WBC & RETIC* unacceptable, please check calibration/human error.Remaining 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)
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