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. : 2307 **Distribution No.:** 163-E **Month/Year:** March/2024

Instrument ID: SD/HAE/Horiba Yumizen H500/01,208YODH04845 **Model Name.:** HORIBA YUMIZEN H500 **Serial No.:** 208YODH04845

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: 06-05-2024[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	4.25	4.15	8.4	11.03	0.031	-2.96	0.1	0.1	0.006	0.00
RBC x10^6/µl	1	3.65	3.6	7.25	7.38	0.009	-0.53	0.05	0.03	0.002	0.67
Hb g/dl	1	12.6	12.6	25.2	25.5	0.027	-0.45	0	0.1	0.007	-1.35
HCT%	1	36.2	35.7	71.9	78.7	0.141	-1.58	0.5	0.4	0.024	0.27
MCV-fl	1	99.4	99.2	198.6	212.9	0.298	-1.67	0.2	0.3	0.020	-0.27
MCH-Pg	1	35	34.6	69.6	69.3	0.087	0.13	0.4	0.3	0.018	0.36
MCHC-g/dl	1	35.3	34.9	70.2	64.75	0.119	1.57	0.4	0.3	0.020	0.34
Plt. x10^3/µl	1	185	176	361	319	1.365	1.11	9	4	0.259	1.12
Retic %	2	11	10	21	15.3	0.206	0.97	1	0.5	0.034	0.84

Lithic consensus

P.S . Assesment

		YOUR REPORT	CONSENSUS REPORT
DLC%	3	Nrbcs= , Poly=4 L=11, E=, Mono/Promono=4 , B1=81 P.M.=, Mye=, Meta=, Other=WBCs are increased in number. Platelets are markedly reduced in number. Haemoparasites are not seen.	Blast: 70-88, Poly: 5-9, Lympho: 3-8, Myelo/Mono/Promyelo/Meta/Eos/Baso: 0-5
RBC Morphology	3	RBCs are normocytic normochromic to microcytic hypochromic. Mild degree of anisopoikilocytosis is seen. Occasional polychromatophils are seen.	Predominantly: Normocytic/Normochromic; Moderate: Anisocytosis, Mild: Microcytosis, Poikilocytosis

Test Parameters	S.No.	Your Result 1	Your Result 2	Among Lab (Accuracy Testing) Your Results Sum of 2 Value	Consensus result sum of 2 values (Assigned Value)	Uncertainty of Assigned Values	Z Score	Within Lab (Precision Testing) Yours Results Diff. of 2 Values	Consensus Result Diff. of 2 values (Assigned Value)	Uncertainty of Assigned Values	Z Score
Diagnosis	3	Features are of Acute Myeloid Leukemia. ADVICE - Bone marrow study and Flow cytometry for further typing and confirmation.		Acute Myeloid Leukemia(AML)							

COMBINED DATA VALUES OF TOTAL PARTICIPANTS

Test parameters	S.No.	Total participants covered in the current dist. 163--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	333	331	86.4	93.05	5.44	1.81	8.16	5.14
RBC x10^6/µl	1	333	333	89.19	93.99	6.91	2.7	3.9	3.31
Hb g/dl	1	333	333	87.39	90.39	6.91	4.5	5.7	5.11
HCT%	1	333	331	93.96	92.75	2.72	4.83	3.32	2.42
MCV-fl	1	333	330	91.82	92.73	5.45	2.73	2.73	4.54
MCH-Pg	1	333	330	89.7	88.79	6.06	3.94	4.24	7.27
MCHC-g/dl	1	333	330	92.42	88.48	4.55	4.24	3.03	7.28
Plt. x10^3/µl	1	333	331	91.54	93.35	6.34	3.02	2.12	3.63
ReticCount%	2	333	294	95.92	85.71	2.72	8.84	1.36	5.45
PS Assessment	3	333	289	Satisfactory :95.5%, Borderline Sat. :4.20%, Unsatisfactory :0.30%					

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)
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