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. : 6026 **Distribution No.:** 162-O **Month/Year:** January/2024

Instrument ID: ERBA **Model Name.:** H560 **Serial No.:** B7426

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: 12-04-2024[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	7.17	6.91	14.08	12.91	0.033	**1.20**	0.26	0.1	0.007	**1.44**
RBC x10^6/µl	1	4.65	4.61	9.26	8.96	0.012	**0.96**	0.04	0.04	0.003	**0.00**
Hb g/dl	1	11.8	11.6	23.4	24	0.027	**-0.90**	0.2	0.1	0.008	**0.67**
HCT%	1	38.9	38.7	77.6	76.9	0.171	**0.14**	0.2	0.4	0.025	**-0.45**
MCV-fl	1	84	83.8	167.8	173.3	0.304	**-0.63**	0.2	0.2	0.012	**0.00**
MCH-Pg	1	25.5	25.2	50.7	53.8	0.080	**-1.52**	0.3	0.2	0.011	**0.45**
MCHC-g/dl	1	30.4	30	60.4	62.3	0.149	**-0.45**	0.4	0.3	0.020	**0.34**
Plt. x10^3/µl	1	282	272	554	514	1.539	**0.88**	10	7	0.408	**0.45**
Retic %	2	5.4	4.9	10.3	13.8	0.222	**-0.60**	0.5	0.5	0.036	**0.00**

P.S . Assesment

		YOUR REPORT	CONSENSUS REPORT
DLC%	3	Nrbcs=5 , Poly=43 L=39, E=2, Mono/Promono=11 , B1=0 P.M.=0, Mye=0, Meta=0, Other=Teardrop cells, Acanthocytes, Target cells, Stomatocytes and many giant platelets are seen	Poly: 47-61.5, Lympho: 30-43, Eosino: 2-4, Mono: 2-6, Blast/Promyelo/Myelo/ Meta: 0-5
RBC Morphology	3	Moderately microcytic hypochromic with moderate Anisopoikilocytosis	Predominantly: Microcytic, Hypochromic, Moderate: Anisopoikilocytosis Mild:Target cells , Tear drop cells, Elliptocytes
Diagnosis	3	Moderate Microcytic Hypochromic Anemia	Haemoglobinopathy

COMBINED DATA VALUES OF TOTAL PARTICIPANTS

Test parameters	S.No.	Total participants covered in the current dist. 162--O	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	332	331	87.01	87.01	9.37	6.04	3.62	6.95
RBC $x10^6$/µl	1	332	332	86.14	91.57	7.83	2.71	6.03	5.72
Hb g/dl	1	332	332	85.24	85.84	8.13	6.02	6.63	8.14
HCT%	1	332	331	92.15	90.94	4.53	3.02	3.32	6.04
MCV-fl	1	332	331	93.96	88.22	5.14	3.32	0.9	8.46
MCH-Pg	1	332	331	87.31	72.21	7.25	19.64	5.44	8.15
MCHC-g/dl	1	332	331	93.96	89.73	3.93	6.04	2.11	4.23
Plt. $x10^3$/µl	1	332	330	92.12	90.3	4.24	4.24	3.64	5.46
ReticCount%	2	332	264	91.67	81.82	4.55	12.12	3.78	6.06
PS Assessment	3	332	255	Satisfactory :87.06%, Borderline Sat. :9.33%, Unsatisfactory :3.61%					

*Comments:

1). Among Lab (EQA) : PS Diagnosis partially correct, 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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