



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. : 6026 **Distribution No.:** 162-0 Month/Year: January/2024

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

Name & Contact No. of PT Co-ordinator: Dr. Manoranjan Mahapatra (Prof. & Head), Hematology, AIIMS, Delhi,

 $Tel: 9013085730 \; , \; E\text{-Mail}: accuracy 2000@gmail.com$ Date of issue & status of the report: 12-04-2024[Final].

CBC and Retic Assessment

				Among Lab (Accuracy Testing)				Within Lab (Precision Testing)				
Test Parameters	S.No.	Your Result 1		Your Results Sum of 2 Value	Consensus result sum of 2 values (Assigned Value)	Uncertainty		Yours Results Diff. of 2 Values	Consensus Result Diff. of 2 values (Assigned Value)	Uncertainty of Assigned Values	Z Score	
WBC x10³/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	
НСТ%	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. x10³/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 neverestors	S.No.	Total participants	Total No. responded	% of Labs with Z Score 0-2		% of Labs with Z Score 2-3		% of Labs with Z Score >3	
Test parameters		current dist. 1620		Among labs	Within lab	Among labs	Within lab	Among labs	Within lab
WBC x10³/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	3 <mark>31</mark>	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	<mark>72.</mark> 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. x10³/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 $> \pm 3$: 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 $> \pm 3$ 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

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