



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.: 4347 **Distribution No.:** 163-K Month/Year: April/2024 **Instrument ID:** HORIBA MEDICAL Model Name.: YUMIZEN H550 **Serial No.:** 211YADH04052

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

 $Tel: 9013085730 \; , \; E\text{-Mail}: info@ishtmaiimseqap.com$ Date of issue & status of the report: 19-06-2024[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		Results	Consensus Result Diff. of 2 values (Assigned Value)	Uncertainty of Assigned Values	Z Score	
WBC x10³/μl	1	5.37	5.31	10.68	8.55	0.033	2.54	0.06	0.1	0.006	-0.45	
RBC x10 ⁶ /μl	1	4.67	4.62	9.29	9.1	0.010	0.78	0.05	0.04	0.003	0.19	
Hb g/dl	1	13.6	13.6	27.2	25.5	0.030	2.08	0	0.1	0.007	-1.35	
НСТ%	1	56.9	56. <mark>2</mark>	113.1	79.2	0.170	7.79	0.7	0.4	0.023	0.81	
MCV-fl	1	121.8	121.7	243.5	174	0.314	8.47	0.1	0.3	0.022	-0.54	
МСН-Рд	1	29.5	29.5	59	56.2	0.067	1.73	0	0.2	0.016	-0.90	
MCHC-g/dl	1	24.8	23.2	48	64.35	0.161	-3.89	1.6	0.3	0.019	4.38	
Plt. x10³/μl	1	211	204	415	179.5	1.782	4.81	7	5	0.297	0.45	
Retic %	2	10	9	19	16	0.260	0.42	1	0.5	0.036	0.84	

P.S. Assesment

		YOUR REPORT	CONSENSUS REPORT				
DLC%	3		Lymp: 77-88, Poly: 8-14.25, mono: 1-3, nRBC/Blast/Myelo/Meta/Eosino: 0-5				
RBC Morphology	3	Normocytic Normochromic	Predominantly: Normocytic/Normochromic; Moderate: Anisocytosis, Mild: Microcytic				
Diagnosis	3	Chronic Lymphoproliferative Disorder CLL.	Chronic Lymphoproliferative Disorder/CLL				

COMBINED DATA VALUES OF TOTAL PARTICIPANTS

Test neverestors	C 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	5.NU.	current dist. 163K		Among labs	Within lab	Among labs	Within lab	Among labs	Within lab
WBC x10³/μl	1	303	303	79.21	89.44	5.61	5.28	15.18	5.28
RBC x10 ⁶ /μl	1	303	303	89.44	90.76	5.28	3.96	5.28	5.28
Hb g/dl	1	303	303	90.1	91.42	5.61	3.96	4.29	4.62
HCT%	1	303	3 <mark>02</mark>	93.05	89.4	4.97	5.3	1.98	5.3
MCV-fl	1	303	302	92.05	85.1	5.3	7.28	2.65	7.62
MCH-Pg	1	303	302	87.09	<mark>9</mark> 2.38	6.95	4.64	5.96	2.98
MCHC-g/dl	1	303	302	93.05	93.38	3.64	3.31	3.31	3.31
Plt. x10³/μl	1	303	302	93.71	91.06	3.64	5.63	2.65	3.31
ReticCount%	2	303	251	95.22	86.85	3.19	7.17	1.59	5.98
PS Assessment	3	303	249	Satisfactory:92.74%, Borderline Sat.:3.30%, Unsatisfactory:3.96%					

*Comments:

- 1). Among Lab (EQA): CBC result for HCT, MCV, MCHC & PLT unacceptable, please check calibration/human error.Remaining results acceptable.
- 2). Within Lab (IQA): Difference in the CBC measurement values for *MCHC* unacceptable, may be due to random/human error.

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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