



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.: 2324

Distribution No.: 159-F

Month/Year: March/2023

Instrument ID: H560

Name & Contact No. of PT Co-ordinator: Dr. Seema Tyagi (Prof.), Hematology, AIIMS, Delhi,

Tel: 9013085730 , E-Mail : accuracy2000@gmail.com Date of issue & status of the report: 27-04-2023[Final].

CBC and Retic Assessment

Test Parameters	S.No.			Amo	ng Lab (Acc	curacy Testir	Within Lab (Precision Testing)				
		Your Result 1			Consensus result	Uncertainty of Assigned Values		Results	Consensus Result Diff. of 2 values (Assigned Value)	Uncertainty of Assigned Values	Z Score
WBC x10 ³ /μl 1 7.64 7.51 15.15 15.33 0.039		-0.18	0.13	0.1	0.008	0.27					
RBC x10 ⁶ /µl	1	3.55	3.48	7.03	6.84	0.008	0.95	0.07	0.03	0.002	1.35
Hb g/dl	1.	10.7	10.6	21.3	21.1	0.021	0.39	0.1	0.1	0.007	0.00
нст%	1	33.2	32.4	65.6	67.1	0.167	-0.31	0.8	0.4	0.023	1.35
MCV-fl	1	93.4	93.3	186.7	195,3	0.416	-0.71	0.1	0.3	0.022	-0.54
MCH-Pg	1	30.7	29.9	60.6	61.7	0.077	-0.61	0.8	0.3	0.018	1.69
MCHC-g/d	1 1	32.9	32	64.9	63.1	0.160	0.39	0.9	0.3	0.021	2.02
Plt. x10³/µ	1	292	284	576.	458	1.916	2.36	8	6	0.351	0.3
Retic %	2	15	15	30	43	0.840	-0.50	0	1	0.092	-0.9

P.S , Assesment

	YOUR REPORT	CONSENSUS REPORT		
DLC% 3	Nrbcs=0, Poly=0 L=44, E=2, Mono/Promono=4, B1=0 P.M.=0, Mye=0, Meta=0, Other=Neutrophils -50 % Total count is mildly increased in number, Shift to left seen with band form and metamyelocytes. Few reactive lymphocytes are seen.	hlact/Promyelo/Myelo/Meta: 0-5		

Test Parameters				Among Lab (Accuracy Testing)				Within Lab (Precision Testing)			
	S.No.	Your Result 1			Consensus result	Programme and the second secon		Results	Diff. of 2 values	Uncertainty of Assigned Values	
RBC Morphology	3	target cells eccesional macrocytic cells					lypochro	mia; Mila:	ochromic; Mo : Poikilocytosis	derate: Anisocyt , Target cells ,	osis, Sickle
Diagnosis	3	Leucoerythroblastic blood picture with thrombocytopenia-further evaluation with HPLC to consider/ruleout the possibility of hemoglobinopathy/Thalassemia				Thalassemia/H	aemoglo	binopathy			

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COMBINED DATA VALUES OF TOTAL PARTICIPANTS

		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	S.No.	covered in the current dist. 159F		Among labs	Within lab	Among labs	Within lab	Among labs	Within lab
WBC x10 ³ /µl	1	317	315	84.76	82.22	2.54	10.79	12.7	6.99
RBC x10 ⁶ /µl	1	317	317	83.91	88.01	8.52	5.68	7.57	6.31
Hb g/dl	1	317	317	86.44	92.11	5.68	3.79	7.88	4.1
HCT%	1	317	315	93.65	93.02	3.81	2.54	2.54	4.44
MCV-fl	1	317	315	94.29	91.75	5.08	3.49	0.63	4.76
MCH-Pg	1	317	315	85.71	88.89	6.67	4.76	7.62	6.35
MCHC-q/dl	1	317	315	95.24	91.43	3.49	4.76	1.27	3.81
Plt. x10³/µl	1 1	317	315	89.52	88.89	7.3	5.08	3.18	6.03
ReticCount%	2	317	282	98.23	87.94	1.42	3.55	0.35	8.51
PS Assessment	3	317	282	Satisfactory	:89.28%, B	orderline Sa	t. :6.94%, U	nsatisfactor	:3.78%

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.

 \mathbf{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 > ± 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. Seema Tyagi (Prof.)

PT Co-ordinator: ISHTM-AIIMS-EQAP

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