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. : 2977 **Distribution No.:** 161-G **Month/Year:** September/2023

Instrument ID: Mindray BC6000 Sr.no TU-14001804

Name & Contact No. of PT Co-ordinator: Dr. Manoranjan Mahapatra (Prof. & Head), Hematology, AIIMS, Delhi, Tel: 9013085730 , E-Mail : accuracy2000@gmail.com

Date of issue & status of the report: 27-12-2023[provisional].

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	4.87	4.53	9.4	10.15	0.042	**-0.78**	0.34	0.1	0.009	**2.16**
RBC x10^6/µl	1	4.12	4.07	8.19	8.03	0.010	**0.67**	0.05	0.04	0.003	**0.27**
Hb g/dl	1	12.6	12.6	25.2	25.2	0.030	**0.00**	0	0.1	0.009	**-0.84**
HCT%	1	43.4	42.7	86.1	78.4	0.203	**1.35**	0.7	0.4	0.028	**0.81**
MCV-fl	1	105.4	105	210.4	194.9	0.388	**1.42**	0.4	0.2	0.022	**0.67**
MCH-Pg	1	31.1	30.6	61.7	62.7	0.076	**-0.56**	0.5	0.3	0.019	**0.67**
MCHC-g/dl	1	29.5	29	58.5	64.1	0.159	**-1.45**	0.5	0.3	0.021	**0.67**
Plt. x10^3/µl	1	183	183	366	420	1.689	**-1.32**	0	6	0.359	**-1.16**
Retic %	2	7	7	14	14.65	0.279	**-0.09**	0	0.5	0.034	**-0.84**

P.S . Assesment

		YOUR REPORT	CONSENSUS REPORT
DLC%	3	Nrbcs=2 , Poly=3 L=93, E=1, Mono/Promono=0 , B1=0 P.M.=0, Mye=0, Meta=0, Other=Prolymphocytes -3, Cleaved cells are seen	Lymp: 85-93, Poly: 3-7, Mono: 1-3, nRBC/Blast/Eosino/Promyelo/Myelo/Meta: 0-5
RBC Morphology	3	Predominantly Normocytic Normochromic admixed Microcytic Hypochromic RBCs	Normocytic, Normochromic; Mild: Microcytic , Hypochromic, Anisopoikilocytosis ,Tear Drop Cells.
Diagnosis	3	CHRONIC LYMPHOCYTIC LEUKEMIA	Chronic Lymphoproliferative Disorder

COMBINED DATA VALUES OF TOTAL PARTICIPANTS

Test parameters	S.No.	Total participants covered in the current dist. 161--G	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	258	257	82.88	81.71	2.33	7.78	14.79	10.51
RBC $x10^6$/µl	1	258	258	86.05	92.25	8.53	3.1	5.42	4.65
Hb g/dl	1	258	258	84.88	87.6	7.75	4.26	7.37	8.14
HCT%	1	258	257	95.72	93	3.11	2.33	1.17	4.67
MCV-fl	1	258	257	96.89	89.11	2.72	6.23	0.39	4.66
MCH-Pg	1	258	257	87.16	88.33	7	5.45	5.84	6.22
MCHC-g/dl	1	258	257	92.22	89.11	5.84	7	1.94	3.89
Plt. $x10^3$/µl	1	258	257	91.83	92.61	4.67	3.11	3.5	4.28
ReticCount%	2	258	232	92.24	90.95	6.47	6.03	1.29	3.02
PS Assessment	3	258	233	Satisfactory :93.8%, Borderline Sat. :1.55%, Unsatisfactory :4.65%					

*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)
PT Co-ordinator: ISHTM-AIIMS-EQAP
Department of Hematology, AIIMS, New Delhi

----------End Of Report----------