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. : 1423 **Distribution No.:** 161-C **Month/Year:** August/2023

Instrument ID: Beckman coutler dxh500 , AZ110611

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: 23-10-2023[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 /µl	1	1.87	1.86	3.73	4.23	0.017	**-1.18**	0.01	0.08	0.004	**-1.05**
RBC x10^6/µl	1	3.69	3.67	7.36	7.39	0.006	**-0.18**	0.02	0.03	0.002	**-0.34**
Hb g/dl	1	10.55	10.54	21.09	20.8	0.018	**.65**	.01	0.1	0.007	**-1.21**
HCT%	1	34.7	34.6	69.3	70.1	0.114	**-0.25**	0.1	0.3	0.021	**-0.90**
MCV-fl	1	94.2	94.1	188.3	189.7	0.245	**-0.20**	0.1	0.3	0.020	**-0.60**
MCH-Pg	1	35.9	35.5	71.4	68.7	0.071	**-1.30**	0.4	0.3	0.018	**0.34**
MCHC-g/dl	1	34	33.5	67.5	63.9	0.115	**.87**	0.5	0.3	0.018	**0.67**
Plt. x10^3/µl	1	170	163	333	308	1.404	**0.59**	7	4	0.259	**0.67**
Retic %	2	1.7	1.6	3.3	2.5	0.055	**0.44**	0.1	0.2	0.011	**-0.34**

P.S . Assesment

		YOUR REPORT	CONSENSUS REPORT
DLC%	3	Nrbcs=0 , Poly=44 L=4, E=5, Mono/Promono=0 , B1=3 P.M.=14, Mye=16, Meta=14, Other=	Poly: 38 – 52, Myelo: 15 - 26, Meta: 9– 17, Blast: 2-6, Promyelo: 2-6, Lympho: 2– 5, Eosino: 2-5, Mono: 1-2, nRBC/ Baso: 0-5
RBC Morphology	3	Microcytes +, occasional tear drop cells, hypochromia +. A population of microcytic well hemogloblnized RBC's	Predominantly: Normocytic/Normochromic; Moderate: Anisocytosis, Hypochromic, Mild: Poikilocytosis,Tear drop cells
Diagnosis	3	chronic myeloid leukemia(CML) Chronic phase. Advised BCR-ABL Mutation studied.	Chronic Myeloid Leukemia (Chronic Phase)

COMBINED DATA VALUES OF TOTAL PARTICIPANTS

Test parameters	S.No.	Total participants covered in the current dist. 161--C	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	359	358	82.12	88.55	3.91	4.75	13.97	6.7
RBC $x10^6$/µl	1	359	359	88.02	90.81	8.64	4.46	3.34	4.73
Hb g/dl	1	359	359	89.97	91.09	5.57	5.01	4.46	3.9
HCT%	1	359	358	91.9	88.55	6.7	6.98	1.4	4.47
MCV-fl	1	359	359	92.48	93.31	6.69	2.79	0.83	3.9
MCH-Pg	1	359	359	89.69	93.59	5.29	1.67	5.02	4.74
MCHC-g/dl	1	359	359	93.31	91.36	4.18	4.18	2.51	4.46
Plt. $x10^3$/µl	1	359	359	94.43	91.36	3.9	5.29	1.67	3.35
ReticCount%	2	359	298	91.61	91.95	5.37	6.71	3.02	1.34
PS Assessment	3	359	335	Satisfactory :96.11%, Borderline Sat. :2.50%, Unsatisfactory :1.39%					

*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)
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