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. : 5848 **Distribution No.:** 160-O **Month/Year:** July/2023

Instrument ID: ERBA H560 {SR.NO. :-K1104B2141071)

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: 19-09-2023[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 x10^3/µl	1	3.93	3.79	7.72	6.86	0.043	**0.98**	0.14	0.08	0.006	**0.90**
RBC x10^6/µl	1	4.94	4.89	9.83	9.52	0.016	**1.01**	0.05	0.04	0.004	**0.10**
Hb g/dl	1	12.5	12.5	25	25.3	0.036	**-0.37**	0	0.1	0.011	**-0.67**
HCT%	1	48.9	48	96.9	80.7	0.256	**3.01**	0.9	0.4	0.045	**0.84**
MCV-fl	1	99	98.3	197.3	169.25	0.451	**2.89**	0.7	0.3	0.030	**0.90**
MCH-Pg	1	25.5	25.4	50.9	53	0.104	**-1.06**	0.1	0.2	0.018	**-0.45**
MCHC-g/dl	1	25.9	25.7	51.6	63.1	0.231	**-2.48**	0.2	0.3	0.027	**-0.28**
Plt. x10^3/µl	1	168	163	331	316.5	2.317	**0.28**	5	7	0.578	**-0.30**
Retic %	2	3	2.8	5.8	1.58	0.054	**2.92**	0.2	0.2	0.014	**0.00**

P.S . Assesment

		YOUR REPORT	CONSENSUS REPORT
DLC%	3	Nrbcs= , Poly=61 L=02, E=3, Mono/Promono=2 , B1=3 P.M.=, Mye=15, Meta=12, Other=	Poly: 37 – 52, Myelo: 15 - 27, Meta: 9– 17, Promyelo: 2-8, Lympho: 2– 5, Blast: 1-4, Eosino: 1-3, Mono: 1-2, nRBC/ Baso: 0-5
RBC Morphology	3	NORMOCYTES ,MACROCYTES,MICROCYTES SEEN	Predominantly: Normocytic/Normochromic; Moderate: Anisocytosis, hypochromic, Mild: Poikilocytosis
Diagnosis	3	Chronic myelogenous leukaemia.	Chronic Myeloid Leukemia (Chronic Phase)

COMBINED DATA VALUES OF TOTAL PARTICIPANTS

Test parameters	S.No.	Total participants covered in the current dist. 160--O	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	199	198	86.36	93.43	3.54	1.01	10.1	5.56
RBC $x10^6$/µl	1	199	199	87.44	86.93	5.53	5.53	7.03	7.54
Hb g/dl	1	199	199	86.93	82.91	6.53	5.53	6.54	11.56
HCT%	1	199	198	92.93	90.4	2.53	3.03	4.54	6.57
MCV-fl	1	199	198	92.42	87.88	6.57	4.04	1.01	8.08
MCH-Pg	1	199	198	83.33	92.93	9.09	1.01	7.58	6.06
MCHC-g/dl	1	199	198	90.91	85.86	5.56	5.05	3.53	9.09
Plt. $x10^3$/µl	1	199	198	89.39	92.93	6.06	3.54	4.55	3.53
ReticCount%	2	199	151	85.43	92.72	7.28	9.93	7.29	-2.65
PS Assessment	3	199	163	Satisfactory :98.5%, Borderline Sat. :0%, Unsatisfactory :1.50%					

*Comments:

1). Among Lab (EQA) : CBC result for *HCT* unacceptable, may be due to random/human error

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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