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. : 3982 **Distribution No.:** 160-K **Month/Year:** July/2023

Instrument ID: C3577 **Model Name.:** **Serial No.:**

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	5.1	5	10.1	11.1	0.164	**-0.24**	0.1	0.17	0.013	**-0.38**
RBC x10^6/µl	1	4.94	4.91	9.85	10	0.013	**-0.47**	0.03	0.06	0.004	**-0.58**
Hb g/dl	1	13.5	13.4	26.9	27.3	0.030	**-0.60**	0.1	0.1	0.009	**0.00**
HCT%	1	43.2	42.8	86	84.15	0.237	**0.28**	0.4	0.5	0.039	**-0.17**
MCV-fl	1	87.4	87.2	174.6	168.7	0.369	**0.57**	0.2	0.2	0.022	**0.00**
MCH-Pg	1	27.5	27.1	54.6	54.6	0.080	**0.00**	0.4	0.3	0.019	**0.34**
MCHC-g/dl	1	31.5	31	62.5	64.2	0.183	**-0.34**	0.5	0.3	0.023	**0.54**
Plt. x10^3/µl	1	175	171	346	350.5	2.856	**-0.06**	4	7	0.500	**-0.45**
Retic %	2	1.5	1.4	2.9	1.8	0.054	**0.72**	0.1	0.2	0.010	**-0.67**

P.S . Assesment

YOUR REPORT			CONSENSUS REPORT
DLC%	3	Nrbcs= , Poly=52 L=05, E=01, Mono/Promono= , B1=02 P.M.=, Mye=16, Meta=22, Other=BAND FORM	Poly: 39 – 55, Myelo: 14 - 27, Meta: 7– 16, Lympho: 2– 6, Promyelo: 1-8, Blast: 1-5, Eosino: 1-4, nRBC/ Mono, Baso: 0-5
RBC Morphology	3		Predominantly: Normocytic/Normochromic; Moderate: Anisocytosis, hypochromic, Mild: Poikilocytosis
Diagnosis	3	CML	Chronic Myeloid Leukemia (Chronic Phase)

COMBINED DATA VALUES OF TOTAL PARTICIPANTS

Test parameters	S.No.	Total participants covered in the current dist. 160--K	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	281	276	87.68	88.77	5.43	6.16	6.89	5.07
RBC $x10^6$/µl	1	281	281	85.05	86.48	6.41	6.41	8.54	7.11
Hb g/dl	1	281	281	83.99	60.85	6.76	28.11	9.25	11.04
HCT%	1	281	275	93.82	89.45	4	4.73	2.18	5.82
MCV-fl	1	281	275	93.45	85.82	4.73	8.73	1.82	5.45
MCH-Pg	1	281	275	83.27	87.64	7.64	4.73	9.09	7.63
MCHC-g/dl	1	281	275	93.45	90.55	4.73	5.82	1.82	3.63
Plt. $x10^3$/µl	1	281	275	90.55	90.18	7.64	4.73	1.81	5.09
ReticCount%	2	281	214	85.51	86.45	5.14	11.21	9.35	2.34
PS Assessment	3	281	233	Satisfactory :96.1%, Borderline Sat. :1.06%, Unsatisfactory :2.84%					

*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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