



## 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. :** 1702

**Distribution No.:** 151-D

Month/Year: August/2020

**Instrument ID: MEK 6510K** 

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

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### **CBC** and Retic Assessment

			Among Lab (Accuracy Testing)					Within Lab (Precision Testing)				
Test Parameters	S.No.	Your Result 1			Consensus result	Uncertainty of Assigned Values		Yours Results	Consensus Result Diff. of 2 values (Assigned Value)		7	
WBC x10³/μl	1	5.3	5.1	10.4	9.8	0.0460	0.43	0.2	0.1	0.0060	0.96	
RBC x10 <sup>6</sup> /µl	1	3.17	3.07	6.24	6.4	0.0060	-0.90	0.1	0.03	0.0010	1.89	
Hb g/dl	1	11.4	11.1	22.5	23.4	0.0210	-1.52	0.3	0.1	0.0070	2.57	
HCT%	1	34.9	34.1	69	72.05	0.1860	-0.50	0.8	0.3	0.0200	1.35	
MCV-fl	1	111	110	221	223.5	0.4950	-0.14	1	0.3	0.0230	1.57	
MCH-Pg	1	36.2	36	72.2	73.2	0.0760	-0.48	0.2	0.3	0.0200	-0.34	
MCHC-g/dl	1	32.7	32.6	65.3	65.3	0.1640	0.00	0.1	0.3	0.0200	-0.67	
Plt. x10³/μl	1	241	228	469	512	1.38	-1.12	13	6	0.32	1.22	
Retic %	2	2.7	2.6	5.3	7.2	0.13	-0.51	0.1	0.3	0.02	-0.72	

#### P.S. Assesment

		YOUR REPORT	CONSENSUS REPORT				
DLC%	3	Nrbcs=0-1/hpf , Poly=22% L=04%, E=00%, Mono/Promono=0% , B1=11% P.M.=17%, Mye=28%, Meta=18%, Other=	Poly: 25-50, Lymph; 2-7, nRBC/Mono/Eo/Blast/Pro: 0-5, Myelo: 20-35, Meta: 15-25, Baso: 0-3				
RBC Morphology	3	Mild hypochromasia with Mainly Macrocytic and few Microcytic Rbc with mod. Anisocytosis and mild poikilocytosis with few tear drop shaped rbc and few fragmented rbc seen.	Predominantly: Normocytic Normochromic. Moderate: Anisocytosis. Mild: Microcytic				
Diagnosis	3	Chronic Myeloid Leukaemia	Chronic Myeloid Leukemia (Chronic Phase) : CML-CP				

# COMBINED DATA VALUES OF TOTAL PARTICIPANTS

		77		T					tab 7
Test parameters	S.No.	Total participants covered in	Total No. responded	% of Labs with Z Score 0-2		% of Labs with Z Score 2-3		Score >3	
	0.110.	the current dist.		Among labs	Within lab	Among labs	Within lab	Among labs	Within lab
WBC $x10^3/\mu l$	1	450	363	88.43	86.23	4.68	5.79	6.61	7.71
RBC x10 <sup>6</sup> /μl	1	450	363	88.43	88.98	4.96	6.06	6.34	4.68
Hb g/dl	1	450	363	85.12	90.91	6.34	4.41	8.54	4.68
HCT%	1	450	363	94.77	92.29	3.03	2.75	1.93	4.68
MCV-fl	1	450	363	97.8	92.29	0.55	3.03	1.1	4.13
MCH-Pg	1	450	363	88.98	90.91	5.51	5.23	4.96	3.03
MCHC-g/dl	1	450	363	96.97	87.05	1.38	6.06	1.38	6.06
Plt. x10 <sup>3</sup> /µl	1	450	363	90.08	90.63	5.23	5.51	4.41	3.58
ReticCount%	2	450	322	93.17	83.85	4.35	1.55	2.8	16.15
PS Assessment	3	450	352	Acceptable:75.4%, Warning Signal:24.6%, Unacceptable:0%					

#### '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  $IQR = 0.7413 \times IQR$ 

**Note-3:** Z score 0 to  $\pm 2$ : Acceptable, Z score  $\pm 2$  to  $\pm 3$ : Warning Signal, Z score >  $\pm 3$ : Unacceptable [As per ISO/IEC 13528:2015 standard]

**Note-4:** Z score value between "0 to  $\pm 2$ " are texted in green colour. Z score value between " $\pm 2$  to  $\pm 3$ " are texted in orange colour. Z score value >  $\pm 3$  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.

Report authorized by,

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Dr. Seema Tyagi (Prof.)

PT Co-ordinator: ISHTM-AIIMS-EQAP

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