



# 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.:** 2896 **Distribution No.:** 149-G Month/Year: December/2019

**Instrument ID:** SYSMEX / KX-21 (Serial Number B4305)

Name & Contact No. of PT Co-ordinator: Dr. Renu Saxena (Prof & Head), Hematology, AIIMS, Delhi,

Tel: 9013085730, E-Mail: accuracy2000@gmail.com Date of issue & status of the report: 09-03-2020[Final].

# **CBC** and Retic Assessment

				Among Lab (Accuracy Testing)				Within Lab (Precision Testing)			
Test Parameters	S.No.	Your Result 1		Your Results Sum of 2 Value	Consensus result sum of 2 values (Assigned Value)	Uncertainty		Results		Uncertainty of Assigned Values	Z Score
WBC x10³/μl	1	5	5	10	10.1	0.0310	-0.13	0	0.1	0.0740	-0.90
RBC x10 <sup>6</sup> /μl	1	4.41	4.38	8.79	8.64	0.0090	0.60	0.03	0.04	0.0020	-0.22
Hb g/dl	1	12.9	12.9	25.8	26.1	0.0290	-0.45	0	0.1	0.0080	-0.67
НСТ%	1	37.1	36.9	74	76.75	0.1550	-0.69	0.2	0.4	0.0250	-0.54
MCV-fl	1	84.2	84.1	168.3	177.7	0.2910	-1.17	0.1	0.3	0.0250	-0.45
МСН-Рд	1	29.5	29.3	58.8	60.5	0.0820	-0.89	0.2	0.3	0.0220	-0.34
MCHC-g/dl	1	35	34.8	69.8	68.1	0.1450	0.44	0.2	0.3	0.0200	-0.34
Plt. x10³/μl	1	174	171	345	338	1.05	0.27	3	5	0.31	-0.45
Retic %	2	2.6	2.4	5	7	0.19	-0.43	0.2	0.3	0.01	-0.45

## P.S. Assesment

		YOUR REPORT	CONSENSUS REPORT		
DLC%	3	Nrbcs=9%, Poly=43%/13% L=3%, E=7%, Mono/Promono=, B1=10% P.M.=3%, Mye=7%, Meta=3%, Other=basophils-2%	Poly: 50-60, Lymph: 2-6, nRBC/Eo/Mono/Blast/Pro: 0-5, My: 10-20, Meta: 10-15		
RBC Morphology	3		Predominantly: Normocytic Normochromic. Moderate: Micro. Mild: Hypo, Aniso.		
Diagnosis		Chronic Myelogenous Leukaemia(CML) - AP	Chronic Myeloid Leukemia (Chronic Phase) : CML-CP		

### **Total** % of Labs with Z % of Labs with Z % of Labs with Z participants Score 0-2 Score 2-3 Score >3 Test Total No. S.No. covered in parameters responded Within Within **Among** Within **Among** Among the current labs lab labs lab labs lab dist. 278 87.77 5.04 7.19 7.19 WBC x10<sup>3</sup>/µl 1 450 88.13 4.68 RBC x10<sup>6</sup>/µl 1 450 278 89.21 93.88 6.12 1.8 4.68 3.6 Hb g/dl 1 450 278 88.85 8.63 6.12 6.47 84.89 5.04 HCT% 1 450 278 91.01 92.81 7.55 4.32 1.44 2.88 MCV-fl 1 450 278 94.24 93.17 3.96 1.44 2.88 3.6 1 278 85.97 90.29 7.91 5.76 6.12 MCH-Pg 450 3.6 MCHC-g/dl 1 450 278 93.53 88.85 5.4 5.76 1.08 5.4 Plt. $x10^3/\mu l$ 1 450 278 88.49 91.73 6.83 5.76 4.68 2.52 ReticCount% 2. 450 230 93.91 82.17 2.61 13.48 3.48 6.52 PS Assessment 3 450 254 Acceptable: 95.8%, Warning Signal: 3.4%, Unacceptable: 0.8%

### \*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 IOR)

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 standard1

**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,

Dr. R. Saxena

Prof & Head, Hematology, AIIMS, Delhi.

PT Co-ordinator: ISHTM-AIIMS-EQAP

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