

# 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.**: 4745 **Distribution No.**: 155-L **Month/Year**: April/2022

**Instrument ID:** CENTUS HA100

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

Tel: 9013085730 , E-Mail : accuracy2000@gmail.com **Date of issue & status of the report:** 04-07-2022[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	15.1	15.1	30.2	24.12	0.1270	1.84	0	0.2	0.0130	-0.88	
RBC x10 <sup>6</sup> /μl	1	5.99	5.98	11.97	12.05	0.0170	-0.17	0.01	0.06	0.0040	-0.84	
Hb g/dl	1	13.3	13.3	26.6	28.5	0.0290	-2.33	0	0.1	0.0080	-1.35	
НСТ%	1	47.3	47.3	94.6	95.8	0.2590	-0.16	0	0.5	0.0360	-0.84	
MCV-fl	1	79.1	79	158.1	159.6	0.3180	-0.17	0.1	0.3	0.0210	-0.54	
MCH-Pg	1	22.2	22.2	44.4	47.1	0.0570	-1.73	0	0.2	0.0120	-1.35	
MCHC-g/dl	1	28.1	28.1	56.2	58.9	0.1470	-0.65	0	0.25	0.0170	-0.84	
Plt. x10³/μl	1	162	161	323	399	2.71	-0.93	1	9	0.55	-0.83	
Retic %	2	27	26	53	17.05	0.44	2.62	1	0.7	0.05	0.24	

### P.S. Assesment

		YOUR REPORT	CONSENSUS REPORT					
DLC%	3		Poly: 50 - 66, Myelo: 9 - 18, Meta: 6 - 13, Lympho: 3-7, nRBC/Promyelo/Blast/Eos/Baso/Mono: 0 - 5					
RBC Morphology	3		Predominantly: Normocytic/Normochromic; Moderate: Anisocytosi hypochromia, Microcytosis; Mild: Macrocytosis, Poikilocytosis					
Diagnosis	3	Chronic Myeloid Leukemia	Chronic Myeloid Leukemia (Chronic Phase)					

#### **COMBINED DATA VALUES OF TOTAL PARTICIPANTS**

Test never eters	S.No.	Total participants covered in the current dist. 155L	Total No. responded	% of Labs with Z Score 0-2		% of Labs with Z Score 2-3		% of Labs with Z Score >3	
Test parameters				Among labs	Within lab	Among labs	Within lab	Among labs	Within lab
WBC x10³/μl	1	347	334	87.43	89.22	5.69	4.19	6.88	6.59
RBC x10 <sup>6</sup> /μl	1	347	347	83.29	86.46	7.49	2.02	9.22	11.52
Hb g/dl	1	347	347	87.32	84.73	4.9	6.05	7.78	9.22
HCT%	1	347	3 <mark>33</mark>	90.39	88.89	6.61	5.11	3	6
MCV-fl	1	347	333	90.09	86.19	5.41	3.9	4.5	9.91
MCH-Pg	1	347	333	87.99	<mark>93</mark> .69	7.51	3	4.5	3.31
MCHC-g/dl	1	347	333	91.59	86.79	4.8	4.5	3.61	8.71
Plt. x10³/μl	1	347	333	96.7	86.19	1.8	8.71	1.5	5.1
ReticCount%	2	347	222	91.44	93.24	5.41	2.7	3.15	4.06
PS Assessment	3	347	230	Satisfactory:96.26%, Borderline Sat.: 2.88%, Unsatisfactory:0.86%					

#### \*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  $\pm 2$ : 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.

Note 10: Reports are kept confidential.

Report authorized by,

Dr. Seema Tyagi (Prof.)

PT Co-ordinator: ISHTM-AIIMS-EQAP

Department of Hematology, AIIMS, New Delhi

-----End Of Report-----