

## **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. : 1861

**Distribution No.:** 157-E Month/Year: August/2022

Instrument ID: ELITE 580 (Serial No. K11052132009)

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: 22-10-2022[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 of Assigned Values	Z Score	Deculto		Uncertainty of Assigned Values	Z Score	
WBC x10³/µl	1	6.81	6.78	13.59	17.38	0.1220	-1.21	0.03	0.17	0.0110	-0.94	
RBC x10 <sup>6</sup> /µl	1	5.62	5.62	11.24	10.98	0.0110	0.88	0	0.04	0.0030	-0.90	
Hb g/dl	1	10.2	10.2	20.4	21.1	0.0220	-1.18	0	0.1	0.0070	-1.35	
HCT%	1	36	36	72	71.3	0.1690	0.15	0	0.3	0.0230	-0.81	
MCV-fl	1	64.3	64.2	128.5	129.15	0.2640	-0.09	0.1	0.2	0.0120	-0.45	
MCH-Pg	1	18.2	18.1	36.3	38.5	0.0510	-1.85	0.1	0.1	0.0090	0.00	
MCHC-g/dl	1	28.4	28.1	56.5	59.2	0.1610	-0.61	0.3	0.2	0.0130	0.45	
Plt. x10³/µl	1	266	256	522	465	2.38	0.86	10	7	0.49	0.37	
Retic %	2	8	7	15	8.5	0.17	1.31	1	0.4	0.02	2.02	

### **P.S** . Assesment

		YOUR REPORT	CONSENSUS REPORT				
DLC%	3		Poly: 19 - 36, Myelo: 20 - 40, Meta: 9 - 20, Lympho: 2 - 6, Promyelo: 1 - 6, nRBC/ Baso/ Eos/ Mono /Blast: 0 - 5				
RBC Morphology	3		Predominantly: Normocytic/Normochromic; Moderate: Anisocytosis, hypochromia, Microcytosis; Mild: Macrocytosis, Poikilocytosis				
Diagnosis		Chronic myeloid leukemia - Accelerated Phase.	Chronic Myeloid Leukemia (Chronic Phase)				

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

Test name atom	S No	Total participants covered in the	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	5.NO.	current dist. 157E		Among labs	Within lab	Among labs	Within lab	Among labs	Within lab	
WBC x10 <sup>3</sup> /µl	1	313	311	<mark>85</mark> .85	89.07	10.29	4.18	3.86	6.75	
RBC x10 <sup>6</sup> /µl	1	313	313	<mark>87.86</mark>	90.42	5.43	3.83	6.71	5.75	
Hb g/dl	1	313	313	85.94	90.73	5.11	4.47	8.95	4.8	
HCT%	1	313	3 <mark>10</mark>	92.26	89.03	4.52	4.52	3.22	6.45	
MCV-fl	1	313	310	91.94	88.39	3.87	9.03	4.19	2.58	
MCH-Pg	1	313	309	85.76	<mark>91</mark> .91	5.5	4.21	8.74	3.88	
MCHC-g/dl	1	313	309	91.59	91.91	5.18	4.53	3.23	3.56	
Plt. x10 <sup>3</sup> /µl	1	313	311	94.53	87.14	4.5	6.43	0.97	6.43	
ReticCount%	2	313	288	97.92	93.4	1.39	1.04	0.69	5.56	
<b>PS</b> Assessment	3	313	289	Satisfactory :74.77%, Borderline Sat. :9.58%, Unsatisfactory :15.65%						

#### \*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.

Note 10: Reports are kept confidential.

Report authorized by,

Jege-

Dr. Seema Tyagi (Prof.) PT Co-ordinator: ISHTM-AIIMS-EQAP Department of Hematology, AIIMS, New Delhi

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