

# 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. :** 3752 **Distribution No.:** 154-J **Month/Year:** January/2022

**Instrument ID:** XN-550(S.No-20102)

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

Tel: 9013085730 , E-Mail : accuracy2000@gmail.com **Date of issue & status of the report:** 16-03-2022[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	Consensus Result Diff. of 2 values (Assigned Value)	Uncertainty of Assigned Values	Z Score	
WBC x10³/μl	1	7.93	7.46	15.39	14.9	0.0430	0.51	0.47	0.11	0.0110	3.74	
RBC x10 <sup>6</sup> /μl	1	3.53	3.43	6.96	6.82	0.0080	0.73	0.1	0.03	0.0030	1.89	
Hb g/dl	1	11	10.8	21.8	21.8	0.0240	0.00	0.2	0.1	0.0080	1.35	
НСТ%	1	37.8	37	74.8	68.6	0.1510	1.86	0.8	0.3	0.0270	1.69	
MCV-fl	1	107.9	107.1	215	200.6	0.3570	1.65	0.8	0.5	0.0370	0.45	
MCH-Pg	1	31.5	31.2	62.7	64.1	0.0800	-0.79	0.3	0.2	0.0160	0.34	
MCHC-g/dl	1	29.2	29.1	58.3	63.6	0.1440	-1.62	0.1	0.3	0.0220	-0.54	
Plt. x10³/μl	1	209	197	406	418	1.39	-0.39	12	6	0.39	1.16	
Retic %	2	6	5.9	11.9	6.6	0.17	1.20	0.1	0.3	0.02	-0.67	

### P.S. Assesment

		YOUR REPORT	CONSENSUS REPORT				
DLC%	3		Poly: 45 - 58 , Myelo: 8 - 21, Meta: 6 - 13; Lympho/Promyelo: 1 - 10; Blast/nRBC/Eos/Baso/Mono: 0 - 5				
RBC Morphology	3		Predominantly: Normocytic/Normochromic; Moderate: Anisocytosis, Microcytosis, Hypochromia; Mild: Macrocytosis, Poikilocytosis				
Diagnosis	3	CML	Chronic Myeloid Leukemia				

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

Test parameters	S.No.	Total participants	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		current dist. 154J		Among labs	Within lab	Among labs	Within lab	Among labs	Within lab	
WBC x10³/μl	1	237	237	86.92	85.65	4.64	1.69	8.44	12.66	
RBC x10 <sup>6</sup> /μl	1	237	237	91.14	91.56	4.22	4.22	4.64	4.22	
Hb g/dl	1	237	237	92.83	89.87	3.8	3.8	3.37	6.33	
HCT%	1	237	237	90.3	84.81	8.44	7.59	1.26	7.6	
MCV-fl	1	237	236	94.92	94.92	3.81	2.97	1.27	2.11	
MCH-Pg	1	237	237	89.03	<mark>8</mark> 8.19	7.17	6.75	3.8	5.06	
MCHC-g/dl	1	237	237	90.72	89.45	8.44	5.06	0.84	5.49	
Plt. x10³/μl	1	237	237	89.03	91.56	7.59	4.22	3.38	4.22	
ReticCount%	2	237	232	96.12	83.19	1.29	10.78	2.59	6.03	
PS Assessment	3	237	217	Satisfactory :90.99%, Borderline Sat. :7.17%, Unsatisfactory :1.84%						

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

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