

# **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.: 1975

**Distribution No.:** 158-E Month/Year: December/2022

Instrument ID: MINDRAY BC-6200

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: 24-01-2023[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	Consensus Result Diff. of 2 values (Assigned Value)	Uncertainty of Assigned Values	Z Score	
WBC x10³/µl	1	8.02	7.93	15.95	15.7	0.0450	0.21	0.09	0.13	0.0080	-0.39	
RBC x10 <sup>6</sup> /µl	1	3.56	3.54	7.1	6.92	0.0070	0.97	0.02	0.03	0.0020	-0.27	
Hb g/dl	1	12.8	12.7	25.5	25.1	0.0210	0.77	0.1	0.1	0.0080	0.00	
HCT%	1	42.7	42. <mark>7</mark>	85.4	78.3	0.1850	1.33	0	0.4	0.0250	-1.35	
MCV-fl	1	120.4	120.1	240.5	225.75	0.5040	1.03	0.3	0.3	0.0230	0.00	
MCH-Pg	1	35.9	35.7	71.6	72.6	0.0840	-0.50	0.2	0.3	0.0210	-0.34	
MCHC-g/dl	1	29.9	29.7	59.6	63.75	0.1540	-0.86	0.2	0.3	0.0190	-0.34	
Plt. x10³/μl	1	211	208	419	459	1.62	-1.00	3	5	0.35	-0.39	
Retic %	2	22.3	22	44.3	29	0.68	0.72	0.3	1	0.07	-0.63	

## P.S. Assesment

		YOUR REPORT	CONSENSUS REPORT				
DLC%	3		Blast: 65-87, Poly: 5-10, Lympho: 3-8, Myelo: 0-7, Mono: 1-10.5, nRBC/Promyelo/Meta/Eos: 0-5				
RBC Morphology	- 3		Predominantly: Normocytic/Normochromic; Moderate: Microcytosis, Hypochromia; Mild: Anisocytosis, Macrocytosis				
Diagnosis	3	ACUTE LEUKEMIA	Acute Myeloid Leukemia (AML)				

#### Page 2 of 2

### **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.NU.	current dist. 158E		Among labs	Within lab	Among labs	Within lab	Among labs	Within lab
WBC x10 <sup>3</sup> /µl	1	291	289	<mark>84</mark> .08	88.24	3.81	5.54	12.11	6.22
RBC x10 <sup>6</sup> /µl	1	291	291	88.32	93.47	7.56	2.41	4.12	4.12
Hb g/dl	1	291	291	87.97	90.38	4.12	6.53	7.91	3.09
HCT%	1	291	2 <mark>89</mark>	96.54	92.39	2.08	3.81	1.38	3.8
MCV-fl	1	291	288	97.92	95.14	1.39	2.08	0.69	2.78
MCH-Pg	1	291	288	87.15	<mark>8</mark> 7.5	8.33	7.29	4.52	5.21
MCHC-g/dl	1	291	288	96.88	<mark>86.4</mark> 6	2.43	6.25	0.69	7.29
Plt. x10 <sup>3</sup> /µl	1	291	289	89.97	92.39	7.27	2.42	2.76	5.19
ReticCount%	2	291	260	97.31	89.62	2.69	1.54	0	8.84
PS Assessment	3	291	264	Satisfactory :87.3%, Borderline Sat. :5.49%, Unsatisfactory :7.21%					

#### \*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 guarterly 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-----