

# 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.**: 940 **Distribution No.**: 154-D **Month/Year:** February/2022

Instrument ID: Medonics

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:** 22-02-2022[Final].

## **CBC** and Retic Assessment

				Amo	ng Lab (Aco	curacy Testin	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	4.9	4.9	9.8	7.27	0.0600	1.37	0	0.1	0.0090	-0.75	
RBC x10 <sup>6</sup> /μl	1	3.78	3.7	7.48	7.36	0.0070	0.65	0.08	0.04	0.0030	0.90	
Hb g/dl	1	10.8	10.4	21.2	21.2	0.0210	0.00	0.4	0.1	0.0080	2.02	
НСТ%	1	34.8	34.1	68.9	64.1	0.1070	1.58	0.7	0.3	0.0250	0.77	
MCV-fl	1	92.16	92.06	184.22	174	0.2260	1.72	0.1	0.3	0.0240	-0.45	
MCH-Pg	1	28.57	28.11	56.68	57.5	0.0590	-0.53	0.46	0.3	0.0190	0.54	
MCHC-g/dl	1	31	30.5	61.5	66.1	0.1060	-1.59	0.5	0.3	0.0220	0.54	
Plt. x10³/μl	1	151	151	302	269	0.95	1.20	0	4	0.28	-0.77	
Retic %	2	4	3.5	7.5	4.4	0.10	1.02	0.5	0.2	0.01	1.35	

### P.S. Assesment

		YOUR REPORT	CONSENSUS REPORT					
DLC%	3	IMONO/Promono= BI=/UPM = MVe=	Blast: 60-85, Poly: 2-6, Lympho: 6-21, nRBC/mono/Eosino/Myelo/Meta: 0-1					
RBC Morphology	3	NC/NC	Predominantly: Normocytic/ Normochromic, Moderate: Anisocytosis, Microcytic					
Diagnosis	3	Suggestive of Acute Leukemia. Advice Bone Marrow examination, Immunophenotyping, Karyotyping for typing of Leukemia.	Acute Leukemia (AL)					

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

Test parameters	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	
		current dist. 154D		Among <mark>la</mark> bs	Within lab	Among labs	Within lab	Among labs	Within lab
WBC x10³/μl	1	319	312	79.49	85.58	5.45	5.45	15.06	8.97
RBC x10 <sup>6</sup> /μl	1	319	319	88.09	88.09	5.02	4.7	6.89	7.21
Hb g/dl	1	319	319	87.15	87.77	5.02	5.64	7.83	6.59
HCT%	1	319	313	91.37	89.78	3.83	5.43	4.8	4.79
MCV-fl	1	319	3 <mark>13</mark>	91.69	90.42	4.47	5.11	3.84	4.47
MCH-Pg	1	319	313	90.1	89.46	5.43	4.15	4.47	6.39
MCHC-g/dl	1	319	313	90.42	88.5	6.07	6.39	3.51	5.11
Plt. x10³/μl	1	319	313	91.05	95.85	4.79	3.19	4.16	0.960000000000001
ReticCount%	2	319	319	95.3	89.66	2.19	2.19	2.51	8.15
PS Assessment	3	319	298	Satisfactory:94.36%, Borderline Sat.:5.32%, Unsatisfactory:0.31%					

### \*Comments:

Among Lab (EQA): Results acceptable.
 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.

Report authorized by,

Dr. Seema Tyagi (Prof.)

PT Co-ordinator: ISHTM-AIIMS-EQAP

Department of Hematology, AIIMS, New Delhi

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