



**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. :** 5277

**Distribution No.:** 158-N

**Month/Year:** February/2023

**Instrument ID:** MEDONIC M32 (118008)

**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:** 28-02-2023[Final].

### CBC and Retic Assessment

Test Parameters	S.No.	Among Lab (Accuracy Testing)						Within Lab (Precision Testing)			
		Your Result 1	Your Result 2	Your Results Sum of 2 Value	Consensus result sum of 2 values (Assigned Value)	Uncertainty of Assigned Values	Z Score	Yours Results Diff. of 2 Values	Consensus Result Diff. of 2 values (Assigned Value)	Uncertainty of Assigned Values	Z Score
WBC x10 <sup>3</sup> /µl	1	7.4	7.3	14.7	14.94	0.0360	-0.27	0.1	0.1	0.0080	0.00
RBC x10 <sup>6</sup> /µl	1	3.79	3.77	7.56	7.31	0.0090	1.05	0.02	0.04	0.0020	-0.54
Hb g/dl	1	12.9	12.8	25.7	24.9	0.0270	1.31	0.1	0.1	0.0080	0.00
HCT%	1	37.9	37.6	75.5	78.15	0.1710	-0.50	0.3	0.4	0.0250	-0.22
MCV-fl	1	99.9	99.6	199.5	214.85	0.4180	-1.15	0.3	0.3	0.0230	0.00
MCH-Pg	1	34.2	33.8	68	68.1	0.0800	-0.05	0.4	0.3	0.0220	0.27
MCHC-g/dl	1	34.2	34	68.2	63.4	0.1470	1.07	0.2	0.3	0.0200	-0.27
Plt. x10 <sup>3</sup> /µl	1	158	157	315	319	1.68	-0.08	1	5	0.32	-0.77
Retic %	2	8.6	8.5	17.1	10	0.18	1.41	0.1	0.5	0.03	-0.67

### P.S . Assesment

YOUR REPORT		CONSENSUS REPORT
<b>DLC%</b>	3	Nrbcs=0 , Poly=8 L=50, E=2, Mono/Promono=3 , B1=30 P.M.=2, Mye=2, Meta=3, Other=
<b>RBC Morphology</b>	3	Lympho: 49-73, Blast: 5-35, Poly:4-10, nRBC/Eos/Baso/Mono /Myelo/Meta/ Promyelo: 0-5
<b>Diagnosis</b>	3	Predominantly Normocytic Normochromic, Mildly Microcytic Hypochromic, Mild Anisocytosis
		Predominantly: Normocytic/ Normochromic, Moderate: Anisocytosis, Microcytic
		Acute Leukemia - Lymphoblastic
		Acute Leukemia (AL)

**COMBINED DATA VALUES OF TOTAL PARTICIPANTS**

Test parameters	S.No.	Total participants covered in the current dist. 158--N	Total No. responded	% of Labs with Z Score 0-2		% of Labs with Z Score 2-3		% of Labs with Z Score >3	
				Among labs	Within lab	Among labs	Within lab	Among labs	Within lab
<b>WBC x10<sup>3</sup>/µl</b>	1	342	340	80	85.59	4.71	3.53	15.29	10.88
<b>RBC x10<sup>6</sup>/µl</b>	1	342	342	88.3	90.35	6.73	3.51	4.97	6.14
<b>Hb g/dl</b>	1	342	342	86.55	85.96	6.73	6.73	6.72	7.31
<b>HCT%</b>	1	342	340	95.88	87.94	3.53	5.29	0.59	6.77
<b>MCV-fl</b>	1	342	340	97.35	92.35	1.76	2.35	0.89	5.3
<b>MCH-Pg</b>	1	342	340	86.47	88.24	8.82	6.47	4.71	5.29
<b>MCHC-g/dl</b>	1	342	340	95.59	90.88	3.24	4.71	1.17	4.41
<b>Plt. x10<sup>3</sup>/µl</b>	1	342	340	95	90	3.24	3.82	1.76	6.18
<b>ReticCount%</b>	2	342	265	94.34	89.81	4.53	5.66	1.13	4.53
<b>PS Assessment</b>	3	342	244	Satisfactory :81.59%, Borderline Sat. :11.40%, Unsatisfactory :7.01%					

**\*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](http://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-----