



**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. : 4484

Distribution No.: 160-L

Month/Year: October/2023

Instrument ID: 2022519

Name & Contact No. of PT Co-ordinator: Dr. Manoranjan Mahapatra ( Prof. & Head), Hematology, AIIMS, Delhi,  
 Tel: 9013085730 , E-Mail : accuracy2000@gmail.com

Date of issue &amp; status of the report: 11-10-2023[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	8.28	8.21	16.49	15.9	0.077	0.28	0.07	0.14	0.009	-0.52
RBC x10 <sup>6</sup> /μl	1	4.35	4.34	8.69	9.7	0.012	0.18	0.01	0.04	0.003	-0.58
Hb g/dl	1	13.2	12.8	26	27.8	0.028	0.15	0.4	0.1	0.008	0.67
HCT%	1	41.6	41.4	83	86.6	0.206	-0.66	0.2	0.4	0.025	-0.45
MCV-fl	1	95.63	95.39	191.02	179.7	0.347	1.17	0.24	0.3	0.019	-0.20
MCH-Pg	1	30.41	29.43	59.84	57.55	0.066	1.40	0.98	0.2	0.012	0.54
MCHC-g/dl	1	31.88	30.77	62.65	64	0.138	-0.36	1.11	0.3	0.012	0.58
Plt. x10 <sup>3</sup> /μl	1	151	132	283	313	2.475	-0.44	19	8	0.522	1.14
Retic %	2										

### P.S . Assesment

YOUR REPORT		CONSENSUS REPORT
DLC%	3	Nrbcs=00 , Poly=04 L=60, E=00, Mono/Promono=01 , B1=35 P.M.=00, Mye=00, Meta=00, Other=00
RBC Morphology	3	Blast: 1-69, Lympho: 22-88, Poly: 3-8, nRBC/ Mono/Eos/Baso/Myelo/Meta/ Promyelo: 0-5
Diagnosis	3	Predominantly: Normocytic/ Normochromic, Moderate: Anisocytosis, Microcytic, poikilocytosis
		ACUTE LEUKEMIA ?ALL
		Acute Leukemia (AL)

**COMBINED DATA VALUES OF TOTAL PARTICIPANTS**

Test parameters	S.No.	Total participants covered in the current dist. 160--L	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
WBC x10 <sup>3</sup> /μl	1	324	323	87	91.95	2.48	1.55	10.52	6.5
RBC x10 <sup>6</sup> /μl	1	324	324	82.72	91.05	8.64	2.78	8.64	6.17
Hb g/dl	1	324	324	90.12	87.96	4.01	3.09	5.87	8.95
HCT%	1	324	323	91.02	89.78	6.19	4.33	2.79	5.89
MCV-fl	1	324	323	93.19	90.09	5.57	4.64	1.24	5.27
MCH-Pg	1	324	322	86.02	71.43	7.76	19.88	6.22	8.69
MCHC-g/dl	1	324	323	91.02	88.54	5.88	3.1	3.1	8.36
Plt. x10 <sup>3</sup> /μl	1	324	323	91.95	89.16	6.81	6.19	1.24	4.65
ReticCount%	2	324	198	89.9	93.43	5.56	5.05	4.54	1.52
PS Assessment	3	324	203	Satisfactory :75.79%, Borderline Sat. :5.27%, Unsatisfactory :18.94%					

**\*Comments:**

1). **Among Lab (EQA) : CBC result 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 ±2: Acceptable, Z score ±2 to ±3 :Warning Signal, Z score > ±3 : Unacceptable [As per ISO/IEC 13528:2015 standard]

**Note-4:** Z score value between“0 to ±2” are texted in green colour. Z score value between“±2 to ±3” are texted in orange colour. Z score value > ±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 (x-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. Manoranjan Mahapatra ( Prof. & Head)

PT Co-ordinator: ISHTM-AIIMS-EQAP

Department of Hematology, AIIMS, New Delhi

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