



**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. : 270

Distribution No.: 158-B

Month/Year: October/2022

Instrument ID: BC-6200TW- 02000920

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

Date of issue &amp; status of the report: 01-01-2023[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	5.06	4.9	9.96	10	0.0290	-0.05	0.16	0.1	0.0050	0.67
RBC x10 <sup>6</sup> /µl	1	4.23	4.22	8.45	8.86	0.0060	-2.21	0.01	0.04	0.0020	-0.81
Hb g/dl	1	13.3	13.3	26.6	26.4	0.0190	0.34	0	0.1	0.0070	-1.35
HCT%	1	43.5	43.5	87	82.6	0.1590	0.84	0	0.4	0.0230	-1.08
MCV-fl	1	103	102.9	205.9	186.5	0.3470	1.70	0.1	0.3	0.0230	-0.45
MCH-Pg	1	31.5	31.4	62.9	59.7	0.0480	2.19	0.1	0.2	0.0120	-0.45
MCHC-g/dl	1	30.6	30.5	61.1	63.8	0.1370	-0.61	0.1	0.3	0.0180	-0.67
Plt. x10 <sup>3</sup> /µl	1	212	209	421	414	1.59	0.15	3	7	0.40	-0.54
Retic %	2	3.2	2.7	5.9	10.5	0.14	-1.13	0.5	0.3	0.02	0.86

### P.S . Assesment

YOUR REPORT			CONSENSUS REPORT		
DLC%	3	Nrbcs= , Poly=10 L=10, E=, Mono/Promono=3 , B1=10 P.M.=, Mye=, Meta=, Other=66% Atypical cells, nuclei of atypical cells few indented.Smudge cells seen. Platelets reduced in count (10000)	Blast: 76-92, Lympho: 4-16, Poly: 1-3, nRBC/Eos/Baso/Mono/Myelo/Meta/ Promyelo: 0-5		
RBC Morphology	3	Anisopoikilocytosis, microcytic hypochromic, normocytes.	Predominantly: Normocytic/ Normochromic, Moderate: Anisocytosis, Microcytic		

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)
Diagnosis	3	Leukaemic leucocytosis with few circulating blasts(10%) and many atypical cells(66%).Smudge cells seen. Kindly confirm diagnosis by immunophenotyping and flow cytometry.				Acute Leukemia (AL)			

### COMBINED DATA VALUES OF TOTAL PARTICIPANTS

Test parameters	S.No.	Total participants covered in the current dist. 158--B	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	358	357	87.11	92.72	5.32	3.36	7.57	3.92
RBC x10 <sup>6</sup> /µl	1	358	358	90.22	91.06	4.19	4.47	5.59	4.47
Hb g/dl	1	358	358	89.66	91.06	5.87	4.19	4.47	4.75
HCT%	1	358	356	97.47	92.13	1.97	4.21	0.56	3.66
MCV-fl	1	358	355	98.03	92.96	1.69	2.82	0.28	4.22
MCH-Pg	1	358	355	92.68	75.21	3.94	17.18	3.38	7.61
MCHC-g/dl	1	358	354	97.18	88.14	1.98	3.67	0.84	8.19
Plt. x10 <sup>3</sup> /µl	1	358	356	91.57	91.01	5.9	4.21	2.53	4.78
ReticCount%	2	358	337	90.5	83.38	8.01	0.59	1.49	16.03
PS Assessment	3	358	340	Satisfactory :97.5%, Borderline Sat. :1.11%, Unsatisfactory :1.39%					

**\*Comments:**

1). **Among Lab (EQA) : PS Diagnosis partially correct, remaining 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 ±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 ( $\bar{x}-\bar{y}$ ) should be smaller than the check value (0.3\*SDPA).

**Note-6:** ISHTM-AIIMS-EQAP does not subcontract any task of its scheme

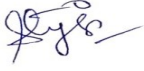
**Note-7:** Participants are free to use methods/analyzer of their own choice.

**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.ishtmaimseqap.com](http://www.ishtmaimseqap.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-----

