



**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. : 757

Distribution No.: 160-A

Month/Year: April/2023

Instrument ID: XN-330 (11547)

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

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### 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> /pl	1	3.93	3.8	7.73	10	0.029	-2.88	0.13	0.1	0.006	0.29
RBC x10 <sup>6</sup> /pl	1	3.82	3.81	7.63	7.66	0.006	-0.18	0.01	0.03	0.002	-0.54
Hb g/dl	1	10.1	10	20.1	20.3	0.017	-0.49	0.1	0.1	0.007	0.00
HCT%	1	33.7	33.5	67.2	64.2	0.104	0.86	0.2	0.3	0.020	-0.34
MCV-fl	1	88.2	87.9	176.1	166.9	0.217	1.24	0.3	0.3	0.020	0.00
MCH-Pg	1	26.5	26.2	52.7	52.9	0.049	-0.15	0.3	0.2	0.011	0.45
MCHC-g/dl	1	30.1	29.7	59.8	63.4	0.106	-1.09	0.4	0.3	0.020	0.34
Plt. x10 <sup>3</sup> /pl	1	120	117	237	228	1.187	0.28	3	5	0.271	-0.45
Retic %	2	24	21	45	17.45	0.251	4.07	3	0.5	0.025	-4.22

### P.S . Assesment

YOUR REPORT		CONSENSUS REPORT
DLC%	3 Nrbcs=0, Poly=2 L=3, E=0, Mono/Promono=0, B1=95 P.M.=0, Mye=0, Meta=0, Other=	Blast: 90-97, Lympho: 3-8, Poly: 1-2, nRBC/ Mono/Eos/Baso/Myelo/Meta/ Promyelo: 0-5
RBC Morphology	3 Normocytic, hypochromia+, anisocytosis+	Predominantly: Normocytic/ Normochromic, Moderate: Anisocytosis, Microcytic
Diagnosis	3 Acute Lymphoblastic leukemia	Acute Leukemia (AL)

## COMBINED DATA VALUES OF TOTAL PARTICIPANTS

parameters	S.No.	Total participants covered in the current dist. 160--A	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	356	355	82.25	89.58	4.79	3.94	12.96	6.48
RBC x10 <sup>6</sup> /µl	1	356	356	85.96	91.29	8.43	5.06	5.61	3.65
Hb g/dl	1	356	356	87.08	92.42	6.74	3.09	6.18	4.49
HCT%	1	356	355	95.77	89.58	3.1	5.92	1.13	4.5
MCV-fI	1	356	354	97.46	86.44	1.69	8.19	0.85	5.37
MCH-Pg	1	356	355	86.48	94.37	8.17	3.1	5.35	2.53
MCHC-g/dl	1	356	355	94.65	87.32	3.38	5.35	1.97	7.33
Plt. x10 <sup>3</sup> /µl	1	356	355	87.32	94.65	9.58	1.97	3.1	3.38
ReticCount%	2	356	328	90.85	92.68	6.1	5.79	3.05	1.53
PS Assessment	3	356	342	Satisfactory :99.44%, Borderline Sat. :0.28%, Unsatisfactory :0.28%					

## Comments:

1). Among Lab (EQA) : RETIC result is unacceptable, may be due to random/human error.

2). Within Lab (IQA) : RETIC result is unacceptable, may be due to random/human error.

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.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-----

Verified



Corrective Action: Retic value is cross checked by Another Pathologist observed Value is 8.9% which is Acceptable.