



**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. : 3017

Distribution No.: 160-G

Month/Year: June/2023

Instrument ID: TR-81000491

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: 01-08-2023[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	5.51	5.42	10.93	10.77	0.042	0.17	0.09	0.1	0.007	-0.09
RBC x10 <sup>6</sup> /µl	1	5.58	4.55	10.13	8.86	0.009	5.11	1.03	0.04	0.003	26.71
Hb g/dl	1	13.1	13	26.1	25.5	0.030	0.81	0.1	0.1	0.008	0.00
HCT%	1	39.1	38.5	77.6	81.9	0.173	-0.97	0.6	0.4	0.027	0.54
MCV-fl	1	85.3	84.6	169.9	185.1	0.307	-1.94	0.7	0.3	0.022	1.08
MCH-Pg	1	28.6	28.6	57.2	57.8	0.073	-0.35	0	0.2	0.019	-0.67
MCHC-g/dl	1	33.8	33.6	67.4	62.4	0.135	1.45	0.2	0.3	0.021	-0.34
Plt. x10 <sup>3</sup> /µl	1	90	85	175	167	1.767	0.17	5	5	0.308	0.00
Retic %	2										

### P.S . Assesment

YOUR REPORT			CONSENSUS REPORT		
DLC%	3	Nrbcs= , Poly= L=, E=, Mono/Promono= , B1= P.M.=, Mye=, Meta=, Other=	Lymph: 78-86, Poly: 8-15, Eosino: 1-3, mono: 1-2, nRBC/blast/Myelo/Meta: 0-5		
RBC Morphology	3		Predominantly: Normocytic/Normochromic; Moderate: Anisocytosis, Microcytosis, Hypochromia; Mild: Macrocytosis, Poikilocytosis.		
Diagnosis	3		Chronic Lymphoproliferative Disorder/CLL		

**COMBINED DATA VALUES OF TOTAL PARTICIPANTS**

Test parameters	S.No.	Total participants covered in the current dist. 160--G	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	271	271	78.97	89.67	5.17	4.43	15.86	5.9
<b>RBC x10<sup>6</sup>/µl</b>	1	271	271	88.19	86.35	6.27	7.38	5.54	6.27
<b>Hb g/dl</b>	1	271	271	91.88	88.56	4.8	5.17	3.32	6.27
<b>HCT%</b>	1	271	271	95.2	87.45	2.21	8.12	2.59	4.43
<b>MCV-fl</b>	1	271	271	94.83	86.72	3.32	8.12	1.85	5.16
<b>MCH-Pg</b>	1	271	271	88.93	88.56	6.27	5.54	4.8	5.9
<b>MCHC-g/dl</b>	1	271	271	92.62	87.82	5.9	4.8	1.48	7.38
<b>Plt. x10<sup>3</sup>/µl</b>	1	271	271	95.94	88.56	1.85	5.17	2.21	6.27
<b>ReticCount%</b>	2	271	240	94.58	88.33	4.58	8.33	0.84	3.34
<b>PS Assessment</b>	3	271	240	Satisfactory :95.19%, Borderline Sat. :2.96%, Unsatisfactory :1.85%					

**\*Comments:**

**1). Among Lab (EQA) : CBC result for RBC unacceptable, may be due to random/human error.PS Diagnosis not reported, remaining results acceptable**

**2). Within Lab (IQA) : Difference in the CBC measurement values for RBC 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](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

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