



**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. : 4459

Distribution No.: 159-L

Month/Year: Sep/2023

Instrument ID: YUMIZEN H550 112YAX403617

Name & Contact No. of PT Co-ordinator: Dr. Seema Tyagi (Prof.), Hematology, AIIMS, Delhi,  
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Date of issue &amp; status of the report: 13-06-2023[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	1.21	1.05	2.26	3.50	0.031	0.99	0.16	0.1	0.005	0.67
RBC x10 <sup>6</sup> /μl	1	4.31	4.31	8.62	8.96	0.010	-1.27	0	0.05	0.003	-1.12
Hb g/dl	1	12.4	12.3	24.7	26.3	0.028	-1.96	0.1	0.1	0.007	0.00
HCT%	1	40.2	40.1	80.3	85.7	0.229	-0.83	0.1	0.5	0.025	-0.90
MCV-fl	1	93.3	93	186.3	190.8	0.466	-0.31	0.3	0.2	0.020	0.27
MCH-Pg	1	28.7	28.6	57.3	58.7	0.071	-0.65	0.1	0.2	0.011	-0.45
MCHC-g/dl	1	30.8	30.8	61.6	60.8	0.162	0.17	0	0.3	0.016	-1.01
Plt. x10 <sup>3</sup> /μl	1	131	119	250	252	1.160	-0.06	12	5	0.327	1.18
Retic %	2	4.4	4	8.4	14.7	0.201	-1.07	0.4	0.6	0.045	-0.22

### P.S. Assesment

YOUR REPORT			CONSENSUS REPORT		
DLC%	3	Nrbcs=1 , Poly=07 L=90, E=01, Mono/Promono=01 , B1=00 P.M.=00, Mye=00, Meta=00, Other=SMUDGE CELLS SEEN	Lymph: 80-89, Poly: 9-15, Mono: 1-2, nRBC/blast/Eosino/Myelo/Meta: 0-1		
RBC Morphology	3	NORMOCHROMIC NORMOCYTIC,MACRO FEW	Predominantly: Normocytic/Normochromic; Moderate: Anisocytosis, Microcytosis, Hypochromia; Mild: Macrocytosis, Poikilocytosis		
Diagnosis	3	CLL	Chronic Lymphocytic Leukemia (CLL)		

**COMBINED DATA VALUES OF TOTAL PARTICIPANTS**

Test parameters	S.No.	Total participants covered in the current dist. 159--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	345	345	84.64	90.43	4.06	3.48	11.3	6.09
RBC x10 <sup>6</sup> /μl	1	345	345	87.54	91.01	7.83	3.77	4.63	5.22
Hb g/dl	1	345	345	90.14	89.28	5.8	6.67	4.06	4.05
HCT%	1	345	345	91.88	93.91	4.93	4.06	3.19	2.03
MCV-fl	1	345	345	93.62	91.3	3.19	4.35	3.19	4.35
MCH-Pg	1	345	345	93.04	92.17	4.64	2.9	2.32	4.93
MCHC-g/dl	1	345	345	92.46	90.14	5.8	3.48	1.74	6.38
Plt. x10 <sup>3</sup> /μl	1	345	345	91.88	90.14	5.51	4.06	2.61	5.8
ReticCount%	2	345	223	92.38	91.48	7.17	2.69	0.45	5.83
PS Assessment	3	345	212	Satisfactory :95.96%, Borderline Sat. :3.18%, Unsatisfactory :0.86%					

**\*Comments:**

1). **Among Lab (EQA) : CBC 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.ishtmaiiseqap.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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