



**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. : 967

Distribution No.: 158-C

Month/Year: November/2022

Instrument ID: YUMIZEN H550 SNO: 909YAXH02676

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: 02-01-2023[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	1.69	1.6	3.29	14.49	0.030	-14.81	0.09	0.1	0.008	-0.09
RBC x10 <sup>6</sup> /µl	1	4.23	4.12	8.35	8.15	0.007	1.04	0.11	0.03	0.002	2.16
Hb g/dl	1	11.8	11.8	23.6	23.4	0.020	0.39	0	0.1	0.007	-1.35
HCT%	1	34.9	34.1	69	73.3	0.144	-0.97	0.8	0.3	0.023	1.69
MCV-fl	1	82.6	82.6	165.2	180.8	0.301	-1.59	0	0.3	0.020	-0.81
MCH-Pg	1	28.6	28	56.6	57.3	0.053	-0.50	0.6	0.2	0.015	1.80
MCHC-g/dl	1	34.6	33.8	68.4	63.4	0.126	1.27	0.8	0.3	0.018	1.69
Plt. x10 <sup>3</sup> /µl	1	324	320	644	570	2.175	1.22	4	6	0.352	-0.34
Retic %	2	7.3	6.4	13.7	10	0.171	0.83	0.9	0.4	0.023	0.84

### P.S . Assesment

YOUR REPORT			CONSENSUS REPORT		
DLC%	3	Nrbcs=0 , Poly=3 L=64, E=0, Mono/Promono=0 , B1=0 P.M.=, Mye=, Meta=, Other=ATYPICAL LYPHOCYTES 33%	Lymph: 77-89, Poly: 6-12, blast: 1-8, nRBC/mono/Eosino/Myelo/Meta: 0-5		
RBC Morphology	3	Predominately : Normocytic/Normochromic ,Mild Anisocytosis	Predominantly: Normocytic/Normochromic; Moderate: Anisocytosis, Microcytosis, Hypochromia; Mild: Macrocytosis, Poikilocytosis ,Few smudge cells seen.		
Diagnosis	3	Chronic Lymphocytic Leukemia (Atypical)	Chronic lymphoproliferative disorder		

**COMBINED DATA VALUES OF TOTAL PARTICIPANTS**

Test parameters	S.No.	Total participants covered in the current dist. 158--C	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	321	321	81.31	82.87	6.85	8.1	11.84	9.03
<b>RBC x10<sup>6</sup>/µl</b>	1	321	321	90.34	91.9	6.54	3.74	3.12	4.36
<b>Hb g/dl</b>	1	321	321	92.83	90.65	4.05	4.05	3.12	5.3
<b>HCT%</b>	1	321	321	97.2	92.21	2.18	4.98	0.62	2.81
<b>MCV-fl</b>	1	321	321	98.44	93.77	0.93	2.8	0.63	3.43
<b>MCH-Pg</b>	1	321	321	89.72	92.52	6.54	4.67	3.74	2.81
<b>MCHC-g/dl</b>	1	321	321	97.51	91.9	1.87	4.67	0.62	3.43
<b>Plt. x10<sup>3</sup>/µl</b>	1	321	321	93.46	92.52	3.43	4.36	3.11	3.12
<b>ReticCount%</b>	2	321	302	92.05	93.71	4.64	5.96	3.31	0.33
<b>PS Assessment</b>	3	321	297	Satisfactory :94.08%, Borderline Sat. :2.49%, Unsatisfactory :3.42%					

**\*Comments:**

- 1). Among Lab (EQA) : CBC result for WBC unacceptable, may be due to random/human error**
- 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.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

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