



**PROFICIENCY TESTING REPORT**  
**ISHBT-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. : 4501

Distribution No.: 159-L

Month/Year: April/2023

Instrument ID: SWELAB ALFA 18749

Name &amp; 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 $\times 10^3/\mu\text{l}$	1	4.7	4.6	9.3	7.96	0.031	1.64	0.1	0.1	0.005	0.00
RBC $\times 10^6/\mu\text{l}$	1	4.83	4.78	9.61	8.96	0.010	2.37	0.05	0.05	0.003	0.00
Hb g/dl	1	13.6	13.5	27.1	26.3	0.028	0.98	0.1	0.1	0.007	0.00
HCT%	1	45.2	44.8	90	85.7	0.229	0.66	0.4	0.5	0.025	-0.22
MCV-fl	1	93.6	93.6	187.2	190.8	0.466	-0.24	0	0.2	0.020	-0.54
MCH-Pg	1	28.4	28.1	56.5	58.7	0.071	-1.02	0.3	0.2	0.011	0.45
MCHC-g/dl	1	30.3	30	60.3	60.8	0.162	-0.11	0.3	0.3	0.016	0.00
Plt. $\times 10^3/\mu\text{l}$	1	112	106	218	252	1.160	-1.04	6	5	0.327	0.17
Retic %	2	5.6	5.2	10.8	14.7	0.201	-0.66	0.4	0.6	0.045	-0.23

### P.S . Assesment

YOUR REPORT			CONSENSUS REPORT
DLC%	3	Nrbcs=0 , Poly=15 L=84, E=, Mono/Promono=01 , B1= P.M.=, Mye=, Meta=, Other=	Lymp: 80-89, Poly: 9-15, Mono: 1-2, nRBC/blast/Eosino/Myelo/Meta: 0-1
RBC Morphology	3	RBC normal in number, Normochromic Normocytic RBC.NO nRBC, poly chromasia seen .	Predominantly: Normocytic/Normochromic; Moderate: Anisocytosis, Microcytosis, Hypochromia; Mild: Macrocytosis, Poikilocytosis
Diagnosis	3	Absolute lymphocytosis with smudge cells favour chronic Lymphoproliferative disorder like CLL. Thrombocytopenia ( mild )	Chronic Lymphocytic Leukemia (CLL)

**COMBINED DATA VALUES OF TOTAL PARTICIPANTS**

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	347	347	84.44	90.2	4.32	3.46	11.24	6.34
RBC x10 <sup>6</sup> /µl	1	347	347	87.61	91.35	8.07	3.75	4.32	4.9
Hb g/dl	1	347	347	90.2	89.34	5.76	6.63	4.04	4.03
HCT%	1	347	347	91.93	91.07	4.9	6.34	3.17	2.59
MCV-fl	1	347	347	93.37	91.35	3.46	4.32	3.17	4.33
MCH-Pg	1	347	347	93.08	92.22	4.61	2.88	2.31	4.9
MCHC-g/dl	1	347	347	92.51	90.2	5.76	3.46	1.73	6.34
Plt. x10 <sup>3</sup> /µl	1	347	347	91.64	89.05	5.76	4.61	2.6	6.34
ReticCount%	2	347	224	92.41	91.52	7.14	2.68	0.45	5.80
PS Assessment	3	347	213	Satisfactory :95.96%, Borderline Sat. :3.18%, Unsatisfactory :0.86%					

**Comments:**

1). Among Lab (EQA) : 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.ishtmaiiseqap.com](http://www.ishtmaiiseqap.com).

**Note 10:** Reports are kept confidential.

Report authorized by,



*Satisfactory*  
*Shr*

Dr. Seema Tyagi (Prof.)

PT Co-ordinator: ISHTM-AIIMS-EQAP

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