

# 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

Instrument ID: SWELAB AFLA BASIC 20p (31063)

Name & Contact No. of PT Co-ordinator: Dr. Seema Tyagi (Prof.), Hematology, AIIMS, Delhi,

Tel: 9013085730 , E-Mail : accuracy2000@gmail.com **Date of issue & status of the report:** 27-04-2022[Final].

## **CBC** and Retic Assessment

	S.No.			Among Lab (Accuracy Testing)				Within Lab (Precision Testing)				
Test Parameters		Your Result 1		Your Results Sum of 2 Value	Consensus result sum of 2 values (Assigned Value)	Uncertainty		Yours Results Diff. of 2 Values	Consensus Result Diff. of 2 values (Assigned Value)	Uncertainty of Assigned Values	Z Score	
WBC x10³/μl	1	4.3	4.1	8.4	7	0.0290	1.76	0.2	0.1	0.0070	0.79	
RBC x10 <sup>6</sup> /μl	1	3.73	3.72	7.45	7.33	0.0080	0.52	0.01	0.03	0.0020	-0.54	
Hb g/dl	1	13.2	13.1	26.3	26.7	0.0210	-0.67	0.1	0.1	0.0070	0.00	
НСТ%	1	42.5	42.3	84.8	84	0.1430	0.18	0.2	0.4	0.0230	-0.45	
MCV-fl	1	113.9	113.5	227.4	227	0.2950	0.04	0.4	0.3	0.0250	0.22	
МСН-Рд	1	35.5	35.1	70.6	72.8	0.0800	-1.02	0.4	0.3	0.0190	0.45	
MCHC-g/dl	1	31.2	30.9	62.1	63.65	0.1130	-0.45	0.3	0.3	0.0180	0.00	
Plt. x10³/μl	1	169	162	331	401.5	1.40	-1.86	7	5	0.31	0.39	
Retic %	2	4	3.9	7.9	16	0.28	-1.17	0.1	0.5	0.03	-0.67	

### P.S. Assesment

		YOUR REPORT	CONSENSUS REPORT				
DLC%	3	Nrbcs=0 , Poly=20 L=02, E=08, Mono/Promono=03 , B1=03 P.M.=05, Mye=34, Meta=20, Other=	Poly: 40 - 60, Myelo: 10 - 25, Meta: 5 - 20, Promyelo: 1-10, nRBC/Lympho/Blast/Eos/Baso/Mono: 0 - 5				
RBC Morphology	3	Mild anisocytosis with few macrocytes seen Predominant normochromic	Predominantly: Normocytic/Normochromic; Moderate: Anisocytosis, hypochromia, Microcytosis; Mild: Macrocytosis, Poikilocytosis				
Diagnosis	3	LEUCOCYTOSIS WITH MYELOID PREDOMINANCE FEATURES ARE SUGGESTIVE OF MYELOPROLIFEARTIVE NEOPLASM POSSIBILITY OF ACCLERATED PHASE OF CML IS SUGGESTED	Chronic Myeloid Leukemia (Chronic Phase)				

### **COMBINED DATA VALUES OF TOTAL PARTICIPANTS**

Test never eters	S.No.	Total participants covered in the current dist. 155D	Total No. responded	% of Labs with Z Score 0-2		% of Labs with Z Score 2-3		% of Labs with Z Score >3		
Test parameters				Among labs	Within lab	Among labs	Within lab	Among labs	Within lab	
WBC x10³/μl	1	354	347	<mark>87.</mark> 61	86.46	4.03	3.75	8.36	9.79	
RBC x10 <sup>6</sup> /μl	1	354	354	88.98	88.7	5.08	3.67	5.94	7.63	
Hb g/dl	1	354	354	84.18	84.75	5.93	5.93	9.89	9.32	
HCT%	1	354	3 <mark>47</mark>	94.24	90.2	3.17	3.46	2.59	6.34	
MCV-fl	1	354	346	96.53	89.6	1.16	3.76	2.31	6.64	
MCH-Pg	1	354	347	87.9	<mark>8</mark> 7.61	6.63	5.76	5.47	6.63	
MCHC-g/dl	1	354	347	94.81	85.3	3.75	5.19	1.44	9.51	
Plt. x10³/μl	1	354	347	88.76	91.64	8.36	2.88	2.88	5.48	
ReticCount%	2	354	354	83.33	85.59	5.65	4.52	11.02	9.89	
PS Assessment	3	354	333	Satisfactory:93.58%, Borderline Sat.:4.53%, Unsatisfactory:1.89%						

### \*Comments:

- 1). Among Lab (EQA): PS Diagnosis partially correct, remaining 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  $\pm 2$ : Acceptable, Z score  $\pm 2$  to  $\pm 3$ : Warning Signal, Z score  $> \pm 3$ : Unacceptable [As per ISO/IEC 13528:2015 standard]

**Note-4:** Z score value between "0 to  $\pm 2$ " are texted in green colour. Z score value between " $\pm 2$  to  $\pm 3$ " are texted in orange colour. Z score value  $> \pm 3$  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.

Report authorized by,

Dr. Seema Tyagi (Prof.)

PT Co-ordinator: ISHTM-AIIMS-EQAP

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