



## 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.**: 2919 **Distribution No.:** 164-G Month/Year: June/2024 **Instrument ID:** DR B LAL CLINICAL Model Name.: SYSMEX XN 350 **Serial No.:** 15073

LABORATORY PVT LTD

Name & Contact No. of PT Co-ordinator: Dr. Manoranjan Mahapatra ( Prof. & Head), Hematology, AIIMS, Delhi,

Tel: 9013085730, E-Mail: info@ishtmaiimseqap.com Date of issue & status of the report: 14-08-2024 [Final]

## **CBC** and **Retic** Assessment

	S.No.			Amo	ng Lab (Aco	curacy Testin	ıg)	Within Lab (Precision Testing)				
Test Parameters		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		
WBC x10 <sup>3</sup> /μl	1	5.73	5.49	11.22	15.8	0.350	-0.37	0.24	0.15	0.014	0.43	
RBC x106/μl	1	4.01	3.95	7.96	7.88	0.013	0.28	0.06	0.04	0.003	0.54	
Hb g/dl	1	11.8	11.8	23.6	23.9	0.040	-0.29	0	0.1	0.009	-0.67	
нст%	1	46.2	45.9	92.1	83.9	0.145	1.87	0.1	0.1	0.007	0.00	
MCV-fl	1	88.8	88.6	177.4	165.2	0.234	1.66	0.3	0.3	0.022	0.00	
MCH-Pg	1	29.9	29.4	59.3	60.4	0.093	-0.50	0.5	0.2	0.017	1.35	
MCHC-g/dl	1	28.8	28.8	57.6	63.1	0.111	-1.67	0	0.2	0.015	-0.90	
Plt. x10³/μl	1	106	101	207	116.5	1.599	1.81	5	5	0.302	0.00	
Retic %	2	5	5	10	26	0.416	-1.60	0	0.7	0.054	-0.82	

# P.S . Assesment

		YOUR REPORT	CONSENSUS REPORT				
DLC%	3		Poly: 50-63 , Lympho: 30-40, Eosino: 2-6 , Mono: 2-5, blast/Promyelo/Myelo/Meta: 0				
RBC Morphology			Predominantly: Normocytic/Normochromic; Moderate: Anisocytosis, Microcytic, Hypochromic; Mild: Poikilocytosis, Target cells , Sickle cells, polychromatophils				
Diagnosis	3		Sickle Cell Anemia				

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

To st manage store	S.No.	Total participants covered in the current dist.	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 x10 <sup>3</sup> /μl	1	267	266	81.95	84.59	1.5	2.63	16.550	12.78
RBC x10 <sup>6</sup> /μl	1	267	267	81.65	89.89	6.37	4.12	11.98	5.99
Hb g/dl	1	267	267	82.02	88.01	4.87	4.49	13.11	7.5
НСТ%	1	267	266	89.85	90.23	5.64	6.39	4.51	3.38
MCV-fl	1	267	265	92.45	92.08	5.28	4.15	2.27	3.77
MCH-Pg	1	267	266	87.59	90.98	5.26	2.26	7.15	6.76
MCHC-g/dl	1	267	266	93.61	87.22	3.38	4.14	3.01	8.64
Plt. x10³/µl	1	267	266	89.1	94.74	5.64	2.26	5.26	3
ReticCount%	2	267	246	91.06	92.68	8.54	2.85	0.4	4.47
PS Assessment	3	267	239	Satisfactory	:90.64%, Bo	<mark>rd</mark> erline Sat.	:3.37%, Un	satisfactory	:5.99%

### \*Comments:

Among Lab (EQA): Results acceptable.
 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 (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.ishtmaiimseqap.com.

Note 10: Reports are kept confidential.

Report authorized by,

Dr. Manoranjan Mahapatra ( Prof. & Head)

PT Co-ordinator: ISHTM-AIIMS-EQAP

Department of Hematology, AIIMS, New Delhi

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