



# 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.:** 2575 **Distribution No.:** 164-E Month/Year: June/2024

**Instrument ID:** ERBA H-360 **Serial No.:** K10012134077 Model Name.: ERBA H-360

SR.NO.K10012134077

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: 05-08-2024 [Final]

# **CBC** and Retic Assessment

				Among Lab (Accuracy Testing)				Within Lab (Precision Testing)				
Test Parameters	S.No.	Your Result 1		Your Results Sum of 2 Value	Consensus result sum of 2 values (Assigned Value)	Uncertainty		Results	Consensus Result Diff. of 2 values (Assigned Value)	Uncertainty of Assigned Values	Z Score	
WBC x10³/μl	1	10.15	10.13	20.28	28.25	0.639	-0.37	0.02	0.3	0.021	-0.69	
RBC x10 <sup>6</sup> /μl	1	5.14	5.12	10.26	9.7	0.011	1.89	0.02	0.04	0.003	-0.39	
Hb g/dl	1	14.1	13.9	28	27.6	0.029	0.50	0.2	0.1	0.008	0.67	
НСТ%	1	44.3	43.8	88.1	86.85	0.235	0.18	0.5	0.4	0.025	0.19	
MCV-fl	1	86.2	85.6	171.8	178.8	0.448	-0.59	0.6	0.3	0.023	0.81	
МСН-Рд	1	27.4	27.1	54.5	56.9	0.082	-1.12	0.3	0.3	0.013	0.00	
MCHC-g/dl	1	31.8	31.7	63.5	63.5	0.181	0.00	0.1	0.3	0.022	-0.54	
Plt. <b>x10³/μl</b>	1	92	70	162	175	2.475	-0.18	22	5	0.342	2.87	
Retic %	2	18	16	34	21.6	0.244	1.80	2	0.7	0.047	1.35	

# P.S. Assesment

YOUR REPORT			CONSENSUS REPORT				
DLC%	3	Nrbcs=2 , Poly=50 L=35, E=3, Mono/Promono=11 , B1=0 P.M.=0, Mye=0, Meta=0, Other=0	Poly: 53-64, Lympho: 28-38, Eosino: 1-3, Mono: 2-5, blast/Promyelo/Myelo/Meta: 0-5				
RBC Morphology	3	PREDOMINANTLY ANISOPOIKILOCYTOSIS, MODERATELY MICROCYTOSIS HYPOCHROMASIA. FEW TEAR DROP CELLS AND ELLIPTOCYTES SEEN.	Predominantly: Microcytic, Hypochromic, Moderate: Anisopoikilocytosis Mild:Target cells , Tear drop cells				
Diagnosis	3	BETA THALASSEMIA MAJOR.	Thalassemia Hemoglobinopathy				

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

Test never eters	S.No.	Total participants covered in the current dist. 164E	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	329	325	84	85.85	3.69	6.46	12.310	7.69
RBC x10 <sup>6</sup> /μl	1	329	329	87.54	92.1	7.9	3.95	4.56	3.95
Hb g/dl	1	329	329	88.15	82.37	5.47	8.81	6.38	8.82
HCT%	1	329	3 <mark>26</mark>	95.09	90.18	2.45	5.21	2.46	4.61
MCV-fl	1	329	325	91.38	94.46	5.54	2.15	3.08	3.39
MCH-Pg	1	329	325	88.31	93.23	5.54	4	6.15	2.77
MCHC-g/dl	1	329	325	92.92	92.62	4.31	2.77	2.77	4.61
Plt. x10³/μl	1	329	327	92.97	88.38	3.06	5.2	3.97	6.42
ReticCount%	2	329	289	87.89	95.5	10.03	2.42	2.08	2.08
PS Assessment	3	329	290	Satisfactory:95.75%, Borderline Sat.:1.82%, Unsatisfactory:2.43%					

### \*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  $(\bar{x}-\bar{y})$  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.

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

-----End Of Report-----