



## 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.: 803** 

Distribution No.: 152-A

Month/Year: January/2021

Instrument ID: ERBA Sysmex Xp- 100,3 part,B2607

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: 17-02-2021[Final].

## **CBC** and Retic Assessment

Test Parameters	S.No.	A Tablight		Amo	ng Lab (Ac	curacy Testin	Within Lab (Precision Testing)				
				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 x10³/μl	1	4.7	4.2	8.9	9.41	0.0260	-0.68	0.5	0.1	0.0070	3.17
RBC x10 <sup>6</sup> /μl	1	3.07	3.04	6.11	6.12	0.0050	-0.04	0.03	0.03	0.0010	0.00
Hb g/dl	1	10.5	10.5	21	20.6	0.0180	0.86	0	0.1	0.0060	-1.35
НСТ%	1	29.4	29.1	58.5	62.3	0.1250	-0.81	0.3	0.3	0.0110	0.00
MCV-fl	1	95.8	95.7	191.5	203	0.3650	-0.83	0.1	0.3	0.0200	-0.54
мсн-Рд	1	34.5	34.2	68.7	67.3	0.0580	0.82	0.3	0.3	0.0180	0.00
MCHC-g/dl	1	36.1	35.7	71.8	66.1	0.1400	1.16	0.4	0.3	0.0200	0.30
Plt. x10³/μl	1	131	129	260	250.5	0.62	. 0.53	2	4	0.21	-0.54
Retic %	2	4	3.5	7.5	13.15	0.25	-0.67	0.5	0.4	0.02	0.34

### P.S. Assesment

		YOUR REPORT	CONSENSUS REPORT				
DLC%	3	Nrbcs=01 , Poly=02 L=98, E=0, Mono/Promono=0 , B1=0 P.M.=0, Mye=0, Meta=0, Other=	Lymp: 1-25, Blast: 60-95, Poly: 1-6, nRBC/Mono/Eo/Myelo/Meta: 0-1				
RBC Morphology	3	NCNC, few MCHC	Predominantly: Normocytic/ Normochromic, Moderate: Anisocytosis, Microcytic				
Diagnosis	3	Chronic Lymphocytic Leukemia	Acute Lymphoblastic Leukemia (ALL)				

# COMBINED DATA VALUES OF TOTAL PARTICIPANTS

Test	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	
parameters				Among labs	Within lab	Among labs	Within lab	Among labs	Within lab
WBC x10³/μl	1	374	375	90.13	82.4	4.53	6.93	5.6	10.4
RBC x10 <sup>6</sup> /µl	1	374	376	87.5	85.9	7.45	3.46	5.05	10.11
Hb g/dl	1	374	376	89.89	91.76	6.38	2.93	3.72	0.53
HCT%	1	374	376	98.67	88.3	0.8	5.32	0.53	5.85
MCV-fl	1	374	376	98.94	92.02	0.8	2.66	0.27	5.32
MCH-Pg	1	374	375	92.53	88.27	4.27	8.27	3.2	3.47
MCHC-g/dl	1	374	376	97.61	88.3	1.86	5.32	0.53	6.12
Plt. x10³/µl	1	374	376	89.63	92.02	6.91	2.93	3.46	5.05
ReticCount%	2	374	325	96.31	92.62	3.08	1.23	0.31	7.38
PS Assessment	3	374		Acceptable:85%, Warning Signal:4.8%, Unacceptable:10.2%					

#### 'Comments:

- 1). Among Lab (EQA): Wrongly Reported PS, remaining results acceptable
- 2). Within Lab (IQA): Difference in the CBC measurement values for WBC unacceptable, may be due to random/human error.

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  $IQR = 0.7413 \times IQR$ 

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 > ±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  $(\overline{x}-\overline{y})$  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-EOAP

Department of Hematology, AIIMS, New Delhi

-----End Of Report--