

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.: 4793 **Distribution No.**: 156-L **Month/Year**: July/2022

Instrument ID: Sysmex XP100: B6697

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:** 27-09-2022[Final].

CBC and Retic Assessment

				Among Lab (Accuracy Testing)				Within Lab (Precision Testing)				
Test Parameters	S.No.	Your Result 1		Results	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	6.9	6.7	13.6	12.18	0.0990	0.48	0.2	0.15	0.0120	0.31	
RBC x10 ⁶ /μl	1	4.47	4.38	8.85	8.69	0.0140	0.41	0.09	0.05	0.0040	0.60	
Hb g/dl	1	11.7	11.7	23.4	24.8	0.0290	-1.72	0	0.1	0.0100	-0.45	
НСТ%	1	37.7	36. <mark>5</mark>	74.2	79.6	0.2150	-0.93	1.2	0.4	0.0290	1.35	
MCV-fl	1	86.1	81.7	167.8	183.3	0.3570	-1.54	4.4	0.4	0.0270	7.71	
МСН-Рд	1	26.7	26.2	52.9	57.3	0.0800	-2.24	0.5	0.3	0.0200	0.67	
MCHC-g/dl	1	32.1	31	63.1	62.4	0.1610	0.16	1.1	0.3	0.0230	2.16	
Plt. x10³/μl	1	182	160	342	348	1.70	-0.13	22	7	0.47	1.69	
Retic %	2	12.3	11.2	23.5	3.63	0.09	8.00	1.1	0.2	0.02	3.04	

P.S. Assesment

		YOUR REPORT	CONSENSUS REPORT				
DLC%	3		Poly: 32 - 50, Myelo: 14 - 28, Meta: 10 - 18, Promyelo: 2-8, Lympho: 2-7, nRBC//Blast/Eos/Baso/Mono: 0 - 5				
RBC Morphology	3		Predominantly: Normocytic/Normochromic; Moderate: Anisocytosis, hypochromia, Microcytosis; Mild: Macrocytosis, Poikilocytosis				
Diagnosis	3	Microcytic hypochromic anaemia	Chronic Myeloid Leukemia (Chronic Phase)				

COMBINED DATA VALUES OF TOTAL PARTICIPANTS

Test neverences	S.No.	Total participants	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		current dist. 156L		Among labs	Within lab	Among labs	Within lab	Among labs	Within lab
WBC x10³/μl	1	318	306	92.16	82.35	5.56	5.88	2.28	11.77
RBC x10 ⁶ /μl	1	318	318	87.11	83.65	5.35	4.4	7.54	11.95
Hb g/dl	1	318	318	87.74	84.91	3.14	5.35	9.12	9.74
HCT%	1	318	3 <mark>07</mark>	92.18	89.25	4.56	5.21	3.26	5.54
MCV-fl	1	318	307	91.21	91.86	5.54	3.58	3.25	4.56
MCH-Pg	1	318	307	89.25	<mark>8</mark> 5.67	4.89	3.58	5.86	10.75
MCHC-g/dl	1	318	307	90.88	86.97	5.86	5.21	3.26	7.82
Plt. x10³/μl	1	318	307	91.86	92.18	5.86	2.61	2.28	5.21
ReticCount%	2	318	218	91.28	83.94	3.67	13.3	5.05	2.76
PS Assessment	3	318	216	Satisfactory: 93.4%, Borderline Sat.: 2.83%, Unsatisfactory: 3.77%					

*Comments:

- 1). Among Lab (EQA): CBC result for and RETIC unacceptable, may be due to random/human error. PS Diagnosis wrongly reported, remaining results acceptable
- 2). Within Lab (IQA): MCV & RETIC result is unacceptable, please check precision/human error.Remaining 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 $> \pm 3$: 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 $> \pm 3$ 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. Seema Tyagi (Prof.)

PT Co-ordinator: ISHTM-AIIMS-EQAP

Department of Hematology, AIIMS, New Delhi

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