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. : 5345 **Distribution No.:** 160-N **Month/Year:** July/2023

Instrument ID: Horiba YUMIZEN H2500

Name & Contact No. of PT Co-ordinator: Dr. Manoranjan Mahapatra (Prof. & Head), Hematology, AIIMS, Delhi, Tel: 9013085730 , E-Mail : accuracy2000@gmail.com

Date of issue & status of the report: 05-10-2023[Final].

CBC and Retic Assessment

Test Parameters	S.No.			Among Lab (Accuracy Testing)				Within Lab (Precision Testing)			
		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	Z Score
WBC x10^3/µl	1	3.98	3.91	7.89	9.3	0.036	**-1.46**	0.07	0.1	0.007	**-0.27**
RBC x10^6/µl	1	4.23	4.23	8.46	8.35	0.011	**0.40**	0	0.04	0.002	**-1.08**
Hb g/dl	1	11	11	22	21.5	0.026	**0.81**	0	0.1	0.007	**-1.35**
HCT%	1	34	33.8	67.8	68.4	0.163	**-0.12**	0.2	0.3	0.019	**-0.27**
MCV-fl	1	80.4	79.9	160.3	165.1	0.312	**-0.51**	0.5	0.2	0.017	**1.01**
MCH-Pg	1	26.1	26	52.1	51.7	0.071	**0.22**	0.1	0.2	0.014	**-0.45**
MCHC-g/dl	1	32.7	32.3	65	62.7	0.148	**0.55**	0.4	0.3	0.017	**0.34**
Plt. x10^3/µl	1	195	184	379	304	1.864	**1.56**	11	6	0.361	**0.84**
Retic %	2	3.5	3	6.5	6.85	0.131	**-0.09**	0.5	0.4	0.022	**0.45**

P.S . Assesment

		YOUR REPORT	CONSENSUS REPORT
DLC%	3	Nrbcs=0 , Poly=19 L=78, E=0, Mono/Promono=03 , B1=0 P.M.=0, Mye=0, Meta=0, Other=Smudge cells are evident (1 - 2 per HPF)	Lymp: 68-79, Poly: 15-26, mono: 1-3,Eosino: 1-2, nRBC/blast/Myelo/Meta/: 0-5
RBC Morphology	3	Normocytic Normochromic	Predominantly: Normocytic/Normochromic; Moderate: Anisocytosis, Microcytic, Hypochromia; Mild: Poikilocytosis.
Diagnosis	3	Chronic lymphocytic leukemia	Chronic Lymphoproliferative Disorder/CLL

COMBINED DATA VALUES OF TOTAL PARTICIPANTS

Test parameters	S.No.	Total participants covered in the current dist. 160--N	Total No. responded	% of Labs with Z Score 0-2		% of Labs with Z Score 2-3		% of Labs with Z Score >3	
				Among labs	Within lab	Among labs	Within lab	Among labs	Within lab
WBC $x10^3$/µl	1	343	340	84.12	85.29	6.18	8.24	9.7	6.47
RBC $x10^6$/µl	1	343	343	84.55	90.96	7	3.79	8.45	5.25
Hb g/dl	1	343	343	86.88	90.09	5.83	4.66	7.29	5.25
HCT%	1	343	341	91.5	87.1	4.4	5.57	4.1	7.33
MCV-fl	1	343	341	93.26	87.1	3.81	3.23	2.93	9.67
MCH-Pg	1	343	340	87.06	94.12	7.94	2.35	5	3.53
MCHC-g/dl	1	343	341	92.38	86.51	4.69	5.28	2.93	8.21
Plt. $x10^3$/µl	1	343	341	88.27	89.74	7.62	5.57	4.11	4.69
ReticCount%	2	343	266	90.98	80.08	6.77	14.29	2.25	5.63
PS Assessment	3	343	256	Satisfactory :95.03%, Borderline Sat. :1.75%, Unsatisfactory :3.22%					

*Comments:

1). Among Lab (EQA) : 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 ±2: Acceptable, Z score ±2 to ±3 :Warning Signal, Z score > ±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 > ±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)
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