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

PC-1002

Duration of stability testing - minimum upto 8 days at ambient temp. after dispatch of specimens

EQAP CODE No. : 3201 **Distribution No.:** 160-H **Month/Year:** June/2023

Instrument ID: ASX MICROS 60 OT SERIAL NO 811OT98394

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: 03-08-2023[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	6.4	6.2	12.6	10.79	0.061	**1.91**	0.2	0.1	0.010	**0.84**
RBC x10^6/µl	1	4.88	4.87	9.75	8.81	0.015	**3.54**	0.01	0.04	0.004	**-0.67**
Hb g/dl	1	14	14	28	25.5	0.044	**3.15**	0	0.1	0.012	**-0.75**
HCT%	1	43	42.9	85.9	80.95	0.241	**1.19**	0.1	0.5	0.043	**-0.90**
MCV-fl	1	88	88	176	183.6	0.427	**-0.97**	0	0.25	0.033	**-0.67**
MCH-Pg	1	28.8	28.7	57.5	57.8	0.092	**-0.20**	0.1	0.3	0.027	**-0.67**
MCHC-g/dl	1	32.7	32.7	65.4	62.45	0.178	**0.90**	0	0.3	0.035	**-0.70**
Plt. x10^3/µl	1	115	111	226	176.5	2.588	**0.99**	4	5	0.492	**-0.17**
Retic %	2	12	12	24	18.5	0.496	**0.57**	0	0.5	0.050	**-0.84**

P.S . Assesment

		YOUR REPORT	CONSENSUS REPORT
DLC%	3	Nrbcs= , Poly=12 L=76, E=06, Mono/Promono=02 , B1=04 P.M.=, Mye=, Meta=, Other=WBCs - Shift to left upto blast cells. Many smudge cells are also seen. Platelets- Adequate on smear. Blood parasites- Not seen	Lymp: 77-86, Poly: 8-15, Eosino: 1-3, mono: 1-3, nRBC/blast/Myelo/Meta: 0-5
RBC Morphology	3	Normochromic Normocytic	Predominantly: Normocytic/Normochromic; Moderate: Anisocytosis, Microcytosis, Hypochromia; Mild: Macrocytosis, Poikilocytosis.

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Diagnosis	3	Above hematological findings are suggestive of chronic lymphocytic leukemia. Advice to do cytochemistry and marker studies.		Chronic Lymphoproliferative Disorder/CLL							

COMBINED DATA VALUES OF TOTAL PARTICIPANTS

Test parameters	S.No.	Total participants covered in the current dist. 160--H	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	146	145	81.38	89.66	6.9	4.83	11.72	5.51
RBC x10^6/µl	1	146	146	90.41	92.47	2.05	4.11	7.54	3.42
Hb g/dl	1	146	146	86.99	86.3	6.16	5.48	6.85	8.22
HCT%	1	146	146	89.04	93.84	8.22	2.74	2.74	3.42
MCV-fl	1	146	146	91.78	93.15	6.85	2.74	1.37	4.11
MCH-Pg	1	146	146	81.51	89.04	9.59	6.85	8.9	4.11
MCHC-g/dl	1	146	146	91.1	93.84	6.85	4.11	2.05	2.05
Plt. x10^3/µl	1	146	146	91.1	91.78	6.85	4.79	2.05	3.43
ReticCount%	2	146	116	98.28	86.21	1.72	10.34	0	3.45
PS Assessment	3	146	109	Satisfactory :97.96%, Borderline Sat. :1.36%, Unsatisfactory :0.68%					

***Comments:**

1). Among Lab (EQA) : CBC result for *RBC & HB* unacceptable, please check calibration/human error.Remaining 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. Seema Tyagi (Prof.)
PT Co-ordinator: ISHTM-AIIMS-EQAP
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