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. : 4442 **Distribution No.:** 159-L **Month/Year:** April/2023

Instrument ID: S.N.19624

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: 13-06-2023[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	4.37	4.26	8.63	7.96	0.031	**0.82**	0.11	0.1	0.005	**0.11**
RBC x10^6/µl	1	4.55	4.51	9.06	8.96	0.010	**0.36**	0.04	0.05	0.003	**-0.22**
Hb g/dl	1	13.3	13.3	26.6	26.3	0.028	**0.37**	0	0.1	0.007	**-1.15**
HCT%	1	45.5	45.1	90.6	85.75	0.229	**0.74**	0.4	0.5	0.025	**-0.22**
MCV-fl	1	100	100	200	190.85	0.466	**0.62**	0	0.2	0.020	**-0.54**
MCH-Pg	1	29.5	29.2	58.7	58.7	0.071	**0.00**	0.3	0.2	0.011	**0.45**
MCHC-g/dl	1	29.5	29.2	58.7	60.8	0.162	**-0.45**	0.3	0.3	0.016	**0.00**
Plt. x10^3/µl	1	125	124	249	251.5	1.160	**-0.08**	1	5	0.327	**-0.67**
Retic %	2	12	5	17	14.7	0.201	**0.39**	7	0.6	0.045	**7.19**

P.S . Assesment

	YOUR REPORT		CONSENSUS REPORT
DLC%	3	Nrbcs=00 , Poly=00 L=00, E=02, Mono/Promono=03 , B1=00 P.M.=00, Mye=00, Meta=00, Other=00	Lymp: 80-89, Poly: 9-15, Mono: 1-2, nRBC/blast/Eosino/Myelo/Meta: 0-1
RBC Morphology	3	normochromic, normocytic	Predominantly: Normocytic/Normochromic; Moderate: Anisocytosis, Microcytosis, Hypochromia; Mild: Macrocytosis, Poikilocytosis
Diagnosis	3	leucoytosis with limphocytosis	Chronic Lymphocytic Leukemia (CLL)

COMBINED DATA VALUES OF TOTAL PARTICIPANTS

Test parameters	S.No.	Total participants covered in the current dist. 159--L	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	346	346	84.68	90.17	4.05	3.47	11.27	6.36
RBC $x10^6$/µl	1	346	346	87.57	91.33	8.09	3.76	4.34	4.91
Hb g/dl	1	346	346	90.17	89.31	5.78	6.65	4.05	4.04
HCT%	1	346	346	91.91	91.04	4.91	6.65	3.18	2.31
MCV-fl	1	346	346	93.64	91.33	3.18	4.34	3.18	4.33
MCH-Pg	1	346	346	93.06	92.2	4.62	2.89	2.32	4.91
MCHC-g/dl	1	346	346	92.77	90.17	5.49	3.47	1.74	6.36
Plt. $x10^3$/µl	1	346	346	92.49	90.17	4.91	4.05	2.6	5.78
ReticCount%	2	346	223	92.38	91.48	7.17	2.69	0.45	5.83
PS Assessment	3	346	212	Satisfactory :95.96%, Borderline Sat. :3.18%, Unsatisfactory :0.86%					

*Comments:

1). Among Lab (EQA) : PS Diagnosis partially correct, remaining results acceptable

2). Within Lab (IQA) : RETIC result is 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 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,

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