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. : 1433 **Distribution No.:** 159-C **Month/Year:** February/2023

Instrument ID: A380_CELLT SN 665000215

Name & Contact No. of PT Co-ordinator: Dr. Seema Tyagi (Prof.), Hematology, AIIMS, Delhi,
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Date of issue & status of the report: 05-04-2023[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	2.23	2.1	4.33	4.23	0.017	**0.24**	0.13	0.08	0.004	**0.75**
RBC x10^6/µl	1	3.09	3.04	6.13	6.06	0.006	**0.43**	0.05	0.03	0.002	**0.67**
Hb g/dl	1	10.1	10	20.1	20.8	0.018	**-1.57**	0.1	0.1	0.007	**0.00**
HCT%	1	29.81	29.64	59.45	64.7	0.116	**-1.34**	0.17	0.3	0.020	**-0.44**
MCV-fl	1	98	96	194	213.4	0.339	**-1.64**	2	0.3	0.024	**3.82**
MCH-Pg	1	32.7	32.5	65.2	68.7	0.071	**-1.69**	0.2	0.3	0.018	**-0.34**
MCHC-g/dl	1	33.7	33.6	67.3	63.9	0.115	**0.81**	0.1	0.3	0.018	**-0.67**
Plt. x10^3/µl	1	78	71	149	174	0.707	**-1.20**	7	3	0.194	**1.35**
Retic %	2	0.45	0.4	0.85	8.9	0.145	**-1.86**	0.05	0.4	0.021	**-1.57**

P.S . Assesment

		YOUR REPORT	CONSENSUS REPORT
DLC%	3	Nrbcs=2 , Poly=41 L=55, E=2, Mono/Promono=0 , B1=0 P.M.=0, Mye=0, Meta=0, Other=	Poly: 43-54 , Lympho: 40-50 , Mono: 2-6, Eosino: 1-3 , nRBC:0-2, blast/Promyelo/Myelo/Meta: 0
RBC Morphology	3	MAINLY NORMOCYTIC HYPOCHROMIC,FEW SICKLE SHAPED RED BLOOD SEEN.	Predominantly: Normocytic/Normochromic; Moderate: Anisocytosis, Microcytosis, Hypochromia; Mild: Poikilocytosis , Target cells , Sickle shaped cells ,tear drop cells
Diagnosis	3	SICKLE CELL DISEASE	Hemoglobinopathy Likely sickle cell-Beta Thalassemia

COMBINED DATA VALUES OF TOTAL PARTICIPANTS

Test parameters	S.No.	Total participants covered in the current dist. 159--C	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	349	347	84.73	92.8	6.05	1.15	9.22	6.05
RBC x10^6/µl	1	349	349	91.4	87.39	5.73	5.73	2.87	6.88
Hb g/dl	1	349	349	90.54	92.84	5.44	3.44	4.02	3.72
HCT%	1	349	347	98.56	88.18	0.86	6.34	0.58	5.48
MCV-fl	1	349	347	99.42	92.22	0.58	3.75	0	4.03
MCH-Pg	1	349	347	93.95	87.03	4.03	5.48	2.02	7.49
MCHC-g/dl	1	349	347	97.69	87.03	2.02	6.92	0.29	6.05
Plt. x10^3/µl	1	349	347	90.2	91.35	6.63	4.03	3.17	4.62
ReticCount%	2	349	331	94.56	82.48	4.23	13.29	1.21	4.23
PS Assessment	3	349	314	Satisfactory :88.83%, Borderline Sat. :8.02%, Unsatisfactory :3.15%					

***Comments:**

1). Among Lab (EQA) : Results acceptable.

2). Within Lab (IQA) : Difference in the CBC measurement values for *MCV* 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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