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. : 1910 **Distribution No.:** 159-F **Month/Year:** March/2023

Instrument ID: BENESPHERA H31 (RQ-75122029)

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: 27-04-2023[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	8.2	7.9	16.1	15.33	0.039	**0.75**	0.3	0.1	0.008	**1.80**
RBC x10^6/µl	1	3.64	3.58	7.22	6.84	0.008	**1.90**	0.06	0.03	0.002	**1.01**
Hb g/dl	1	10.6	10.5	21.1	21.1	0.021	**0.00**	0.1	0.1	0.007	**0.00**
HCT%	1	37.5	37.3	74.8	67.1	0.167	**1.61**	0.2	0.4	0.023	**-0.67**
MCV-fl	1	90.4	89.4	179.8	195.3	0.416	**-1.28**	1	0.3	0.022	**1.89**
MCH-Pg	1	29.6	28.8	58.4	61.7	0.077	**-1.82**	0.8	0.3	0.018	**1.69**
MCHC-g/dl	1	32.8	32.3	65.1	63.1	0.160	**0.43**	0.5	0.3	0.021	**0.67**
Plt. x10^3/µl	1	170	168	338	458	1.916	**-2.40**	2	6	0.351	**-0.67**
Retic %	2	45.1	45	90.1	43	0.840	**1.83**	0.1	1	0.092	**-0.81**

P.S . Assesment

		YOUR REPORT	CONSENSUS REPORT
DLC%	3	Nrbcs=10 , Poly=74 L=24, E=01, Mono/Promono=01 , B1=0 P.M.=0, Mye=0, Meta=0, Other=0	Poly: 54-67, Lympho: 22-33, Mono: 2-5, Eosino: 1-3, blast/Promyelo/Myelo/Meta: 0-5
RBC Morphology	3	macrocytosis present anisopoIkilocytosis marked, nucleted rbc -: 10/100wbc, platelet-: 82x1000/ul, mp absent, abnormal cell absent,	Predominantly: Normocytic/Normochromic; Moderate: Anisocytosis, Microcytosis, Hypochromia; Mild: Poikilocytosis , Target cells , Sickle shaped cells ,tear drop cells
Diagnosis	3	Macrocytic anemia	Thalassemia/Haemoglobinopathy

COMBINED DATA VALUES OF TOTAL PARTICIPANTS

Test parameters	S.No.	Total participants covered in the current dist. 159--F	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 $x10^3/\mu l$	1	317	315	84.76	82.22	2.54	10.79	12.7	6.99
RBC $x10^6/\mu l$	1	317	317	83.91	88.01	8.52	5.68	7.57	6.31
Hb g/dl	1	317	317	86.44	92.11	5.68	3.79	7.88	4.1
HCT%	1	317	315	93.65	93.02	3.81	2.54	2.54	4.44
MCV-fl	1	317	315	94.29	91.75	5.08	3.49	0.63	4.76
MCH-Pg	1	317	315	85.71	88.89	6.67	4.76	7.62	6.35
MCHC-g/dl	1	317	315	95.24	91.43	3.49	4.76	1.27	3.81
Plt. $x10^3/\mu l$	1	317	315	89.52	88.89	7.3	5.08	3.18	6.03
ReticCount%	2	317	282	98.23	87.94	1.42	3.55	0.35	8.51
PS Assessment	3	317	282	Satisfactory :89.28%, Borderline Sat. :6.94%, Unsatisfactory :3.78%					

*Comments:

1). Among Lab (EQA) : PS Diagnosis partially correct, 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
Department of Hematology, AIIMS, New Delhi

----------End Of Report----------