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. : 6514 **Distribution No.:** 163-P **Month/Year:** May/2024

Instrument ID: ERBA **Model Name.:** H560 **Serial No.:** INS00078

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

Date of issue & status of the report: 03-07-2024[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	3.38	3.3	6.68	8.38	0.065	**-0.95**	0.08	0.1	0.009	**-0.27**
RBC x10^6/µl	1	4.73	4.62	9.35	9.09	0.012	**0.73**	0.11	0.07	0.003	**0.77**
Hb g/dl	1	14.9	14.7	29.6	30.8	0.054	**-0.67**	0.2	0.2	0.010	**0.00**
HCT%	1	54.4	53.1	107.5	111.9	0.498	**-0.26**	1.3	0.8	0.041	**0.75**
MCV-fl	1	115.1	114.8	229.9	247.5	1.034	**-0.50**	0.3	0.4	0.024	**-0.22**
MCH-Pg	1	31.7	31.5	63.2	68.6	0.113	**-1.55**	0.2	0.3	0.020	**-0.27**
MCHC-g/dl	1	27.6	27.4	55	54.9	0.203	**0.01**	0.2	0.3	0.016	**-0.34**
Plt. x10^3/µl	1	200	198	398	360	3.217	**0.34**	2	10	0.536	**-0.83**
Retic %	2	13	12.5	25.5	60.5	1.061	**-1.02**	0.5	2	0.111	**-0.78**

P.S . Assesment

		YOUR REPORT	CONSENSUS REPORT
DLC%	3	Nrbcs=2 , Poly=60 L=32, E=6, Mono/Promono=0 , B1=0 P.M.=0, Mye=0, Meta=0, Other=Microspherocytes, Schistocytes	Poly: 49 – 60, Lympho: 30 – 41, Mono: 2 - 4, Eosino: 2.25 - 6, Myelo/Meta/Promyelo/Blast/Baso: 0-5
RBC Morphology	3	Anisopoikilocytosis with normocytes, spherocyes, microspherocytes,, polychromatophilic RBCs, and a few schistocytes	RBCs show moderate Anisopoikilocytosis with some Macrocytic and Hypochromic cells. There is a marked increase in Polychromatophilic cells. Schistocytes, Micro-Spherocytes, and macro-ovalocytes are noted.
Diagnosis	3	Hemolytic anemia, possibly Heriditary Spherocytosis	Autoimmune Hemolytic Anemia

COMBINED DATA VALUES OF TOTAL PARTICIPANTS

Test parameters	S.No.	Total participants covered in the current dist. 163--P	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	414	411	82.48	88.81	6.57	1.46	10.95	9.73
RBC $x10^6$/µl	1	414	414	86.47	89.13	5.31	5.07	8.22	5.8
Hb g/dl	1	414	414	91.55	89.37	4.83	5.31	3.62	5.32
HCT%	1	414	412	94.9	90.05	3.4	3.64	1.7	6.31
MCV-fl	1	414	414	95.89	89.86	3.14	4.35	0.97	5.79
MCH-Pg	1	414	412	89.32	89.81	4.61	4.37	6.07	5.82
MCHC-g/dl	1	414	414	92.75	85.75	3.38	4.35	3.87	9.9
Plt. $x10^3$/µl	1	414	414	87.68	89.61	2.9	5.8	9.42	4.59
ReticCount%	2	414	80	97.5	90	1.25	2.5	1.25	7.50
PS Assessment	3	414	72	Satisfactory :95.66%, Borderline Sat. :2.41%, Unsatisfactory :1.93%					

*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,

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