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. : 1807 **Distribution No.:** 164-E **Month/Year:** June/2024

Instrument ID: ZY BIO Z3 **Model Name.:** ZY BIO Z3 **Serial No.:** EZY21000Z3200803211

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: 05-08-2024 [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	35.56	35.2	70.76	28.25	0.639	**1.98**	0.36	0.3	0.021	**0.15**
RBC x10^6/µl	1	4.8	4.78	9.58	9.7	0.011	**-0.40**	0.02	0.04	0.003	**-0.39**
Hb g/dl	1	14.2	14.1	28.3	27.6	0.029	**0.87**	0.1	0.1	0.008	**0.00**
HCT%	1	44.3	44.2	88.5	86.85	0.235	**0.24**	0.1	0.4	0.025	**-0.58**
MCV-fl	1	92.29	92	184.29	178.8	0.448	**0.47**	0.29	0.3	0.023	**-0.03**
MCH-Pg	1	29.58	29.1	58.68	56.9	0.082	**0.83**	0.48	0.3	0.013	**0.61**
MCHC-g/dl	1	32.05	32	64.05	63.5	0.181	**0.11**	0.05	0.3	0.022	**-0.67**
Plt. x10^3/µl	1	92	91	183	175	2.475	**0.11**	1	5	0.342	**-0.67**
Retic %	2	9.6	9.5	19.1	21.6	0.244	**-0.36**	0.1	0.7	0.047	**-0.62**

P.S . Assesment

YOUR REPORT			CONSENSUS REPORT
DLC%	3	Nrbcs=08 , Poly=52 L=32, E=04, Mono/Promono=12 , B1=00 P.M.=00, Mye=00, Meta=00, Other=00	Poly: 53-64, Lympho: 28-38, Eosino: 1-3, Mono: 2-5, blast/Promyelo/Myelo/Meta: 0-5
RBC Morphology	3	Microcytic hypochromic RBCs Sever Anisopoikilocytosis see. Few tear drop cells++ and pencil cell+ noted Target cells++, Halmet cell + Advice : iron study followed by Hb HPLC F THALASEMIA.	Predominantly: Microcytic, Hypochromic, Moderate: Anisopoikilocytosis Mild:Target cells , Tear drop cells
Diagnosis	3	High suspicious Thalasemia	Thalassemia Hemoglobinopathy

COMBINED DATA VALUES OF TOTAL PARTICIPANTS

Test parameters	S.No.	Total participants covered in the current dist. 164--E	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	329	325	84	85.85	3.69	6.46	12.310	7.69
RBC $x10^6$/µl	1	329	329	87.54	92.1	7.9	3.95	4.56	3.95
Hb g/dl	1	329	329	88.15	82.37	5.47	8.81	6.38	8.82
HCT%	1	329	326	95.09	90.18	2.45	5.21	2.46	4.61
MCV-fl	1	329	325	91.38	94.46	5.54	2.15	3.08	3.39
MCH-Pg	1	329	325	88.31	93.23	5.54	4	6.15	2.77
MCHC-g/dl	1	329	325	92.92	92.62	4.31	2.77	2.77	4.61
Plt. $x10^3$/µl	1	329	327	92.97	88.38	3.06	5.2	3.97	6.42
ReticCount%	2	329	289	87.89	95.5	10.03	2.42	2.08	2.08
PS Assessment	3	329	290	Satisfactory :95.75%, Borderline Sat. :1.82%, Unsatisfactory :2.43%					

*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,

Dr. Manoranjan Mahapatra (Prof. & Head)
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