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. : 726 **Distribution No.:** 149-B **Month/Year:** November/2019

Instrument ID: HORIBA PENTA XLR--607XLR7436

Name & Contact No. of PT Co-ordinator: Dr. Renu Saxena (Prof & Head), Hematology, AIIMS, Delhi, Tel: 9013085730 , E-Mail : accuracy2000@gmail.com

Date of issue & status of the report: 12-12-2019[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 $x10^3/\mu l$	1	5	4.7	9.7	8.9	0.0230	**1.17**	0.3	0.1	0.0050	2.51
RBC $x10^6/\mu l$	1	3.98	3.63	7.61	8.26	0.0070	-2.95	0.35	0.04	0.0010	10.62
Hb g/dl	1	13.9	13.3	27.2	27.4	0.0240	**-0.30**	0.6	0.1	0.0060	3.37
HCT%	1	33.2	30.6	63.8	83	0.1870	-2.71	2.6	0.4	0.0200	7.42
MCV-fl	1	84	83	167	199.8	0.4020	-2.43	1	0.2	0.0160	2.51
MCH-Pg	1	38.3	33.5	71.8	66.6	0.0540	**3.34**	4.8	0.2	0.0160	20.68
MCHC-g/dl	1	45.4	40.1	85.5	66.2	0.1580	**3.62**	5.3	0.2	0.0100	17.20
Plt. $x10^3/\mu l$	1	178	156	334	387	2.02	**-1.70**	22	5	0.27	3.28
Retic %	2	2.5	2.3	4.8	9	0.21	**-0.64**	0.2	0.25	0.02	-0.17

P.S . Assesment

		YOUR REPORT	CONSENSUS REPORT
DLC%	3	Nrbcs=1 , Poly=4 L=3, E=0, Mono/Promono=8 , B1=83 P.M.=, Mye=1, Meta=, Other=	Blast: 80-90, Poly: 5-7, Lymph: 2-7, Eo/Mono/Pro/My/Meta: 0-4
RBC Morphology	3		Predominantly: Normocytic Normochromic. Moderate: Anisocytosis. Mild: Microcytic
Diagnosis	3	ACUTE LEUKEMIA- AML	Acute Leukemia (myeloid lineage)

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COMBINED DATA VALUES OF TOTAL PARTICIPANTS

Test parameters	S.No.	Total participants covered in the current dist.	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	450	388	88.92	90.72	6.96	1.29	3.61	7.47
RBC $x10^6/\mu l$	1	450	388	91.49	88.4	4.38	4.64	3.61	5.93
Hb g/dl	1	450	388	90.21	89.18	4.64	4.9	4.64	5.41
HCT%	1	450	388	97.68	92.01	1.8	3.09	0	4.12
MCV-fl	1	450	388	95.88	84.54	2.58	10.31	0.77	4.38
MCH-Pg	1	450	388	87.89	90.98	5.67	3.61	5.41	4.38
MCHC-g/dl	1	450	388	95.88	89.95	2.32	4.38	1.03	4.64
Plt. $x10^3/\mu l$	1	450	388	92.53	86.86	5.15	6.19	1.8	6.44
ReticCount%	2	450	305	92.46	83.28	3.61	2.62	3.28	15.74
PS Assessment	3	450	363	Acceptable:94.9%,Warning Signal:2.7%,Unacceptable :2.4%					

Comments:

1). Among Lab (EQA) : CBC result for RBC, MCH & MCHC unacceptable, please check calibration/human error., PS morph not reported

2). Within Lab (IQA) : Difference for most of the CBC results unacceptable, check precision.

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.

Report authorized by,

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