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. : 644 **Distribution No.:** 160-B **Month/Year:** May/2023

Instrument ID: Tulip Councell-21 M10011851026

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

Date of issue & status of the report: 06-07-2023[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	4.78	4.78	9.56	6.8	0.030	3.38	0	0.09	0.006	-0.93
RBC x10^6/µl	1	4.51	4.44	8.95	8.6	0.006	1.97	0.07	0.03	0.002	0.90
Hb g/dl	1	11.5	11.3	22.8	23.9	0.019	-2.12	0.2	0.1	0.006	1.35
HCT%	1	40.5	39.9	80.4	76.2	0.157	0.91	0.6	0.3	0.021	0.81
MCV-fl	1	89.9	89.8	179.7	177.4	0.312	0.26	0.1	0.2	0.021	-0.34
MCH-Pg	1	25.8	25	50.8	55.6	0.052	-3.41	0.8	0.2	0.012	4.05
MCHC-g/dl	1	28.7	27.8	56.5	62.3	0.135	-1.53	0.9	0.3	0.012	2.02
Plt. x10^3/µl	1	121	111	232	256	1.624	-0.44	10	5	0.289	0.96
Retic %	2	9	8.8	17.8	19.6	0.231	-0.25	0.2	0.5	0.023	-0.51

P.S . Assesment

		YOUR REPORT	CONSENSUS REPORT
DLC%	3	Nrbcs=6 , Poly=50 L=41, E=3, Mono/Promono=6 , B1= P.M.=, Mye=, Meta=, Other=	Poly: 42-53, Lympho: 33-45, Mono: 1-4, Myelo: 1-4, Meta: 1-4, Eos: 1-2, nRBC/Blast/Baso/Promyelo: 0-5
RBC Morphology	3	Normocytic Normochromic	Predominantly: Normocytic/ Normochromic, Moderate: Anisocytosis, Microcytic, Poikilocytosis, tear drop cells
Diagnosis	3	Pancytopaenia	MDS/Pancytopenia

COMBINED DATA VALUES OF TOTAL PARTICIPANTS

Test parameters	S.No.	Total participants covered in the current dist. 160--B	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	373	369	83.74	90.51	4.34	3.25	11.92	6.24
RBC $x10^6/\mu l$	1	373	373	86.86	90.08	6.17	4.56	6.97	5.36
Hb g/dl	1	373	373	85.52	45.58	8.58	0.54	5.9	53.88
HCT%	1	373	370	90.81	91.89	7.03	4.05	2.16	4.06
MCV-fl	1	373	369	90.24	85.09	5.15	9.49	4.61	5.42
MCH-Pg	1	373	369	86.45	94.31	7.59	3.25	5.96	2.44
MCHC-g/dl	1	373	369	91.6	90.51	5.96	3.25	2.44	6.24
Plt. $x10^3/\mu l$	1	373	370	94.05	87.57	5.41	5.41	0.54	7.02
ReticCount%	2	373	346	93.64	89.6	4.91	8.09	1.45	2.31
PS Assessment	3	373	314	Satisfactory :78.45%, Borderline Sat. :12.12%, Unsatisfactory :9.43%					

*Comments:

1). Among Lab (EQA) : CBC result for *WBC & MCH* unacceptable, please check calibration/human error.Remaining results acceptable.

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