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. : 2487 **Distribution No.:** 162-E **Month/Year:** December/2023

Instrument ID: Medonic **Model Name.:** Medonic **Serial No.:** M-20

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: 14-02-2024[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	4.9	4.7	9.6	9.22	0.074	**0.13**	0.2	0.1	0.010	**0.67**
RBC x10^6/µl	1	4.23	4.05	8.28	8.44	0.012	**-0.53**	0.18	0.06	0.004	**1.80**
Hb g/dl	1	13	12.6	25.6	26.75	0.037	**-1.41**	0.4	0.1	0.011	**2.02**
HCT%	1	40.6	39	79.6	84.1	0.201	**-0.85**	1.6	0.5	0.042	**1.48**
MCV-fl	1	96.1	96.1	192.2	198.45	0.346	**-0.73**	0	0.3	0.026	**-0.81**
MCH-Pg	1	31.2	30.7	61.9	63.2	0.080	**-0.67**	0.5	0.3	0.025	**0.54**
MCHC-g/dl	1	32.5	32	64.5	63.4	0.138	**0.32**	0.5	0.3	0.025	**0.51**
Plt. x10^3/µl	1	183	170	353	419	2.265	**-1.05**	13	6	0.421	**1.05**
Retic %	2	9	8.5	17.5	20.6	0.396	**-0.27**	0.5	0.7	0.045	**-0.39**

P.S . Assesment

		YOUR REPORT	CONSENSUS REPORT
DLC%	3	Nrbcs=0 , Poly=87 L=3, E=2, Mono/Promono=1 , B1=0 P.M.=0, Mye=2, Meta=5, Other=toxic granules	Poly: 66 – 79, Myelo: 4 - 11, Meta: 4 – 10, Lympho: 4 – 8, Eos: 1- 2, Mono: 1 - 2, nRBC/ Baso/ Promyelo, Blast : 0 – 5
RBC Morphology	3	normocytic normochromic, macrocytic	Predominantly: Normocytic/Normochromic; Moderate: Anisocytosis, Mild: Macrocytes
Diagnosis	3	leukemoid reactions / CML	Chronic Myeloid Leukemia

COMBINED DATA VALUES OF TOTAL PARTICIPANTS

Test parameters	S.No.	Total participants covered in the current dist. 162--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	284	265	83.77	87.55	8.3	4.53	7.93	7.92
RBC $x10^6$/µl	1	284	284	82.39	79.23	4.93	4.93	12.68	15.84
Hb g/dl	1	284	284	80.63	85.21	7.75	3.17	11.62	11.62
HCT%	1	284	265	91.7	87.92	4.15	3.02	4.15	9.06
MCV-fl	1	284	264	89.39	90.15	5.68	3.03	4.93	6.82
MCH-Pg	1	284	264	88.26	86.74	7.58	4.55	4.16	8.71
MCHC-g/dl	1	284	264	90.15	87.88	5.3	4.55	4.55	7.57
Plt. $x10^3$/µl	1	284	265	93.58	87.92	4.53	6.79	1.89	5.29
ReticCount%	2	284	251	94.42	81.67	3.98	10.76	1.6	7.57
PS Assessment	3	284	253	Satisfactory :89.45%, Borderline Sat. :9.15%, Unsatisfactory :1.40%					

*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)
PT Co-ordinator: ISHTM-AIIMS-EQAP
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