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. : 3543 **Distribution No.:** 159-J **Month/Year:** March/2023

Instrument ID: MEDONIC M-SERIES M32 112438

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

Date of issue & status of the report: 01-06-2023[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	5.6	5.2	10.8	10.36	0.038	0.37	0.4	0.1	0.008	2.28
RBC x10^6/µl	1	4.2	4.19	8.39	8.99	0.011	-2.13	0.01	0.04	0.003	-0.67
Hb g/dl	1	14.2	14	28.2	29.3	0.029	-1.48	0.2	0.1	0.008	0.67
HCT%	1	39.1	38.6	77.7	88.55	0.234	-1.74	0.5	0.4	0.027	0.22
MCV-fl	1	92.3	92	184.3	196.05	0.390	-1.00	0.3	0.3	0.023	0.00
MCH-Pg	1	33.7	33.4	67.1	65.5	0.076	0.80	0.3	0.3	0.018	0.00
MCHC-g/dl	1	36.4	36.3	72.7	65.9	0.163	1.54	0.1	0.3	0.020	-0.67
Plt. x10^3/µl	1	106	104	210	255	1.285	-1.24	2	4	0.284	-0.45
Retic %	2										

P.S . Assesment

		YOUR REPORT	CONSENSUS REPORT
DLC%	3	Nrbcs= , Poly= L=, E=, Mono/Promono= , B1= P.M.=, Mye=, Meta=, Other=	Poly: 25 - 45, Myelo: 15 - 31, Meta: 10- 20, Lympho: 2- 7, Eosino: 1-4, Promyelo: 2-7, Blast: 1-4, Mono: 1 - 3, nRBC/Baso: 0-5
RBC Morphology	3		Predominantly: Normocytic/Normochromic; Moderate: Anisocytosis, hypochromia, Microcytosis; Mild: Macrocytosis, Poikilocytosis
Diagnosis	3		Chronic Myeloid Leukemia (Chronic Phase)

COMBINED DATA VALUES OF TOTAL PARTICIPANTS

Test parameters	S.No.	Total participants covered in the current dist. 159--J	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	308	302	83.44	86.75	2.98	5.96	13.58	7.29
RBC $x10^6/\mu l$	1	308	308	87.66	90.26	5.52	2.92	6.82	6.82
Hb g/dl	1	308	308	81.49	83.44	5.52	6.49	12.99	10.07
HCT%	1	308	304	91.12	89.8	5.92	3.62	2.96	6.58
MCV-fl	1	308	304	95.72	92.43	1.97	2.96	2.31	4.61
MCH-Pg	1	308	304	88.82	89.14	6.58	2.63	4.6	8.23
MCHC-g/dl	1	308	304	93.42	89.14	3.29	6.58	3.29	4.28
Plt. $x10^3/\mu l$	1	308	304	94.41	91.12	3.29	6.25	2.3	2.63
ReticCount%	2	308	268	94.4	92.16	4.85	3.36	0.75	4.48
PS Assessment	3	308	268	Satisfactory :95.46%, Borderline Sat. :2.27%, Unsatisfactory :2.27%					

Comments:

1). Among Lab (EQA) : PS Diagnosis not reported, remaining 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. Seema Tyagi (Prof.)
PT Co-ordinator: ISHTM-AIIMS-EQAP
Department of Hematology, AIIMS, New Delhi

----------End Of Report----------

RCA

PROBLEM : The value of some analytes are existing outside the normal limits.

Why 1 : Low stability of the reagent.

Why 2 : errors from reusable glasswares.

Why 3 : Manul errors occurs in pipetting of reagents and samples.

Why 4 : Errors from dilution of QC material.

Why 5 : Temperature variation of refrigerator due to the interruption of current supply.

Medical Officer
Family Health Centre
Panavally 688526

Panavally
19/07/2023

MEDICAL OFFICER
FHC PANAVALLY

CAPA

DEFINE THE PROBLEM

In performing external quality programme, the value of some analytes are existing outside the normal limits.

IDENTIFY THE ROOT CAUSE

- Low stability of the reagent .
- Errors from reusable glasswares.
- Manual error occures in pipetting.
- Temperature variation of refrigerator due to interruption of current supply.

RECOMMENED AND IMPLEMENT SOLUTIONS

- New reagent kits are implemented.
- Correct cleaning procedure are given to the cleaning staff regarding cleaning of reusable glasswares.
- Intermittent wiping of pipettes with tissue paper are promoted.
- Solar panel is implemented in the FHC for the uniflow of current to the laboratory.

Panavally
19/07/2023

Medical Officer
Family Health Centre
Panavally 688526

MEDICAL OFFICER
FHC PANAVALLY

FROM,

Medical Officer
FHC Panavally

To,

The Co-ordinator
NABL- MELTS Programme

Dear sir/Madam,

Due to the unavailability of a medical pathologist in our instituition, peripheral smear examination can't be done in our laboratory. So for the EQAP Programme, only the sample for complete blood count examination is analysed and reported to AIIMS Delhi . Therefore , I request you to kindly do the review and help us to complete the programme.

Panavally
09.08.2023

Your's faithfully

Dr.Rubin Joseph Pakalomattom
M O Panavally

Medical Officer
Family Health Centre
Panavally 688526

NB ; Site and the phone number is not responding after uploading the data requested. Please send your current phone number.