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. : 3109 **Distribution No.:** 161-H **Month/Year:** September/2023

Instrument ID: MEK - 1301, SN - 00307

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: 27-12-2023[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	5.38	5.22	10.6	10.35	0.063	0.23	0.16	0.1	0.010	0.58
RBC x10^6/µl	1	4.02	3.99	8.01	7.72	0.013	1.40	0.03	0.03	0.003	0.00
Hb g/dl	1	10.93	10.89	21.82	23	0.031	-2.27	0.04	0.1	0.010	-0.81
HCT%	1	36	35.7	71.7	71.4	0.222	0.07	0.3	0.3	0.031	0.00
MCV-fl	1	89.6	89.5	179.1	184.4	0.406	-0.68	0.1	0.3	0.034	-0.54
MCH-Pg	1	27.4	27.1	54.5	59.3	0.087	-3.41	0.3	0.3	0.023	0.00
MCHC-g/dl	1	30.6	30.3	60.9	64.4	0.174	-1.05	0.3	0.3	0.029	0.00
Plt. x10^3/µl	1	124	121	245	236	1.375	0.38	3	3	0.328	0.00
Retic %	2										

P.S . Assesment

YOUR REPORT			CONSENSUS REPORT
DLC%	3	Nrbcs= , Poly= L=, E=, Mono/Promono= , Bl= P.M =, Mye=, Meta=, Other=	Poly: 43 - 54, Lympho: 35- 45, Mono: 2 - 4, Eosino: 1-2, Plasma Cells: 00, nRBC/Blast, Promyelo, Myelo, Meta, Baso: 0-5
RBC Morphology	3		RBC- Marked Rouleaux formation with Predominantly Normocytic Normochromic red blood cells.
Diagnosis	3		Plasma Cell Leukemia

COMBINED DATA VALUES OF TOTAL PARTICIPANTS

Test parameters	S.No.	Total participants covered in the current dist. 161--H	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	148	146	86.3	82.19	4.79	9.59	8.91	8.22
RBC x10^6/µl	1	148	148	84.46	94.59	6.76	3.38	8.78	2.03
Hb g/dl	1	148	148	82.43	41.89	5.41	51.35	12.16	6.76
HCT%	1	148	147	93.2	94.56	4.08	4.08	2.72	1.36
MCV-fl	1	148	147	94.56	93.2	4.76	2.04	0.68	4.76
MCH-Pg	1	148	147	86.39	90.48	8.16	5.44	5.45	4.08
MCHC-g/dl	1	148	147	95.24	94.56	4.08	2.72	0.68	2.72
Plt. x10^3/µl	1	148	147	91.16	92.52	5.44	3.4	3.4	4.08
ReticCount%	2	148	116	99.14	93.97	0.86	3.45	0	2.58
PS Assessment	3	148	108	Satisfactory :90.55%, Borderline Sat. :5.40%, Unsatisfactory :4.05%					

Comments:

1). Among Lab (EQA) : CBC result for MCH unacceptable, may be due to random/human error.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,

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End Of Report