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. : 3529 **Distribution No.:** 161-J **Month/Year:** October/2023

Instrument ID: 909YAXH02625

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: 10-01-2024[provisional].

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	4.38	4.2	8.58	12.77	0.038	**-4.71**	0.18	0.1	0.010	**0.72**
RBC x10^6/µl	1	4.55	4.19	8.74	8.72	0.011	**0.07**	0.36	0.05	0.003	**6.97**
Hb g/dl	1	10.9	10.9	21.8	22	0.024	**-0.34**	0	0.1	0.008	**-1.35**
HCT%	1	37.4	35.6	73	69.8	0.156	**0.81**	1.8	0.4	0.027	**3.15**
MCV-fl	1	85	82.2	167.2	160	0.272	**1.14**	2.8	0.3	0.025	**5.62**
MCH-Pg	1	26.1	23.9	50	50.45	0.063	**-0.32**	2.2	0.2	0.016	**8.99**
MCHC-g/dl	1	30.7	29.1	59.8	63.3	0.146	**-0.94**	1.6	0.3	0.022	**3.51**
Plt. x10^3/µl	1	209	182	391	397	1.557	**-0.16**	27	7	0.440	**3.37**
Retic %	2	30	25	55	31	0.570	**1.65**	5	1	0.066	**3.60**

P.S . Assesment

		YOUR REPORT	CONSENSUS REPORT
DLC%	3	Nrbcs=2 , Poly=57 L=3, E=2, Mono/Promono=1 , B1=9 P.M.=9, Mye=10, Meta=5, Other=	Poly: 43 – 56, Myelo: 14 - 28, Meta: 8– 16, Promyelo: 2-6, Lympho: 2– 5, Blast: 1-3, Eosino: 1-2, Mono: 1-2, nRBC/, Baso: 0-5
RBC Morphology	3	NORMOCYTIC NORMOCHROMIC	Predominantly: Normocytic/Normochromic; Moderate: Anisocytosis, Hypochromic, Mild: Poikilocytosis
Diagnosis	3	CHRONIC MYELOID LEUKEMIA-CHRONIC PHASE	Chronic Myeloid Leukemia (Chronic Phase)

COMBINED DATA VALUES OF TOTAL PARTICIPANTS

Test parameters	S.No.	Total participants covered in the current dist. 161--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 $x10^3$/µl	1	277	273	82.05	89.74	5.86	4.03	12.09	6.23
RBC $x10^6$/µl	1	277	277	88.09	90.25	6.14	2.89	5.77	6.86
Hb g/dl	1	277	277	84.12	90.25	6.14	2.89	9.74	6.86
HCT%	1	277	273	88.64	88.64	5.49	4.03	5.87	7.33
MCV-fl	1	277	273	87.18	91.58	6.96	2.56	5.86	5.86
MCH-Pg	1	277	272	83.82	93.01	7.72	1.1	8.46	5.89
MCHC-g/dl	1	277	273	90.48	89.01	4.4	4.03	5.12	6.96
Plt. $x10^3$/µl	1	277	273	91.21	92.31	5.49	3.66	3.3	4.03
ReticCount%	2	277	237	96.62	91.14	2.95	3.38	0.43	5.48
PS Assessment	3	277	232	Satisfactory :95.68%, Borderline Sat. :2.88%, Unsatisfactory :1.44%					

*Comments:

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

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.

Note 10: Reports are kept confidential.

Report authorized by,

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