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. : 1573 **Distribution No.:** 160-C **Month/Year:** May/2023

Instrument ID: MINDRAY BC2800

Name & Contact No. of PT Co-ordinator: Dr. Seema Tyagi (Prof.), Hematology, AIIMS, Delhi,
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Date of issue & status of the report: 11-07-2023[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	10.5	10.5	21	17.4	0.112	**1.14**	0	0.18	0.010	**-1.07**
RBC x10^6/µl	1	4.04	3.98	8.02	8.58	0.008	**-2.36**	0.06	0.04	0.002	**0.54**
Hb g/dl	1	11.7	11.6	23.3	25.1	0.026	**-2.43**	0.1	0.1	0.007	**0.00**
HCT%	1	37.1	36.3	73.4	75.3	0.191	**-0.32**	0.8	0.3	0.022	**1.35**
MCV-fl	1	91.9	91.4	183.3	175.3	0.389	**0.68**	0.5	0.3	0.018	**0.67**
MCH-Pg	1	29.1	28.9	58	58.6	0.077	**-0.32**	0.2	0.2	0.014	**0.00**
MCHC-g/dl	1	31.9	31.5	63.4	66.5	0.168	**-0.61**	0.4	0.3	0.016	**0.34**
Plt. x10^3/µl	1	118	94	212	200	2.329	**0.17**	24	6	0.342	**3.04**
Retic %	2	1	1	2	18.6	0.269	**-2.13**	0	0.5	0.031	**-0.84**

P.S . Assesment

		YOUR REPORT	CONSENSUS REPORT
DLC%	3	Nrbcs= , Poly= L=30, E=, Mono/Promono= , B1=20 P.M.=, Mye=, Meta=, Other=50	Blast: 60-87, Lympho: 9-23, Poly: 1-4, nRBC/ Mono/Eos/Baso/Myelo/Meta/ Promyelo: 0-5
RBC Morphology	3	MICROCYTIC HYPOCHROMICWITH ANISOPOIKILOCYTOSIS	Predominantly: Normocytic/ Normochromic, Moderate: Anisocytosis, Microcytic
Diagnosis	3	CHRONIC LYMPHOCYTIC LEUKEMIA	Acute Leukemia (AL)

COMBINED DATA VALUES OF TOTAL PARTICIPANTS

Test parameters	S.No.	Total participants covered in the current dist. 160--C	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	366	362	80.11	87.02	9.12	4.97	10.77	8.01
RBC $x10^6/\mu l$	1	366	366	88.52	92.08	5.46	4.37	6.02	3.55
Hb g/dl	1	366	366	84.43	89.34	7.65	5.74	7.92	4.92
HCT%	1	366	363	94.21	95.04	4.13	1.65	1.66	3.31
MCV-fl	1	366	363	93.11	88.43	4.68	6.89	2.21	4.68
MCH-Pg	1	366	363	81.54	90.91	7.44	4.41	11.02	4.68
MCHC-g/dl	1	366	363	93.94	86.5	3.58	3.86	2.48	9.64
Plt. $x10^3/\mu l$	1	366	363	94.21	87.88	4.13	6.89	1.66	5.23
ReticCount%	2	366	342	93.27	86.84	4.09	10.23	2.64	2.93
PS Assessment	3	366	339	Satisfactory :83.62%, Borderline Sat. :9.83%, Unsatisfactory :6.55%					

*Comments:

1). Among Lab (EQA) : PS Diagnosis wrongly reported, remaining results acceptable

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