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. : 5663 **Distribution No.:** 159-N **Month/Year:** April/2023

Instrument ID: BC 5150

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: 14-06-2023[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	3.87	3.83	7.7	8.1	0.039	**-0.34**	0.04	0.1	0.007	**-0.48**
RBC x10^6/µl	1	5.48	5.45	10.93	10.7	0.013	**0.62**	0.03	0.05	0.003	**-0.34**
Hb g/dl	1	12.7	12.5	25.2	25.2	0.026	**0.00**	0.2	0.1	0.007	**0.67**
HCT%	1	42.5	42.5	85	79.8	0.155	**1.11**	0	0.4	0.025	**-0.90**
MCV-fl	1	78.1	77.4	155.5	149.4	0.206	**0.96**	0.7	0.2	0.017	**1.69**
MCH-Pg	1	23.2	22.7	45.9	46.8	0.059	**-0.56**	0.5	0.2	0.012	**2.02**
MCHC-g/dl	1	29.8	29.4	59.2	62.5	0.120	**-0.88**	0.4	0.3	0.018	**0.34**
Plt. x10^3/µl	1	206	173	379	371	1.599	**0.17**	33	7	0.392	**3.90**
Retic %	2	20	18	38	15.65	0.249	**2.93**	2	0.5	0.034	**2.53**

P.S . Assesment

		YOUR REPORT	CONSENSUS REPORT
DLC%	3	Nrbcs=0 , Poly=42 L=6, E=3, Mono/Promono=1 , B1= P.M.=2, Mye=19, Meta=20, Other=8 Band form	Poly: 44 – 60, Myelo: 10 - 22, Meta: 7– 16, Lympho: 2– 6, Promyelo: 2-6, Eosino: 1-4, Blast: 1-4, Mono: 1 – 3, nRBC/Baso: 0-5
RBC Morphology	3	normocytic normochromicrbc mixed with fewmicrocytic hypochromic	Predominantly: Normocytic/Normochromic; Moderate: Anisocytosis, hypochromia, Microcytosis; Mild: Macrocytosis, Poikilocytosis
Diagnosis	3	chronic myeloid leukemia	Chronic Myeloid Leukemia (Chronic Phase)

COMBINED DATA VALUES OF TOTAL PARTICIPANTS

Test parameters	S.No.	Total participants covered in the current dist. 159--N	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	363	358	88.55	86.31	3.07	6.42	8.38	7.27
RBC $x10^6$/µl	1	363	363	87.6	87.05	6.89	4.96	5.51	7.99
Hb g/dl	1	363	363	90.63	85.12	4.96	5.23	4.41	9.65
HCT%	1	363	359	94.71	87.47	4.46	4.74	0.83	7.79
MCV-fl	1	363	359	93.04	88.3	5.29	6.69	1.67	5.01
MCH-Pg	1	363	359	86.91	93.31	8.08	1.39	5.01	5.3
MCHC-g/dl	1	363	358	93.85	87.43	5.31	5.59	0.84	6.98
Plt. $x10^3$/µl	1	363	359	92.76	92.48	4.74	3.9	2.5	3.62
ReticCount%	2	363	272	93.38	84.93	4.78	8.82	1.84	6.25
PS Assessment	3	363	266	Satisfactory :93.95%, Borderline Sat. :2.20%, Unsatisfactory :3.85%					

*Comments:

1). Among Lab (EQA) : 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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