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

NABL Certificate No. PC - 1002

Duration of stability testing - minimum upto 8 days at ambient temp. after dispatch of specimens

EQAP CODE No. : 3027 **Distribution No.:** 154-G **Month/Year:** December/2021

Instrument ID: yumizen 550

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: 06-03-2022[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	1.28	0.96	2.24	11.46	0.0430	**-10.86**	0.32	0.1	0.0090	**1.98**
RBC x10^6/µl	1	4.33	3.94	8.27	8.66	0.0110	**-1.62**	0.39	0.04	0.0030	**9.44**
Hb g/dl	1	13.1	13	26.1	25.5	0.0270	**0.90**	0.1	0.1	0.0090	**0.00**
HCT%	1	37.1	35.9	73	81.6	0.1940	**-1.87**	1.2	0.4	0.0290	**2.16**
MCV-fl	1	85.7	83.5	169.2	188.4	0.3850	**-2.04**	2.2	0.3	0.0290	**4.27**
MCH-Pg	1	33.2	31	64.2	59	0.0980	**2.55**	2.2	0.2	0.0200	**6.74**
MCHC-g/dl	1	39.7	38	77.7	62.6	0.1560	**4.12**	1.7	0.2	0.0210	**5.06**
Plt. x10^3/µl	1	147	140	287	311	1.63	**-0.64**	7	5	0.46	**0.39**
Retic %	2	8.2	8	16.2	13	0.27	**0.54**	0.2	0.5	0.03	**-0.51**

P.S . Assesment

YOUR REPORT			CONSENSUS REPORT
DLC%	3	Nrbcs=0.00 , Poly=57.00 L=3.00, E=2.00, Mono/Promono=2.00 , B1=5.00 P.M.=2.00, Mye=4.00, Meta=12.00, Other=0.00	Poly: 40 – 60, Myelo: 11 – 22, Meta: 6 – 14, Blast/nRBC: 1 – 15, Promyelo/Eos/Baso/Lympho/Mono: 0 – 5
RBC Morphology	3	Normocytic Normochromic	Predominantly: Microcytosis, Anisocytosis; Moderate: Hypochromia, Poikilocytosis; Mild: Normocytic/Normochromic, Macrocytosis, Tear drop cells
Diagnosis	3		Chronic Myeloid Leukemia (CML)

COMBINED DATA VALUES OF TOTAL PARTICIPANTS

Test parameters	S.No.	Total participants covered in the current dist. 154--G	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	216	215	82.79	96.28	7.91	1.4	9.3	2.32
RBC $x10^6$/µl	1	216	216	89.35	93.52	6.48	2.31	4.17	4.17
Hb g/dl	1	216	216	93.06	93.06	5.09	4.17	1.85	2.77
HCT%	1	216	215	94.88	90.7	3.26	5.58	1.86	3.72
MCV-fl	1	216	215	97.21	93.95	1.86	2.33	0.93	3.72
MCH-Pg	1	216	215	91.63	94.88	6.51	2.79	1.86	2.33
MCHC-g/dl	1	216	215	94.42	88.84	4.19	6.98	1.39	4.18
Plt. $x10^3$/µl	1	216	215	92.56	92.56	4.65	4.65	2.79	2.79
ReticCount%	2	216	216	90.28	91.67	9.26	6.02	0.46	2.31
PS Assessment	3	216	204	Satisfactory :90.37%, Borderline Sat. :8.71%, Unsatisfactory :0.91%					

*Comments:

1). Among Lab (EQA) : 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.

Report authorized by,

Dr. Seema Tyagi (Prof.)
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