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.:** 162-J **Month/Year:** January/2024

Instrument ID: HORIBA **Model Name.:** YUMIZEN H550 **Serial No.:** 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: 21-03-2024[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	1.69	1.53	3.22	10.41	0.030	**-10.21**	0.16	0.1	0.006	**0.62**
RBC x10^6/µl	1	4.88	4.79	9.67	9.51	0.011	**0.55**	0.09	0.05	0.003	**0.90**
Hb g/dl	1	12.7	12.7	25.4	24.79	0.022	**1.19**	0	0.1	0.008	**-0.71**
HCT%	1	39.2	38.2	77.4	78.9	0.207	**-0.24**	1	0.4	0.028	**1.35**
MCV-fl	1	80.2	79.9	160.1	168.4	0.394	**-0.67**	0.3	0.3	0.021	**0.00**
MCH-Pg	1	26.4	26	52.4	51.9	0.065	**0.30**	0.4	0.3	0.015	**0.45**
MCHC-g/dl	1	33.1	32.4	65.5	62	0.166	**0.69**	0.7	0.3	0.020	**1.66**
Plt. x10^3/µl	1	205	198	403	421	2.119	**-0.36**	7	7	0.417	**0.00**
Retic %	2	18	14	32	22.55	0.336	**1.06**	4	0.7	0.057	**2.78**

P.S . Assesment

YOUR REPORT			CONSENSUS REPORT
DLC%	3	Nrbcs=1 , Poly=76 L=05, E=2, Mono/Promono=01 , B1=02 P.M.=05, Mye=02, Meta=05, Other=Nil	Poly: 65.25 – 78, Lympho: 5– 9, Myelo: 3 - 8, Meta: 2.75 – 6, Eosino: 2-6, Mono: 1-2, Promyelo: 0.5-3, Blast/Baso: 0-5
RBC Morphology	3	NORMOCYTIC NORMOCHROMIC RBCs ADMIXED WITH FEW MICROCYTIC MILD TO MODERATE HYPOCHROMIC RBCs	Predominantly: Normocytic/Normochromic; Moderate: Anisocytosis, Mild: Poikilocytosis, Polychromatophilic, Macrocytes, Tear drop cells
Diagnosis	3	Differential Diagnosis-1) CML- CHRONIC PHASE or 2) Myeloid Leukemoid Reaction	Chronic Myeloid Leukemia (Chronic Phase)

COMBINED DATA VALUES OF TOTAL PARTICIPANTS

Test parameters	S.No.	Total participants covered in the current dist. 162--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	303	300	81	93.33	4.67	1.67	14.33	5
RBC $x10^6$/µl	1	303	303	89.11	89.11	4.95	4.95	5.94	5.94
Hb g/dl	1	303	303	84.49	88.45	6.93	4.62	8.58	6.93
HCT%	1	303	300	97	91	1.67	3.67	1.33	5.33
MCV-fl	1	303	300	97.67	90.33	1	3.33	1.33	6.34
MCH-Pg	1	303	300	89.33	78	6.67	15.33	4	6.67
MCHC-g/dl	1	303	300	96.67	91.67	2.33	4.33	1	4
Plt. $x10^3$/µl	1	303	300	88.67	86.67	9.33	5.67	2	7.66
ReticCount%	2	303	260	95	93.08	3.85	1.92	1.15	5.00
PS Assessment	3	303	252	Satisfactory :80.01%, Borderline Sat. :10.66%, Unsatisfactory :9.33%					

***Comments:**

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

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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