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. : 507 **Distribution No.:** 158-A **Month/Year:** October/2022

Instrument ID: BC6200(TW-03000988)

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: 21-12-2022[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	7.27	6.79	14.06	14.5	0.0300	**-0.51**	0.48	0.1	0.0070	**3.42**
RBC x10^6/µl	1	4.66	4.26	8.92	8.5	0.0070	**2.24**	0.4	0.03	0.0020	**12.48**
Hb g/dl	1	14.2	13.1	27.3	25.1	0.0200	**3.71**	1.1	0.1	0.0070	**13.49**
HCT%	1	47.5	43.6	91.1	79.6	0.1720	**1.98**	3.9	0.3	0.0060	**12.14**
MCV-fl	1	102.3	101.9	204.2	188	0.3400	**1.30**	0.4	0.2	0.0180	**0.67**
MCH-Pg	1	30.6	30.4	61	59.2	0.6740	**1.33**	0.2	0.2	0.0130	**0.00**
MCHC-g/dl	1	29.9	29.8	59.7	62.7	0.1290	**-0.67**	0.1	0.2	0.0150	**-0.45**
Plt. x10^3/µl	1	221	198	419	503	1.50	**-1.95**	23	6	0.31	**3.28**
Retic %	2	10	9	19	15.8	0.26	**0.43**	1	0.4	0.02	**1.01**

P.S . Assesment

		YOUR REPORT	CONSENSUS REPORT
DLC%	3	Nrbcs=0 , Poly=65 L=30, E=2, Mono/Promono=2 , B1=0 P.M.=0, Mye=0, Meta=0, Other=0	Lympho: 37-47, Poly: 44-54, Mono: 2-5, Eosino: 1-5, blast/Promyelo/Myelo/Meta: 0
RBC Morphology	3	Anisopoikilocytosis with microcytic hypochromic showing target cells, transfused RBCs	Predominantly: Normocytic/Normochromic; Moderate: Anisocytosis, Microcytosis, Hypochromia; Mild: Poikilocytosis , Target cells , Sickle shaped cells ,tear drop cells
Diagnosis	3	Hemoglobinopathy ?? thalasemia	Diagnosis- Haemoglobinopathy/Thalassemia

COMBINED DATA VALUES OF TOTAL PARTICIPANTS

Test parameters	S.No.	Total participants covered in the current dist. 158--A	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	362	356	84.55	85.39	4.21	7.3	11.24	7.31
RBC $x10^6$/µl	1	362	362	84.25	90.61	8.56	3.59	7.19	5.8
Hb g/dl	1	362	362	87.85	91.71	4.97	2.49	7.18	5.8
HCT%	1	362	357	98.04	86.27	0.84	6.72	1.12	7.01
MCV-fl	1	362	357	99.44	87.11	0.28	9.52	0.28	3.37
MCH-Pg	1	362	357	87.96	92.44	5.6	2.52	6.44	5.04
MCHC-g/dl	1	362	357	97.2	93	1.12	3.08	1.68	3.92
Plt. $x10^3$/µl	1	362	357	92.16	90.2	5.32	5.88	2.52	3.92
ReticCount%	2	362	340	93.53	93.24	4.12	5	2.35	1.76
PS Assessment	3	362	339	Satisfactory :96.68%, Borderline Sat. :2.76%, Unsatisfactory :0.552%					

*Comments:

1). Among Lab (EQA) : CBC result for HB 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,

Dr. Seema Tyagi (Prof.)
PT Co-ordinator: ISHTM-AIIMS-EQAP
Department of Hematology, AIIMS, New Delhi

----------End Of Report----------