



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.: 448

Distribution No.: 154-B

Month/Year: October/2021

Instrument ID: HORIBA PENTRA ES-60 (901PES15172)

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: 14-02-2022[Final].

CBC and Retic Assessment

Test Parameters	S.No.	Among Lab (Accuracy Testing)						Within Lab (Precision Testing)					
		Your Result 1		Your Results Sum of 2 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			
WBC x10³/μl	1	5	4.9	9.9	9.85	0.0200	0.09	0.1	0.1	0.0060	0.00		
RBC x10 ⁶ /μl	1	4.75	4.71	9.46	9.49	0.0080	-0.12	0.04	0.04	0.0020	0.00		
Hb g/dl	1	14	13.9	27.9	27.3	0.0190	1.01	0.1	0.1	0.0070	0.00		
НСТ%	1	40.3	40.2	80.5	81.6	0.1040	-0.39	0.1	0.4	0.0230	-0.81		
MCV-fl	1	85	85	170	172.6	0.1830	-0.49	0	0.3	0.0210	-0.67		
МСН-Рд	1	29.7	29.2	58.9	57.6	0.0460	0.97	0.5	0.2	0.0140	1.35		
MCHC-g/dl	1	34.8	34.4	69.2	66.9	0.0850	0.98	0.4	0.3	0.0170	0.34		
Plt. x10³/μl	1	126	126	252	273	0.85	-0.79	0	4	0.25	-0.90		
Retic %	2	14	13.5	27.5	17.4	0.25	1.24	0.5	0.48	0.02	0.03		

P.S. Assesment

		YOUR REPORT	CONSENSUS REPORT				
DLC%		Nrbcs=0.00, Poly=56.00 L=31.00, E=4.00, Mono/Promono=9.00, B1=0.00 P.M.=0.00, Mye=0.00, Meta=0.00, Other=	Poly: 55 - 65, Lympho: 28 - 35, Eosin/nRBC: 1 - 5, Blast/Myelo/Promyelo/Baso/Mono: 0 - 5				
RBC Morphology	3	Macrocytic blood picture showing anisoipoikilocytosis with predominant Macro-ovalocytes few tear drop cells occasional cell showing howell-jolly body and occasional polychromatic cell.	Predominantly: Normocytic/Normochromic; Moderate: Anisocytosis, Microcytosis, Hypochromia; Mild: Macrocytosis, Poikilocytosis				
Diagnosis	3	Feature suggestive of Macrocytic (Megaloblast) Anaemia.	Dimorphic Anemia				

COMBINED DATA VALUES OF TOTAL PARTICIPANTS

Test parameters	S.No.	Total participants covered in the current dist.	Total No. responded	% of Labs with Z Score 0-2		% of Labs with Z Score 2-3		% of Labs with Z Score >3	
rest parameters				Among labs	Within lab	Among labs	Within lab	Among labs	Within lab
WBC x10³/μl	1	374	369	84.82	91.6	7.05	2.98	8.13	5.42
RBC x10 ⁶ /µl	1	374	374	88.5	88.5	5.88	5.88	5.62	5.62
Hb g/dl	1	374	374	88.24	92.51	4.81	4.55	6.95	2.94
НСТ%	1	374	368	86.96	91.85	8.42	4.35	4.62	3.8
MCV-fl	1	374	367	91.55	93.19	5.45	3.54	3	3.27
MCH-Pg	1	374	367	89.37	90.46	7.9	5.45	2.73	4.09
MCHC-g/dl	1	374	367	89.1	92.1	6.54	6.27	4.36	1.63
Plt. x10 ³ /μl	1	374	367	94.28	93.46	3.81	4.9	1.91	1.64
ReticCount%	2	374	374	96.79	90.91	2.14	1.34	1.07	7.75
PS Assessment	3	374	332	Satisfactory :97.6%, Borderline Sat. :1.87%, Unsatisfactory :0.53%					

*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 $> \pm 3$: 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 $> \pm 3$ 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.

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

Report authorized by,

Dr. Seema Tyagi (Prof.)

PT Co-ordinator: ISHTM-AIIMS-EQAP

Department of Hematology, AIIMS, New Delhi

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