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. : 6115   **Distribution No.:** 162-O   **Month/Year:** January/2024

Instrument ID: AGGAPPE   **Model Name.:** MISPA COUNT X   **Serial No.:** DA4 -25000602

Name & Contact No. of PT Co-ordinator: Dr. Manoranjan Mahapatra (Prof. & Head), Hematology, AIIMS, Delhi,
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Date of issue & status of the report: 12-04-2024[Final].

CBC and Retic Assessment

Test Parameters	S.No.	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
				Among Lab (Accuracy Testing)				**Within Lab (Precision Testing)**			
WBC x10³/µl	1	6.7	6.3	13	12.91	0.033	0.09	0.4	0.1	0.007	2.70
RBC x10⁶/µl	1	4.4	4.22	8.62	8.96	0.012	-1.09	0.18	0.04	0.003	2.70
Hb g/dl	1	12.3	11.8	24.1	24	0.027	0.15	0.5	0.1	0.008	2.70
HCT%	1	40.6	38.8	79.4	76.9	0.171	0.51	1.8	0.4	0.025	3.15
MCV-fl	1	92.3	91.9	184.2	173.3	0.304	1.25	0.4	0.2	0.012	0.67
MCH-Pg	1	27.9	27.8	55.7	53.8	0.080	0.93	0.1	0.2	0.011	-0.45
MCHC-g/dl	1	30.4	30.2	60.6	62.3	0.149	-0.40	0.2	0.3	0.020	-0.34
Plt. x10³/µl	1	245	244	489	514	1.539	-0.55	1	7	0.408	-0.90
Retic %	2	6.2	5.8	12	13.8	0.222	-0.31	0.4	0.5	0.036	-0.17

P.S . Assesment

		YOUR REPORT	CONSENSUS REPORT
DLC%	3	Nrbcs=00 , Poly=56 L=36, E=05, Mono/Promono=03 , B1=00 P.M.=00, Mye=00, Meta=00, Other=Platelets show mild reduction in total counts with normal morphological features	Poly: 47-61.5, Lympho: 30-43, Eosino: 2-4, Mono: 2-6, Blast/Promyelo/Myelo/ Meta: 0-5
RBC Morphology	3	Predominantly microcytic hypochromic together with few normocytic hypochromic cells. The cells show variable numbersof elliptical shaped, burr shaped, schistocytes and extreme microcytic cells. Fair numbers of target cells are also evident.	Predominantly: Microcytic, Hypochromic, Moderate: Anisopoikilocytosis Mild:Target cells , Tear drop cells, Elliptocytes

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
Diagnosis	3	Thalassemia				Haemoglobinopathy					

COMBINED DATA VALUES OF TOTAL PARTICIPANTS

Test parameters	S.No.	Total participants covered in the current dist. 162--O	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	332	331	87.01	87.01	9.37	6.04	3.62	6.95
RBC x10^6/µl	1	332	332	86.14	91.57	7.83	2.71	6.03	5.72
Hb g/dl	1	332	332	85.24	85.84	8.13	6.02	6.63	8.14
HCT%	1	332	331	92.15	90.94	4.53	3.02	3.32	6.04
MCV-fl	1	332	331	93.96	88.22	5.14	3.32	0.9	8.46
MCH-Pg	1	332	331	87.31	72.21	7.25	19.64	5.44	8.15
MCHC-g/dl	1	332	331	93.96	89.73	3.93	6.04	2.11	4.23
Plt. x10^3/µl	1	332	330	92.12	90.3	4.24	4.24	3.64	5.46
ReticCount%	2	332	264	91.67	81.82	4.55	12.12	3.78	6.06
PS Assessment	3	332	255	Satisfactory :87.06%, Borderline Sat. :9.33%, Unsatisfactory :3.61%					

*Comments:

1). **Among Lab (EQA) : Results acceptable.**

2). **Within Lab (IQA) : Difference in the CBC measurement values for *HCT* 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 ($\overline{x}$-$\overline{y}$) 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. Manoranjan Mahapatra (Prof. & Head)
PT Co-ordinator: ISHTM-AIIMS-EQAP
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-----------End Of Report-----------