



PROFICIENCY TESTING REPORT

ISHTM-AIIMS EXTERNAL QUALITY ASSURANCE PROGRAMME





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

EQAP CODE No.: 2913 **Distribution No.**: 159-G **Month/Year**: March/2023

Instrument ID: MindrayBC5150

Name & Contact No. of PT Co-ordinator: Dr. Seema Tyagi (Prof.), Hematology, AIIMS, Delhi,

 $\label{eq:compared} \begin{tabular}{ll} Tel: 9013085730 \ , \ E-Mail: accuracy 2000@gmail.com \\ \begin{tabular}{ll} \textbf{Date of issue \& status of the report: } 01-05-2023[Final]. \\ \end{tabular}$

CBC and Retic Assessment

				Among Lab (Accuracy Testing)				Within Lab (Precision Testing)				
Test Parameters	S.No.	Your Result 1		Your Results Sum of 2 Value	Consensus result sum of 2 values (Assigned Value)	Uncertainty		Results	Consensus Result Diff. of 2 values (Assigned Value)	Uncertainty of Assigned Values	Z Score	
WBC x10³/μl	1	4.17	3.99	8.16	8.21	0.0460	-0.04	0.18	0.1	0.0070	0.72	
RBC x10 ⁶ /μl	1	4.19	4.12	8.31	8.8	0.0100	-2.49	0.07	0.04	0.0030	0.81	
Hb g/dl	1	12.8	12.8	25.6	25.9	0.0240	-0.48	0	0.1	0.0080	-1.35	
НСТ%	1	40.4	39.8	80.2	80.5	0.1800	-0.07	0.6	0.3	0.0270	0.81	
MCV-fl	1	96.5	96.3	192.8	183.65	0.2900	1.18	0.2	0.3	0.0250	-0.27	
МСН-Рд	1	31.1	30.5	61.6	59	0.0730	1.52	0.6	0.2	0.0170	1.80	
MCHC-g/dl	1	32.2	31.7	63.9	64.05	0.1360	-0.04	0.5	0.3	0.0200	0.67	
Plt. x 10³/μl	1	144	143	287	293	1.46	-0.16	1	4.5	0.34	-0.67	
Retic %	2	2.5	1.5	4	8.15	0.19	-0.89	1	0.4	0.03	2.31	

P.S. Assesment

		YOUR REPORT	CONSENSUS REPORT				
DLC%	3	Nrbcs=53, Poly=77 L=20, E=01, Mono/Promono=02, B1=00 P.M.=00, Mye=00, Meta=00, Other=Platelets Reduced on smear, Giant Platelets - Occasional, Large Platelets - Present (+)	Poly: 55-66, Lympho: 24-34, Mono: 1-4, Eosino: 1-3, blast/Promyelo/Myelo/Meta: 0-5				
RBC Morphology	3	Macrocytosis (++), Anisocytosis (++), Poikilocytosis (+++), Polychromisa (+), Tear drop Cells - Occasional, Schistocytes - Occasional.	Predominantly: Normocytic/Normochromic; Moderate: Anisocytosis, Microcytosis, Hypochromia; Mild: Poikilocytosis, Target cells, Sickle shaped cells, tear drop cells				
Diagnosis	3	Hemolytic Anemia with thrombocytopenia & Neutrophilic leukocytosis.	Thalassemia/Haemoglobinopathy				

COMBINED DATA VALUES OF TOTAL PARTICIPANTS

Test never eters	S.No.	Total participants covered in the current dist. 159G	Total No. responded	% of Labs with Z Score 0-2		% of Labs with Z Score 2-3		% of Labs with Z Score >3		
Test parameters				Among labs	Within lab	Among labs	Within lab	Among labs	Within lab	
WBC x10³/μl	1	248	248	<mark>8</mark> 7.5	88.31	4.44	3.63	8.06	8.06	
RBC x10 ⁶ /μl	1	248	248	79.84	87.9	10.48	6.05	9.68	6.05	
Hb g/dl	1	248	248	88.71	92.34	4.84	3.63	6.45	4.03	
HCT%	1	248	2 <mark>48</mark>	94.35	89.92	4.44	4.84	1.21	5.24	
MCV-fl	1	248	248	96.77	91.53	2.42	3.23	0.81	5.24	
MCH-Pg	1	248	247	91.9	<mark>9</mark> 4.74	6.07	0.4	2.03	4.86	
MCHC-g/dl	1	248	248	94.76	90.73	4.84	2.82	0.4	6.45	
Plt. x10³/μl	1	248	248	92.74	93.95	5.24	4.03	2.02	2.02	
ReticCount%	2	248	216	91.2	84.26	5.56	9.26	3.24	6.48	
PS Assessment	3	248	218	Satisfactory: 90.74%, Borderline Sat.: 8.06%, Unsatisfactory: 1.20%						

*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.

Note 10: Reports are kept confidential.

Report authorized by,

Dr. Seema Tyagi (Prof.)

PT Co-ordinator: ISHTM-AIIMS-EQAP

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