

PROFICIENCY TESTING REPORT

 $Duration\ of\ stability\ testing\ -\ minimum\ up to\ 8\ days\ at\ ambient\ temp.\ after\ dispatch\ of\ specimens$

EQAP CODE No.: 1272

Distribution No.: 152-D Month/Year: February/2021

Instrument ID: Merilyzer cellquant (191216)

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: 02-03-2021[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	Consensus result			Daniella	Consensus Result Diff. of 2 values (Assigned Value)	Uncertainty of Assigned Values	Z Score	
WBC x10³/μl	1	2.82	2.63	5.45	5.5	0.0200	-0.09	0.19	0.1	0.0050	1.39	
RBC x10 ⁶ /μl	1	4.74	4.71	9.45	9.32	0.0080	0.63	0.03	0.03	0.0020	0.00	
Hb g/dl	1	13.1	13	26.1	27	0.0200	-1.52	0.1	0.1	0.0070	0.00	
НСТ%	1	41.6	41.4	83	83.9	0.1780	-0.15	0.2	0.3	0.0200	-0.27	
MCV-fl	1	88	87.7	175.7	179.9	0.3170	-0.40	0.3	0.2	0.0170	0.45	
МСН-Рд	1	27.6	27.6	55.2	57.7	0.0540	-1.65	0	0.2	0.0140	-0.90	
MCHC-g/dl	1	31.5	31.4	62.9	64.15	0.1300	-0.28	0.1	0.3	0.0120	-0.67	
Plt. x10³/μl	1	103	97	200	196	0.75	0.19	6	4	0.26	0.45	
Retic %	2	3.1	2.9	6	5	0.08	0.44	0.2	0.2	0.01	0.00	

P.S. Assesment

		YOUR REPORT	CONSENSUS REPORT			
DLC%	3	Nrbcs=76, Poly=69 L=28, E=0, Mono/Promono=0, B1=0 P.M.=0, Mye=0, Meta=03, Other=0	nRBC: 30 - 65, Poly: 60 - 75, Lympho: 15-30, Eos/Mono: 1-5, Blast/Myelo/Meta: 0-1			
RBC Morphology	3	Macrocytes, macro-ovalocytes, microcytes, normocytes, tear drop cells, spherocytes	Predominantly: Macrocytosis, Microcytosis, Spherocytosis, Polychromasia, Anisocytosis; Moderate: Normocytic/Normochromic Hypo.			
Diagnosis	3	Dimorphic anemia Predominantly macrocytic. Advised- Hemolytic workup	Hemolytic Anemia			

COMBINED DATA VALUES OF TOTAL PARTICIPANTS

Test parameters	S.No.	Total participants covered in the current dist.	Total No.	% 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
WBC x10 ³ /µl	1	312	346	89.31	92.2	2.31			
RBC x10 ⁶ /µl	1	312	346	89.88			1.45	8.38	6.36
Hb g/dl	1	312	347		91.04	6.94	3.47	3.18	5.2
НСТ%	1	312		91.07	99.42	6.92	3.17	2.02	0.58
MCV-fl	1		346	97.69	92.2	1.73	3.47	0.58	4.34
MCH-Pg	1	312	345	97.68	86.09	1.45	8.99	0.87	4.93
53	1	312	346	91.62	91.04	6.07	3.47	2.31	5.49
MCHC-g/dl	1	312	346	98.55	92.2	0.29	3.76	1.16	3.76
Plt. x10 ³ /µl	1	312	346	93.35	91.91				
ReticCount%	2	312	318			3.47	5.49	3.18	2.6
PS Assessment	3	312		93.71 Acceptable	86.48 91.4.Warn	4.09 ing Signal	7.7 Unacce	2.2	11.64

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 LOA (Internal Quality Assurance):
- 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 $IQR = 0.7413 \times IQR$
- 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 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.

Report authorized by,

Style.

Dr. Seema Tyagi (Prof.)

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