



**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. : 3953

Distribution No.: 157-H      Month/Year: September/2022

Instrument ID: B6923

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Date of issue &amp; status of the report: 07-11-2022[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 <sup>3</sup> /µl	1	5.6	5.4	11	9.03	0.0420	3.14	0.2	0.1	0.0090	1.04
RBC x10 <sup>6</sup> /µl	1	4.84	4.74	9.58	9.38	0.0150	0.76	0.1	0.05	0.0050	0.84
Hb g/dl	1	12.2	12	24.2	24.9	0.0410	-1.05	0.2	0.1	0.0110	1.35
HCT%	1	43	42.4	85.4	80.25	0.2890	1.04	0.6	0.4	0.0430	0.45
MCV-fl	1	89.5	88.8	178.3	170.45	0.4740	0.84	0.7	0.3	0.0410	0.77
MCH-Pg	1	25.3	25.2	50.5	52.9	0.1010	-1.52	0.1	0.2	0.0230	-0.45
MCHC-g/dl	1	28.4	28.3	56.7	61.75	0.2320	-1.29	0.1	0.3	0.0300	-0.54
Plt. x10 <sup>3</sup> /µl	1	204	194	398	367.5	2.38	0.71	10	7	0.61	0.45
Retic %	2	5.5	4.8	10.3	9.5	0.28	0.14	0.7	0.4	0.04	0.77

**P.S . Assesment**

YOUR REPORT		CONSENSUS REPORT
DLC%	3	Nrbcs=33 , Poly=37 L=23, E=05, Mono/Promono=02 , B1=00 P.M.=00, Mye=00, Meta=00, Other=
RBC Morphology	3	Poly: 42-56 , Lympho: 28-40 ,Eosino: 5-12 , Mono: 2-5, blast/Promyelo/Myelo/Meta: 0
Diagnosis	3	Hemoglobinopathy (Sickle cell Anemia or sickle cell-Thalassemia compound heterozygote) with secondary megaloblastic changes.
		Predominantly: Normocytic/Normochromic; Moderate: Anisocytosis, Microcytosis, Hypochromia; Mild: Poikilocytosis , Target cells , Sickle shaped cells ,tear drop cells
		Hemoglobinopathy possible sickle cell anemia

**COMBINED DATA VALUES OF TOTAL PARTICIPANTS**

Test parameters	S.No.	Total participants covered in the current dist. 157--H	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 <sup>3</sup> /µl	1	136	136	86.76	90.44	4.41	2.94	8.83	6.62
RBC x10 <sup>6</sup> /µl	1	136	136	90.44	91.18	3.68	2.94	5.88	5.88
Hb g/dl	1	136	136	91.91	91.18	3.68	5.15	4.41	3.67
HCT%	1	136	136	89.71	88.97	5.88	5.88	4.41	5.15
MCV-fl	1	136	136	91.18	93.38	5.88	1.47	2.94	5.15
MCH-Pg	1	136	136	83.82	90.44	8.82	5.15	7.36	4.41
MCHC-g/dl	1	136	136	88.97	88.24	5.88	6.62	5.15	5.14
Plt. x10 <sup>3</sup> /µl	1	136	136	93.38	95.59	3.68	2.21	2.94	2.2
ReticCount%	2	136	107	97.2	96.26	1.87	1.87	0.93	1.87
PS Assessment	3	136	105	Satisfactory :89.71%, Borderline Sat. :7.35%, Unsatisfactory :2.94%					

**Comments:**

1). Among Lab (EQA) : CBC result for WBC unacceptable, may be due to random/human error

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 > ±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](http://www.ishtmaiimseqap.com).

**Note 10:** Reports are kept confidential.

Report authorized by,



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