



**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. : 4963

Distribution No.: 158-M

Month/Year: January/2023

Instrument ID: K1104B2145264

Name & Contact No. of PT Co-ordinator: Dr. Seema Tyagi (Prof.), Hematology, AIIMS, Delhi,  
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Date of issue &amp; status of the report: 28-02-2023[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	6.42	6.23	12.65	13.31	0.0350	-0.76	0.19	0.1	0.0070	0.93
RBC x10 <sup>6</sup> /µl	1	5.15	5.12	10.27	10.25	0.0120	0.07	0.03	0.05	0.0030	-0.39
Hb g/dl	1	12.8	12.8	25.6	26.5	0.0270	-1.21	0	0.1	0.0080	-0.67
HCT%	1	44.7	44.4	89.1	85.7	0.2190	0.46	0.3	0.4	0.0250	-0.26
MCV-fl	1	86.9	86.8	173.7	169.35	0.3530	0.38	0.1	0.3	0.0190	-0.63
MCH-Pg	1	24.9	24.9	49.8	51.5	0.0590	-1.04	0	0.2	0.0140	-0.90
MCHC-g/dl	1	28.7	28.7	57.4	61	0.1400	-0.66	0	0.3	0.0210	-1.01
Plt. x10 <sup>3</sup> /µl	1	408	379	787	781	2.99	0.07	29	9	0.52	2.45
Retic %	2	1.3	1.3	2.6	15.35	0.22	-2.14	0	0.5	0.03	-0.84

### P.S . Assesment

YOUR REPORT			CONSENSUS REPORT		
DLC%	3	Nrbcs= , Poly=2 L=12, E=0, Mono/Promono=1 , B1=85 P.M.=, Mye=, Meta=, Other=	Blast: 65-88, Lympho: 5-14, Poly: 2-5, nRBC/Eos/Baso/Mono /Myelo/Meta/ Promyelo: 0-5		
RBC Morphology	3	Nucleated RBCs seen, Target cells seen	Predominantly: Normocytic/ Normochromic, Moderate: Anisocytosis, Microcytic		
Diagnosis	3		Acute Leukemia (AL)		

**COMBINED DATA VALUES OF TOTAL PARTICIPANTS**

Test parameters	S.No.	Total participants covered in the current dist. 158--M	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
<b>WBC x10<sup>3</sup>/µl</b>	1	338	335	83.88	84.18	6.27	6.27	9.85	9.55
<b>RBC x10<sup>6</sup>/µl</b>	1	338	338	89.64	89.35	5.92	5.03	4.44	5.62
<b>Hb g/dl</b>	1	338	338	88.76	85.21	5.03	4.44	6.21	10.35
<b>HCT%</b>	1	338	336	97.92	89.88	0.89	5.36	1.19	4.76
<b>MCV-fl</b>	1	338	336	97.62	87.2	1.79	6.55	0.59	6.25
<b>MCH-Pg</b>	1	338	336	88.39	89.58	7.44	4.76	4.17	5.66
<b>MCHC-g/dl</b>	1	338	336	98.21	86.9	0.89	7.74	0.9	5.36
<b>Plt. x10<sup>3</sup>/µl</b>	1	338	336	94.64	92.26	3.27	2.98	2.09	4.76
<b>ReticCount%</b>	2	338	296	91.22	85.14	6.08	9.8	2.7	5.06
<b>PS Assessment</b>	3	338	283	Satisfactory :97.93%, Borderline Sat. :1.18%, Unsatisfactory :0.890%					

**\*Comments:**

**1). Among Lab (EQA) : PS Diagnosis not reported, remaining 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  $\pm 2$ : Acceptable, Z score  $\pm 2$  to  $\pm 3$  :Warning Signal, Z score  $> \pm 3$  : Unacceptable [As per ISO/IEC 13528:2015 standard]

**Note-4:** Z score value between " $0$  to  $\pm 2$ " are texted in green colour. Z score value between " $\pm 2$  to  $\pm 3$ " 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](http://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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