



**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. : 1694

Distribution No.: 158-D

Month/Year: November/2022

Instrument ID: BD634545(23306)

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: 11-01-2023[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	7.29	7.27	14.56	13.68	0.0280	1.31	0.02	0.1	0.0070	-0.67
RBC x10 <sup>6</sup> /µl	1	5.37	5.31	10.68	10.47	0.0090	0.83	0.06	0.03	0.0020	0.67
Hb g/dl	1	14.7	14.7	29.4	29.1	0.0210	0.51	0	0.1	0.0070	-1.35
HCT%	1	47.2	46.8	94	90.45	0.1590	0.76	0.4	0.3	0.0220	0.22
MCV-fl	1	88.1	87.9	176	173.1	0.2520	0.40	0.2	0.3	0.0210	-0.34
MCH-Pg	1	27.7	27.4	55.1	55.4	0.0440	-0.27	0.3	0.2	0.0140	0.45
MCHC-g/dl	1	31.4	31.1	62.5	64.1	0.1070	-0.49	0.3	0.3	0.0180	0.00
Plt. x10 <sup>3</sup> /µl	1	139	137	276	281	1.19	-0.15	2	5	0.30	-0.58
Retic %	2	11.5	10	21.5	36.5	0.72	-0.67	1.5	1	0.06	0.42

### P.S . Assesment

YOUR REPORT		CONSENSUS REPORT
DLC%	3	Nrbcs=0 , Poly=34 L=63, E=0, Mono/Promono=03 , B1=0 P.M.=0, Mye=0, Meta=0, Other=
RBC Morphology	3	Lympho: 64-73, Poly: 23-31, nRBC/mono/Eosino/Myelo/Meta/blast: 0-5
Diagnosis	3	Predominantly: Normocytic/Normochromic; Moderate: Anisocytosis, Microcytosis, Hypochromia; Mild: Macrocytosis, Poikilocytosis ,Few smudge cells seen.
		NORMOCYTIC AND NORMOCHROMIC BLOOD PICTURE WITH LYMPHOCYTIC LEUKOCYTOSIS ADV:- IMMUNOPHENOTYPING TO RULE OUT CHRONIC LYMPHOCYTIC LEUKEMIA
		Chronic lymphoproliferative disorder

**COMBINED DATA VALUES OF TOTAL PARTICIPANTS**

Test parameters	S.No.	Total participants covered in the current dist. 158--D	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	327	325	84.62	91.08	4.62	4.62	10.76	4.3
<b>RBC x10<sup>6</sup>/µl</b>	1	327	327	88.99	90.52	5.81	3.98	5.2	5.5
<b>Hb g/dl</b>	1	327	327	87.16	89.91	5.81	5.81	7.03	4.28
<b>HCT%</b>	1	327	325	93.85	88.31	2.46	6.15	3.69	5.54
<b>MCV-fl</b>	1	327	325	94.15	89.54	3.69	6.15	2.16	4.31
<b>MCH-Pg</b>	1	327	325	91.38	89.85	3.69	5.54	4.93	4.61
<b>MCHC-g/dl</b>	1	327	325	96.92	91.08	1.23	4	1.85	4.92
<b>Plt. x10<sup>3</sup>/µl</b>	1	327	325	90.15	90.77	7.38	6.15	2.47	3.08
<b>ReticCount%</b>	2	327	298	97.32	88.26	2.01	4.36	0.67	7.38
<b>PS Assessment</b>	3	327	291	Satisfactory :87.42%, Borderline Sat. :11.04%, Unsatisfactory :1.53%					

**\*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  $\pm 2$ : 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.ishtmaimseqap.com](http://www.ishtmaimseqap.com).

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

Report authorized by,



Dr. Seema Tyagi (Prof.)

PT Co-ordinator: ISHTM-AIIMS-EQAP

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