



**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. : 5497

Distribution No.: 159-N

Month/Year: April/2023

Instrument ID: INS00078

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Date of issue &amp; status of the report: 14-06-2023[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	3.86	3.85	7.71	8.1	0.039	-0.32	0.01	0.1	0.007	-0.76
RBC x10 <sup>6</sup> /µl	1	5.29	5.28	10.57	10.7	0.013	-0.35	0.01	0.05	0.003	-0.67
Hb g/dl	1	12	11.9	23.9	25.2	0.026	-1.59	0.1	0.1	0.007	0.00
HCT%	1	40.2	40.1	80.3	79.8	0.155	0.11	0.1	0.4	0.025	-0.67
MCV-fl	1	76.1	75.9	152	149.4	0.206	0.41	0.2	0.2	0.017	0.00
MCH-Pg	1	22.8	22.5	45.3	46.8	0.059	-0.95	0.3	0.2	0.012	0.67
MCHC-g/dl	1	30	29.6	59.6	62.5	0.120	-0.77	0.4	0.3	0.018	0.34
Plt. x10 <sup>3</sup> /µl	1	173	170	343	370.5	1.599	-0.57	3	7	0.392	-0.58
Retic %	2	6.9	6.5	13.4	15.7	0.249	-0.30	0.4	0.5	0.034	-0.17

### P.S . Assesment

YOUR REPORT		CONSENSUS REPORT
DLC%	3	Nrbcs=2 , Poly=45 L=05, E=01, Mono/Promono=02 , B1=01 P.M.=02, Mye=25, Meta=06, Other=Band forms 10
RBC Morphology	3	Poly: 44 - 60, Myelo: 10 - 22, Meta: 7- 16, Lympho: 2- 6, Promyelo: 2-6, Eosino: 1-4, Blast: 1-4, Mono: 1 - 3, nRBC/Baso: 0-5
Diagnosis	3	Normocytic normochromic, few microcytes also seen.
		Predominantly: Normocytic/Normochromic; Moderate: Anisocytosis, hypochromia, Microcytosis; Mild: Macrocytosis, Poikilocytosis
		Myeloproliferative neoplasm - probably Chronic myeloid leukemia ( CML )
		Chronic Myeloid Leukemia (Chronic Phase)

**COMBINED DATA VALUES OF TOTAL PARTICIPANTS**

Test parameters	S.No.	Total participants covered in the current dist. 159--N	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	364	359	88.58	86.07	3.06	6.69	8.36	7.24
<b>RBC x10<sup>6</sup>/µl</b>	1	364	364	87.64	87.09	6.87	4.95	5.49	7.96
<b>Hb g/dl</b>	1	364	364	90.66	84.89	4.95	5.22	4.39	9.89
<b>HCT%</b>	1	364	360	94.72	87.5	4.44	4.72	0.84	7.78
<b>MCV-fl</b>	1	364	360	93.06	88.33	5.28	6.67	1.66	5
<b>MCH-Pg</b>	1	364	360	86.94	93.06	8.06	1.67	5	5.27
<b>MCHC-g/dl</b>	1	364	359	93.87	87.19	5.29	5.85	0.84	6.96
<b>Plt. x10<sup>3</sup>/µl</b>	1	364	360	93.61	91.94	3.89	4.17	2.5	3.89
<b>ReticCount%</b>	2	364	273	93.41	84.62	4.76	8.79	1.83	6.59
<b>PS Assessment</b>	3	364	267	Satisfactory :93.95%, Borderline Sat. :2.20%, Unsatisfactory :3.85%					

**\*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 > ±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,



Dr. Seema Tyagi (Prof.)

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