



**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. : 5425

Distribution No.: 159-N

Month/Year: April/2023

Instrument ID: H-560 (K1104B2211056)

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: 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	1.92	1.75	3.67	8.1	0.039	-3.72	0.17	0.1	0.007	0.56
RBC x10 <sup>6</sup> /µl	1	5.56	5.46	11.02	10.7	0.013	0.86	0.1	0.05	0.003	0.84
Hb g/dl	1	12.8	12.7	25.5	25.2	0.026	0.37	0.1	0.1	0.007	0.00
HCT%	1	41.1	39.9	81	79.8	0.155	0.26	1.2	0.4	0.025	1.80
MCV-fl	1	73.8	73.1	146.9	149.4	0.206	-0.39	0.7	0.2	0.017	1.69
MCH-Pg	1	23.3	22.9	46.2	46.8	0.059	-0.38	0.4	0.2	0.012	1.35
MCHC-g/dl	1	31.9	31.1	63	62.5	0.120	0.13	0.8	0.3	0.018	1.69
Plt. x10 <sup>3</sup> /µl	1	226	209	435	371	1.599	1.33	17	7	0.392	1.50
Retic %	2	7	6	13	15.65	0.249	-0.35	1	0.5	0.034	0.84

### P.S . Assesment

YOUR REPORT			CONSENSUS REPORT	
DLC%	3	Nrbcs=3 , Poly=48 L=5, E=3, Mono/Promono=3 , B1=4 P.M.=5, Mye=13, Meta=14, Other=dyserythroipoiesis	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	
RBC Morphology	3	normocytic normochromic, macrocytosis, mild hypochromia noted	Predominantly: Normocytic/Normochromic; Moderate: Anisocytosis, hypochromia, Microcytosis; Mild: Macrocytosis, Poikilocytosis	
Diagnosis	3	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	363	358	88.55	86.31	3.07	6.42	8.38	7.27
<b>RBC x10<sup>6</sup>/µl</b>	1	363	363	87.6	87.05	6.89	4.96	5.51	7.99
<b>Hb g/dl</b>	1	363	363	90.63	85.12	4.96	5.23	4.41	9.65
<b>HCT%</b>	1	363	359	94.71	87.47	4.46	4.74	0.83	7.79
<b>MCV-fl</b>	1	363	359	93.04	88.3	5.29	6.69	1.67	5.01
<b>MCH-Pg</b>	1	363	359	86.91	93.31	8.08	1.39	5.01	5.3
<b>MCHC-g/dl</b>	1	363	358	93.85	87.43	5.31	5.59	0.84	6.98
<b>Plt. x10<sup>3</sup>/µl</b>	1	363	359	92.76	92.48	4.74	3.9	2.5	3.62
<b>ReticCount%</b>	2	363	272	93.38	84.93	4.78	8.82	1.84	6.25
<b>PS Assessment</b>	3	363	266	Satisfactory :93.95%, Borderline Sat. :2.20%, Unsatisfactory :3.85%					

**\*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

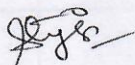
**Note-7:** Participants are free to use methods/analyzer of their own choice.

**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,



Dr. Seema Tyagi (Prof.)

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-----End Of Report-----