



**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. : 1325

Distribution No.: 161-C

Month/Year: August/2023

Instrument ID: K11052315035

Name & Contact No. of PT Co-ordinator: Dr. Manoranjan Mahapatra ( Prof. & Head), Hematology, AIIMS, Delhi,  
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Date of issue &amp; status of the report: 23-10-2023[provisional].

### 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	4.87	4.84	9.71	9.3	0.029	0.54	0.03	0.1	0.006	-0.63
RBC x10 <sup>6</sup> /µl	1	3.86	3.82	7.68	7.39	0.006	1.78	0.04	0.03	0.002	0.34
Hb g/dl	1	11.5	11.5	23	23.3	0.020	-0.51	0	0.1	0.007	-1.35
HCT%	1	36	35.7	71.7	70.1	0.114	0.49	0.3	0.3	0.021	0.00
MCV-fl	1	93.4	93.2	186.6	189.7	0.245	-0.44	0.2	0.3	0.020	-0.30
MCH-Pg	1	30	29.9	59.9	63.2	0.063	-1.89	0.1	0.2	0.015	-0.45
MCHC-g/dl	1	32.2	32.1	64.3	66.6	0.116	-0.67	0.1	0.3	0.016	-0.67
Plt. x10 <sup>3</sup> /µl	1	136	129	265	308	1.404	-1.02	7	4	0.259	0.67
Retic %	2	0.5	0.3	0.8	2.5	0.055	-0.93	0.2	0.2	0.011	0.00

#### P.S . Assesment

YOUR REPORT			CONSENSUS REPORT		
DLC%	3	Nrbcs= , Poly=38 L=12, E=4, Mono/Promono=1 , B1= P.M.=2, Mye=24, Meta=18, Other=	Poly: 38 - 52, Myelo: 15 - 26, Meta: 9- 17, Blast: 2-6, Promyelo: 2-6, Lympho: 2- 5, Eosino: 2-5, Mono: 1-2, nRBC/ Baso: 0-5		
RBC Morphology	3	Anisocytosis(+++),Poikilocytosis(++),Microcytes(++),Hypochromia(++),Tear Drop cells (+)and Polychronatophils(+)	Predominantly: Normocytic/Normochromic; Moderate: Anisocytosis, Hypochromic, Mild: Poikilocytosis,Tear drop cells		
Diagnosis	3	Chronic Myeloproliferative Disorder.	Chronic Myeloid Leukemia (Chronic Phase)		

Test parameters	S.No.	Total participants covered in the current dist. 161--C	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	359	358	82.12	88.55	3.91	4.75	13.97	6.7
RBC x10 <sup>6</sup> /µl	1	359	359	88.02	90.81	8.64	4.46	3.34	4.73
Hb g/dl	1	359	359	89.97	91.09	5.57	5.01	4.46	3.9
HCT%	1	359	358	91.9	88.55	6.7	6.98	1.4	4.47
MCV-fl	1	359	359	92.48	93.31	6.69	2.79	0.83	3.9
MCH-Pg	1	359	359	89.42	93.87	5.57	1.67	5.01	4.46
MCHC-g/dl	1	359	359	93.31	91.36	4.18	4.18	2.51	4.46
Plt. x10 <sup>3</sup> /µl	1	359	359	94.43	91.36	3.9	5.29	1.67	3.35
ReticCount%	2	359	298	91.61	91.95	5.37	6.71	3.02	1.34
PS Assessment	3	359	335	Satisfactory :96.11%, Borderline Sat. :2.50%, Unsatisfactory :1.39%					

**\*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. Manoranjan Mahapatra ( Prof. & Head)

PT Co-ordinator: ISHTM-AIIMS-EQAP

Department of Hematology, AIIMS, New Delhi

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