



**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. : 4317

Distribution No.: 156-K

Month/Year: July/2022

Instrument ID: 705ES0H11486

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Date of issue &amp; status of the report: 25-09-2022[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	5.6	5.5	11.1	9.2	0.0610	1.22	0.1	0.1	0.0110	0.00
RBC x10 <sup>6</sup> /µl	1	4.38	4.29	8.67	8.88	0.0110	-0.79	0.09	0.05	0.0030	0.77
Hb g/dl	1	13.6	13.2	26.8	27	0.0370	-0.21	0.4	0.1	0.0100	2.02
HCT%	1	45.4	44.1	89.5	83.2	0.2210	1.17	1.3	0.5	0.0370	1.54
MCV-fl	1	104	103	207	186.65	0.3960	2.26	1	0.3	0.0270	1.57
MCH-Pg	1	31	30.7	61.7	60.9	0.0870	0.41	0.3	0.3	0.0190	0.00
MCHC-g/dl	1	29.9	29.9	59.8	65.15	0.1890	-1.22	0	0.3	0.0210	-0.95
Plt. x10 <sup>3</sup> /µl	1	174	149	323	211.5	1.74	2.40	25	4	0.32	4.72
Retic %	2	3.7	3.5	7.2	3.8	0.10	1.36	0.2	0.2	0.01	0.00

### P.S . Assesment

YOUR REPORT		CONSENSUS REPORT
DLC%	3	Nrbcs=1 , Poly=40 L=2, E=2, Mono/Promono=1 , B1=1 P.M.=2, Mye=42, Meta=7, Other=
RBC Morphology	3	Poly: 35 - 48, Myelo: 14 - 26, Meta: 8 - 15, Promyelo: 3-7, nRBC/Lympho /Blast/Eos/Baso/Mono: 0 - 5
Diagnosis	3	RBC SHOW MILD ANISOCYTOSIS,PREDOMINANTLY NORMOCYTIC NORMOCHROMIC, MICROCYTES(+),MACROCYTES(+) SEEN. MYELOPROLIFERATIVE NEOPLASM, MOST PROBABLY CHRONIC MYELOID LEUKEMIA-CHRONIC PHASE (CML-CP)
		Predominantly: Normocytic/Normochromic; Moderate: Anisocytosis, hypochromia, Microcytosis; Mild: Macrocytosis, Poikilocytosis
		Chronic Myeloid Leukemia (Chronic Phase)

**COMBINED DATA VALUES OF TOTAL PARTICIPANTS**

Test parameters	S.No.	Total participants covered in the current dist. 156--K	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	252	248	84.27	87.1	6.85	2.42	8.88	10.48
<b>RBC x10<sup>6</sup>/µl</b>	1	252	252	86.11	92.46	6.75	1.59	7.14	5.95
<b>Hb g/dl</b>	1	252	252	90.87	82.54	1.98	7.94	7.15	9.52
<b>HCT%</b>	1	252	248	94.35	91.94	2.42	2.82	3.23	5.24
<b>MCV-fl</b>	1	252	248	89.11	94.35	6.85	2.42	4.04	3.23
<b>MCH-Pg</b>	1	252	248	87.1	91.53	6.05	2.82	6.85	5.65
<b>MCHC-g/dl</b>	1	252	248	91.13	91.94	4.44	2.42	4.43	5.64
<b>Plt. x10<sup>3</sup>/µl</b>	1	252	248	92.34	89.11	3.63	5.24	4.03	5.65
<b>ReticCount%</b>	2	252	214	93.46	89.72	4.67	7.48	1.87	2.80
<b>PS Assessment</b>	3	252	213	Satisfactory :93.65%, Borderline Sat. :4.76%, Unsatisfactory :1.58%					

**\*Comments:**

1). **Among Lab (EQA) : Results acceptable.**

2). **Within Lab (IQA) : Difference in the CBC measurement values for PLT unacceptable, may be due to random/human error.**

**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,



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