



**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. : 2081

Distribution No.: 156-E

Month/Year: May/2022

Instrument ID: HEM/102 (903PES15247)

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### 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	16.7	16.6	33.3	14.31	0.0900	<b>8.97</b>	0.1	0.12	0.0110	<b>-0.12</b>
RBC x10 <sup>6</sup> /µl	1	3.97	3.95	7.92	7.73	0.0090	<b>0.83</b>	0.02	0.04	0.0030	<b>-0.54</b>
Hb g/dl	1	13.4	13.3	26.7	26.8	0.0300	<b>-0.11</b>	0.1	0.1	0.0080	<b>0.00</b>
HCT%	1	42.9	42.7	85.6	87	0.2310	<b>-0.22</b>	0.2	0.4	0.0260	<b>-0.45</b>
MCV-fl	1	108	108	216	224	0.4640	<b>-0.65</b>	0	0.3	0.0240	<b>-0.67</b>
MCH-Pg	1	33.8	33.5	67.3	69.2	0.1030	<b>-0.72</b>	0.3	0.3	0.0210	<b>0.00</b>
MCHC-g/dl	1	31.3	31	62.3	61.2	0.1770	<b>0.24</b>	0.3	0.2	0.0200	<b>0.34</b>
Plt. x10 <sup>3</sup> /µl	1	278	266	544	567.5	3.17	<b>-0.27</b>	12	7	0.44	<b>0.82</b>
Retic %	2	12	11	23	20.5	0.36	<b>0.27</b>	1	0.7	0.05	<b>0.51</b>

### P.S . Assesment

YOUR REPORT		CONSENSUS REPORT
<b>DLC%</b>	3	Nrbcs= , Poly=09 L=08, E=1, Mono/Promono= , B1= P.M.=1, Mye=25, Meta=06, Other=NEUTROPHILS- 50%
<b>RBC Morphology</b>	3	Poly: 40 - 56, Myelo: 14 - 26, Meta: 7 - 16, Promyelo: 2-6, nRBC/Lympho /Blast/Eos/Baso/Mono: 0 - 5
<b>Diagnosis</b>	3	RBC- MILD ANISOCHROMIA, MILD ANISOCYTOSIS, MICROCYTES NOTED WBC- LEUCOCYTOSIS WITH SHIFT TO LEFT AND MYELOCYTE BULGE PLATELETE-ADEQUATE 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. 156--E	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	298	296	77.36	88.51	7.43	5.07	15.21	6.42
<b>RBC x10<sup>6</sup>/µl</b>	1	298	298	88.59	89.6	5.37	4.36	6.04	6.04
<b>Hb g/dl</b>	1	298	298	86.91	84.23	4.03	8.39	9.06	7.38
<b>HCT%</b>	1	298	296	91.22	89.86	6.42	6.08	2.36	4.06
<b>MCV-fl</b>	1	298	295	89.49	94.24	6.78	2.03	3.73	3.73
<b>MCH-Pg</b>	1	298	295	88.47	90.85	5.42	4.41	6.11	4.74
<b>MCHC-g/dl</b>	1	298	295	91.19	90.51	5.08	3.05	3.73	6.44
<b>Plt. x10<sup>3</sup>/µl</b>	1	298	296	89.19	88.85	8.78	5.74	2.03	5.41
<b>ReticCount%</b>	2	298	270	90	80.37	5.56	14.44	4.44	5.19
<b>PS Assessment</b>	3	298	279	Satisfactory :91.29%, Borderline Sat. :5.36%, Unsatisfactory :3.35%					

**\*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.ishtmaiimseqap.com](http://www.ishtmaiimseqap.com).

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

Report authorized by,



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