



**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. :** 1884

**Distribution No.:** 157-F

**Month/Year:** August/2022

**Instrument ID:** BC6200(TW-02000912)

**Name & Contact No. of PT Co-ordinator:** Dr. Seema Tyagi (Prof.), Hematology, AIIMS, Delhi,  
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**Date of issue & status of the report:** 28-10-2022[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	5.3	5.23	10.53	10.5	0.0360	0.04	0.07	0.1	0.0070	-0.25
RBC x10 <sup>6</sup> /µl	1	4.19	4.19	8.38	8.43	0.0090	-0.22	0	0.04	0.0030	-1.08
Hb g/dl	1	14.3	14.2	28.5	28.4	0.0300	0.13	0.1	0.1	0.0080	0.00
HCT%	1	49.7	49.6	99.3	85.2	0.1910	2.84	0.1	0.4	0.0260	-0.81
MCV-fl	1	118.5	118.4	236.9	202.6	0.3720	3.56	0.1	0.3	0.0240	-0.54
MCH-Pg	1	34.3	33.8	68.1	67.4	0.0810	0.36	0.5	0.3	0.0200	0.67
MCHC-g/dl	1	28.9	28.6	57.5	66.2	0.1610	-2.06	0.3	0.3	0.0190	0.00
Plt. x10 <sup>3</sup> /µl	1	131	131	262	273	1.81	-0.24	0	5	0.32	-1.12
Retic %	2	0.3	0.2	0.5	11.4	0.22	-1.93	0.1	0.49	0.03	-0.66

### P.S . Assesment

YOUR REPORT		CONSENSUS REPORT	
<b>DLC%</b>	3	Nrbcs= , Poly=5 L=10, E=, Mono/Promono=5 , B1=80 P.M.=, Mye=, Meta=, Other=	Blast: 30-85, Poly: 2-8, Lympho: 4-10, Myelo: 0-7, Mono: 1-10.5, nRBC/Promyelo/Meta/Eos: 0-5
<b>RBC Morphology</b>	3	MICROCYTIC HYPOCHROMIC	Predominantly: Normocytic/Normochromic; Moderate: Microcytosis, Hypochromia; Mild: Anisocytosis, Macrocytosis
<b>Diagnosis</b>	3	ACUTE LEUKEMIA	Acute Myeloid Leukemia (AML)

**COMBINED DATA VALUES OF TOTAL PARTICIPANTS**

Test parameters	S.No.	Total participants covered in the current dist. 157--F	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	288	288	82.29	86.11	4.17	7.64	13.54	6.25
<b>RBC x10<sup>6</sup>/µl</b>	1	288	288	86.46	93.06	6.25	3.47	7.29	3.47
<b>Hb g/dl</b>	1	288	288	87.5	87.5	5.9	6.6	6.6	5.9
<b>HCT%</b>	1	288	287	91.99	90.59	3.83	5.92	4.18	3.49
<b>MCV-fl</b>	1	288	287	91.64	94.08	5.57	1.05	2.79	4.87
<b>MCH-Pg</b>	1	288	287	83.97	89.55	7.32	6.62	8.71	3.83
<b>MCHC-g/dl</b>	1	288	287	93.03	86.76	4.18	5.23	2.79	8.01
<b>Plt. x10<sup>3</sup>/µl</b>	1	288	287	89.55	88.85	6.27	5.57	4.18	5.58
<b>ReticCount%</b>	2	288	251	95.62	91.24	3.98	7.17	0.4	1.59
<b>PS Assessment</b>	3	288	255	Satisfactory :94.45%, Borderline Sat. :3.12%, Unsatisfactory :2.43%					

**\*Comments:**

- 1). Among Lab (EQA) : CBC result for MCV 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  $\pm 2$ : 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,



Dr. Seema Tyagi (Prof.)

PT Co-ordinator: ISHTM-AIIMS-EQAP

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