



**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. : 1977

Distribution No.: 158-E

Month/Year: November/2022

Instrument ID: MINDRAY BC 6200, TW-04001028

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: 24-01-2023[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	7.69	7.6	15.29	15.7	0.0450	-0.35	0.09	0.13	0.0080	-0.39
RBC x10 <sup>6</sup> /µl	1	3.43	3.43	6.86	6.92	0.0070	-0.32	0	0.03	0.0020	-0.81
Hb g/dl	1	12.5	12.4	24.9	25.1	0.0210	-0.39	0.1	0.1	0.0080	0.00
HCT%	1	40.6	40.6	81.2	78.3	0.1850	0.54	0	0.4	0.0250	-1.35
MCV-fl	1	118.3	118.2	236.5	225.75	0.5040	0.75	0.1	0.3	0.0230	-0.54
MCH-Pg	1	36.4	36.1	72.5	72.6	0.0840	-0.05	0.3	0.3	0.0210	0.00
MCHC-g/dl	1	30.8	30.5	61.3	63.75	0.1540	-0.51	0.3	0.3	0.0190	0.00
Plt. x10 <sup>3</sup> /µl	1	216	209	425	459	1.62	-0.85	7	5	0.35	0.39
Retic %	2	6.3	6.2	12.5	29	0.68	-0.78	0.1	1	0.07	-0.81

### P.S . Assesment

YOUR REPORT		CONSENSUS REPORT
DLC%	3	Nrbcs=2 , Poly=11 L=04, E=02, Mono/Promono=03 , B1=80 P.M.=00, Mye=00, Meta=00, Other=Few ? monoblasts showing vacuolated cytoplasm and convoluted nuclei
RBC Morphology	3	Blast: 65-87, Poly: 5-10, Lympho: 3-8, Myelo: 0-7, Mono: 1-10.5, nRBC/Promyelo/Meta/Eos: 0-5
Diagnosis	3	Normocytic, normochromic with macrocytes and anisocytosis
		Predominantly: Normocytic/Normochromic; Moderate: Microcytosis, Hypochromia; Mild: Anisocytosis, Macrocytosis
		Acute leukemia-probably of AML-M5 to be considered.
		Acute Myeloid Leukemia (AML)

**COMBINED DATA VALUES OF TOTAL PARTICIPANTS**

Test parameters	S.No.	Total participants covered in the current dist. 158--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	291	289	84.08	88.24	3.81	5.54	12.11	6.22
<b>RBC x10<sup>6</sup>/µl</b>	1	291	291	88.32	93.47	7.56	2.41	4.12	4.12
<b>Hb g/dl</b>	1	291	291	87.97	90.38	4.12	6.53	7.91	3.09
<b>HCT%</b>	1	291	289	96.54	92.39	2.08	3.81	1.38	3.8
<b>MCV-fl</b>	1	291	288	97.92	95.14	1.39	2.08	0.69	2.78
<b>MCH-Pg</b>	1	291	288	87.15	87.5	8.33	7.29	4.52	5.21
<b>MCHC-g/dl</b>	1	291	288	96.88	86.46	2.43	6.25	0.69	7.29
<b>Plt. x10<sup>3</sup>/µl</b>	1	291	289	89.97	92.39	7.27	2.42	2.76	5.19
<b>ReticCount%</b>	2	291	260	97.31	89.62	2.69	1.54	0	8.84
<b>PS Assessment</b>	3	291	264	Satisfactory :87.3%, Borderline Sat. :5.49%, Unsatisfactory :7.21%					

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

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

Report authorized by,



Dr. Seema Tyagi (Prof.)

PT Co-ordinator: ISHTM-AIIMS-EQAP

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