

PROFICIENCY TESTING REPORT *ISHTM-AIIMS EXTERNAL QUALITY ASSURANCE PROGRAMME* NABL accredited program as per ISO/IEC 17043:2010 standard



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. : 2398

Distribution No.: 157-F Month/Year: August/2022

Instrument ID: ERBA H-360, 3 PART (K10012116054

Name & Contact No. of PT Co-ordinator: Dr. Seema Tyagi (Prof.), Hematology, AIIMS, Delhi, Tel: 9013085730, E-Mail: accuracy2000@gmail.com

Date of issue & status of the report: 28-10-2022[Final].

CBC and Retic Assessment

| | | | | Among Lab (Accuracy Testing) | | | | Within Lab (Precision Testing) | | | | |
|--------------------------|-------|---------------------|-------|---|--|--------------------------------------|------------|--------------------------------|------|--------------------------------------|------------|--|
| Test Parameters | S.No. | Your Result 1 | | Your Results Sum of 2 Value | Consensus result sum of 2 values (Assigned Value) | Uncertainty of Assigned Values | Z Score | Deculto | | Uncertainty of Assigned Values | Z Score | |
| WBC x10³/µl | 1 | 4.98 | 4.89 | 9.87 | 10.5 | 0.0360 | -0.75 | 0.09 | 0.1 | 0.0070 | -0.08 | |
| RBC x10 ⁶ /µl | 1 | 4.45 | 4.42 | 8.87 | 8.43 | 0.0090 | 1.95 | 0.03 | 0.04 | 0.0030 | -0.27 | |
| Hb g/dl | 1 | 13.9 | 13.8 | 27.7 | 28.4 | 0.0300 | -0.91 | 0.1 | 0.1 | 0.0080 | 0.00 | |
| HCT% | 1 | 45.5 | 45 | 90.5 | 85.2 | 0.1910 | 1.07 | 0.5 | 0.4 | 0.0260 | 0.27 | |
| MCV-fl | 1 | 102.4 | 101.9 | 204.3 | 202.6 | 0.3720 | 0.18 | 0.5 | 0.3 | 0.0240 | 0.54 | |
| MCH-Pg | 1 | 31.4 | 31.3 | 62.7 | 67.4 | 0.0810 | -2.44 | 0.1 | 0.3 | 0.0200 | -0.67 | |
| MCHC-g/dl | 1 | 30.7 | 30.6 | 61.3 | 66.2 | 0.1610 | -1.16 | 0.1 | 0.3 | 0.0190 | -0.67 | |
| Plt. x10³/μl | 1 | 149 | 149 | 298 | 273 | 1.81 | 0.54 | 0 | 5 | 0.32 | -1.12 | |
| Retic % | 2 | 3 | 2 | 5 | 11.4 | 0.22 | -1.14 | 1 | 0.49 | 0.03 | 0.86 | |

P.S . Assesment

| | | YOUR REPORT | CONSENSUS REPORT | | | | |
|-------------------|---|--------------------------------------|--|--|--|--|--|
| DLC% | 3 | | Blast: 30-85, Poly: 2-8, Lympho: 4-10, Myelo: 0-7, Mono: 1-10.5, nRBC/Promyelo/Meta/Eos: 0-5 | | | | |
| RBC Morphology | ≺ | | Predominantly: Normocytic/Normochromic; Moderate: Microcytosis, Hypochromia; Mild: Anisocytosis, Macrocytosis | | | | |
| Diagnosis | 3 | S/O: ACUTE PROMYELOCYTIC LEUKEMIA | Acute Myeloid Leukemia (AML) | | | | |

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COMBINED DATA VALUES OF TOTAL PARTICIPANTS

| Test name atom | S No | Total participants covered in the | Total No. responded | % of Labs with Z Score 0-2 | | % of Labs with Z Score 2-3 | | % of Labs with Z Score >3 | |
|---------------------------|-------|---|------------------------|---|---------------------|-------------------------------|---------------|------------------------------|---------------|
| Test parameters | 5.NO. | current dist. 157F | | Among labs | Within lab | Among labs | Within lab | Among labs | Within lab |
| WBC x10 ³ /µl | 1 | 288 | 288 | <mark>82</mark> .29 | 86.11 | 4.17 | 7.64 | 13.54 | 6.25 |
| RBC x10 ⁶ /µl | 1 | 288 | 288 | 86.46 | 93.06 | 6.25 | 3.47 | 7.29 | 3.47 |
| Hb g/dl | 1 | 288 | 288 | 87.5 | 87.5 | 5.9 | 6.6 | 6.6 | 5.9 |
| HCT% | 1 | 288 | 2 <mark>87</mark> | 91.99 | 90.59 | 3.83 | 5.92 | 4.18 | 3.49 |
| MCV-fl | 1 | 288 | 287 | 91.64 | 94.08 | 5.57 | 1.05 | 2.79 | 4.87 |
| MCH-Pg | 1 | 288 | 287 | 83.97 | <mark>8</mark> 9.55 | 7.32 | 6.62 | 8.71 | 3.83 |
| MCHC-g/dl | 1 | 288 | 287 | 93.03 | <mark>86.7</mark> 6 | 4.18 | 5.23 | 2.79 | 8.01 |
| Plt. x10 ³ /µl | 1 | 288 | 287 | 89.2 | 88.85 | 6.27 | 5.57 | 4.53 | 5.58 |
| ReticCount% | 2 | 288 | 251 | 95.62 | 91.24 | 3.98 | 7.17 | 0.4 | 1.59 |
| PS Assessment | 3 | 288 | 255 | Satisfactory :94.45%, Borderline Sat. :3.12%, Unsatisfactory :2.43% | | | | | |

*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 $IQR = 0.7413 \times IQR$

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 guarterly 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.

Note 10: Reports are kept confidential.

Report authorized by,

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Dr. Seema Tyagi (Prof.) PT Co-ordinator: ISHTM-AIIMS-EQAP Department of Hematology, AIIMS, New Delhi

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