



PROFICIENCY TESTING REPORT
ISHBT-AIIMS INTERNAL 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. : 1673

Distribution No.: 163-C

Month/Year: February/2024

Instrument ID: SYSMEX

Model Name: XN350

Serial No.: 11321

Name & Contact No. of PT Co-ordinator: Dr. Manoranjan Mahapatra (Prof. & Head), Hematology, AIIMS, Delhi,
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Date of issue & status of the report: 29-04-2024 [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 ³ /µl | 1 | 4.11 | 4.07 | 8.18 | 8.28 | 0.025 | -0.15 | 0.04 | 0.1 | 0.006 | -0.67 |
| RBC x10 ⁶ /µl | 1 | 4.06 | 4.05 | 8.11 | 8.36 | 0.007 | -1.20 | 0.01 | 0.03 | 0.002 | -0.45 |
| Hb g/dl | 1 | 13.1 | 13.1 | 26.2 | 26.3 | 0.020 | -0.22 | 0 | 0.1 | 0.007 | -1.35 |
| HCT% | 1 | 41.5 | 41.3 | 82.8 | 81.5 | 0.145 | 0.30 | 0.2 | 0.3 | 0.023 | -0.22 |
| MCV-f | 1 | 102.2 | 102 | 204.2 | 194.6 | 0.286 | 1.04 | 0.2 | 0.2 | 0.019 | 0.00 |
| MCH-Pg | 1 | 32.3 | 32.3 | 64.6 | 62.8 | 0.054 | 1.28 | 0 | 0.3 | 0.016 | -1.01 |
| MCHC-g/dl | 1 | 31.7 | 31.6 | 63.3 | 64.3 | 0.113 | -0.30 | 0.1 | 0.3 | 0.018 | -0.67 |
| Plt. x10 ³ /µl | 1 | 236 | 229 | 465 | 394 | 1.382 | 1.74 | 7 | 5 | 0.294 | 0.39 |
| Retic % | 2 | 14.4 | 14 | 28.4 | 23.1 | 0.274 | 0.74 | 0.4 | 0.65 | 0.043 | -0.44 |

P.S . Assesment

| YOUR REPORT | | | CONSENSUS REPORT | | |
|----------------|---|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|--|--|
| DLC% | 3 | Nrbcs=3 , Poly=15 L=4, E=1, Mono/Promono=14 , B1=18 P.M.=30, Mye=10, Meta=5, Other= | Blast: 46-70, Poly: 10-20, Myelo: 3-12, Meta: 2-8, Promyelo: 1-8, Lympho: 3-7, Mono: 1-4, nRBC/Eos/Baso : 0-5 | | |
| RBC Morphology | 3 | Normocytic normochromic with mild anisocytosis | Predominantly: Normocytic/Normochromic, Moderate: Anisocytosis, Mild: Macrocytes, poikilocytosis | | |
| Diagnosis | 3 | ? Acute Myeloid Leukemia M4 | Acute Leukemia likely Acute Myeloid Leukemia | | |

COMBINED DATA VALUES OF TOTAL PARTICIPANTS

| Test parameters | S.No. | Total participants covered in the current dist. 163--C | 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 |
| WBC x10 ⁹ /µl | 1 | 348 | 344 | 85.17 | 90.12 | 7.27 | 5.52 | 7.56 | 4.36 |
| RBC x10 ⁶ /µl | 1 | 348 | 348 | 90.23 | 93.97 | 5.17 | 2.3 | 4.6 | 3.73 |
| Hb g/dl | 1 | 348 | 348 | 76.15 | 92.53 | 13.79 | 3.45 | 10.06 | 4.02 |
| HCT% | 1 | 348 | 345 | 95.07 | 91.88 | 3.48 | 4.06 | 1.45 | 4.06 |
| MCV-f | 1 | 348 | 345 | 96.52 | 84.06 | 3.19 | 9.28 | 0.29 | 6.66 |
| MCH-Pg | 1 | 348 | 345 | 86.96 | 90.43 | 6.96 | 5.22 | 6.08 | 4.35 |
| MCHC-g/dl | 1 | 348 | 345 | 92.17 | 91.3 | 4.93 | 4.93 | 2.9 | 3.77 |
| Plt. x10 ⁹ /µl | 1 | 348 | 345 | 94.2 | 88.99 | 3.19 | 5.22 | 2.61 | 5.79 |
| ReticCount% | 2 | 348 | 317 | 89.91 | 80.44 | 7.89 | 11.99 | 2.2 | 7.57 |
| PS Assessment | 3 | 348 | 316 | Satisfactory :97.42%, Borderline Sat. :0.86%, Unsatisfactory :1.72% | | | | | |

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 ±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 (S_s) 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.

Note 10: Reports are kept confidential.

Report authorized by,



Dr. Manoranjan Mahapatra (Prof. & Head)

PT Co-ordinator: ISHTM-AIIMS-EQAP

Department of Hematology, AIIMS, New Delhi

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