



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

EOAP CODE No.: 1196

Distribution No.: 163-D

Month/Year: March/2024

Instrument ID: SYSMEX LTD

Model Name.: XN 350

Serial No.: 11359

JAPAN

Name & Contact No. of PT Co-ordinator: Dr. Manoranjan Mahapatra (Prof. & Head), Hematology, AIIMS, Delhi, Tel: 9013085730, E-Mail: info@ishtmaiimseqap.com

Date of issue & status of the report: 01-05-2024[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 | | Yours Results Diff. of 2 Values | T. 1 CC C C | Uncertainty of Assigned Values | Z Score | |
| WBC x10³/μl | 1 | 4.32 | 4.32 | 8.64 | 8.82 | 0.037 | -0.16 | 0 | 0.1 | 0.006 | -0.90 | |
| RBC x10 ⁶ /μl | 1 | 4.26 | 4.25 | 8.51 | 8.56 | 0.008 | -0.21 | 0.01 | 0.03 | 0.002 | -0.54 | |
| Hb g/dl | 1 | 13.1 | 13.1 | 26.2 | 26.8 | 0.019 | -1.01 | 0 | 0.1 | 0.007 | -0.67 | |
| НСТ% | 1 | 42.1 | 42 | 84.1 | 83.2 | 0.135 | 0.22 | 0.1 | 0.3 | 0.022 | -0.54 | |
| MCV-fl | 1 | 98.8 | 98.8 | 197.6 | 194.55 | 0.259 | 0.37 | 0 | 0.3 | 0.020 | -1.01 | |
| МСН-Рд | 1 | 30.8 | 30.8 | 61.6 | 62.6 | 0.055 | -0.67 | 0 | 0.2 | 0.015 | -0.90 | |
| MCHC-g/dl | 1 | 31.2 | 31.1 | 62.3 | 64.2 | 0.102 | -0.58 | 0.1 | 0.2 | 0.016 | -0.34 | |
| Plt. x10³/μl | 1 | 258 | 256 | 514 | 514 | 1.336 | 0.00 | 2 | 6 | 0.336 | -0.67 | |
| Retic % | 2 | 7 | 6 | 13 | 12.85 | 0.279 | 0.02 | 1 | 0.4 | 0.024 | 1.01 | |

P.S. Assesment

| // | | | | | | | | |
|-------------------|-----|--|---|--|--|--|--|--|
| YOUR REPORT | | | CONSENSUS REPORT | | | | | |
| DLC% | 3 | Nrbcs=2 , Poly=5 L=2, E=0, Mono/Promono=0 , B1=65 P.M.=28, Mye=0, Meta=0, Other= | Blast: 65-89, Poly: 4-9, Lympho: 3-8, Myelo/Mono/Promyelo/Meta/Eos/Baso: 0-5 | | | | | |
| RBC Morphology | 3 | NORMOCYTIC NORMOCHROMIC ANEMIA WITH OCCASIONAL MACROCYTES | Predominantly: Normocytic/Normochromic; Moderate: Anisocytosis, Mild: Microcytosis, Poikilocytosis | | | | | |
| Diagnosis | - 3 | ACUTE LEUKEMIA PROBABLY MYELOID/PROMYELOCYTIC | Acute Myeloid Leukemia(AML) | | | | | |

COMBINED DATA VALUES OF TOTAL PARTICIPANTS

| | S.No. | Total participants covered in the current dist. 163D | 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 | | | | Among labs | Within lab | Among labs | Within lab | Among labs | Within lab |
| WBC x10³/μl | 1 | 365 | 362 | 91.16 | 92.82 | 2.76 | 2.49 | 6.08 | 4.69 |
| RBC x10 ⁶ /µl | 1 | 365 | 365 | 89.04 | 92.6 | 6.85 | 2.47 | 4.11 | 4.93 |
| Hb g/dl | 1 | 365 | 365 | 88.49 | 89.04 | 6.58 | 4.66 | 4.93 | 6.3 |
| НСТ% | 1 | 365 | 362 | 93.65 | 91.16 | 4.7 | 3.59 | 1.65 | 5.25 |
| MCV-fl | 1 | 365 | 362 | 95.03 | 86.19 | 3.59 | 7.46 | 1.38 | 6.35 |
| MCH-Pg | 1 | 365 | 361 | 88.09 | 91.41 | 7.2 | 3.05 | 4.71 | 5.54 |
| MCHC-g/dl | 1 | 365 | 361 | 93.35 | 88.92 | 3.88 | 4.71 | 2.77 | 6.37 |
| Plt. x10³/μl | 1 | 365 | 362 | 90.06 | 92.54 | 6.35 | 3.59 | 3.59 | 3.87 |
| ReticCount% | 2 | 365 | 326 | 96.93 | 93.25 | 2.76 | 4.29 | 0.31 | 2.46 |
| PS Assessment | 3 | 365 | 338 | Satisfactory :95.9%, Borderline Sat. :1.64%, Unsatisfactory :2.46% | | | | | |

*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 $> \pm 3$: 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 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-EOAP

Department of Hematology, AIIMS, New Delhi

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



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PARTICIPATION CERTIFICATE

[Certificate No. EQAP/1196/2023/30]

Date 30.12.2023

This is to certify that" VINAMRA SWARAJ HOSPITAL-PATHOLOGY DEPT, THANE, Maharashtra, 400703 "has participated in the "ISHTM-AIIMS External Quality Assurance Program" for the period "January 2023 to December 2023".

Report authorized by,

Dr. Manoranjan Mahapatra (Prof. & Head)

PT Co-ordinator: ISHTM-AIIMS-EQAP

Department of Hematology, AIIMS, New Delhi