



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. : 3752

Distribution No.: 155-J

Month/Year: March/2022

Instrument ID: Sysmex XN550,5Part,SN.20102

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: 31-05-2022[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 ³ /µl | 1 | 5 | 4.9 | 9.9 | 10.56 | 0.0580 | -0.47 | 0.1 | 0.1 | 0.0100 | 0.00 |
| RBC x10 ⁶ /µl | 1 | 4.8 | 4.7 | 9.5 | 9.37 | 0.0140 | 0.36 | 0.1 | 0.05 | 0.0040 | 0.96 |
| Hb g/dl | 1 | 14.1 | 14.1 | 28.2 | 28 | 0.0370 | 0.25 | 0 | 0.1 | 0.0100 | -0.67 |
| HCT% | 1 | 42.9 | 42.4 | 85.3 | 84.1 | 0.1710 | 0.29 | 0.5 | 0.5 | 0.0310 | 0.00 |
| MCV-fl | 1 | 90.2 | 89.4 | 179.6 | 179.8 | 0.2720 | -0.03 | 0.8 | 0.3 | 0.0310 | 0.96 |
| MCH-Pg | 1 | 30 | 29.4 | 59.4 | 59.55 | 0.1010 | -0.07 | 0.6 | 0.3 | 0.0200 | 1.01 |
| MCHC-g/dl | 1 | 33.3 | 32.9 | 66.2 | 66.5 | 0.1520 | -0.09 | 0.4 | 0.3 | 0.0230 | 0.34 |
| Plt. x10 ³ /µl | 1 | 374 | 370 | 744 | 286 | 2.24 | 9.09 | 4 | 8 | 0.55 | -0.48 |
| Retic % | 2 | 4.5 | 4.3 | 8.8 | 8 | 0.15 | 0.21 | 0.2 | 0.4 | 0.03 | -0.54 |

P.S . Assesment

| YOUR REPORT | | CONSENSUS REPORT |
|-----------------------|---|---|
| DLC% | 3 | Nrbcs=0 , Poly=05 L=01, E=00, Mono/Promono= , B1=95 P.M.=0, Mye=0, Meta=0, Other= |
| RBC Morphology | 3 | Majority of the RBCs are Normochromic Normocytic and Many Microcytic Hypochromic RBCs |
| Diagnosis | 3 | Acute Leukemia |

COMBINED DATA VALUES OF TOTAL PARTICIPANTS

| Test parameters | S.No. | Total participants covered in the current dist. 155--J | 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 x10³/µl | 1 | 252 | 250 | 87.2 | 81.6 | 2 | 3.6 | 10.8 | 14.8 |
| RBC x10⁶/µl | 1 | 252 | 252 | 90.48 | 87.7 | 4.37 | 3.97 | 5.15 | 8.33 |
| Hb g/dl | 1 | 252 | 252 | 85.71 | 89.68 | 5.95 | 5.16 | 8.34 | 5.16 |
| HCT% | 1 | 252 | 250 | 90.4 | 88.8 | 5.2 | 4 | 4.4 | 7.2 |
| MCV-fl | 1 | 252 | 249 | 91.97 | 92.77 | 5.22 | 2.81 | 2.81 | 4.42 |
| MCH-Pg | 1 | 252 | 250 | 89.6 | 88.8 | 5.2 | 2.4 | 5.2 | 8.8 |
| MCHC-g/dl | 1 | 252 | 250 | 87.6 | 86 | 7.2 | 7.6 | 5.2 | 6.4 |
| Plt. x10³/µl | 1 | 252 | 248 | 84.68 | 90.73 | 6.45 | 4.44 | 8.87 | 4.83 |
| ReticCount% | 2 | 252 | 230 | 92.61 | 94.78 | 4.35 | 0.87 | 3.04 | 4.35 |
| PS Assessment | 3 | 252 | 236 | Satisfactory :94.82%, Borderline Sat. :3.58%, Unsatisfactory :1.59% | | | | | |

***Comments:**

- 1). Among Lab (EQA) : CBC result for PLT 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 ± 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 $> \pm 3$ 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.

Note 10: Reports are kept confidential.

Report authorized by,



Dr. Seema Tyagi (Prof.)

PT Co-ordinator: ISHTM-AIIMS-EQAP

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