



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. : 1465

Distribution No.: 156-C

Month/Year: May/2022

Instrument ID: 909YAXH02687

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: 12-07-2022[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 | 3.53 | 3.16 | 6.69 | 41.35 | 0.2760 | -1.62 | 0.37 | 0.21 | 0.0140 | 0.54 |
| RBC x10 ⁶ /µl | 1 | 4.44 | 4.35 | 8.79 | 8.63 | 0.0080 | 0.71 | 0.09 | 0.03 | 0.0020 | 1.62 |
| Hb g/dl | 1 | 12.5 | 12.4 | 24.9 | 26.4 | 0.0330 | -1.84 | 0.1 | 0.1 | 0.0080 | 0.00 |
| HCT% | 1 | 42 | 41.3 | 83.3 | 83.6 | 0.2070 | -0.05 | 0.7 | 0.4 | 0.0240 | 0.81 |
| MCV-fl | 1 | 94.9 | 94.7 | 189.6 | 194.1 | 0.4040 | -0.38 | 0.2 | 0.3 | 0.0250 | -0.17 |
| MCH-Pg | 1 | 28.5 | 28.2 | 56.7 | 61.1 | 0.0840 | -1.98 | 0.3 | 0.2 | 0.0160 | 0.45 |
| MCHC-g/dl | 1 | 30 | 29.8 | 59.8 | 62.6 | 0.1590 | -0.61 | 0.2 | 0.3 | 0.0170 | -0.34 |
| Plt. x10 ³ /µl | 1 | 230 | 226 | 456 | 346 | 3.20 | 1.09 | 4 | 5 | 0.31 | -0.18 |
| Retic % | 2 | 2.6 | 2.5 | 5.1 | 7.85 | 0.12 | -0.81 | 0.1 | 0.3 | 0.02 | -0.90 |

P.S . Assesment

| YOUR REPORT | | CONSENSUS REPORT |
|----------------|---|---|
| DLC% | 3 | Nrbcs=02 , Poly=15 L=18, E=00, Mono/Promono=01 , B1=64 P.M.=00, Mye=00, Meta=00, Other=00 |
| RBC Morphology | 3 | Blast: 49-70, Lympho: 12-27 ,Poly: 9-17, /mono:1-5 nRBC/Eosino/Myelo/Meta/promyelo: 0-2 |
| Diagnosis | 3 | Predominantly: Normocytic/ Normochromic, Moderate: Anisocytosis, Microcytic , macrocytes, Tear drop cells |
| | | Acute leukemia. |
| | | Acute Leukemia (AL) |

COMBINED DATA VALUES OF TOTAL PARTICIPANTS

| Test parameters | S.No. | Total participants covered in the current dist. 156--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 x10³/µl | 1 | 348 | 346 | 99.13 | 89.88 | 0.29 | 3.47 | 0.58 | 6.65 |
| RBC x10⁶/µl | 1 | 348 | 348 | 91.09 | 90.8 | 4.6 | 3.74 | 4.31 | 5.46 |
| Hb g/dl | 1 | 348 | 348 | 85.92 | 87.93 | 6.61 | 4.6 | 7.47 | 7.47 |
| HCT% | 1 | 348 | 347 | 88.47 | 89.05 | 4.9 | 3.75 | 6.63 | 7.2 |
| MCV-fl | 1 | 348 | 347 | 88.47 | 91.93 | 3.75 | 4.61 | 7.78 | 3.46 |
| MCH-Pg | 1 | 348 | 347 | 87.32 | 87.61 | 5.76 | 6.92 | 6.92 | 5.47 |
| MCHC-g/dl | 1 | 348 | 347 | 91.64 | 86.46 | 4.9 | 4.9 | 3.46 | 8.64 |
| Plt. x10³/µl | 1 | 348 | 347 | 95.39 | 91.64 | 3.46 | 3.46 | 1.15 | 4.9 |
| ReticCount% | 2 | 348 | 330 | 90.91 | 82.12 | 7.27 | 12.73 | 1.82 | 5.15 |
| PS Assessment | 3 | 348 | 327 | Satisfactory :94.27%, Borderline Sat. :4.59%, Unsatisfactory :1.14% | | | | | |

***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 $> \pm 3$ 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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