



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. : 5409

Distribution No.: 159-N

Month/Year: April/2023

Instrument ID: IB-10156544(C4057)

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Date of issue & status of the report: 14-06-2023[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 | 4.9 | 4.8 | 9.7 | 8.1 | 0.039 | 1.33 | 0.1 | 0.1 | 0.007 | 0.00 |
| RBC x10 ⁶ /µl | 1 | 5.4 | 5.38 | 10.78 | 10.7 | 0.013 | 0.22 | 0.02 | 0.05 | 0.003 | -0.51 |
| Hb g/dl | 1 | 12.8 | 12.8 | 25.6 | 25.2 | 0.026 | 0.49 | 0 | 0.1 | 0.007 | -0.67 |
| HCT% | 1 | 39.7 | 39.5 | 79.2 | 79.8 | 0.155 | -0.13 | 0.2 | 0.4 | 0.025 | -0.45 |
| MCV-fl | 1 | 73.8 | 73.1 | 146.9 | 149.4 | 0.206 | -0.39 | 0.7 | 0.2 | 0.017 | 1.69 |
| MCH-Pg | 1 | 23.8 | 23.7 | 47.5 | 46.8 | 0.059 | 0.44 | 0.1 | 0.2 | 0.012 | -0.67 |
| MCHC-g/dl | 1 | 32.4 | 32.2 | 64.6 | 62.5 | 0.120 | 0.56 | 0.2 | 0.3 | 0.018 | -0.34 |
| Plt. x10 ³ /µl | 1 | 195 | 186 | 381 | 370.5 | 1.599 | 0.22 | 9 | 7 | 0.392 | 0.29 |
| Retic % | 2 | 10 | 9 | 19 | 15.7 | 0.249 | 0.44 | 1 | 0.5 | 0.034 | 0.84 |

P.S . Assesment

| YOUR REPORT | | | CONSENSUS REPORT | | |
|----------------|---|--|---|--|--|
| DLC% | 3 | Nrbcs=05 , Poly=45 L=02, E=04, Mono/Promono=08 , B1=01 P.M.=02, Mye=27, Meta=10, Other=t0(9:22), NAP Score | Poly: 44 - 60, Myelo: 10 - 22, Meta: 7- 16, Lympho: 2- 6, Promyelo: 2-6, Eosino: 1-4, Blast: 1-4, Mono: 1 - 3, nRBC/Baso: 0-5 | | |
| RBC Morphology | 3 | Mostly Normocytic normochromic. Mild to moderate anisocytosis seen. Nucleated RBC - 05/100 WBC | Predominantly: Normocytic/Normochromic; Moderate: Anisocytosis, hypochromia, Microcytosis; Mild: Macrocytosis, Poikilocytosis | | |
| Diagnosis | 3 | Chronic phase of chronic Myeloid Leukemia | Chronic Myeloid Leukemia (Chronic Phase) | | |

COMBINED DATA VALUES OF TOTAL PARTICIPANTS

| Test parameters | S.No. | Total participants covered in the current dist. 159--N | 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 | 364 | 359 | 88.58 | 86.07 | 3.06 | 6.69 | 8.36 | 7.24 |
| RBC x10⁶/µl | 1 | 364 | 364 | 87.64 | 87.09 | 6.87 | 4.95 | 5.49 | 7.96 |
| Hb g/dl | 1 | 364 | 364 | 90.66 | 84.89 | 4.95 | 5.22 | 4.39 | 9.89 |
| HCT% | 1 | 364 | 360 | 94.72 | 87.5 | 4.44 | 4.72 | 0.84 | 7.78 |
| MCV-fl | 1 | 364 | 360 | 93.06 | 88.33 | 5.28 | 6.67 | 1.66 | 5 |
| MCH-Pg | 1 | 364 | 360 | 86.94 | 93.06 | 8.06 | 1.67 | 5 | 5.27 |
| MCHC-g/dl | 1 | 364 | 359 | 93.87 | 87.19 | 5.29 | 5.85 | 0.84 | 6.96 |
| Plt. x10³/µl | 1 | 364 | 360 | 93.61 | 91.94 | 3.89 | 4.17 | 2.5 | 3.89 |
| ReticCount% | 2 | 364 | 273 | 93.41 | 84.62 | 4.76 | 8.79 | 1.83 | 6.59 |
| PS Assessment | 3 | 364 | 267 | Satisfactory :93.95%, Borderline Sat. :2.20%, Unsatisfactory :3.85% | | | | | |

***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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