



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. : 3251

Distribution No.: 156-I

Month/Year: June/2022

Instrument ID: MINDARY BC 3000 PLUS (RJ34114645)

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: 29-08-2022[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 | 5.9 | 5.7 | 11.6 | 10.88 | 0.1010 | 0.43 | 0.2 | 0.1 | 0.0120 | 0.86 |
| RBC x10 ⁶ /µl | 1 | 4.63 | 4.61 | 9.24 | 8.86 | 0.0140 | 1.60 | 0.02 | 0.04 | 0.0040 | -0.54 |
| Hb g/dl | 1 | 11.8 | 11.6 | 23.4 | 25.4 | 0.0420 | -3.00 | 0.2 | 0.1 | 0.0110 | 1.35 |
| HCT% | 1 | 42.7 | 42 | 84.7 | 80.35 | 0.2230 | 1.09 | 0.7 | 0.4 | 0.0360 | 0.85 |
| MCV-fl | 1 | 92.3 | 91.3 | 183.6 | 182.5 | 0.3910 | 0.16 | 1 | 0.3 | 0.0370 | 1.40 |
| MCH-Pg | 1 | 25.4 | 25.1 | 50.5 | 57.35 | 0.1040 | -4.25 | 0.3 | 0.2 | 0.0230 | 0.45 |
| MCHC-g/dl | 1 | 27.6 | 27.6 | 55.2 | 62.9 | 0.1840 | -2.06 | 0 | 0.3 | 0.0220 | -1.35 |
| Plt. x10 ³ /µl | 1 | 166 | 165 | 331 | 418.5 | 2.67 | -1.84 | 1 | 5 | 0.52 | -0.67 |
| Retic % | 2 | 1 | 0.5 | 1.5 | 10.4 | 0.40 | -1.14 | 0.5 | 0.5 | 0.05 | 0.00 |

P.S . Assesment

| YOUR REPORT | | CONSENSUS REPORT |
|----------------|---|--|
| DLC% | 3 | Nrbcs=3 , Poly=24 L=10, E=3, Mono/Promono=6 , B1=8 P.M.=12, Mye=16, Meta=15, Other=NIL |
| RBC Morphology | 3 | Blast: 26-64, Poly: 6-19, Lympho: 8-15, mono:2-20 , Myelo:0-7 , Meta: 0-7, promyelo: 0-6, Eosino:0-1 |
| Diagnosis | 3 | Chronic Myeloid Leukaemia |
| | | Predominantly: Normocytic/ Normochromic, Moderate: Anisocytosis, Microcytic |
| | | Acute Leukemia (AL) |

COMBINED DATA VALUES OF TOTAL PARTICIPANTS

| Test parameters | S.No. | Total participants covered in the current dist. 156--I | 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 | 138 | 138 | 87.68 | 83.33 | 5.8 | 2.9 | 6.52 | 13.77 |
| RBC x10⁶/µl | 1 | 138 | 138 | 87.68 | 92.75 | 7.25 | 4.35 | 5.07 | 2.9 |
| Hb g/dl | 1 | 138 | 138 | 92.03 | 88.41 | 5.8 | 5.8 | 2.17 | 5.79 |
| HCT% | 1 | 138 | 138 | 89.86 | 90.58 | 7.25 | 5.8 | 2.89 | 3.62 |
| MCV-fl | 1 | 138 | 138 | 93.48 | 94.2 | 4.35 | 1.45 | 2.17 | 4.35 |
| MCH-Pg | 1 | 138 | 138 | 86.23 | 90.58 | 10.87 | 5.8 | 2.9 | 3.62 |
| MCHC-g/dl | 1 | 138 | 138 | 93.48 | 90.58 | 5.07 | 2.9 | 1.45 | 6.52 |
| Plt. x10³/µl | 1 | 138 | 138 | 93.48 | 92.03 | 4.35 | 4.35 | 2.17 | 3.62 |
| ReticCount% | 2 | 138 | 115 | 96.52 | 89.57 | 0.00 | 6.96 | 3.48 | 3.47 |
| PS Assessment | 3 | 138 | 126 | Satisfactory :91.31%, Borderline Sat. :0.72%, Unsatisfactory :7.97% | | | | | |

***Comments:**

1). **Among Lab (EQA) : CBC result for MCH unacceptable, may be due to random/human error.PS Diagnosis wrongly reported, remaining 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 (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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