



**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. : 3569

Distribution No.: 154-J

Month/Year: January/2022

Instrument ID: Beckman DxH 500(AZ080377)

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### 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 <sup>3</sup> /μl  | 1     | 6.92                         | 6.66          | 13.58                       | 14.9  | 0.0430                         | -1.38   | 0.26                            | 0.11  | 0.0110                         | 1.56    |
| RBC x10 <sup>6</sup> /μl  | 1     | 3.45                         | 3.41          | 6.86                        | 6.82  | 0.0080                         | 0.21    | 0.04                            | 0.03  | 0.0030                         | 0.27    |
| Hb g/dl                   | 1     | 11.18                        | 11.13         | 22.31                       | 21.8  | 0.0240                         | 0.86    | 0.05                            | 0.1   | 0.0080                         | -0.67   |
| HCT%                      | 1     | 35.8                         | 35.4          | 71.2                        | 68.6  | 0.1510                         | 0.78    | 0.4                             | 0.3   | 0.0270                         | 0.34    |
| MCV-fl                    | 1     | 103.9                        | 103.8         | 207.7                       | 200.6   | 0.3570                         | 0.81    | 0.1                             | 0.5   | 0.0370                         | -0.60   |
| MCH-Pg                    | 1     | 32.6                         | 32.4          | 65                          | 64.1  | 0.0800                         | 0.51    | 0.2                             | 0.2   | 0.0160                         | 0.00    |
| MCHC-g/dl                 | 1     | 31.4                         | 31.2          | 62.6                        | 63.6  | 0.1440                         | -0.31   | 0.2                             | 0.3   | 0.0220                         | -0.27   |
| Plt. x10 <sup>3</sup> /μl | 1     | 232                          | 229           | 461                         | 418   | 1.39                           | 1.38    | 3                               | 6   | 0.39                           | -0.58   |
| Retic %                   | 2     | 2.8                          | 1.8           | 4.6                         | 6.6   | 0.17                           | -0.45   | 1                               | 0.3   | 0.02                           | 2.36    |

### P.S . Assesment

| YOUR REPORT    |   |   | CONSENSUS REPORT  |  |  |
|----------------|---|---|---|--|--|
| DLC%           | 3 | Nrbcs=2.00 , Poly=51.00 L=5.00, E=6.00, Mono/Promono=30.00 , B1=4.00 P.M.=1.00, Mye=1.00, Meta=1.00, Other= | Poly: 45 - 58 , Myelo: 8 - 21, Meta: 6 - 13; Lympho/Promyelo: 1 - 10; Blast/nRBC/Eos/Baso/Mono: 0 - 5                         |  |  |
| RBC Morphology | 3 | Normocytic Normochromic, Mild Hypochromasia, Polychromasia +  | Predominantly: Normocytic/Normochromic; Moderate: Anisocytosis, Microcytosis, Hypochromia; Mild: Macrocytosis, Poikilocytosis |  |  |
| Diagnosis      | 3 | Chronic Myeloproliferative disorder with Monocytosis  | Chronic Myeloid Leukemia  |  |  |

### COMBINED DATA VALUES OF TOTAL PARTICIPANTS

| Test parameters           | S.No. | Total participants covered in the current dist. 154--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 x10 <sup>3</sup> /µl  | 1     | 237  | 237                 | 86.92   | 85.65      | 4.64                       | 1.69       | 8.44                      | 12.66      |
| RBC x10 <sup>6</sup> /µl  | 1     | 237  | 237                 | 91.14   | 91.56      | 4.22                       | 4.22       | 4.64                      | 4.22       |
| Hb g/dl                   | 1     | 237  | 237                 | 92.83   | 89.87      | 3.8                        | 3.8        | 3.37                      | 6.33       |
| HCT%                      | 1     | 237  | 237                 | 90.3  | 84.81      | 8.44                       | 7.59       | 1.26                      | 7.6        |
| MCV-fl                    | 1     | 237  | 236                 | 94.92   | 94.92      | 3.81                       | 2.97       | 1.27                      | 2.11       |
| MCH-Pg                    | 1     | 237  | 237                 | 89.03   | 88.19      | 7.17                       | 6.75       | 3.8                       | 5.06       |
| MCHC-g/dl                 | 1     | 237  | 237                 | 90.72   | 89.45      | 8.44                       | 5.06       | 0.84                      | 5.49       |
| Plt. x10 <sup>3</sup> /µl | 1     | 237  | 237                 | 89.03   | 91.56      | 7.59                       | 4.22       | 3.38                      | 4.22       |
| ReticCount%               | 2     | 237  | 232                 | 96.12   | 83.19      | 1.29                       | 10.78      | 2.59                      | 6.03       |
| PS Assessment             | 3     | 237  | 217                 | Satisfactory :90.99%, Borderline Sat. :7.17%, Unsatisfactory :1.84% |            |                            |            |                           |            |

**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 > ±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](http://www.ishtmaiimseqap.com).

**Note 10:** Reports are kept confidential.

Report authorized by,



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