



**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. : 1597

Distribution No.: 149-C

Month/Year: November/2019

Instrument ID: I COUNT 5

Name & Contact No. of PT Co-ordinator: Dr. Renu Saxena (Prof & Head), Hematology, AIIMS, Delhi,  
 Tel: 9013085730 , E-Mail : accuracy2000@gmail.com

Date of issue &amp; status of the report: 24-12-2019[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 <sup>3</sup> /µl  | 1     | 17.4                         | 17.2          | 34.6                        | 30.11   | 0.0150                         | 3.19    | 0.2                             | 0.2   | 0.0050                         | 0.00    |
| RBC x10 <sup>6</sup> /µl  | 1     | 3.2                          | 3.2           | 6.4                         | 6.74  | 0.0070                         | -2.08   | 0                               | 0.03  | 0.0010                         | -0.81   |
| Hb g/dl                   | 1     | 11.7                         | 11.5          | 23.2                        | 23.3  | 0.0180                         | -0.17   | 0.2                             | 0.1   | 0.0060                         | 0.67    |
| HCT%                      | 1     | 37.1                         | 36.4          | 73.5                        | 74.05   | 0.1400                         | -0.13   | 0.7                             | 0.3   | 0.0170                         | 1.08    |
| MCV-fl                    | 1     | 113.8                        | 113.2         | 227                         | 219   | 0.3040                         | 0.77    | 0.6                             | 0.3   | 0.0180                         | 0.81    |
| MCH-Pg                    | 1     | 35.8                         | 35.7          | 71.5                        | 69.2  | 0.0530                         | 1.24    | 0.1                             | 0.3   | 0.0110                         | -0.67   |
| MCHC-g/dl                 | 1     | 31.6                         | 31.5          | 63.1                        | 63.1  | 0.1270                         | 0.00    | 0.1                             | 0.3   | 0.0110                         | -0.67   |
| Plt. x10 <sup>3</sup> /µl | 1     | 342                          | 339           | 681                         | 823   | 1.05                           | -2.20   | 3                               | 8   | 0.30                           | -0.66   |
| Retic %                   | 2     | 5.4                          | 5.1           | 10.5                        | 7.2   | 0.16                           | 0.65    | 0.3                             | 0.4   | 0.02                           | -0.34   |

All case perfect

### P.S . Assesment

| YOUR REPORT    |   |  | CONSENSUS REPORT  |
|----------------|---|--|---|
| DLC%           | 3 | Nrbcs=--- , Poly=stab-10% L=01%, E=01%, Mono/Promono=01% , B1=02% P.M.=04%, Mye=09%, Meta=07%, Other=--- | Poly: 65-75, nRBC/Lymph/Eo/Mono/blast/pro: 0-5, Myelo: 10-15, Meta: 5-12, Baso: 0-2 |
| RBC Morphology | 3 | NO SIGNIFICANT POLYCHROMASIA   | Predominantly: Normocytic Normochromic, Moderate: Anisocytosis, Mild: Microcytic    |
| Diagnosis      | 3 | chronic myeloid leukemia-chronic phase   | Chronic Myeloid Leukemia (Chronic Phase) [ CML-CP ]                                 |

27/12/19



**COMBINED DATA VALUES OF TOTAL PARTICIPANTS**

| Test parameters           | S.No. | Total participants covered in the current dist. | 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     | 450   | 373                 | 89.81   | 93.03      | 4.29                       | 3.22       | 5.63                      | 3.49       |
| RBC x10 <sup>6</sup> /µl  | 1     | 450   | 373                 | 87.67   | 89.01      | 6.7                        | 3.75       | 5.36                      | 6.7        |
| Hb g/dl                   | 1     | 450   | 373                 | 86.33   | 88.74      | 6.97                       | 3.22       | 6.43                      | 7.77       |
| HCT%                      | 1     | 450   | 373                 | 96.51   | 89.54      | 1.34                       | 4.29       | 1.88                      | 5.09       |
| MCV-fl                    | 1     | 450   | 373                 | 94.1  | 94.37      | 3.49                       | 1.07       | 2.14                      | 4.29       |
| MCH-Pg                    | 1     | 450   | 373                 | 88.74   | 91.96      | 4.02                       | 3.75       | 6.97                      | 4.02       |
| MCHC-g/dl                 | 1     | 450   | 373                 | 92.23   | 87.4       | 5.09                       | 5.63       | 2.41                      | 6.17       |
| Plt. x10 <sup>3</sup> /µl | 1     | 450   | 373                 | 86.6  | 90.35      | 6.7                        | 3.49       | 6.43                      | 5.9        |
| ReticCount%               | 2     | 450   | 266                 | 90.23   | 95.49      | 4.89                       | 0.38       | 3.01                      | 6.77       |
| PS Assessment             | 3     | 450   | 354                 | Acceptable:97%,Warning Signal:2.2%,Unacceptable :0.8% |            |                            |            |                           |            |

**Comments:**

- 1). Among Lab (EQA) : CBC result for WBC 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 > ±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).

Report authorized by,



Dr. R. Saxena

Prof & Head, Hematology, AIIMS, Delhi.

PT Co-ordinator: ISHTM-AIIMS-EQAP

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



2/13/2020

## LAB MONTHLY SUMMARY

Lab Name **BALAJI MEDICAL CENTRE** Lab No **5817**  
 Month **January** Year **2020**  
 Constituent Group **Chemistry II**

Date of Result Entered : 13/01/2020

Date of Report Published : 11/02/2020

| Sl.No | Analyte        | Method / Principle Name                      | Analyzer Name                 | No of Participants | DV     | Participants |       | Your Value  | SDI   | U    |
|-------|----------------|--|-------------------------------|--------------------|--------|--------------|-------|-------------|-------|------|
|       |                |  |                               |                    |        | CV           | SD    |             |       |      |
| 1     | GLUCOSE I      | GOD-POD                                      | OTHERS ( Any other Analyzer ) | 850                | 134.43 | 9.69         | 13.03 | 142 mg/dl   | 0.58  | 0.89 |
| 2     | UREA I         | UREASE BERTHELOT                             | OTHERS ( Any other Analyzer ) | 281                | 39.56  | 14.36        | 5.68  | 36.8 mg/dl  | -0.49 | 0.68 |
| 3     | T.BILIRUBIN I  | DIAZONIUM SALT ( Colorimetric ) / JENDRASSIK | OTHERS ( Any other Analyzer ) | 597                | 2.04   | 21.38        | 0.44  | 2 mg/dl     | -0.09 | 0.04 |
| 4     | T-PROTEIN I    | BIURET - colorimetric                        | OTHERS ( Any other Analyzer ) | 690                | 5.22   | 11.48        | 0.60  | 5.3 g/dl    | 0.13  | 0.05 |
| 5     | ALBUMIN I      | BCG - colorimetric                           | OTHERS ( Any other Analyzer ) | 674                | 3.19   | 10.36        | 0.33  | 3.01 g/dl   | -0.54 | 0.03 |
| 6     | URIC ACID I    | ENZYMATIC / URICASE Colorimetric             | OTHERS ( Any other Analyzer ) | 631                | 5.96   | 15.93        | 0.95  | 5.9 mg/dl   | -0.06 | 0.08 |
| 7     | TRIGLYCERIDE I | GPO-PAP / Enzymatic Colorimetric / End Point | OTHERS ( Any other Analyzer ) | 766                | 115.15 | 15.91        | 18.32 | 108.9 mg/dl | -0.34 | 1.32 |

| SDI Range                      | Interpretation                           |
|--------------------------------|--|
| Within -1.0 to +1.0            | Excellent.                               |
| Between $\pm 1.0$ to $\pm 2.0$ | Good.                                    |
| Between $\pm 2.0$ to $\pm 3.0$ | Accept with caution. Warning Signal.     |
| Beyond $\pm 3.0$               | Unacceptable performance. Action Signal. |

*All are within -1.0 to 1.0 (Excellent)*

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Homogeneity and Stability of the sample is passed.

*Pamela Christudoss*  
 Dr. Pamela Christudoss  
 CMC EQAS Co-Ordinator  
 Christian Medical College, Vellore

\*\*\*\*\* End of Report \*\*\*\*\*



2/13/2020

**LAB MONTHLY SUMMARY**

Lab Name **BALAJI MEDICAL CENTRE** Lab No **5817**  
 Month **January** Year **2020**  
 Constituent Group **HbA1c**

Date of Result Entered : 13/01/2020

Date of Report Published : 11/02/2020

| Sl.No | Analyte | Method / Principle Name               | Analyzer Name                 | No of Participants | DV   | Participants CV | SD   | Your Value | SDI   | U    |
|-------|---------|---------------------------------------|-------------------------------|--------------------|------|-----------------|------|------------|-------|------|
| 1     | HbA1c   | TURBIDIMETRIC INHIBITION IMMUNO ASSAY | OTHERS ( Any other Analyzer ) | 171                | 5.33 | 11.42           | 0.61 | 5.3 %      | -0.05 | 0.09 |

| SDI Range            | Interpretation                           |
|----------------------|--|
| Within -1.0 to +1.0  | Excellent.                               |
| Between ±1.0 to ±2.0 | Good.                                    |
| Between ±2.0 to ±3.0 | Accept with caution. Warning Signal.     |
| Beyond ±3.0          | Unacceptable performance. Action Signal. |

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Homogeneity and Stability of the sample is passed.

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 Christian Medical College, Vellore

\*\*\*\*\* End of Report \*\*\*\*\*