

## BIO-CHEMISTRY-02

### ALL METHOD REPORT

Cycle - 12/2023

Lab Code: 2619

Round No - 2

Date: 15/03/2023

| Parameters           | Units | No.of. Participants | Robust Mean | Robust Standard deviation (SD) | Uncertainty of Assign Values | Range (± 2 SD) | Your Value | Z Score |
|----------------------|-------|---------------------|-------------|--------------------------------|------------------------------|----------------|------------|---------|
| Albumin              | g/dL  | 71                  | 4.3         | 0.1                            | 0.01                         | 4.1-4.5        | *4         | -2.7    |
| Alkaline Phosphatase | U/L   | 70                  | 171.0       | 22.5                           | 3.37                         | 125.9-216.1    | 171        | 0.0     |
| Bilirubin Total      | mg/dL | 71                  | 1.5         | 0.1                            | 0.02                         | 1.2-1.8        | 1.5        | -0.1    |
| Calcium(Total)       | mg/dL | 67                  | 8.9         | 0.4                            | 0.06                         | 8.0-9.7        | 8.6        | -0.6    |
| Cholesterol (Total)  | mg/dL | 70                  | 150.8       | 7.2                            | 1.08                         | 136.3-165.2    | 158        | 1.0     |
| Creatinine           | mg/dL | 71                  | 1.5         | 0.1                            | 0.02                         | 1.3-1.7        | 1.6        | 1.0     |
| Glucose              | mg/dL | 70                  | 104.4       | 6.8                            | 1.01                         | 90.9-117.9     | 94         | -1.5    |
| HDL                  | mg/dL | 67                  | 49.7        | 4.8                            | 0.73                         | 40.2-59.2      | 51.0       | 0.3     |
| Potassium            | mEq/L | 66                  | 4.0         | 0.2                            | 0.03                         | 3.7-4.4        | 4.0        | -0.1    |
| Protein (Total)      | g/dl  | 71                  | 5.8         | 0.2                            | 0.03                         | 5.3-6.2        | 5.8        | 0.2     |
| Sodium               | mEq/L | 66                  | 140.4       | 3.5                            | 0.53                         | 133.5-147.4    | 139        | -0.4    |
| SGPT/ALT             | U/L   | 71                  | 31.5        | 2.7                            | 0.40                         | 26.1-36.9      | 32         | 0.2     |
| SGOT/AST             | U/L   | 71                  | 30.8        | 2.4                            | 0.35                         | 26.1-35.5      | 29         | -0.8    |
| Triglyceride         | mg/dL | 69                  | 99.1        | 7.9                            | 1.18                         | 83.3-114.8     | 88         | -1.4    |
| Urea                 | mg/dL | 71                  | 43.0        | 3.2                            | 0.48                         | 36.6-49.5      | 41         | -0.6    |
| Uric Acid            | mg/dl | 70                  | 5.9         | 0.4                            | 0.06                         | 5.0-6.7        | 5.6        | -0.7    |
| Chloride             | mEq/L | 66                  | 99.3        | 3.7                            | 0.56                         | 92.0-106.6     | 100        | 0.2     |
| Phosphorus           | mg/dL | 62                  | 4.5         | 0.2                            | 0.03                         | 4.2-4.9        | 4.4        | -0.6    |
| Magnesium            | mg/dl | 25                  | 2.3         | 0.1                            | 0.03                         | 2.1-2.5        | .          | -       |
| Iron                 | µg/dL | 50                  | 116.5       | 11.7                           | 2.06                         | 93.2-139.8     | 114        | -0.2    |
| Amylase              | U/L   | 44                  | 84.3        | 7.9                            | 1.48                         | 68.5-100.0     | .          | -       |
| CK                   | U/L   | 20                  | 173.7       | 21.6                           | 6.05                         | 130.4-216.9    | .          | -       |

### Interpretation of Z Score :

| Z Score Value(+/-) | $[Z] \leq 2.0$                     | $2.0 < [Z] < 3.0$           | $[Z] \geq 3.0$                           |
|--------------------|------------------------------------|-----------------------------|--|
| Interpretation     | Satisfactory Performance No signal | Questionable Warning Signal | Unsatisfactory Performance action Signal |

| Legends | (*) Excluded From Group Mean | { } Not Reported | (#)Late Result Submission | (\$ )Reported in other Unit |
|---------|------------------------------|------------------|---------------------------|-----------------------------|
|---------|------------------------------|------------------|---------------------------|-----------------------------|

Chief Coordinator

Programme Director

Dr.Sanjay Mehrotra

Dr.Bandana Mehrotra

Checked By

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Prepared by: SS

Doc. No.: ASS / FR / 03A / R 01 / Dt.: 05.01.2022

## BIO-CHEMISTRY-02

### METHOD WISE REPORT

Cycle - 12/2023

Round No - 02

Date: 15/03/2023

Lab Code: 2619

Note: @ Parameters are not part of Method Group

| Parameters           | Units | Method Group                               | No.of. Participants | Robust Mean | Robust Standard deviation (SD) | Uncertainty of Assign Values | Range (± 2 SD) | Your Value | Z Score |
|----------------------|-------|--|---------------------|-------------|--------------------------------|------------------------------|----------------|------------|---------|
| Albumin              | g/dL  | Bromocresol Green (BCG)                    | 52                  | 4.3         | 0.1                            | 0.02                         | 4.0-4.6        | *4         | -3.0    |
| Alkaline Phosphatase | U/L   | PNPP                                       | 51                  | 171.1       | 23.7                           | 4.15                         | 123.7-218.5    | 171        | 0.0     |
| Bilirubin Total      | mg/dL | Diazonium Ion                              | 50                  | 1.5         | 0.1                            | 0.02                         | 1.3-1.7        | 1.5        | 0.0     |
| Calcium(Total)       | mg/dL | Arsenazo iii                               | 40                  | 8.9         | 0.4                            | 0.08                         | 8.0-9.8        | 8.6        | -0.8    |
| Cholesterol (Total)  | mg/dL | Cholesterol Oxidase,esterase, peroxidase   | 52                  | 150.9       | 7.1                            | 1.23                         | 136.7-165.2    | 158        | 1.0     |
| Creatinine @         | mg/dL | Alkaline picrate                           | 47                  | 1.5         | 0.1                            | 0.02                         | 1.3-1.6        | -          | -       |
| Glucose @            | mg/dL | Glucose oxidase,hydrogen peroxide(Trinder) | 35                  | 108.4       | 6                              | 1.27                         | 96.5-120.3     | -          | -       |
| HDL @                | mg/dL | Direct measure                             | 37                  | 48          | 6.7                            | 1.38                         | 34.6-61.5      | -          | -       |
| Potassium @          | mEq/L | ISE Direct                                 | 33                  | 3.9         | 0.2                            | 0.04                         | 3.6-4.2        | -          | -       |
| Protein (Total) @    | g/dl  | Biuret, reagent blank, end point           | 32                  | 5.7         | 0.3                            | 0.07                         | 5.1-6.4        | -          | -       |
| Sodium @             | mEq/L | ISE Direct                                 | 34                  | 140.5       | 3.7                            | 0.79                         | 133.2-147.9    | -          | -       |
| SGPT/ALT @           | U/L   | UV without P5P                             | 41                  | 31.1        | 3.3                            | 0.64                         | 24.6-37.6      | -          | -       |
| SGOT/AST             | U/L   | UV without P5P                             | 40                  | 30.7        | 2.3                            | 0.45                         | 26.1-35.2      | 29         | -0.7    |
| Triglyceride         | mg/dL | Enzymatic method                           | 38                  | 99.8        | 8.3                            | 1.68                         | 83.2-116.5     | 88         | -1.4    |
| Urea @               | mg/dL | Urease                                     | 45                  | 43.2        | 3.3                            | 0.61                         | 36.6-49.9      | -          | -       |
| Uric Acid            | mg/dl | Uricase                                    | 43                  | 5.9         | 0.4                            | 0.08                         | 5.0-6.7        | 5.6        | -0.8    |
| Chloride             | mEq/L | ISE Indirect                               | 34                  | 98.1        | 3.7                            | 0.79                         | 90.8-105.4     | 100        | 0.5     |
| Phosphorus @         | mg/dL | Phosphomolybdate method                    | 44                  | 4.48        | 0.2                            | 0.04                         | 4.2-4.8        | -          | -       |
| Magnesium @          | mg/dl | Uricase Colorimetic                        | 9                   | 2.3         | 0.4                            | 0.17                         | 1.5-3.1        | -          | -       |
| Iron                 | µg/dL | Ferene                                     | 26                  | 119.6       | 12.6                           | 3.09                         | 94.4-144.8     | 114        | -0.4    |
| Amylase              | U/L   | Uricase Colorimetic                        | 19                  | 86          | 6.6                            | 1.89                         | 72.9-99.2      | -          | -       |

#### Interpretation of Z Score :

| Z Score Value(+/-) | $ Z  \leq 2.0$                     | $2.0 <  Z  < 3.0$           | $ Z  \geq 3.0$                           |
|--------------------|------------------------------------|-----------------------------|--|
| Interpretation     | Satisfactory Performance No signal | Questionable Warning Signal | Unsatisfactory Performance action Signal |

| Legends | (*) Excluded From Group Mean | {;} Not Reported | (#)Late Result Submission | (\$)Reported in other Unit |
|---------|------------------------------|------------------|---------------------------|----------------------------|
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Chief Coordinator

Dr.Sanjay Mehrotra

Checked By:

Prepared by PS

Doc. No.: ASS / FR / 03A / R 01 / Dt: 05.01.2022

Programme Director

Dr.Bandana Mehrotra

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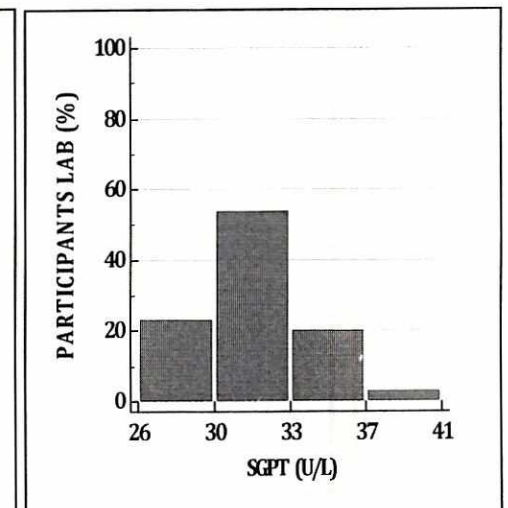
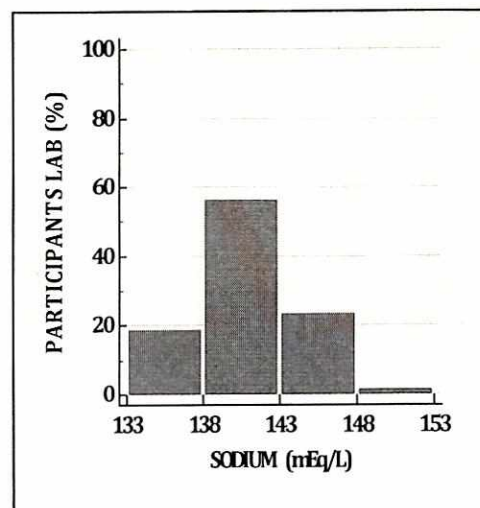
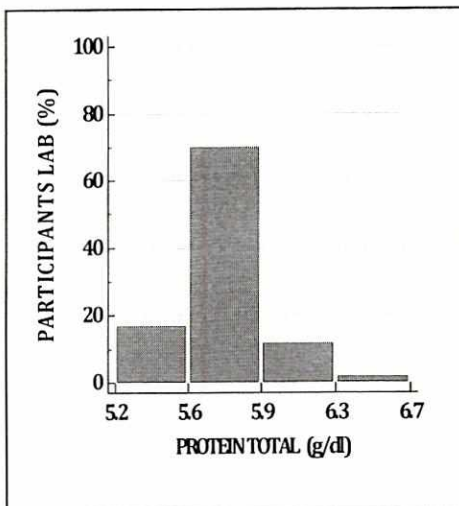
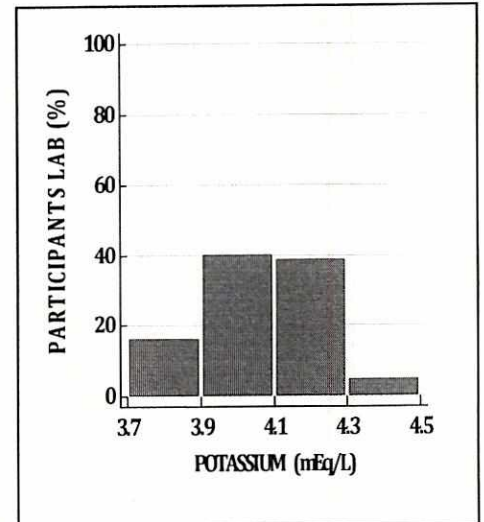
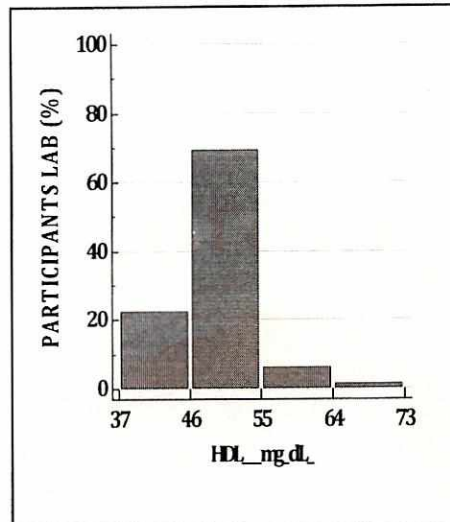
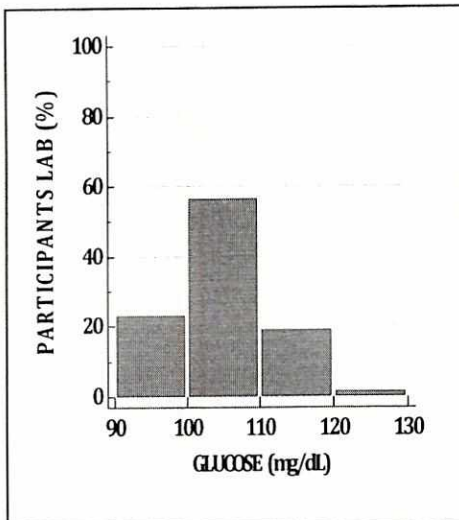


## EXTENDED BIO-CHEMISTRY-02

### GRAPHICAL REPORT

Cycle - 12/2023  
Round-2

Date: 15/03/2023



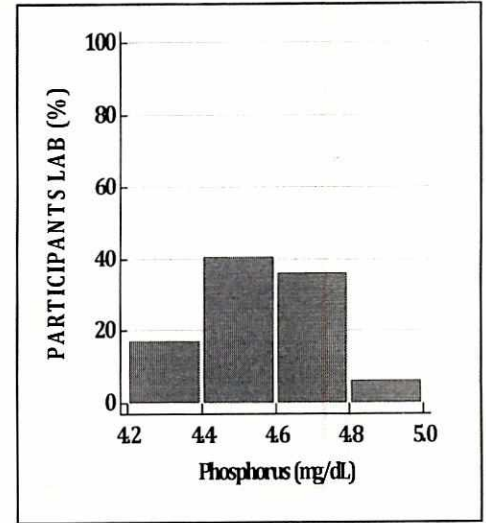
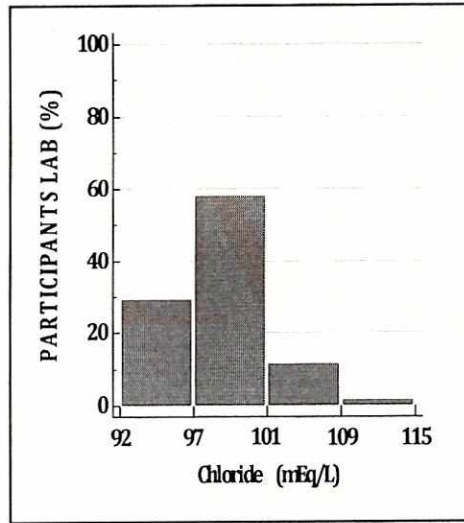
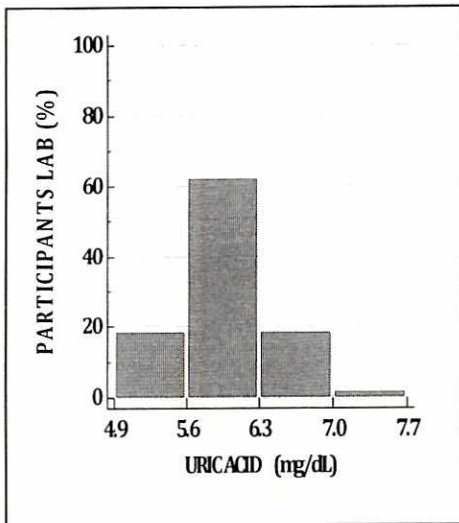
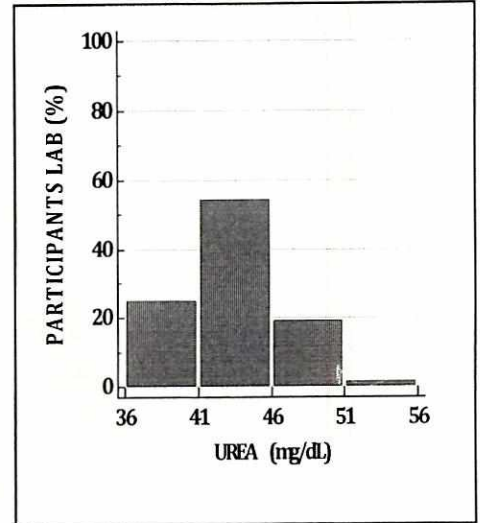
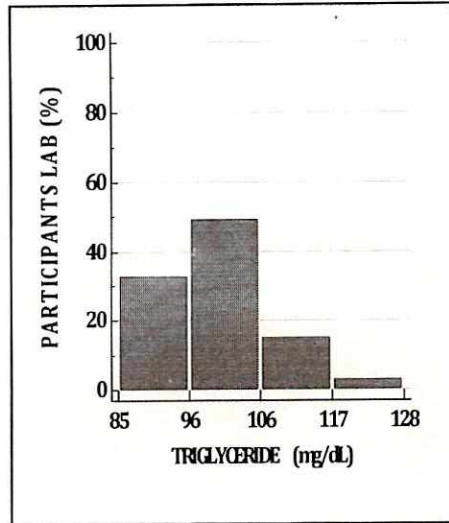
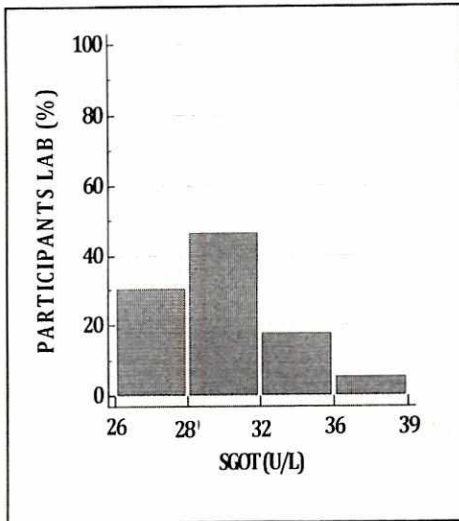


## EXTENDED BIO-CHEMISTRY-02

### GRAPHICAL REPORT

Cycle - 12/2023  
Round-2

Date: 15/03/2023

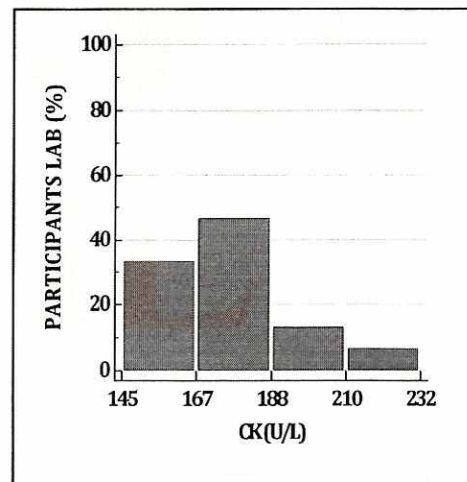
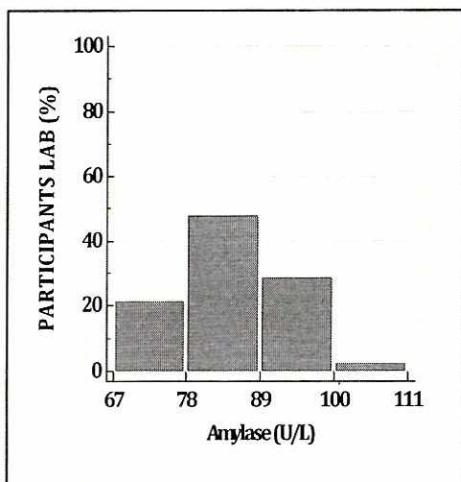
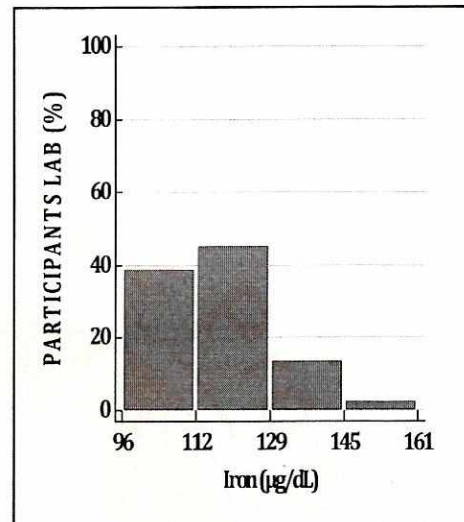
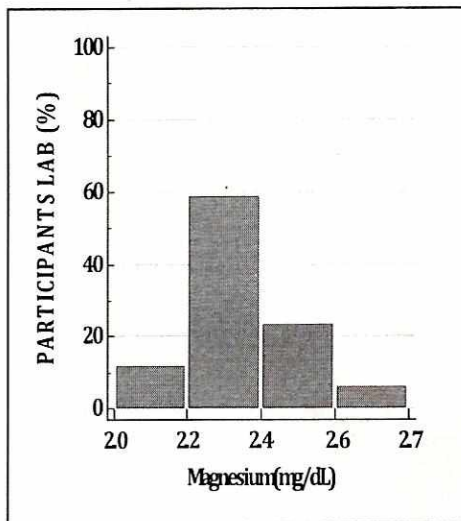


## EXTENDED BIO-CHEMISTRY-02

### GRAPHICAL REPORT

Cycle - 12/2023  
Round-2

Date: 15/03/2023



# RML- Quality Assurance Program (RML-QAP)



## Extended Biochemistry -02

ALL PARTICIPANTS COMPLETE DATA REPORT

Cycle - 12/2023

Round No -2

Date: 15/03/2023

**Note:-** This report is only for information about the participants performance in the particular round

| Parameters           | Total No. of Participants | No. of Responses | No of Participant Excluded from Robust Group Mean | No. of Participants Z Score b/w 0.0 - 2 | No. of Participants Z Score b/w 2.1 - 2.9 | No. of Participants Z Score >3 |
|----------------------|---------------------------|------------------|---|---|---|--------------------------------|
| Albumin              | 100                       | 71               | 12  | 50                                      | 9   | 12                             |
| Alkaline Phosphatase | 100                       | 70               | 2   | 62                                      | 6   | 2                              |
| Bilirubin Total      | 100                       | 71               | 4   | 62                                      | 5   | 4                              |
| Calcium(Total)       | 100                       | 67               | 7   | 55                                      | 5   | 7                              |
| Cholesterol (Total)  | 100                       | 70               | 4   | 61                                      | 5   | 4                              |
| Creatinine           | 100                       | 71               | 2   | 65                                      | 4   | 2                              |
| Glucose              | 100                       | 70               | 1   | 66                                      | 3   | 1                              |
| HDL                  | 100                       | 67               | 5   | 56                                      | 6   | 5                              |
| Potassium            | 100                       | 66               | 1   | 62                                      | 3   | 1                              |
| Protein (Total)      | 100                       | 71               | 11  | 55                                      | 5   | 11                             |
| Sodium               | 100                       | 66               | 3   | 61                                      | 2   | 3                              |
| SGPT/ALT             | 100                       | 71               | 7   | 63                                      | 1   | 7                              |
| SGOT/AST             | 100                       | 71               | 13  | 54                                      | 4   | 13                             |
| Triglyceride         | 100                       | 69               | 1   | 65                                      | 3   | 1                              |
| Urea                 | 100                       | 71               | 3   | 67                                      | 1   | 3                              |
| Uric Acid            | 100                       | 70               | 3   | 60                                      | 7   | 3                              |
| Chloride mEq/L       | 100                       | 66               | 4   | 59                                      | 3   | 4                              |
| Phosphorus mg/dL     | 100                       | 62               | 9   | 47                                      | 6   | 9                              |
| Magnesium mg/dl      | 100                       | 25               | 7   | 17                                      | 1   | 7                              |
| Iron µg/dL           | 100                       | 50               | 6   | 42                                      | 2   | 6                              |
| Amylase U/L          | 100                       | 44               | 2   | 41                                      | 1   | 2                              |
| CK U/L               | 100                       | 20               | 5   | 15                                      | 0   | 5                              |

\*\*End of Report\*\*

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Doc. No.: ASS / FR / 01 / R 00 / Dt.: 01.07.2012



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**IQC / EQAS Outlier Log**

TM/FR/16/R00/Dt: 01.08.2022

Department Biochemistry

| Date/Time | Parameter                      | Rule violated        | Corrective action                                   | Tech Sign          | Reviewed by        |
|-----------|--------------------------------|----------------------|---|--------------------|--------------------|
| 16/3/23   | Albumin<br>RML CAP<br>cycle-12 | outside<br>consensus | Re. material - OK<br>Instrument<br>maintenance - OK | <i>[Signature]</i> | <i>[Signature]</i> |
|           | Reand-2                        |                      | PT material - OK<br>Clinical error<br>- NA          |                    |                    |
|           |                                |                      | Return PT sample                                    |                    |                    |
|           |                                |                      | New Z score is 1.0                                  |                    |                    |
|           |                                |                      |   |                    |                    |
|           |                                |                      |   |                    |                    |



# RESULTS LIST REPORT (RELEASED)

Operator ID: Admin  
Site:

System Name: Alinity ci-series

SN: SCM22913  
Software Version: 3.4.0

| Module | R/P     | SID          | Name | Assay   | Result   | Interpretation | Flags | Code | Time                |
|--------|---------|--------------|------|---------|----------|----------------|-------|------|---------------------|
| 1      | G9352/2 | EQAS R2 CY12 |      | AlbBCG2 | 4.4 g/dL |                |       |      | 16.03.2023 08.59 AM |

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

Signature: \_\_\_\_\_ Date: \_\_\_\_\_