

# Summary Report of IQC program for G6PD Quantitative Test - Medicon Group - January 2025 -

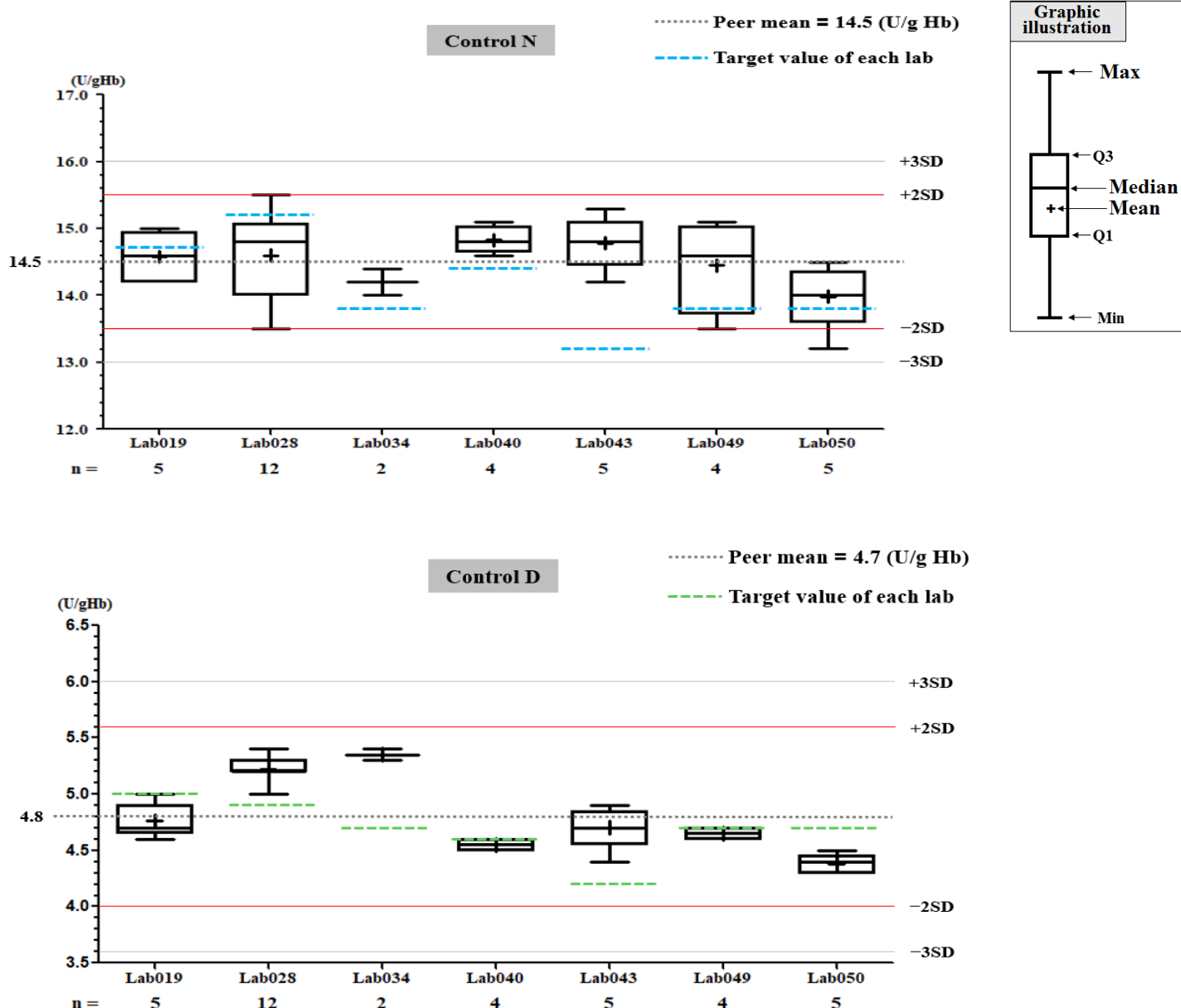
## I. The statistic results of all laboratories in this month

| G6PD                        | Control N<br>(Lot No.:BJ0922N) | Control D<br>(Lot No.: BJ0922D) |
|-----------------------------|--------------------------------|---------------------------------|
| Labs                        | 7                              | 7                               |
| Received results number (n) | 37                             | 37                              |
| Median                      | 14.6 (U/g Hb)                  | 4.7 (U/g Hb)                    |
| Mean                        | 14.5 (U/g Hb)                  | 4.8 (U/g Hb)                    |
| SD                          | 0.5                            | 0.4                             |
| CV                          | 3.4%                           | 8.3%                            |
| Range of G6PD               | 13.2 ~ 15.5 (U/g Hb)           | 4.3 ~ 5.4 (U/g Hb)              |
| Range of Hb                 | 1.9 ~ 2.6 (g/dL)               | 1.8 ~ 2.3 (g/dL)                |

\*The statistic results are calculated from all labs reported in this month

\*\* G6PD Method = Medicon reagent kit, 37°C

## II. The distribution of G6PD reported for each lab in this survey



QC Chart of Internal Quality Control (IQC)for G6PD Quantitative Test

Select LotNo : BJ0922N (2021-01-01 ~ 2100-12-31) Change

Print Table

Lab043

|                           | Control N          |                                | Control D          |                                |
|---------------------------|--------------------|--------------------------------|--------------------|--------------------------------|
| QC Control Lot No.        | BJ0922N            |                                | BJ0922D            |                                |
| Duration of the Analyzing | Month<br>(2025/01) | CUM<br>(2024/08/01~2025/01/31) | Month<br>(2025/01) | CUM<br>(2024/08/01~2025/01/31) |
| Runs (N)                  | 5                  | 26                             | 5                  | 26                             |
| Mean (U/gHb)              | 14.8               | 14.2                           | 4.7                | 4.7                            |
| SD                        | 0.4                | 0.6                            | 0.2                | 0.2                            |
| CV (%)                    | 2.7                | 4.2                            | 4.3                | 4.3                            |
| Target Value (U/gHb)      | 13.2               | 13.2                           | 4.2                | 4.2                            |
| Total Error (%)           | 17.5               | 16.0                           | 20.4               | 20.4                           |
| TEa (%)                   | 20                 | 20                             | 20                 | 20                             |
| σ                         | 2.9                | 3.0                            | 1.9                | 1.9                            |

Bias (%) = [ ( | Mean - Target | ) / Target ] x 100%

TE : Total Error(%) = Bias (%) + 2 × CV (%)

σ (Sigma) = [TEa% - Bias (%) ] / CV (%)

Month : 2025 01 Change ; Cumulative : from 2024 08 01 to 2025 01 31 Change

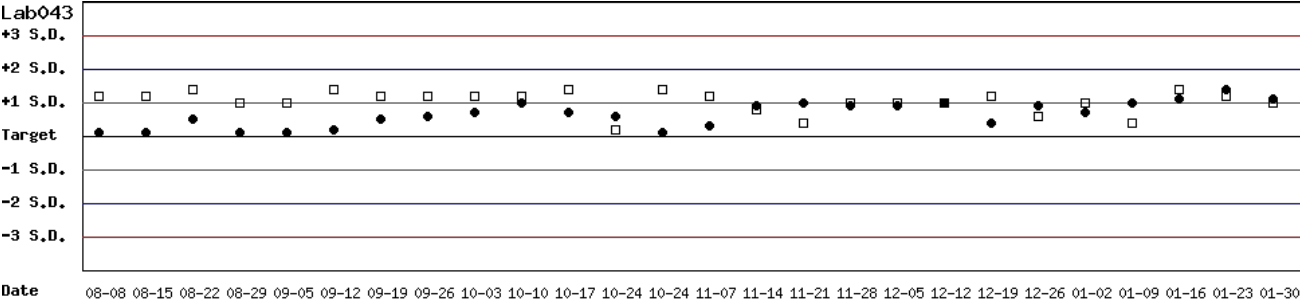
TOP

Control N and Control D SDI  
QC Chart

Lot No.: BJ0922N ; Duration : 2024-08-01 to 2025-01-31 ; Target : 13.2 ; SD : 1.50 ( ● )

Lot No.: BJ0922D ; Duration : 2024-08-01 to 2025-01-31 ; Target : 4.2 ; SD : 0.50 ( □ )

Lab043

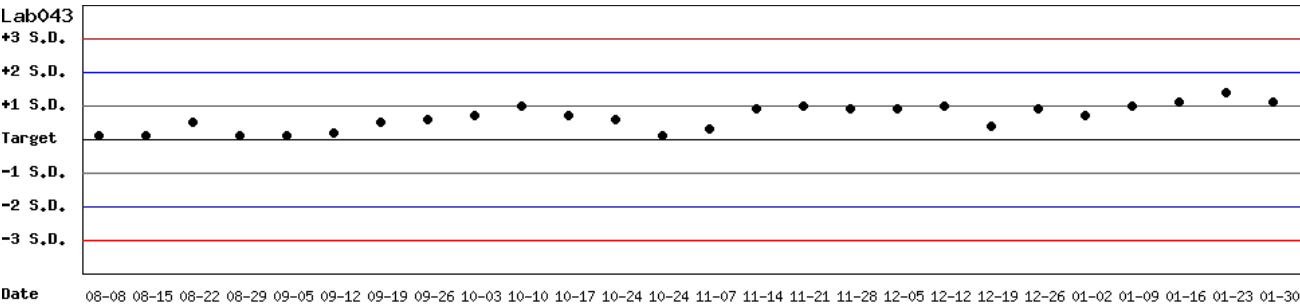


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Control N SDI QC Chart

Lot No.: BJ0922N ; Duration : 2024-08-01 to 2025-01-31 ; Target : 13.2 ; SD : 1.50

Lab043



TOP

Control D SDI QC Chart

Lab043

Lot No.: BJ0922D ; Duration : 2024-08-01 to 2025-01-31 ; Target : 4.2 ; SD : 0.50

Lab043

+3 S.D.

+2 S.D.

+1 S.D.

Target

-1 S.D.

-2 S.D.

-3 S.D.

Date

08-08 08-15 08-22 08-29 09-05 09-12 09-19 09-26 10-03 10-10 10-17 10-24 10-24 11-07 11-14 11-21 11-28 12-05 12-12 12-19 12-26 01-02 01-09 01-16 01-23 01-30

Month : 2025 01 Change ; Cumulative : from 2024 08 01 to 2025 01 31 Change

[TOP]

Peer Group Statistics (Table 1)

Select LotNo : BJ0922N (2021-01-01 ~ 2100-12-31) Change

Select Reagent Kit : 5 - Medicon Change

Print Table 1

Monthly

Month : 2025 01 Change

|        |                    | Control N (Lot No.: BJ0922N) |              |            |     |        |        |         |     |  | Control D (Lot No.: BJ0922D) |              |            |     |        |        |         |     |
|--------|--------------------|------------------------------|--------------|------------|-----|--------|--------|---------|-----|--|------------------------------|--------------|------------|-----|--------|--------|---------|-----|
| UnitID | Reagent Kit (Code) | Target (U/gHb)               | Mean (U/gHb) | n for Mean | SD  | CV (%) | TE (%) | TEa (%) | σ   |  | Target (U/gHb)               | Mean (U/gHb) | n for Mean | SD  | CV (%) | TE (%) | TEa (%) | σ   |
| Lab019 | 5                  | 14.7                         | 14.6         | 5          | 0.4 | 2.7    | 6.2    | 20      | >6  |  | 5.0                          | 4.8          | 5          | 0.2 | 4.2    | 12.3   | 20      | 3.8 |
| Lab028 | 5                  | 15.2                         | 14.6         | 12         | 0.6 | 4.1    | 12.2   | 20      | 3.9 |  | 4.9                          | 5.2          | 12         | 0.1 | 1.9    | 10.0   | 20      | >6  |
| Lab034 | 5                  | 13.8                         | 14.2         | 2          | -   | -      | -      | 20      | -   |  | 4.7                          | 5.4          | 2          | -   | -      | -      | 20      | -   |
| Lab040 | 5                  | 14.4                         | 14.8         | 4          | 0.2 | 1.4    | 5.5    | 20      | >6  |  | 4.6                          | 4.6          | 4          | 0.1 | 2.2    | 4.3    | 20      | >6  |
| Lab043 | 5                  | 13.2                         | 14.8         | 5          | 0.4 | 2.7    | 17.5   | 20      | 2.9 |  | 4.2                          | 4.7          | 5          | 0.2 | 4.3    | 20.4   | 20      | 1.9 |
| Lab049 | 5                  | 13.8                         | 14.5         | 4          | 0.7 | 4.8    | 14.7   | 20      | 3.1 |  | 4.7                          | 4.7          | 4          | 0.1 | 2.1    | 4.3    | 20      | >6  |
| Lab050 | 5                  | 13.8                         | 14.0         | 5          | 0.5 | 3.6    | 8.6    | 20      | 5.2 |  | 4.7                          | 4.4          | 5          | 0.1 | 2.3    | 10.9   | 20      | 5.9 |
| Total  | -                  | -                            | 14.5         | 37         | 0.5 | 3.4    | -      | -       | -   |  | -                            | 4.8          | 37         | 0.4 | 8.3    | -      | -       | -   |

Bias (%) = [ ( | Mean - Target | ) / Target ] x 100%  
TE : Total Error(%) = Bias (%) + 2 x CV (%)  
σ (Sigma) = [TEa% - Bias (%) ] / CV (%)

[TOP]

Cumulative

Cumulative : from 2021 01 01 to 2025 01 31 Change

|        |                    | Control N (Lot No.: BJ0922N) |              |            |     |        |        |         |     |  | Control D (Lot No.: BJ0922D) |              |            |     |        |        |         |     |
|--------|--------------------|------------------------------|--------------|------------|-----|--------|--------|---------|-----|--|------------------------------|--------------|------------|-----|--------|--------|---------|-----|
| UnitID | Reagent Kit (Code) | Target (U/gHb)               | Mean (U/gHb) | n for Mean | SD  | CV (%) | TE (%) | TEa (%) | σ   |  | Target (U/gHb)               | Mean (U/gHb) | n for Mean | SD  | CV (%) | TE (%) | TEa (%) | σ   |
| Lab018 | 5                  | 16.2                         | 15.3         | 113        | 0.4 | 2.6    | 10.8   | 20      | 5.6 |  | 5.5                          | 5.4          | 113        | 0.1 | 1.9    | 5.5    | 20      | >6  |
| Lab019 | 5                  | 14.7                         | 14.6         | 149        | 0.6 | 4.1    | 8.9    | 20      | 4.7 |  | 5.0                          | 4.8          | 149        | 0.2 | 4.2    | 12.3   | 20      | 3.8 |
| Lab020 | 5                  | 14.4                         | 14.4         | 90         | 0.5 | 3.5    | 6.9    | 20      | 5.7 |  | 4.6                          | 4.7          | 90         | 0.2 | 4.3    | 10.7   | 20      | 4.1 |
| Lab022 | 5                  | 14.4                         | 14.4         | 27         | 0.5 | 3.5    | 6.9    | 20      | 5.7 |  | 4.6                          | 4.7          | 27         | 0.3 | 6.4    | 14.9   | 20      | 2.8 |
| Lab025 | 5                  | 14.4                         | 14.2         | 13         | 0.5 | 3.5    | 8.4    | 20      | 5.3 |  | 5.4                          | 5.1          | 13         | 0.3 | 5.9    | 17.3   | 20      | 2.4 |
| Lab028 | 5                  | 15.2                         | 15.0         | 66         | 0.9 | 6.0    | 13.3   | 20      | 3.1 |  | 4.9                          | 5.1          | 66         | 0.3 | 5.9    | 15.8   | 20      | 2.7 |
| Lab032 | 5                  | 14.9                         | 14.3         | 153        | 0.4 | 2.8    | 9.6    | 20      | 5.7 |  | 4.8                          | 4.5          | 153        | 0.2 | 4.4    | 15.1   | 20      | 3.1 |
| Lab033 | 5                  | 13.8                         | 13.6         | 81         | 0.7 | 5.1    | 11.7   | 20      | 3.6 |  | 4.7                          | 4.6          | 81         | 0.3 | 6.5    | 15.2   | 20      | 2.7 |
| Lab034 | 5                  | 13.8                         | 14.3         | 29         | 0.5 | 3.5    | 10.6   | 20      | 4.7 |  | 4.7                          | 5.2          | 29         | 0.2 | 3.8    | 18.3   | 20      | 2.5 |
| Lab037 | 5                  | 13.8                         | 14.5         | 59         | 0.5 | 3.4    | 12.0   | 20      | 4.4 |  | 4.7                          | 4.7          | 59         | 0.2 | 4.3    | 8.5    | 20      | 4.7 |
| Lab040 | 5                  | 14.4                         | 14.8         | 144        | 0.2 | 1.4    | 5.5    | 20      | >6  |  | 4.6                          | 4.6          | 144        | 0.1 | 2.2    | 4.3    | 20      | >6  |
| Lab043 | 5                  | 13.2                         | 13.9         | 175        | 1.0 | 7.2    | 19.7   | 20      | 2.0 |  | 4.2                          | 4.6          | 175        | 0.4 | 8.7    | 26.9   | 20      | 1.2 |
| Lab049 | 5                  | 13.8                         | 14.4         | 244        | 0.6 | 4.2    | 12.7   | 20      | 3.7 |  | 4.7                          | 4.7          | 244        | 0.3 | 6.4    | 12.8   | 20      | 3.1 |
| Lab050 | 5                  | 13.8                         | 14.5         | 69         | 0.6 | 4.1    | 13.3   | 20      | 3.6 |  | 4.7                          | 5.0          | 69         | 0.5 | 10.0   | 26.4   | 20      | 1.4 |
| Total  | -                  | -                            | 14.5         | 1412       | 0.7 | 4.8    | -      | -       | -   |  | -                            | 4.8          | 1412       | 0.4 | 8.3    | -      | -       | -   |

Bias (%) = [ ( | Mean - Target | ) / Target ] x 100%  
TE : Total Error(%) = Bias (%) + 2 x CV (%)  
σ (Sigma) = [TEa% - Bias (%) ] / CV (%)

[TOP]

| Reagent Kit | Reagent Code |
|-------------|--------------|
| Medicon     | 5            |

Peer Group Statistics (Table 2)

Select LotNo : BJ0922N (2021-01-01 ~ 2100-12-31)Change

Select Reagent Kit : 5 - MediconChange

Print Table 2

Control N Month vs. Cumulative

|                                                                                          |                                                                                                         | Control N (Lot No.: BJ0922N) |                 |               |     |           |           |            |     |  |                             |                 |               |     |           |           |            |     |
|------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|------------------------------|-----------------|---------------|-----|-----------|-----------|------------|-----|--|-----------------------------|-----------------|---------------|-----|-----------|-----------|------------|-----|
|                                                                                          |                                                                                                         | Month (2025/01)              |                 |               |     |           |           |            |     |  | CUM (2021/01/01~2025/01/31) |                 |               |     |           |           |            |     |
| UnitID  | Reagent Kit<br>(Code)  | Target<br>(U/gHb)            | Mean<br>(U/gHb) | n for<br>Mean | SD  | CV<br>(%) | TE<br>(%) | TEa<br>(%) | σ   |  | Target<br>(U/gHb)           | Mean<br>(U/gHb) | n for<br>Mean | SD  | CV<br>(%) | TE<br>(%) | TEa<br>(%) | σ   |
| <a href="#">Lab018</a>                                                                   | 5                                                                                                       | 16.2                         | -               | 0             | -   | -         | -         | 20         | -   |  | 16.2                        | 15.3            | 113           | 0.4 | 2.6       | 10.8      | 20         | 5.6 |
| <a href="#">Lab019</a>                                                                   | 5                                                                                                       | 14.7                         | 14.6            | 5             | 0.4 | 2.7       | 6.2       | 20         | >6  |  | 14.7                        | 14.6            | 149           | 0.6 | 4.1       | 8.9       | 20         | 4.7 |
| <a href="#">Lab020</a>                                                                   | 5                                                                                                       | 14.4                         | -               | 0             | -   | -         | -         | 20         | -   |  | 14.4                        | 14.4            | 90            | 0.5 | 3.5       | 6.9       | 20         | 5.7 |
| <a href="#">Lab022</a>                                                                   | 5                                                                                                       | 14.4                         | -               | 0             | -   | -         | -         | 20         | -   |  | 14.4                        | 14.4            | 27            | 0.5 | 3.5       | 6.9       | 20         | 5.7 |
| <a href="#">Lab025</a>                                                                   | 5                                                                                                       | 14.4                         | -               | 0             | -   | -         | -         | 20         | -   |  | 14.4                        | 14.2            | 13            | 0.5 | 3.5       | 8.4       | 20         | 5.3 |
| <a href="#">Lab028</a>                                                                   | 5                                                                                                       | 15.2                         | 14.6            | 12            | 0.6 | 4.1       | 12.2      | 20         | 3.9 |  | 15.2                        | 15.0            | 66            | 0.9 | 6.0       | 13.3      | 20         | 3.1 |
| <a href="#">Lab032</a>                                                                   | 5                                                                                                       | 14.9                         | -               | 0             | -   | -         | -         | 20         | -   |  | 14.9                        | 14.3            | 153           | 0.4 | 2.8       | 9.6       | 20         | 5.7 |
| <a href="#">Lab033</a>                                                                   | 5                                                                                                       | 13.8                         | -               | 0             | -   | -         | -         | 20         | -   |  | 13.8                        | 13.6            | 81            | 0.7 | 5.1       | 11.7      | 20         | 3.6 |
| <a href="#">Lab034</a>                                                                   | 5                                                                                                       | 13.8                         | 14.2            | 2             | -   | -         | -         | 20         | -   |  | 13.8                        | 14.3            | 29            | 0.5 | 3.5       | 10.6      | 20         | 4.7 |
| <a href="#">Lab037</a>                                                                   | 5                                                                                                       | 13.8                         | -               | 0             | -   | -         | -         | 20         | -   |  | 13.8                        | 14.5            | 59            | 0.5 | 3.4       | 12.0      | 20         | 4.4 |
| <a href="#">Lab040</a>                                                                   | 5                                                                                                       | 14.4                         | 14.8            | 4             | 0.2 | 1.4       | 5.5       | 20         | >6  |  | 14.4                        | 14.8            | 144           | 0.2 | 1.4       | 5.5       | 20         | >6  |
| <a href="#">Lab043</a>                                                                   | 5                                                                                                       | 13.2                         | 14.8            | 5             | 0.4 | 2.7       | 17.5      | 20         | 2.9 |  | 13.2                        | 13.9            | 175           | 1.0 | 7.2       | 19.7      | 20         | 2.0 |
| <a href="#">Lab049</a>                                                                   | 5                                                                                                       | 13.8                         | 14.5            | 4             | 0.7 | 4.8       | 14.7      | 20         | 3.1 |  | 13.8                        | 14.4            | 244           | 0.6 | 4.2       | 12.7      | 20         | 3.7 |
| <a href="#">Lab050</a>                                                                   | 5                                                                                                       | 13.8                         | 14.0            | 5             | 0.5 | 3.6       | 8.6       | 20         | 5.2 |  | 13.8                        | 14.5            | 69            | 0.6 | 4.1       | 13.3      | 20         | 3.6 |
| Total                                                                                    | -                                                                                                       | -                            | 14.5            | 37            | 0.5 | 3.4       | -         | -          | -   |  | -                           | 14.5            | 1412          | 0.7 | 4.8       | -         | -          | -   |

Bias (%) = [ ( | Mean - Target | ) / Target ] x 100%  
TE : Total Error(%) = Bias (%) + 2 × CV (%)  
σ (Sigma) = [TEa% - Bias (%) ] / CV (%)

Month : 202501Change

Cumulative : from 20210101 to 20250131Change

TOP

Control D Month vs. Cumulative

|                                                                                            |                                                                                                           | Control D (Lot No.: BJ0922D) |                 |               |     |           |           |            |     |  |                             |                 |               |     |           |           |            |     |
|--------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|------------------------------|-----------------|---------------|-----|-----------|-----------|------------|-----|--|-----------------------------|-----------------|---------------|-----|-----------|-----------|------------|-----|
|                                                                                            |                                                                                                           | Month (2025/01)              |                 |               |     |           |           |            |     |  | CUM (2021/01/01~2025/01/31) |                 |               |     |           |           |            |     |
| UnitID  | Reagent Kit<br>(Code)  | Target<br>(U/gHb)            | Mean<br>(U/gHb) | n for<br>Mean | SD  | CV<br>(%) | TE<br>(%) | TEa<br>(%) | σ   |  | Target<br>(U/gHb)           | Mean<br>(U/gHb) | n for<br>Mean | SD  | CV<br>(%) | TE<br>(%) | TEa<br>(%) | σ   |
| <a href="#">Lab018</a>                                                                     | 5                                                                                                         | 5.5                          | -               | 0             | -   | -         | -         | 20         | -   |  | 5.5                         | 5.4             | 113           | 0.1 | 1.9       | 5.5       | 20         | >6  |
| <a href="#">Lab019</a>                                                                     | 5                                                                                                         | 5.0                          | 4.8             | 5             | 0.2 | 4.2       | 12.3      | 20         | 3.8 |  | 5.0                         | 4.8             | 149           | 0.2 | 4.2       | 12.3      | 20         | 3.8 |
| <a href="#">Lab020</a>                                                                     | 5                                                                                                         | 4.6                          | -               | 0             | -   | -         | -         | 20         | -   |  | 4.6                         | 4.7             | 90            | 0.2 | 4.3       | 10.7      | 20         | 4.1 |
| <a href="#">Lab022</a>                                                                     | 5                                                                                                         | 4.6                          | -               | 0             | -   | -         | -         | 20         | -   |  | 4.6                         | 4.7             | 27            | 0.3 | 6.4       | 14.9      | 20         | 2.8 |
| <a href="#">Lab025</a>                                                                     | 5                                                                                                         | 5.4                          | -               | 0             | -   | -         | -         | 20         | -   |  | 5.4                         | 5.1             | 13            | 0.3 | 5.9       | 17.3      | 20         | 2.4 |
| <a href="#">Lab028</a>                                                                     | 5                                                                                                         | 4.9                          | 5.2             | 12            | 0.1 | 1.9       | 10.0      | 20         | >6  |  | 4.9                         | 5.1             | 66            | 0.3 | 5.9       | 15.8      | 20         | 2.7 |
| <a href="#">Lab032</a>                                                                     | 5                                                                                                         | 4.8                          | -               | 0             | -   | -         | -         | 20         | -   |  | 4.8                         | 4.5             | 153           | 0.2 | 4.4       | 15.1      | 20         | 3.1 |
| <a href="#">Lab033</a>                                                                     | 5                                                                                                         | 4.7                          | -               | 0             | -   | -         | -         | 20         | -   |  | 4.7                         | 4.6             | 81            | 0.3 | 6.5       | 15.2      | 20         | 2.7 |
| <a href="#">Lab034</a>                                                                     | 5                                                                                                         | 4.7                          | 5.4             | 2             | -   | -         | -         | 20         | -   |  | 4.7                         | 5.2             | 29            | 0.2 | 3.8       | 18.3      | 20         | 2.5 |
| <a href="#">Lab037</a>                                                                     | 5                                                                                                         | 4.7                          | -               | 0             | -   | -         | -         | 20         | -   |  | 4.7                         | 4.7             | 59            | 0.2 | 4.3       | 8.5       | 20         | 4.7 |
| <a href="#">Lab040</a>                                                                     | 5                                                                                                         | 4.6                          | 4.6             | 4             | 0.1 | 2.2       | 4.3       | 20         | >6  |  | 4.6                         | 4.6             | 144           | 0.1 | 2.2       | 4.3       | 20         | >6  |
| <a href="#">Lab043</a>                                                                     | 5                                                                                                         | 4.2                          | 4.7             | 5             | 0.2 | 4.3       | 20.4      | 20         | 1.9 |  | 4.2                         | 4.6             | 175           | 0.4 | 8.7       | 26.9      | 20         | 1.2 |
| <a href="#">Lab049</a>                                                                     | 5                                                                                                         | 4.7                          | 4.7             | 4             | 0.1 | 2.1       | 4.3       | 20         | >6  |  | 4.7                         | 4.7             | 244           | 0.3 | 6.4       | 12.8      | 20         | 3.1 |
| <a href="#">Lab050</a>                                                                     | 5                                                                                                         | 4.7                          | 4.4             | 5             | 0.1 | 2.3       | 10.9      | 20         | 5.9 |  | 4.7                         | 5.0             | 69            | 0.5 | 10.0      | 26.4      | 20         | 1.4 |
| Total                                                                                      | -                                                                                                         | -                            | 4.8             | 37            | 0.4 | 8.3       | -         | -          | -   |  | -                           | 4.8             | 1412          | 0.4 | 8.3       | -         | -          | -   |

Bias (%) = [ ( | Mean - Target | ) / Target ] x 100%  
TE : Total Error(%) = Bias (%) + 2 × CV (%)  
σ (Sigma) = [TEa% - Bias (%) ] / CV (%)

Month : 202501Change

Cumulative : from 20210101 to 20250131Change

TOP

| Reagent Kit | Reagent Code |
|-------------|--------------|
| Medicon     | 5            |