

# Summary Report of IQC program for G6PD Quantitative Test - Medicon Group - October 2024 -

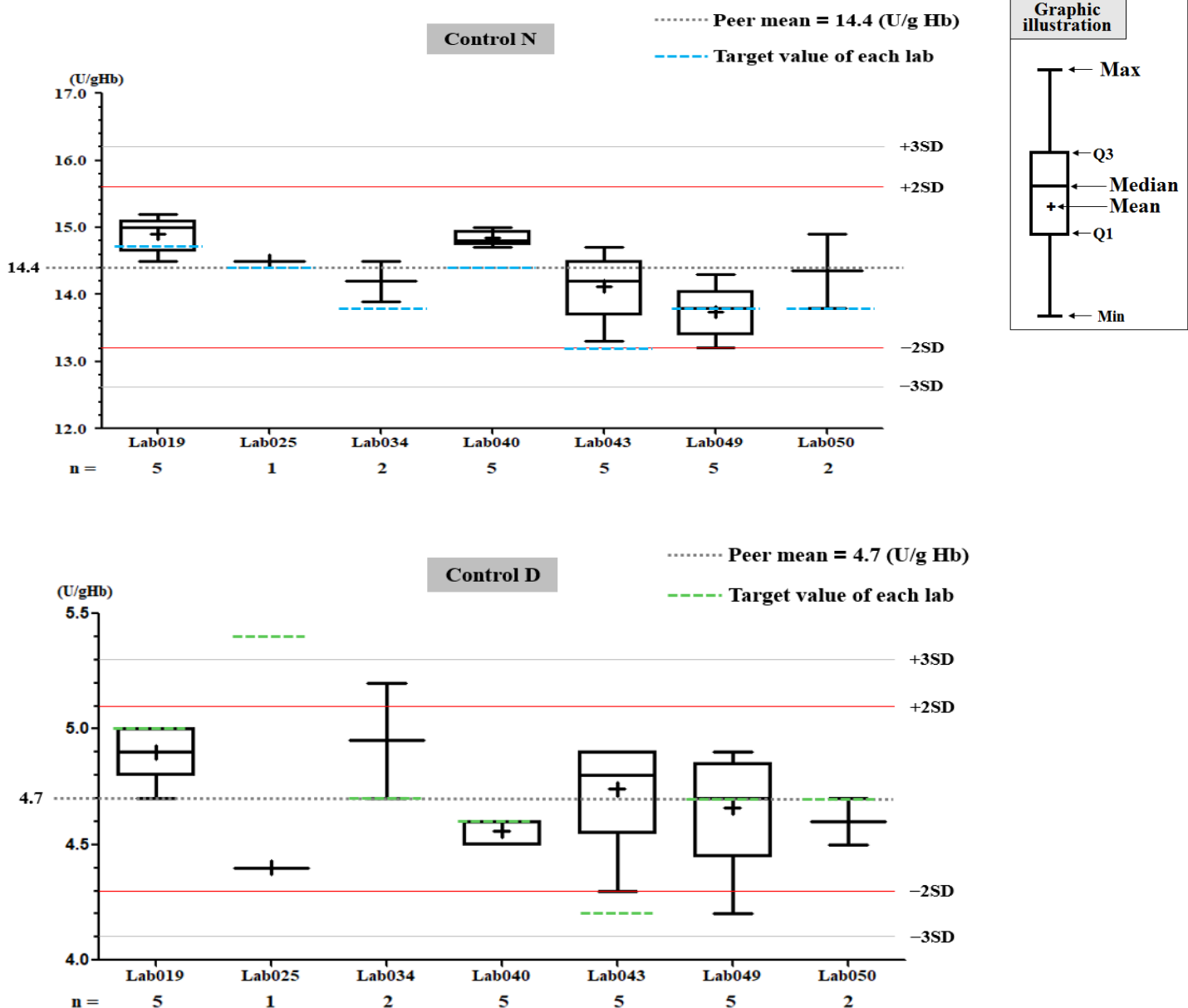
## I. The statistic results of all laboratories in this month

| G6PD                        | Control N<br>(Lot No.:BJ0922N) | Control D<br>(Lot No.: BJ0922D) |
|-----------------------------|--------------------------------|---------------------------------|
| Labs                        | 7                              | 7                               |
| Received results number (n) | 25                             | 25                              |
| Median                      | 14.5 (U/g Hb)                  | 4.7 (U/g Hb)                    |
| Mean                        | 14.4 (U/g Hb)                  | 4.7 (U/g Hb)                    |
| SD                          | 0.6                            | 0.2                             |
| CV                          | 4.2%                           | 4.3%                            |
| Range of G6PD               | 13.2 ~ 15.2 (U/g Hb)           | 4.2 ~ 5.2 (U/g Hb)              |
| Range of Hb                 | 2.0 ~ 2.5 (g/dL)               | 1.9 ~ 2.4 (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



# G6PD 定量檢驗內部品管統計結果及 SDI 分佈圖

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

列印圖表

## 檢驗單位 : Lab019

| QC Control Lot No. | Control N       |                             | Control D       |                             |
|--------------------|-----------------|-----------------------------|-----------------|-----------------------------|
|                    | BJ0922N         |                             | BJ0922D         |                             |
| 檢驗期間               | Month (2024/10) | CUM (2024/05/08~2024/10/31) | Month (2024/10) | CUM (2024/05/08~2024/10/31) |
| 累計點數 (N)           | 5               | 26                          | 5               | 26                          |
| 累計平均值 (Mean) U/gHb | 14.9            | 14.8                        | 4.9             | 4.9                         |
| 累計標準差 (SD)         | 0.3             | 0.4                         | 0.1             | 0.1                         |
| 累計變異係數 (CV) %      | 2.0             | 2.7                         | 2.0             | 2.0                         |
| 目標值 (Target) U/gHb | 14.7            | 14.7                        | 5.0             | 5.0                         |
| 總誤差 (TE) %         | 5.4             | 6.1                         | 6.1             | 6.1                         |
| 可容許總誤差 (TEa) %     | 20              | 20                          | 20              | 20                          |
| $\sigma$           | >6              | >6                          | >6              | >6                          |

誤差 (Bias)% =  $\{ [ | \text{累計平均值 (Mean)} - \text{目標值 (Target)} | ] / \text{目標值 (Target)} \} \times 100\%$   
 總誤差 (TE, Total Error)% = 誤差 (Bias)% + 2 × 累計變異係數 (CV)  
 $\sigma$  (Sigma) = (TEa% - 誤差 (Bias)% ) / 累計變異係數 (CV)

月統計 : 2024 10 Change ; 累計期間 (CUM) : 自 2024 05 08 至 2024 10 31 Change

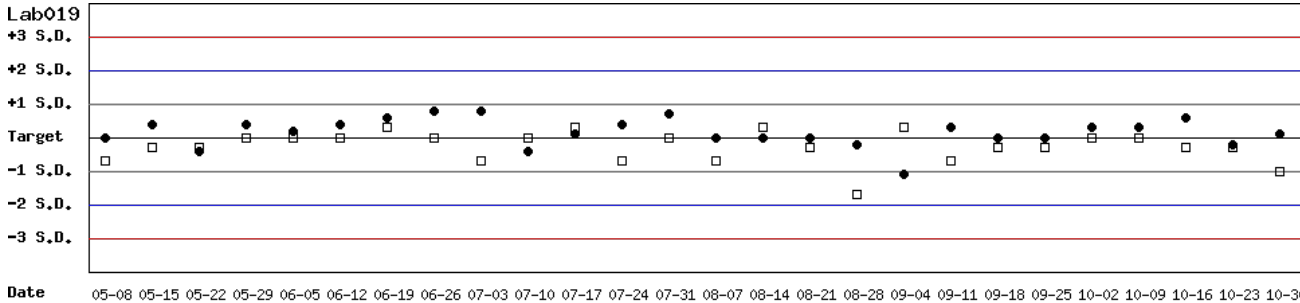
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## Control N 及 Control D SDI 分佈圖

Lot No.: BJ0922N; 檢驗期間 : 2024-05-08 至 2024-10-31; 目標值 (Target) : 14.7; 參考標準差 (SD) : 0.90 (●)

Lot No.: BJ0922D; 檢驗期間 : 2024-05-08 至 2024-10-31; 目標值 (Target) : 5.0; 參考標準差 (SD) : 0.30 (□)

單位 : Lab019



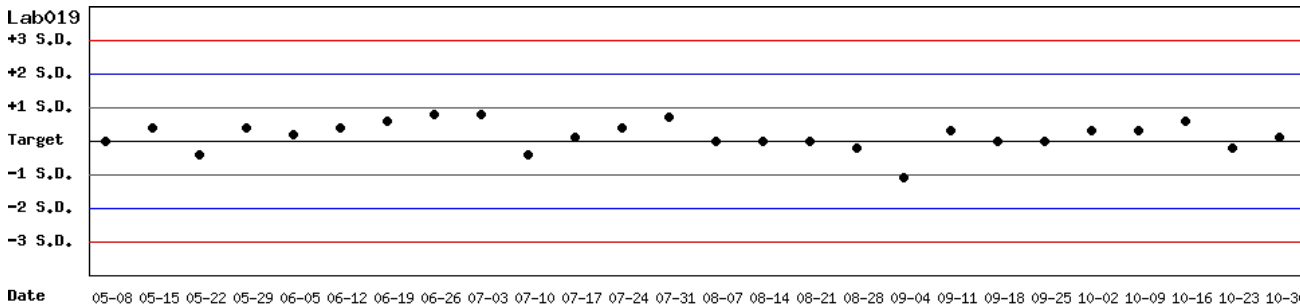
月統計 : 2024 10 Change ; 累計期間 (CUM) : 自 2024 05 08 至 2024 10 31 Change

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## Control N SDI 分佈圖

Lot No.: BJ0922N; 檢驗期間 : 2024-05-08 至 2024-10-31; 目標值 (Target) : 14.7; 參考標準差 (SD) : 0.90

單位 : Lab019



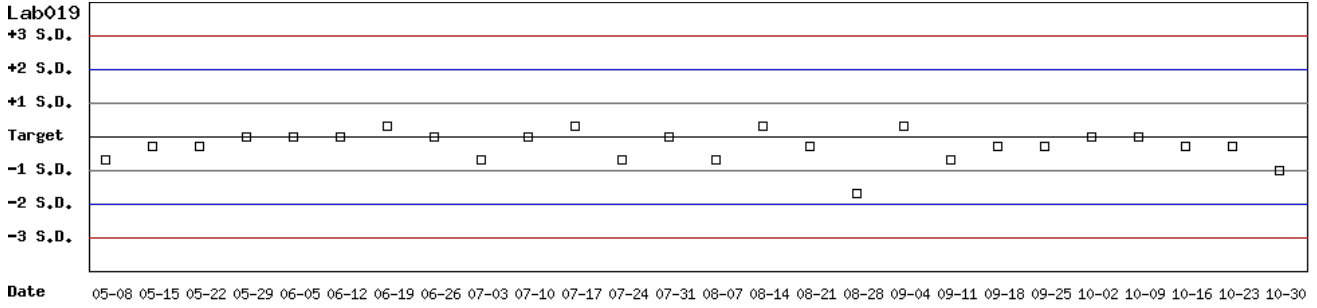
月統計 : 2024 10 Change ; 累計期間 (CUM) : 自 2024 05 08 至 2024 10 31 Change

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# Control D SDI 分佈圖

Lot No.: BJ0922D; 檢驗期間: 2024-05-08 至 2024-10-31; 目標值 (Target): 5.0; 參考標準差 (SD): 0.30

單位: Lab019



月統計: 2024 10 Change ; 累計期間 (CUM): 自 2024 05 08 至 2024 10 31 Change

## 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 : 2024 10 Change

| UnitID <small>↑</small> | Reagent Kit<br>(Code) <small>↑</small> | Control N (Lot No.: BJ0922N) |                 |               |     |           |           |            |     | Control D (Lot No.: BJ0922D) |                 |               |     |           |           |            |     |
|-------------------------|--|------------------------------|-----------------|---------------|-----|-----------|-----------|------------|-----|------------------------------|-----------------|---------------|-----|-----------|-----------|------------|-----|
|                         |  | 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="#">Lab019</a>  | 5                                      | 14.7                         | 14.9            | 5             | 0.3 | 2.0       | 5.4       | 20         | >6  | 5.0                          | 4.9             | 5             | 0.1 | 2.0       | 6.1       | 20         | >6  |
| <a href="#">Lab025</a>  | 5                                      | 14.4                         | 14.5            | 1             | -   | -         | -         | 20         | -   | 5.4                          | 4.4             | 1             | -   | -         | -         | 20         | -   |
| <a href="#">Lab034</a>  | 5                                      | 13.8                         | 14.2            | 2             | -   | -         | -         | 20         | -   | 4.7                          | 5.0             | 2             | -   | -         | -         | 20         | -   |
| <a href="#">Lab040</a>  | 5                                      | 14.4                         | 14.8            | 5             | 0.1 | 0.7       | 4.1       | 20         | >6  | 4.6                          | 4.6             | 5             | 0.1 | 2.2       | 4.3       | 20         | >6  |
| <a href="#">Lab043</a>  | 5                                      | 13.2                         | 14.1            | 5             | 0.5 | 3.5       | 13.9      | 20         | 3.8 | 4.2                          | 4.7             | 5             | 0.3 | 6.4       | 24.7      | 20         | 1.3 |
| <a href="#">Lab049</a>  | 5                                      | 13.8                         | 13.7            | 5             | 0.4 | 2.9       | 6.6       | 20         | >6  | 4.7                          | 4.7             | 5             | 0.3 | 6.4       | 12.8      | 20         | 3.1 |
| <a href="#">Lab050</a>  | 5                                      | 13.8                         | 14.4            | 2             | -   | -         | -         | 20         | -   | 4.7                          | 4.6             | 2             | -   | -         | -         | 20         | -   |
| Total                   | -                                      | -                            | 14.4            | 25            | 0.6 | 4.2       | -         | -          | -   | -                            | 4.7             | 25            | 0.2 | 4.3       | -         | -          | -   |

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

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

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

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### Cumulative

Cumulative : from 2021 01 01 to 2024 10 31 Change

| UnitID <small>↑</small> | Reagent Kit<br>(Code) <small>↑</small> | Control N (Lot No.: BJ0922N) |                 |               |     |           |           |            |     | Control D (Lot No.: BJ0922D) |                 |               |     |           |           |            |     |
|-------------------------|--|------------------------------|-----------------|---------------|-----|-----------|-----------|------------|-----|------------------------------|-----------------|---------------|-----|-----------|-----------|------------|-----|
|                         |  | 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                         | 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  |
| <a href="#">Lab019</a>  | 5                                      | 14.7                         | 14.6            | 136           | 0.6 | 4.1       | 8.9       | 20         | 4.7 | 5.0                          | 4.8             | 136           | 0.2 | 4.2       | 12.3      | 20         | 3.8 |
| <a href="#">Lab020</a>  | 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 |
| <a href="#">Lab022</a>  | 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 |
| <a href="#">Lab025</a>  | 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 |
| <a href="#">Lab028</a>  | 5                                      | 15.2                         | 15.1            | 54            | 0.9 | 6.0       | 12.6      | 20         | 3.2 | 4.9                          | 5.0             | 54            | 0.3 | 6.0       | 14.0      | 20         | 3.0 |
| <a href="#">Lab032</a>  | 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 |
| <a href="#">Lab033</a>  | 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 |
| <a href="#">Lab034</a>  | 5                                      | 13.8                         | 14.3            | 22            | 0.5 | 3.5       | 10.6      | 20         | 4.7 | 4.7                          | 5.1             | 22            | 0.2 | 3.9       | 16.4      | 20         | 2.9 |
| <a href="#">Lab037</a>  | 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 |
| <a href="#">Lab040</a>  | 5                                      | 14.4                         | 14.8            | 132           | 0.2 | 1.4       | 5.5       | 20         | >6  | 4.6                          | 4.6             | 132           | 0.1 | 2.2       | 4.3       | 20         | >6  |
| <a href="#">Lab043</a>  | 5                                      | 13.2                         | 13.9            | 162           | 1.0 | 7.2       | 19.7      | 20         | 2.0 | 4.2                          | 4.6             | 162           | 0.4 | 8.7       | 26.9      | 20         | 1.2 |
| <a href="#">Lab049</a>  | 5                                      | 13.8                         | 14.4            | 233           | 0.6 | 4.2       | 12.7      | 20         | 3.7 | 4.7                          | 4.7             | 233           | 0.3 | 6.4       | 12.8      | 20         | 3.1 |
| <a href="#">Lab050</a>  | 5                                      | 13.8                         | 14.6            | 54            | 0.6 | 4.1       | 14.0      | 20         | 3.5 | 4.7                          | 5.2             | 54            | 0.4 | 7.7       | 26.0      | 20         | 1.2 |
| Total                   | -                                      | -                            | 14.5            | 1329          | 0.7 | 4.8       | -         | -          | -   | -                            | 4.8             | 1329          | 0.4 | 8.3       | -         | -          | -   |

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

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

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

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| 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 - Medicon Change

Print Table 2

### Control N Month vs. Cumulative

| Control N (Lot No.: BJ0922N) |                                     |                 |              |            |     |        |        |         |     |                             |              |            |     |        |        |         |     |
|------------------------------|-------------------------------------|-----------------|--------------|------------|-----|--------|--------|---------|-----|-----------------------------|--------------|------------|-----|--------|--------|---------|-----|
|                              |                                     | Month (2024/10) |              |            |     |        |        |         |     | CUM (2021/01/01~2024/10/31) |              |            |     |        |        |         |     |
| UnitID <small>↑</small>      | Reagent Kit (Code) <small>↑</small> | 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   |
| <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            | 14.9         | 5          | 0.3 | 2.0    | 5.4    | 20      | >6  | 14.7                        | 14.6         | 136        | 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            | 14.5         | 1          | -   | -      | -      | 20      | -   | 14.4                        | 14.2         | 13         | 0.5 | 3.5    | 8.4    | 20      | 5.3 |
| <a href="#">Lab028</a>       | 5                                   | 15.2            | -            | 0          | -   | -      | -      | 20      | -   | 15.2                        | 15.1         | 54         | 0.9 | 6.0    | 12.6   | 20      | 3.2 |
| <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         | 22         | 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         | 5          | 0.1 | 0.7    | 4.1    | 20      | >6  | 14.4                        | 14.8         | 132        | 0.2 | 1.4    | 5.5    | 20      | >6  |
| <a href="#">Lab043</a>       | 5                                   | 13.2            | 14.1         | 5          | 0.5 | 3.5    | 13.9   | 20      | 3.8 | 13.2                        | 13.9         | 162        | 1.0 | 7.2    | 19.7   | 20      | 2.0 |
| <a href="#">Lab049</a>       | 5                                   | 13.8            | 13.7         | 5          | 0.4 | 2.9    | 6.6    | 20      | >6  | 13.8                        | 14.4         | 233        | 0.6 | 4.2    | 12.7   | 20      | 3.7 |
| <a href="#">Lab050</a>       | 5                                   | 13.8            | 14.4         | 2          | -   | -      | -      | 20      | -   | 13.8                        | 14.6         | 54         | 0.6 | 4.1    | 14.0   | 20      | 3.5 |
| Total                        | -                                   | -               | 14.4         | 25         | 0.6 | 4.2    | -      | -       | -   | -                           | 14.5         | 1329       | 0.7 | 4.8    | -      | -       | -   |

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

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

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

Month : 2024 10 Change

Cumulative : from 2021 01 01 to 2024 10 31 Change

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### Control D Month vs. Cumulative

| Control D (Lot No.: BJ0922D) |                                     |                 |              |            |     |        |        |         |     |                             |              |            |     |        |        |         |     |
|------------------------------|-------------------------------------|-----------------|--------------|------------|-----|--------|--------|---------|-----|-----------------------------|--------------|------------|-----|--------|--------|---------|-----|
|                              |                                     | Month (2024/10) |              |            |     |        |        |         |     | CUM (2021/01/01~2024/10/31) |              |            |     |        |        |         |     |
| UnitID <small>↑</small>      | Reagent Kit (Code) <small>↑</small> | 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   |
| <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             | 4.9          | 5          | 0.1 | 2.0    | 6.1    | 20      | >6  | 5.0                         | 4.8          | 136        | 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             | 4.4          | 1          | -   | -      | -      | 20      | -   | 5.4                         | 5.1          | 13         | 0.3 | 5.9    | 17.3   | 20      | 2.4 |
| <a href="#">Lab028</a>       | 5                                   | 4.9             | -            | 0          | -   | -      | -      | 20      | -   | 4.9                         | 5.0          | 54         | 0.3 | 6.0    | 14.0   | 20      | 3.0 |
| <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             | 5.0          | 2          | -   | -      | -      | 20      | -   | 4.7                         | 5.1          | 22         | 0.2 | 3.9    | 16.4   | 20      | 2.9 |
| <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          | 5          | 0.1 | 2.2    | 4.3    | 20      | >6  | 4.6                         | 4.6          | 132        | 0.1 | 2.2    | 4.3    | 20      | >6  |
| <a href="#">Lab043</a>       | 5                                   | 4.2             | 4.7          | 5          | 0.3 | 6.4    | 24.7   | 20      | 1.3 | 4.2                         | 4.6          | 162        | 0.4 | 8.7    | 26.9   | 20      | 1.2 |
| <a href="#">Lab049</a>       | 5                                   | 4.7             | 4.7          | 5          | 0.3 | 6.4    | 12.8   | 20      | 3.1 | 4.7                         | 4.7          | 233        | 0.3 | 6.4    | 12.8   | 20      | 3.1 |
| <a href="#">Lab050</a>       | 5                                   | 4.7             | 4.6          | 2          | -   | -      | -      | 20      | -   | 4.7                         | 5.2          | 54         | 0.4 | 7.7    | 26.0   | 20      | 1.2 |
| Total                        | -                                   | -               | 4.7          | 25         | 0.2 | 4.3    | -      | -       | -   | -                           | 4.8          | 1329       | 0.4 | 8.3    | -      | -       | -   |

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

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

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

Month : 2024 10 Change

Cumulative : from 2021 01 01 to 2024 10 31 Change

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