

# Summary Report of IQC program for G6PD Quantitative Test - Medicon Group - October 2023 -

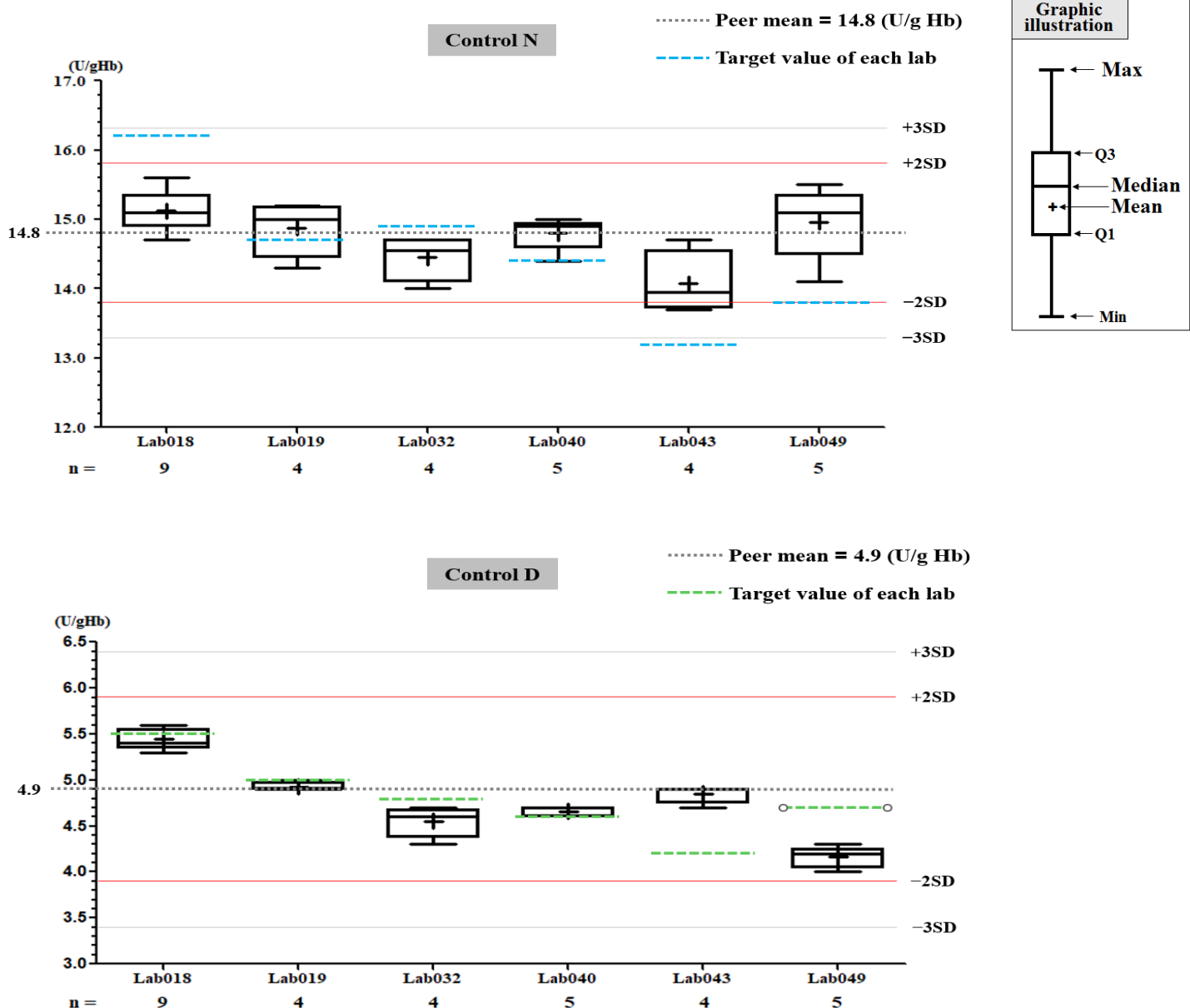
## I. The statistic results of all laboratories in this month

G6PD	Control N (Lot No.:BJ0922N)	Control D (Lot No.: BJ0922D)
Labs	6	6
Received results number (n)	31	31
Median	14.9 (U/g Hb)	4.9 (U/g Hb)
Mean	14.8 (U/g Hb)	4.9 (U/g Hb)
SD	0.5	0.5
CV	3.4%	10.2%
Range of G6PD	13.7 ~ 15.6 (U/g Hb)	4.0 ~ 5.6 (U/g Hb)
Range of Hb	2.1 ~ 2.6 (g/dL)	1.9 ~ 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)

## Lab018

QC Control Lot No.	Control N		Control D	
	BJ0922N		BJ0922D	
Duration of the Analyzing	Month (2023/10)	CUM (2022/04/04~2023/10/31)	Month (2023/10)	CUM (2022/04/04~2023/10/31)
Runs (N)	9	17	9	17
Mean (U/gHb)	15.1	15.7	5.4	5.5
SD	0.3	0.7	0.1	0.1
CV (%)	2.0	4.5	1.9	1.8
Target Value (U/gHb)	16.2	16.2	5.5	5.5
Total Error (%)	10.8	12.0	5.5	3.6
TEa (%)	20	20	20	20
$\sigma$	>6	3.8	>6	>6

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

Month :    ; Cumulative : from    to

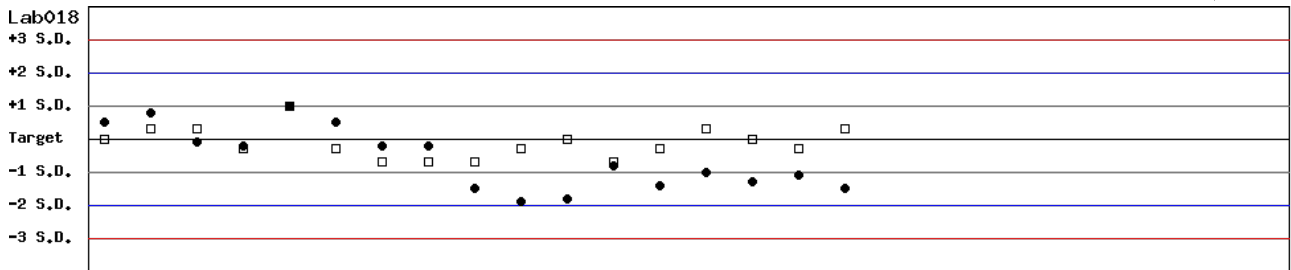
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## Control N and Control D SDI QC Chart

Lot No.: BJ0922N ; Duration : 2022-04-04 to 2023-10-31 ; Target : 16.2 ; SD : 0.80 (●)

Lot No.: BJ0922D ; Duration : 2022-04-04 to 2023-10-31 ; Target : 5.5 ; SD : 0.30 (□)

Lab018



Date 04-04 04-05 04-07 04-11 04-13 07-01 07-05 07-07 10-03 10-06 10-10 10-13 10-17 10-20 10-24 10-27 10-31

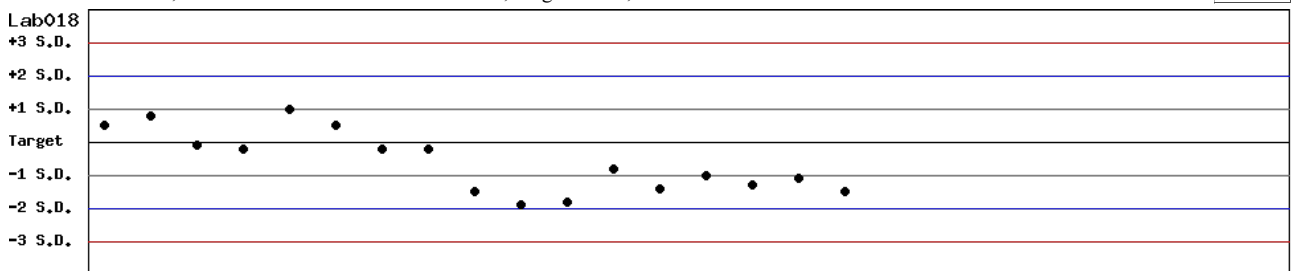
Month :    ; Cumulative : from    to

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## Control N SDI QC Chart

Lot No.: BJ0922N ; Duration : 2022-04-04 to 2023-10-31 ; Target : 16.2 ; SD : 0.80

Lab018



Date 04-04 04-05 04-07 04-11 04-13 07-01 07-05 07-07 10-03 10-06 10-10 10-13 10-17 10-20 10-24 10-27 10-31

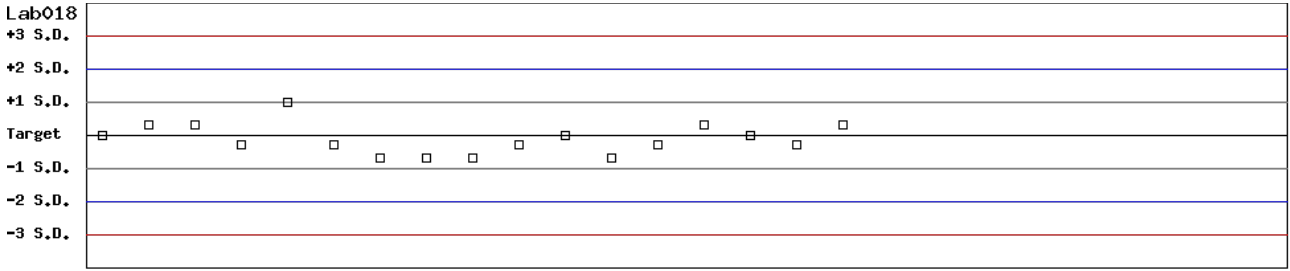
Month :    ; Cumulative : from    to

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## Control D SDI QC Chart

Lot No.: BJ0922D ; Duration : 2022-04-04 to 2023-10-31 ; Target : 5.5 ; SD : 0.30

Lab018



Date 04-04 04-05 04-07 04-11 04-13 07-01 07-05 07-07 10-03 10-06 10-10 10-13 10-17 10-20 10-24 10-27 10-31

Month : 2023 10 Change ; Cumulative : from 2022 04 04 to 2023 10 31 Change

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## 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 : 2023 10 Change

UnitID <small>↑</small>	Reagent Kit (Code) <small>↑</small>	Control N (Lot No.: BJ0922N)								Control D (Lot No.: BJ0922D)							
		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	15.1	9	0.3	2.0	10.8	20	>6	5.5	5.4	9	0.1	1.9	5.5	20	>6
<a href="#">Lab019</a>	5	14.7	14.9	4	0.4	2.7	6.7	20	>6	5.0	4.9	4	0.1	2.0	6.1	20	>6
<a href="#">Lab032</a>	5	14.9	14.5	4	0.3	2.1	6.8	20	>6	4.8	4.6	4	0.2	4.3	12.9	20	3.7
<a href="#">Lab040</a>	5	14.4	14.8	5	0.2	1.4	5.5	20	>6	4.6	4.7	5	0.1	2.1	6.4	20	>6
<a href="#">Lab043</a>	5	13.2	14.1	4	0.5	3.5	13.9	20	3.8	4.2	4.9	4	0.1	2.0	20.7	20	1.7
<a href="#">Lab049</a>	5	13.8	15.0	5	0.5	3.3	15.4	20	3.4	4.7	4.2	5	0.1	2.4	15.4	20	3.9
Total	-	-	14.8	31	0.5	3.4	-	-	-	-	4.9	31	0.5	10.2	-	-	-

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

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

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

[\[TOP\]](#)

### Cumulative

Cumulative : from 2021 01 01 to 2023 10 31 Change

UnitID <small>↑</small>	Reagent Kit (Code) <small>↑</small>	Control N (Lot No.: BJ0922N)								Control D (Lot No.: BJ0922D)							
		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	15.7	17	0.7	4.5	12.0	20	3.8	5.5	5.5	17	0.1	1.8	3.6	20	>6
<a href="#">Lab019</a>	5	14.7	14.4	83	0.6	4.2	10.4	20	4.3	5.0	4.7	83	0.3	6.4	18.8	20	2.2
<a href="#">Lab020</a>	5	14.4	14.4	76	0.5	3.5	6.9	20	5.7	4.6	4.7	76	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="#">Lab028</a>	5	15.2	15.1	34	1.1	7.3	15.2	20	2.6	4.9	4.9	34	0.3	6.1	12.2	20	3.3
<a href="#">Lab032</a>	5	14.9	14.3	140	0.4	2.8	9.6	20	5.7	4.8	4.5	140	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="#">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	14.7	72	0.2	1.4	4.8	20	>6	4.6	4.6	72	0.1	2.2	4.3	20	>6
<a href="#">Lab043</a>	5	13.2	13.8	110	1.2	8.7	21.9	20	1.8	4.2	4.6	110	0.4	8.7	26.9	20	1.2
<a href="#">Lab049</a>	5	13.8	14.4	163	0.6	4.2	12.7	20	3.7	4.7	4.7	163	0.3	6.4	12.8	20	3.1
Total	-	-	14.3	862	0.8	5.6	-	-	-	-	4.7	862	0.3	6.4	-	-	-

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 (2023/10)								CUM (2021/01/01~2023/10/31)							
UnitID <span style="font-size: small;">↑</span>	Reagent Kit (Code) <span style="font-size: small;">↑</span>	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	15.1	9	0.3	2.0	10.8	20	>6	16.2	15.7	17	0.7	4.5	12.0	20	3.8
<a href="#">Lab019</a>	5	14.7	14.9	4	0.4	2.7	6.7	20	>6	14.7	14.4	83	0.6	4.2	10.4	20	4.3
<a href="#">Lab020</a>	5	14.4	-	0	-	-	-	20	-	14.4	14.4	76	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="#">Lab028</a>	5	15.2	-	0	-	-	-	20	-	15.2	15.1	34	1.1	7.3	15.2	20	2.6
<a href="#">Lab032</a>	5	14.9	14.5	4	0.3	2.1	6.8	20	>6	14.9	14.3	140	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="#">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	0.2	1.4	5.5	20	>6	14.4	14.7	72	0.2	1.4	4.8	20	>6
<a href="#">Lab043</a>	5	13.2	14.1	4	0.5	3.5	13.9	20	3.8	13.2	13.8	110	1.2	8.7	21.9	20	1.8
<a href="#">Lab049</a>	5	13.8	15.0	5	0.5	3.3	15.4	20	3.4	13.8	14.4	163	0.6	4.2	12.7	20	3.7
<b>Total</b>	-	-	14.8	31	0.5	3.4	-	-	-	-	14.3	862	0.8	5.6	-	-	-

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

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

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

Month : 2023 ▼ 10 ▼ Change

Cumulative : from 2021 ▼ 01 ▼ 01 ▼ to 2023 ▼ 10 ▼ 31 ▼ Change

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### Control D Month vs. Cumulative

		Control D (Lot No.: BJ0922D)															
		Month (2023/10)								CUM (2021/01/01~2023/10/31)							
UnitID <span style="font-size: small;">↑</span>	Reagent Kit (Code) <span style="font-size: small;">↑</span>	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	5.4	9	0.1	1.9	5.5	20	>6	5.5	5.5	17	0.1	1.8	3.6	20	>6
<a href="#">Lab019</a>	5	5.0	4.9	4	0.1	2.0	6.1	20	>6	5.0	4.7	83	0.3	6.4	18.8	20	2.2
<a href="#">Lab020</a>	5	4.6	-	0	-	-	-	20	-	4.6	4.7	76	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="#">Lab028</a>	5	4.9	-	0	-	-	-	20	-	4.9	4.9	34	0.3	6.1	12.2	20	3.3
<a href="#">Lab032</a>	5	4.8	4.6	4	0.2	4.3	12.9	20	3.7	4.8	4.5	140	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="#">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	4.7	5	0.1	2.1	6.4	20	>6	4.6	4.6	72	0.1	2.2	4.3	20	>6
<a href="#">Lab043</a>	5	4.2	4.9	4	0.1	2.0	20.7	20	1.7	4.2	4.6	110	0.4	8.7	26.9	20	1.2
<a href="#">Lab049</a>	5	4.7	4.2	5	0.1	2.4	15.4	20	3.9	4.7	4.7	163	0.3	6.4	12.8	20	3.1
<b>Total</b>	-	-	4.9	31	0.5	10.2	-	-	-	-	4.7	862	0.3	6.4	-	-	-

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

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

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

Month : 2023 ▼ 10 ▼ Change

Cumulative : from 2021 ▼ 01 ▼ 01 ▼ to 2023 ▼ 10 ▼ 31 ▼ Change

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Reagent Kit	Reagent Code
Medicon	5