

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

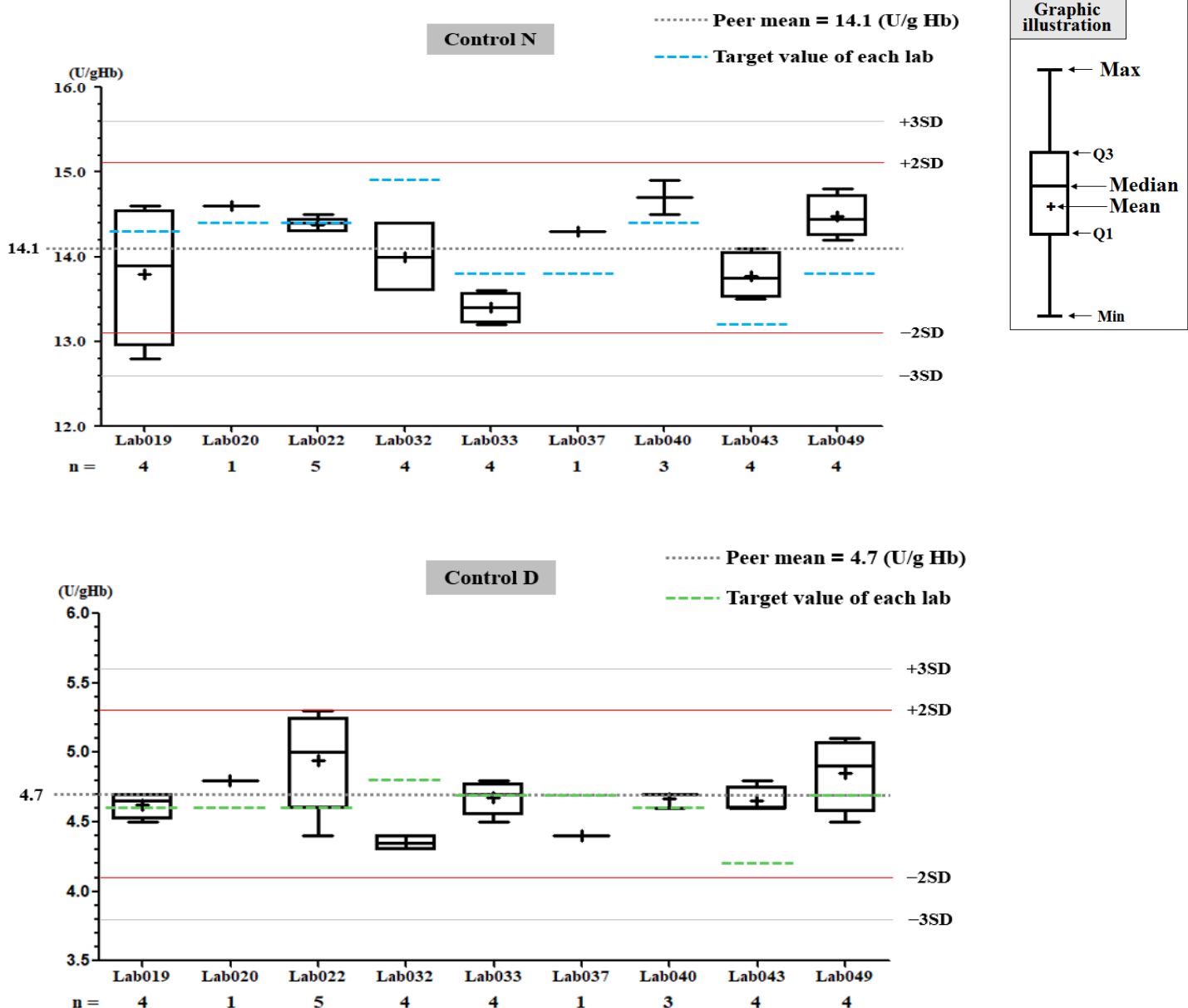
## I. The statistic results of all laboratories in this month

G6PD	Control N (Lot No.:BJ0922N)	Control D (Lot No.: BJ0922D)
Labs	9	9
Received results number (n)	30	30
Median	14.3 (U/g Hb)	4.7 (U/g Hb)
Mean	14.1 (U/g Hb)	4.7 (U/g Hb)
SD	0.5	0.3
CV	3.5%	4.3%
Range of G6PD	12.8 ~ 14.9 (U/g Hb)	4.3 ~ 5.3 (U/g Hb)
Range of Hb	2.1 ~ 2.8 (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



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

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

[Print Table](#)

## Lab019

QC Control Lot No.	Control N		Control D	
	BJ0922N		BJ0922D	
Duration of the Analyzing	Month (2023/04)	CUM (2022/08/03~2023/04/30)	Month (2023/04)	CUM (2022/08/03~2023/04/30)
Runs (N)	4	26	4	26
Mean (U/gHb)	13.8	14.0	4.6	4.6
SD	0.8	0.4	0.1	0.2
CV (%)	5.8	2.9	2.2	4.3
Target Value (U/gHb)	14.3	14.3	4.6	4.6
Total Error (%)	15.1	7.8	4.3	8.7
TEa (%)	20	20	20	20
$\sigma$	2.8	>6	>6	4.7

Bias (%) =  $\left[ \frac{(\text{Mean} - \text{Target})}{\text{Target}} \right] \times 100\%$   
 TE : Total Error(%) = Bias (%) + 2 × CV (%)  
 $\sigma$  (Sigma) = [TEa% - Bias (%)] / CV (%)

Month : 2023 04 Change ; Cumulative : from 2022 08 03 to 2023 04 30 Change

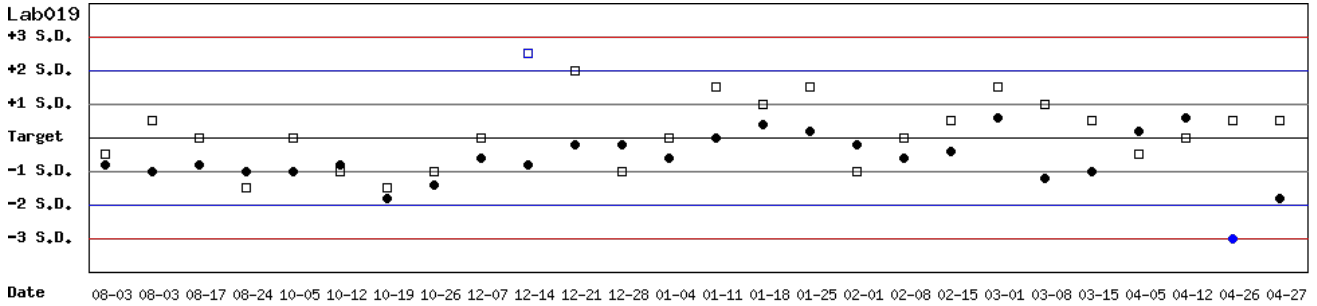
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## Control N and Control D SDI QC Chart

Lot No.: BJ0922N ; Duration : 2022-08-03 to 2023-04-30 ; Target : 14.3 ; SD : 0.50 (●)

Lot No.: BJ0922D ; Duration : 2022-08-03 to 2023-04-30 ; Target : 4.6 ; SD : 0.20 (□)

Lab019



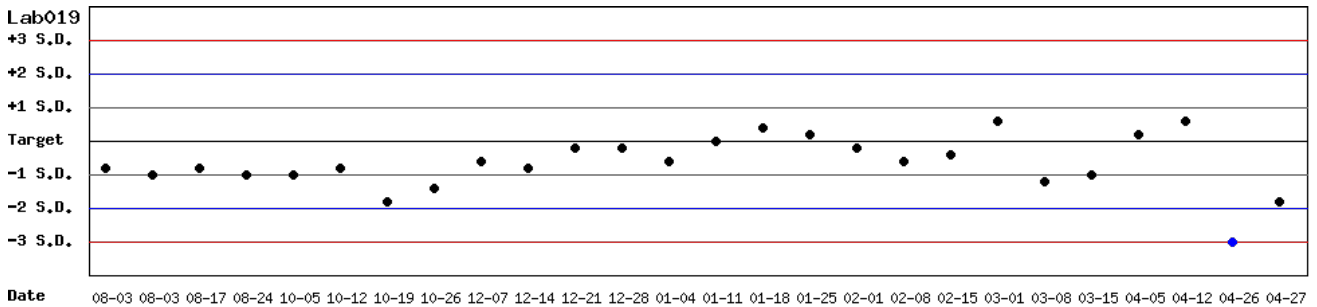
Month : 2023 04 Change ; Cumulative : from 2022 08 03 to 2023 04 30 Change

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## Control N SDI QC Chart

Lot No.: BJ0922N ; Duration : 2022-08-03 to 2023-04-30 ; Target : 14.3 ; SD : 0.50

Lab019



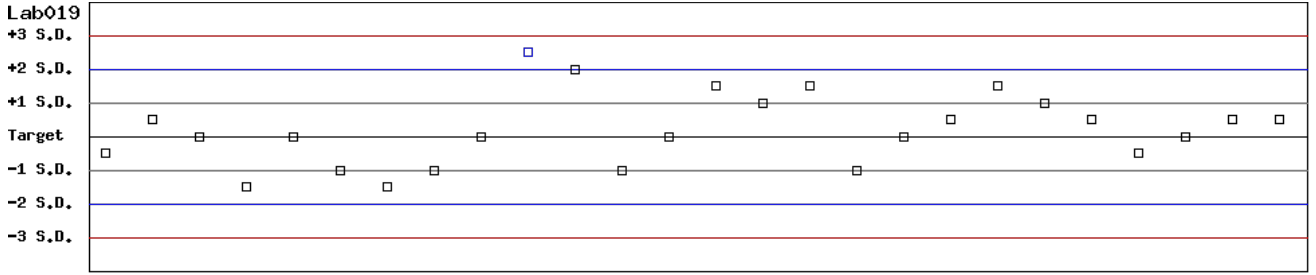
Month : 2023 04 Change ; Cumulative : from 2022 08 03 to 2023 04 30 Change

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## Control D SDI QC Chart

Lot No.: BJ0922D ; Duration : 2022-08-03 to 2023-04-30 ; Target : 4.6 ; SD : 0.20

Lab019



**Date** 08-03 08-03 08-17 08-24 10-05 10-12 10-19 10-26 12-07 12-14 12-21 12-28 01-04 01-11 01-18 01-25 02-01 02-08 02-15 03-01 03-08 03-15 04-05 04-12 04-26 04-27

Month :    ; Cumulative : from    to

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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 04 Change

UnitID <span>↑</span>	Reagent Kit (Code) <span>↑</span>	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="#">Lab019</a>	5	14.3	13.8	4	0.8	5.8	15.1	20	2.8	4.6	4.6	4	0.1	2.2	4.3	20	>6
<a href="#">Lab020</a>	5	14.4	14.6	1	-	-	-	20	-	4.6	4.8	1	-	-	-	20	-
<a href="#">Lab022</a>	5	14.4	14.4	5	0.1	0.7	1.4	20	>6	4.6	4.9	5	0.4	8.2	22.8	20	1.6
<a href="#">Lab032</a>	5	14.9	14.0	4	0.5	3.6	13.2	20	3.9	4.8	4.4	4	0.1	2.3	12.9	20	5.1
<a href="#">Lab033</a>	5	13.8	13.4	4	0.2	1.5	5.9	20	>6	4.7	4.7	4	0.1	2.1	4.3	20	>6
<a href="#">Lab037</a>	5	13.8	14.3	1	-	-	-	20	-	4.7	4.4	1	-	-	-	20	-
<a href="#">Lab040</a>	5	14.4	14.7	3	0.2	1.4	4.8	20	>6	4.6	4.7	3	0.1	2.1	6.4	20	>6
<a href="#">Lab043</a>	5	13.2	13.8	4	0.3	2.2	8.9	20	>6	4.2	4.7	4	0.1	2.1	16.2	20	3.9
<a href="#">Lab049</a>	5	13.8	14.5	4	0.3	2.1	9.2	20	>6	4.7	4.9	4	0.3	6.1	16.5	20	2.6
Total	-	-	14.1	30	0.5	3.5	-	-	-	-	4.7	30	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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## Cumulative

Cumulative : from 2021 01 01 to 2023 04 30 Change

UnitID <span>↑</span>	Reagent Kit (Code) <span>↑</span>	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	16.4	8	0.4	2.4	6.1	20	>6	5.5	5.5	8	0.2	3.6	7.3	20	5.6
<a href="#">Lab019</a>	5	14.3	14.3	54	0.6	4.2	8.4	20	4.8	4.6	4.6	54	0.2	4.3	8.7	20	4.7
<a href="#">Lab020</a>	5	14.4	14.4	60	0.5	3.5	6.9	20	5.7	4.6	4.7	60	0.1	2.1	6.4	20	>6
<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	123	0.4	2.8	9.6	20	5.7	4.8	4.5	123	0.2	4.4	15.1	20	3.1
<a href="#">Lab033</a>	5	13.8	13.7	68	0.6	4.4	9.5	20	4.4	4.7	4.6	68	0.3	6.5	15.2	20	2.7
<a href="#">Lab037</a>	5	13.8	14.5	53	0.5	3.4	12.0	20	4.4	4.7	4.7	53	0.2	4.3	8.5	20	4.7
<a href="#">Lab040</a>	5	14.4	14.7	47	0.2	1.4	4.8	20	>6	4.6	4.6	47	0.1	2.2	4.3	20	>6
<a href="#">Lab043</a>	5	13.2	13.7	85	1.3	9.5	22.8	20	1.7	4.2	4.5	85	0.5	11.1	29.4	20	1.2
<a href="#">Lab049</a>	5	13.8	14.5	91	0.7	4.8	14.7	20	3.1	4.7	4.7	91	0.2	4.3	8.5	20	4.7
Total	-	-	14.3	650	0.8	5.6	-	-	-	-	4.6	650	0.3	6.5	-	-	-

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 (2023/04)								CUM (2021/01/01~2023/04/30)							
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	-	0	-	-	-	20	-	16.2	16.4	8	0.4	2.4	6.1	20	>6
<a href="#">Lab019</a>	5	14.3	13.8	4	0.8	5.8	15.1	20	2.8	14.3	14.3	54	0.6	4.2	8.4	20	4.8
<a href="#">Lab020</a>	5	14.4	14.6	1	-	-	-	20	-	14.4	14.4	60	0.5	3.5	6.9	20	5.7
<a href="#">Lab022</a>	5	14.4	14.4	5	0.1	0.7	1.4	20	>6	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	14.0	4	0.5	3.6	13.2	20	3.9	14.9	14.3	123	0.4	2.8	9.6	20	5.7
<a href="#">Lab033</a>	5	13.8	13.4	4	0.2	1.5	5.9	20	>6	13.8	13.7	68	0.6	4.4	9.5	20	4.4
<a href="#">Lab037</a>	5	13.8	14.3	1	-	-	-	20	-	13.8	14.5	53	0.5	3.4	12.0	20	4.4
<a href="#">Lab040</a>	5	14.4	14.7	3	0.2	1.4	4.8	20	>6	14.4	14.7	47	0.2	1.4	4.8	20	>6
<a href="#">Lab043</a>	5	13.2	13.8	4	0.3	2.2	8.9	20	>6	13.2	13.7	85	1.3	9.5	22.8	20	1.7
<a href="#">Lab049</a>	5	13.8	14.5	4	0.3	2.1	9.2	20	>6	13.8	14.5	91	0.7	4.8	14.7	20	3.1
Total	-	-	14.1	30	0.5	3.5	-	-	-	-	14.3	650	0.8	5.6	-	-	-

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

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

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

Month : 2023 ▼ 04 ▼ Change

Cumulative : from 2021 ▼ 01 ▼ 01 ▼ to 2023 ▼ 04 ▼ 30 ▼ Change

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### Control D Month vs. Cumulative

		Control D (Lot No.: BJ0922D)															
		Month (2023/04)								CUM (2021/01/01~2023/04/30)							
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	-	0	-	-	-	20	-	5.5	5.5	8	0.2	3.6	7.3	20	5.6
<a href="#">Lab019</a>	5	4.6	4.6	4	0.1	2.2	4.3	20	>6	4.6	4.6	54	0.2	4.3	8.7	20	4.7
<a href="#">Lab020</a>	5	4.6	4.8	1	-	-	-	20	-	4.6	4.7	60	0.1	2.1	6.4	20	>6
<a href="#">Lab022</a>	5	4.6	4.9	5	0.4	8.2	22.8	20	1.6	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	4.4	4	0.1	2.3	12.9	20	5.1	4.8	4.5	123	0.2	4.4	15.1	20	3.1
<a href="#">Lab033</a>	5	4.7	4.7	4	0.1	2.1	4.3	20	>6	4.7	4.6	68	0.3	6.5	15.2	20	2.7
<a href="#">Lab037</a>	5	4.7	4.4	1	-	-	-	20	-	4.7	4.7	53	0.2	4.3	8.5	20	4.7
<a href="#">Lab040</a>	5	4.6	4.7	3	0.1	2.1	6.4	20	>6	4.6	4.6	47	0.1	2.2	4.3	20	>6
<a href="#">Lab043</a>	5	4.2	4.7	4	0.1	2.1	16.2	20	3.9	4.2	4.5	85	0.5	11.1	29.4	20	1.2
<a href="#">Lab049</a>	5	4.7	4.9	4	0.3	6.1	16.5	20	2.6	4.7	4.7	91	0.2	4.3	8.5	20	4.7
Total	-	-	4.7	30	0.3	6.4	-	-	-	-	4.6	650	0.3	6.5	-	-	-

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

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

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

Month : 2023 ▼ 04 ▼ Change

Cumulative : from 2021 ▼ 01 ▼ 01 ▼ to 2023 ▼ 04 ▼ 30 ▼ Change

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Reagent Kit	Reagent Code
Medicon	5