

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

- November 2018 -

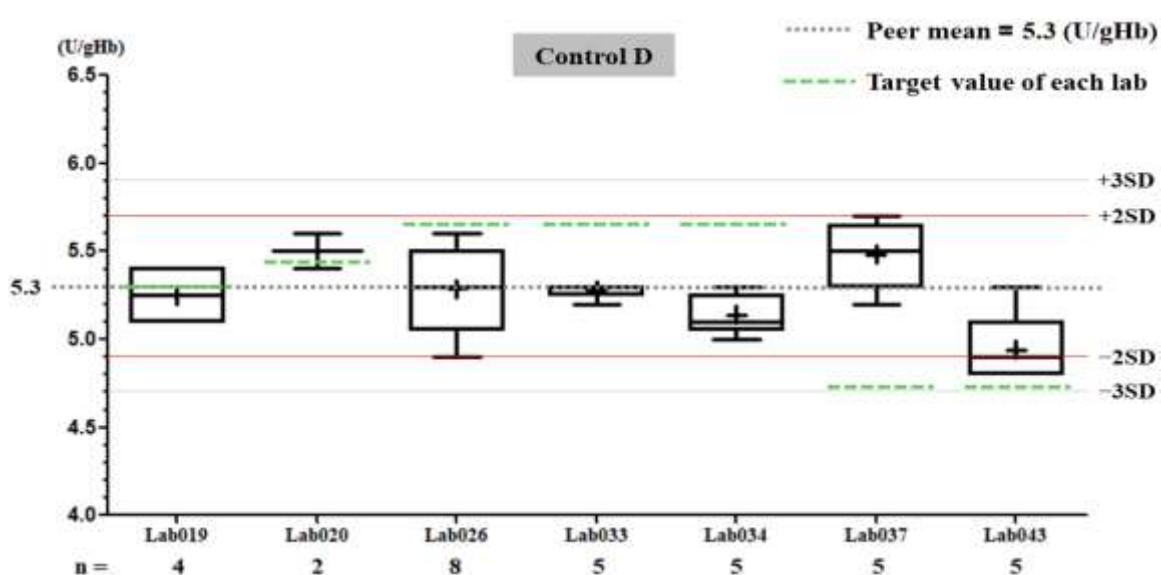
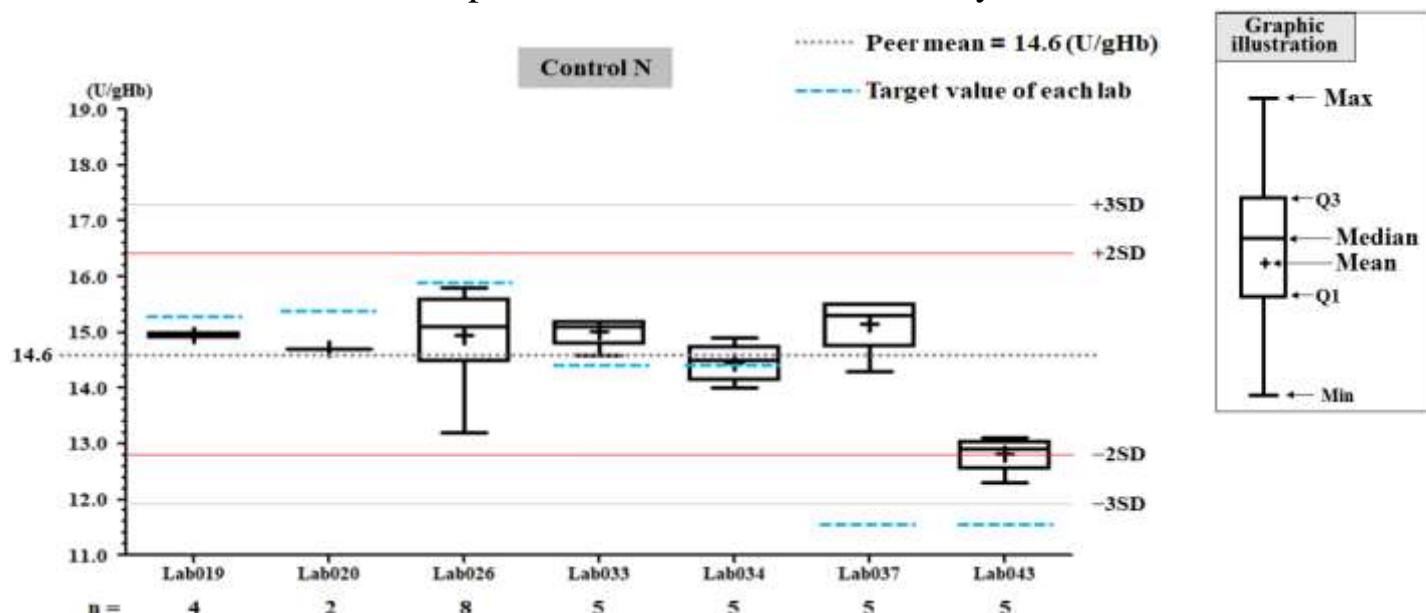
I. The statistic results of all laboratories in this month

G6PD	Control N (Lot No.:AE0909N)	Control D (Lot No.:AE0909D)
Labs	7	7
Received results number (n)	34	34
Median	14.9 (U/gHb)	5.3 (U/gHb)
Mean	14.5 (U/gHb)	5.3 (U/gHb)
SD	0.9	0.2
CV	6.2%	3.8%
Range of G6PD	12.3 ~ 15.8 (U/gHb)	4.8 ~ 5.7 (U/gHb)
Range of Hb	1.7 ~ 2.2 (g/dL)	2.0 ~ 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 : AE0909N (2016-01-01 ~ 2100-12-31)

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[Print Table](#)

Lab037

QC Control Lot No.	Control N		Control D	
	AE0909N		AE0909D	
Duration of the Analyzing	Month (2018/11)	CUM (2016/02/01~2018/11/30)	Month (2018/11)	CUM (2016/02/01~2018/11/30)
Runs (N)	5	7	5	7
Mean (U/gHb)	15.2	15.3	5.5	5.5
SD	0.5	0.5	0.2	0.2
CV (%)	3.3	3.3	3.6	3.6
Target Value (U/gHb)	11.5	11.5	4.5	4.5
Total Error (%)	38.8	39.6	29.5	29.5
TEa (%)	20	20	20	20
σ	-3.7	-4.0	-0.6	-0.6

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

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

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

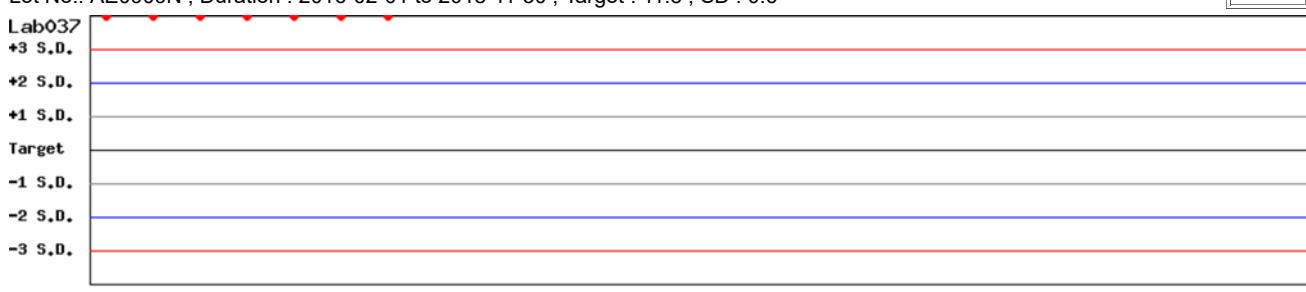
Month : 2018 11 [Change](#) ; Cumulative : from 2016 02 01 to 2018 11 30 [Change](#)

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Control N SDI QC Chart

Lot No.: AE0909N ; Duration : 2016-02-01 to 2018-11-30 ; Target : 11.5 ; SD : 0.6

Lab037



Date 10-19 10-26 11-02 11-10 11-16 11-23 11-30

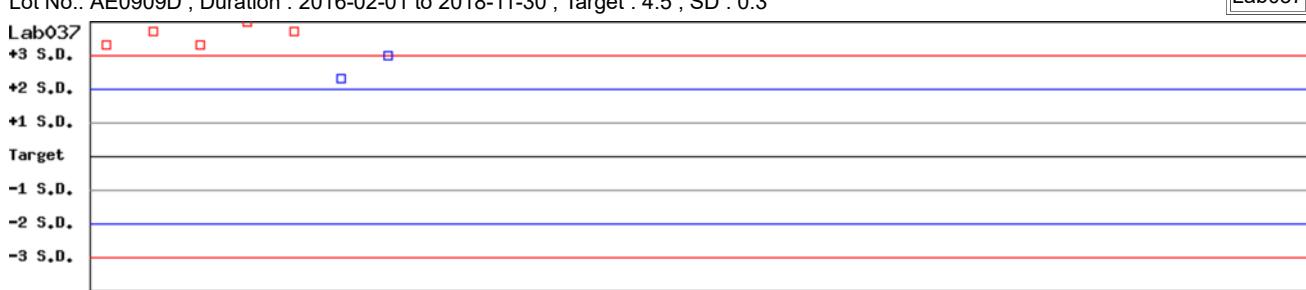
Month : 2018 11 [Change](#) ; Cumulative : from 2016 02 01 to 2018 11 30 [Change](#)

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Control D SDI QC Chart

Lot No.: AE0909D ; Duration : 2016-02-01 to 2018-11-30 ; Target : 4.5 ; SD : 0.3

Lab037



Date 10-19 10-26 11-02 11-10 11-16 11-23 11-30

Month : 2018 11 [Change](#) ; Cumulative : from 2016 02 01 to 2018 11 30 [Change](#)

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Control N and Control D SDI QC Chart

Lot No.: AE0909N ; Duration : 2016-02-01 to 2018-11-30 ; Target : 11.5 ; SD : 0.6 (●)

Lot No.: AE0909D ; Duration : 2016-02-01 to 2018-11-30 ; Target : 4.5 ; SD : 0.3 (□)

Lab037



Date 10-19 10-26 11-02 11-10 11-16 11-23 11-30

Month : 2018 11 ; Cumulative : from 2016 02 01 to 2018 11 30

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Peer Group Statistics (Table 1)

Select LotNo : AE0909N (2016-01-01 ~ 2100-12-31)

Select Reagent Kit : 5 - Medicon

Monthly

Month : 2018

		Control N (Lot No.: AE0909N)								Control D (Lot No.: AE0909D)							
UnitID <input type="button" value="↑"/>	Reagent Kit (Code) <input type="button" value="↑"/>	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	15.3	15.0	4	0.1	0.7	3.3	20	>6	5.3	5.3	4	0.2	3.8	7.5	20	5.3
Lab020	5	15.4	14.7	2	-	-	-	20	-	5.5	5.5	2	-	-	-	20	-
Lab026	5	15.9	14.9	8	0.8	5.4	17.0	20	2.5	5.8	5.3	8	0.3	5.7	19.9	20	2.0
Lab033	5	14.4	15.0	5	0.3	2.0	8.2	20	>6	5.8	5.3	5	0.0	0.0	8.6	20	>6
Lab034	5	14.4	14.5	5	0.3	2.1	4.8	20	>6	5.8	5.1	5	0.1	2.0	16.0	20	4.0
Lab037	5	11.5	15.2	5	0.5	3.3	38.8	20	-3.7	4.5	5.5	5	0.2	3.6	29.5	20	-0.6
Lab043	5	11.5	12.8	5	0.3	2.3	16.0	20	3.8	4.5	4.9	5	0.2	4.1	17.1	20	2.7
Total	-	-	14.6	34	0.9	6.2	-	-	-	-	5.3	34	0.2	3.8	-	-	-

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

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

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

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Cumulative

Cumulative : from 2016 to 2018

		Control N (Lot No.: AE0909N)								Control D (Lot No.: AE0909D)							
UnitID <input type="button" value="↑"/>	Reagent Kit (Code) <input type="button" value="↑"/>	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	15.7	16.1	60	0.7	4.3	11.2	20	4.1	5.6	5.7	60	0.3	5.3	12.3	20	3.4
Lab019	5	15.3	15.1	43	0.4	2.6	6.6	20	>6	5.3	5.3	43	0.2	3.8	7.5	20	5.3
Lab020	5	15.4	15.2	6	0.5	3.3	7.9	20	5.7	5.5	5.5	6	0.1	1.8	3.6	20	>6
Lab026	5	15.9	15.3	125	0.5	3.3	10.3	20	4.9	5.8	5.2	125	0.4	7.7	25.7	20	1.3
Lab027	5	11.5	16.2	53	1.4	8.6	58.2	20	-2.4	4.5	5.6	53	0.4	7.1	38.7	20	-0.6
Lab032	5	15.9	15.8	22	1.0	6.3	13.3	20	3.1	5.8	5.7	22	0.4	7.0	15.8	20	2.6
Lab033	5	14.4	14.8	32	0.6	4.1	10.9	20	4.2	5.8	5.3	32	0.2	3.8	16.2	20	3.0
Lab034	5	14.4	14.2	37	0.5	3.5	8.4	20	5.3	5.8	5.1	37	0.2	3.9	19.9	20	2.0
Lab037	5	11.5	15.3	7	0.5	3.3	39.6	20	-4.0	4.5	5.5	7	0.2	3.6	29.5	20	-0.6
Lab040	5	12.5	13.2	38	0.6	4.5	14.7	20	3.2	4.5	4.7	38	0.3	6.4	17.2	20	2.4
Lab043	5	11.5	13.3	42	1.1	8.3	32.2	20	0.5	4.5	5.1	42	0.3	5.9	25.1	20	1.1
Total	-	-	15.0	465	1.2	8.0	-	-	-	-	5.3	465	0.4	7.5	-	-	-

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

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

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

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Reagent Kit	Reagent Code
Medicon	5

Peer Group Statistics (Table 2)

Select LotNo : AE0909N (2016-01-01 ~ 2100-12-31)

Select Reagent Kit : 5 - Medicon

Control N Month vs. Cumulative

UnitID	Reagent Kit (Code)	Control N (Lot No.: AE0909N)										CUM (2016/02/01~2018/11/30)									
		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	15.7	-	0	-	-	-	20	-	15.7	16.1	60	0.7	4.3	11.2	20	4.1				
Lab019	5	15.3	15.0	4	0.1	0.7	3.3	20	>6	15.3	15.1	43	0.4	2.6	6.6	20	>6				
Lab020	5	15.4	14.7	2	-	-	-	20	-	15.4	15.2	6	0.5	3.3	7.9	20	5.7				
Lab026	5	15.9	14.9	8	0.8	5.4	17.0	20	2.5	15.9	15.3	125	0.5	3.3	10.3	20	4.9				
Lab027	5	11.5	-	0	-	-	-	20	-	11.5	16.2	53	1.4	8.6	58.2	20	-2.4				
Lab032	5	15.9	-	0	-	-	-	20	-	15.9	15.8	22	1.0	6.3	13.3	20	3.1				
Lab033	5	14.4	15.0	5	0.3	2.0	8.2	20	>6	14.4	14.8	32	0.6	4.1	10.9	20	4.2				
Lab034	5	14.4	14.5	5	0.3	2.1	4.8	20	>6	14.4	14.2	37	0.5	3.5	8.4	20	5.3				
Lab037	5	11.5	15.2	5	0.5	3.3	38.8	20	-3.7	11.5	15.3	7	0.5	3.3	39.6	20	-4.0				
Lab040	5	12.5	-	0	-	-	-	20	-	12.5	13.2	38	0.6	4.5	14.7	20	3.2				
Lab043	5	11.5	12.8	5	0.3	2.3	16.0	20	3.8	11.5	13.3	42	1.1	8.3	32.2	20	0.5				
Total	-	-	14.6	34	0.9	6.2	-	-	-	-	15.0	465	1.2	8.0	-	-	-				

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

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

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

Month : 2018

Cumulative : from 2016 02 01 to 2018 11 30 Change

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Control D Month vs. Cumulative

UnitID	Reagent Kit (Code)	Control D (Lot No.: AE0909D)										CUM (2016/02/01~2018/11/30)									
		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	5.6	-	0	-	-	-	20	-	5.6	5.7	60	0.3	5.3	12.3	20	3.4				
Lab019	5	5.3	5.3	4	0.2	3.8	7.5	20	5.3	5.3	5.3	43	0.2	3.8	7.5	20	5.3				
Lab020	5	5.5	5.5	2	-	-	-	20	-	5.5	5.5	6	0.1	1.8	3.6	20	>6				
Lab026	5	5.8	5.3	8	0.3	5.7	19.9	20	2.0	5.8	5.2	125	0.4	7.7	25.7	20	1.3				
Lab027	5	4.5	-	0	-	-	-	20	-	4.5	5.6	53	0.4	7.1	38.7	20	-0.6				
Lab032	5	5.8	-	0	-	-	-	20	-	5.8	5.7	22	0.4	7.0	15.8	20	2.6				
Lab033	5	5.8	5.3	5	0.0	0.0	8.6	20	>6	5.8	5.3	32	0.2	3.8	16.2	20	3.0				
Lab034	5	5.8	5.1	5	0.1	2.0	16.0	20	4.0	5.8	5.1	37	0.2	3.9	19.9	20	2.0				
Lab037	5	4.5	5.5	5	0.2	3.6	29.5	20	-0.6	4.5	5.5	7	0.2	3.6	29.5	20	-0.6				
Lab040	5	4.5	-	0	-	-	-	20	-	4.5	4.7	38	0.3	6.4	17.2	20	2.4				
Lab043	5	4.5	4.9	5	0.2	4.1	17.1	20	2.7	4.5	5.1	42	0.3	5.9	25.1	20	1.1				
Total	-	-	5.3	34	0.2	3.8	-	-	-	-	5.3	465	0.4	7.5	-	-	-				

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

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

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

Month : 2018

Cumulative : from 2016 02 01 to 2018 11 30 Change

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Reagent Kit	Reagent Code
Medicon	5