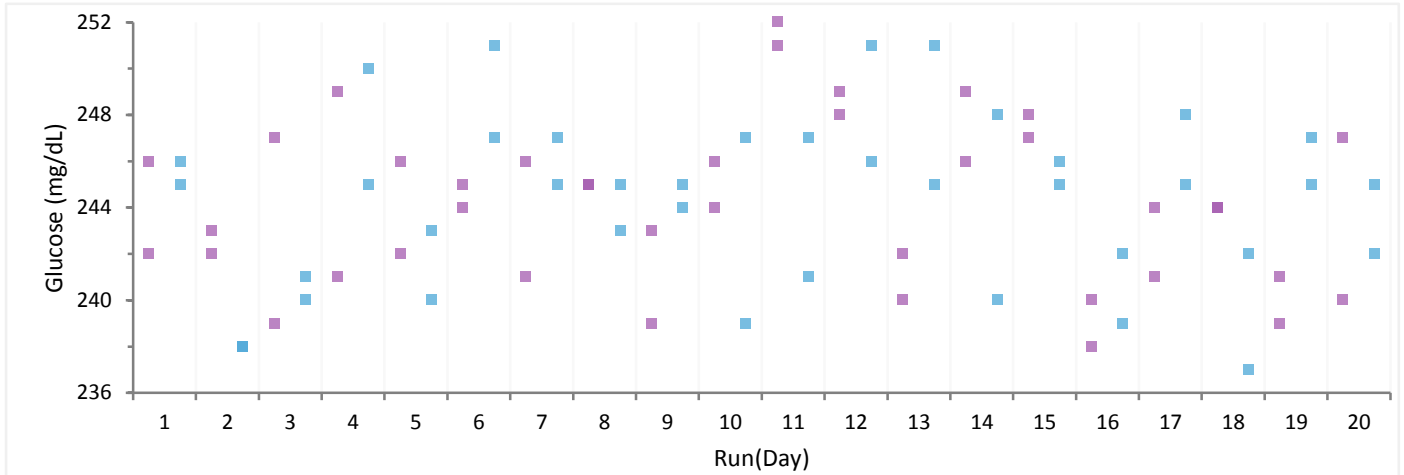


Descriptives



N | 80  
Design | 20 x 2 x 2

Precision

	Mean	SD	95% CI	CV
	244.2	3.6	3.1 to 4.5	1.5%

Abbreviated components

Mean	Repeatability SD	Repeatability CV	Within Laboratory SD	Within Laboratory CV
244.2	2.8	1.2%	3.6	1.5%

Detailed components

Component	% of Total	SD	Exact / MLS 95% CI	CV
Repeatability	61.1%	2.8	2.3 to 3.6	1.2%
Between Run	23.8%	1.8	0.0 to 3.3	0.7%
Within Day	84.9%	3.3	3.0 to 3.9	1.4%
Between Day	15.1%	1.4	0.0 to 2.9	0.6%
Within Laboratory	100.0%	3.6	3.1 to 4.5	1.5%

ANOVA

Effect	SS	DF	MS	Expected MS
Day	415.8	19	21.9	$\sigma^2_{\text{Error}} + 2\sigma^2_{\text{Run(Day)}} + 4\sigma^2_{\text{Day}}$
Run(Day)	281.0	20	14.1	$\sigma^2_{\text{Error}} + 2\sigma^2_{\text{Run(Day)}}$
Error	316.0	40	7.9	$\sigma^2_{\text{Error}}$

## Descriptives

N	450
Design	6 x 3 x 5 x 5
Measuring interval	12.08 to 414.29

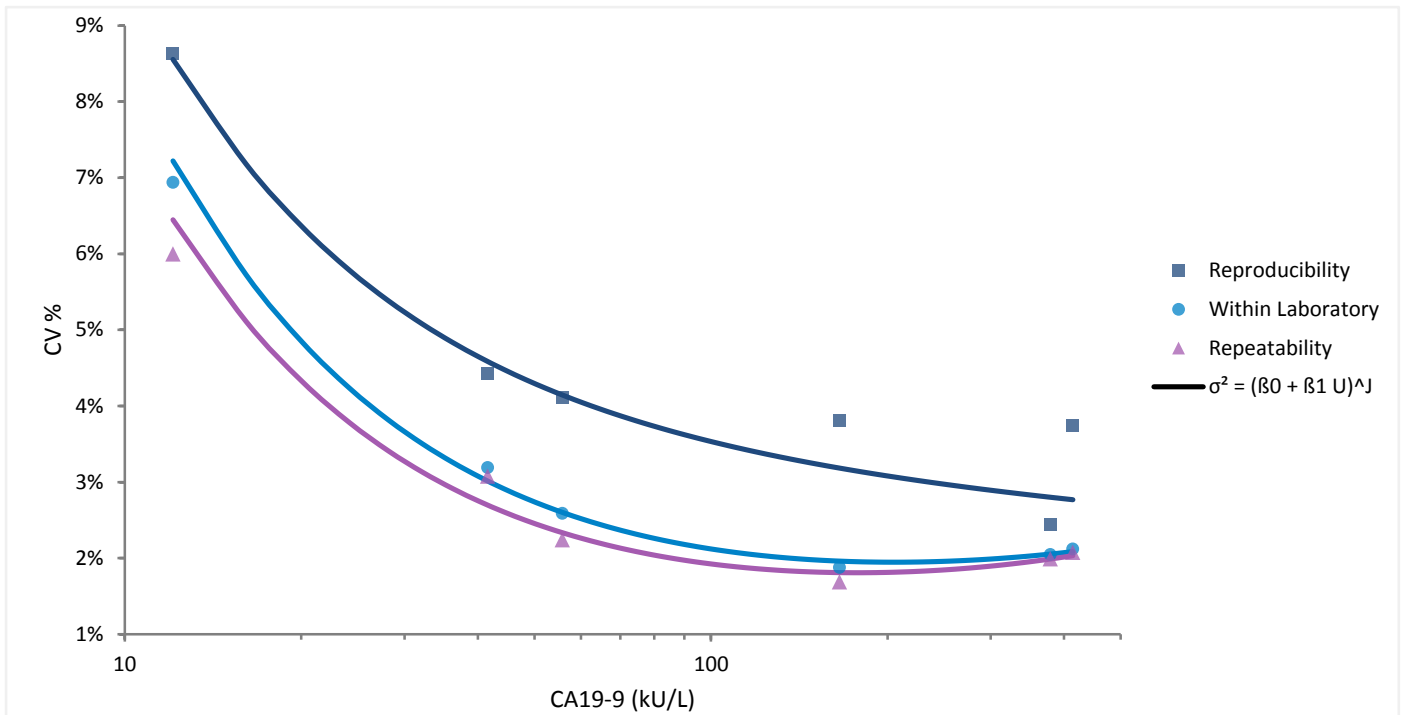
## Precision

Sample	Mean	SD	95% CI	CV
P1	12.08	1.04	0.74 to 1.77	8.6%
P2	41.58	1.84	1.24 to 3.52	4.4%
Q3	55.75	2.29	1.43 to 5.62	4.1%
Q4	165.66	6.30	3.57 to 23.51	3.8%
P5	379.09	9.22	6.92 to 13.83	2.4%
Q6	414.29	15.53	9.30 to 44.62	3.7%

## Abbreviated components

Mean	Repeatability		Within Laboratory		Reproducibility	
	SD	CV	SD	CV	SD	CV
12.08	0.72	6.0%	0.84	6.9%	1.04	8.6%
41.58	1.28	3.1%	1.33	3.2%	1.84	4.4%
55.75	1.25	2.2%	1.44	2.6%	2.29	4.1%
165.66	2.80	1.7%	3.11	1.9%	6.30	3.8%
379.09	7.55	2.0%	7.76	2.0%	9.22	2.4%
414.29	8.60	2.1%	8.77	2.1%	15.53	3.7%

Profile



Model | 3-parameter power variance function  
 Equation |  $\sigma^2 = (\beta_0 + \beta_1 U)^J$

Parameter	Repeatability	Within Laboratory	Reproducibility
$\beta_0$	0.7608	0.8039	0.6291
$\beta_1$	0.007583	0.008776	0.03376
J	3.130	2.893	1.819
-LogLikelihood	3.6664	0.91577	1.7629

## Sample P1

## Detailed components

Component	% of Total	SD	Exact / Satterthwaite		CV
			95% CI		
Repeatability	48.3%	0.72	0.61 to 0.88		6.0%
Between Run	16.4%	0.42			3.5%
Within Laboratory	64.6%	0.84	0.71 to 1.02		6.9%
Between Laboratory	35.4%	0.62			5.1%
Reproducibility	100.0%	1.04	0.74 to 1.77		8.6%

## ANOVA

Effect	SS	DF	MS	Expected MS
Laboratory	22.04	2	11.02	$\sigma^2_{\text{Error}} + 5\sigma^2_{\text{Run(Laboratory)}} + 25\sigma^2_{\text{Laboratory}}$
Run(Laboratory)	16.96	12	1.41	$\sigma^2_{\text{Error}} + 5\sigma^2_{\text{Run(Laboratory)}}$
Error	31.49	60	0.52	$\sigma^2_{\text{Error}}$

## Sample P2

## Detailed components

Component	% of Total	SD	Exact / Satterthwaite		CV
			95% CI		
Repeatability	48.4%	1.28	1.09 to 1.56		3.1%
Between Run	3.6%	0.35			0.8%
Within Laboratory	52.1%	1.33	1.14 to 1.59		3.2%
Between Laboratory	47.9%	1.27			3.1%
Reproducibility	100.0%	1.84	1.24 to 3.52		4.4%

## ANOVA

Effect	SS	DF	MS	Expected MS
Laboratory	85.45	2	42.72	$\sigma^2_{\text{Error}} + 5\sigma^2_{\text{Run(Laboratory)}} + 25\sigma^2_{\text{Laboratory}}$
Run(Laboratory)	27.01	12	2.25	$\sigma^2_{\text{Error}} + 5\sigma^2_{\text{Run(Laboratory)}}$
Error	98.09	60	1.63	$\sigma^2_{\text{Error}}$

## Sample Q3

## Detailed components

Component	% of Total	SD	Exact / Satterthwaite		CV
			95% CI		
Repeatability	29.7%	1.25	1.06 to 1.52		2.2%
Between Run	10.0%	0.72			1.3%
Within Laboratory	39.6%	1.44	1.22 to 1.76		2.6%
Between Laboratory	60.4%	1.78			3.2%
Reproducibility	100.0%	2.29	1.43 to 5.62		4.1%

## ANOVA

Effect	SS	DF	MS	Expected MS
Laboratory	167.06	2	83.53	$\sigma^2_{\text{Error}} + 5\sigma^2_{\text{Run(Laboratory)}} + 25\sigma^2_{\text{Laboratory}}$
Run(Laboratory)	50.11	12	4.18	$\sigma^2_{\text{Error}} + 5\sigma^2_{\text{Run(Laboratory)}}$
Error	93.60	60	1.56	$\sigma^2_{\text{Error}}$

## Sample Q4

## Detailed components

Component	% of Total	SD	Exact / Satterthwaite		CV
			95% CI		
Repeatability	19.7%	2.80	2.37 to 3.40		1.7%
Between Run	4.7%	1.37			0.8%
Within Laboratory	24.3%	3.11	2.65 to 3.77		1.9%
Between Laboratory	75.7%	5.48			3.3%
Reproducibility	100.0%	6.30	3.57 to 23.51		3.8%

## ANOVA

Effect	SS	DF	MS	Expected MS
Laboratory	1537.97	2	768.98	$\sigma^2_{\text{Error}} + 5\sigma^2_{\text{Run(Laboratory)}} + 25\sigma^2_{\text{Laboratory}}$
Run(Laboratory)	205.73	12	17.14	$\sigma^2_{\text{Error}} + 5\sigma^2_{\text{Run(Laboratory)}}$
Error	468.77	60	7.81	$\sigma^2_{\text{Error}}$

## Sample P5

## Detailed components

Component	% of Total	SD	Exact / Satterthwaite		CV
			95% CI		
Repeatability	67.0%	7.55	6.41 to 9.19		2.0%
Between Run	3.7%	1.78			0.5%
Within Laboratory	70.7%	7.76	6.66 to 9.28		2.0%
Between Laboratory	29.3%	4.99			1.3%
Reproducibility	100.0%	9.22	6.92 to 13.83		2.4%

## ANOVA

Effect	SS	DF	MS	Expected MS
Laboratory	1391.14	2	695.57	$\sigma^2_{\text{Error}} + 5\sigma^2_{\text{Run(Laboratory)}} + 25\sigma^2_{\text{Laboratory}}$
Run(Laboratory)	874.77	12	72.90	$\sigma^2_{\text{Error}} + 5\sigma^2_{\text{Run(Laboratory)}}$
Error	3418.02	60	56.97	$\sigma^2_{\text{Error}}$

## Sample Q6

## Detailed components

Component	% of Total	SD	Exact / Satterthwaite		CV
			95% CI		
Repeatability	30.7%	8.60	7.30 to 10.47		2.1%
Between Run	1.3%	1.74			0.4%
Within Laboratory	31.9%	8.77	7.55 to 10.48		2.1%
Between Laboratory	68.1%	12.81			3.1%
Reproducibility	100.0%	15.53	9.30 to 44.62		3.7%

## ANOVA

Effect	SS	DF	MS	Expected MS
Laboratory	8383.61	2	4191.81	$\sigma^2_{\text{Error}} + 5\sigma^2_{\text{Run(Laboratory)}} + 25\sigma^2_{\text{Laboratory}}$
Run(Laboratory)	1068.76	12	89.06	$\sigma^2_{\text{Error}} + 5\sigma^2_{\text{Run(Laboratory)}}$
Error	4437.54	60	73.96	$\sigma^2_{\text{Error}}$