

INPUTs 2013.1

Survey	INPUTs 2013.1
Start date	January, 1 2013
Supervisor	dr. C. Weykamp MCA Laboratory Streekziekenhuis Koningin Beatrix Winterswijk
Subscriptions	93
Result sets	91

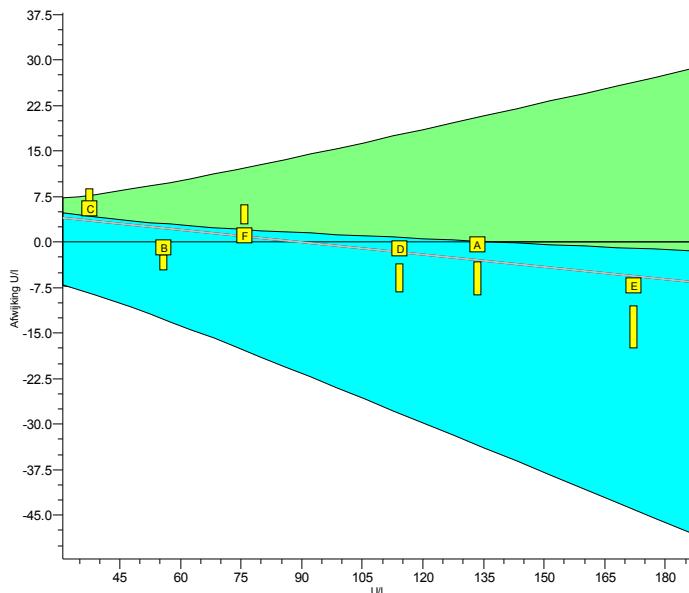
Scores	Your score	MAP	reported
Quantitative	36	38	

INPUTs 2013.1

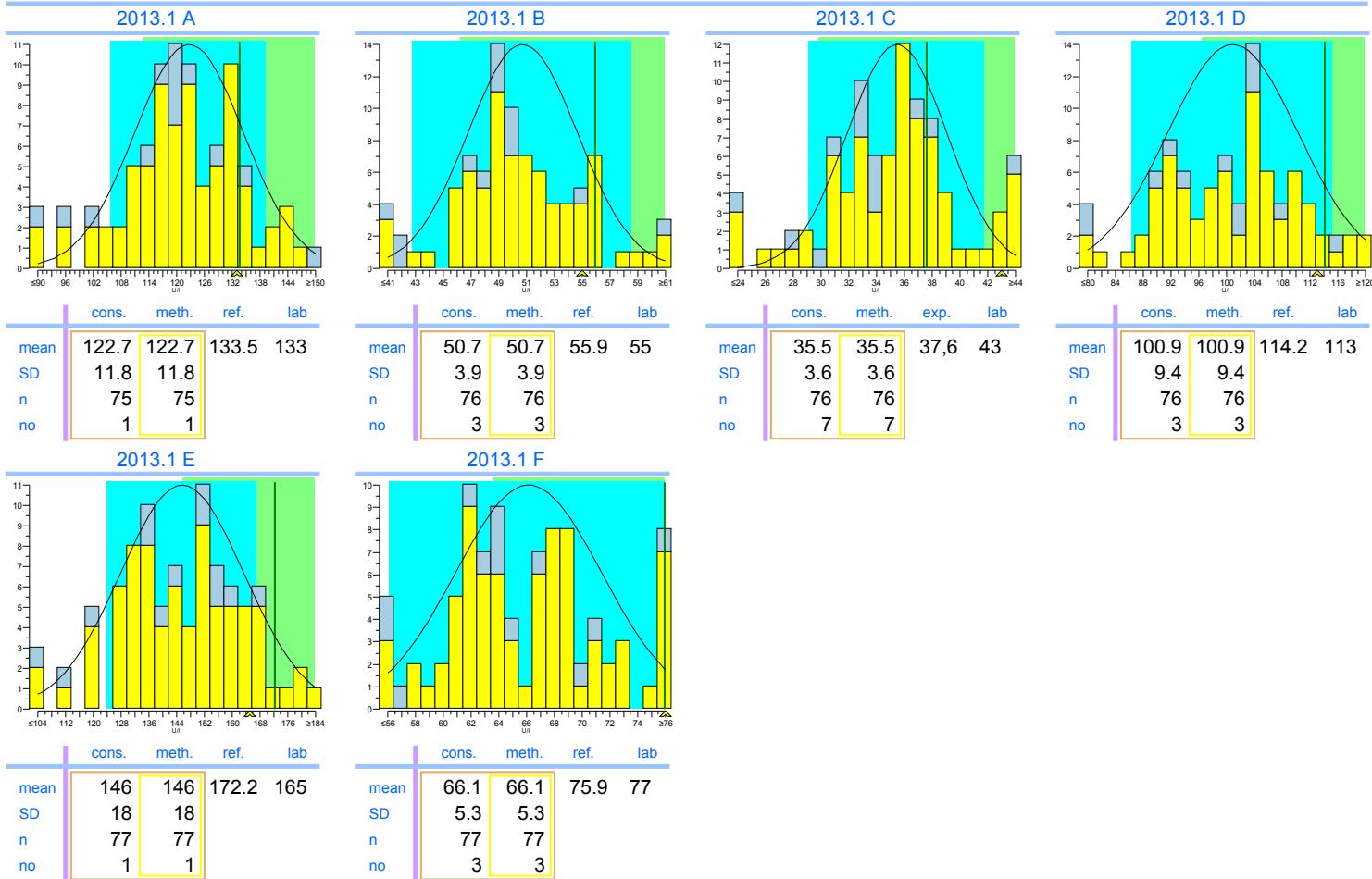
Analyte		Trueness				Precision		Performance			
		your mean	ref.	cons.	SDtl	your prec.	SDbl	this survey	PS	cumulative	PSc
ALAT	U/l	97.7	98.2	86.9	10.1	3.0	2.7		2		12
Alk. Phosphatase	U/l	167	188	173	15	2	2		2		12
Amylase	U/l	204	207	201	8	2	2		2		12
ASAT	U/l	78.2	78.6	71.5	6.8	2.1	1.6		2		12
Calcium	mmol/l	2.46	2.46	2.47	0.07	0.02	0.02		2		12
Chloride	mmol/l	99.6	100.0	100.7	1.8	1.3	0.9		2		12
CK	U/l	243	244	253	18	5	3		2		12
Creatinine	µmol/l	155.2	149.1	150.7	5.6	2.0	2.1		1		11
eGFR (F, 55, white)	ml/min/1,73m ²	36.3	37.6	37.4	2.6	1.1	0.6		2		12
Gamma-GT	U/l	84.2	87.7	86.3	8.6	1.1	1.2		2		12
Glucose	mmol/l	14.10	13.93	14.19	0.44	0.33	0.18		1		11
LD	U/l	510	532	523	33	6	9		2		12
Magnesium	mmol/l	1.24	1.22	1.23	0.04	0.01	0.02		2		12
Potassium	mmol/l	5.30	5.39	5.23	0.10	0.05	0.05		2		12
Sodium	mmol/l	142.2	144.0	141.3	1.7	0.7	0.8		2		12
Total Protein	g/l	65.0	66.8	66.0	1.8	0.9	0.7		2		12
Urate	mmol/l	0.368	0.376	0.374	0.015	0.002	0.004		2		12
Cholesterol	mmol/l	5.07	5.07	5.15	0.14	0.09	0.05		2		12
HDL-Cholesterol	mmol/l	1.24	1.14	1.17	0.06	0.02	0.03		2		12
		Total :				36		36			

INPUTS 2013.1**ALAT**

units: U/l



	2013.1	cumulative
Trueness	-0.56%	-0.56%
Precision	3.5%	3.5%
Number	6	6
Outliers	0	0
Sigma-TE	6.0 [2]	6.0 [2]
Sigma-SA	6.0	6.0
Score pictogram		
Regression line	$6.2 + 0.932 \cdot x$	$6.2 + 0.932 \cdot x$

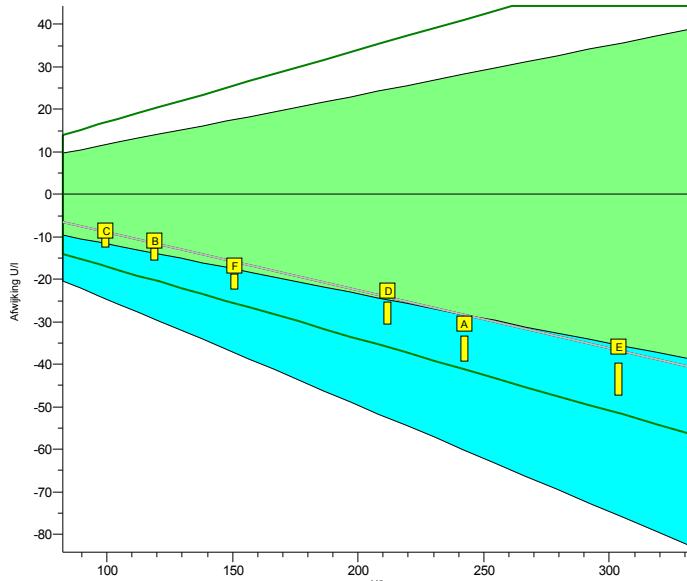
 Consensus group IFCC traceerbaar
 Method IFCC traceable
**Legend**

IFCC traceable IFCC non-traceable

INPUTs 2013.1

Alk. Phosphatase

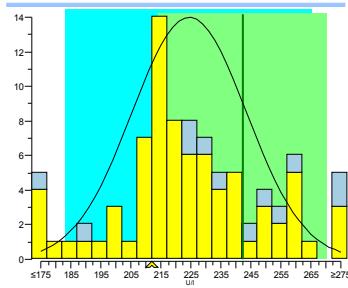
units: U/l



	2013.1	cumulative
Trueness	-11%	-11%
Precision	1.1%	1.1%
Number	6	6
Outliers	0	0
Sigma-TE	1.6	1.6
Sigma-SA	6.0 [2]	6.0 [2]
Score pictogram	[Score pictogram]	[Score pictogram]
Regression line	$5 + 0.864 \cdot x$	$5 + 0.864 \cdot x$

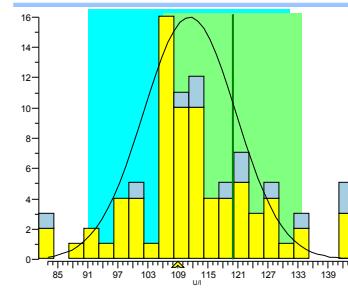
Consensus group IFCC traceerbaar
 Method IFCC traceable

2013.1 A



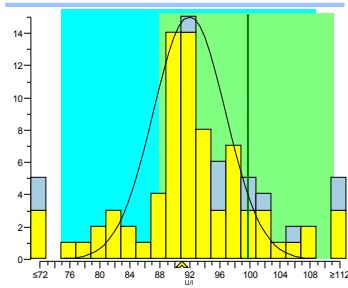
	cons.	meth.	ref.	lab
mean	224	224	242.5	212
SD	19	19		
n	77	77		
no	5	5		

2013.1 B



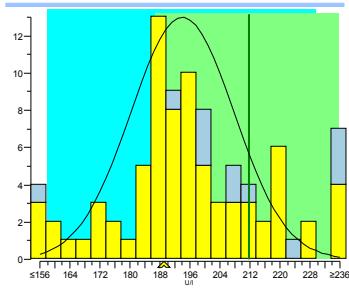
	cons.	meth.	ref.	lab
mean	110	110	119.1	108
SD	9	9		
n	77	77		
no	5	5		

2013.1 C



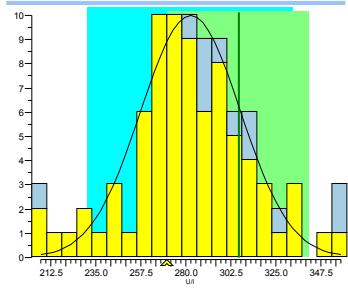
	cons.	meth.	ref.	lab
mean	92	92	99.7	91
SD	5	5		
n	76	76		
no	10	10		

2013.1 D



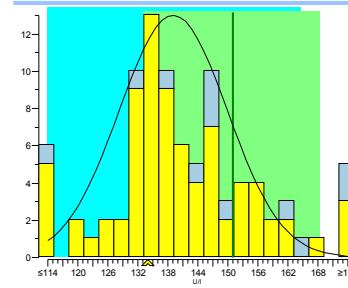
	cons.	meth.	ref.	lab
mean	194	194	211.7	189
SD	14	14		
n	77	77		
no	6	6		

2013.1 E



	cons.	meth.	ref.	lab
mean	280	280	304.0	268
SD	25	25		
n	78	78		
no	3	3		

2013.1 F



	cons.	meth.	ref.	lab
mean	139	139	150.9	134
SD	11	11		
n	78	78		
no	5	5		

Legend

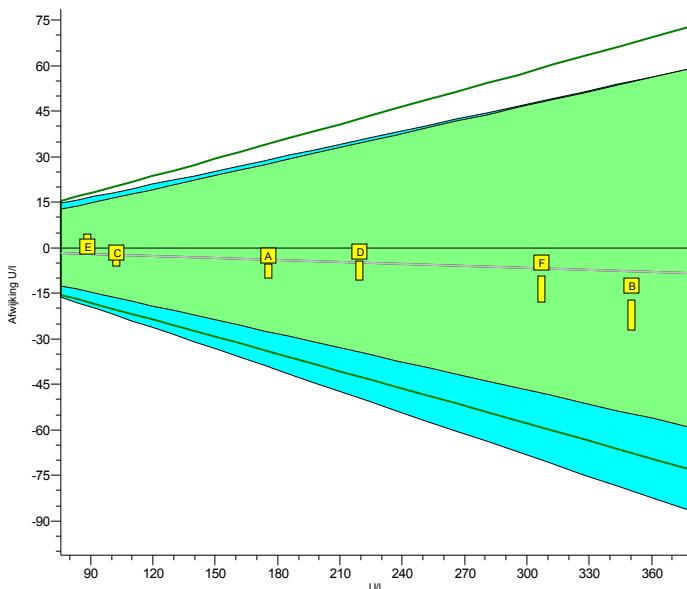
■ IFCC traceable

■ IFCC non-traceable

INPUTs 2013.1

Amylase

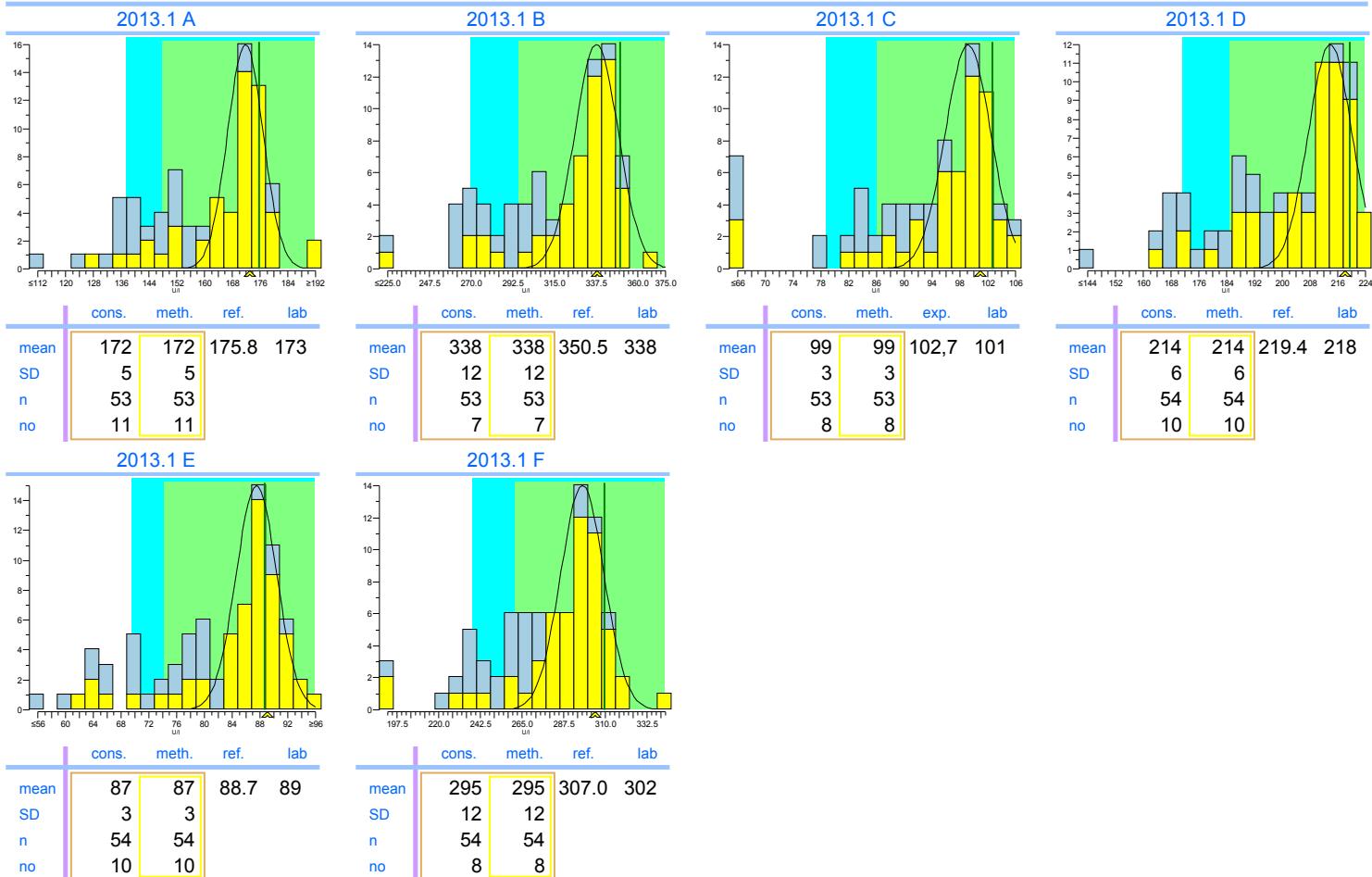
units: U/l



	2013.1	cumulative
Trueness	-1.9%	-1.9%
Precision	1.2%	1.2%
Number	6	6
Outliers	0	0
Sigma-TE	6.0	6.0
Sigma-SA	6.0 [2]	6.0 [2]
Score pictogram	[Green]	[Green]
Regression line	$0 + 0.978 \cdot x$	$0 + 0.978 \cdot x$

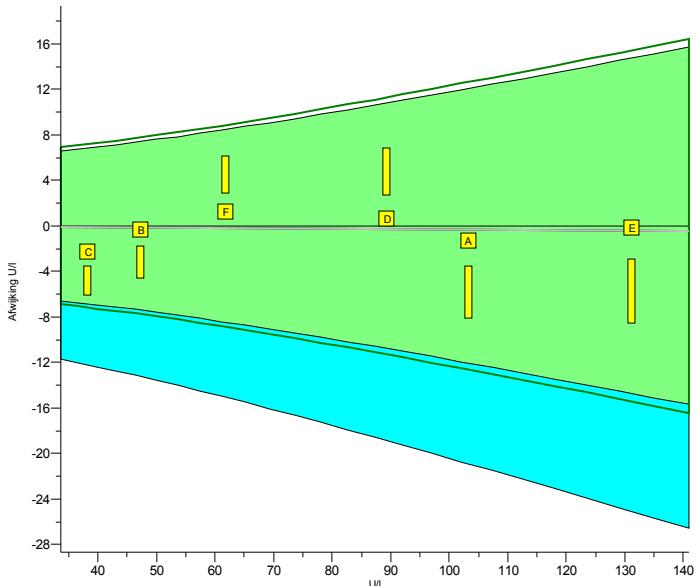
Consensus group
Method

IFCC traceerbaar
IFCC traceable



INPUTs 2013.1**ASAT**

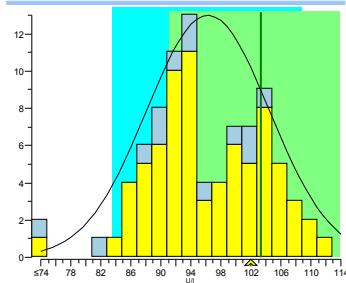
units: U/l



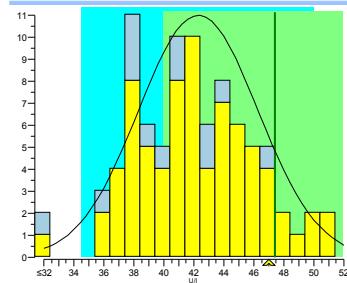
	2013.1	cumulative
Trueness	-0.51%	-0.51%
Precision	3.0%	3.0%
Number	6	6
Outliers	0	0
Sigma-TE	6.0	6.0
Sigma-SA	6.0	6.0
Score pictogram	[2]	[2]
Regression line	$0.0 + 0.997 \cdot x$	$0.0 + 0.997 \cdot x$

 Consensus group: IFCC traceerbaar
 Method: IFCC traceable

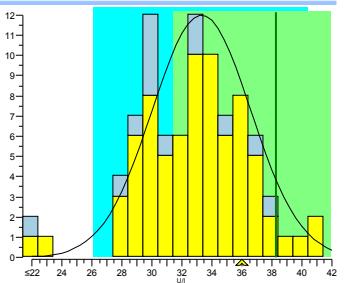
2013.1 A



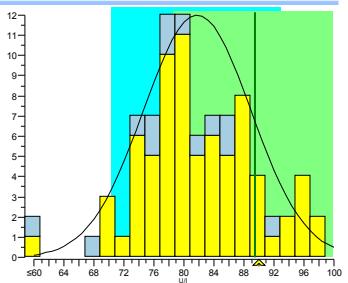
2013.1 B



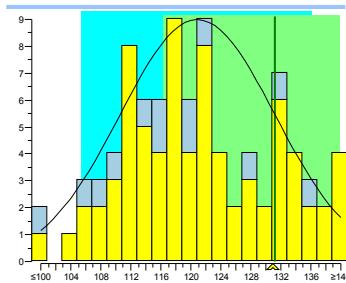
2013.1 C



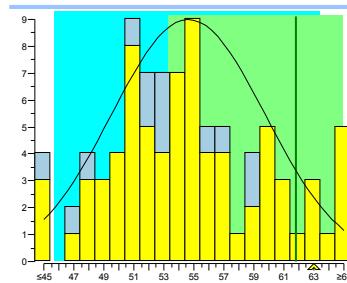
2013.1 D



2013.1 E



2013.1 F



Legend

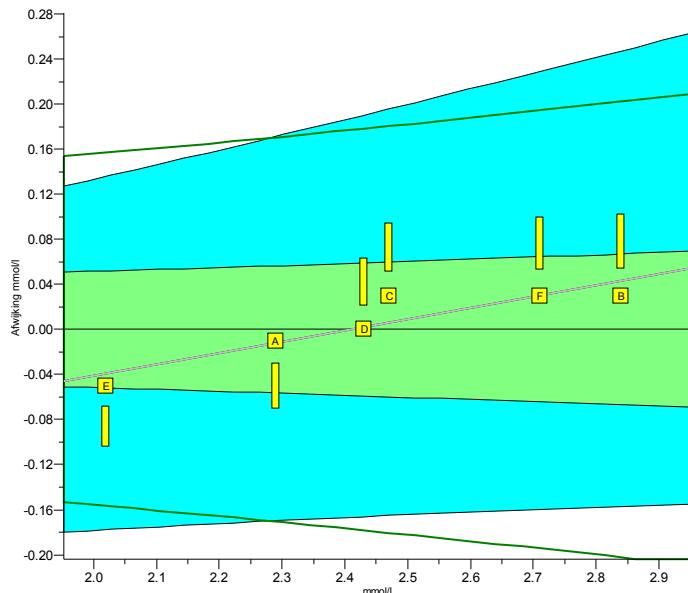
■ IFCC traceable

■ IFCC non-traceable

INPUTs 2013.1

Calcium

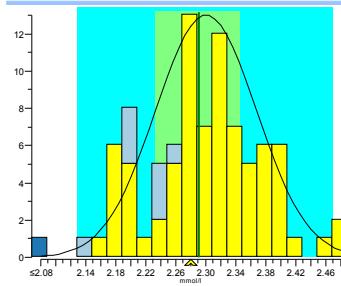
units: mmol/l



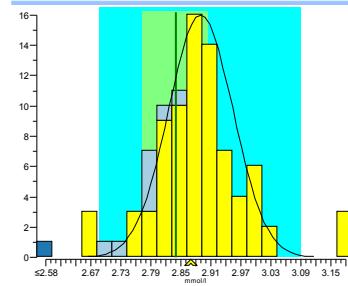
	2013.1	cumulative
Trueness	+0.20%	+0.20%
Precision	0.70%	0.70%
Number	6	6
Outliers	0	0
Sigma-TE	2.8	2.8
Sigma-SA	6.0 [2]	6.0 [2]
Score pictogram	[Green]	[Green]
Regression line	$-0.24 + 1.100 \cdot x$	$-0.24 + 1.100 \cdot x$

Consensus group: Colorimetrisch
 Method: Colorimetric, automatic, discrete

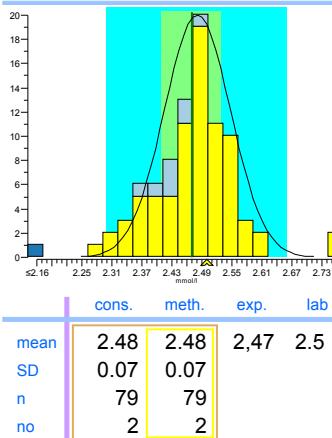
2013.1 A



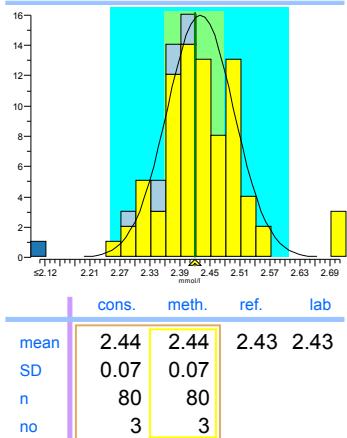
2013.1 B



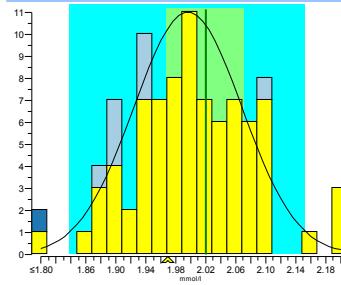
2013.1 C



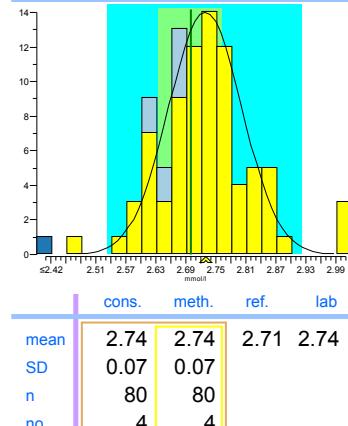
2013.1 D



2013.1 E



2013.1 F



Legend

[Yellow] Colorimetric, automatic, discrete

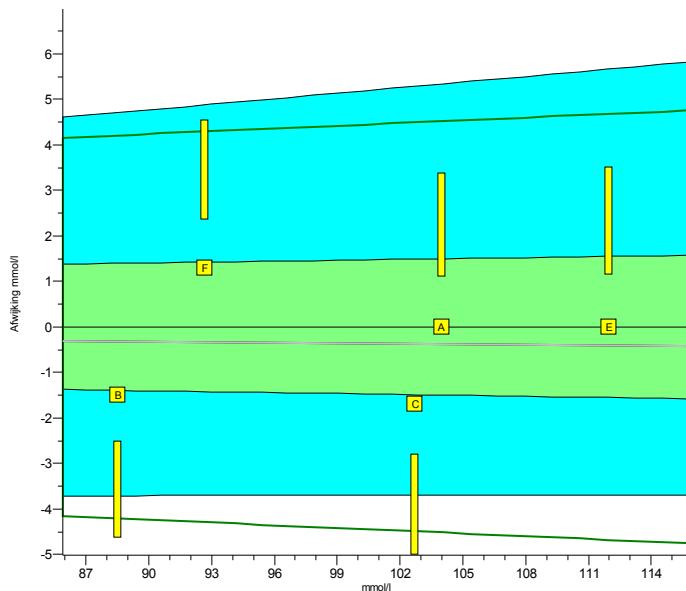
[Grey] ISE indirect (with predilution)

[Blue] Other methods

INPUTs 2013.1

Chloride

units: mmol/l



	2013.1	cumulative
Trueness	-0.38%	-0.38%
Precision	1.3%	1.3%
Number	5	5
Outliers	0	0
Sigma-TE	1.4	1.4
Sigma-SA	4.7 [2]	4.7 [2]
Score pictogram		
Regression line	$0.0 + 0.996 \cdot x$	$0.0 + 0.996 \cdot x$

Consensus group
Method

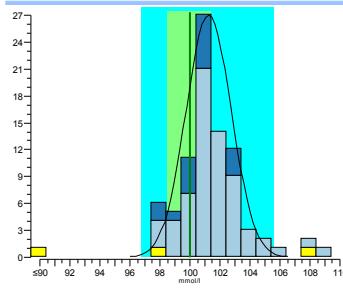
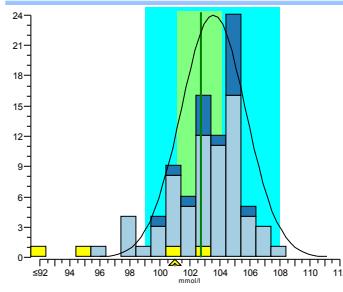
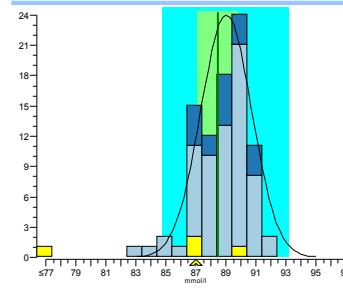
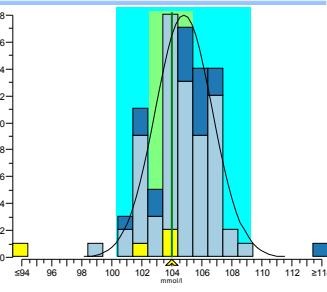
ISE/Colorimetrie
Other methods

2013.1 A

2013.1 B

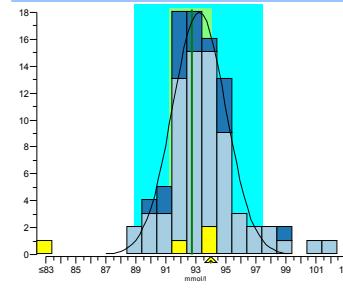
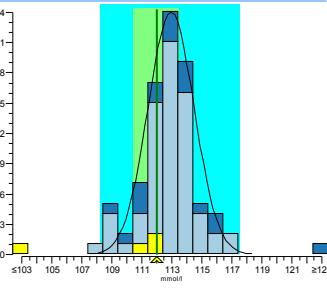
2013.1 C

2013.1 D



2013.1 E

2013.1 F



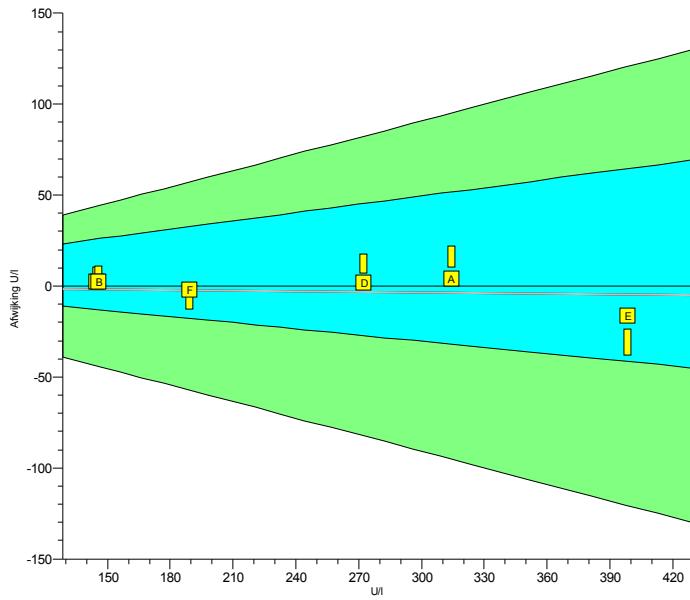
Legend

- [Yellow] Other methods
- [Light Blue] ISE indirect (with predilution)
- [Dark Blue] ISE direct (no predilution)

INPUTS 2013.1

CK

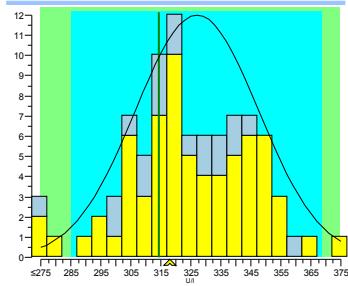
units: U/l



	2013.1	cumulative
Trueness	-0.61%	-0.61%
Precision	2.1%	2.1%
Number	6	6
Outliers	0	0
Sigma-TE	6.0 [2]	6.0 [2]
Sigma-SA	6.0	6.0
Score pictogram	[Green box with yellow dot]	[Green box with yellow dot]
Regression line	$0 + 0.988 \cdot x$	$0 + 0.988 \cdot x$

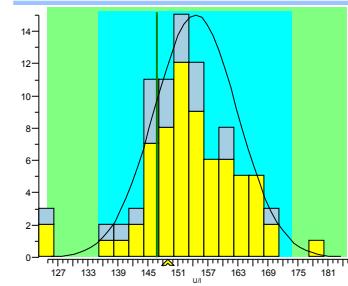
Consensus group IFCC traceerbaar
 Method IFCC traceable

2013.1 A



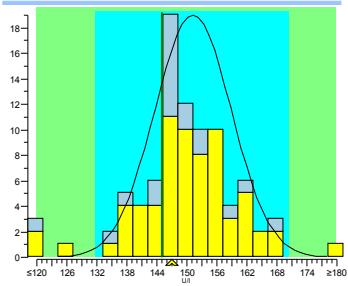
	cons.	meth.	ref.	lab
mean	327	327	314.3	318
SD	21	21		
n	68	68		
no	2	2		

2013.1 B



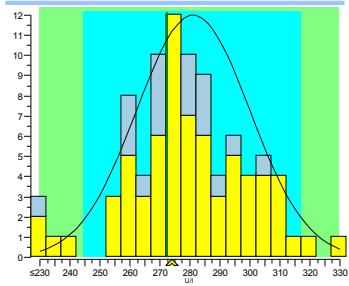
	cons.	meth.	ref.	lab
mean	154	154	145.8	148
SD	8	8		
n	67	67		
no	3	3		

2013.1 C



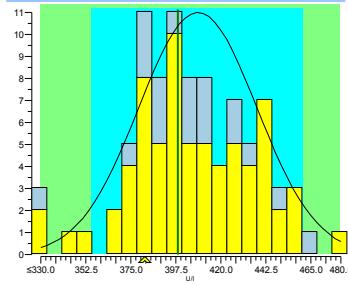
	cons.	meth.	exp.	lab
mean	151	151	145	147
SD	8	8		
n	68	68		
no	4	4		

2013.1 D



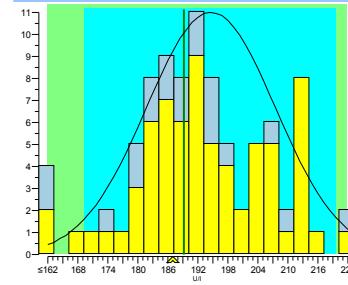
	cons.	meth.	ref.	lab
mean	281	281	272.3	274
SD	19	19		
n	69	69		
no	2	2		

2013.1 E



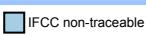
	cons.	meth.	ref.	lab
mean	409	409	398.4	382
SD	30	30		
n	69	69		
no	2	2		

2013.1 F



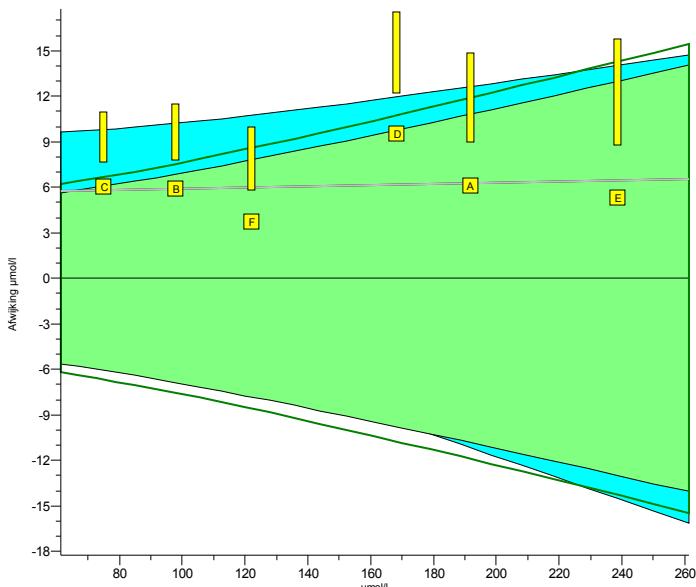
	cons.	meth.	ref.	lab
mean	195	195	189.2	187
SD	13	13		
n	69	69		
no	2	2		

Legend



INPUTs 2013.1

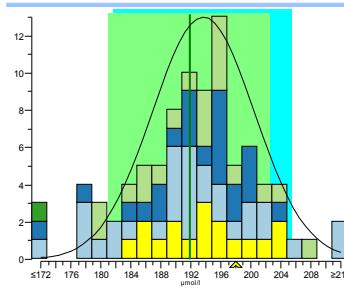
Creatinine

units: $\mu\text{mol/l}$ 

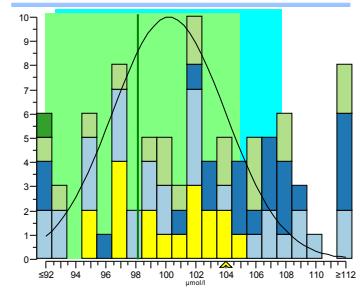
	2013.1	cumulative
Trueness	+4.1%	+4.1%
Precision	1.3%	1.3%
Number	6	6
Outliers	0	0
Sigma-TE	2.2	2.2
Sigma-SA	2.6	2.6
Score pictogram	1	1
Regression line	$5.5 + 1.004 \cdot x$	$5.5 + 1.004 \cdot x$

Consensus group: Enzymatische kreatinine
Method: Enzymatic, automatic

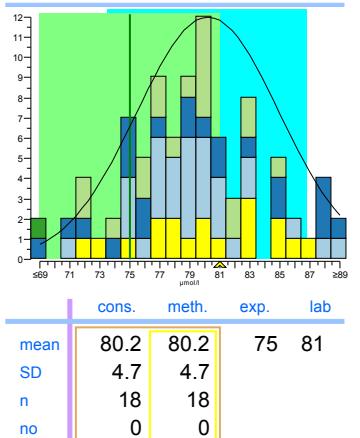
2013.1 A



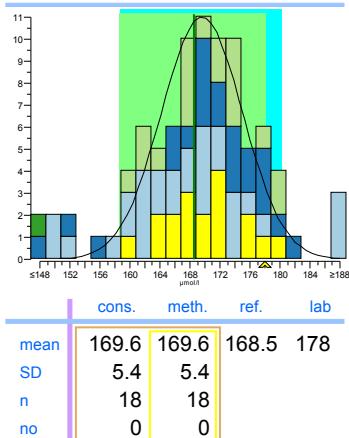
2013.1 B



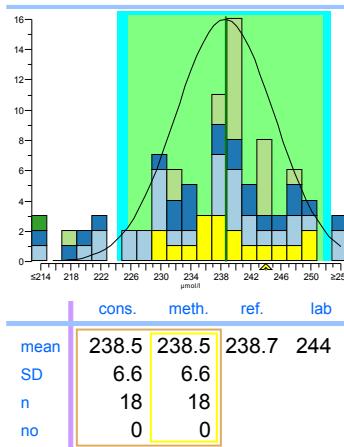
2013.1 C



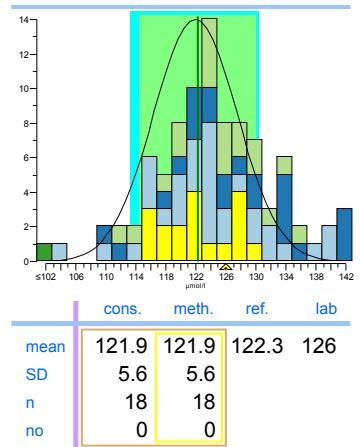
2013.1 D



2013.1 E



2013.1 F



Legend

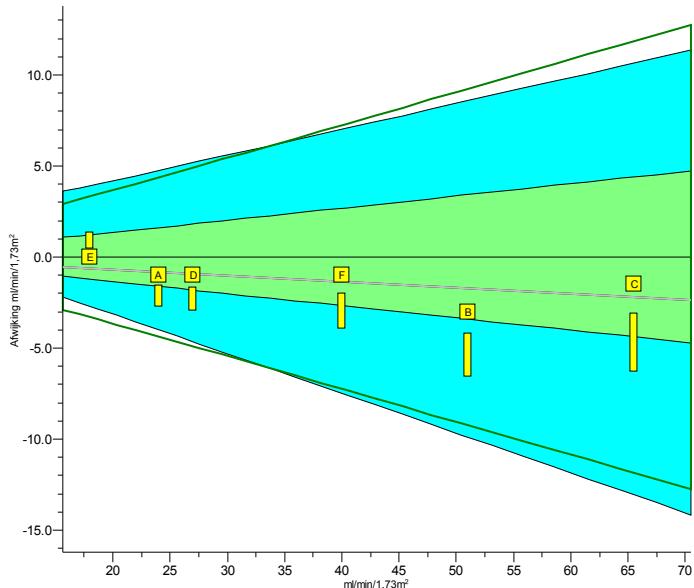
Enzymatic, automatic

Alk. Picrate, kinetic with compensation

Alk. Picrate, kinetic

Alk. Picrate, endpoint

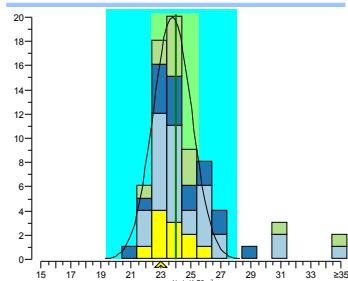
Other methods

INPUTs 2013.1**eGFR (F, 55, white)**units: ml/min/1,73m²

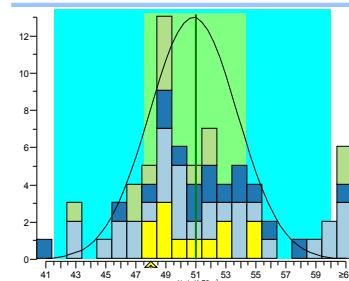
	2013.1	cumulative
Trueness	-3.3%	-3.3%
Precision	3.1%	3.1%
Number	6	6
Outliers	0	0
Sigma-TE	2.6	2.6
Sigma-SA	6.0 [2]	6.0 [2]
Score pictogram	[Yellow, Green, Blue]	[Yellow, Green, Blue]
Regression line	0.0 + 0.966.x	0.0 + 0.966.x

Consensus group: Enzymatische kreatinine
 Method: Enzymatic, automatic

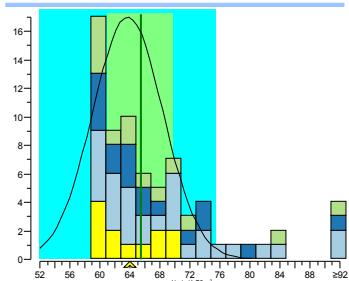
2013.1 A



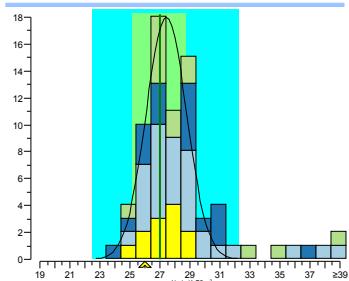
2013.1 B



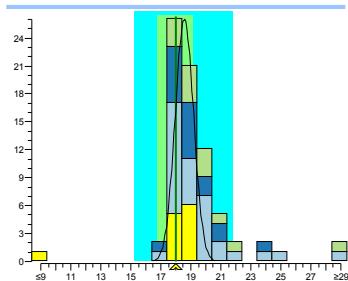
2013.1 C



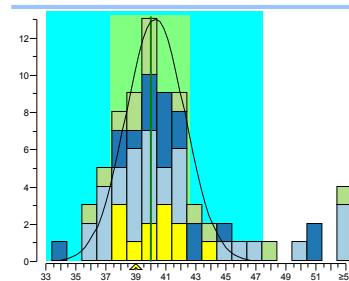
2013.1 D



2013.1 E



2013.1 F



Legend

Enzymatic, automatic

Other methods

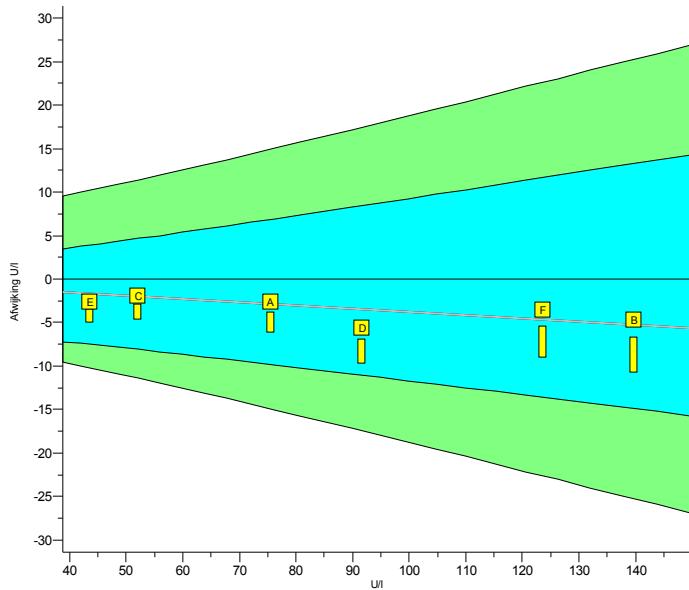
Alk. Picrate, kinetic with compensation

Alk. Picrate, kinetic

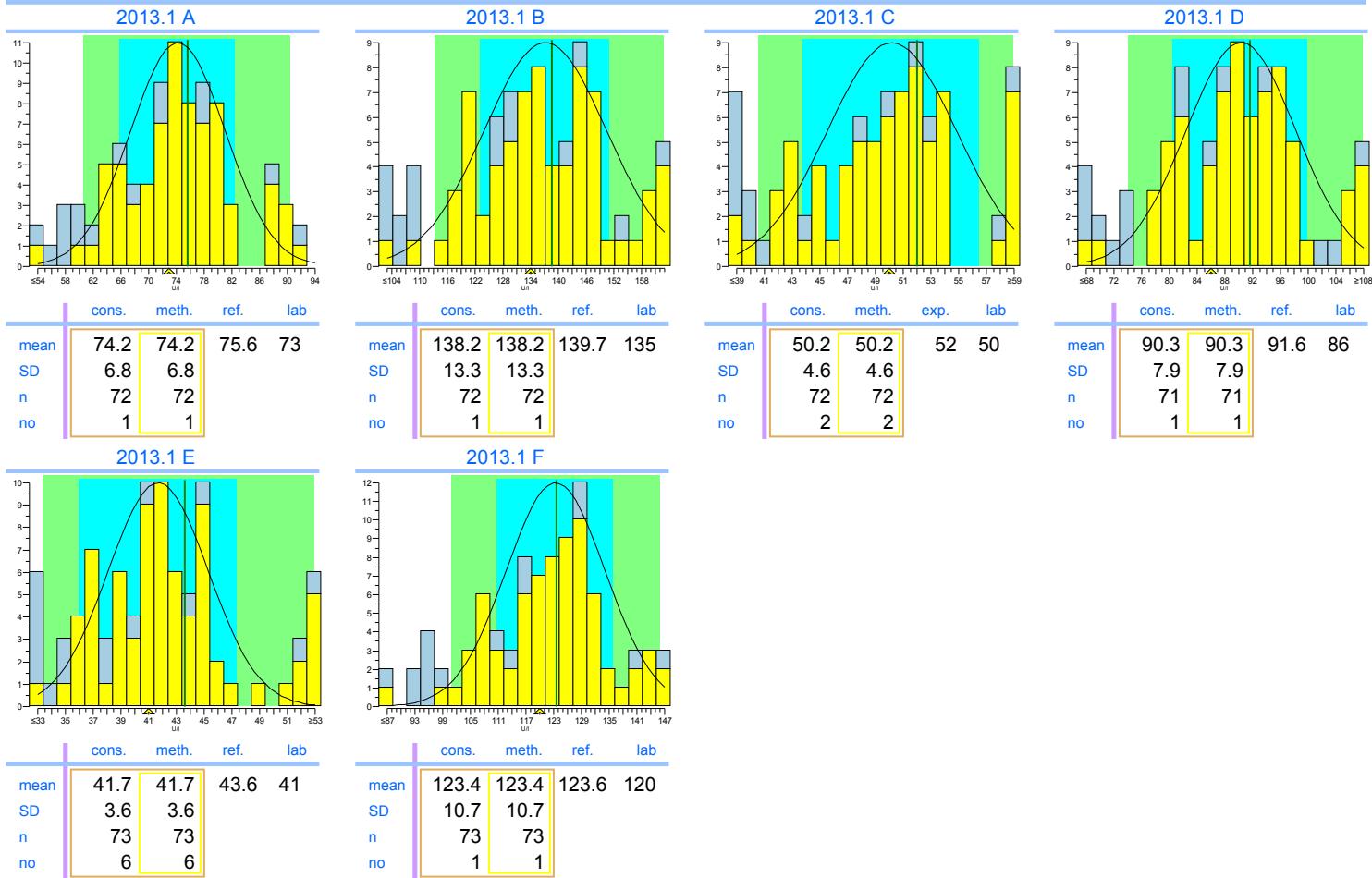
INPUTs 2013.1

Gamma-GT

units: U/l



	2013.1	cumulative
Trueness	-4.0%	-4.0%
Precision	1.3%	1.3%
Number	6	6
Outliers	0	0
Sigma-TE	6.0 [2]	6.0 [2]
Sigma-SA	5.9	5.9
Score pictogram	[Green box with yellow dot]	[Green box with yellow dot]
Regression line	$0.0 + 0.962 \cdot x$	$0.0 + 0.962 \cdot x$

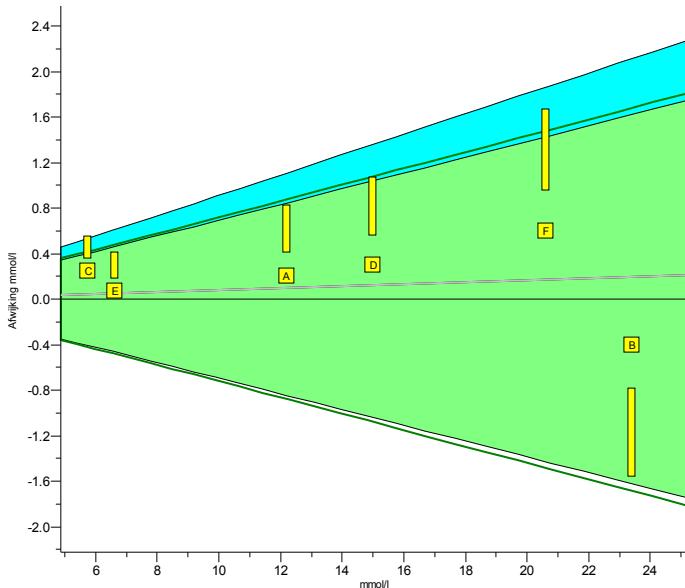
 Consensus group: IFCC traceerbaar
 Method: IFCC traceable


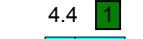
Legend

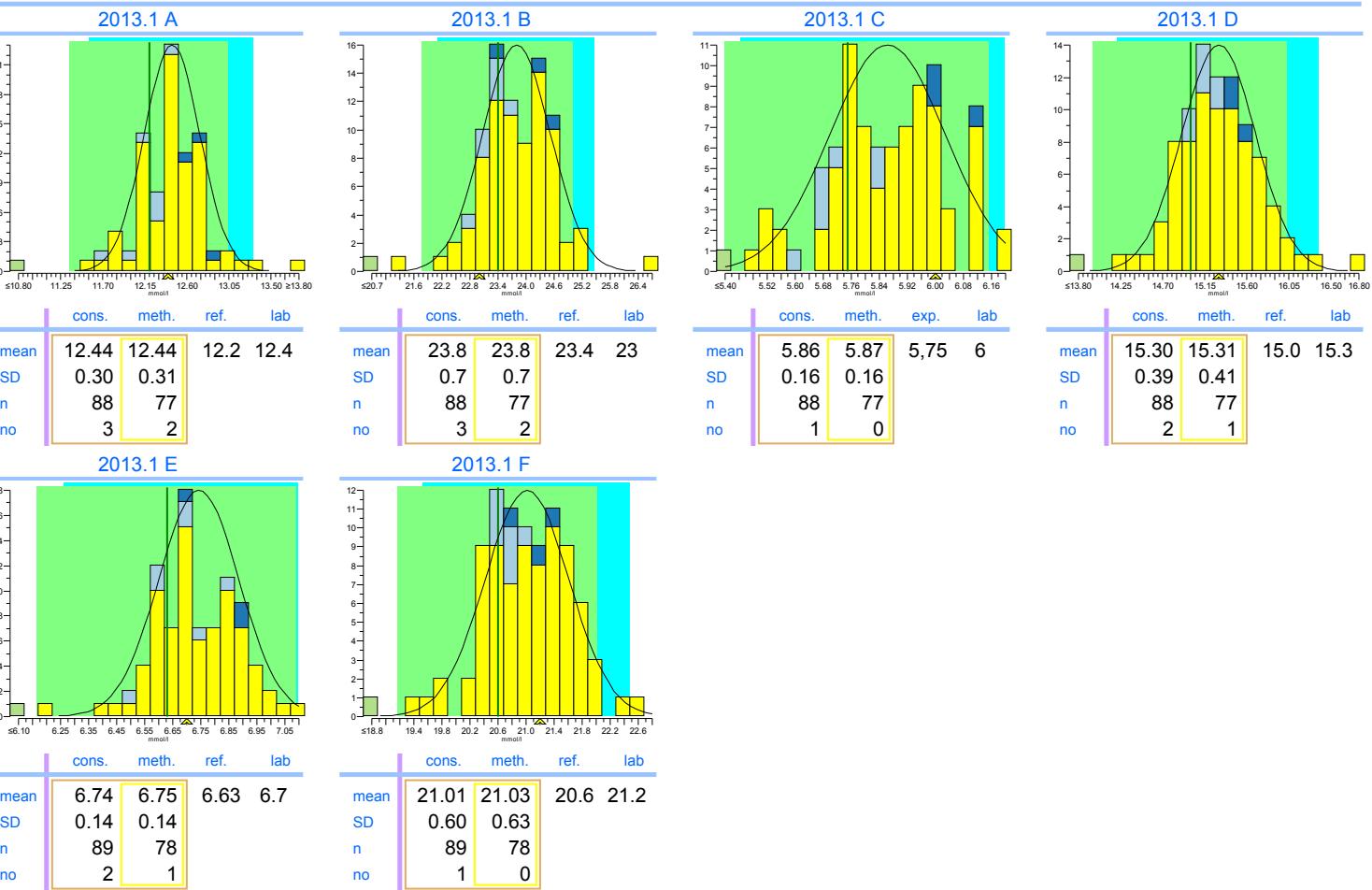
 

INPUTs 2013.1**Glucose**

units: mmol/l



	2013.1	cumulative
Trueness	+1.2%	+1.2%
Precision	2.3%	2.3%
Number	6	6
Outliers	0	0
Sigma-TE	4.2	4.2
Sigma-SA	4.4	4.4
Score pictogram		
Regression line	$0.00 + 1.008.x$	$0.00 + 1.008.x$

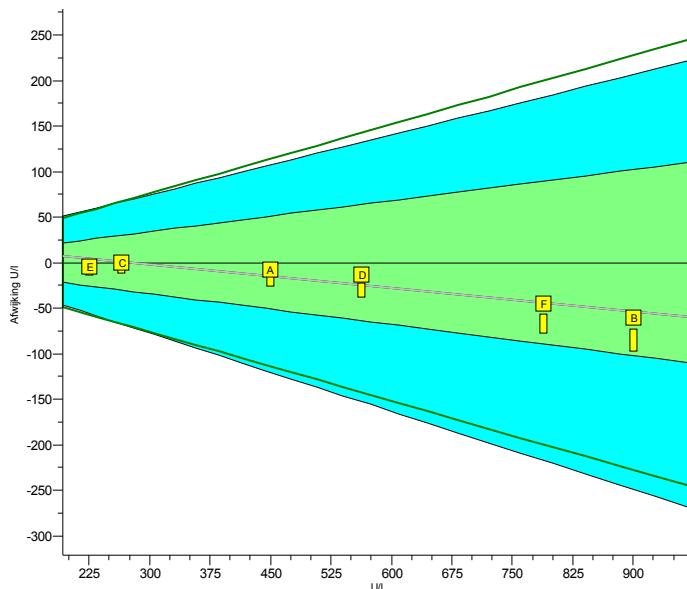
 Consensus group: Natte chemie
 Method: Hexokinase, automatic
**Legend**

- Hexokinase, automatic
- Glucose-oxydase, amperometric, H₂O₂
- Glucose-oxydase/POD,automatic
- Other methods

INPUTS 2013.1

LD

units: U/l

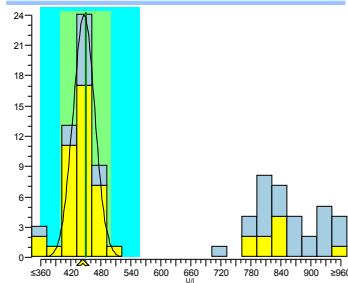


	2013.1	cumulative
Trueness	-4.2%	-4.2%
Precision	1.2%	1.2%
Number	6	6
Outliers	0	0
Sigma-TE	6.0	6.0
Sigma-SA	6.0 [2]	6.0 [2]
Score pictogram	[Yellow/Green]	[Yellow/Green]
Regression line	$23 + 0.914 \cdot x$	$23 + 0.914 \cdot x$

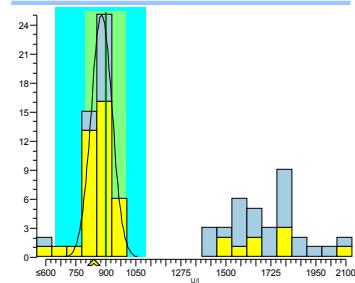
Consensus group
Method

IFCC traceerbaar
IFCC traceable

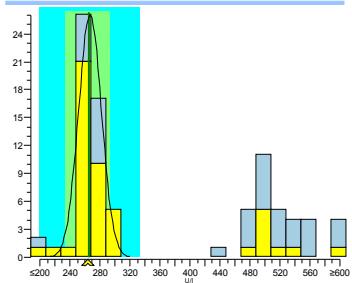
2013.1 A



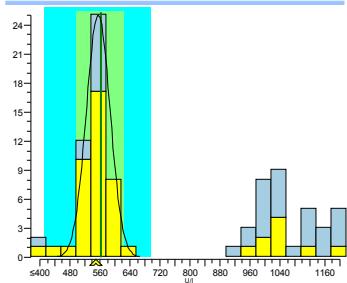
2013.1 B



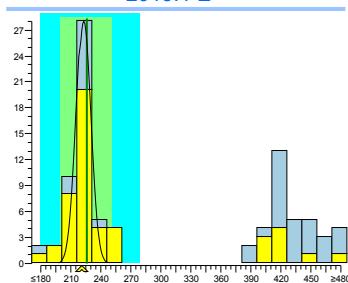
2013.1 C



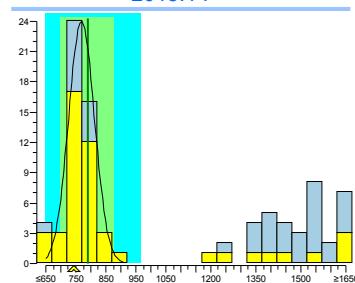
2013.1 D



2013.1 E



2013.1 F



Legend

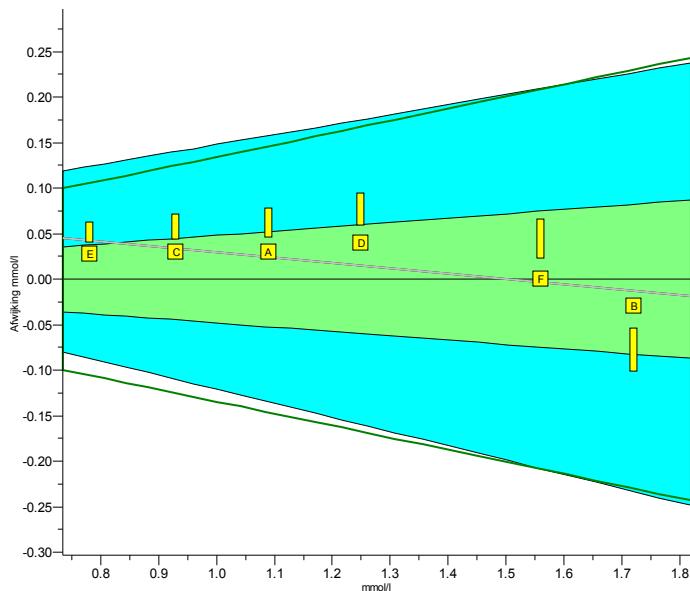
[Yellow] IFCC traceable

[Blue] IFCC non-traceable

INPUTs 2013.1

Magnesium

units: mmol/l

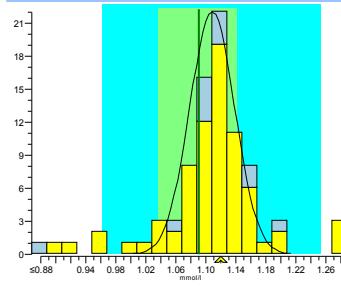


	2013.1	cumulative
Trueness	+1.3%	+1.3%
Precision	1.2%	1.2%
Number	6	6
Outliers	0	0
Sigma-TE	2.9	2.9
Sigma-SA	6.0 [2]	6.0 [2]
Score pictogram	[Score pictogram]	[Score pictogram]
Regression line	$0.09 + 0.941 \cdot x$	$0.09 + 0.941 \cdot x$

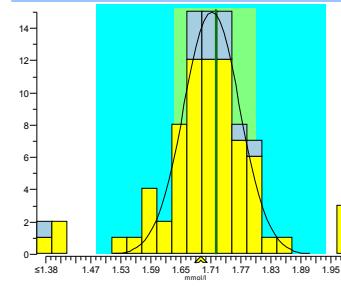
Consensus group
Method

Overall
Colorimetric

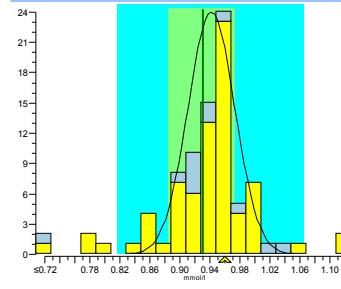
2013.1 A



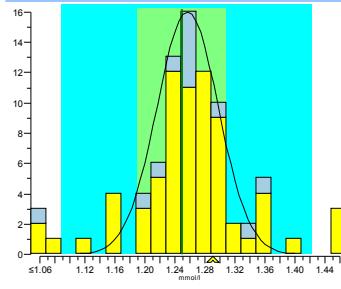
2013.1 B



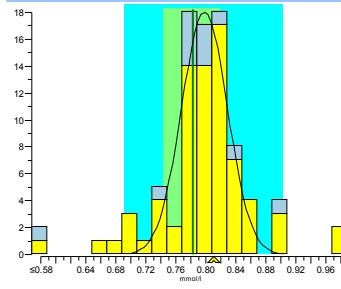
2013.1 C



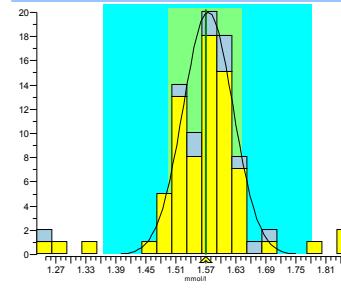
2013.1 D



2013.1 E



2013.1 F

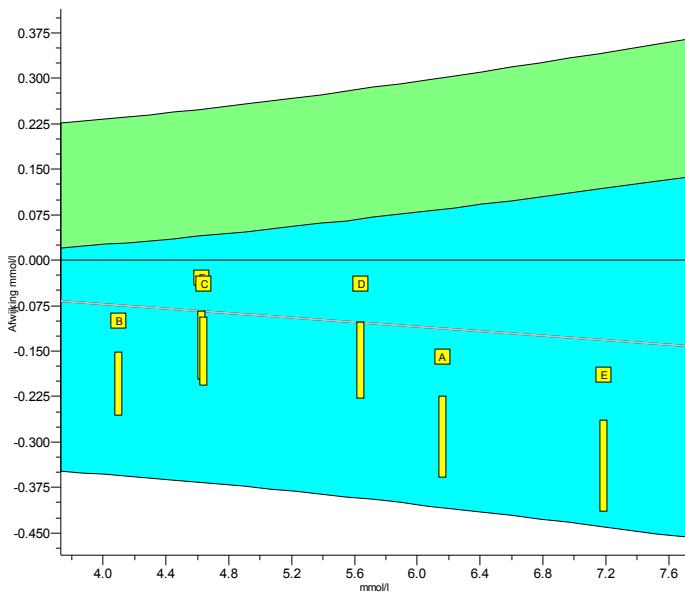


Legend

- [Yellow square] Colorimetric [Blue square] Other methods

INPUTs 2013.1**Potassium**

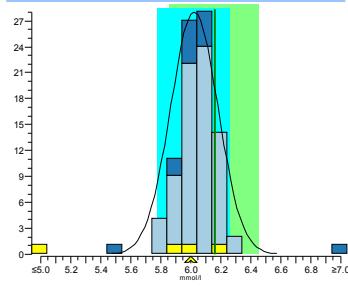
units: mmol/l



	2013.1	cumulative
Trueness	-1.7%	-1.7%
Precision	1.0%	1.0%
Number	6	6
Outliers	0	0
Sigma-TE	4.5 [2]	4.5 [2]
Sigma-SA	3.5	3.5
Score pictogram		
Regression line	$0.00 + 0.982.x$	$0.00 + 0.982.x$

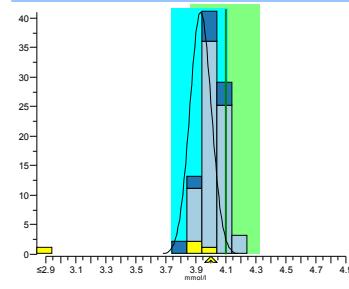
 Consensus group
 Method Other methods
 Other methods

2013.1 A



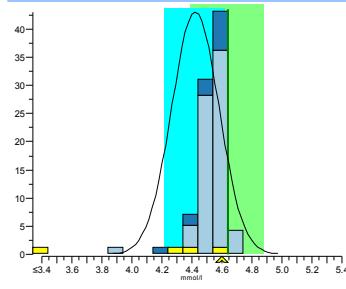
	cons.	meth.	ref.	lab
mean	6.02	6.02	6.16	6
SD				
n	4	4		
no	1	1		

2013.1 B



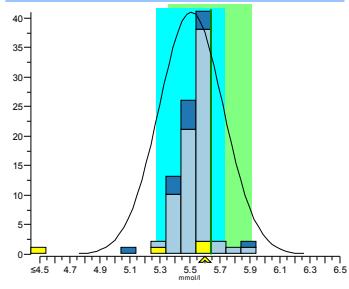
	cons.	meth.	ref.	lab
mean	3.93	3.93	4.10	4
SD				
n	4	4		
no	1	1		

2013.1 C



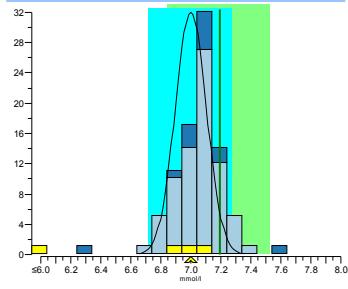
	cons.	meth.	exp.	lab
mean	4.42	4.42	4.64	4.6
SD				
n	4	4		
no	1	1		

2013.1 D



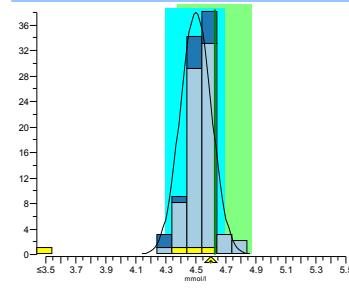
	cons.	meth.	ref.	lab
mean	5.51	5.51	5.64	5.6
SD				
n	4	4		
no	1	1		

2013.1 E



	cons.	meth.	ref.	lab
mean	7.00	7.00	7.19	7
SD				
n	4	4		
no	1	1		

2013.1 F



	cons.	meth.	ref.	lab
mean	4.50	4.50	4.63	4.6
SD				
n	4	4		
no	1	1		

Legend

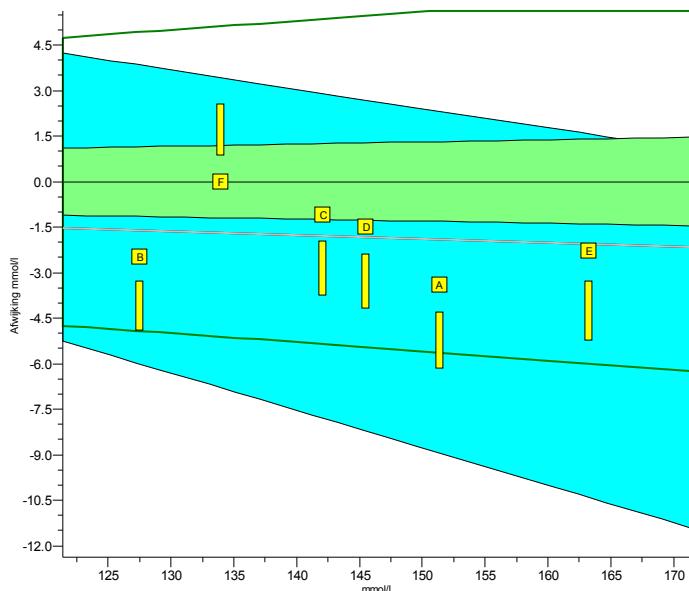
Other methods

ISE indirect (with predilution)

ISE direct (no predilution)

INPUTs 2013.1**Sodium**

units: mmol/l

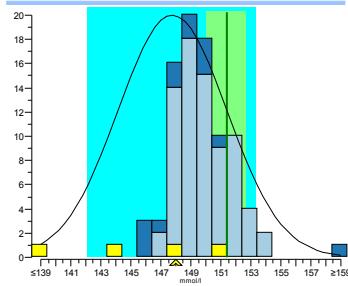


	2013.1	cumulative
Trueness	-1.3%	-1.3%
Precision	0.51%	0.51%
Number	6	6
Outliers	0	0
Sigma-TE	0.1	0.1
Sigma-SA	5.7 [2]	5.7 [2]
Score pictogram	[Yellow]	[Yellow]
Regression line	$0.0 + 0.987 \cdot x$	$0.0 + 0.987 \cdot x$

Consensus group
Method

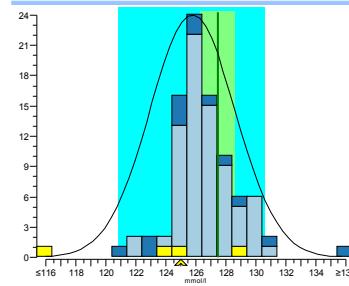
Other methods
Other methods

2013.1 A



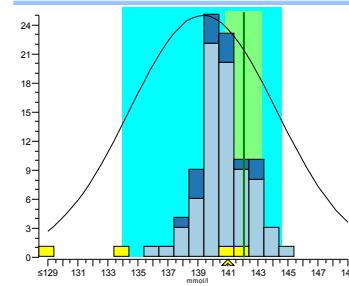
	cons.	meth.	ref.	lab
mean	147.8	147.8	151.4	148
SD				
n	4	4		
no	1	1		

2013.1 B



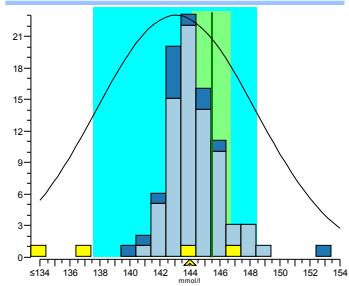
	cons.	meth.	ref.	lab
mean	125.8	125.8	127.5	125
SD				
n	4	4		
no	1	1		

2013.1 C



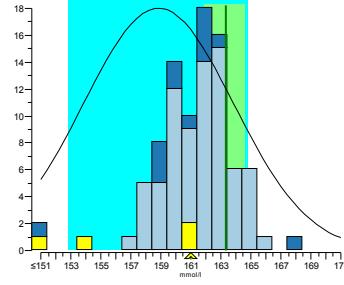
	cons.	meth.	exp.	lab
mean	139.3	139.3	142.1	141
SD				
n	4	4		
no	1	1		

2013.1 D



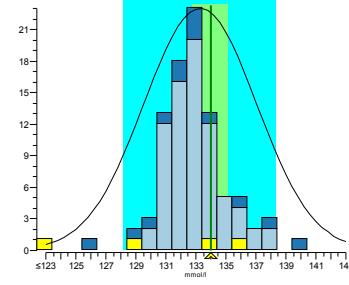
	cons.	meth.	ref.	lab
mean	143.1	143.1	145.5	144
SD				
n	4	4		
no	1	1		

2013.1 E



	cons.	meth.	ref.	lab
mean	158.8	158.8	163.3	161
SD				
n	4	4		
no	1	1		

2013.1 F



	cons.	meth.	ref.	lab
mean	133.3	133.3	134.0	134
SD				
n	4	4		
no	1	1		

Legend

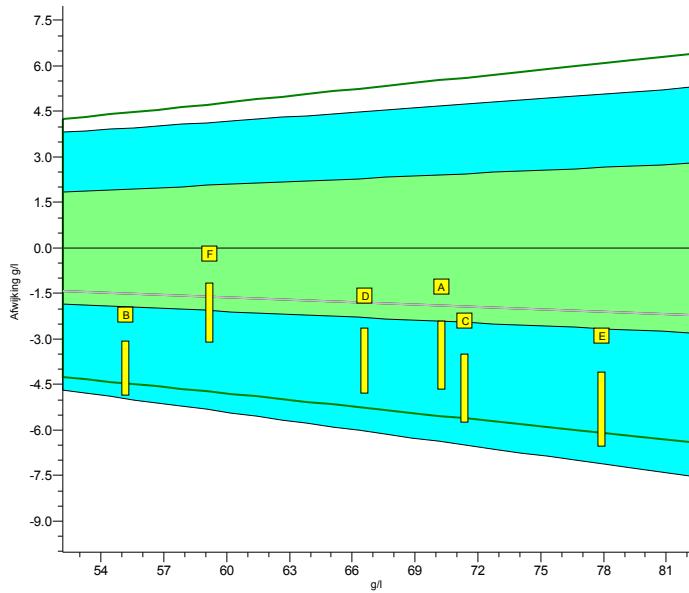
[Yellow] Other methods

[Light Blue] ISE indirect (with predilution)

[Dark Blue] ISE direct (no predilution)

INPUTs 2013.1**Total Protein**

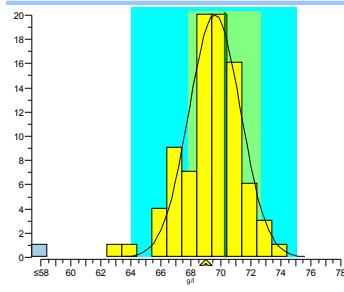
units: g/l



	2013.1	cumulative
Trueness	-2.6%	-2.6%
Precision	1.3%	1.3%
Number	6	6
Outliers	0	0
Sigma-TE	1.4	1.4
Sigma-SA	4.8 [2]	4.8 [2]
Score pictogram	[Yellow, Green, Cyan]	[Yellow, Green, Cyan]
Regression line	$0.0 + 0.973 \cdot x$	$0.0 + 0.973 \cdot x$

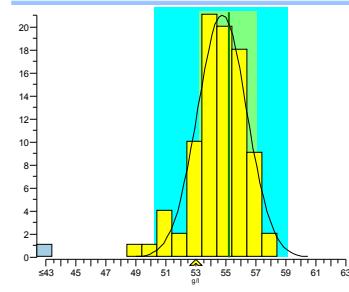
 Consensus group: Biureet
 Method: Biurete, automatic

2013.1 A



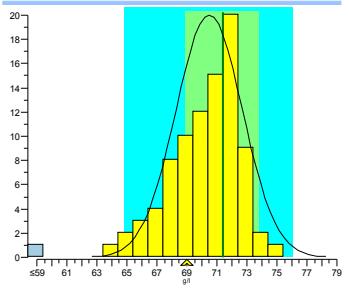
	cons.	meth.	ref.	lab
mean	69.6	69.6	70.3	69
SD	1.7	1.7		
n	88	88		
no	2	2		

2013.1 B



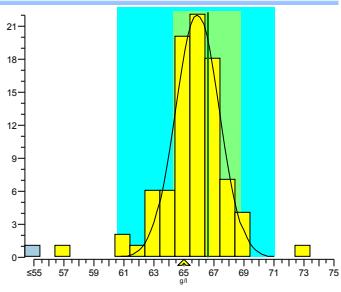
	cons.	meth.	ref.	lab
mean	54.8	54.8	55.2	53
SD	1.6	1.6		
n	88	88		
no	1	1		

2013.1 C



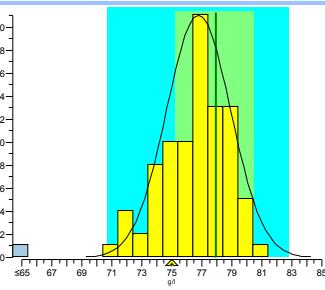
	cons.	meth.	ref.	lab
mean	70.5	70.5	71.4	69
SD	2.2	2.2		
n	87	87		
no	0	0		

2013.1 D



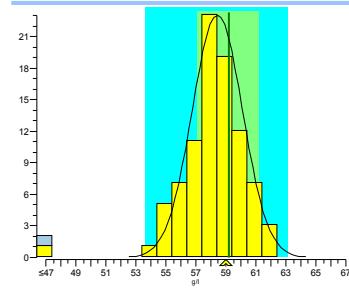
	cons.	meth.	ref.	lab
mean	65.9	65.9	66.6	65
SD	1.5	1.5		
n	88	88		
no	4	4		

2013.1 E



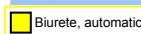
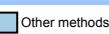
	cons.	meth.	ref.	lab
mean	76.8	76.8	77.9	75
SD	2.1	2.1		
n	88	88		
no	0	0		

2013.1 F



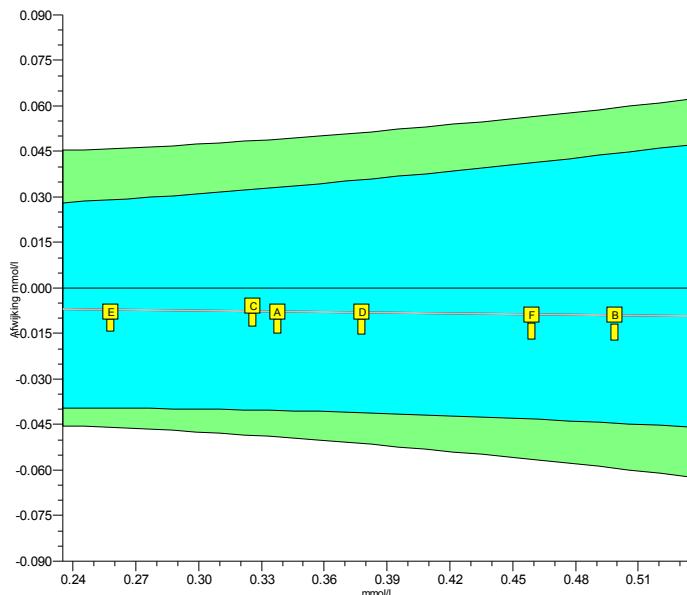
	cons.	meth.	ref.	lab
mean	58.4	58.4	59.2	59
SD	1.7	1.7		
n	89	89		
no	1	1		

Legend

 Biurete, automatic  Other methods

INPUTs 2013.1**Urate**

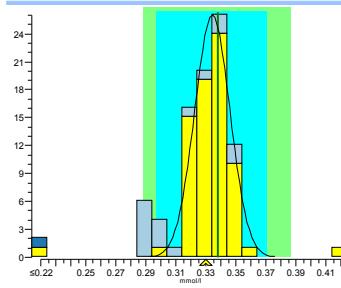
units: mmol/l



	2013.1	cumulative
Trueness	-2.1%	-2.1%
Precision	0.53%	0.53%
Number	6	6
Outliers	0	0
Sigma-TE	6.0 [2]	6.0 [2]
Sigma-SA	6.0	6.0
Score pictogram	[Yellow]	[Yellow]
Regression line	$-0.005 + 0.992 \cdot x$	$-0.005 + 0.992 \cdot x$

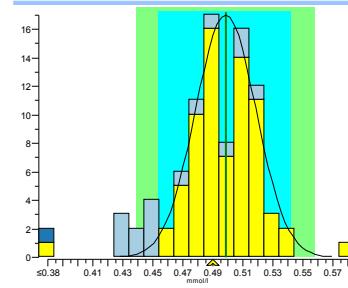
 Consensus group: Colorimetrisch
 Method: Uricase, colorim., automatic

2013.1 A



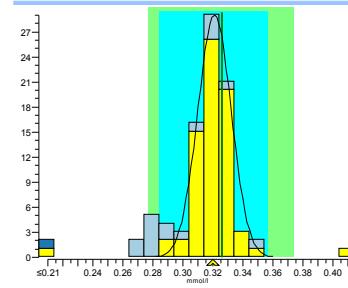
	cons.	meth.	ref.	lab
mean	0.334	0.334	0.338	0.33
SD	0.012	0.012		
n	88	72		
no	18	2		

2013.1 B



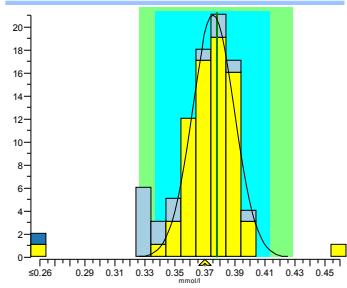
	cons.	meth.	ref.	lab
mean	0.499	0.499	0.499	0.49
SD	0.020	0.020		
n	88	72		
no	18	2		

2013.1 C



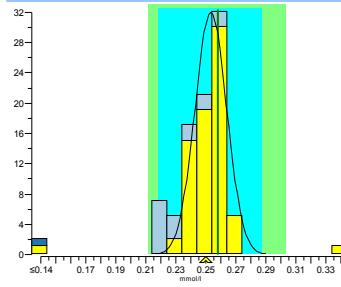
	cons.	meth.	exp.	lab
mean	0.321	0.321	0.326	0.32
SD	0.011	0.011		
n	87	71		
no	18	2		

2013.1 D



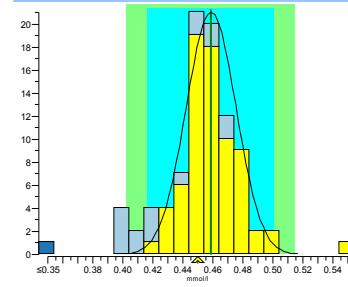
	cons.	meth.	ref.	lab
mean	0.376	0.376	0.378	0.37
SD	0.014	0.014		
n	88	73		
no	17	2		

2013.1 E



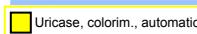
	cons.	meth.	ref.	lab
mean	0.253	0.253	0.258	0.25
SD	0.011	0.011		
n	89	73		
no	18	2		

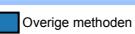
2013.1 F



	cons.	meth.	ref.	lab
mean	0.459	0.459	0.459	0.45
SD	0.017	0.017		
n	88	72		
no	17	1		

Legend

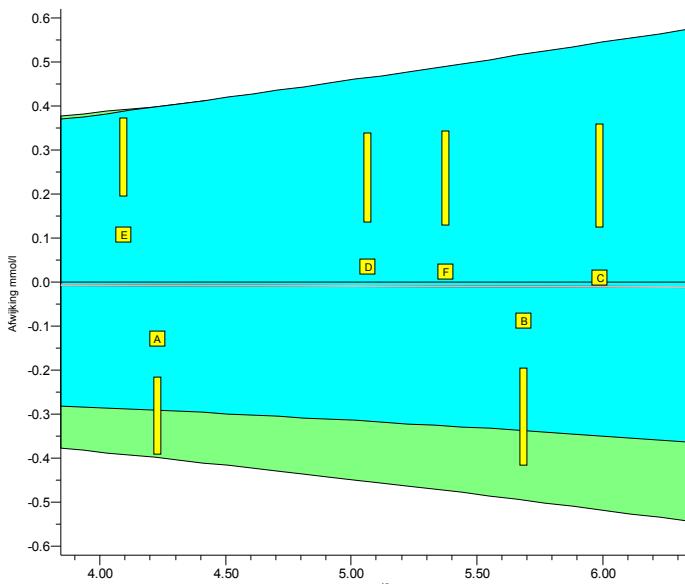




INPUTs 2013.1

Cholesterol

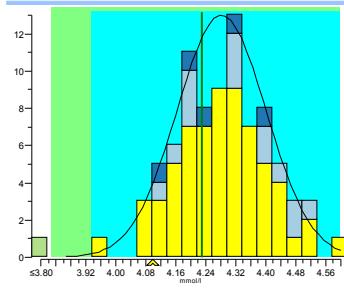
units: mmol/l



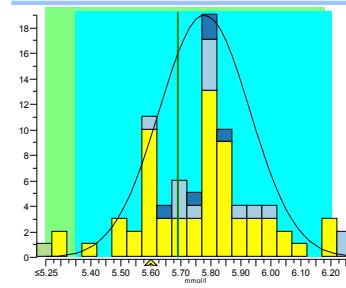
	2013.1	cumulative
Trueness	-0.15%	-0.15%
Precision	1.7%	1.7%
Number	6	6
Outliers	0	0
Sigma-TE	5.5 [2]	5.5 [2]
Sigma-SA	4.7	4.7
Score pictogram	[Score pictogram]	[Score pictogram]
Regression line	$0.00 + 0.998 \cdot x$	$0.00 + 0.998 \cdot x$

Consensus group: Enzymatisch
Method: Enzymatic, automatic, discrete

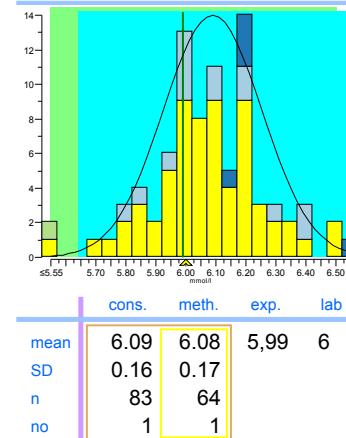
2013.1 A



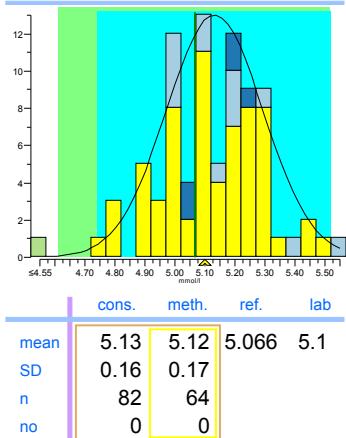
2013.1 B



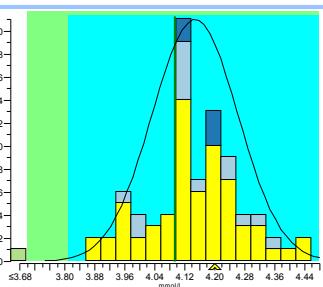
2013.1 C



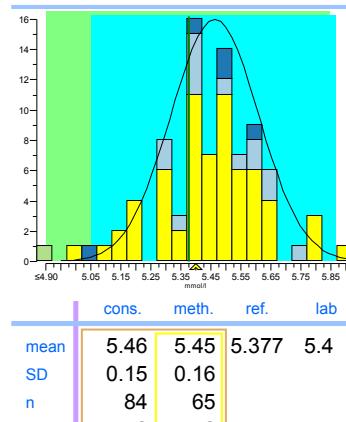
2013.1 D



2013.1 E



2013.1 F



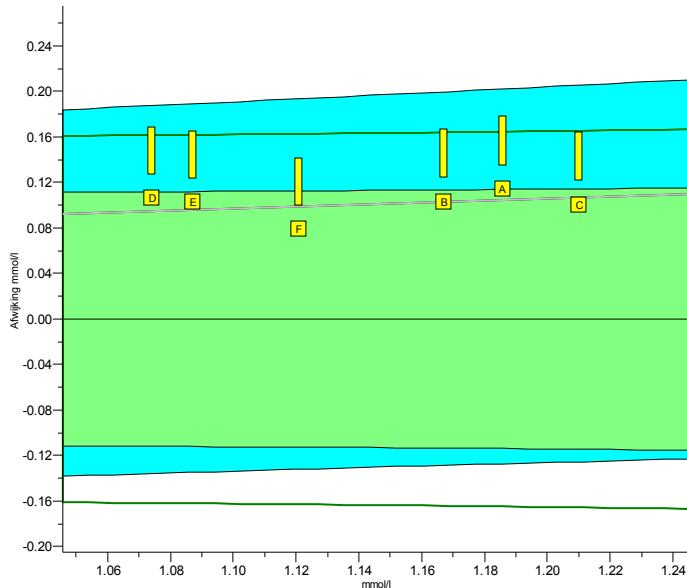
Legend

- Enzymatic, automatic, discrete
- Enzymatic, automatic, kinetic
- Abell-Kendall reference values
- Overige methoden

INPUTS 2013.1

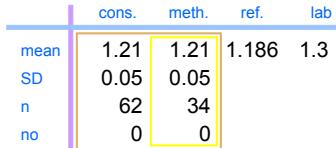
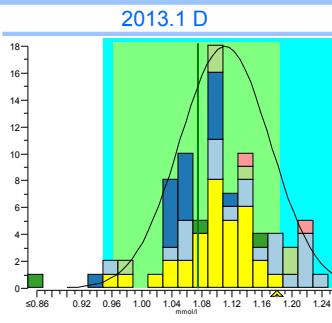
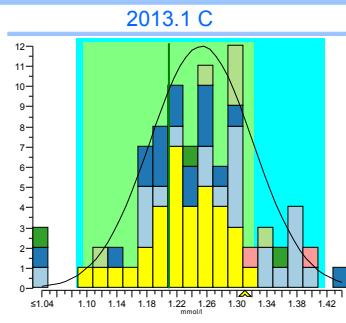
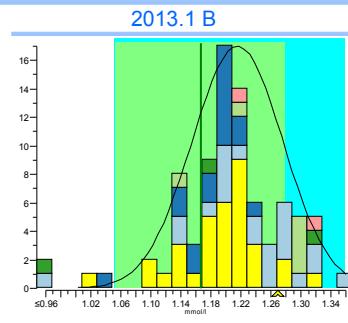
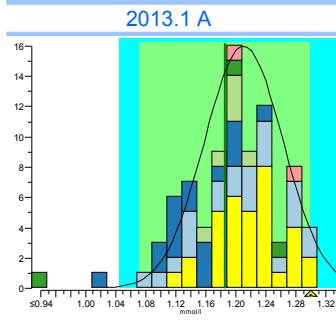
HDL-Cholesterol

units: mmol/l



	2013.1	cumulative
Trueness	+8.8%	+8.8%
Precision	1.5%	1.5%
Number	6	6
Outliers	0	0
Sigma-TE	1.5	1.5
Sigma-SA	4.5 [2]	4.5 [2]
Score pictogram	[Score pictogram]	[Score pictogram]
Regression line	$0.00 + 1.088.x$	$0.00 + 1.088.x$

Consensus group: Direct
 Method: PEG modified enzyme, PEGME (Kyowa Medex)



Legend

PEG modified enzyme, PEGME (Kyowa Medex)

Accelerator Selective Detergent ("Ultra HDL")

Immunoinhibition

Catalase method (Denka Seiken)

Overige methoden

Precipitation Technique