

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	26	32	

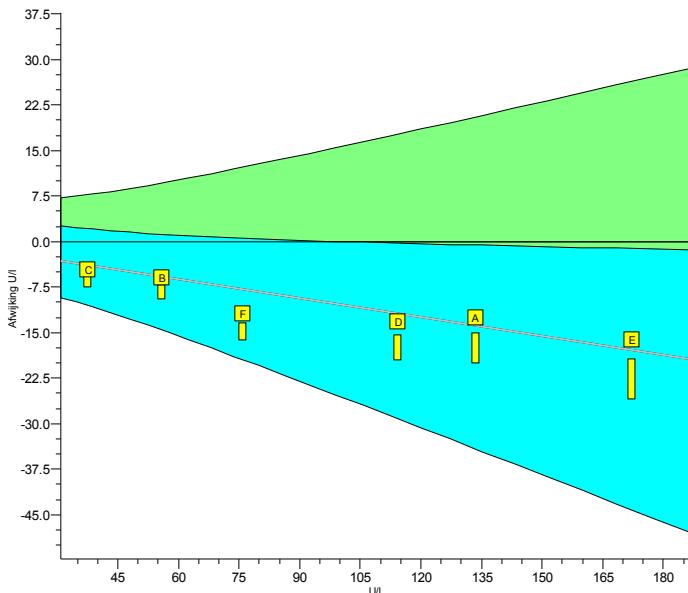
INPUTs 2013.1

Analyte		Trueness				Precision		Performance			
		your mean	ref.	cons.	SDtl	your prec.	SDbl	this survey	PS	cumulative	PSc
ALAT	U/l	87.5	98.2	85.7	7.9	3.5	2.3	1	1		1
Alk. Phosphatase	U/l	182	188	173	15	2	2	2	2		2
Amylase	U/l	172	207	175	17	4	3	1	1		1
Calcium	mmol/l	2.53	2.46	2.47	0.07	0.02	0.02	2	2		2
Chloride	mmol/l	100.7	100.0	100.8	1.8	0.5	0.9	2	2		2
CK	U/l	244	244	253	18	3	3	2	2		2
Creatinine	µmol/l	156.2	149.1	150.7	5.6	1.1	2.1	1	1		1
eGFR (F, 55, white)	ml/min/1,73m ²	35.8	37.6	37.4	2.6	0.6	0.6	2	2		2
Glucose	mmol/l	14.64	13.93	14.19	0.44	0.21	0.18	1	1		1
Magnesium	mmol/l	1.26	1.22	1.23	0.04	0.02	0.02	2	2		2
Potassium	mmol/l	5.31	5.39	5.30	0.10	0.03	0.04	2	2		2
Sodium	mmol/l	143.2	144.0	142.7	1.7	0.5	0.9	2	2		2
Total Protein	g/l	66.2	66.8	66.0	1.8	0.3	0.7	2	2		2
Urate	µmol/l	388	376	374	15	2	4	2	2		2
Cholesterol	mmol/l	5.30	5.07	5.15	0.14	0.08	0.05	1	1		1
HDL-Cholesterol	mmol/l	1.23	1.14	1.17	0.06	0.03	0.03	1	1		1
		Total :				26		26			

INPUTs 2013.1

ALAT

units: U/l



	2013.1	cumulative
Trueness	-11%	-11%
Precision	4.1%	4.1%
Number	6	6
Outliers	0	0
Sigma-TE	3.6 [1]	3.6 [1]
Sigma-SA	1.9	1.9
Score pictogram		
Regression line	$0.0 + 0.896 \cdot x$	$0.0 + 0.896 \cdot x$

Consensus group niet IFCC traceerbaar
Method IFCC non-traceable

2013.1 A

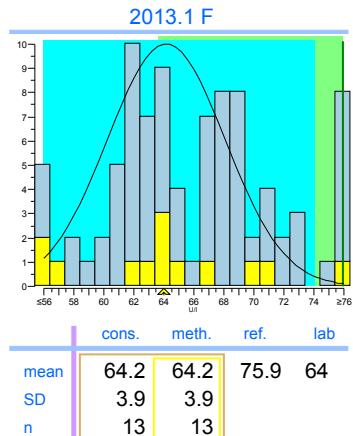
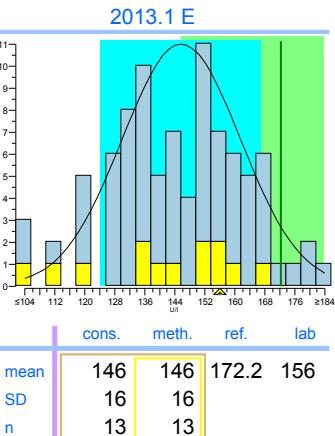
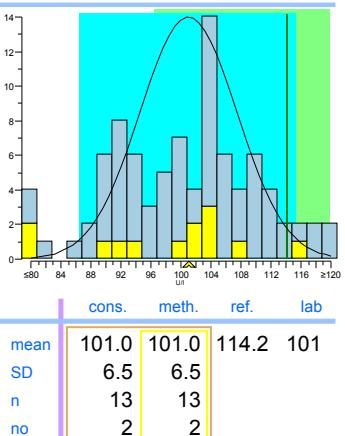
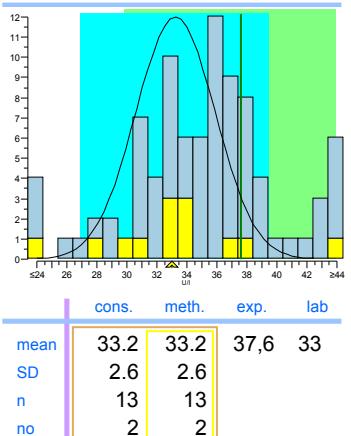
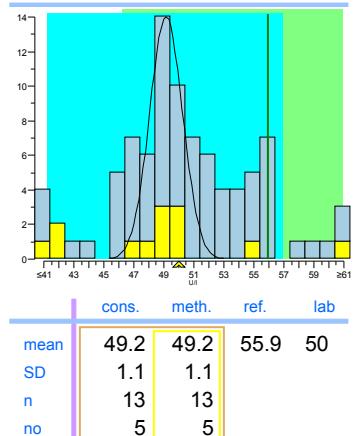
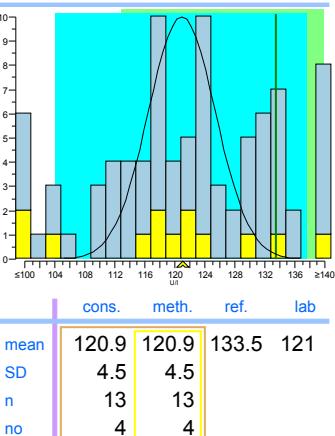
2013.1 B

2013.1 C

2013.1 D

2013.1 E

2013.1 F



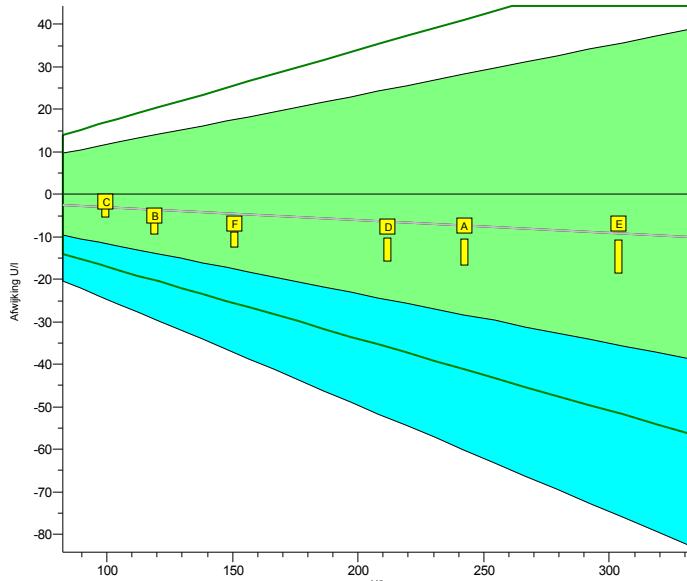
Legend

 IFCC non-traceable IFCC traceable

INPUTs 2013.1

Alk. Phosphatase

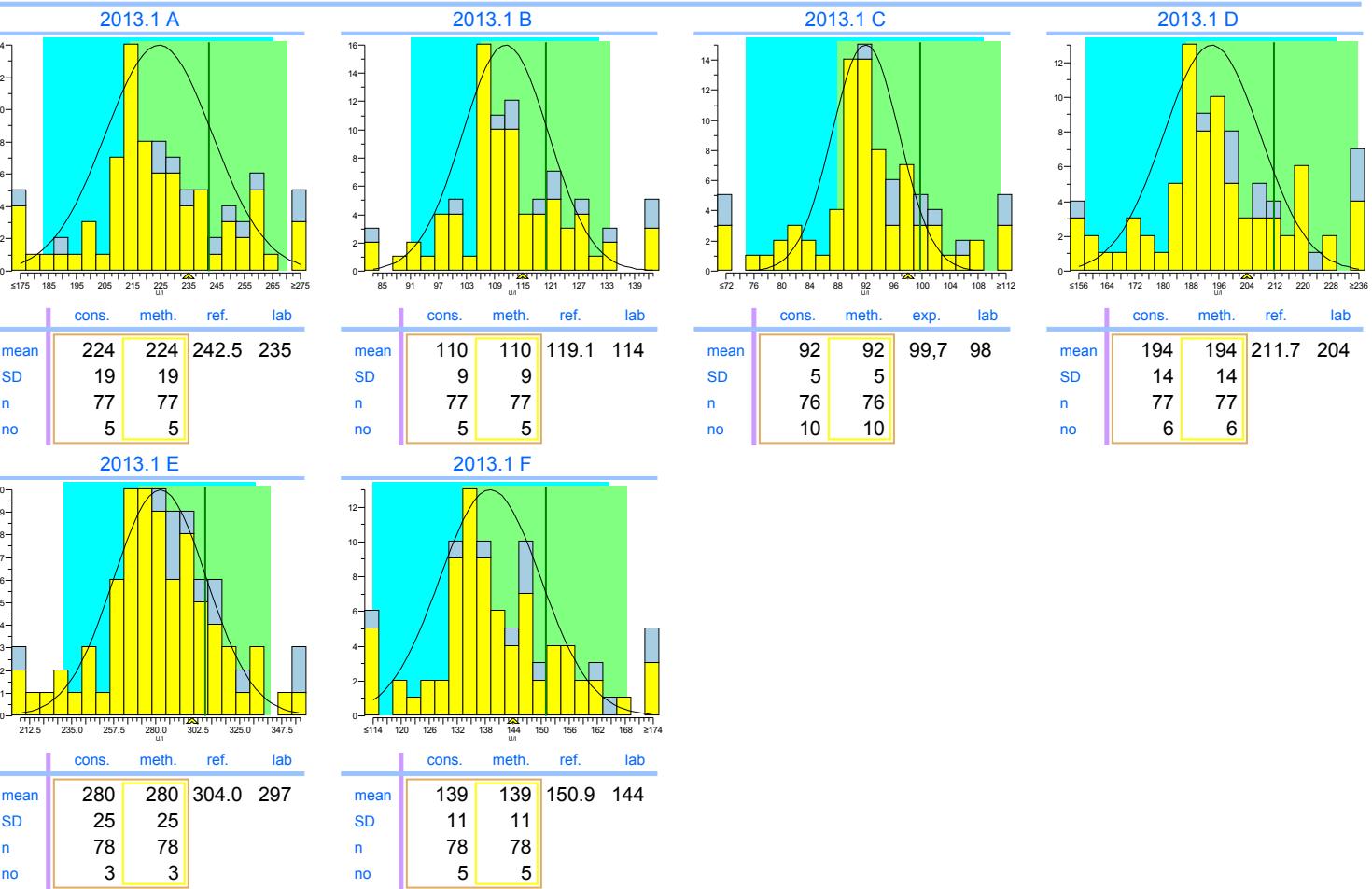
units: U/l



	2013.1	cumulative
Trueness	-3.2%	-3.2%
Precision	1.1%	1.1%
Number	6	6
Outliers	0	0
Sigma-TE	6.0	6.0
Sigma-SA	6.0 [2]	6.0 [2]
Score pictogram	[Score pictogram]	[Score pictogram]
Regression line	$0 + 0.970 \cdot x$	$0 + 0.970 \cdot x$

Consensus group
Method

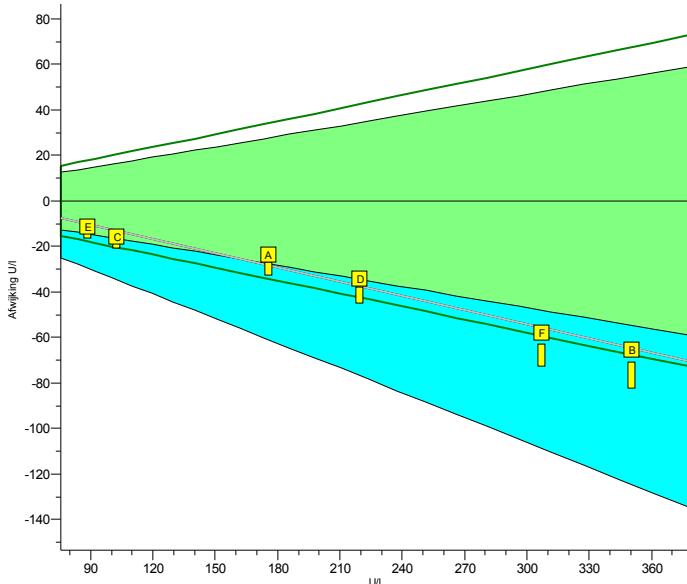
IFCC traceerbaar
IFCC traceable



INPUTs 2013.1

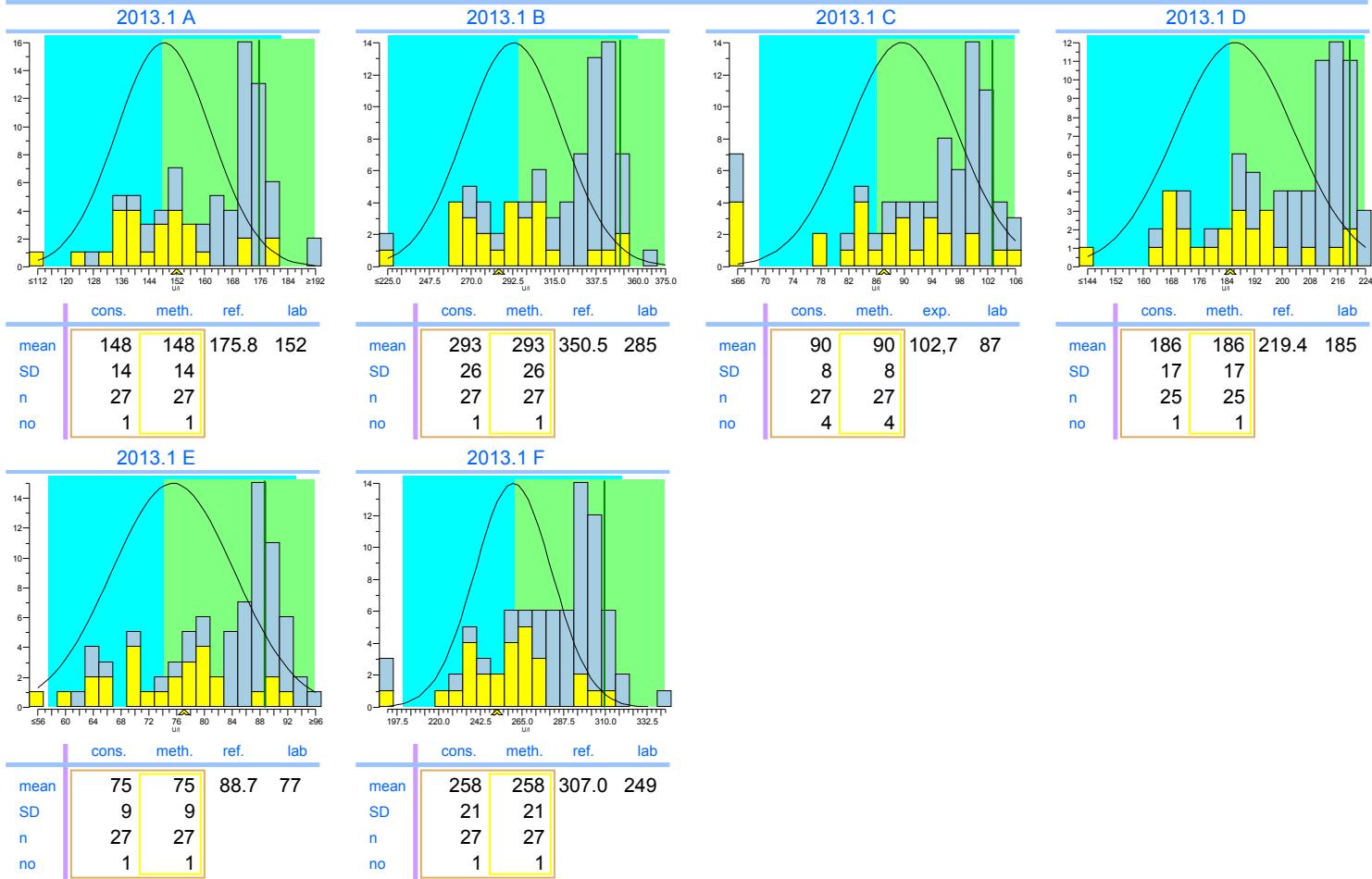
Amylase

units: U/l



	2013.1	cumulative
Trueness	-17%	-17%
Precision	2.2%	2.2%
Number	6	6
Outliers	0	0
Sigma-TE	0.8	0.8
Sigma-SA	3.0	3.0
Score pictogram		
Regression line	$8 + 0.792 \cdot x$	$8 + 0.792 \cdot x$

Consensus group: niet IFCC traceerbaar
 Method: IFCC non-traceable



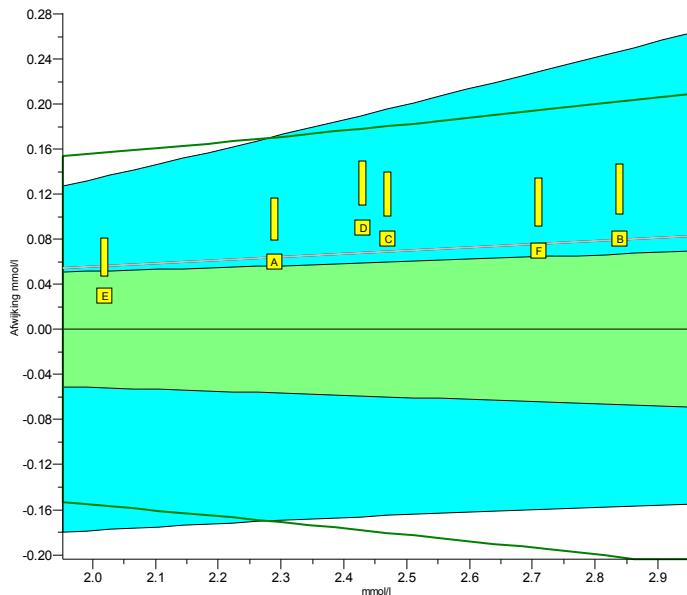
Legend

IFCC non-traceable IFCC traceable

INPUTs 2013.1

Calcium

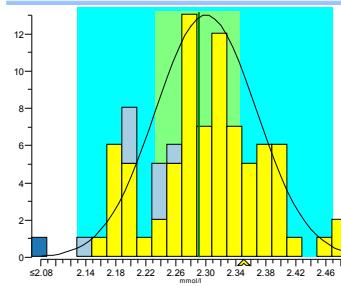
units: mmol/l



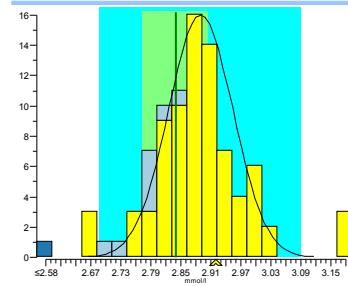
	2013.1	cumulative
Trueness	+2.8%	+2.8%
Precision	0.65%	0.65%
Number	6	6
Outliers	0	0
Sigma-TE	0.3	0.3
Sigma-SA	6.0 [2]	6.0 [2]
Score pictogram	[Color-coded boxes]	[Color-coded boxes]
Regression line	$0.00 + 1.028.x$	$0.00 + 1.028.x$

Consensus group: Colorimetrisch
Method: Colorimetric, automatic, discrete

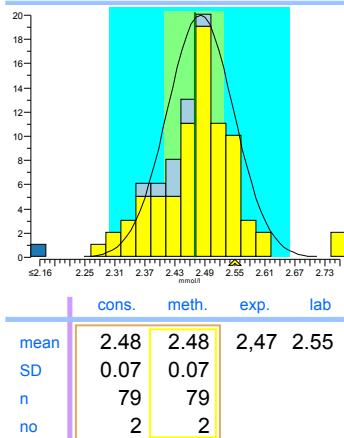
2013.1 A



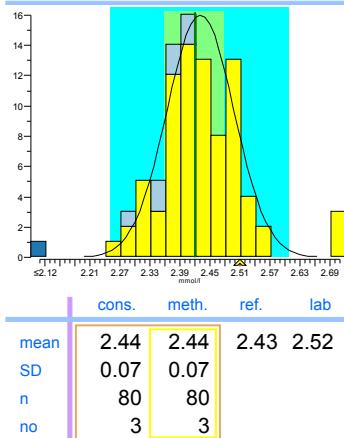
2013.1 B



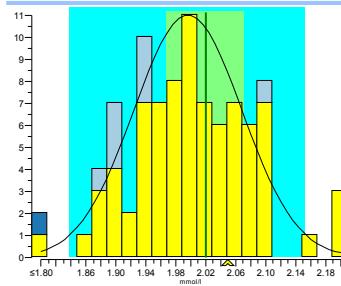
2013.1 C



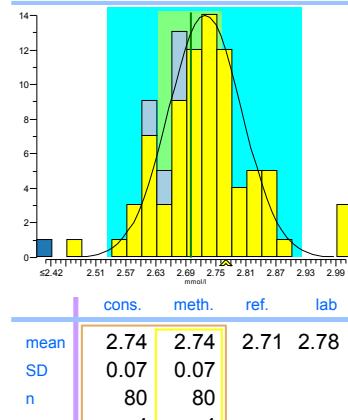
2013.1 D



2013.1 E



2013.1 F



Legend

[Yellow box] Colorimetric, automatic, discrete

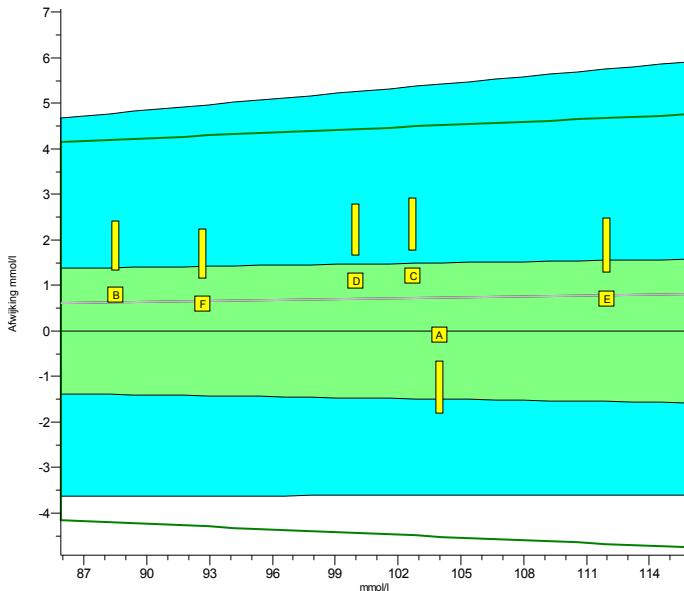
[Light blue box] ISE indirect (with predilution)

[Dark blue box] Other methods

INPUTs 2013.1

Chloride

units: mmol/l



	2013.1	cumulative
Trueness	+0.72%	+0.72%
Precision	0.45%	0.45%
Number	6	6
Outliers	0	0
Sigma-TE	2.4	2.4
Sigma-SA	6.0 [2]	6.0 [2]
Score pictogram	[Yellow/Green]	[Yellow/Green]
Regression line	$0.0 + 1.007 \cdot x$	$0.0 + 1.007 \cdot x$

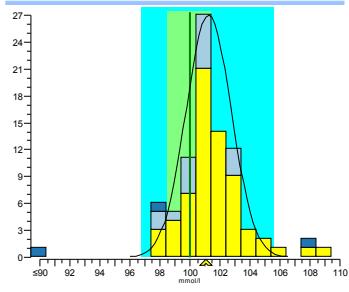
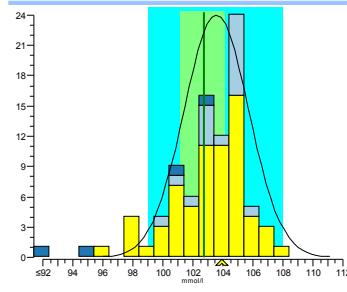
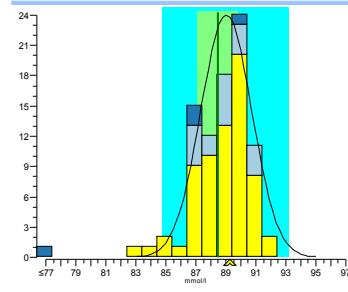
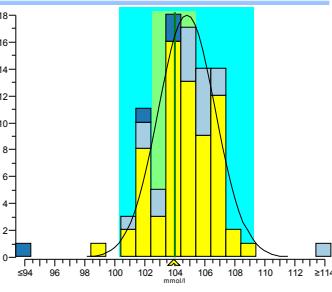
Consensus group ISE/Colorimetrie
Method ISE indirect (with predilution)

2013.1 A

2013.1 B

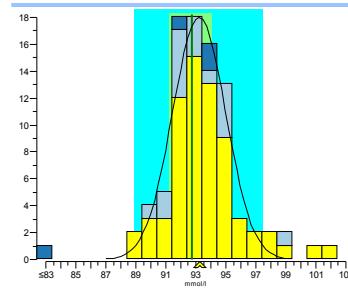
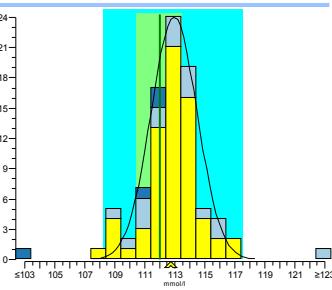
2013.1 C

2013.1 D



2013.1 E

2013.1 F



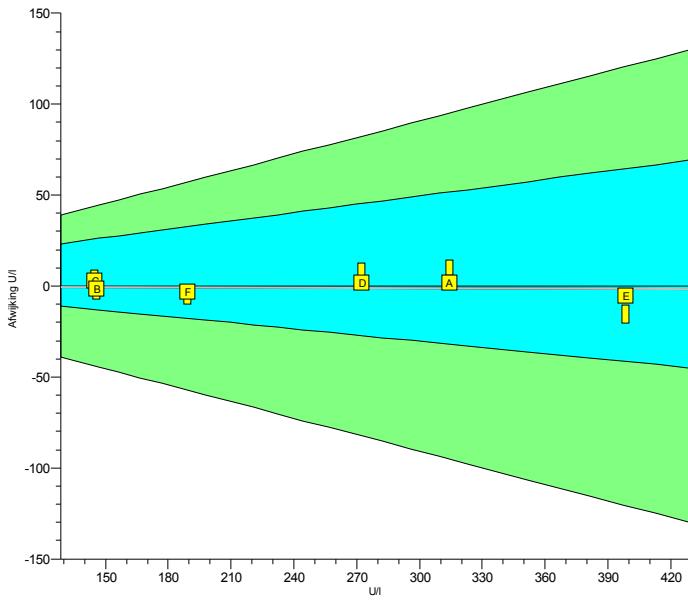
Legend

ISE indirect (with predilution)	ISE direct (no predilution)	Other methods
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INPUTs 2013.1

CK

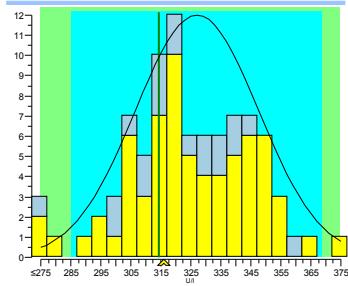
units: U/l



	2013.1	cumulative
Trueness	-0.27%	-0.27%
Precision	1.0%	1.0%
Number	6	6
Outliers	0	0
Sigma-TE	6.0 [2]	6.0 [2]
Sigma-SA	6.0	6.0
Score pictogram		
Regression line	$0 + 0.996 \cdot x$	$0 + 0.996 \cdot x$

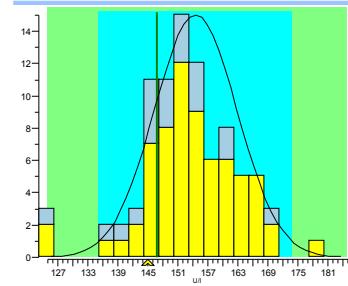
Consensus group IFCC traceerbaar
Method IFCC traceable

2013.1 A



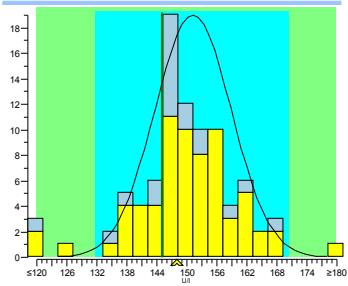
	cons.	meth.	ref.	lab
mean	327	327	314.3	316
SD	21	21		
n	68	68		
no	2	2		

2013.1 B



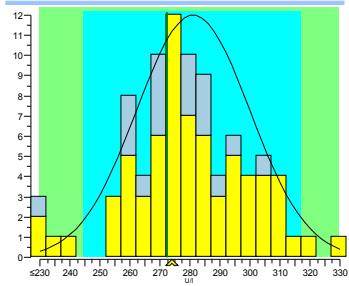
	cons.	meth.	ref.	lab
mean	154	154	145.8	144
SD	8	8		
n	67	67		
no	3	3		

2013.1 C



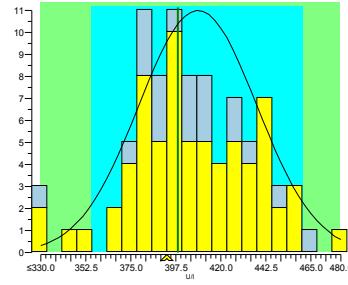
	cons.	meth.	exp.	lab
mean	151	151	145	148
SD	8	8		
n	68	68		
no	4	4		

2013.1 D



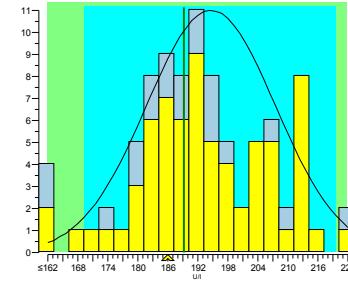
	cons.	meth.	ref.	lab
mean	281	281	272.3	274
SD	19	19		
n	69	69		
no	2	2		

2013.1 E



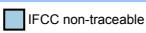
	cons.	meth.	ref.	lab
mean	409	409	398.4	393
SD	30	30		
n	69	69		
no	2	2		

2013.1 F



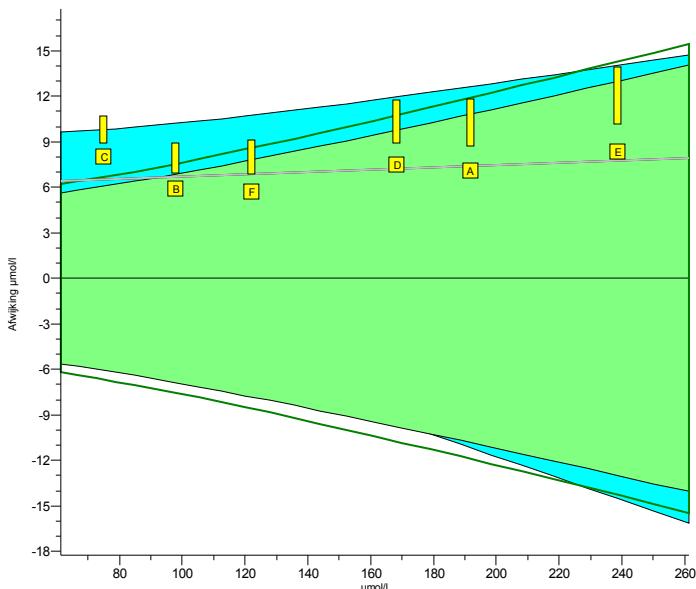
	cons.	meth.	ref.	lab
mean	195	195	189.2	186
SD	13	13		
n	69	69		
no	2	2		

Legend



INPUTs 2013.1

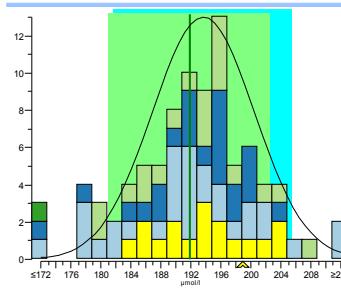
Creatinine

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

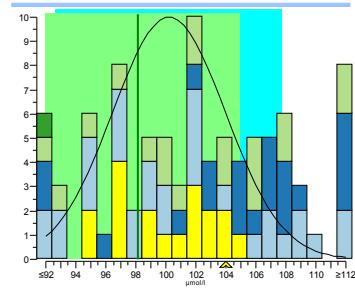
	2013.1	cumulative
Trueness	+4.8%	+4.8%
Precision	0.70%	0.70%
Number	6	6
Outliers	0	0
Sigma-TE	2.3	2.3
Sigma-SA	3.2	3.2
Score pictogram		
Regression line	$5.9 + 1.008x$	$5.9 + 1.008x$

Consensus group: Enzymatische kreatinine
Method: Enzymatic, automatic

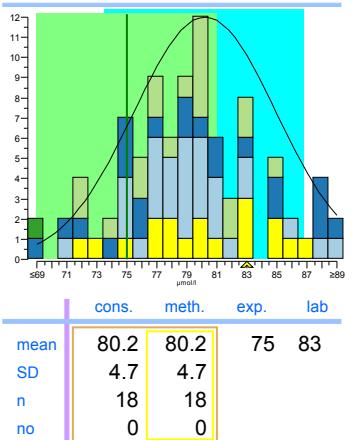
2013.1 A



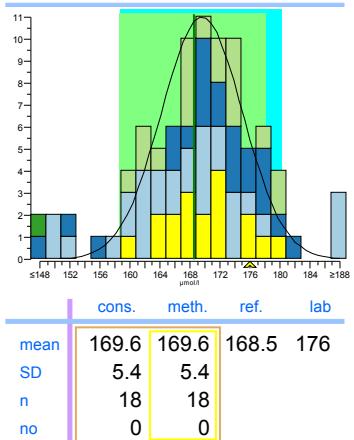
2013.1 B



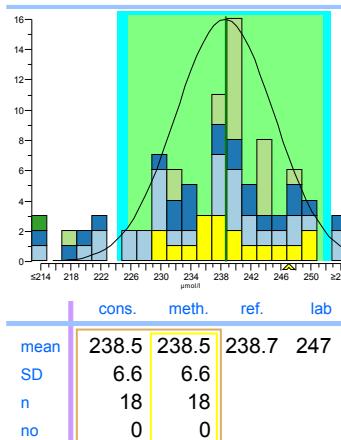
2013.1 C



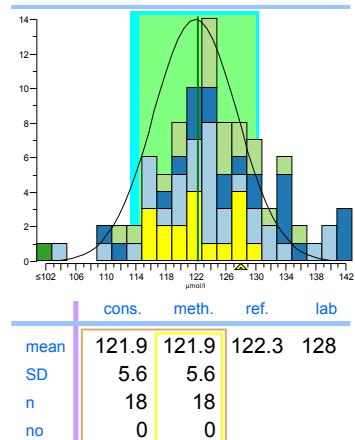
2013.1 D



2013.1 E



2013.1 F

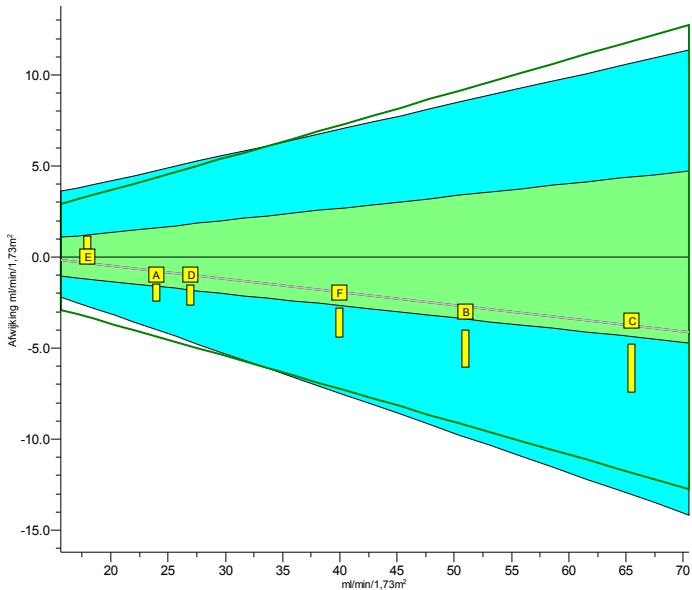


Legend

- Enzymatic, automatic
- Alk. Picrate, kinetic with compensation
- Alk. Picrate, kinetic
- Alk. Picrate, endpoint
- Other methods

INPUTs 2013.1

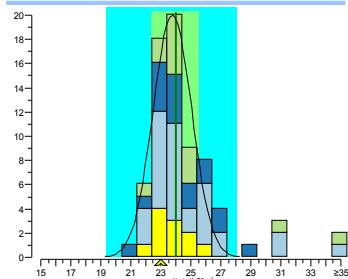
eGFR (F, 55, white)

units: ml/min/1,73m²

	2013.1	cumulative
Trueness	-4.7%	-4.7%
Precision	1.7%	1.7%
Number	6	6
Outliers	0	0
Sigma-TE	2.3	2.3
Sigma-SA	6.0 [2]	6.0 [2]
Score pictogram	[Yellow, Green, Blue]	[Yellow, Green, Blue]
Regression line	$1.0 + 0.928 \cdot x$	$1.0 + 0.928 \cdot x$

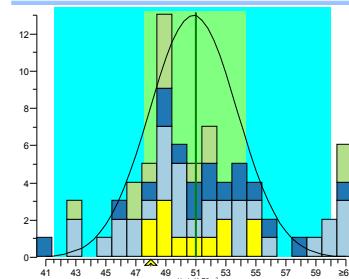
Consensus group: Enzymatische kreatinine
Method: Enzymatic, automatic

2013.1 A



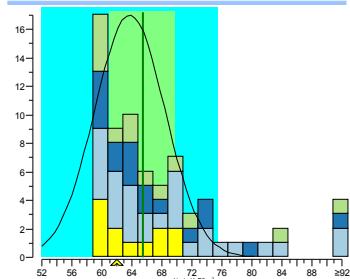
	cons.	meth.	ref.	lab
mean	23.8	23.8	24	23
SD	1.3	1.3		
n	11	11		
no	0	0		

2013.1 B



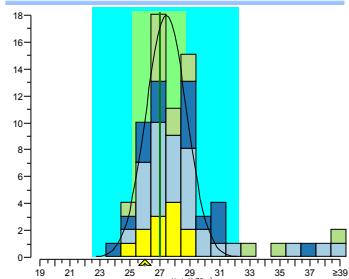
	cons.	meth.	ref.	lab
mean	50.8	50.8	51	48
SD	2.9	2.9		
n	12	12		
no	0	0		

2013.1 C



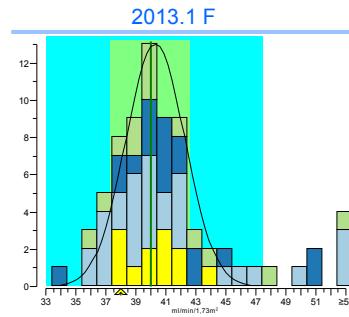
	cons.	meth.	exp.	lab
mean	63.7	63.7	65,5	62
SD	4.7	4.7		
n	12	12		
no	0	0		

2013.1 D



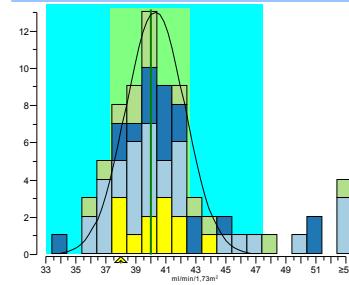
	cons.	meth.	ref.	lab
mean	27.4	27.4	27	26
SD	1.3	1.3		
n	12	12		
no	0	0		

2013.1 E



	cons.	meth.	ref.	lab
mean	18.6	18.6	18	18
SD	0.6	0.6		
n	12	12		
no	1	1		

2013.1 F



	cons.	meth.	ref.	lab
mean	40.3	40.3	40	38
SD	2.0	2.0		
n	12	12		
no	0	0		

Legend

Enzymatic, automatic

Other methods

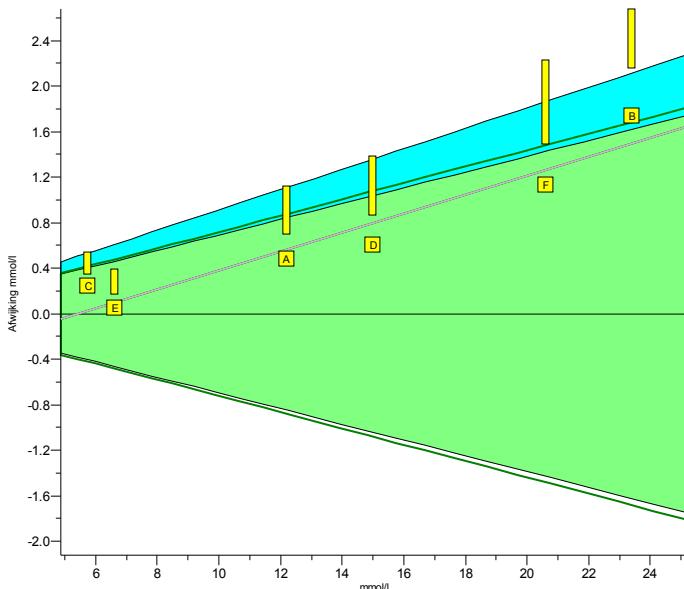
Alk. Picrate, kinetic with compensation

Alk. Picrate, kinetic

INPUTs 2013.1

Glucose

units: mmol/l



	2013.1	cumulative
Trueness	+5.1%	+5.1%
Precision	1.5%	1.5%
Number	6	6
Outliers	0	0
Sigma-TE	2.7	2.7
Sigma-SA	2.9	2.9
Score pictogram	1	1
Regression line	$-0.45 + 1.083 \cdot x$	$-0.45 + 1.083 \cdot x$

Consensus group
Method

Natte chemie
Hexokinase, automatic

2013.1 A

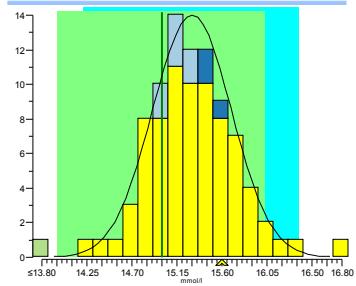
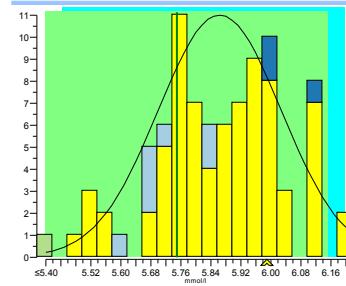
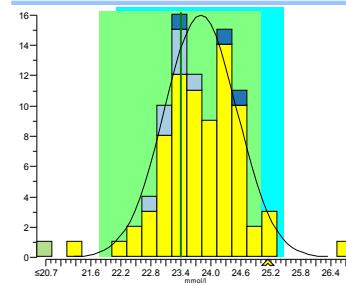
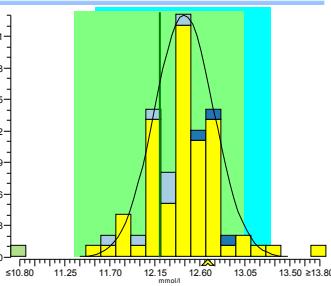
2013.1 B

2013.1 C

2013.1 D

2013.1 E

2013.1 F

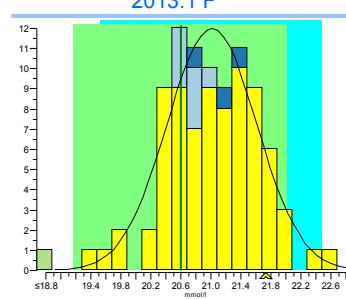
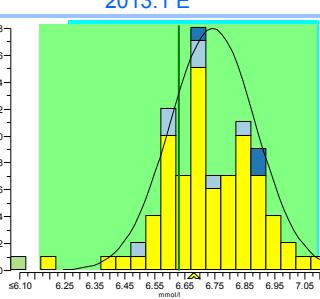


	cons.	meth.	ref.	lab
mean	12.44	12.44	12.2	12.68
SD	0.30	0.31		
n	88	77		
no	3	2		

	cons.	meth.	ref.	lab
mean	23.8	23.8	23.4	25.14
SD	0.7	0.7		
n	88	77		
no	3	2		

	cons.	meth.	exp.	lab
mean	5.86	5.87	5.75	5.99
SD	0.16	0.16		
n	88	77		
no	1	0		

	cons.	meth.	ref.	lab
mean	15.30	15.31	15.0	15.6
SD	0.39	0.41		
n	88	77		
no	2	1		



	cons.	meth.	ref.	lab
mean	6.74	6.75	6.63	6.68
SD	0.14	0.14		
n	89	78		
no	2	1		

	cons.	meth.	ref.	lab
mean	21.01	21.03	20.6	21.73
SD	0.60	0.63		
n	89	78		
no	1	0		

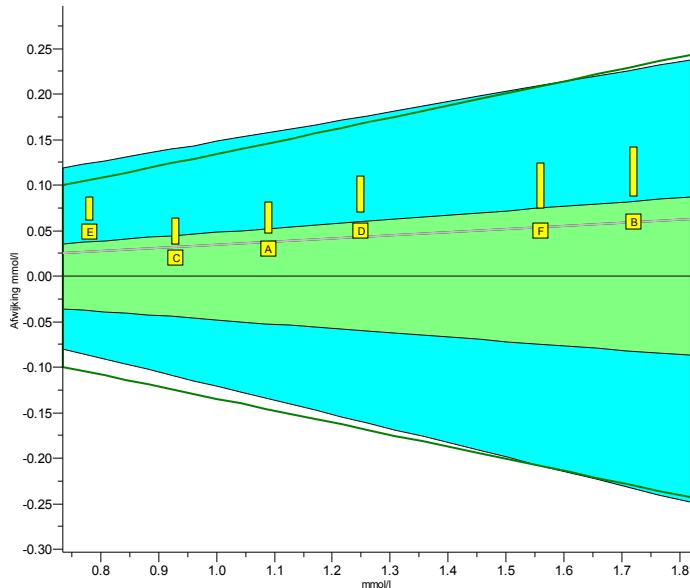
Legend

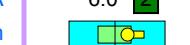
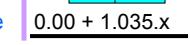
 Hexokinase, automatic	 Glucose-oxydase, amperometric, H ₂ O ₂	 Glucose-oxydase/POD,automatic	 Other methods
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INPUTs 2013.1

Magnesium

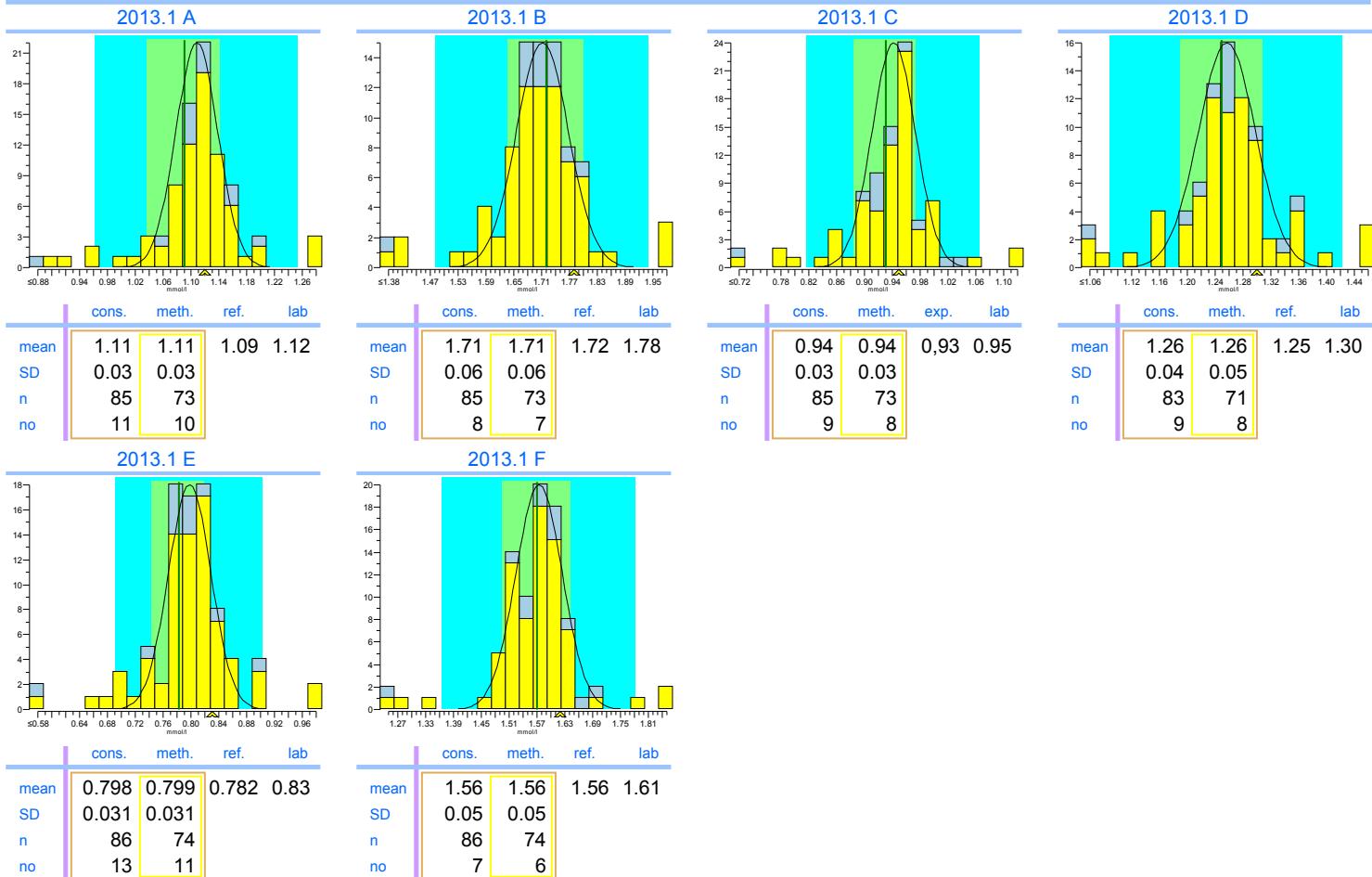
units: mmol/l



	2013.1	cumulative
Trueness	+3.5%	+3.5%
Precision	1.3%	1.3%
Number	6	6
Outliers	0	0
Sigma-TE	1.7	1.7
Sigma-SA	6.0 [2]	6.0 [2]
Score pictogram		
Regression line	$0.00 + 1.035 \cdot x$	$0.00 + 1.035 \cdot x$

Consensus group
Method

Overall
Colorimetric



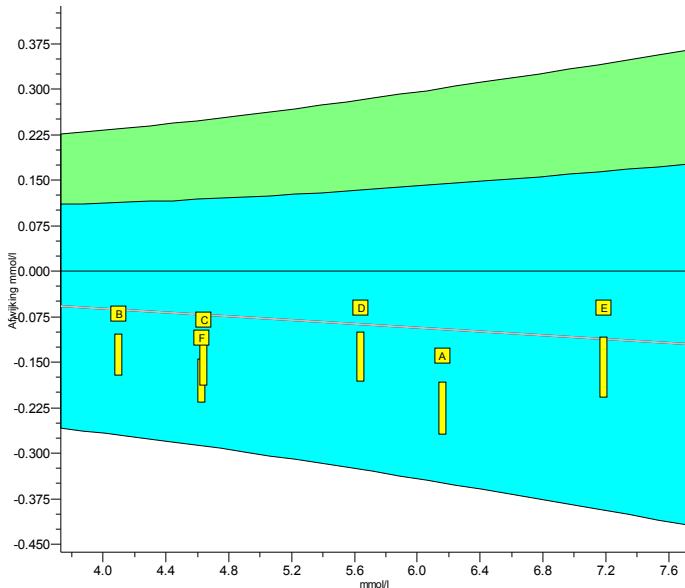
Legend

 Colorimetric	 Other methods
---	--

INPUTs 2013.1

Potassium

units: mmol/l



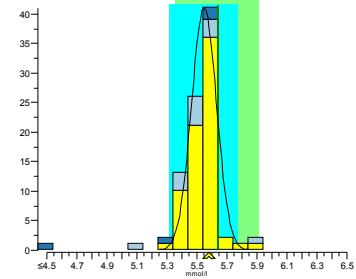
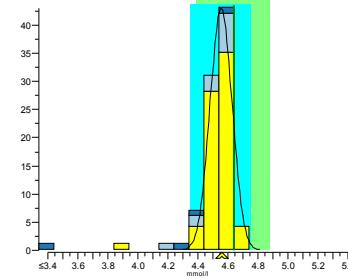
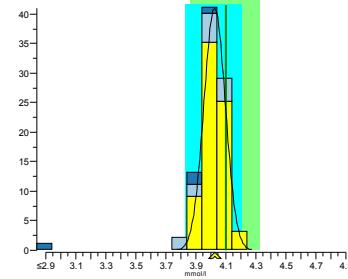
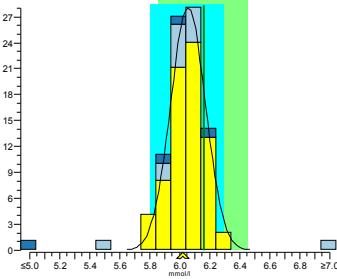
	2013.1	cumulative
Trueness	-1.6%	-1.6%
Precision	0.61%	0.61%
Number	6	6
Outliers	0	0
Sigma-TE	6.0 [2]	6.0 [2]
Sigma-SA	5.0	5.0
Score pictogram	[Yellow box]	[Yellow box]
Regression line	$0.00 + 0.985 \cdot x$	$0.00 + 0.985 \cdot x$
Consensus group	ISE verdund/Vlamfotometrie	
Method	ISE indirect (with predilution)	

2013.1 A

2013.1 B

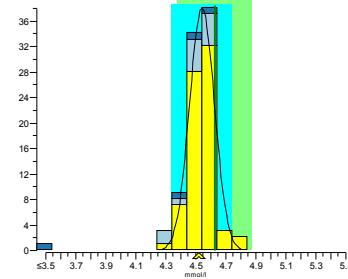
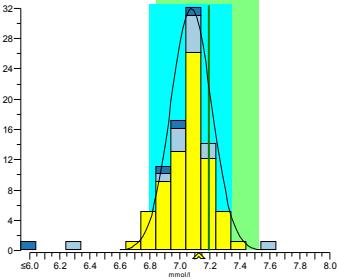
2013.1 C

2013.1 D



2013.1 E

2013.1 F



	cons.	meth.	ref.	lab
mean	6.05	6.05	6.16	6.02
SD	0.12	0.12		
n	72	72		
no	0	0		

	cons.	meth.	ref.	lab
mean	4.02	4.02	4.10	4.03
SD	0.07	0.07		
n	72	72		
no	0	0		

	cons.	meth.	exp.	lab
mean	4.55	4.55	4.64	4.56
SD	0.07	0.07		
n	72	72		
no	1	1		

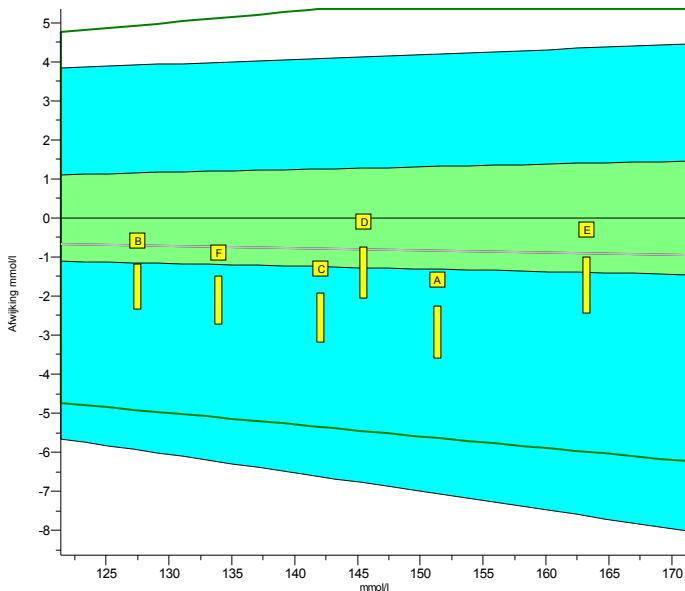
Legend

 ISE indirect (with predilution) ISE direct (no predilution) Other methods

INPUTs 2013.1

Sodium

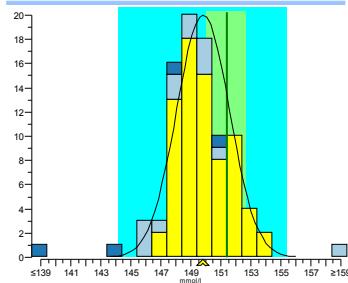
units: mmol/l



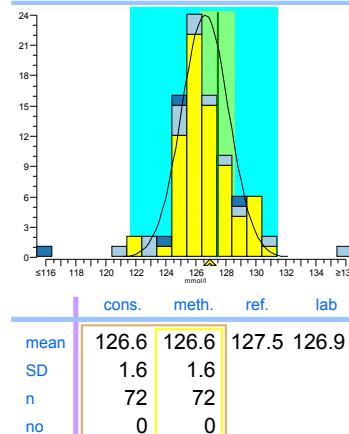
	2013.1	cumulative
Trueness	-0.56%	-0.56%
Precision	0.37%	0.37%
Number	6	6
Outliers	0	0
Sigma-TE	1.7	1.7
Sigma-SA	6.0 [2]	6.0 [2]
Score pictogram	[Score pictogram]	[Score pictogram]
Regression line	$0.0 + 0.995 \cdot x$	$0.0 + 0.995 \cdot x$

Consensus group ISE verdund/Vlamfotometrie
Method ISE indirect (with predilution)

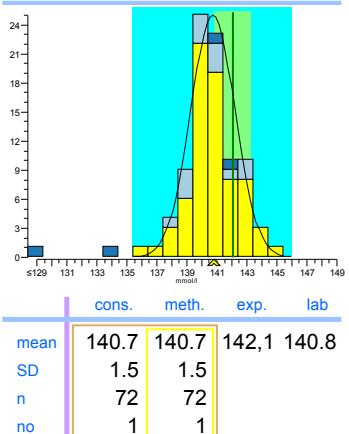
2013.1 A



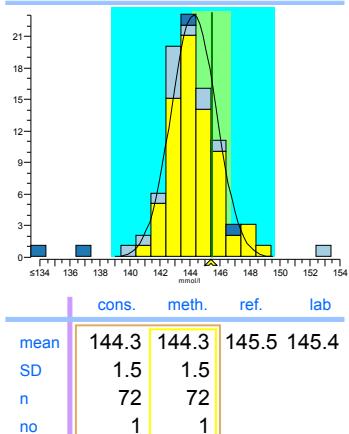
2013.1 B



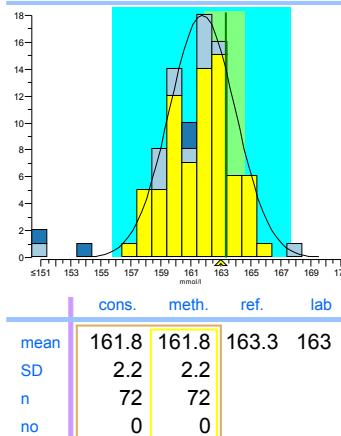
2013.1 C



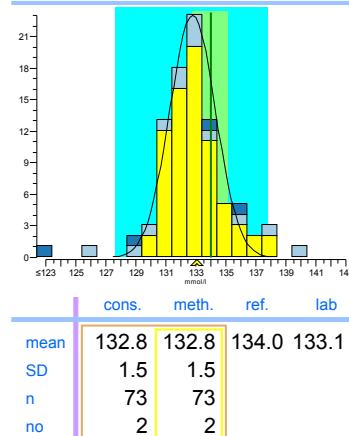
2013.1 D



2013.1 E



2013.1 F



Legend

[Yellow box] ISE indirect (with predilution)

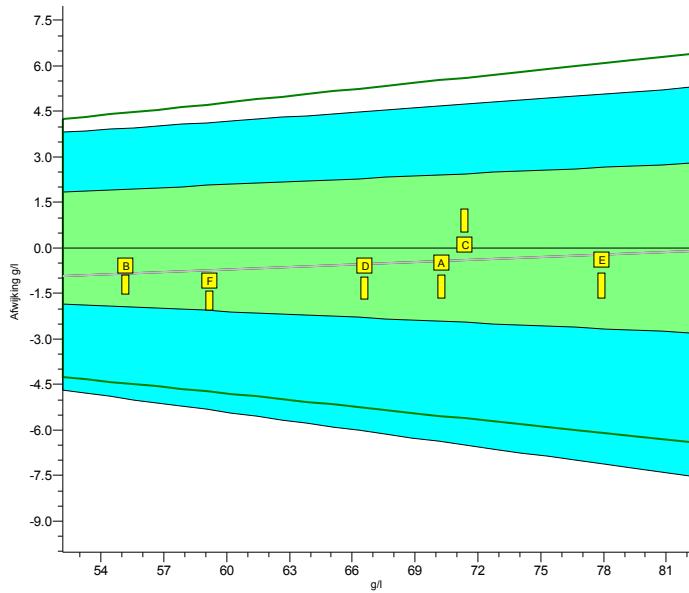
[Light blue box] ISE direct (no predilution)

[Dark blue box] Other methods

INPUTs 2013.1

Total Protein

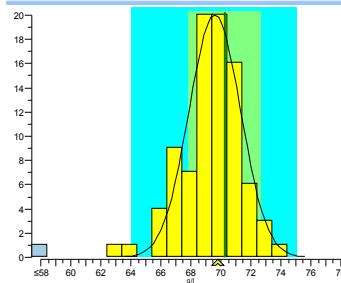
units: g/l



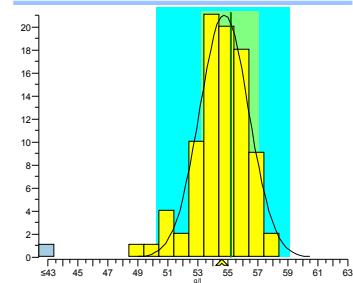
	2013.1	cumulative
Trueness	-0.77%	-0.77%
Precision	0.46%	0.46%
Number	6	6
Outliers	0	0
Sigma-TE	6.0	6.0
Sigma-SA	6.0 [2]	6.0 [2]
Score pictogram	[Yellow/Green]	[Yellow/Green]
Regression line	$-2.4 + 1.028 \cdot x$	$-2.4 + 1.028 \cdot x$

Consensus group: Biureet
 Method: Biurete, automatic

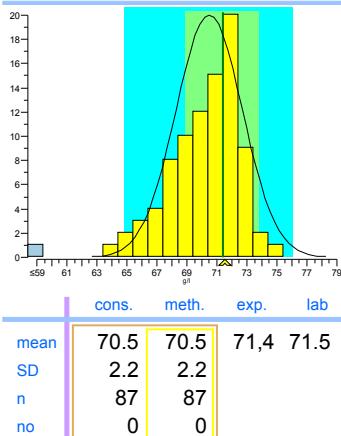
2013.1 A



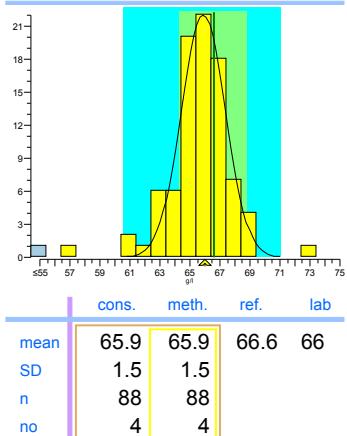
2013.1 B



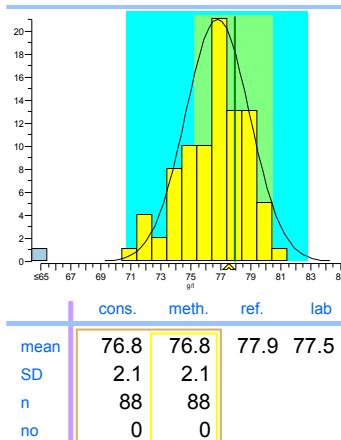
2013.1 C



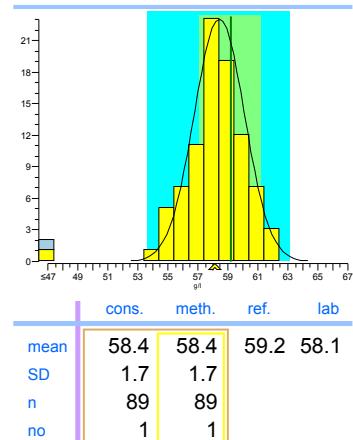
2013.1 D



2013.1 E



2013.1 F



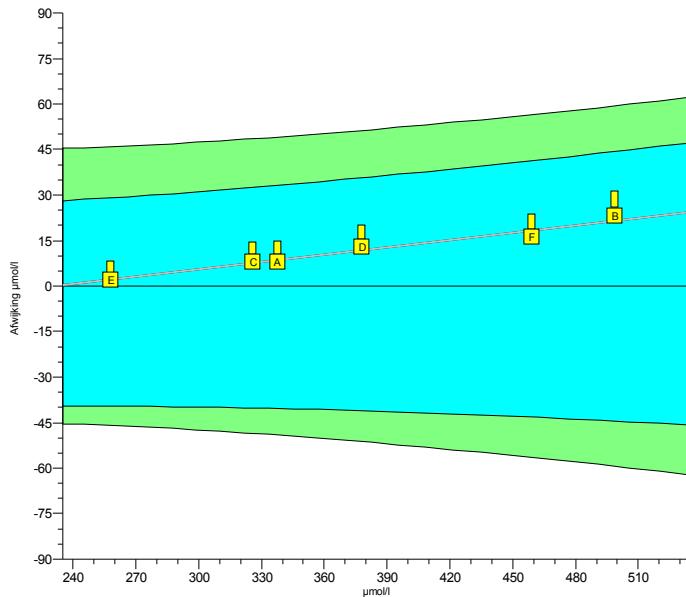
Legend

 Biurete, automatic

 Other methods

INPUTs 2013.1

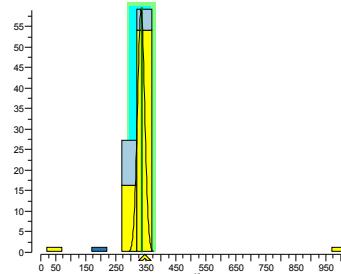
Urate

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

	2013.1	cumulative
Trueness	+3.1%	+3.1%
Precision	0.51%	0.51%
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	$0 + 1.081.x$	$0 + 1.081.x$

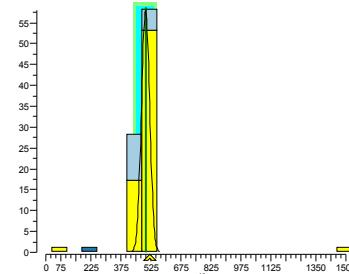
Consensus group: Colorimetrisch
Method: Uricase, colorim., automatic

2013.1 A



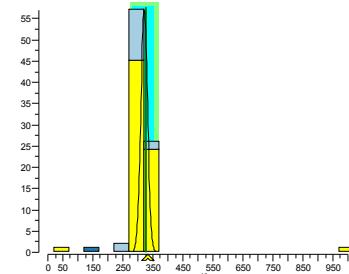
	cons.	meth.	ref.	lab
mean	334	334	0.338	346
SD	12	12		
n	88	72		
no	18	2		

2013.1 B



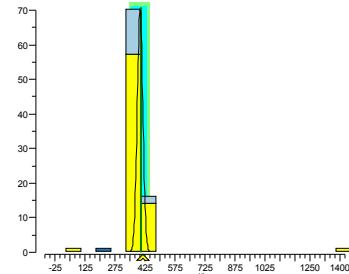
	cons.	meth.	ref.	lab
mean	499	499	0.499	522
SD	20	20		
n	88	72		
no	18	2		

2013.1 C



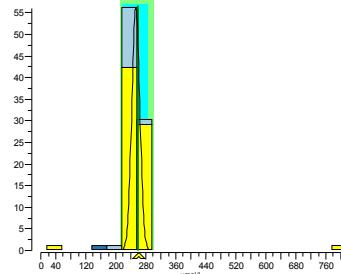
	cons.	meth.	exp.	lab
mean	321	321	0.326	334
SD	11	11		
n	87	71		
no	18	2		

2013.1 D



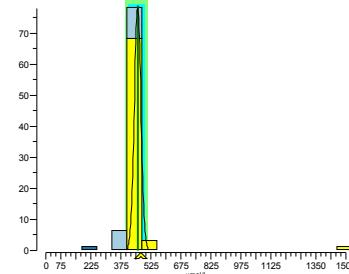
	cons.	meth.	ref.	lab
mean	376	376	0.378	391
SD	14	14		
n	88	73		
no	17	2		

2013.1 E



	cons.	meth.	ref.	lab
mean	253	253	0.258	260
SD	11	11		
n	89	73		
no	18	2		

2013.1 F



	cons.	meth.	ref.	lab
mean	459	459	0.459	475
SD	17	17		
n	88	72		
no	17	1		

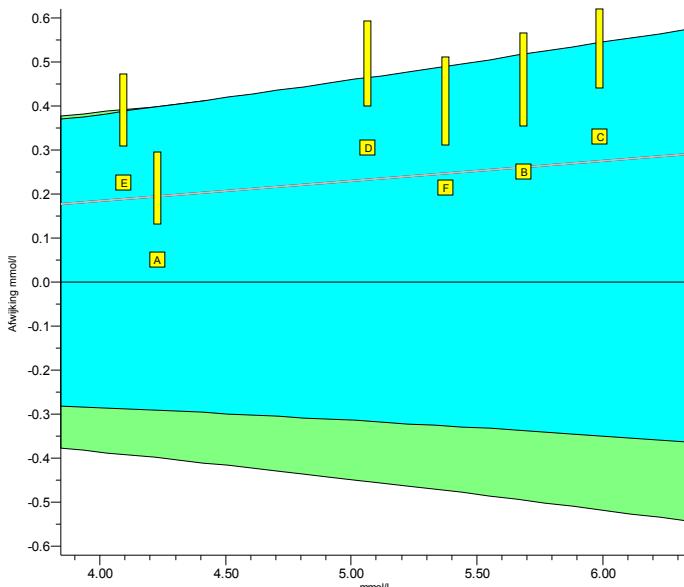
Legend

 Uricase, colorim., automatic	 Uricase, differential UV, automatic	 Oude methoden
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INPUTs 2013.1

Cholesterol

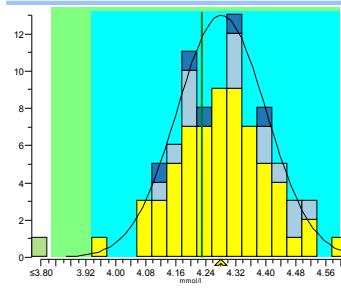
units: mmol/l



	2013.1	cumulative
Trueness	+4.5%	+4.5%
Precision	1.5%	1.5%
Number	6	6
Outliers	0	0
Sigma-TE	3.9	3.9
Sigma-SA	3.0	3.0
Score pictogram		
Regression line	$0.00 + 1.046 \cdot x$	$0.00 + 1.046 \cdot x$

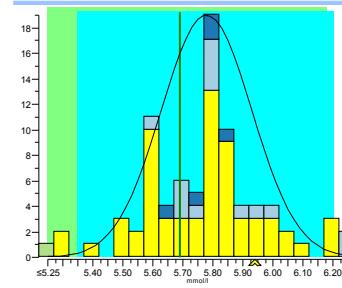
Consensus group: Enzymatisch
Method: Enzymatic, automatic, discrete

2013.1 A



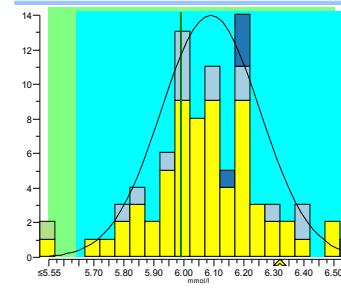
	cons.	meth.	ref.	lab
mean	4.28	4.28	4.230	4.28
SD	0.12	0.12		
n	83	64		
no	0	0		

2013.1 B



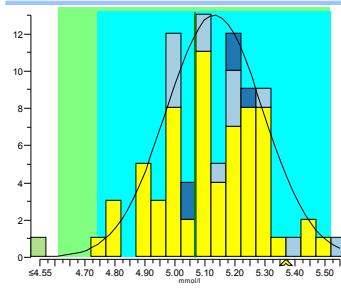
	cons.	meth.	ref.	lab
mean	5.78	5.78	5.689	5.94
SD	0.15	0.18		
n	83	64		
no	4	2		

2013.1 C



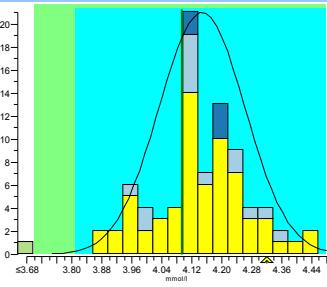
	cons.	meth.	exp.	lab
mean	6.09	6.08	5.99	6.32
SD	0.16	0.17		
n	83	64		
no	1	1		

2013.1 D



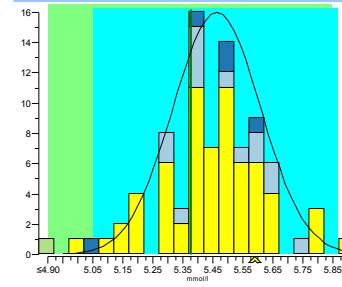
	cons.	meth.	ref.	lab
mean	5.13	5.12	5.066	5.37
SD	0.16	0.17		
n	82	64		
no	0	0		

2013.1 E



	cons.	meth.	ref.	lab
mean	4.15	4.14	4.094	4.32
SD	0.11	0.13		
n	84	65		
no	0	0		

2013.1 F



	cons.	meth.	ref.	lab
mean	5.46	5.45	5.377	5.59
SD	0.15	0.16		
n	84	65		
no	2	2		

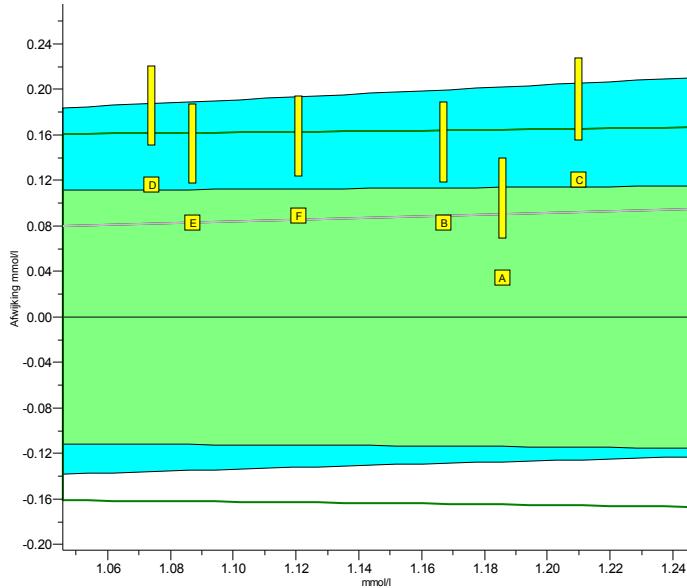
Legend

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

INPUTs 2013.1

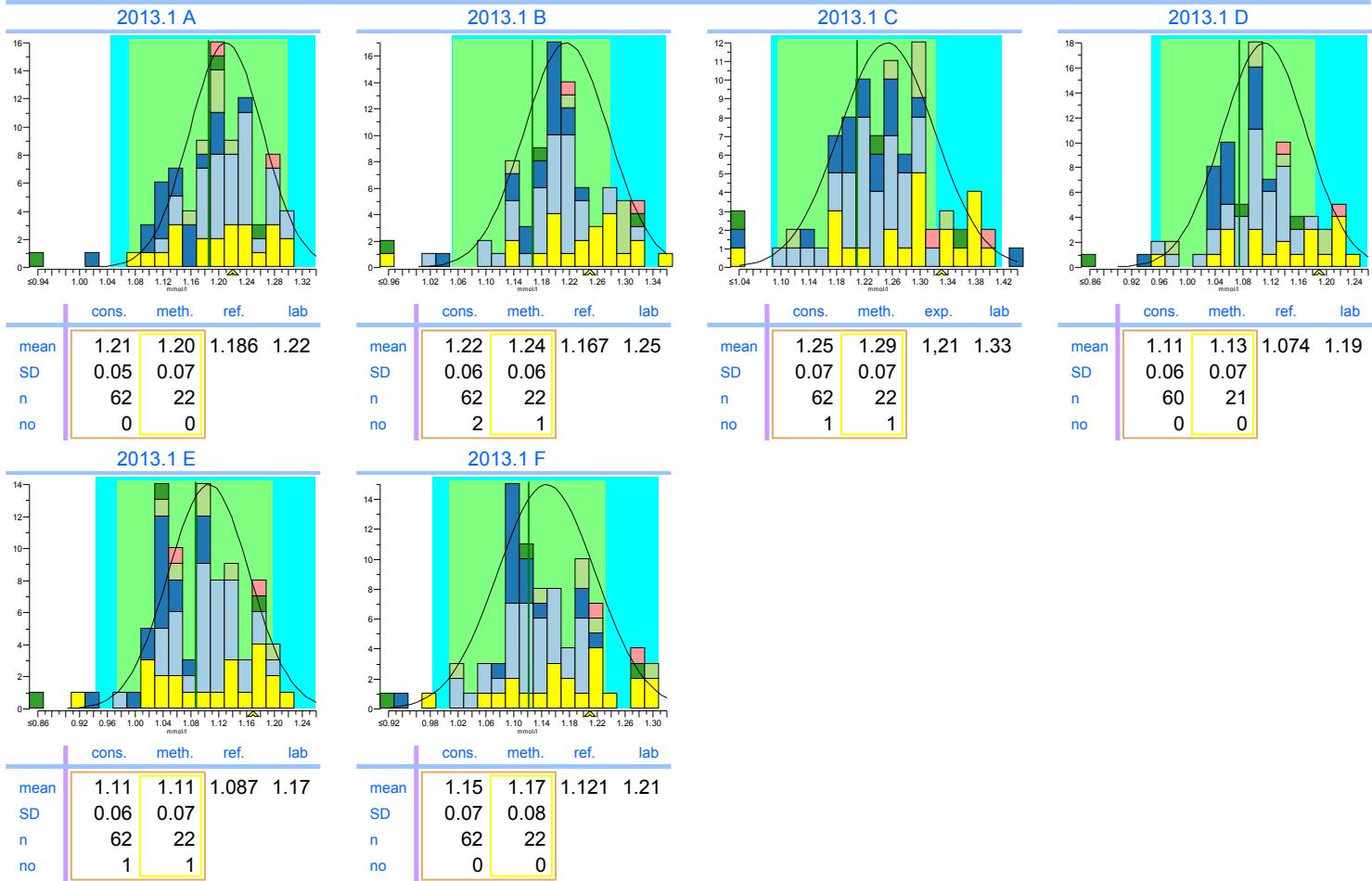
HDL-Cholesterol

units: mmol/l



	2013.1	cumulative
Trueness	+7.7%	+7.7%
Precision	2.4%	2.4%
Number	6	6
Outliers	0	0
Sigma-TE	1.7	1.7
Sigma-SA	3.5	3.5
Score pictogram		
Regression line	$0.00 + 1.076 \cdot x$	$0.00 + 1.076 \cdot x$

Consensus group: Direct
 Method: Accelerator Selective Detergent ("Ultra HDL")



Legend

 Accelerator Selective Detergent ("Ultra HDL")	 PEG modified enzyme, PEGME (Kyowa Medex)	 Immunoinhibition	 Catalase method (Denka Seiken)	 Overige methoden
 Precipitation Technique				