Verein für   medizinische Qualitätskontrolle
Association pour le   contrôle de qualité médical
Associazione per il   controllo di qualità medico

Survey Report

2024 - 1

Survey Specimens

The homogeneity and stability of all specimens were checked before and/or during shipment and no irregularities were noted.
The suitability tests were performed by the laboratories of the Universitätsspital Zürich (University Hospital Zurich) (http://www.uzl.usz.ch/).
The following survey specimens were produced specifically for MQ by a sub-contractor:
B2 Uricult, H4 Parasitic Hematology, K14 tumor marker

Determination of target values

For each target value, the type of determination per ISO17043: 2010 B2.1 is indicated (column "type"):
a   Value known due to production.
b   Certified reference value for use with special specimens
c   Reference value determined by analysis
d   Consensus values of expert laboratories
e   Consensus values of the participants

For methods groups with more than 9 participants, consensus values of the participants ("e") are generally determined.
In order to calculate the target values, we use the mean value of the method group. Values that differ more than 1.5 times the QUALAB-tolerance are outliers and are not used to calculate the target value. Starting point for the elimination of outliers are the values of our suitability tests.
In order to provide all participants with target values that are as meaningful as possible, other methods may also be applied for smaller method groups.

Uncertainty of the determined target values
The standard uncertainty (u_x) is calculated using the following formula (ISO13528):
ux = (target value/100) * (1.25/square root of "number of participants") * %CV
- ux has the same unit as the target value
- ux can be compared with the standard deviation of the participants' collective (SD=target value*%CV/100)
- For participant numbers >18, the standard uncertainty (ux) is significantly lower than the scatter of the collective participants and can be neglected.

QUALAB and MQ tolerances

For all mandatory analyzes, QUALAB tolerances are used (www.qualab.ch, external quality control). For non-mandatory analyzes, the tolerances are specified by MQ's survey specimen leader.

If the determined uncertainty, ux, of the target value is greater than 15% of the QUALAB or MQ tolerance, the letter indicating the type of target detection is marked with an additional star (example "e*"). Thereby, we are alerting the participants to the fact that the uncertainty of the target value can have an impact on the evaluation.

Graphics

The results are shown graphically as follows:
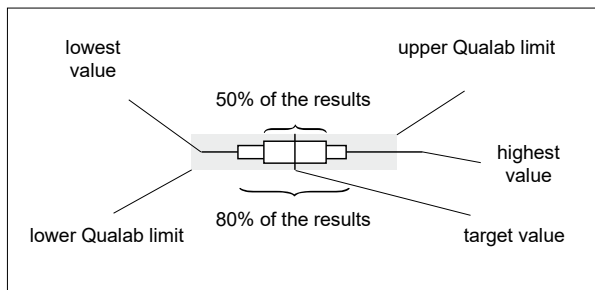
Comparison of Devices
The data in this report allows you to compare the performance of different devices. However, remember to consider the following:
- The chemical control K1 is a ready-to-use commercial control serum. Even if the specimen is of human origin, it is possible that matrix effects occur. These are device-specific and result in different target values.
- Only one specimen was measured. Since the scatter of the results is dependent on the nature of the specimen (matrix effects) and on the signal strength, the determined coefficient of variations (CV in %) cannot be applied generally.
- A large number of runaways is due to administrative errors (wrong unit, results mixed up) or to operator errors (wrong sample, not correctly taken up in solution, not mixed well) and has nothing to do with the type of device.
.

Zürich, 3.4.2024

Dr. R. Fried
Survey Director

INR

1.20   1.32   1.44   1.56   1.68   1.80   1.92   2.04   2.16   2.28   2.40
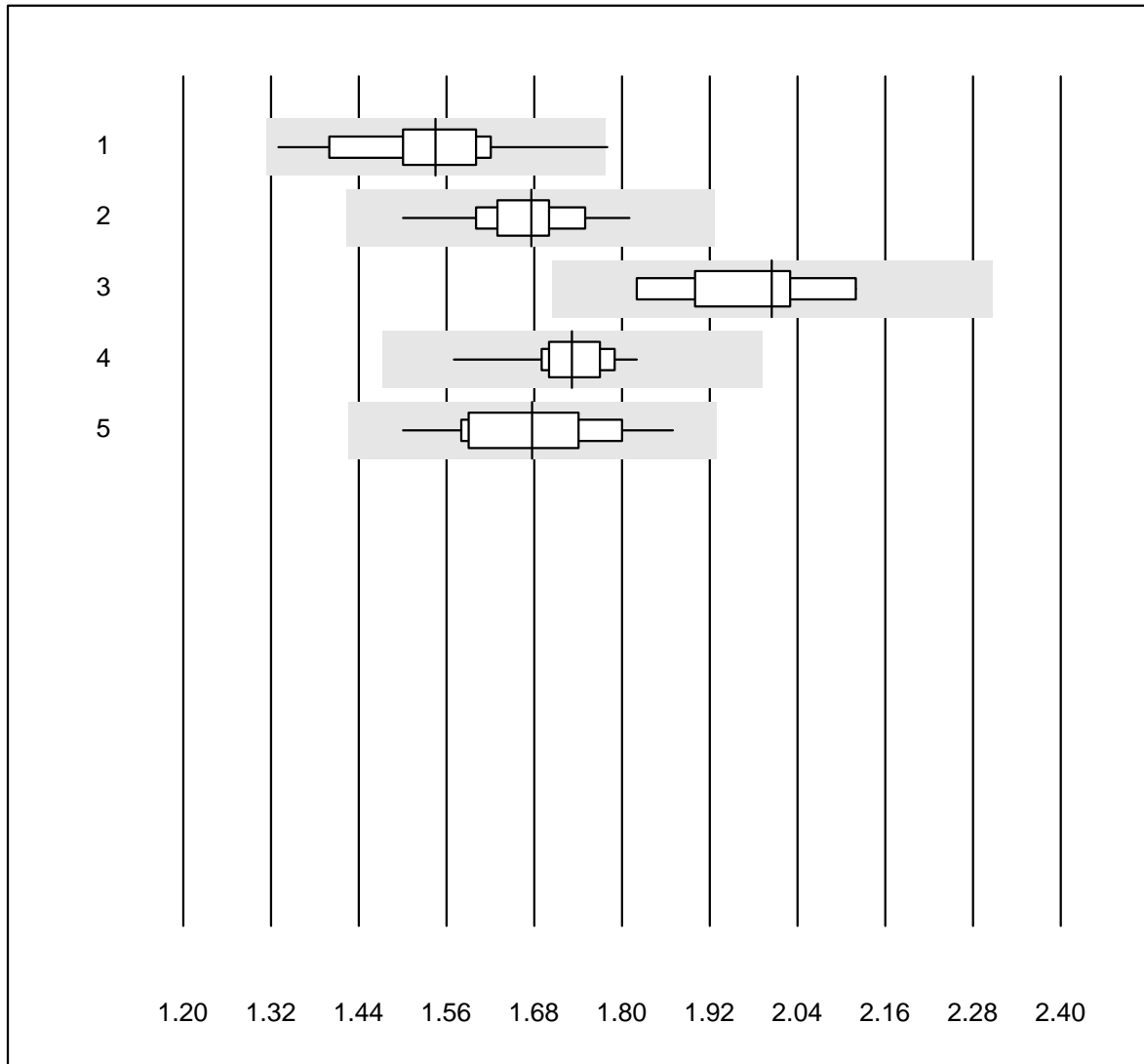
QUALAB tolerance : 15 %   INR ()

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Innovin	16	93.7	6.3	0.0	1.55	6.5	e
2	Neoplastin R	16	100.0	0.0	0.0	1.68	4.3	e
3	Neoplastin Plus	8	100.0	0.0	0.0	2.01	5.1	e
4	Recombiplastin 2G	11	100.0	0.0	0.0	1.73	3.9	e
5	Other methods	14	100.0	0.0	0.0	1.68	6.0	e

3 additional results were submitted but not published because the method groups were too small. (< results per group)

Fibrinogen OA
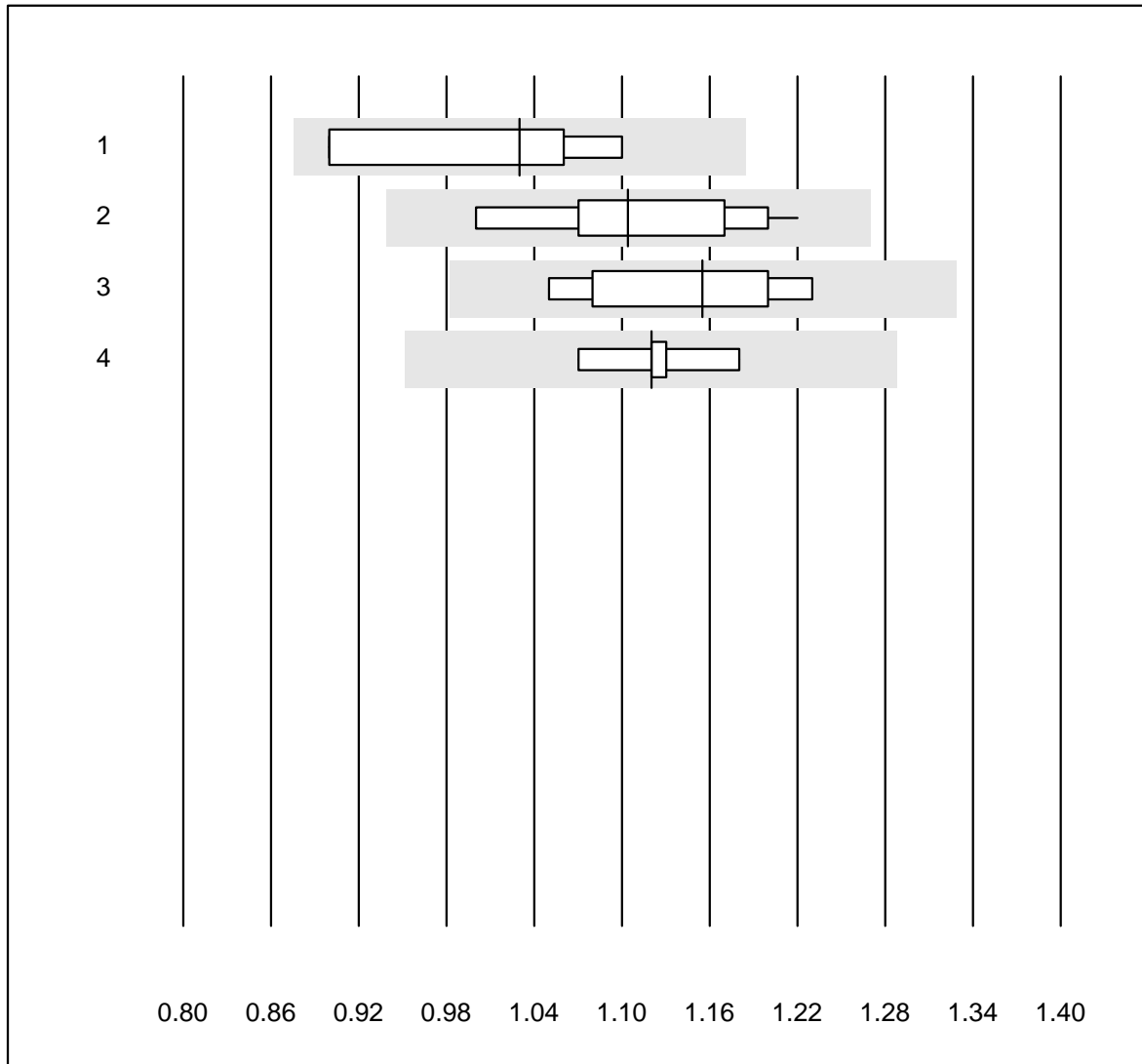
QUALAB tolerance : 15 % Fibrinogen OA (g/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Siemens Thrombin	8	100.0	0.0	0.0	1.03	8.7	e*
2	Stago/STA	19	100.0	0.0	0.0	1.10	6.1	e
3	Fibrinogen Q.F.A.	8	100.0	0.0	0.0	1.16	6.1	e*
4	Other methods	6	100.0	0.0	0.0	1.12	3.1	e

4 additional results were submitted but not published because the method groups were too small. (< results per group)

Activated Prothrombin Time
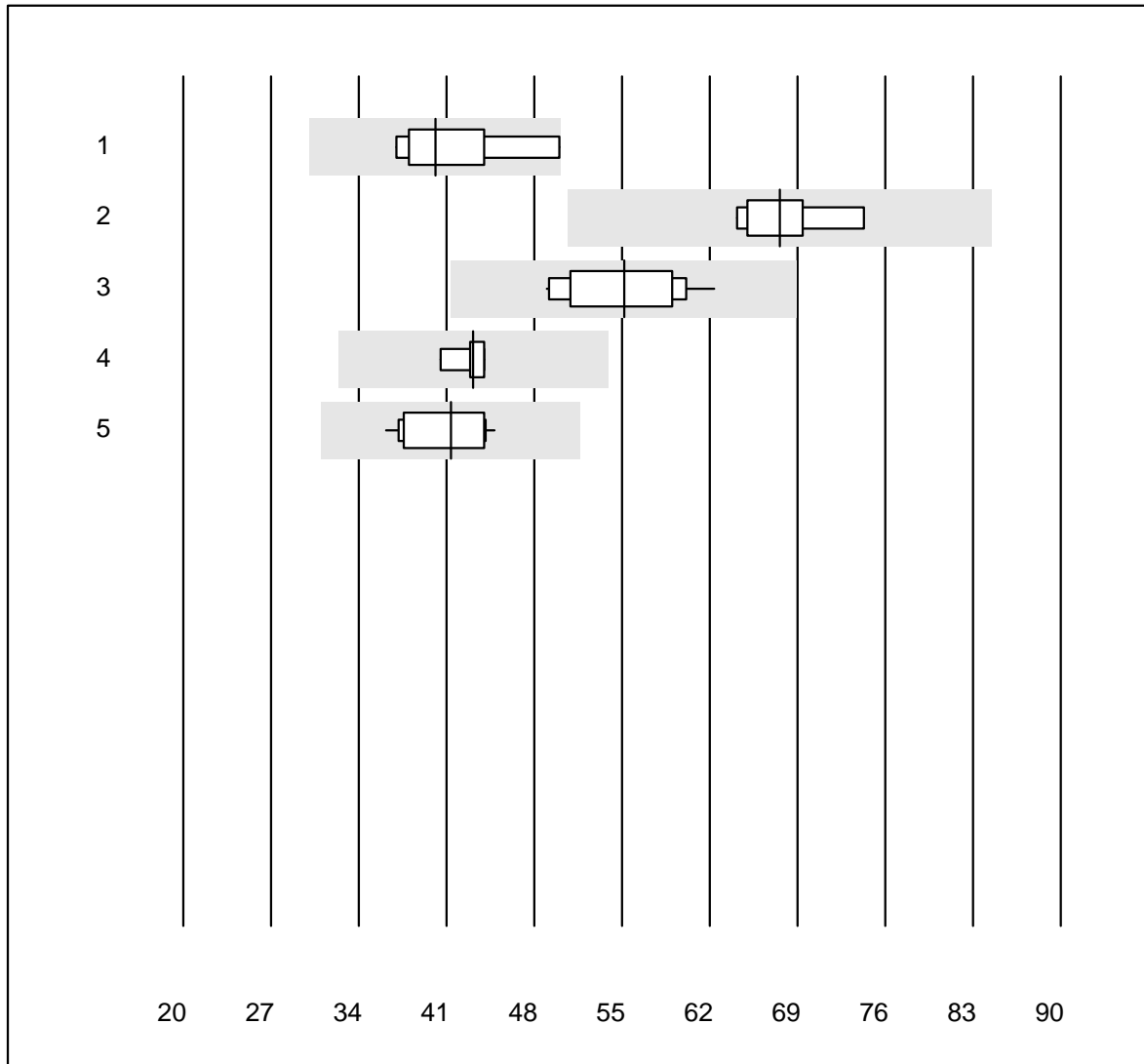

QUALAB tolerance : 25 %   Activated Prothrombin Time (Sek)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Actin FS	7	100.0	0.0	0.0	40.1	10.8	e*
2	Pathromtin SL	7	100.0	0.0	0.0	67.6	5.0	e
3	Stago/STA	22	100.0	0.0	0.0	55.2	7.8	e
4	aPTT-SP	7	100.0	0.0	0.0	43.1	2.8	e
5	Other methods	11	100.0	0.0	0.0	41.3	8.0	e

INR CoaguChek

| | 2.00 | 2.15 | 2.30 | 2.45 | 2.60 | 2.75 | 2.90 | 3.05 | 3.20 | 3.35 | 3.50 |
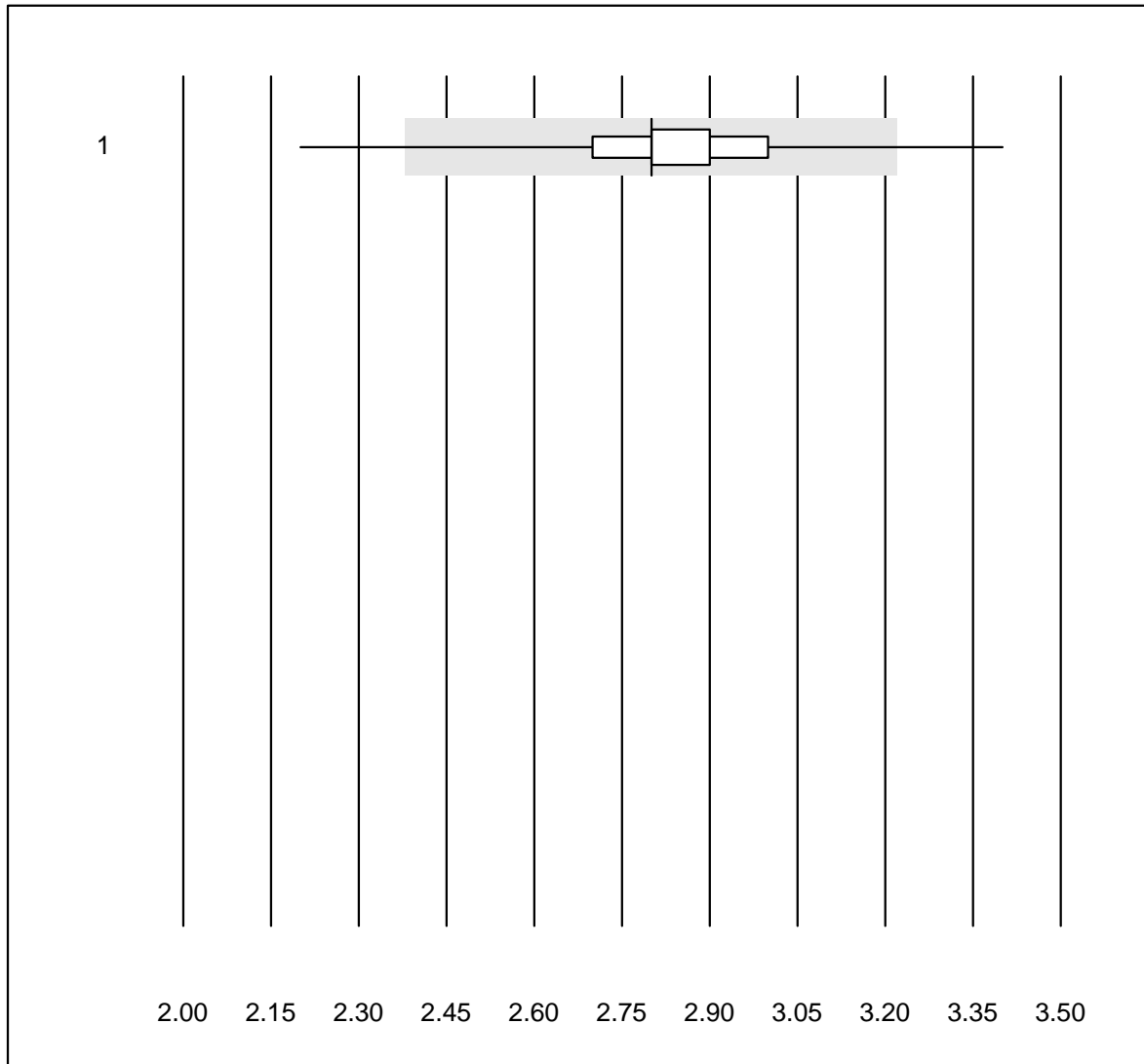
QUALAB tolerance : 15 %   INR CoaguChek ()

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	CoaguChek Pro II	844	98.9	0.6	0.5	2.8	4.3	e

Prothrombin time NT
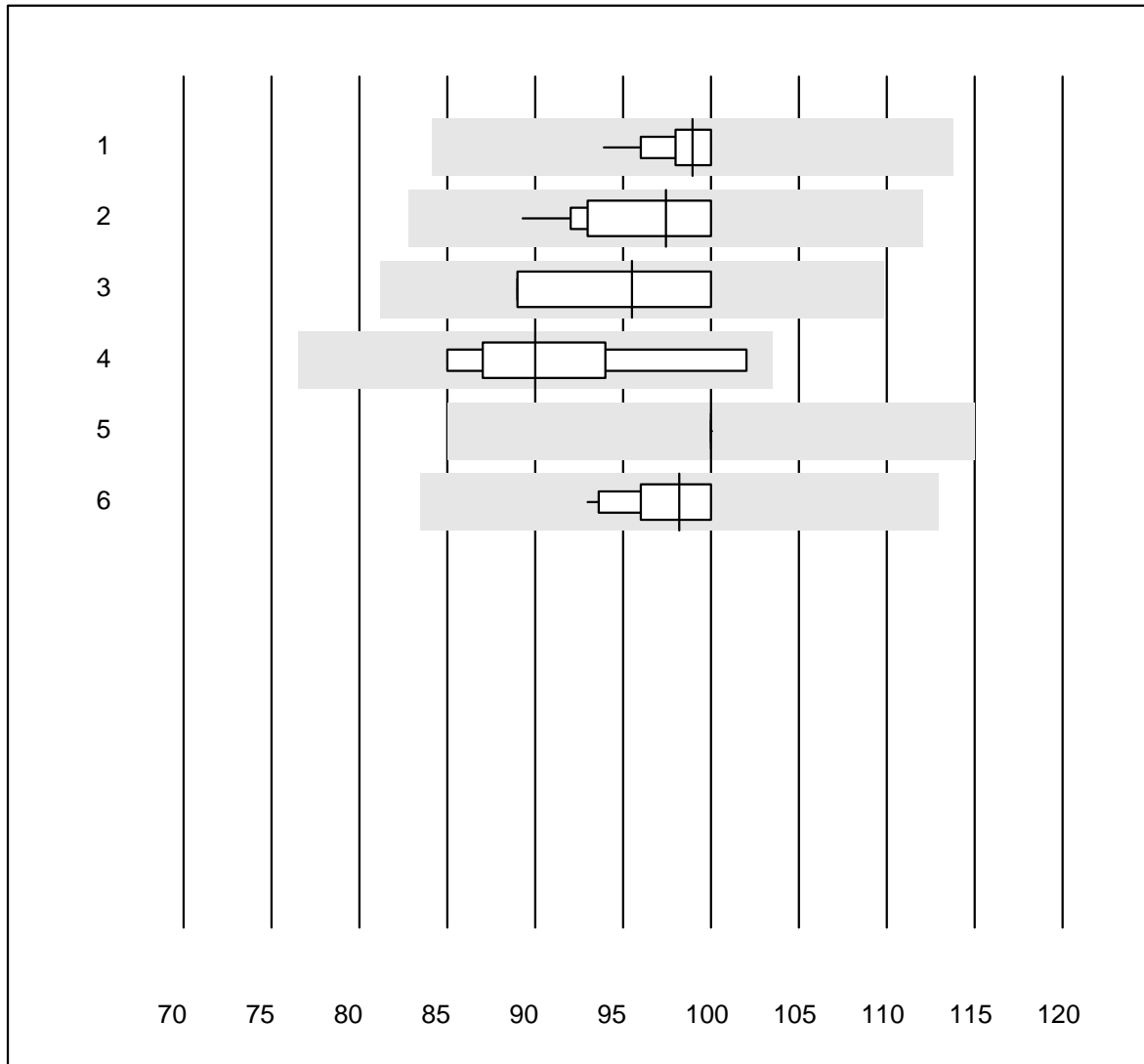
QUALAB tolerance : 15 %

Prothrombin time NT (%)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Innovin	12	100.0	0.0	0.0	99	2.0	e
2	Neoplastin R	12	100.0	0.0	0.0	97	3.9	e
3	Neoplastin Plus	4	100.0	0.0	0.0	96	6.1	e*
4	STA-NeoPTimal	7	100.0	0.0	0.0	90	6.1	e*
5	Recombiplastin 2G	11	100.0	0.0	0.0	100	0.0	e
6	Other methods	15	100.0	0.0	0.0	98	2.6	e

Fibrinogen N
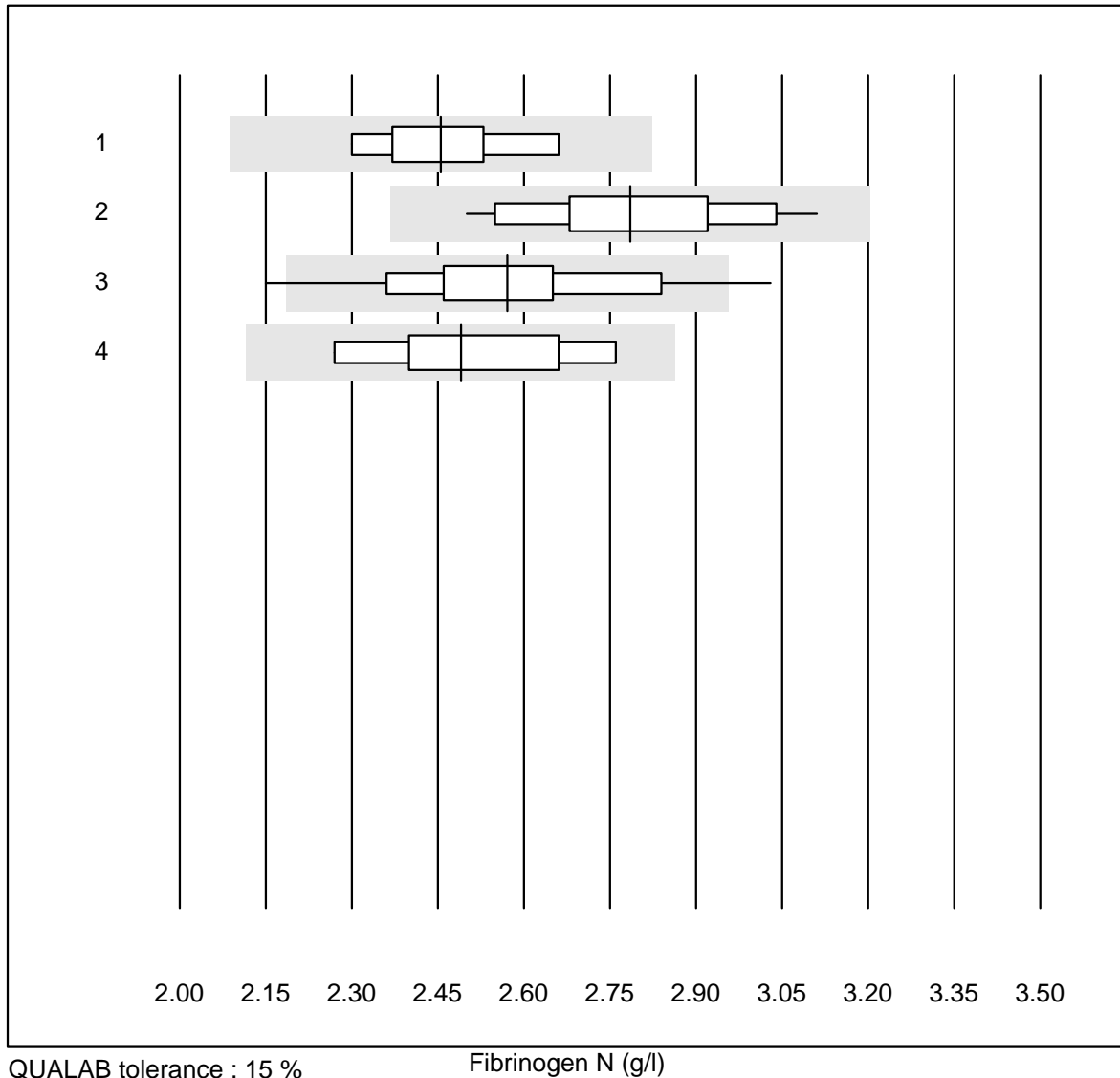
QUALAB tolerance : 15 %   Fibrinogen N (g/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Siemens Thrombin	8	100.0	0.0	0.0	2.46	5.1	e*
2	Stago/STA	18	100.0	0.0	0.0	2.79	6.3	e
3	Fibrinogen Q.F.A.	15	80.0	13.3	6.7	2.57	8.2	e*
4	Fib Clauss (IL)	5	100.0	0.0	0.0	2.49	7.8	e*

5 additional results were submitted but not published because the method groups were too small. (< results per group)

Faktor V

70   76   82   88   94   100   106   112   118   124   130
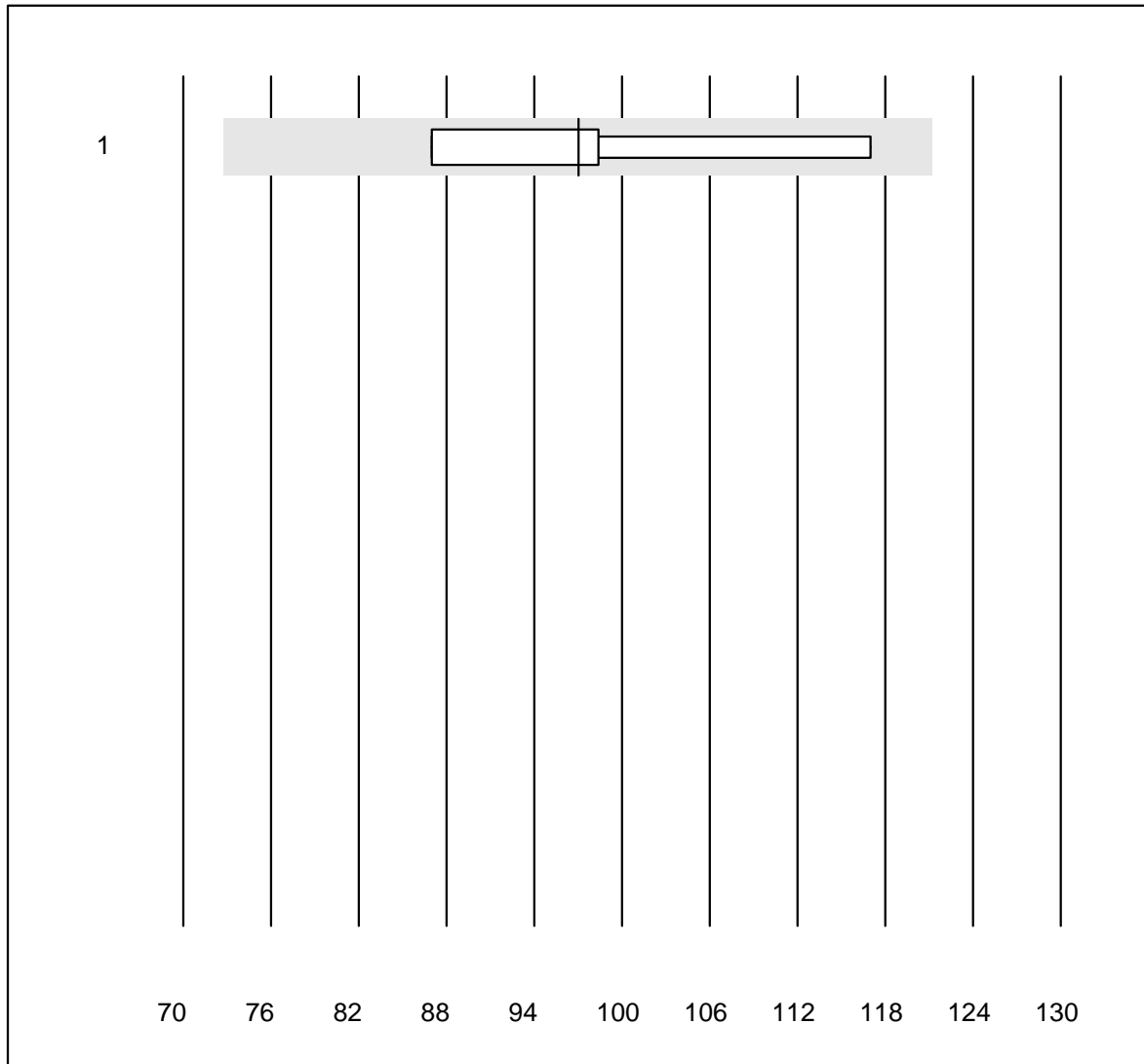
MQ tolerance : 25 %   Faktor V (%)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	all Participants	8	100.0	0.0	0.0	97.0	11.1	e*

aPTT N

QUALAB tolerance : 25 %   aPTT N (Sek)
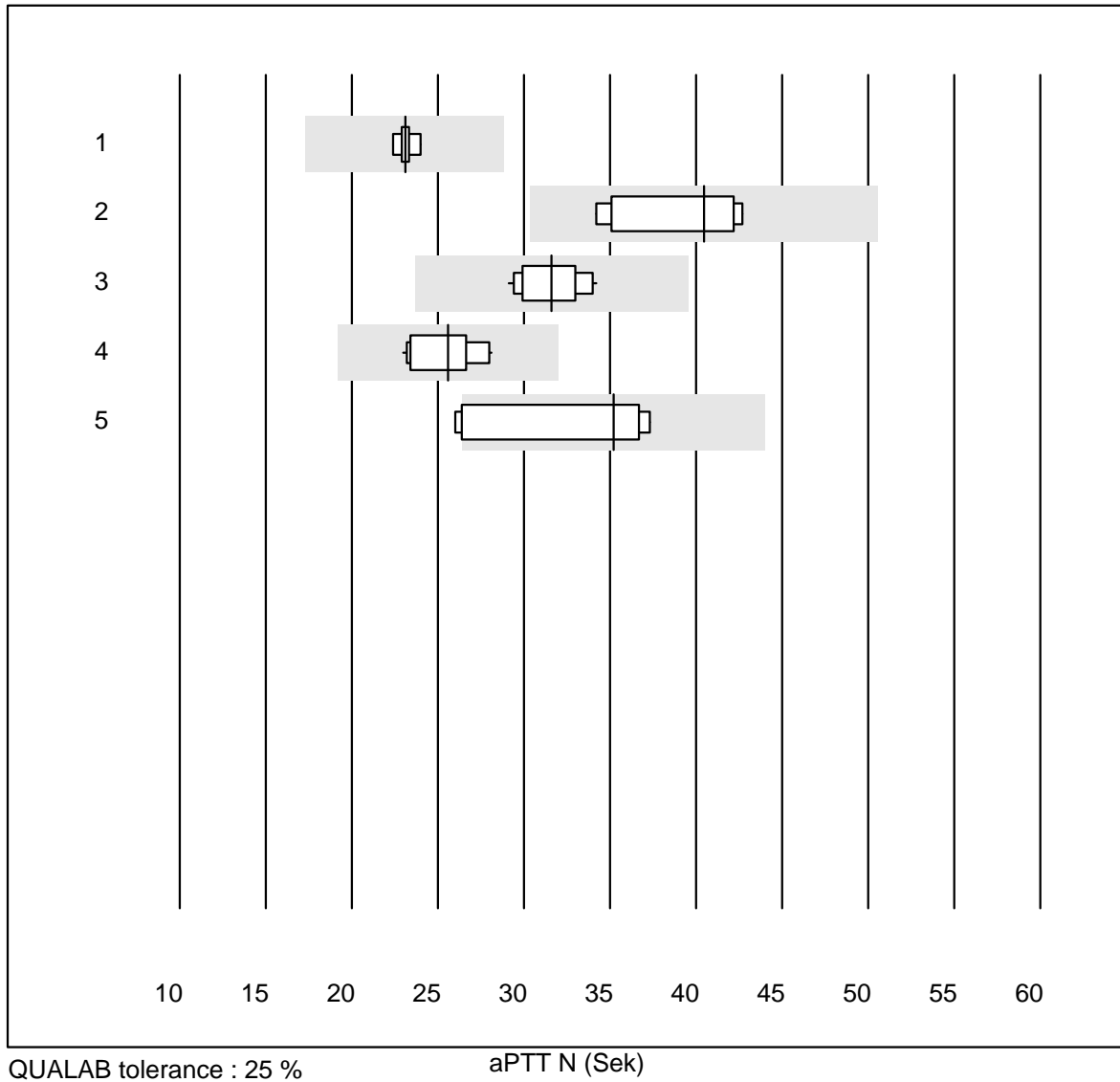
No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Actin FS	9	100.0	0.0	0.0	23.1	2.0	e
2	Pathromtin SL	6	100.0	0.0	0.0	40.5	9.4	e*
3	Stago/STA	20	100.0	0.0	0.0	31.6	5.9	e
4	aPTT-SP	12	100.0	0.0	0.0	25.6	6.8	e
5	Other methods	8	75.0	25.0	0.0	35.2	15.5	e*

Faktor VII
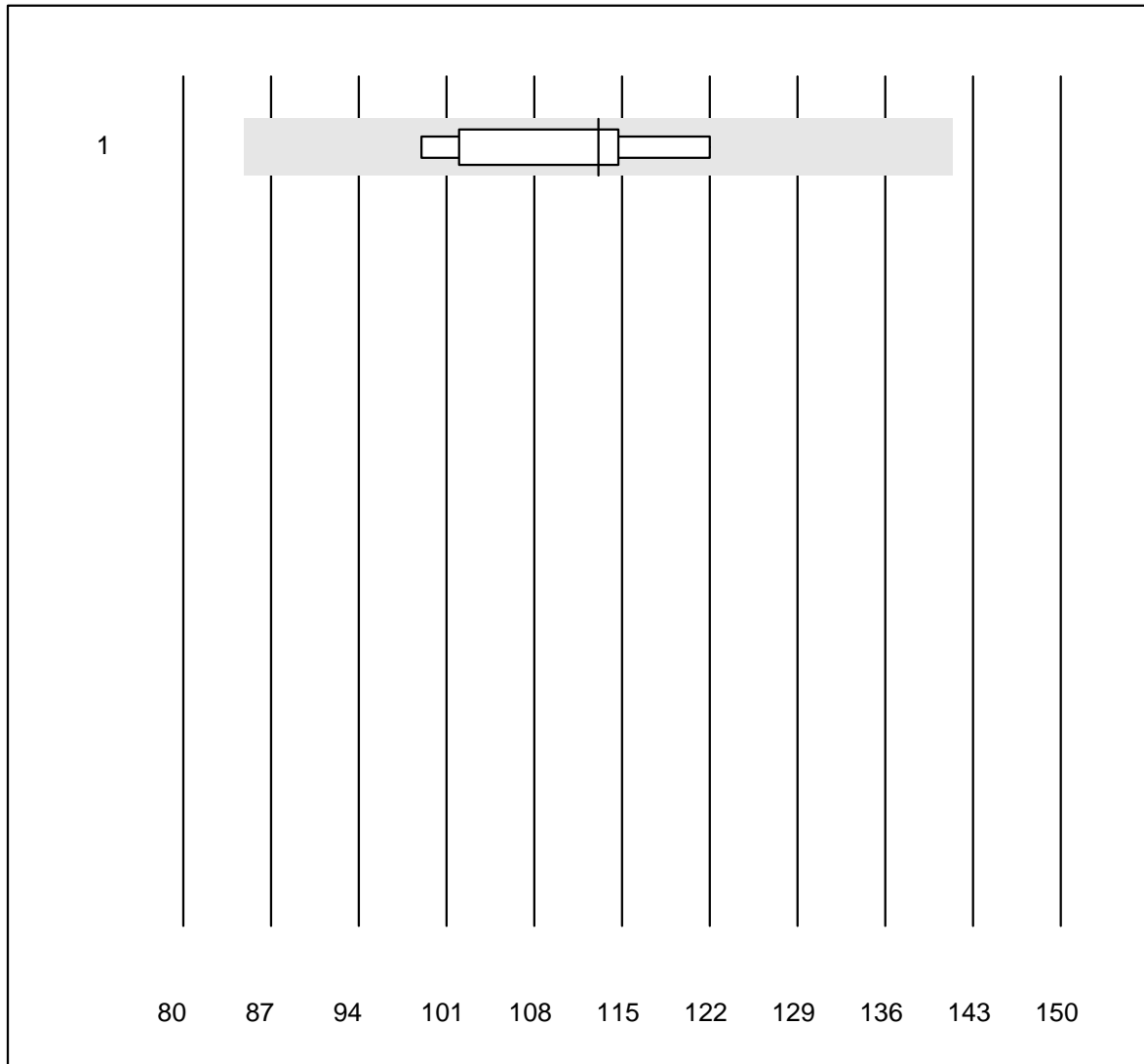
MQ tolerance : 25 %

Faktor VII (%)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	all Participants	5	100.0	0.0	0.0	113.1	8.6	e*

Prothrombin time HT
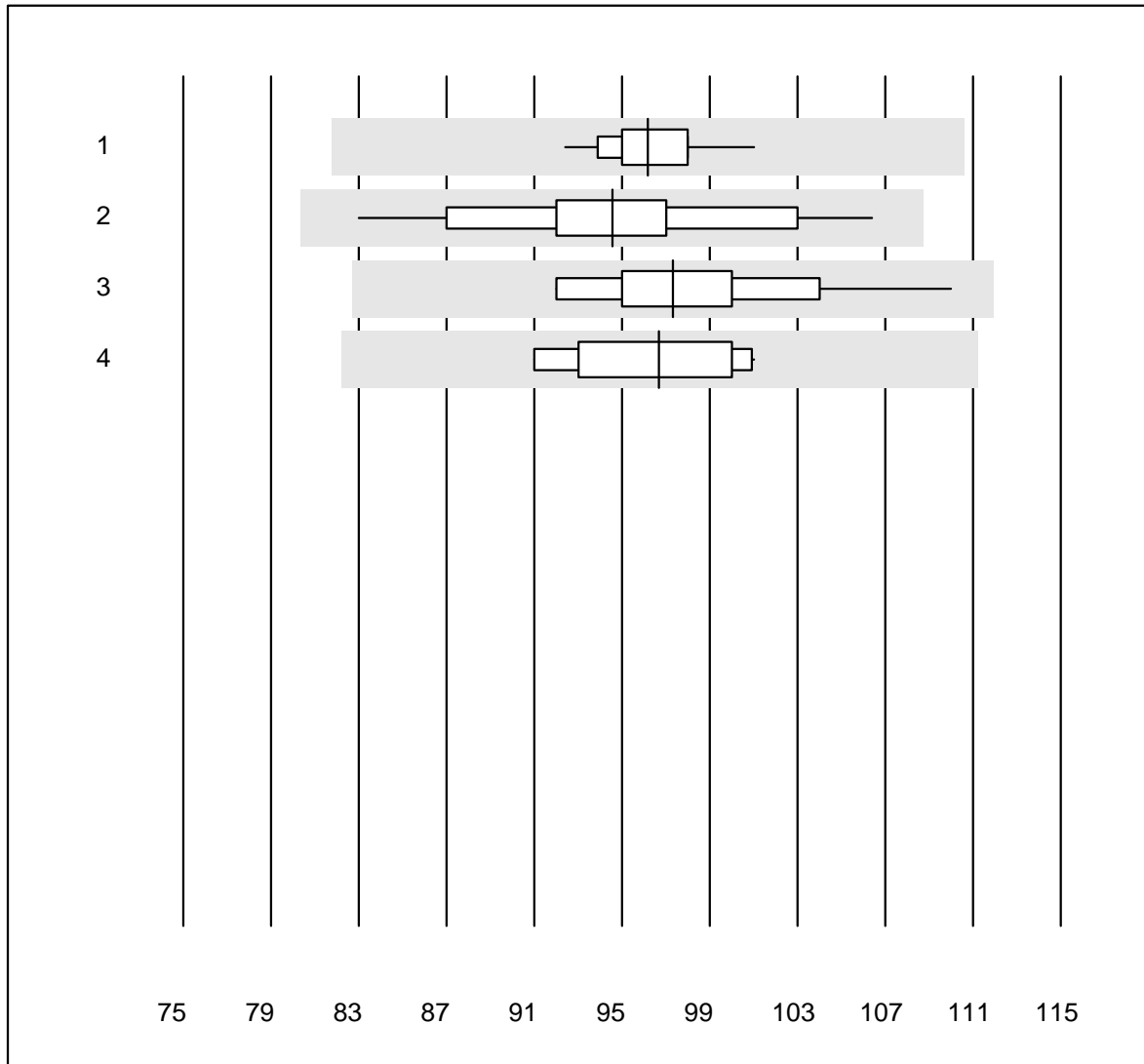
QUALAB tolerance : 15 %   Prothrombin time HT (%)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Innovin	13	100.0	0.0	0.0	96	2.3	e
2	Neoplastin R	13	100.0	0.0	0.0	95	6.5	e*
3	Recombiplastin 2G	13	100.0	0.0	0.0	97	5.3	e
4	Other methods	10	100.0	0.0	0.0	97	4.0	e

3 additional results were submitted but not published because the method groups were too small. (< results per group)

Anti-FXa (unfrakt-Heparin)
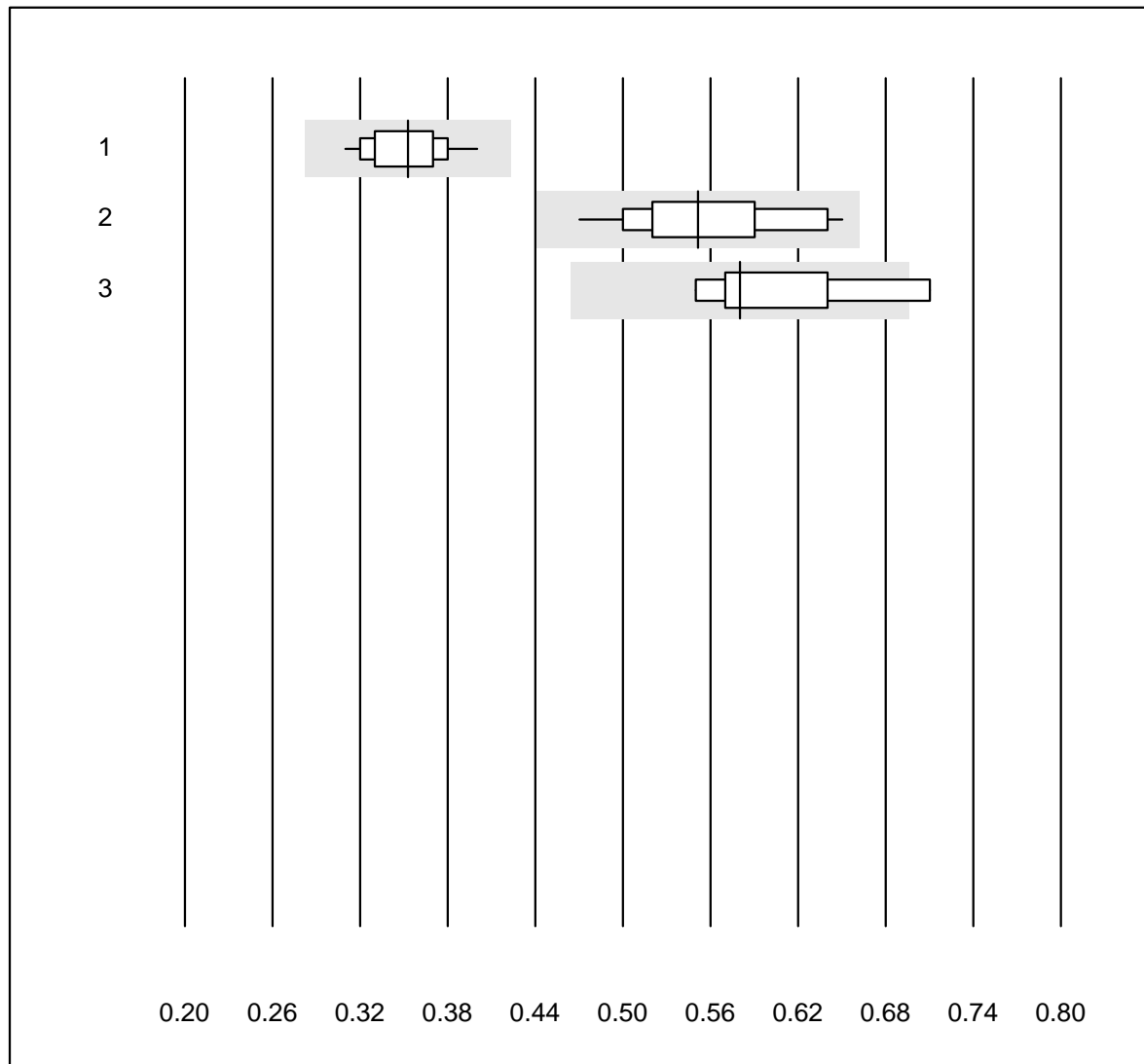
MQ tolerance : 20 %   Anti-FXa (unfrakt-Heparin) (IU/ml)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Stago/STA	11	100.0	0.0	0.0	0.35	7.5	e
2	ACL	26	100.0	0.0	0.0	0.55	9.0	e
3	Other methods	9	88.9	11.1	0.0	0.58	9.6	e*

Fibrinogen H

QUALAB tolerance : 15 %

Fibrinogen H (g/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Siemens Thrombin	4	100.0	0.0	0.0	3.26	8.4	e*
2	Stago/STA	14	100.0	0.0	0.0	3.40	5.3	e
3	Fibrinogen Q.F.A.	15	93.3	0.0	6.7	3.37	7.8	e*
4	Other methods	9	100.0	0.0	0.0	3.25	6.5	e*

4 additional results were submitted but not published because the method groups were too small. (< results per group)

aPTT H

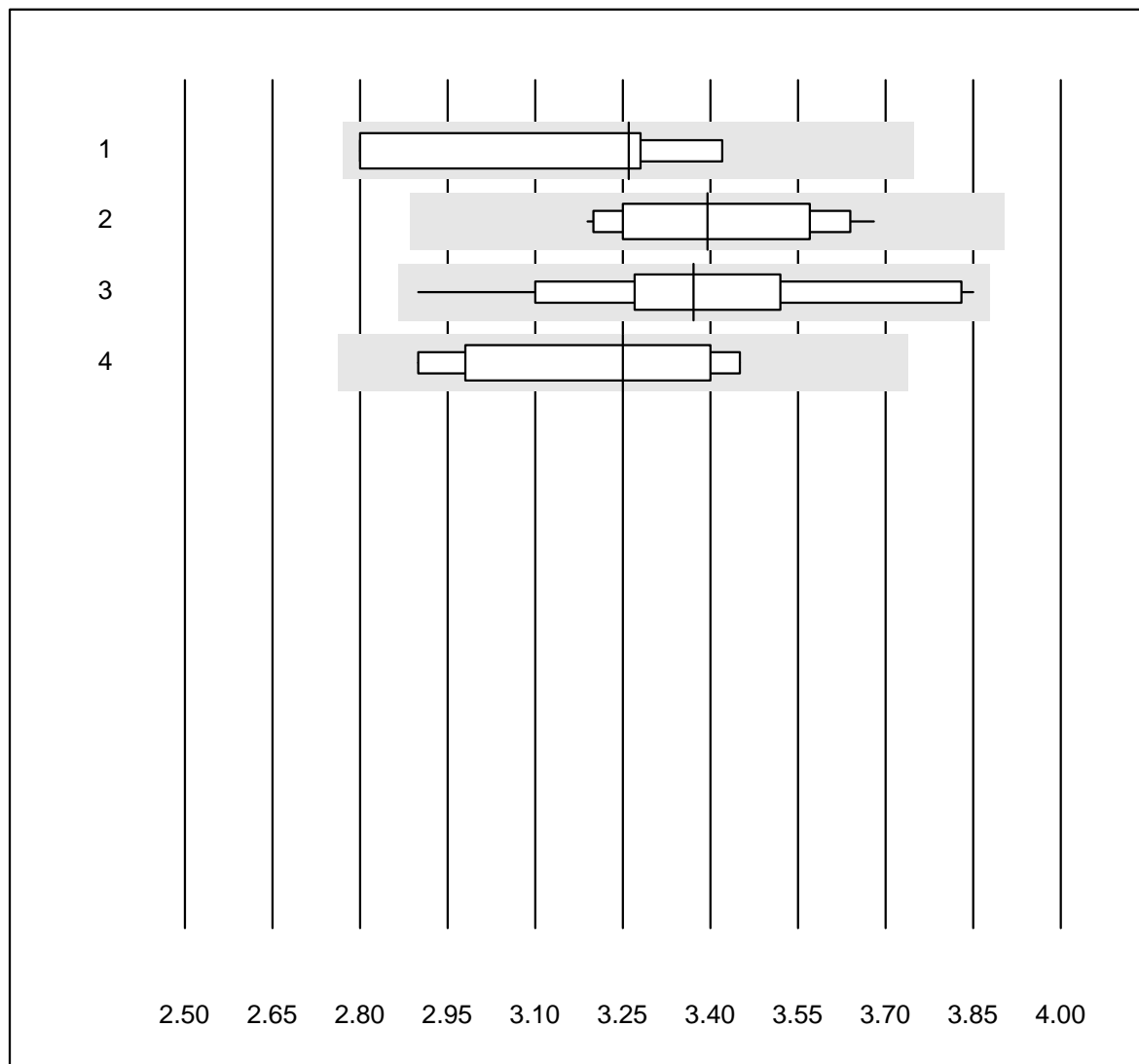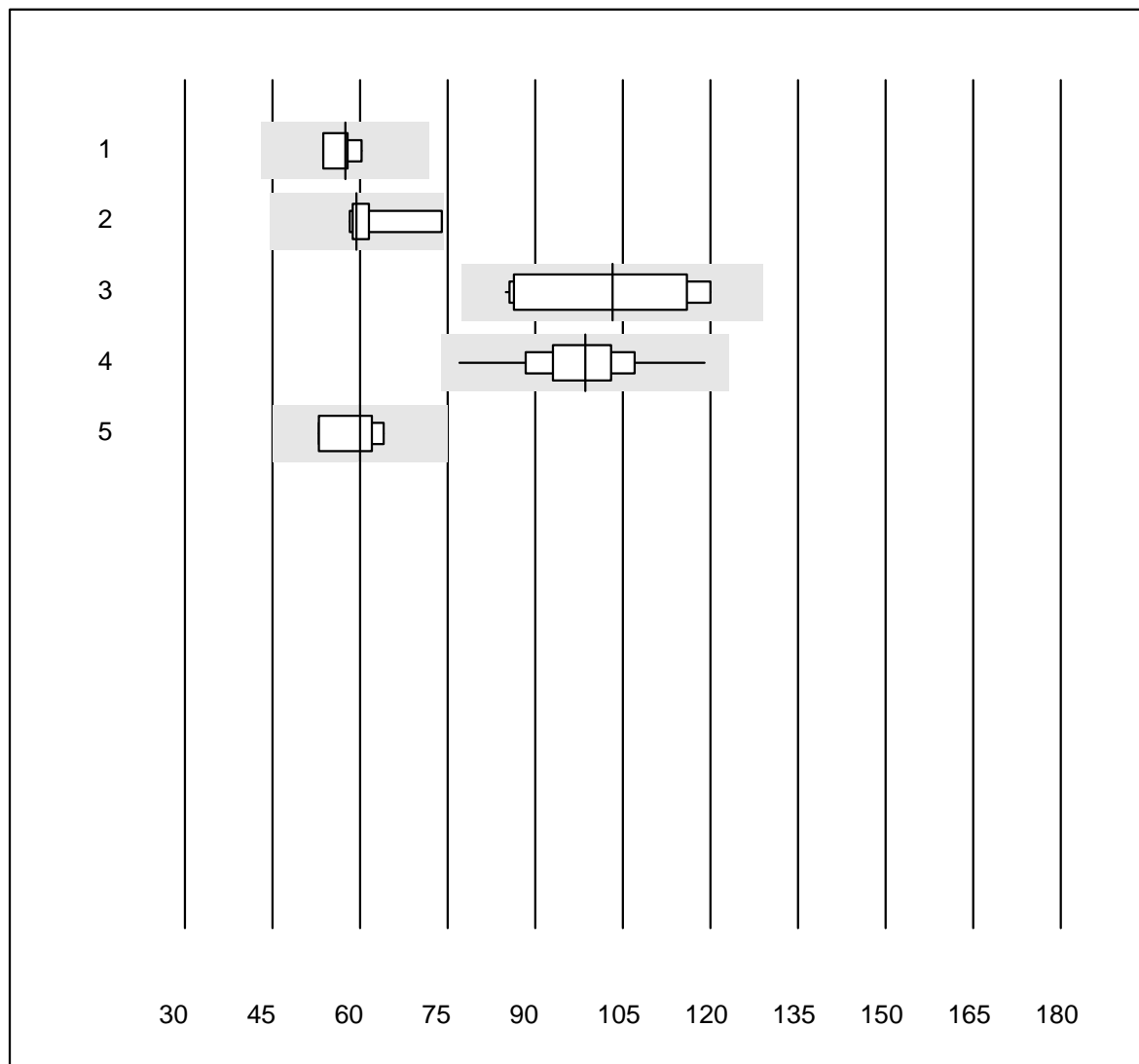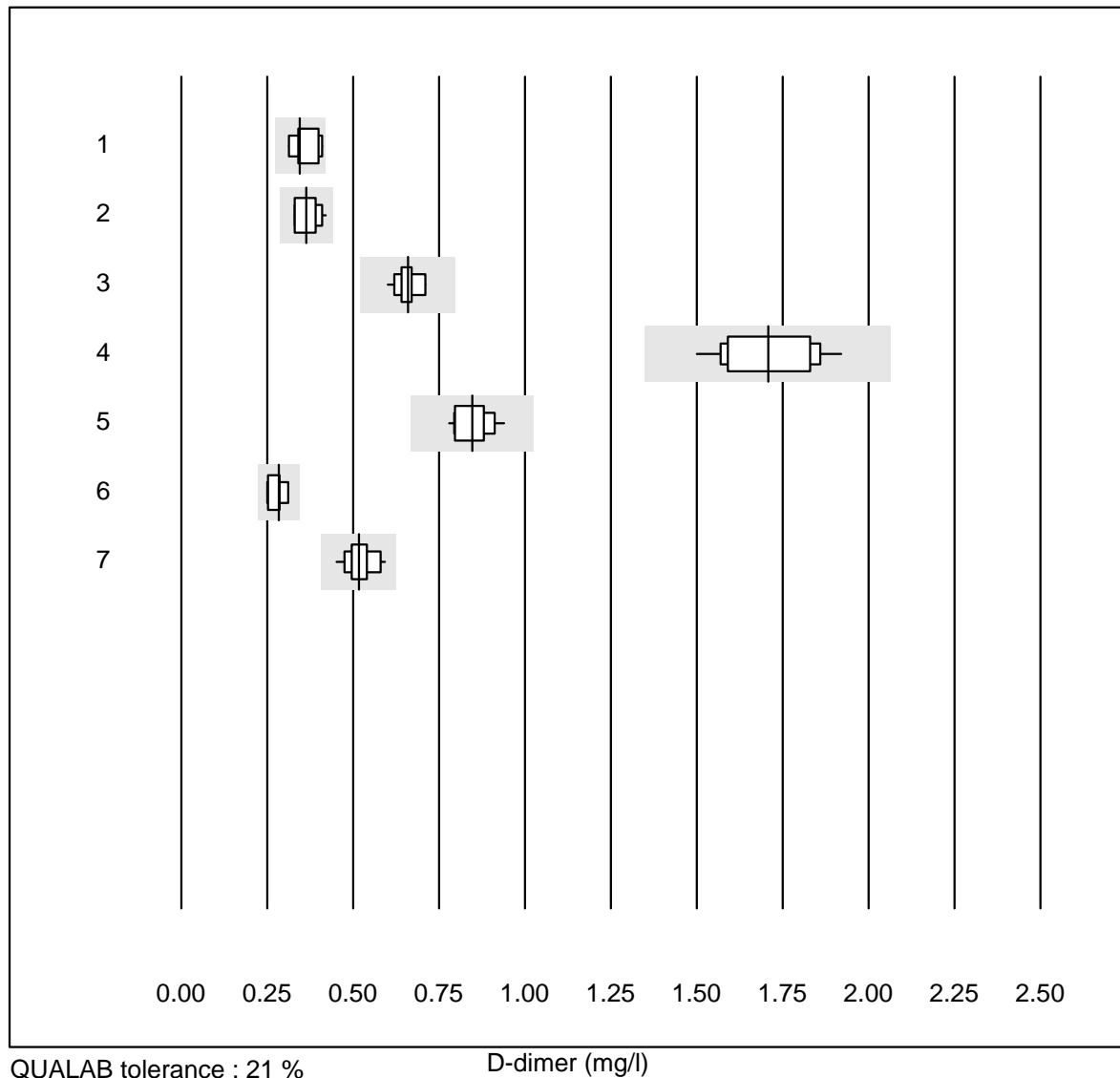QUALAB tolerance : 25 %   aPTT H (Sek)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Actin FS	4	100.0	0.0	0.0	57.5	4.7	e
2	Actin FSL	5	100.0	0.0	0.0	59.4	10.6	e*
3	Stago/STA	13	100.0	0.0	0.0	103.3	14.3	e*
4	aPTT-SP	16	100.0	0.0	0.0	98.5	9.5	e
5	Other methods	4	100.0	0.0	0.0	60.0	8.2	e*

3 additional results were submitted but not published because the method groups were too small. (< results per group)
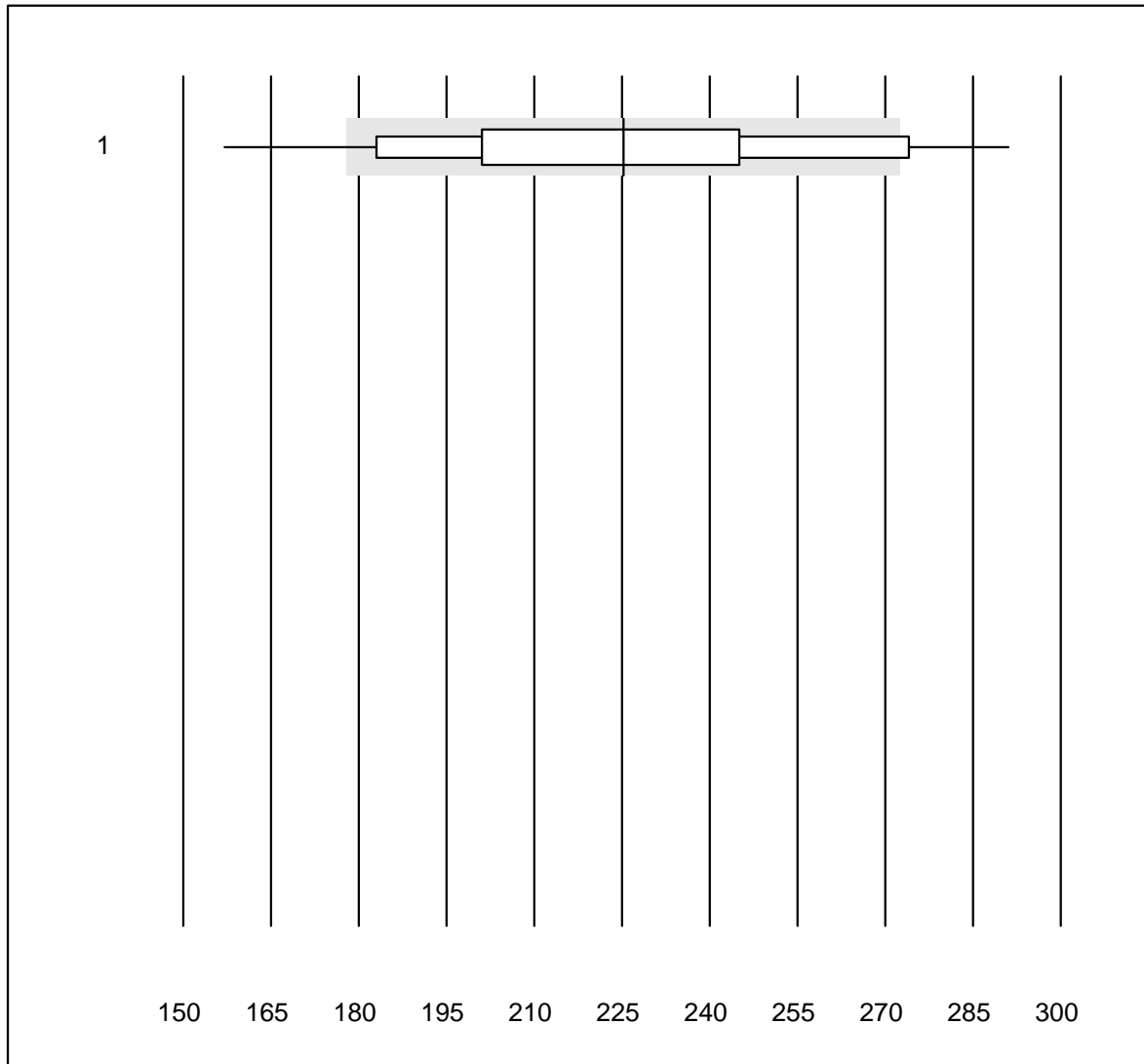
D-dimer

QUALAB tolerance : 21 %

D-dimer (mg/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Roche (Zitratplasma)	6	83.3	0.0	16.7	0.35	11.4	e*
2	STA Liatest	16	81.2	0.0	18.8	0.36	8.8	e
3	Siemens Innovance	13	100.0	0.0	0.0	0.66	5.0	e
4	Pathfast	24	100.0	0.0	0.0	1.71	7.0	e
5	ACL	16	100.0	0.0	0.0	0.85	5.9	e
6	AQT 90 FLEX	6	100.0	0.0	0.0	0.28	8.4	e*
7	VIDAS	17	100.0	0.0	0.0	0.52	7.1	e

5 additional results were submitted but not published because the method groups were too small. (< results per group)

D-Dimer Triage

1

150   165   180   195   210   225   240   255   270   285   300

QUALAB tolerance : 21 %   D-Dimer Triage (ng/ml)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Triage	133	81.2	14.3	4.5	225.24	14.0	e

D-dimer qn AFIAS

0.300 0.335 0.370 0.405 0.440 0.475 0.510 0.545 0.580 0.615 0.650
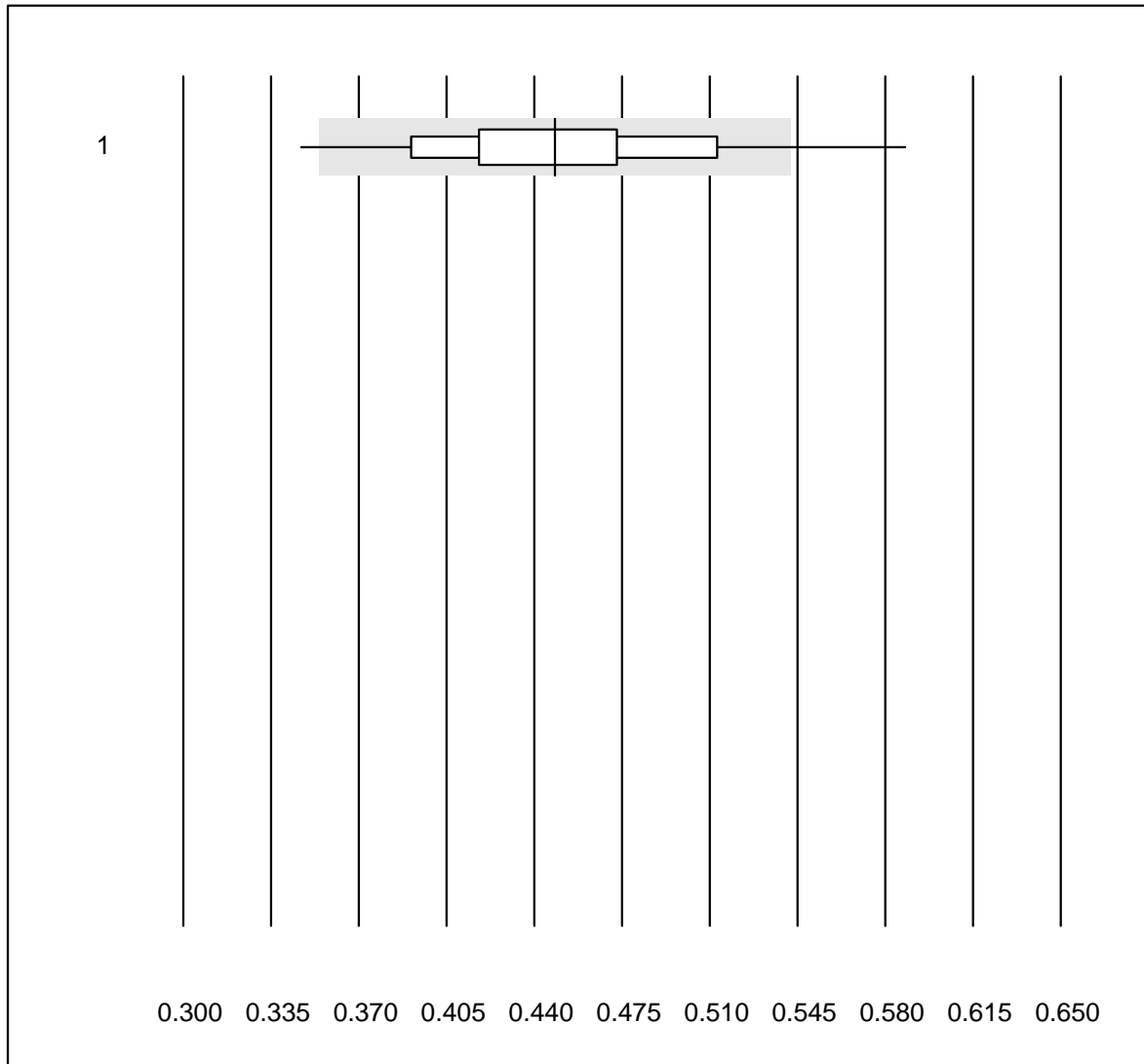
QUALAB tolerance : 21 %   D-dimer qn AFIAS (mg/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	AFIAS	370	82.7	4.3	13.0	0.45	10.4	e

CoaguChek APTT
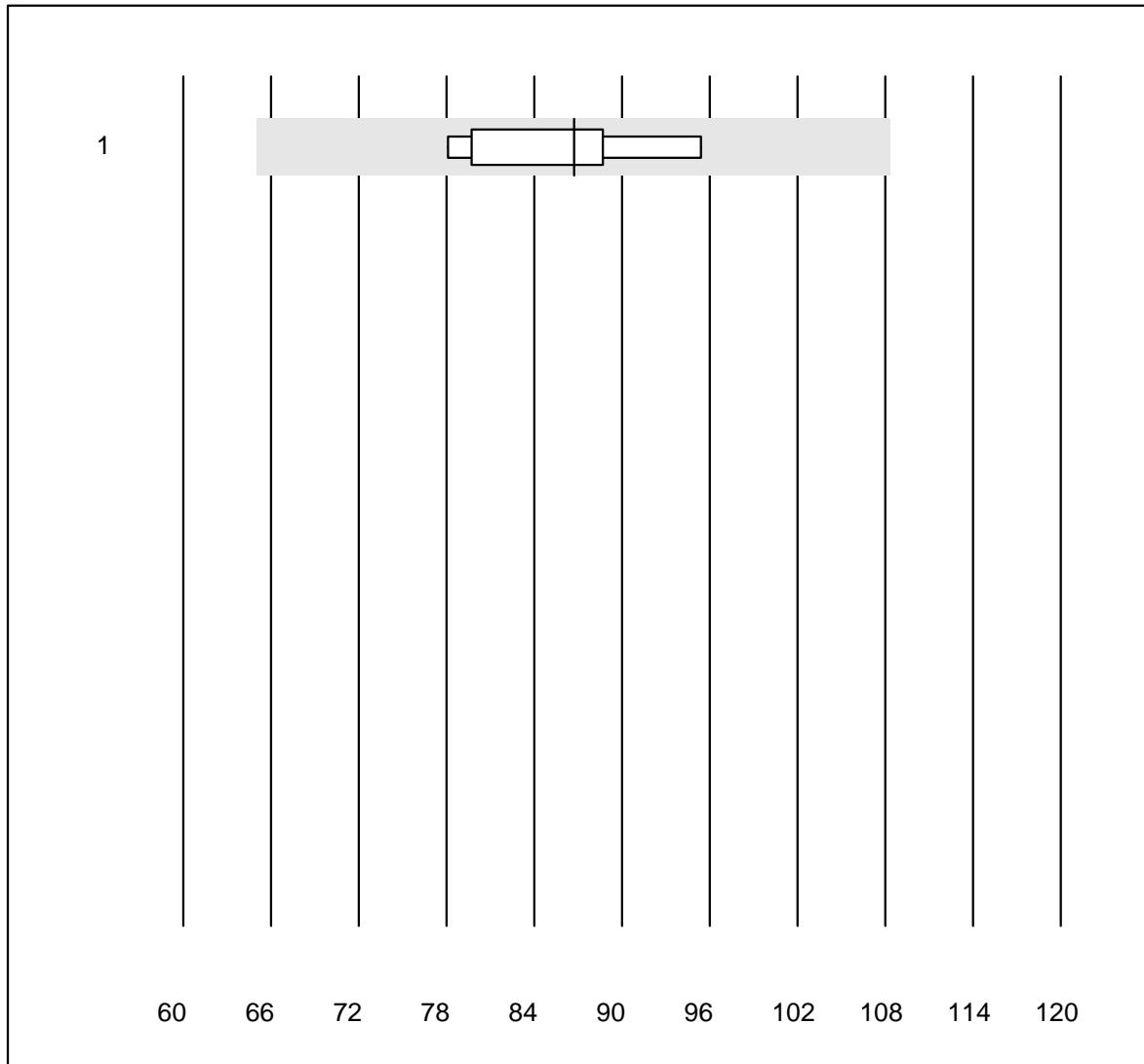
QUALAB tolerance : 25 %   CoaguChek APTT (Sek)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	CoaguChek Pro II	7	100.0	0.0	0.0	86.7	7.2	e

INR CCXS

| | 2.00 | 2.16 | 2.32 | 2.48 | 2.64 | 2.80 | 2.96 | 3.12 | 3.28 | 3.44 | 3.60 |
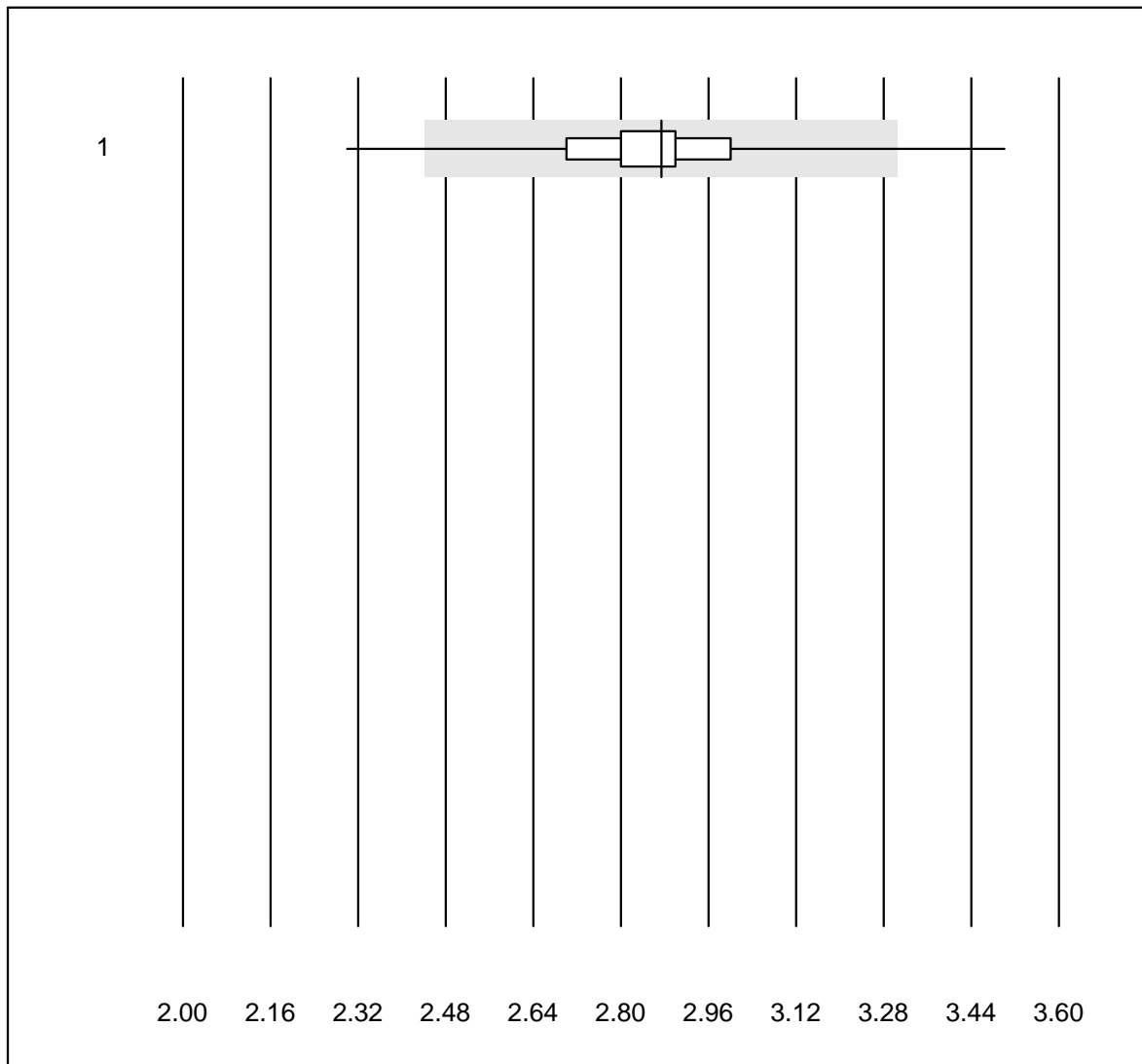
QUALAB tolerance : 15 %   INR CCXS ()

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	CoaguChek XS	1378	98.9	0.9	0.2	2.9	4.2	e

INR HC

```
1
```

1.30 1.37 1.44 1.51 1.58 1.65 1.72 1.79 1.86 1.93 2.00
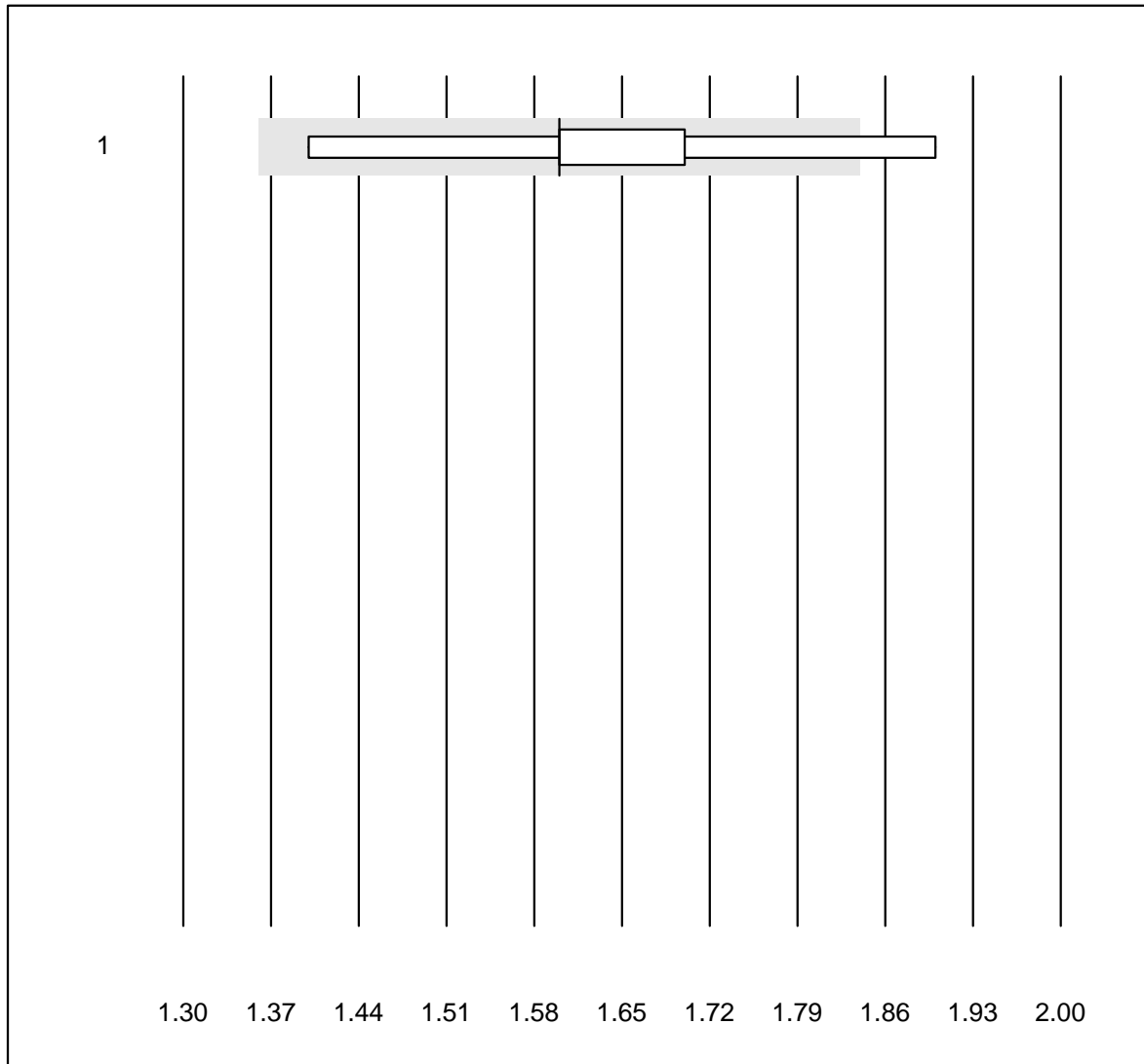
QUALAB tolerance : 15 %   INR HC ()

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Hemochron j.	6	83.3	16.7	0.0	1.6	10.0	e*

INR MI
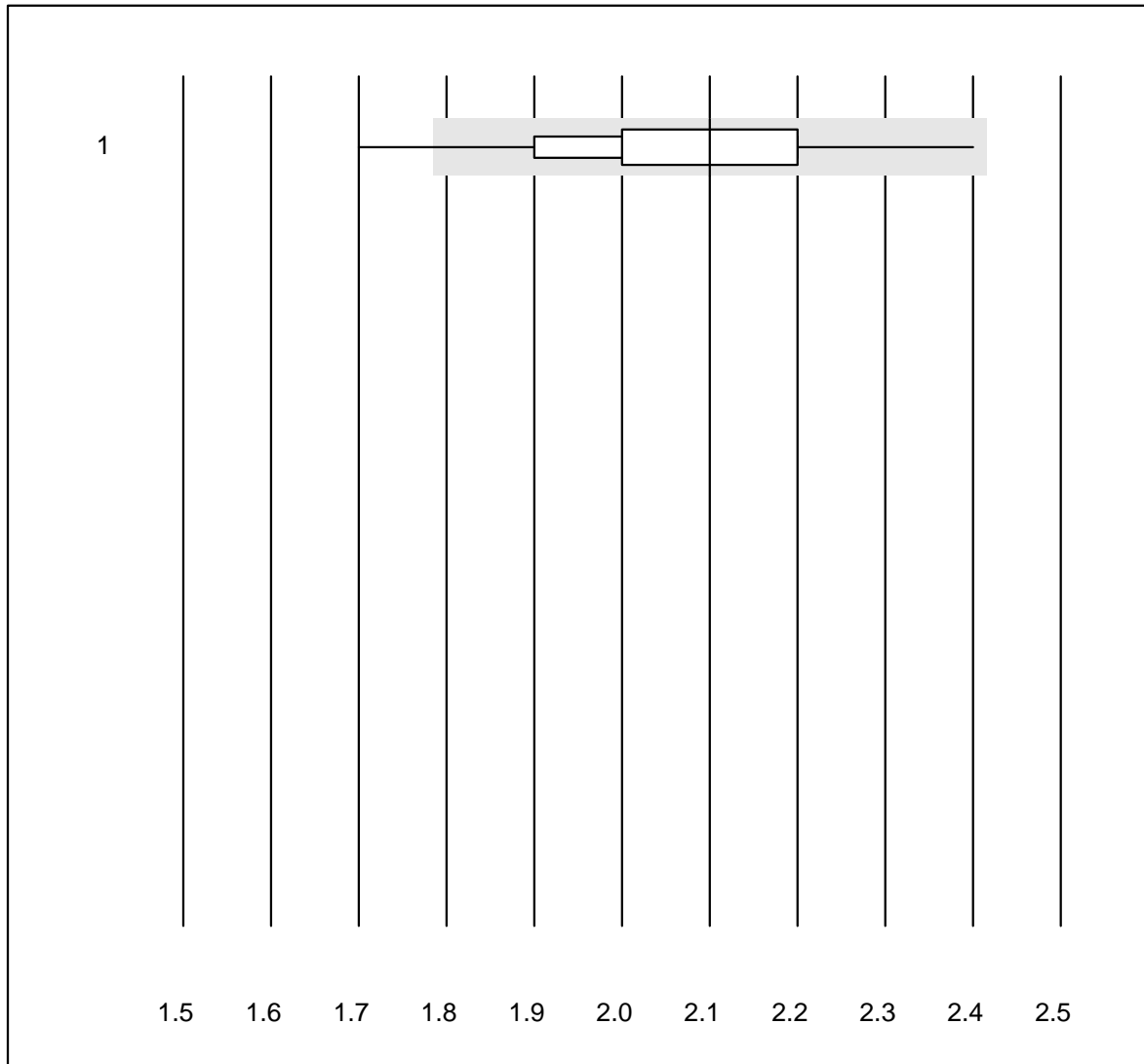
QUALAB tolerance : 15 %

INR MI ()

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	MicroINR	138	89.2	3.6	7.2	2.1	7.1	e

INR Xprecia
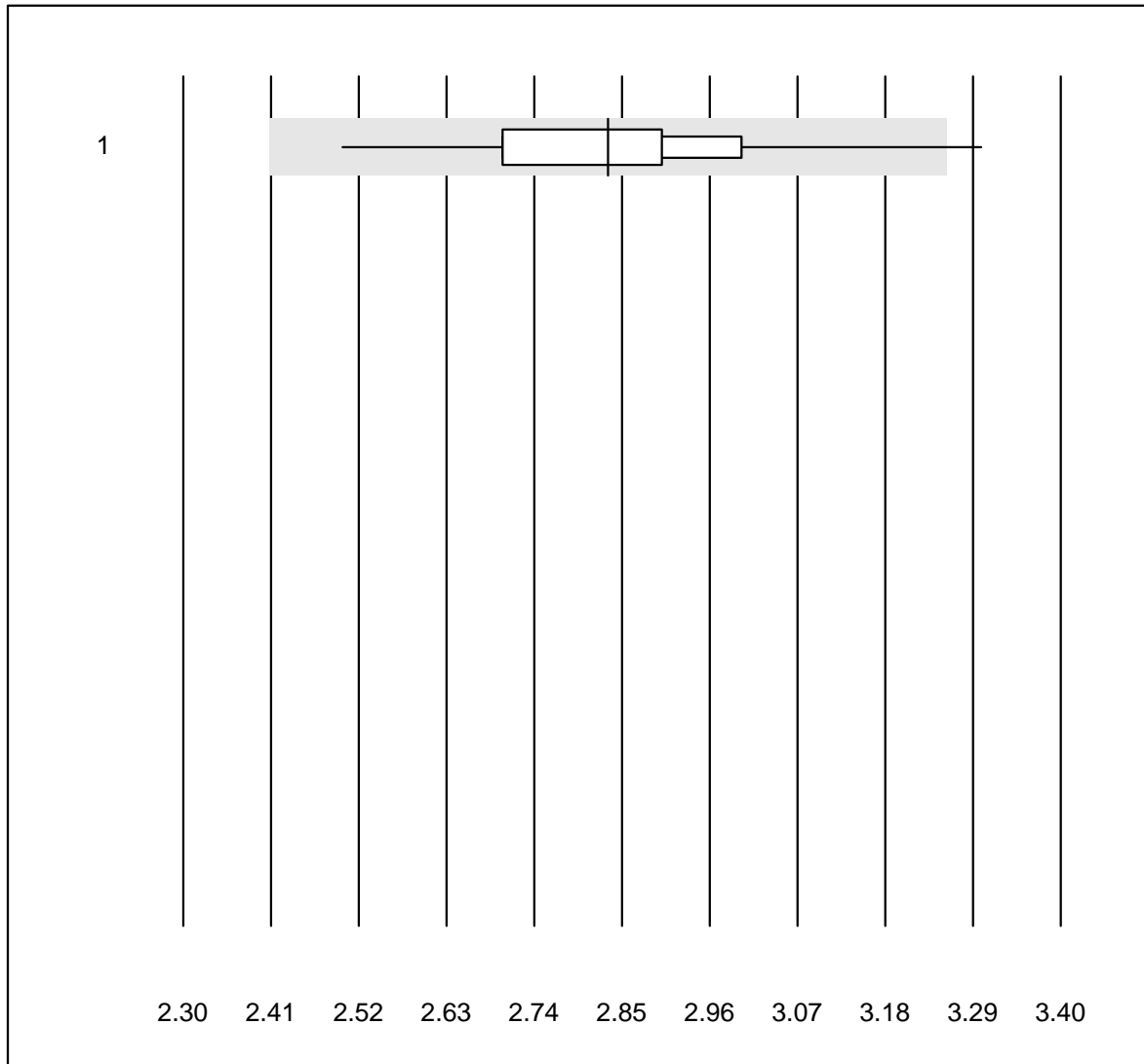
QUALAB tolerance : 15 %   INR Xprecia ()

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Xprecia	44	95.4	2.3	2.3	2.8	5.1	e

INR Lumira Dx

1

| | 4.0 | 4.2 | 4.4 | 4.6 | 4.8 | 5.0 | 5.2 | 5.4 | 5.6 | 5.8 | 6.0 |
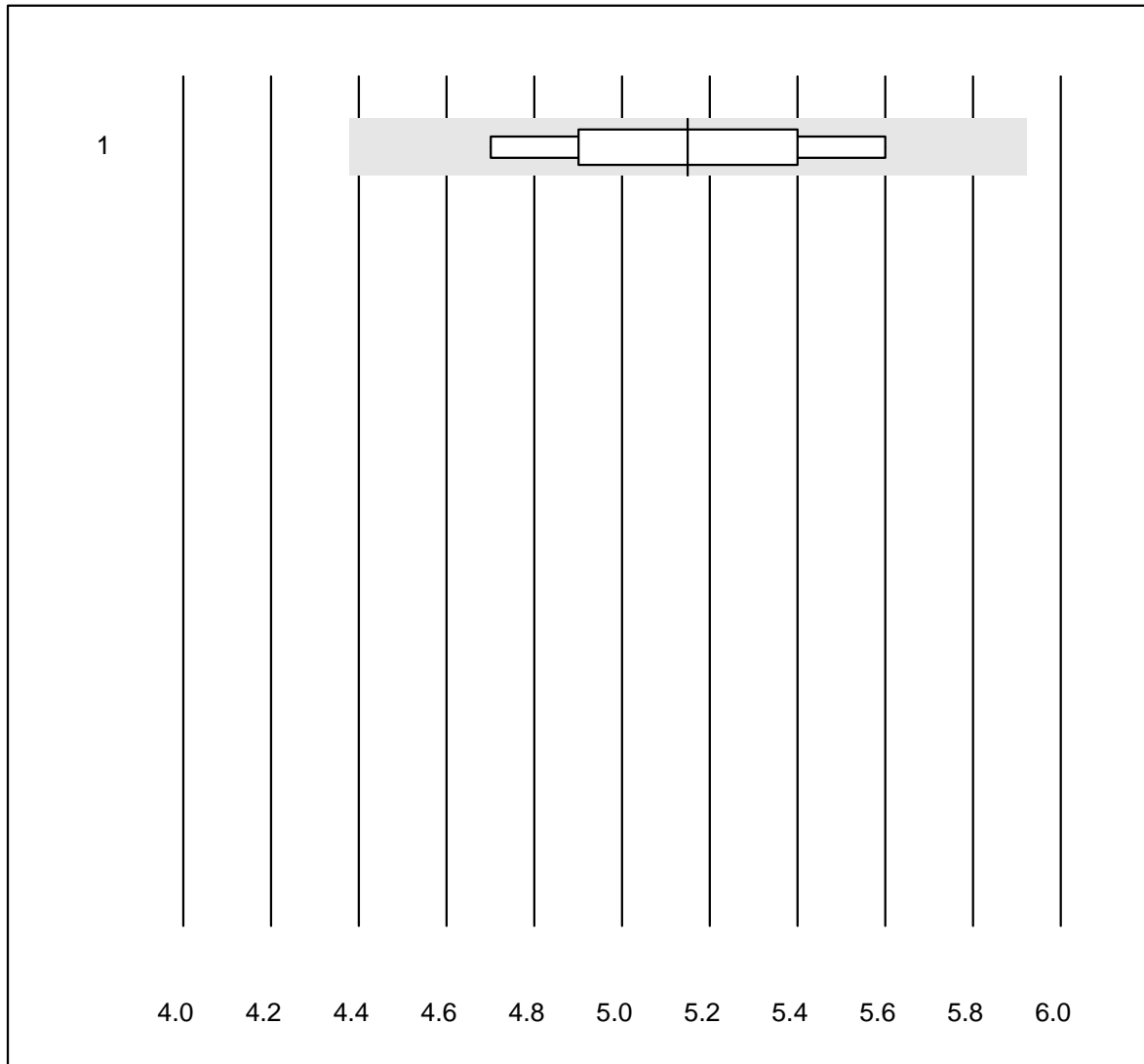
QUALAB tolerance : 15 %   INR Lumira Dx ()

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Lumira Dx	8	100.0	0.0	0.0	5.2	6.4	e*

Anti-FXa (LMW-Heparin)
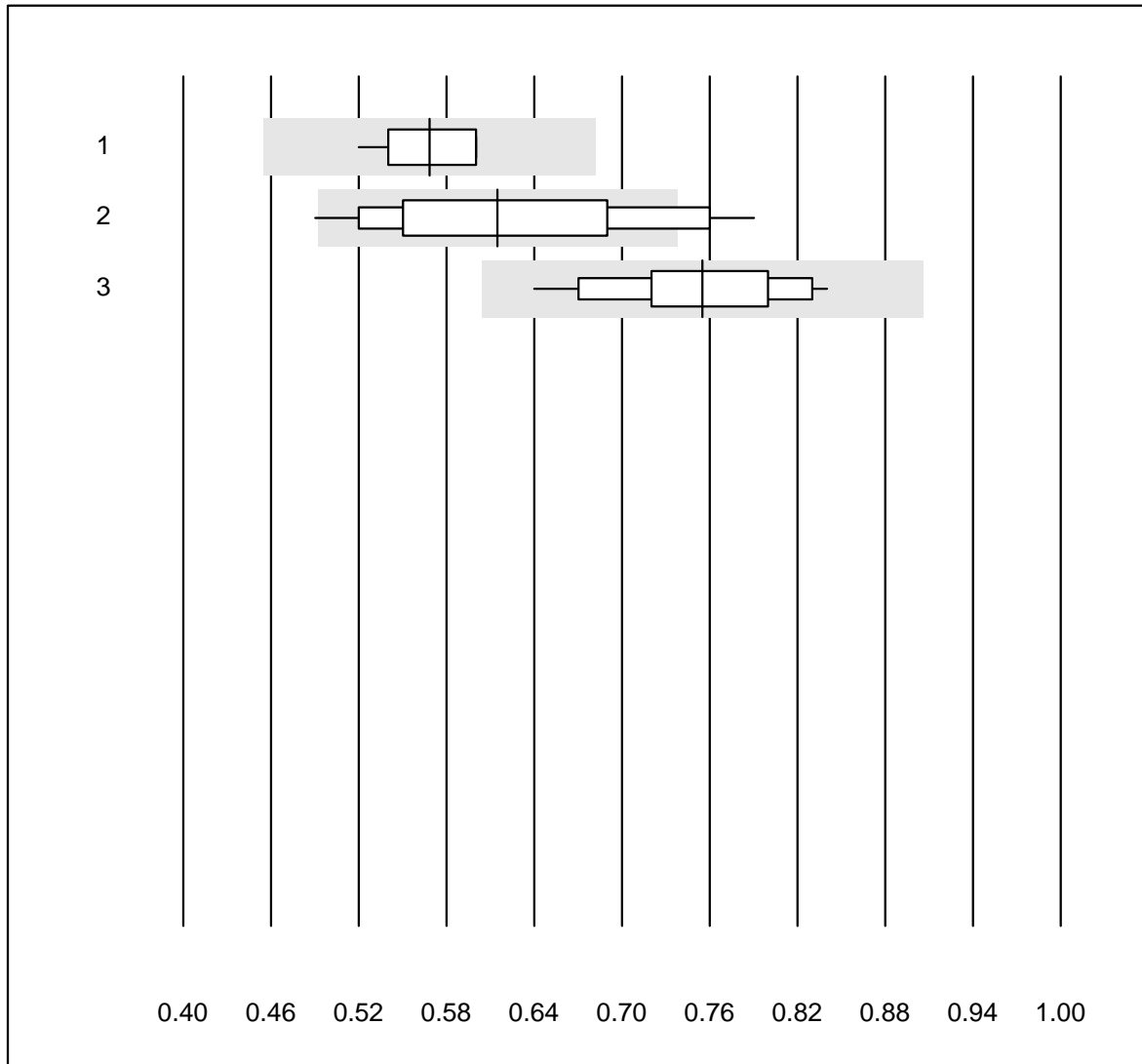
MQ tolerance : 20 %

Anti-FXa (LMW-Heparin) (IU/ml)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Stago/STA	12	100.0	0.0	0.0	0.57	5.0	e
2	ACL	16	81.2	18.8	0.0	0.62	13.6	e*
3	Other methods	18	100.0	0.0	0.0	0.76	7.5	e

Anti-FXa (Rivaroxaban)
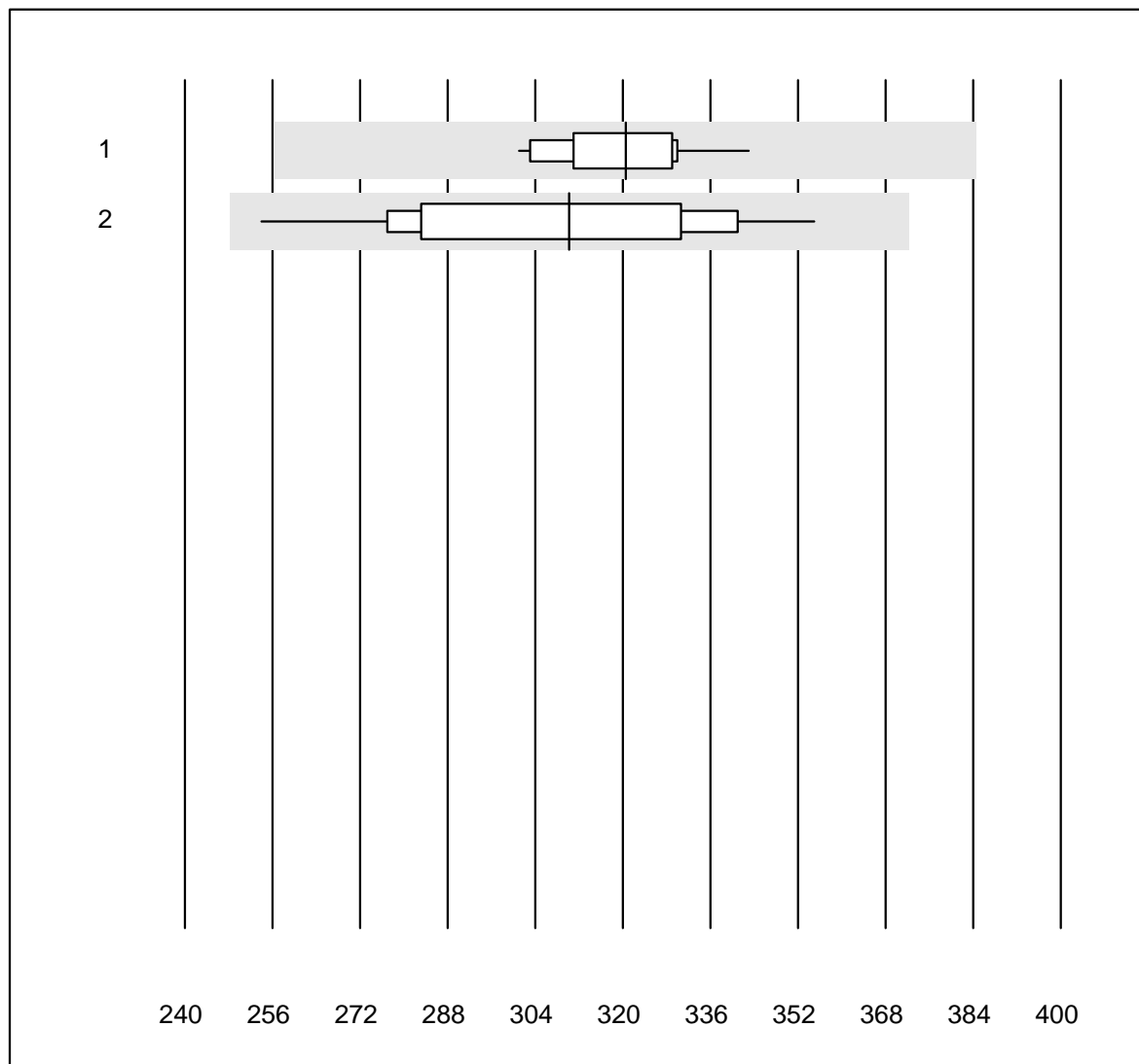
MQ tolerance : 20 %   Anti-FXa (Rivaroxaban) (µg/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Stago/STA	13	100.0	0.0	0.0	320.49	3.8	e
2	ACL	11	100.0	0.0	0.0	310.20	9.5	e*

2 additional results were submitted but not published because the method groups were too small. (< results per group)

Anti-FXa (Apixaban)
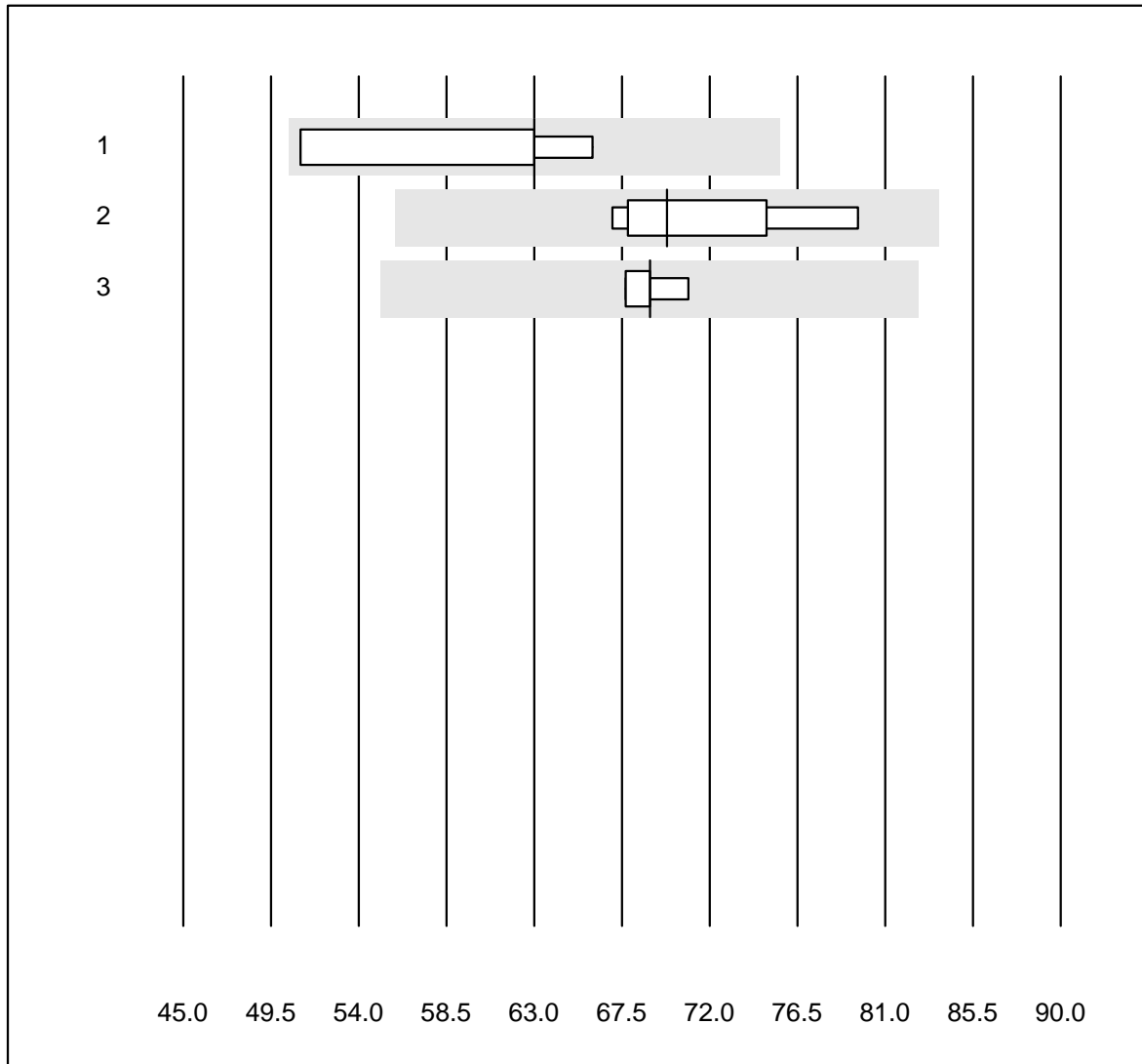
MQ tolerance : 20 %

Anti-FXa (Apixaban) (µg/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Stago/STA	5	80.0	0.0	20.0	63.00	10.8	e*
2	ACL	5	100.0	0.0	0.0	69.80	7.4	e*
3	Other methods	4	100.0	0.0	0.0	68.92	1.9	e

Anti-FXa (Edoxaban)

1

| | 80 | 86 | 92 | 98 | 104 | 110 | 116 | 122 | 128 | 134 | 140 |
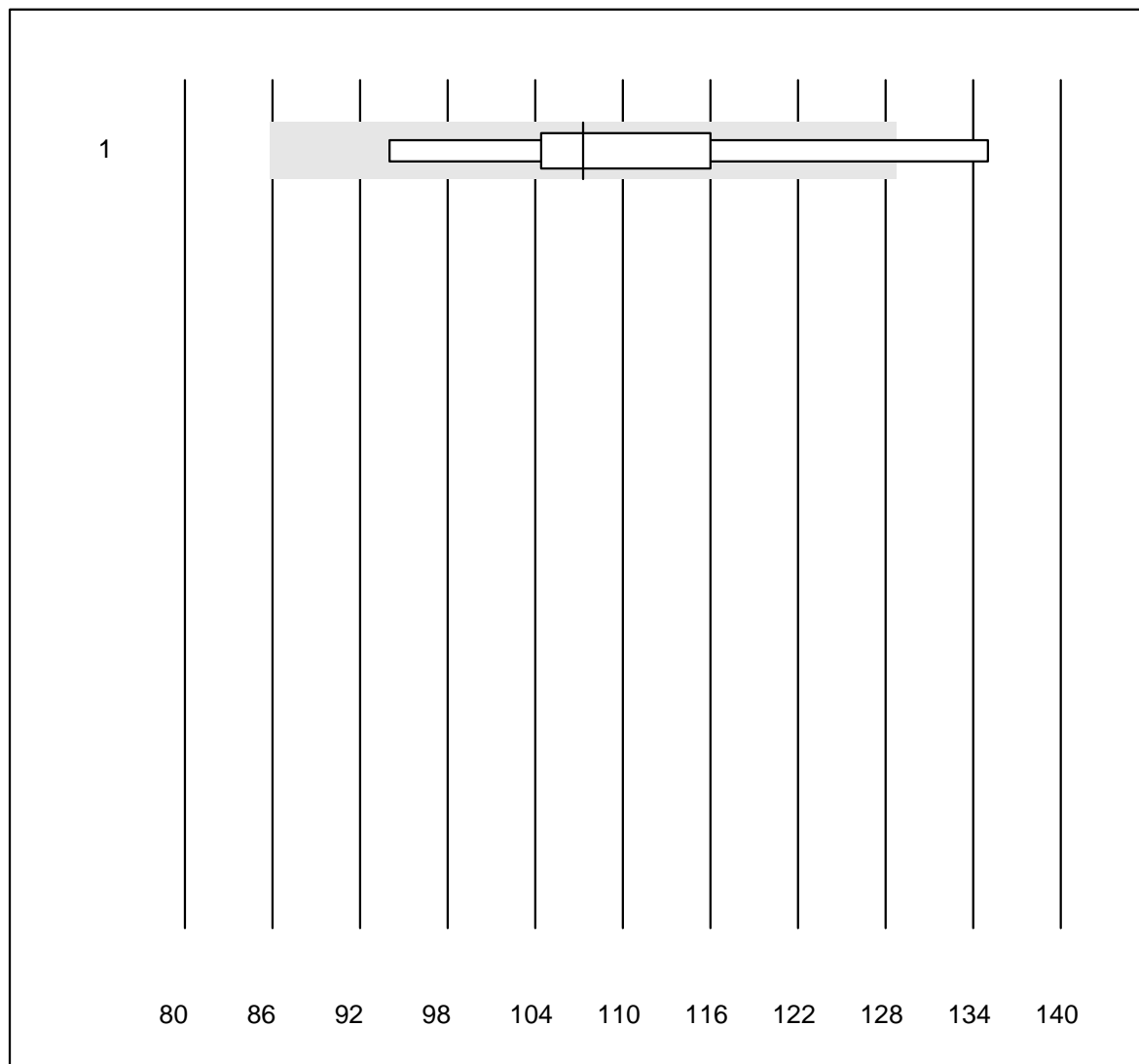
MQ tolerance : 20 %   Anti-FXa (Edoxaban) (µg/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	all Participants	6	83.3	16.7	0.0	107.30	12.5	e*

Anti-FIIa (Dabigatran)
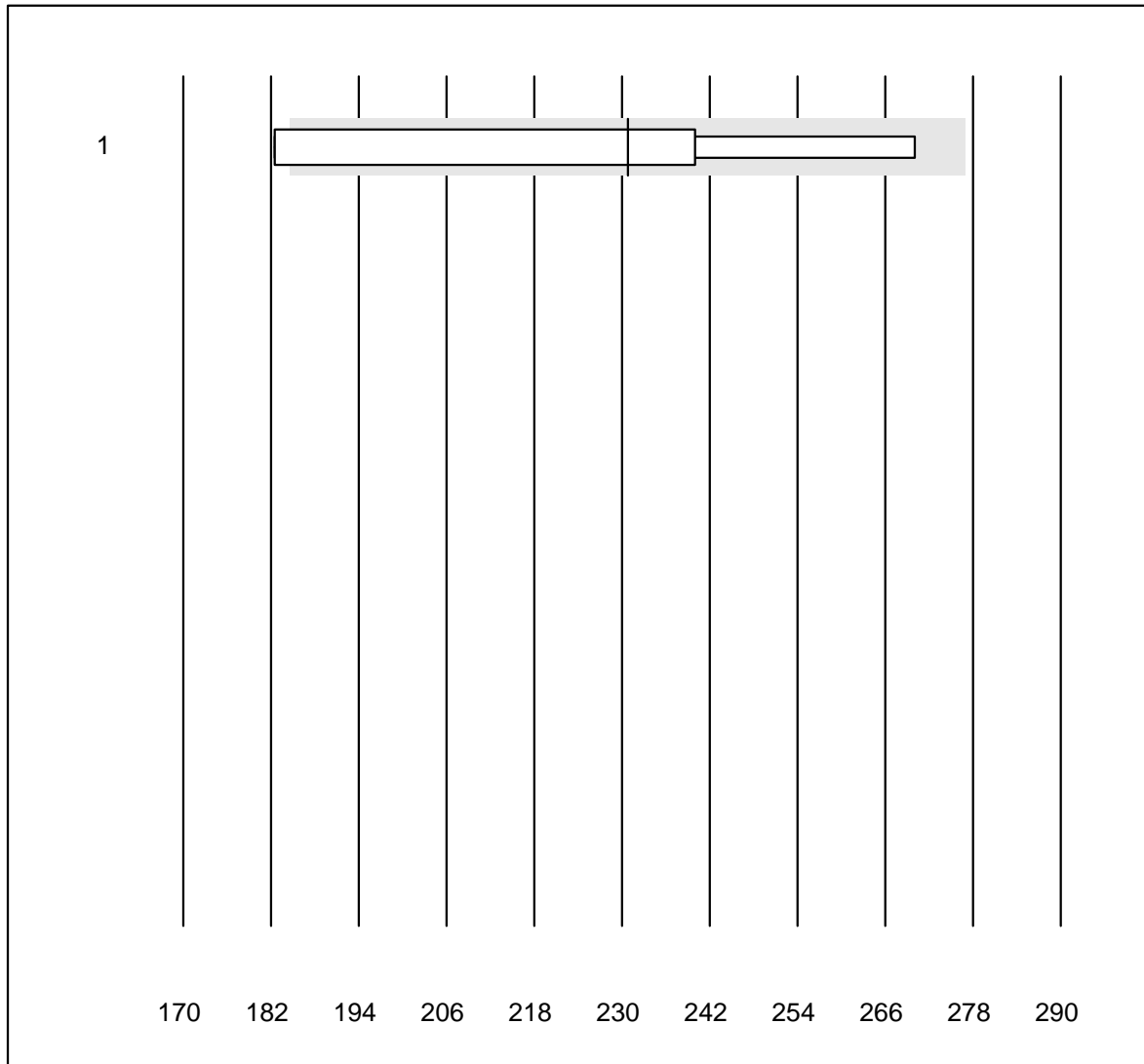
170   182   194   206   218   230   242   254   266   278   290

Anti-FIIa (Dabigatran) (µg/l)

MQ tolerance : 20 %

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	all Participants	4	75.0	25.0	0.0	230.84	19.0	a

Hemoglobin
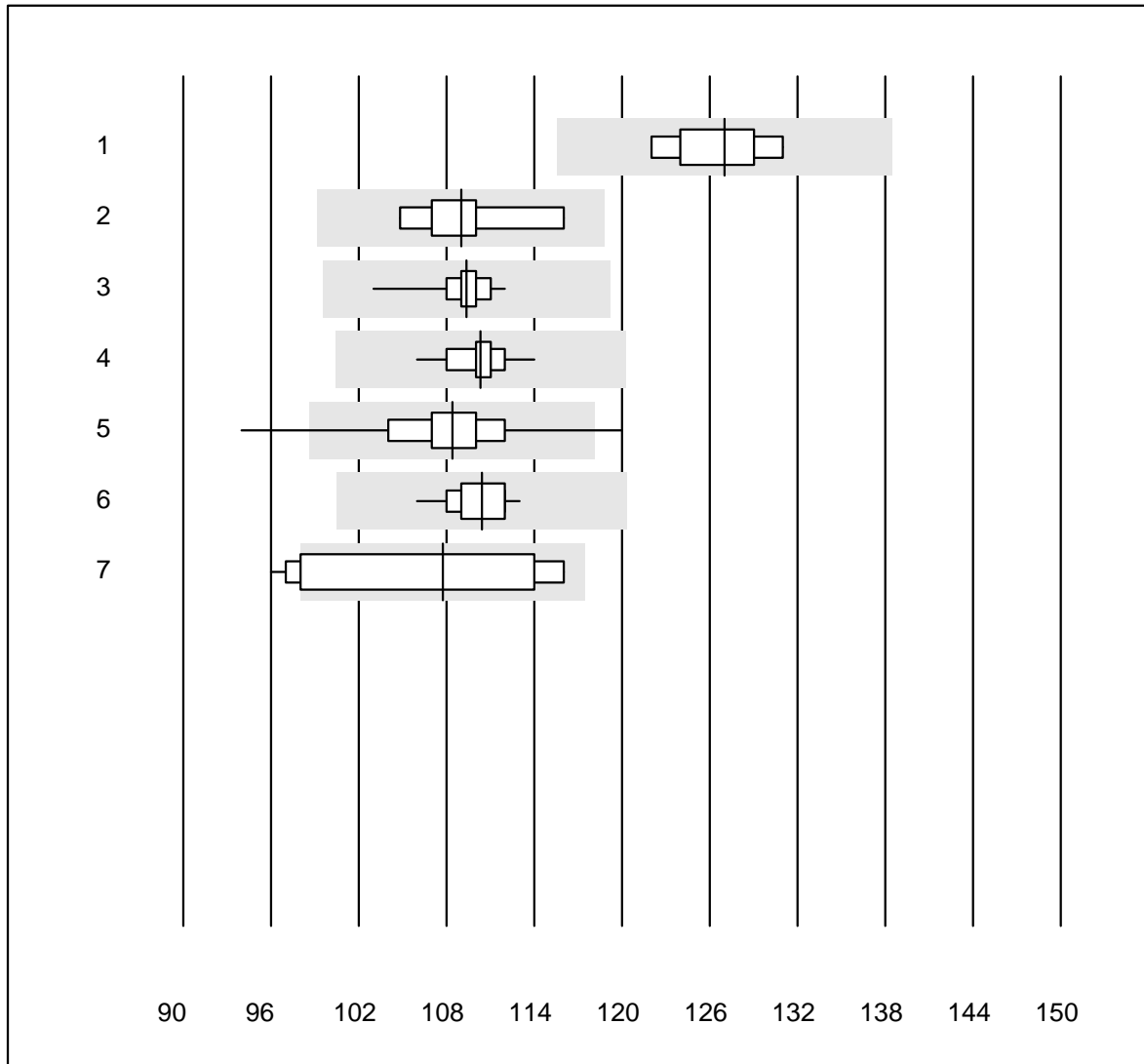
QUALAB tolerance : 9 %

Hemoglobin (g/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Hemocue Hb 801	7	85.7	0.0	14.3	127.0	2.7	e
2	Automat	8	100.0	0.0	0.0	109.0	3.2	e*
3	Cyanmethemoglobin	15	93.3	0.0	6.7	109.4	1.9	e
4	Sysmex X	62	100.0	0.0	0.0	110.3	1.4	e
5	Hemocue	391	91.3	3.6	5.1	108.4	3.3	e
6	Hemocontrol	16	93.7	0.0	6.3	110.4	1.7	e
7	DiaSpect	12	66.7	25.0	8.3	107.8	7.2	e*

7 additional results were submitted but not published because the method groups were too small. (< results per group)
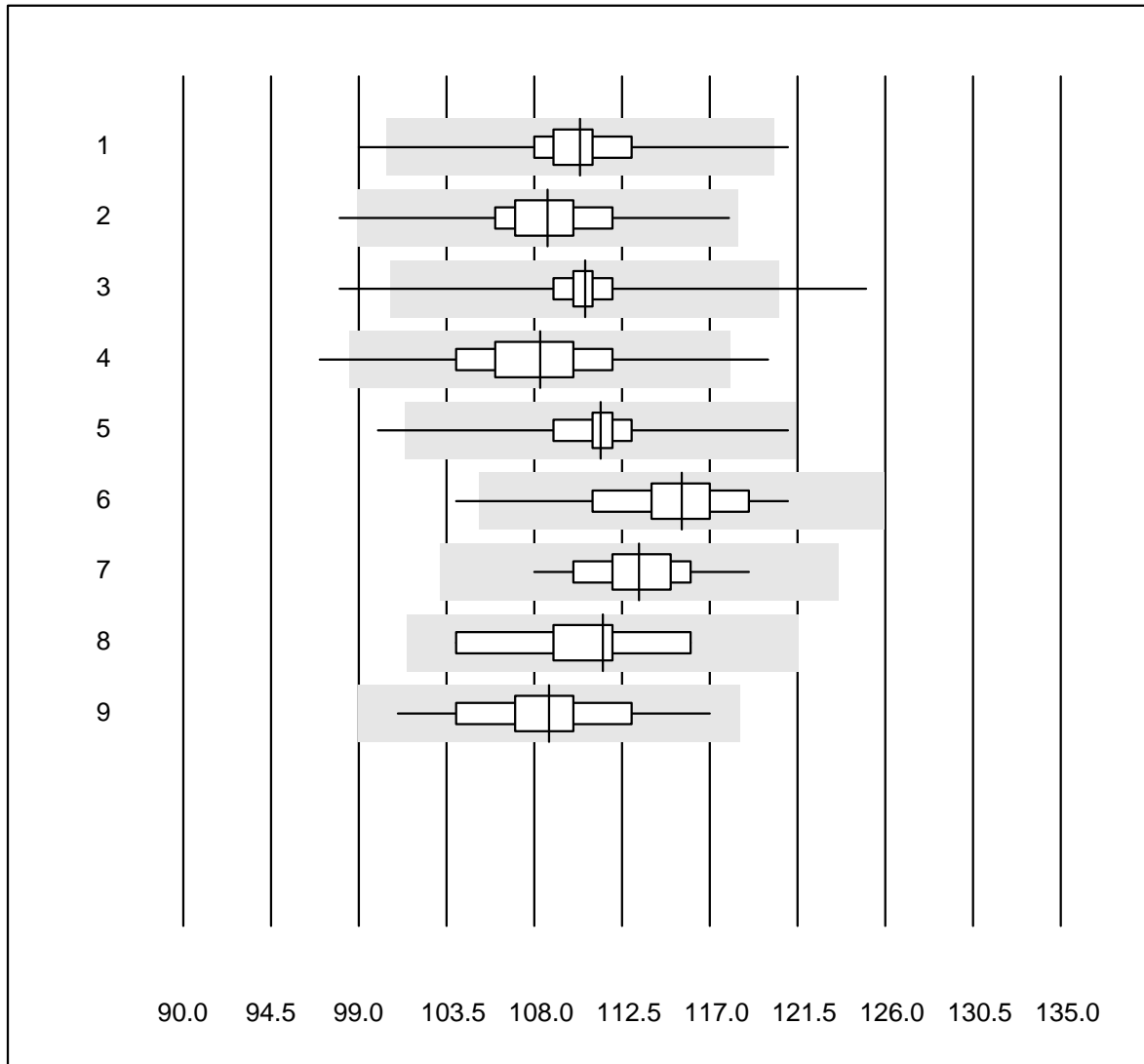
Hemoglobin

QUALAB tolerance : 9 %

Hemoglobin (g/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Sysmex KX21	97	94.8	3.1	2.1	110.3	2.8	e
2	Sysmex PocH - 100i	180	93.3	1.1	5.6	108.7	2.7	e
3	Sysmex XP 300	592	96.7	0.8	2.5	110.6	2.0	e
4	Mythic	224	96.4	0.9	2.7	108.3	3.0	e
5	Sysmex XQ-320	122	96.8	1.6	1.6	111.4	2.3	e
6	Swelab	29	93.2	3.4	3.4	115.6	3.0	e
7	Celltac Alpha (Nihon	55	98.2	0.0	1.8	113.4	2.1	e
8	Samsung HC10	6	100.0	0.0	0.0	111.5	3.6	e*
9	Micros 60	60	98.3	0.0	1.7	108.8	3.1	e

6 additional results were submitted but not published because the method groups were too small. (< results per group)

Hematocrit

0.250   0.261   0.272   0.283   0.294   0.305   0.316   0.327   0.338   0.349   0.360
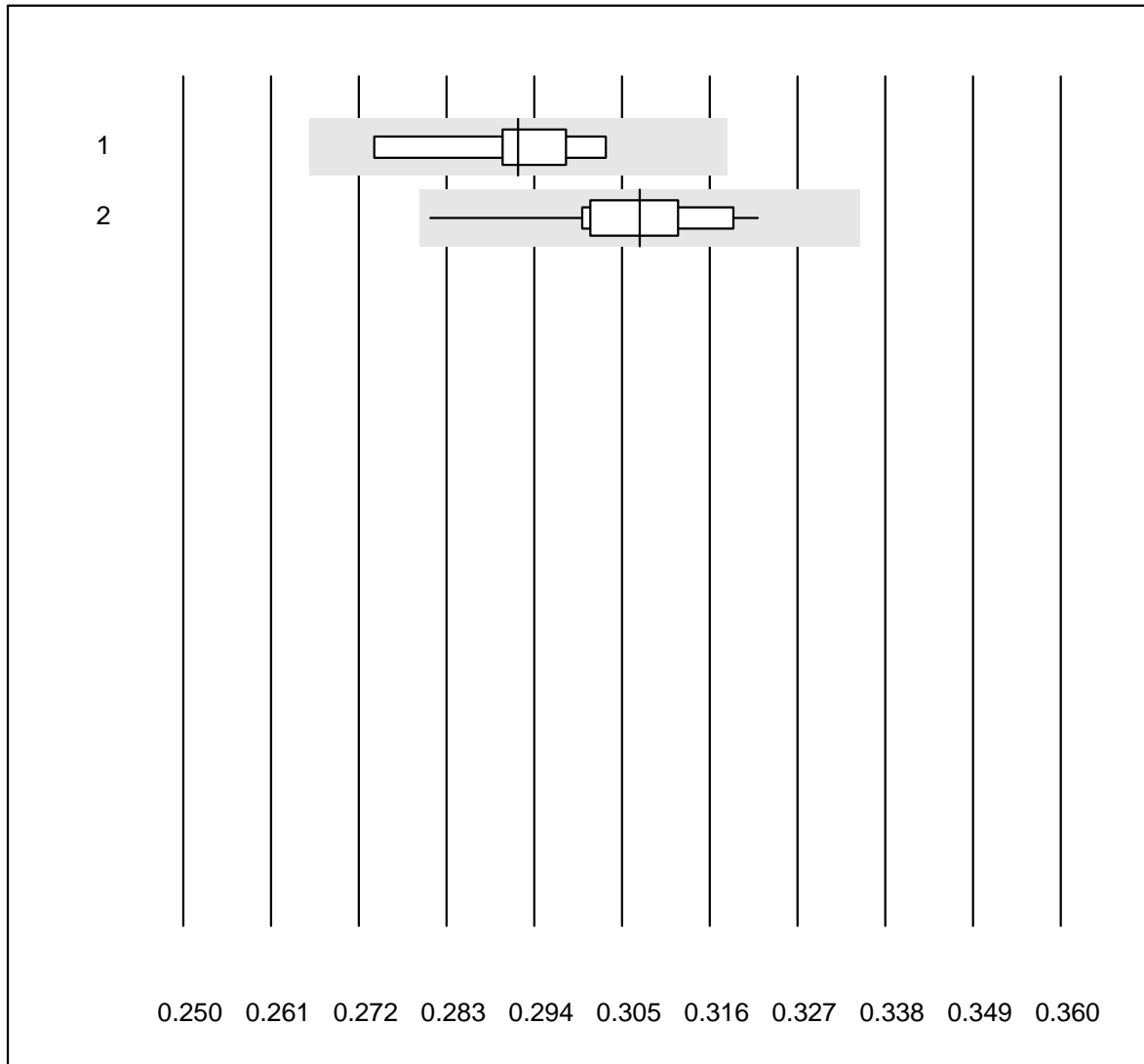
QUALAB tolerance : 9 %   Hematocrit (l/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Automat	7	85.7	0.0	14.3	0.29	3.4	e*
2	Sysmex X	62	100.0	0.0	0.0	0.31	2.7	e

10 additional results were submitted but not published because the method groups were too small. (< results per group)
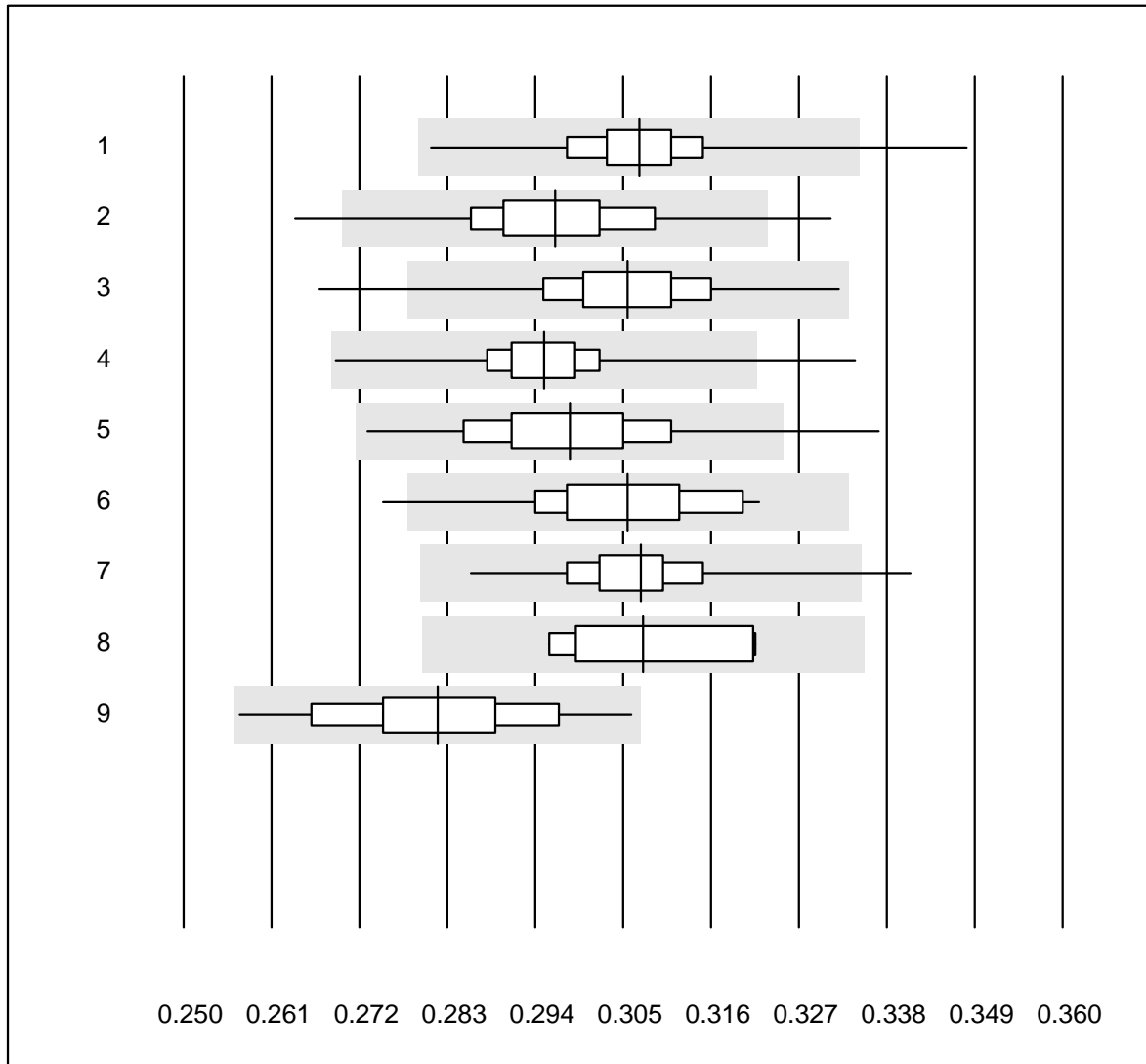
Hematocrit

QUALAB tolerance : 9 %   Hematocrit (l/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Sysmex XQ-320	120	95.9	0.8	3.3	0.31	2.6	e
2	Sysmex KX21	96	94.8	3.1	2.1	0.30	3.5	e
3	Sysmex PocH - 100i	180	92.2	1.7	6.1	0.31	3.2	e
4	Sysmex XP 300	593	96.9	0.7	2.4	0.30	2.3	e
5	Mythic	224	96.4	0.9	2.7	0.30	3.5	e
6	Swelab	29	93.2	3.4	3.4	0.31	3.5	e
7	Celltac Alpha (Nihon	55	92.8	3.6	3.6	0.31	3.3	e
8	Samsung HC10	6	100.0	0.0	0.0	0.31	3.5	e*
9	Micros 60	60	90.0	0.0	10.0	0.28	4.0	e

5 additional results were submitted but not published because the method groups were too small. (< results per group)
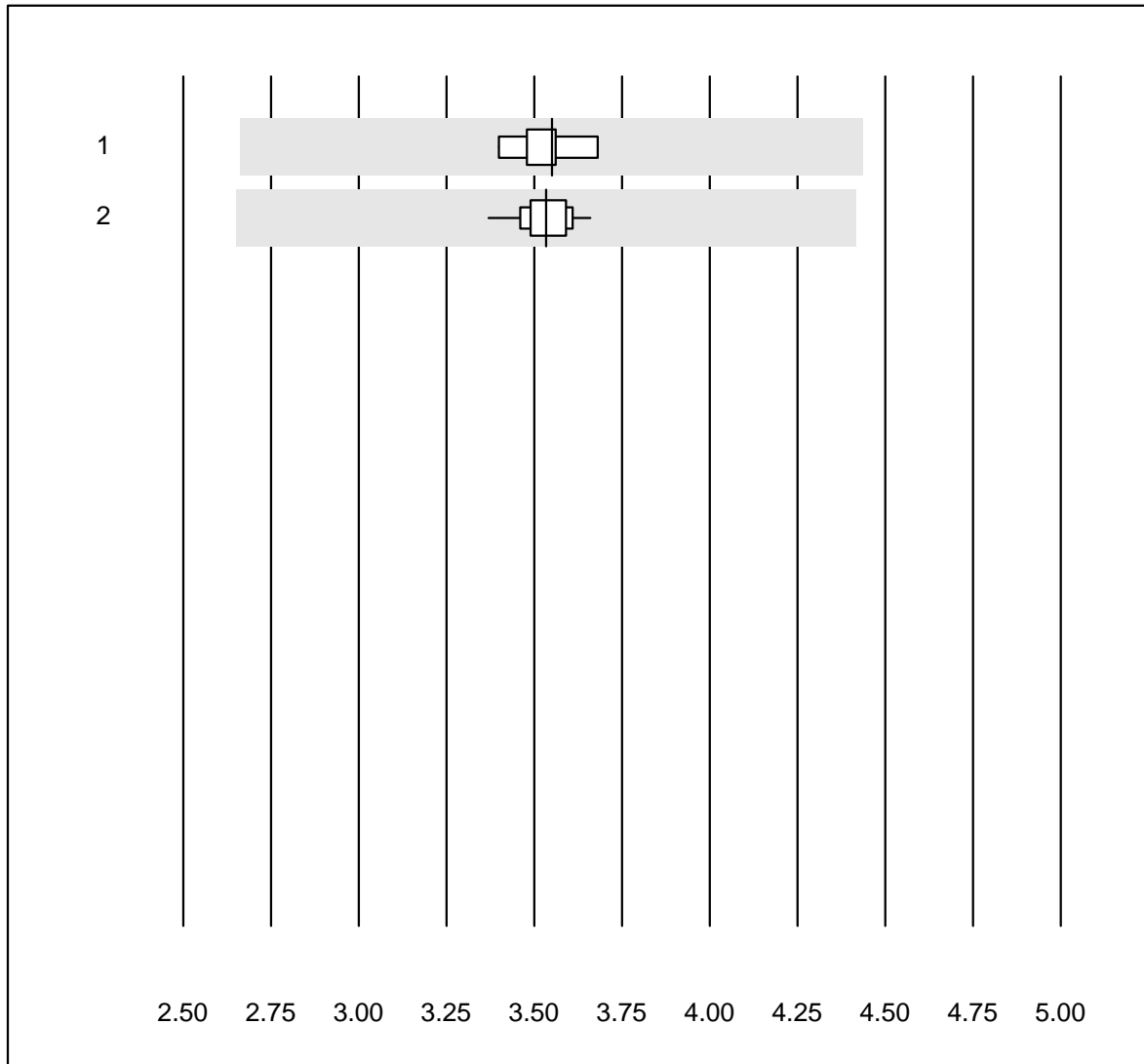
Erythrocytes

QUALAB tolerance : 25 %   Erythrocytes (T/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Automat	7	100.0	0.0	0.0	3.55	2.4	e
2	Sysmex X	62	100.0	0.0	0.0	3.53	1.8	e

7 additional results were submitted but not published because the method groups were too small. (< results per group)

Erythrocytes

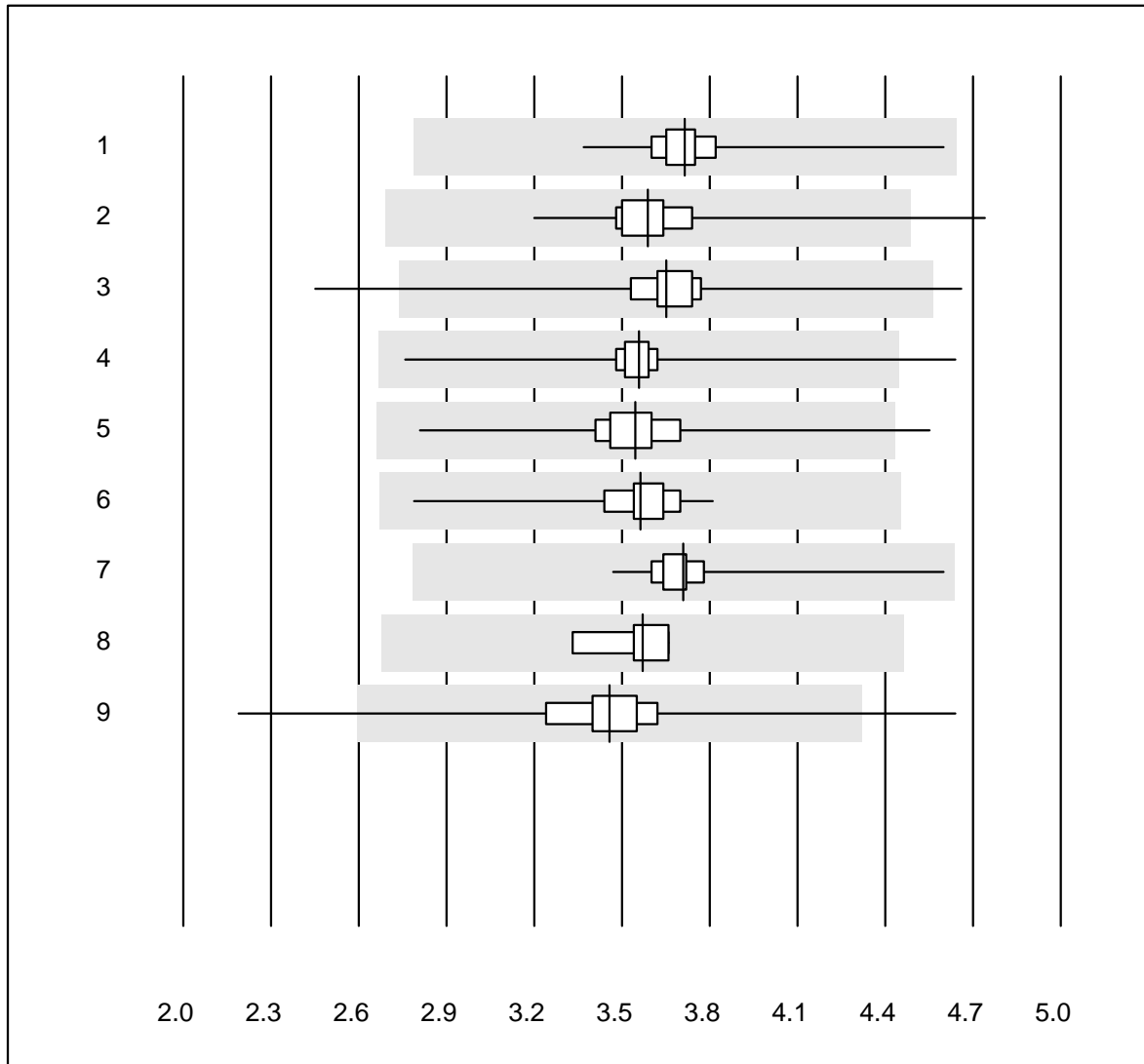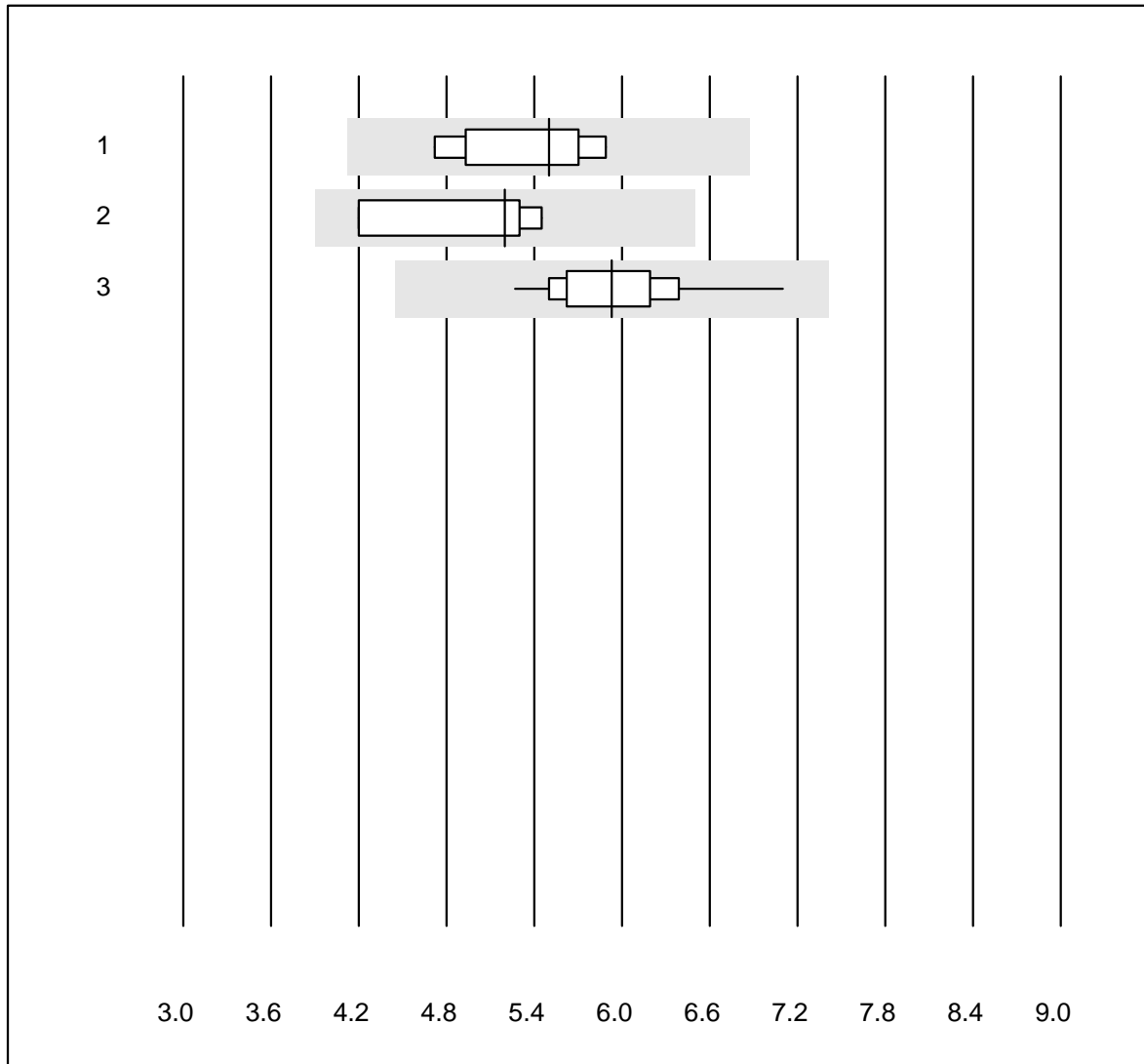QUALAB tolerance : 25 %   Erythrocytes (T/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Sysmex XQ-320	120	100.0	0.0	0.0	3.71	3.8	e
2	Sysmex KX21	97	97.9	2.1	0.0	3.59	5.4	e
3	Sysmex PocH - 100i	179	95.0	2.2	2.8	3.65	5.8	e
4	Sysmex XP 300	593	98.2	0.5	1.3	3.56	3.3	e
5	Mythic	224	98.3	0.4	1.3	3.55	4.3	e
6	Swelab	29	100.0	0.0	0.0	3.56	5.0	e
7	Celltac Alpha (Nihon	55	98.2	0.0	1.8	3.71	4.7	e
8	Samsung HC10	6	100.0	0.0	0.0	3.57	3.4	e
9	Micros 60	60	91.7	3.3	5.0	3.46	7.8	e

5 additional results were submitted but not published because the method groups were too small. (< results per group)

Leucocytes

QUALAB tolerance : 25 %

Leucocytes (G/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Automat	6	100.0	0.0	0.0	5.50	8.4	e*
2	Microscopic	4	100.0	0.0	0.0	5.20	11.2	e*
3	Sysmex X	62	100.0	0.0	0.0	5.93	7.2	e

7 additional results were submitted but not published because the method groups were too small. (< results per group)
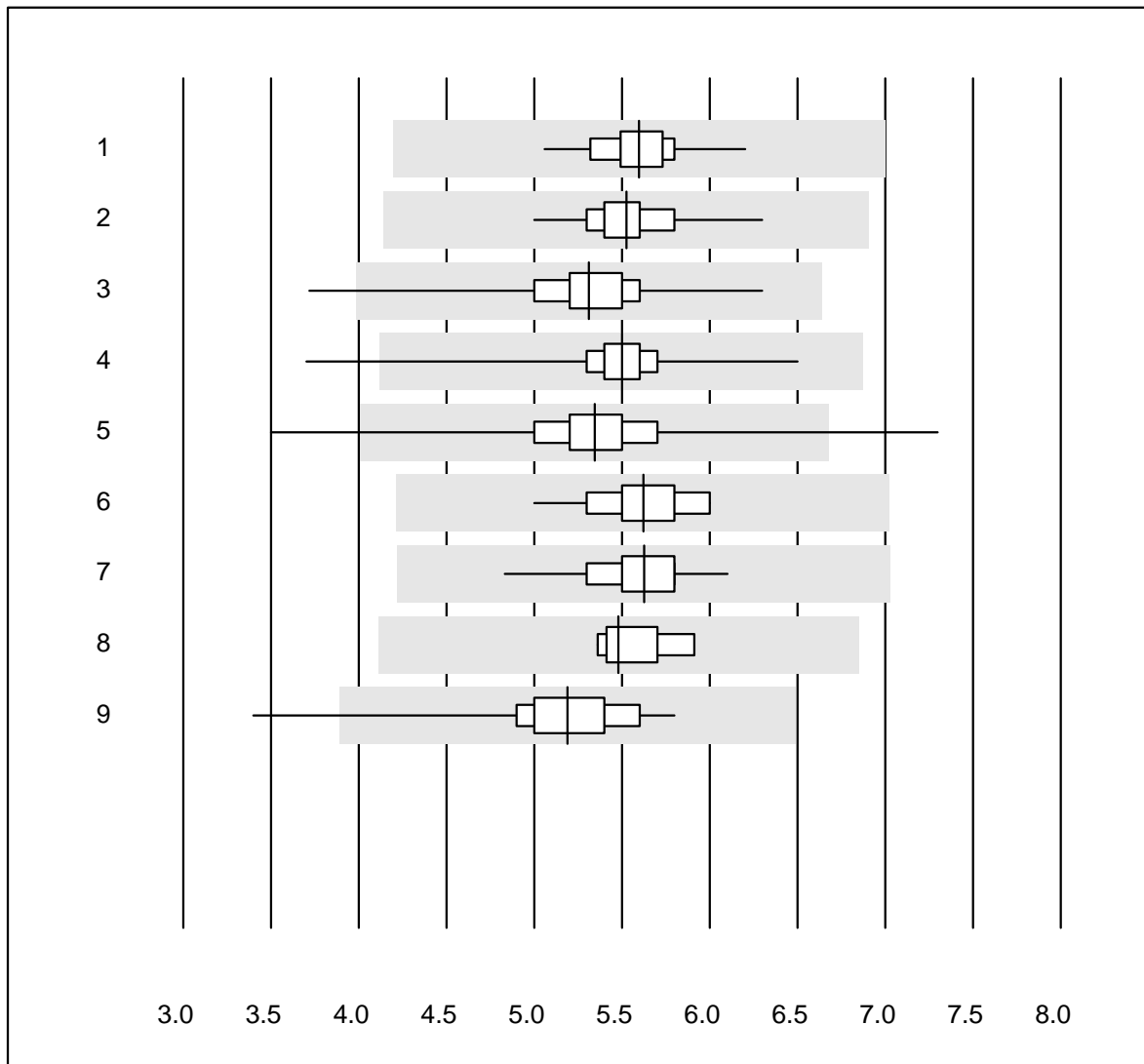
Leucocytes

QUALAB tolerance : 25 %   Leucocytes (G/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Sysmex XQ-320	120	100.0	0.0	0.0	5.60	3.4	e
2	Sysmex KX21	97	100.0	0.0	0.0	5.52	3.9	e
3	Sysmex PocH - 100i	179	98.3	0.6	1.1	5.31	5.1	e
4	Sysmex XP 300	593	99.5	0.2	0.3	5.50	4.0	e
5	Mythic	224	98.2	0.9	0.9	5.34	6.2	e
6	Swelab	29	100.0	0.0	0.0	5.62	4.5	e
7	Celltac Alpha (Nihon	55	100.0	0.0	0.0	5.62	3.9	e
8	Samsung HC10	6	100.0	0.0	0.0	5.48	3.8	e
9	Micros 60	60	95.0	1.7	3.3	5.19	7.7	e

6 additional results were submitted but not published because the method groups were too small. (< results per group)
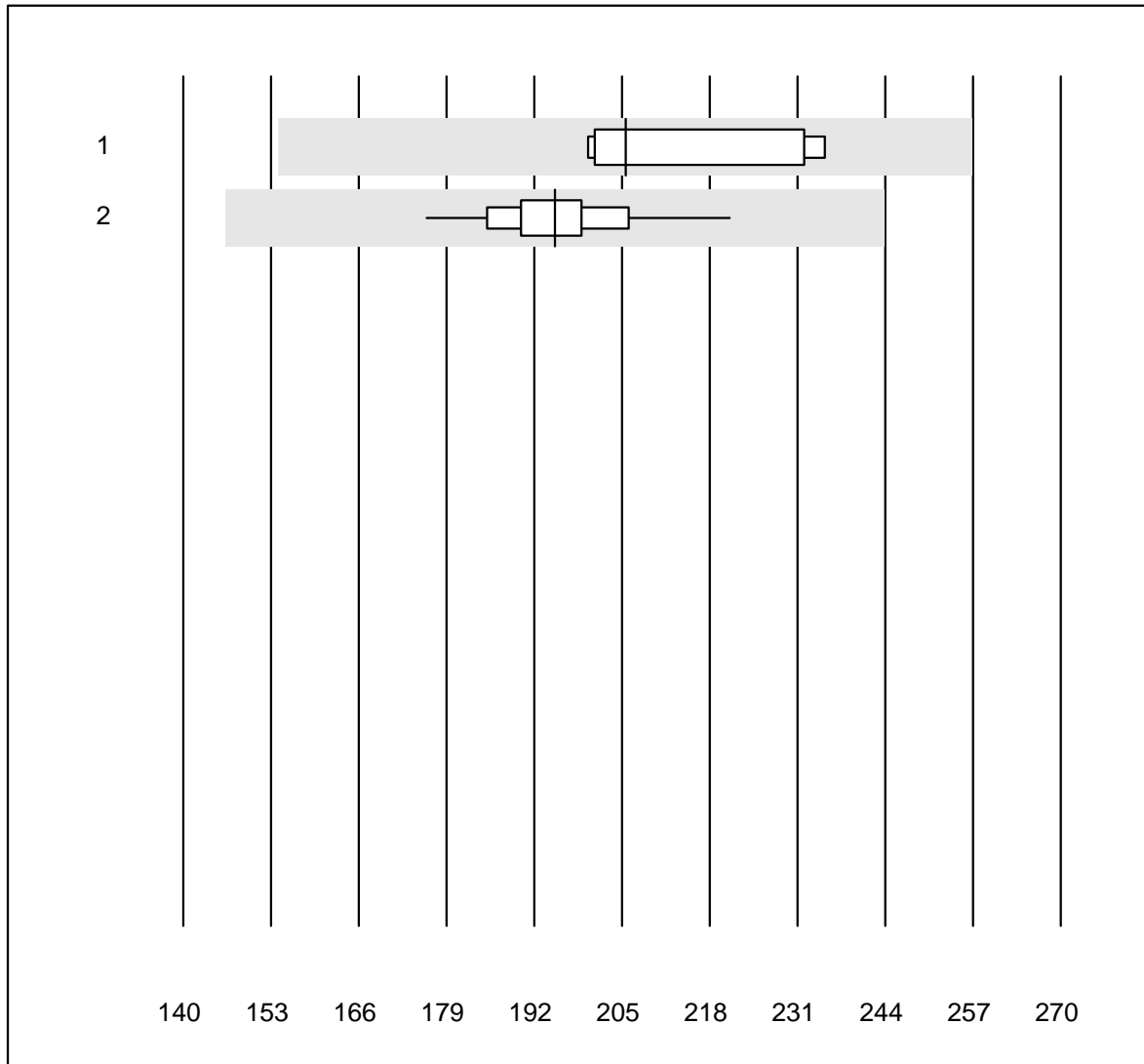
Thrombocytes

QUALAB tolerance : 25 %

Thrombocytes (G/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Automat	6	100.0	0.0	0.0	205.5	7.6	e*
2	Sysmex X	62	100.0	0.0	0.0	195.1	4.2	e

9 additional results were submitted but not published because the method groups were too small. (< results per group)
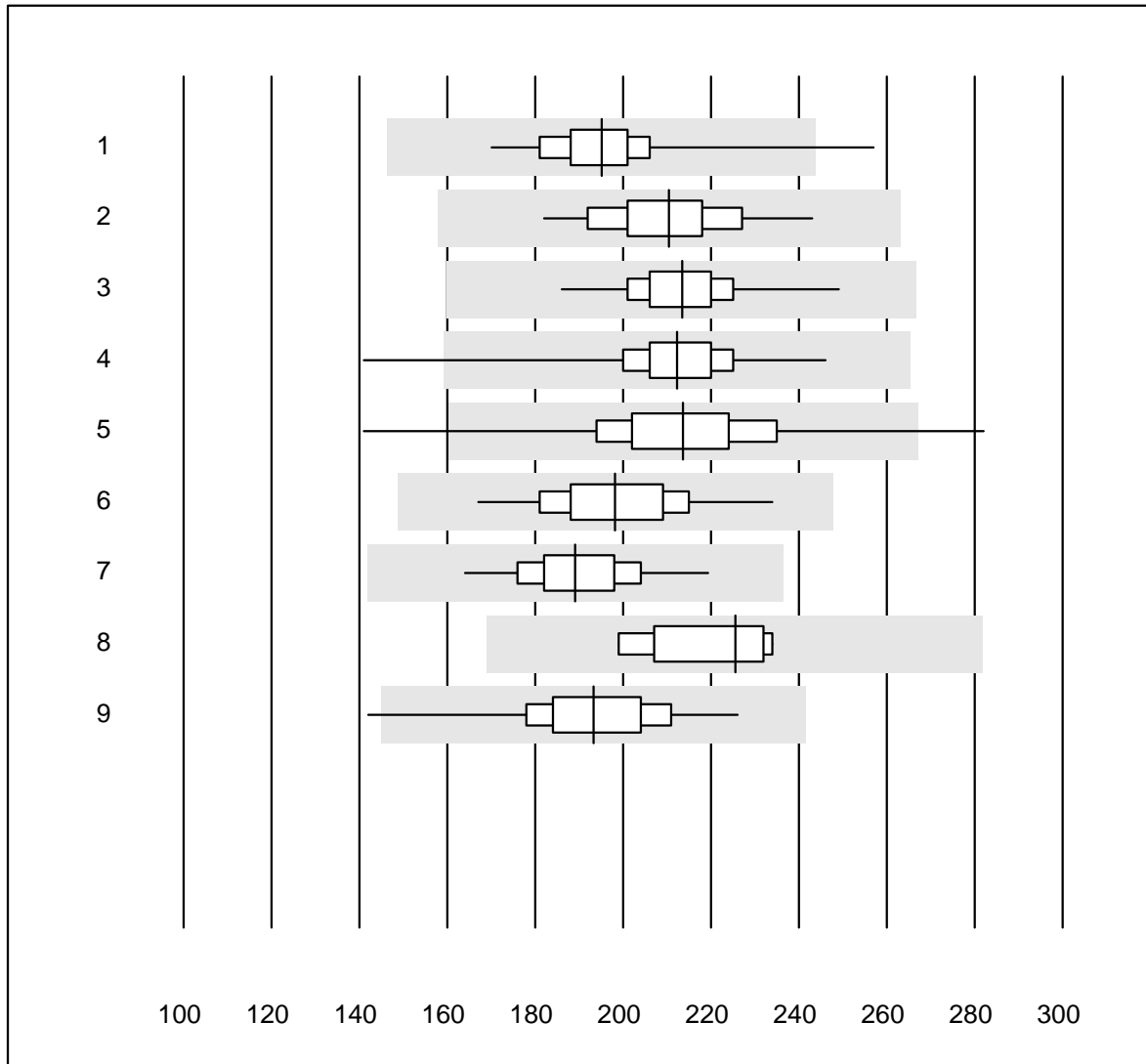
Thrombocytes

QUALAB tolerance : 25 %

Thrombocytes (G/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Sysmex XQ-320	120	99.2	0.8	0.0	195.2	5.9	e
2	Sysmex KX21	96	100.0	0.0	0.0	210.4	6.4	e
3	Sysmex PocH - 100i	179	99.4	0.0	0.6	213.4	4.7	e
4	Sysmex XP 300	593	99.0	0.7	0.3	212.3	5.5	e
5	Mythic	225	97.4	1.3	1.3	213.7	8.0	e
6	Swelab	29	93.1	0.0	6.9	198.2	7.4	e
7	Celltac Alpha (Nihon	55	96.4	0.0	3.6	189.1	6.1	e
8	Samsung HC10	6	100.0	0.0	0.0	225.5	6.6	e
9	Micros 60	60	93.3	1.7	5.0	193.2	7.8	e

5 additional results were submitted but not published because the method groups were too small. (< results per group)
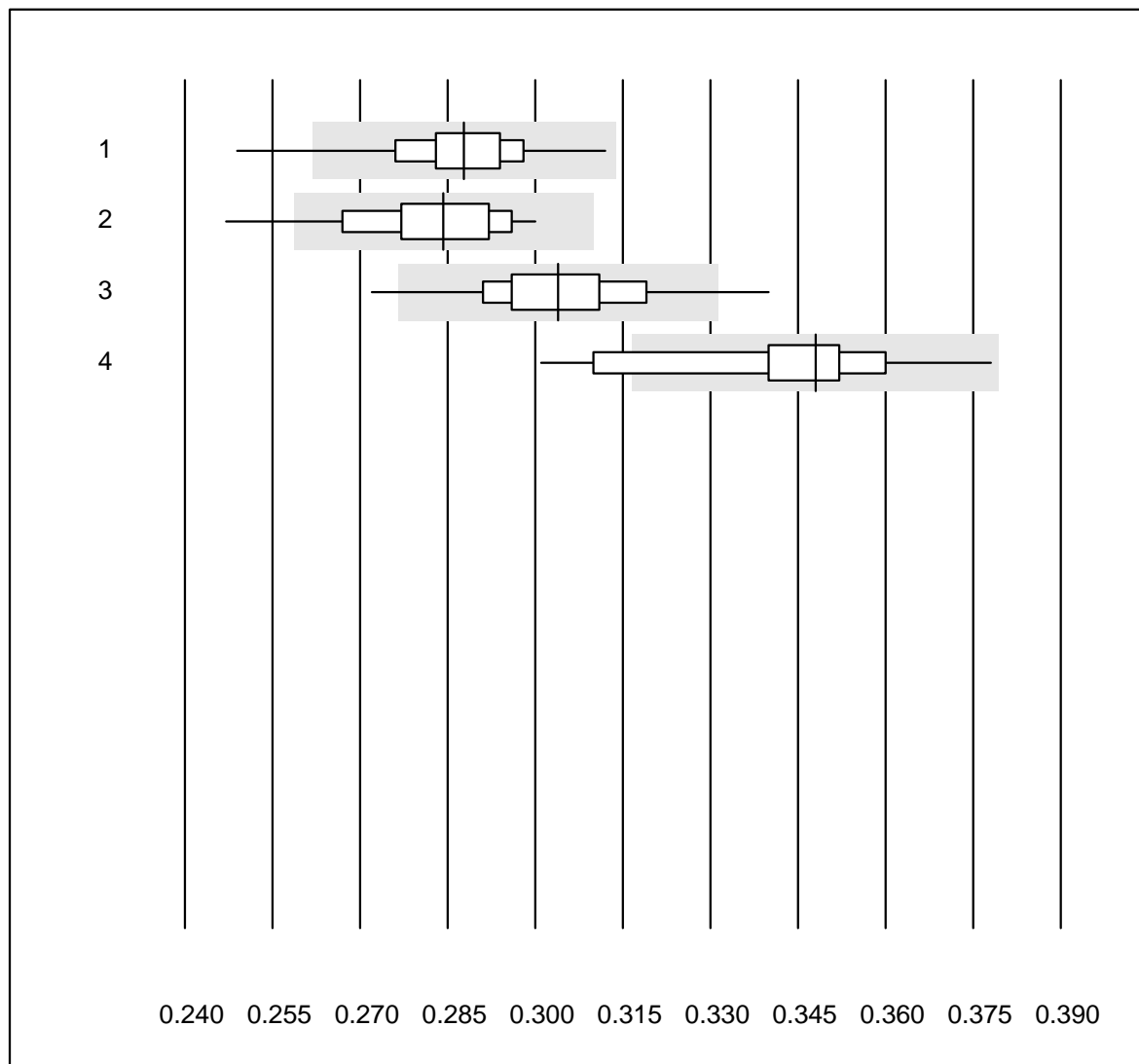
Hemoglobin H2
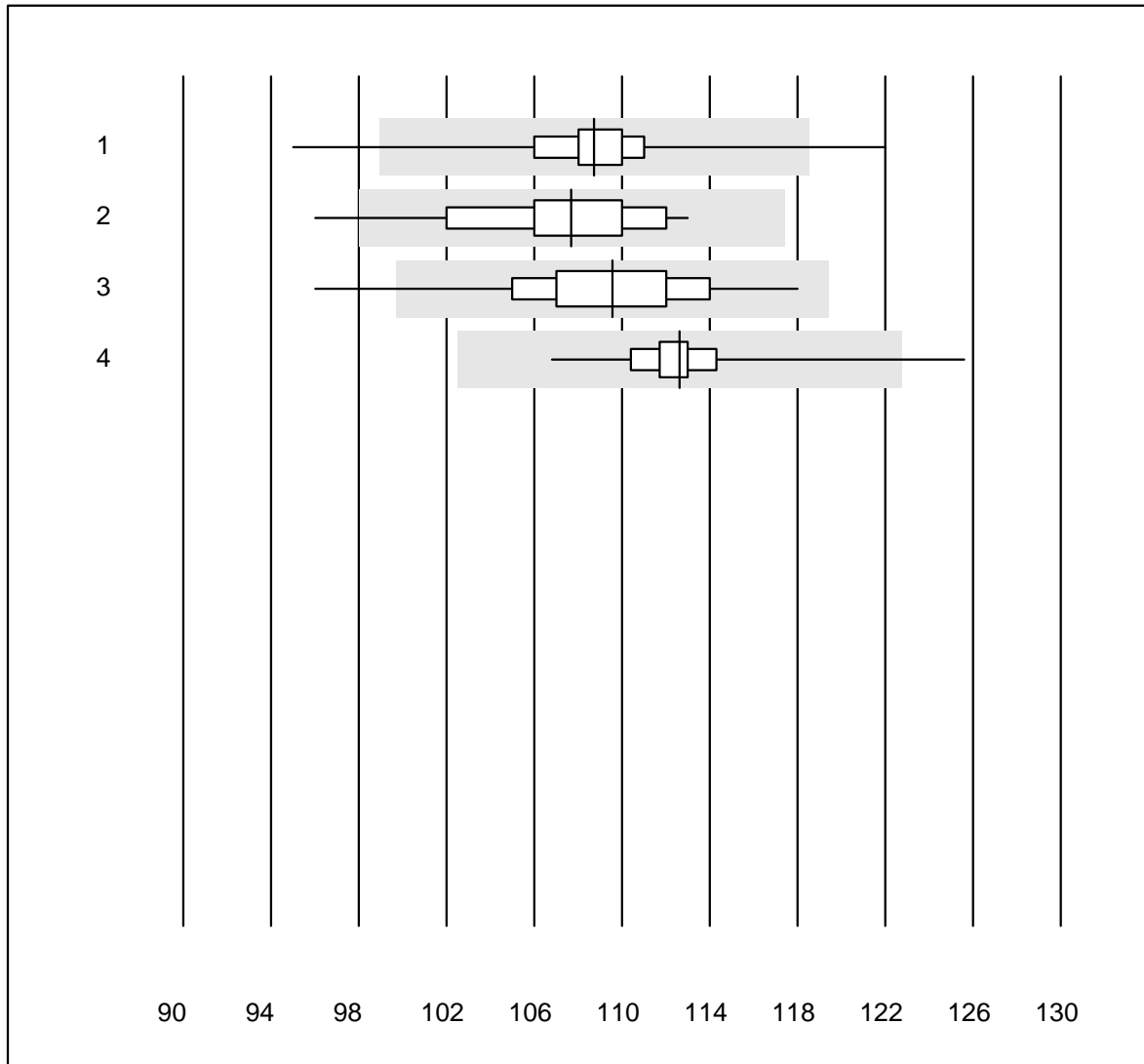
QUALAB tolerance : 9 %   Hemoglobin H2 (g/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Microsemi	907	95.4	1.5	3.1	108.7	2.6	e
2	Abx Micros	41	90.2	4.9	4.9	107.7	3.8	e
3	Z3	233	94.4	0.4	5.2	109.6	3.3	e
4	MEK-1303/5	29	96.6	3.4	0.0	112.6	2.6	e

Hematocrit H2

QUALAB tolerance : 9 %

Hematocrit H2 (l/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Microsemi	907	95.0	1.8	3.2	0.29	3.3	e
2	Abx Micros	41	90.3	7.3	2.4	0.28	4.3	e
3	Z3	233	93.1	1.7	5.2	0.30	3.7	e
4	MEK-1303/5	29	89.7	10.3	0.0	0.35	4.6	e

Leucocytes H2
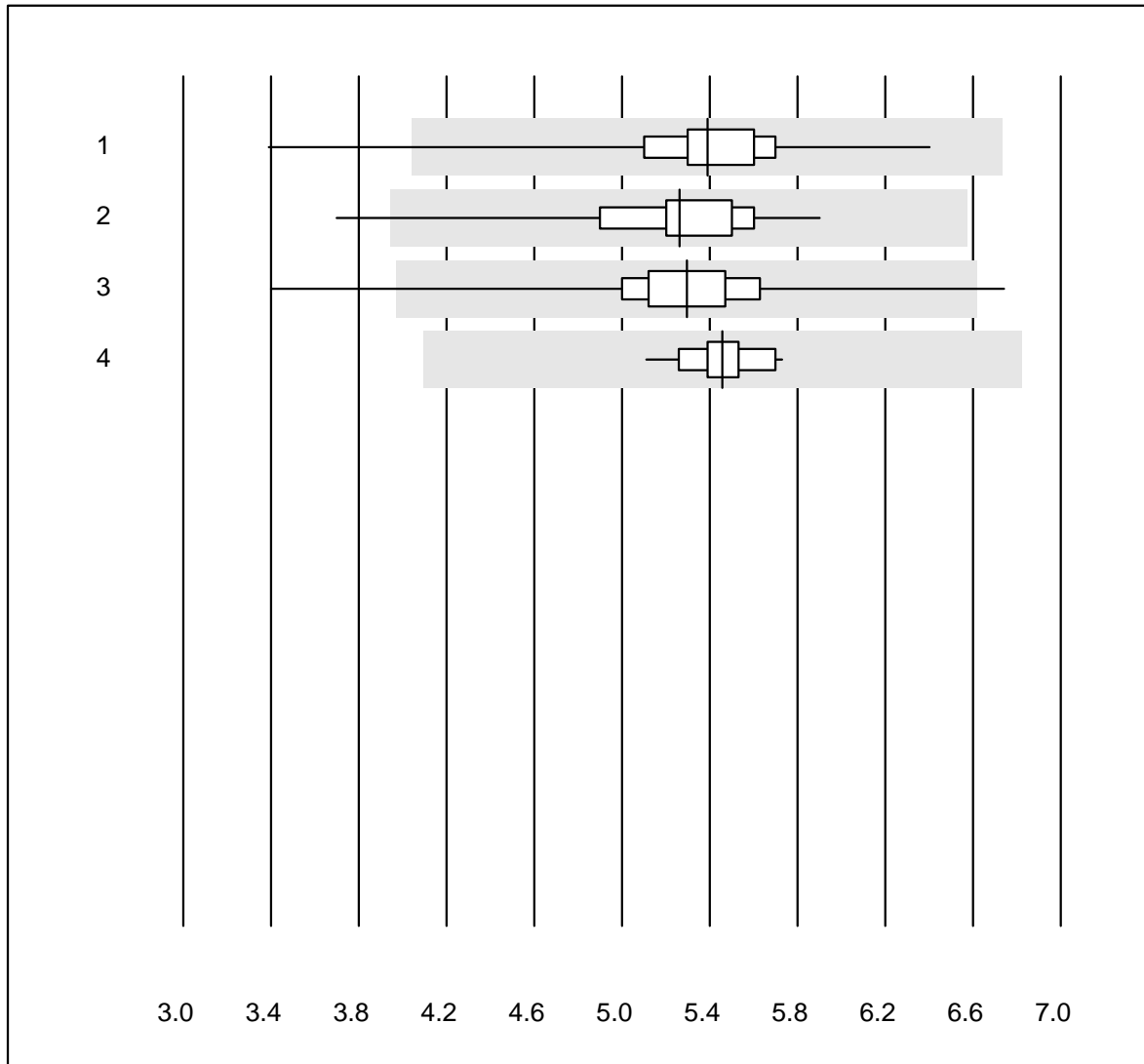
QUALAB tolerance : 25 %   Leucocytes H2 (G/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Microsemi	906	98.7	0.7	0.6	5.39	5.2	e
2	Abx Micros	41	97.6	2.4	0.0	5.26	8.0	e
3	Z3	233	97.4	1.3	1.3	5.29	6.1	e
4	MEK-1303/5	29	100.0	0.0	0.0	5.46	2.6	e

Thrombocytes H2
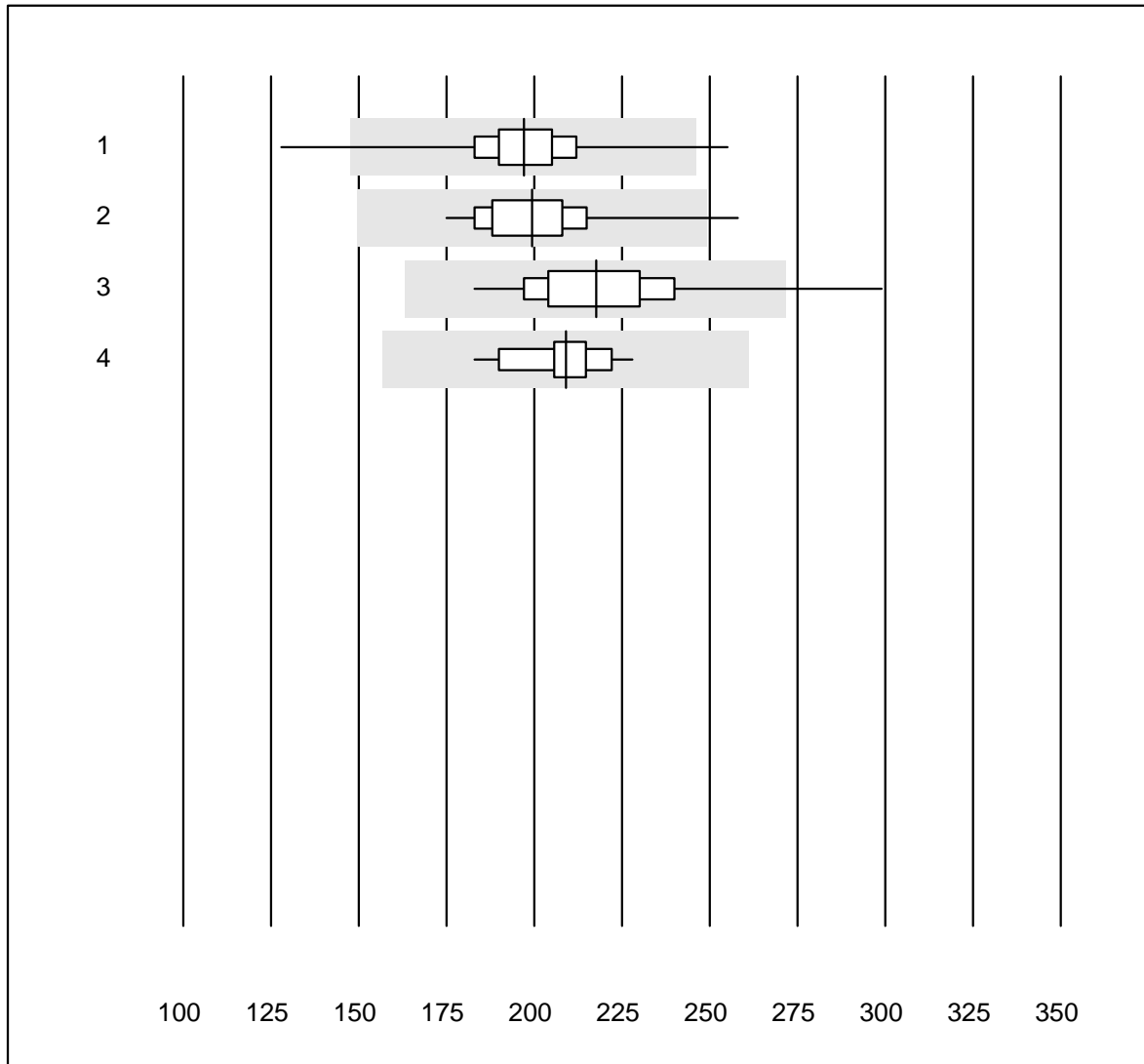
QUALAB tolerance : 25 %

Thrombocytes H2 (G/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Microsemi	907	98.3	0.9	0.8	197.0	6.7	e
2	Abx Micros	41	95.2	2.4	2.4	199.4	8.3	e
3	Z3	233	95.3	0.4	4.3	217.5	7.8	e
4	MEK-1303/5	29	100.0	0.0	0.0	209.0	5.3	e

Erythrocytes H2
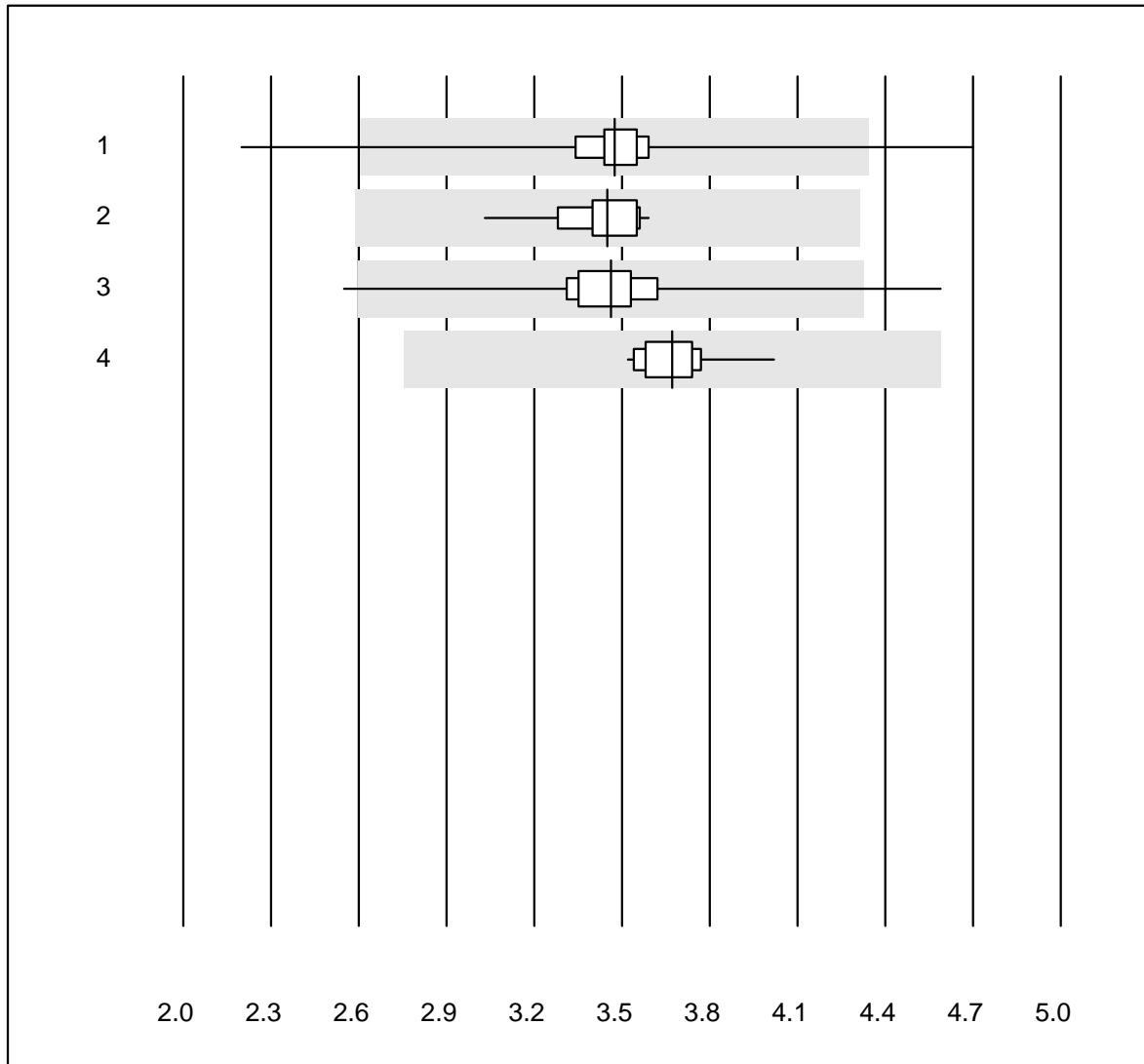
QUALAB tolerance : 25 %   Erythrocytes H2 (T/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Microsemi	907	97.5	0.8	1.7	3.48	4.6	e
2	Abx Micros	41	95.1	0.0	4.9	3.45	3.7	e
3	Z3	233	95.3	1.7	3.0	3.46	5.7	e
4	MEK-1303/5	29	100.0	0.0	0.0	3.67	2.8	e

CRP H2
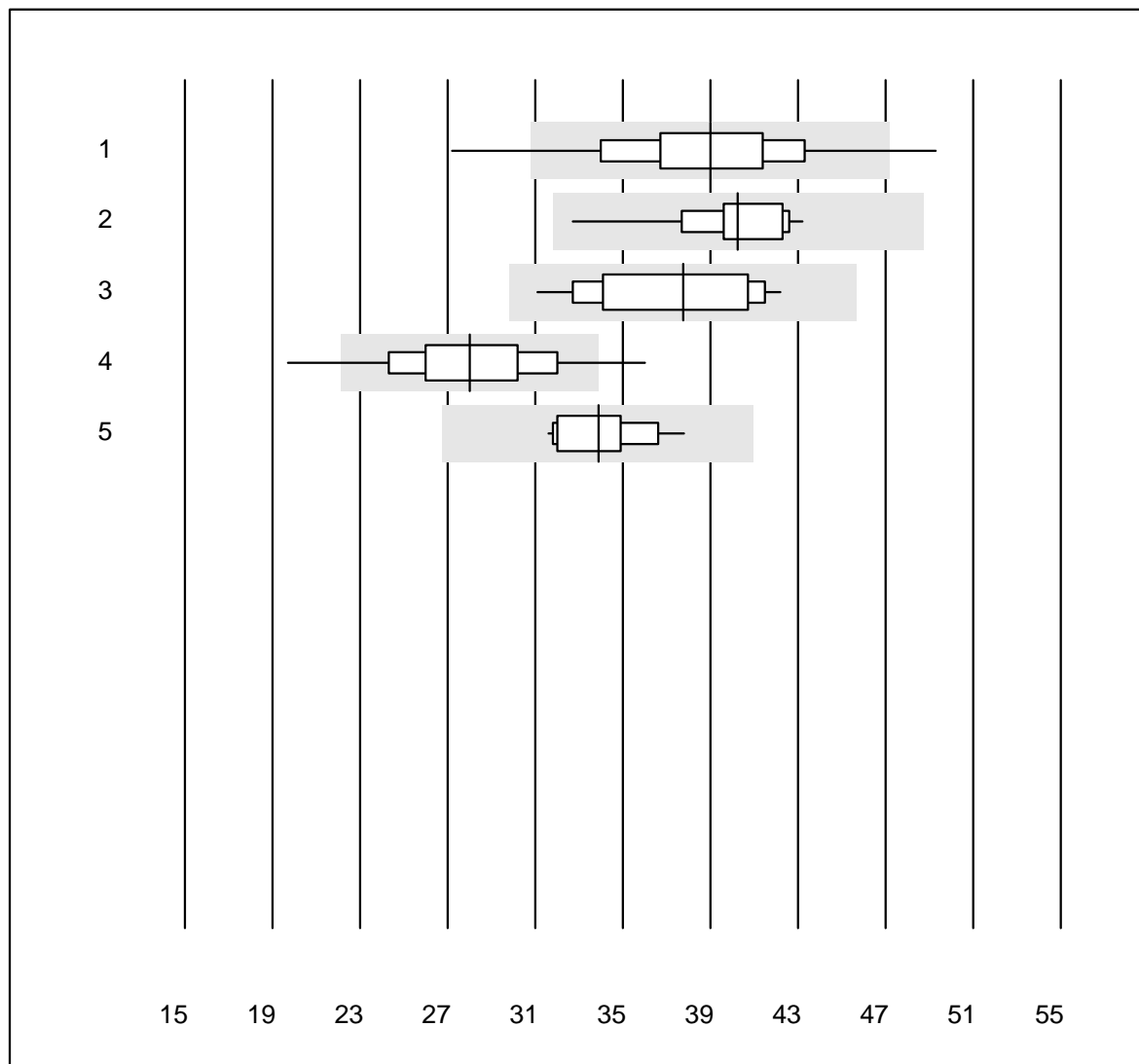
QUALAB tolerance : 21 %

CRP H2 (mg/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Microsemi	891	93.5	2.8	3.7	39.0	9.5	e
2	Abx Micros	11	100.0	0.0	0.0	40.3	7.3	e
3	ABX Micros CRP200	29	93.1	0.0	6.9	37.8	8.8	e
4	Z3	215	89.7	5.6	4.7	28.0	10.7	e
5	MEK-1303/5	14	100.0	0.0	0.0	33.9	5.9	e

Hemoglobin BG
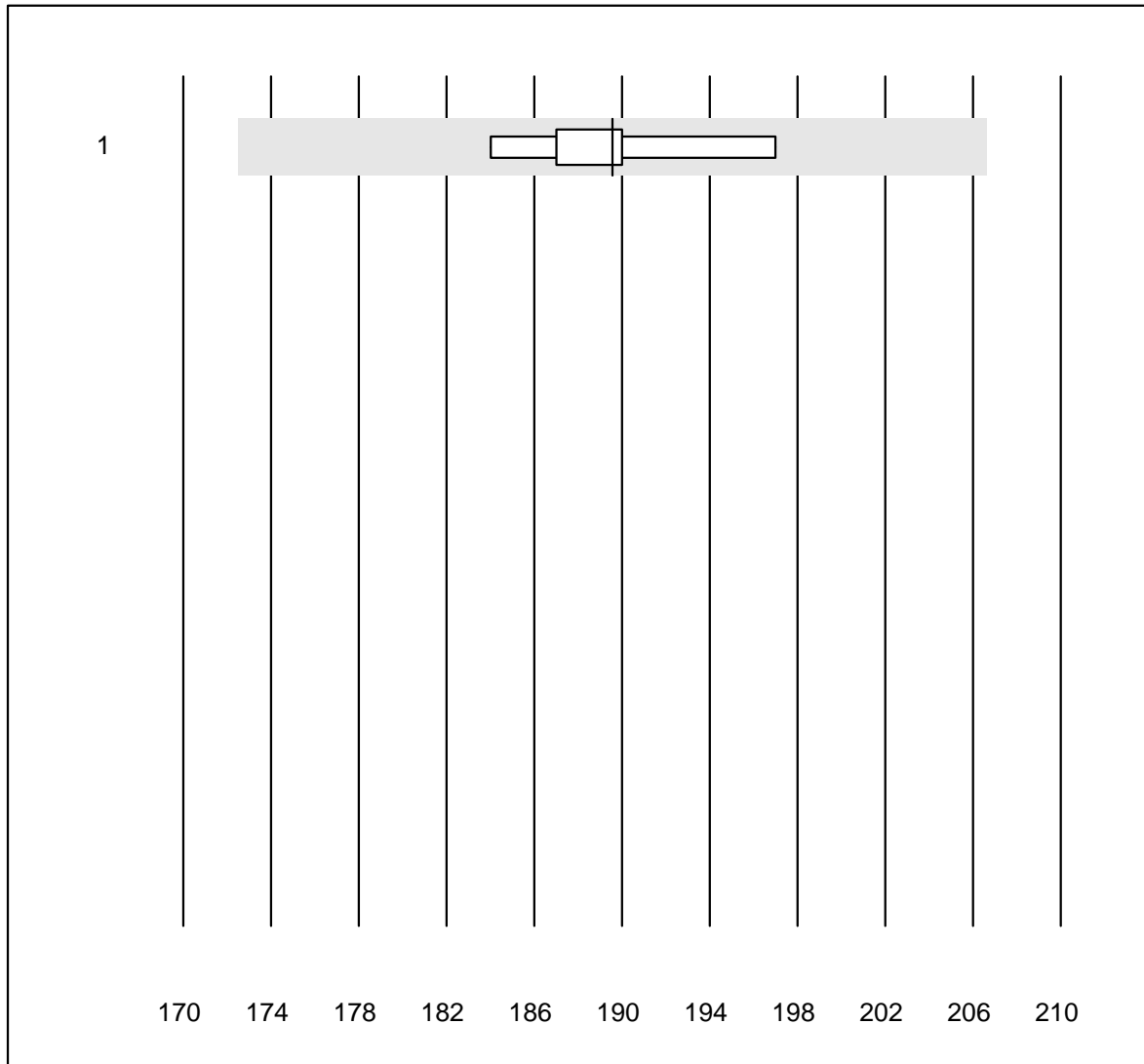
170   174   178   182   186   190   194   198   202   206   210

QUALAB tolerance : 9 %   Hemoglobin BG (g/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	iStat	11	81.8	0.0	18.2	189.6	2.1	e

Hematocrit
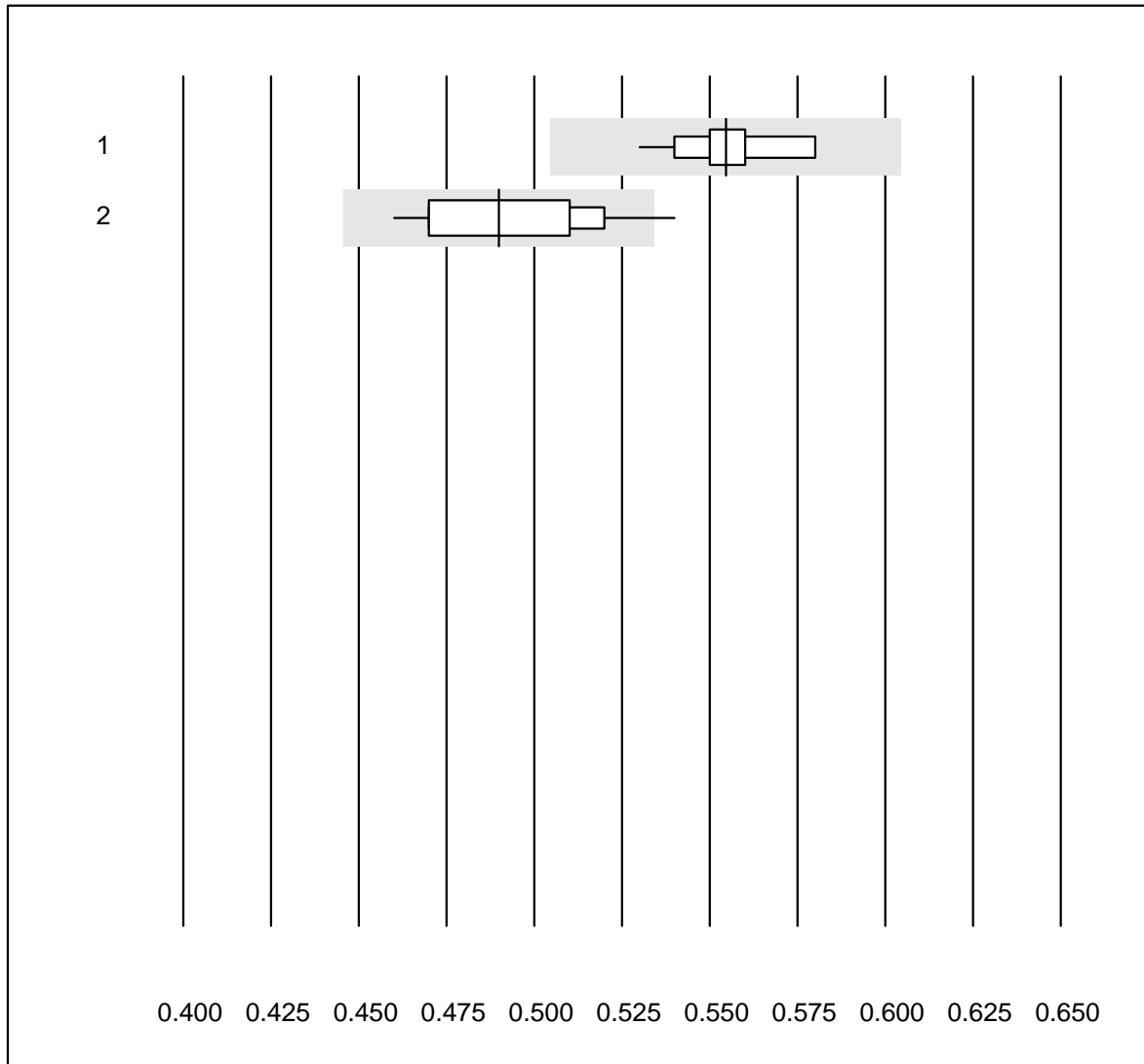
0.400 0.425 0.450 0.475 0.500 0.525 0.550 0.575 0.600 0.625 0.650

QUALAB tolerance : 9 %

Hematocrit (l/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	iStat	16	81.2	0.0	18.8	0.55	2.7	e
2	EPOC	13	84.6	7.7	7.7	0.49	5.1	e*

Hemoglobin
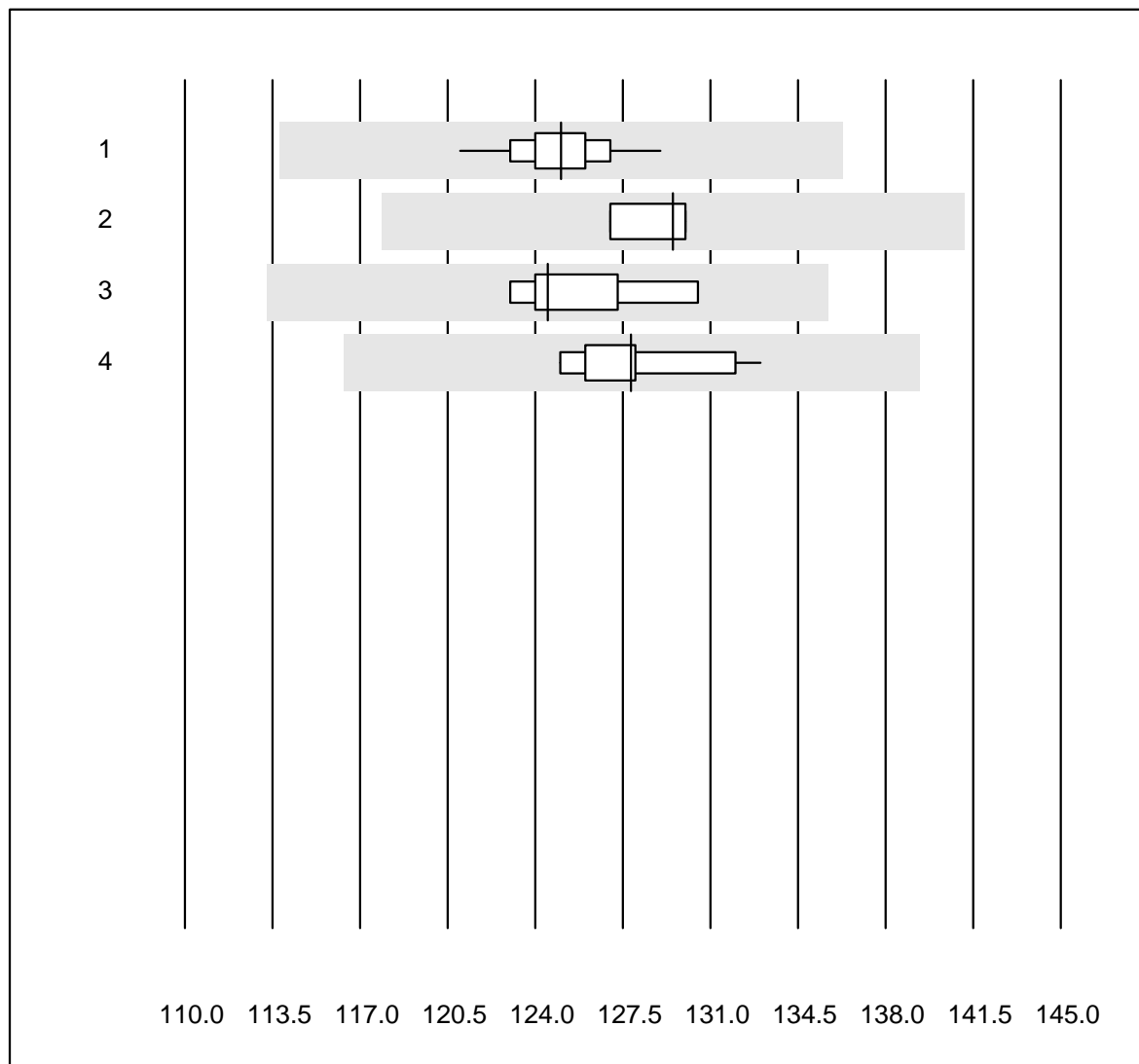
110.0 113.5 117.0 120.5 124.0 127.5 131.0 134.5 138.0 141.5 145.0

QUALAB tolerance : 9 %   Hemoglobin (g/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Sysmex	118	100.0	0.0	0.0	125.0	1.3	e
2	Advia	4	100.0	0.0	0.0	129.5	1.1	e
3	Beckman	5	100.0	0.0	0.0	124.5	2.4	e*
4	Yumizen/Pentra	12	100.0	0.0	0.0	127.8	1.9	e

Hematocrit
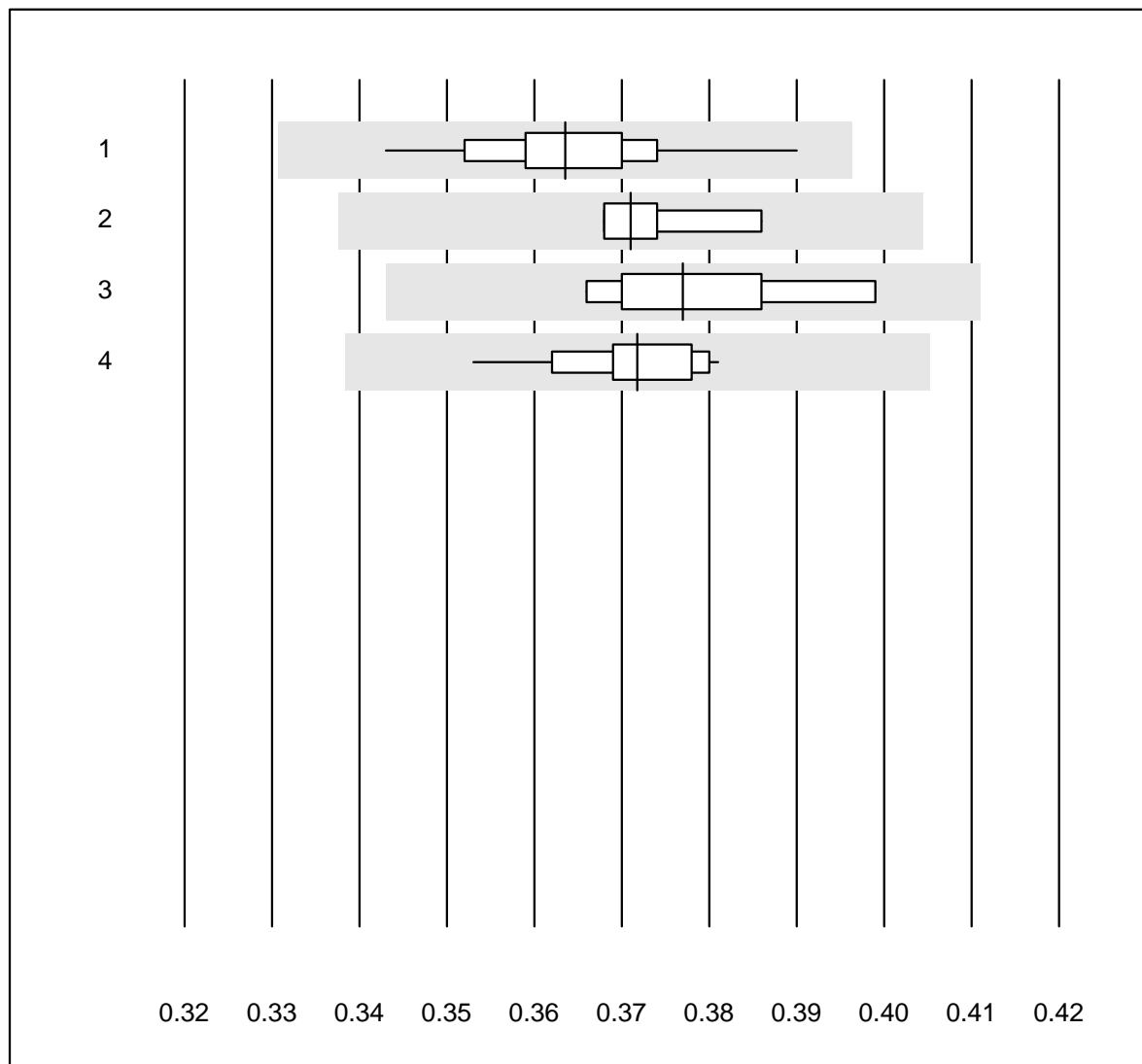
QUALAB tolerance : 9 %   Hematocrit (l/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Sysmex	120	99.2	0.0	0.8	0.36	2.4	e
2	Advia	4	100.0	0.0	0.0	0.37	2.3	e*
3	Beckman	5	100.0	0.0	0.0	0.38	3.5	e*
4	Yumizen/Pentra	12	100.0	0.0	0.0	0.37	2.2	e

Erythrocytes
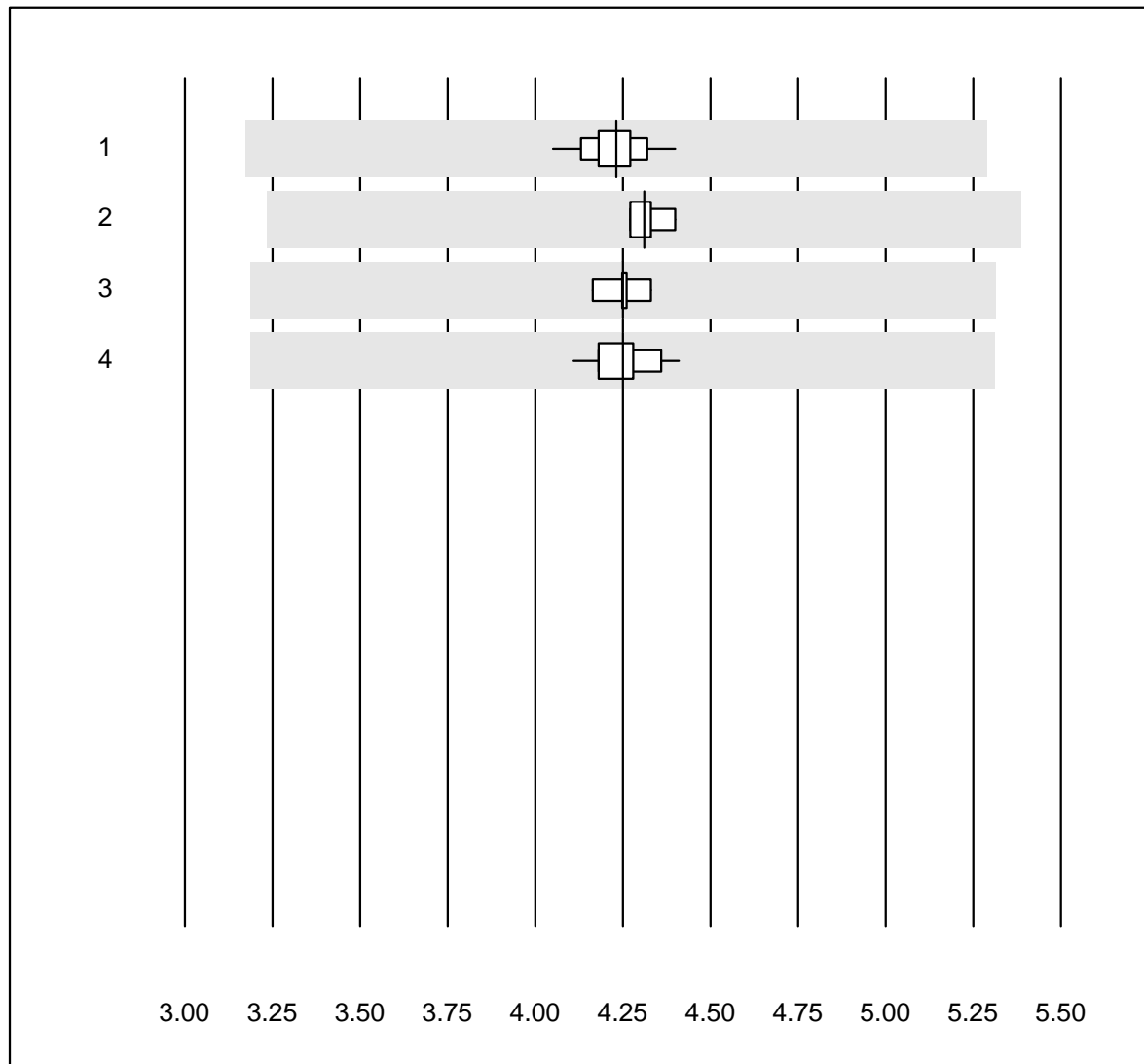
QUALAB tolerance : 25 %

Erythrocytes (T/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Sysmex	119	100.0	0.0	0.0	4.23	1.7	e
2	Advia	4	100.0	0.0	0.0	4.31	1.3	e
3	Beckman	5	100.0	0.0	0.0	4.25	1.4	e
4	Yumizen/Pentra	12	100.0	0.0	0.0	4.25	2.0	e

Leucocytes
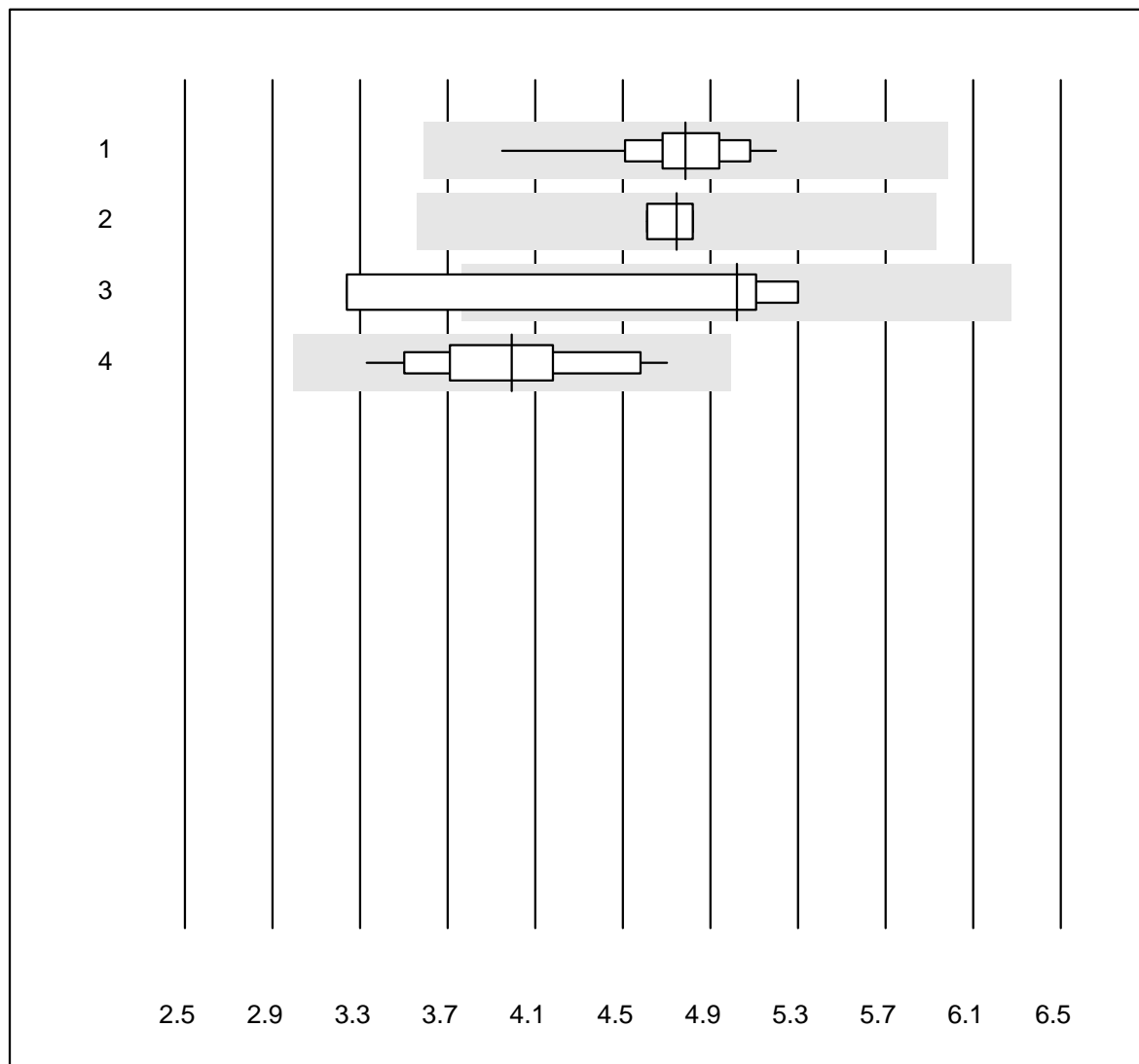
QUALAB tolerance : 25 %   Leucocytes (G/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Sysmex	119	100.0	0.0	0.0	4.79	4.7	e
2	Advia	4	100.0	0.0	0.0	4.75	2.3	e
3	Beckman	5	60.0	20.0	20.0	5.02	20.5	e*
4	Yumizen/Pentra	12	100.0	0.0	0.0	3.99	10.0	e

Thrombocytes
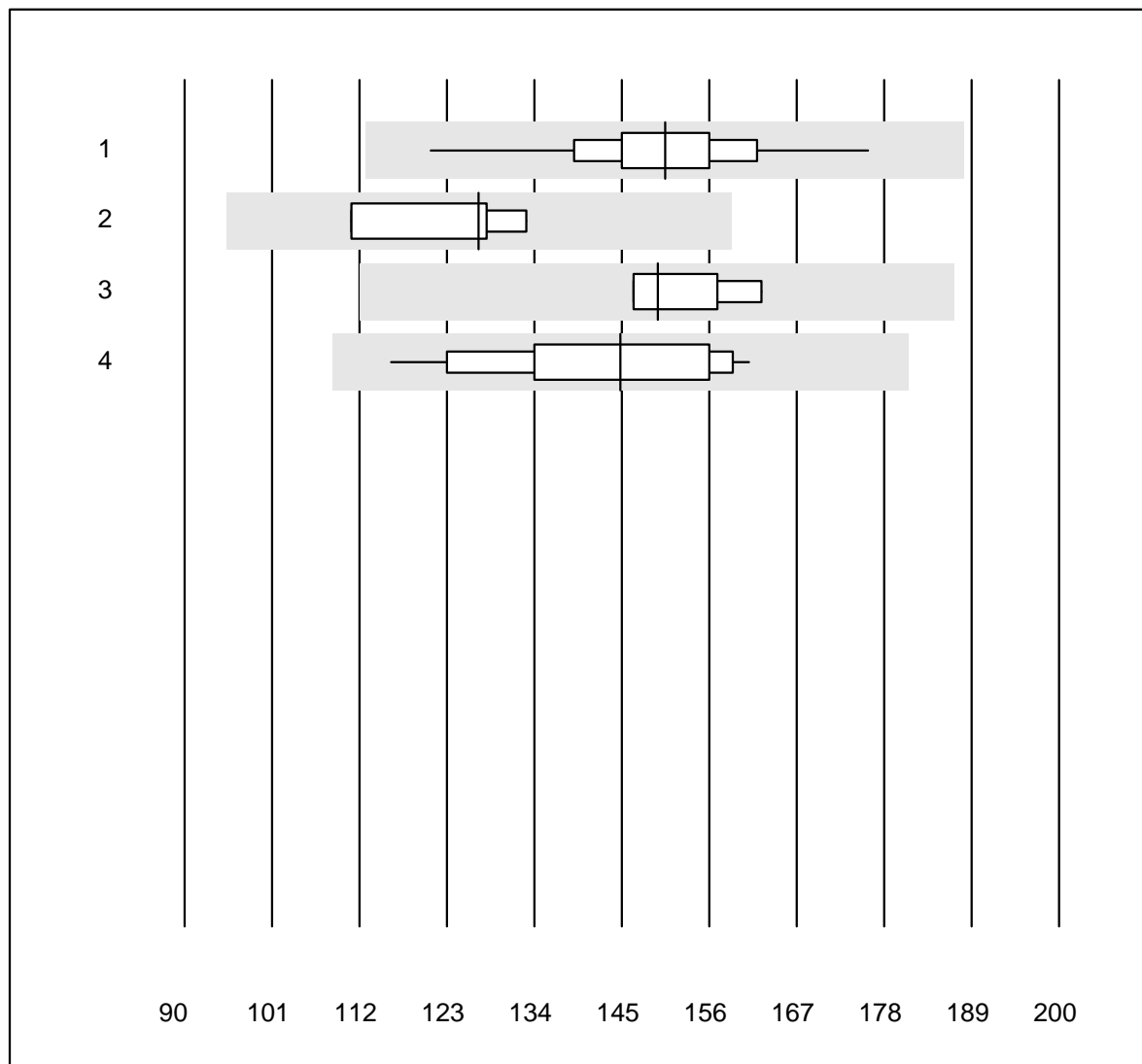
QUALAB tolerance : 25 %

Thrombocytes (G/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Sysmex	118	100.0	0.0	0.0	150.4	6.1	e
2	Advia	4	100.0	0.0	0.0	127.0	7.6	e*
3	Beckman	5	100.0	0.0	0.0	149.5	4.7	e
4	Yumizen/Pentra	12	100.0	0.0	0.0	144.8	10.0	e

Neutrophils
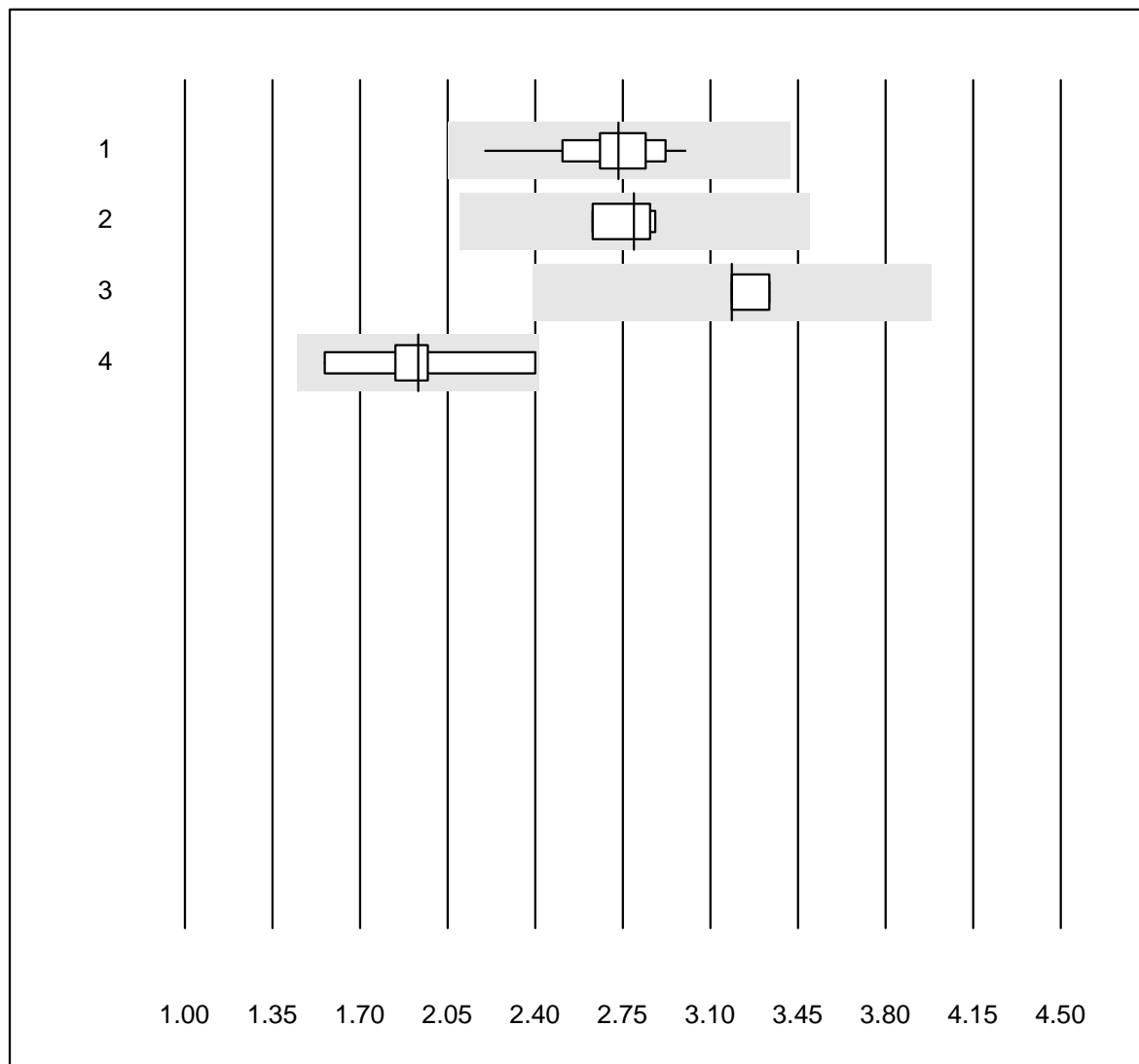
MQ tolerance : 25 %   Neutrophils (G/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Sysmex	120	100.0	0.0	0.0	2.73	5.6	e
2	Advia	4	100.0	0.0	0.0	2.80	4.2	e
3	Beckman	5	60.0	0.0	40.0	3.19	2.4	e
4	Yumizen/Pentra	11	81.8	0.0	18.2	1.93	13.2	e*

Lymphocytes
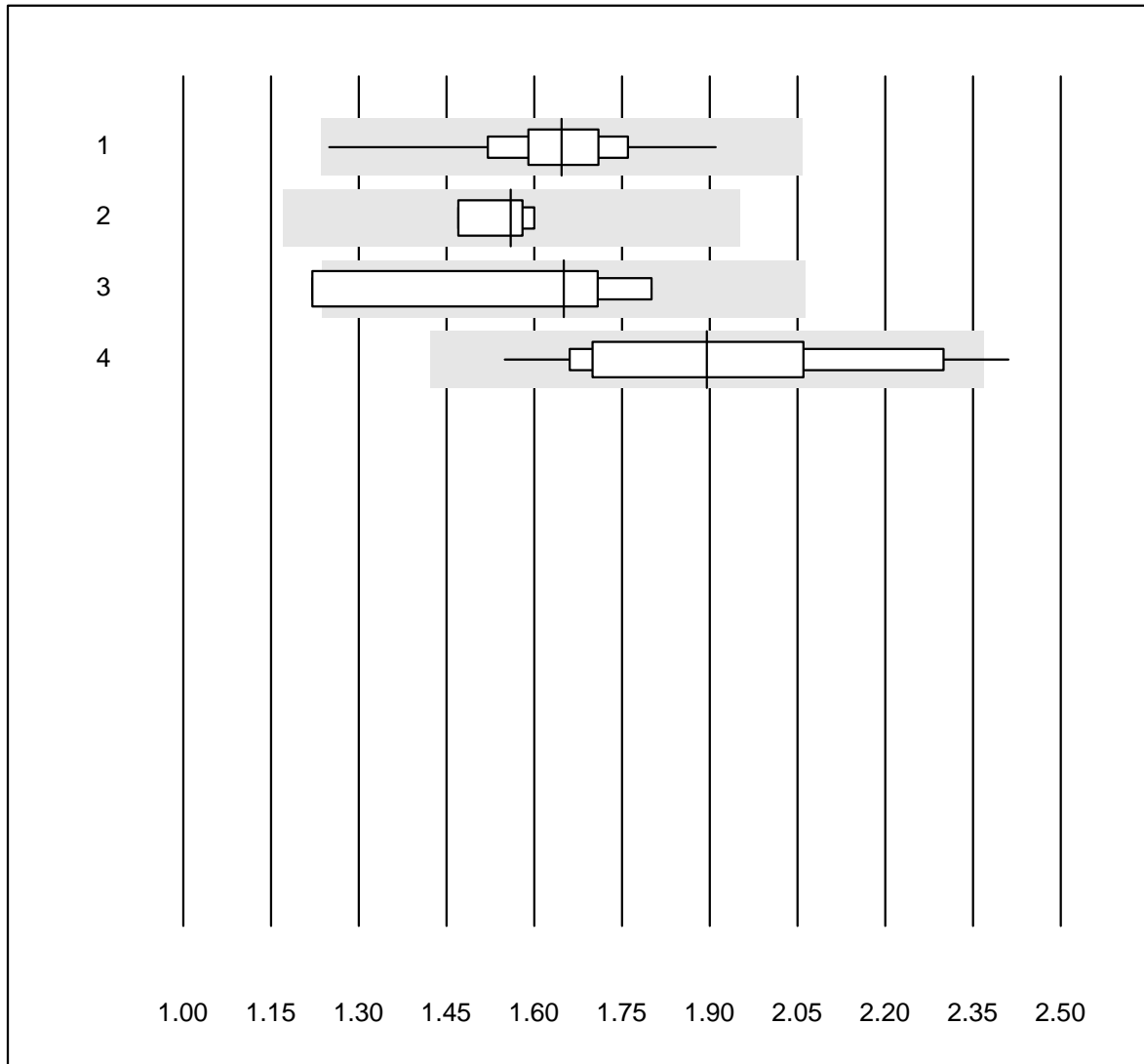
MQ tolerance : 25 %

Lymphocytes (G/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Sysmex	120	100.0	0.0	0.0	1.65	6.1	e
2	Advia	4	100.0	0.0	0.0	1.56	3.7	e
3	Beckman	5	60.0	20.0	20.0	1.65	16.1	e*
4	Yumizen/Pentra	11	90.9	9.1	0.0	1.90	13.9	e*

Monocytes
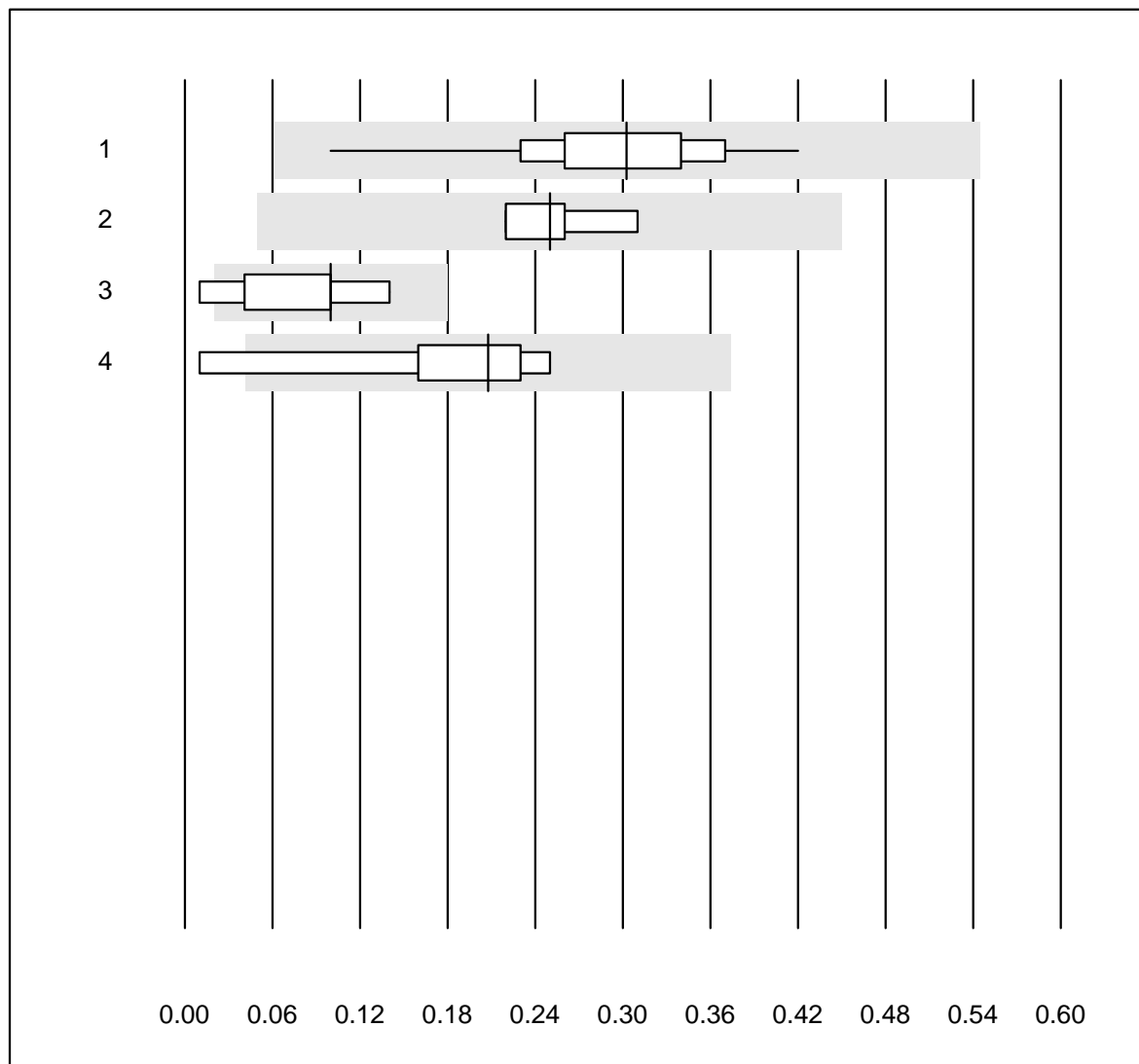
MQ tolerance : 80 %

Monocytes (G/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Sysmex	120	100.0	0.0	0.0	0.30	19.2	a
2	Advia	4	100.0	0.0	0.0	0.25	15.0	a
3	Beckman	5	80.0	20.0	0.0	0.10	68.9	a
4	Yumizen/Pentra	11	81.8	9.1	9.1	0.21	38.1	a

Eosinophils

0.000 0.012 0.024 0.036 0.048 0.060 0.072 0.084 0.096 0.108 0.120
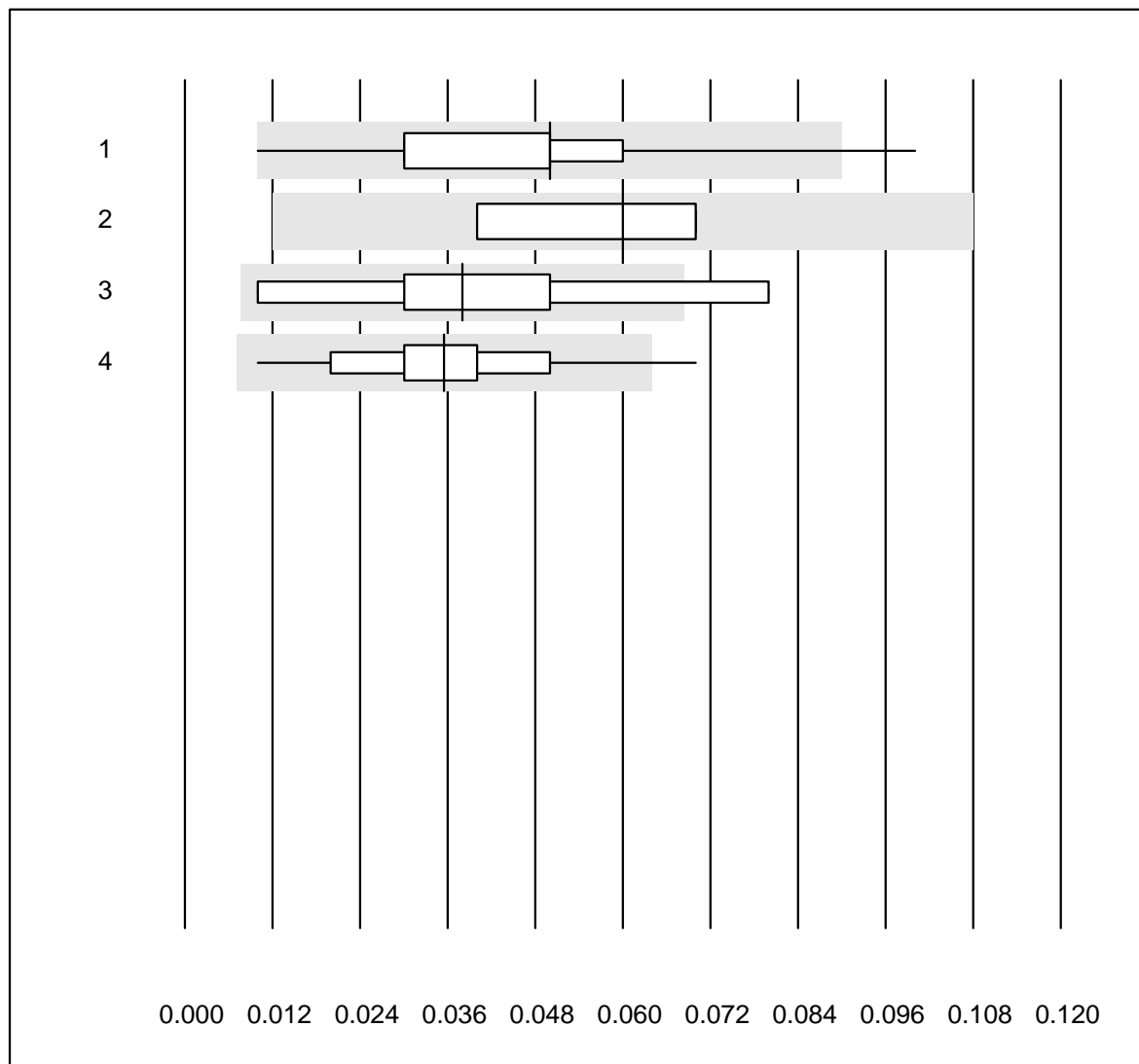
MQ tolerance : 80 %

Eosinophils (G/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Sysmex	119	96.6	3.4	0.0	0.05	36.8	a
2	Advia	4	100.0	0.0	0.0	0.06	26.1	e*
3	Beckman	5	80.0	20.0	0.0	0.04	62.4	e*
4	Yumizen/Pentra	11	90.9	9.1	0.0	0.04	44.4	e*

Basophiles
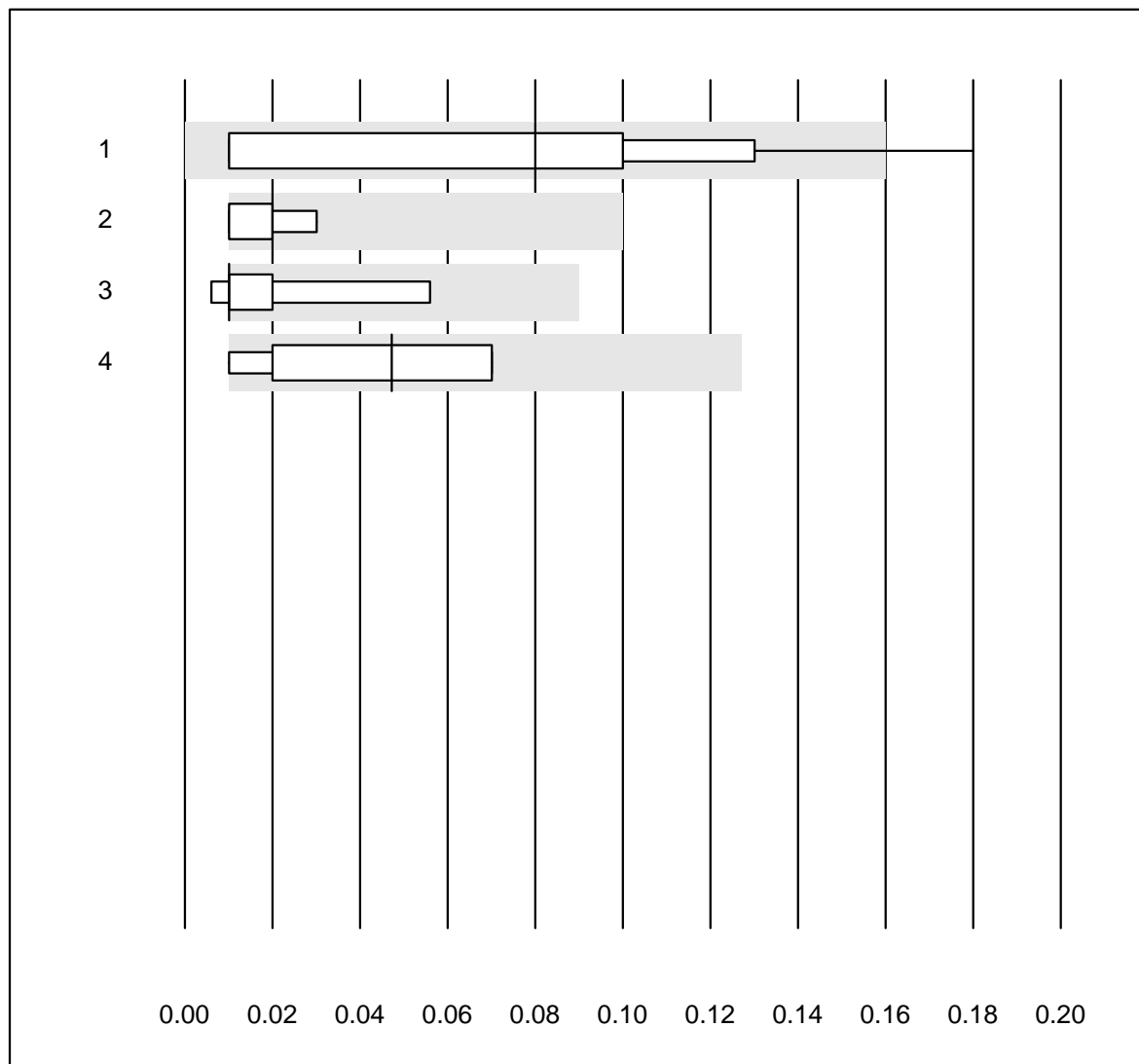
MQ tolerance : 80 %
(< 0.10: +/- 0.08 G/l)

Basophiles (G/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Sysmex	118	94.9	3.4	1.7	0.08	86.6	a
2	Advia	4	100.0	0.0	0.0	0.02	40.8	e*
3	Beckman	5	100.0	0.0	0.0	0.01	100.8	e*
4	Yumizen/Pentra	11	100.0	0.0	0.0	0.05	50.1	e*

MCV
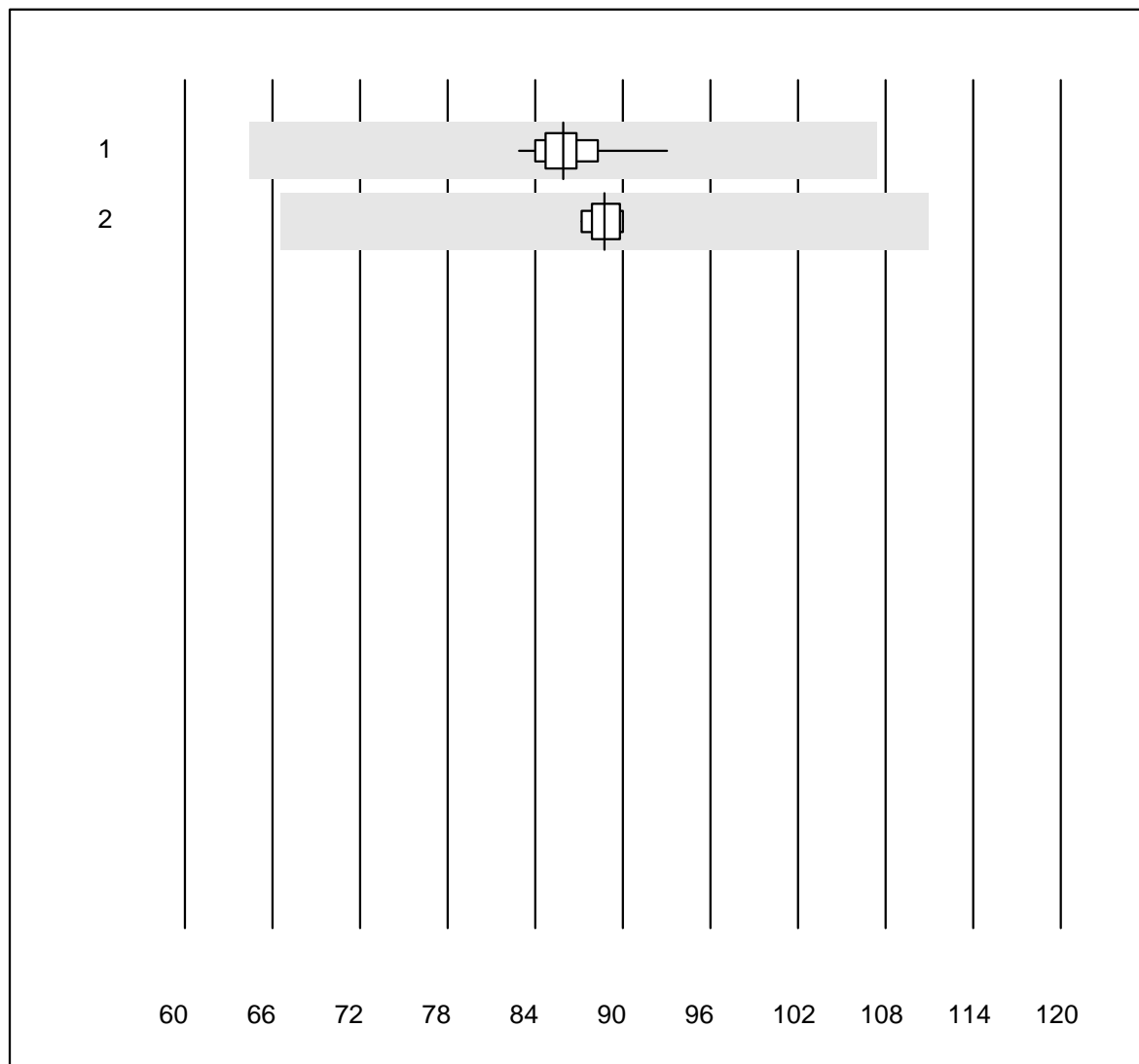
MCV (fl)

MQ tolerance : 25 %

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Sysmex	109	100.0	0.0	0.0	85.9	2.1	e
2	Yumizen/Pentra	8	100.0	0.0	0.0	88.8	1.2	e

6 additional results were submitted but not published because the method groups were too small. (< results per group)

MCH
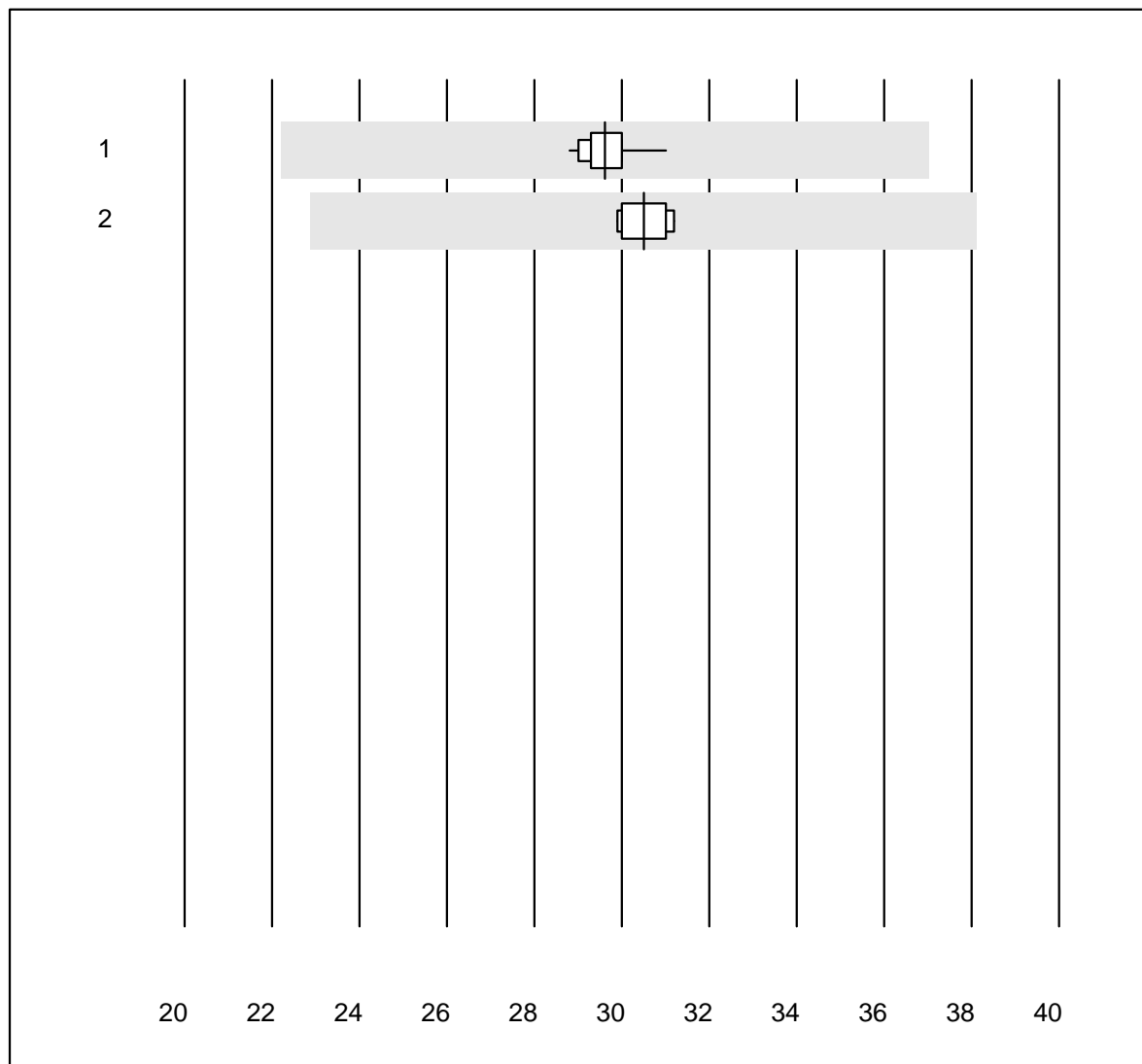
MQ tolerance : 25 %

MCH (pg)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Sysmex	109	99.1	0.0	0.9	29.6	1.4	e
2	Yumizen/Pentra	9	100.0	0.0	0.0	30.5	1.7	e

6 additional results were submitted but not published because the method groups were too small. (< results per group)
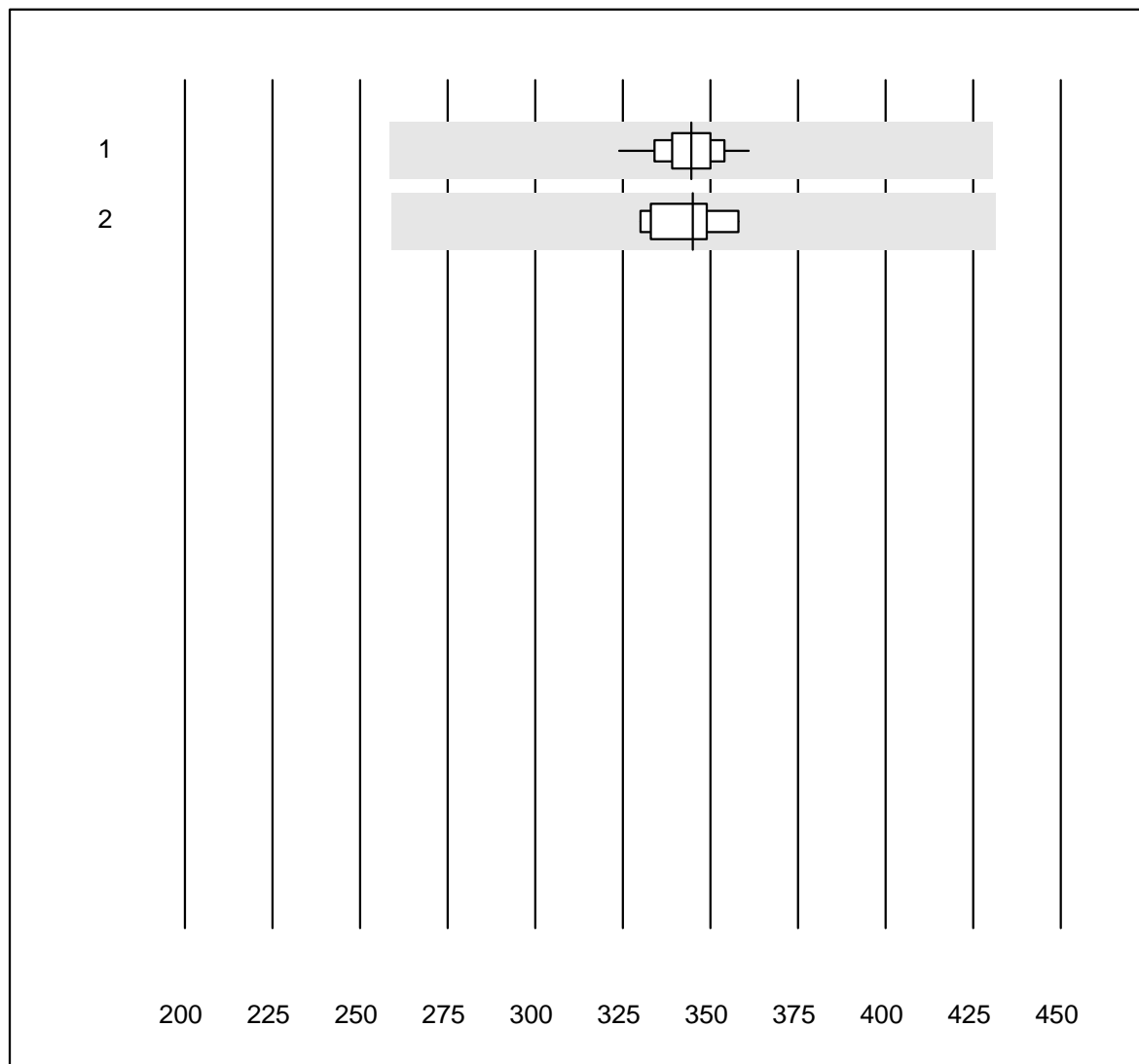
MCHC

MQ tolerance : 25 %

MCHC (g/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Sysmex	110	100.0	0.0	0.0	344	2.3	e
2	Yumizen/Pentra	9	100.0	0.0	0.0	345	3.1	e

6 additional results were submitted but not published because the method groups were too small. (< results per group)
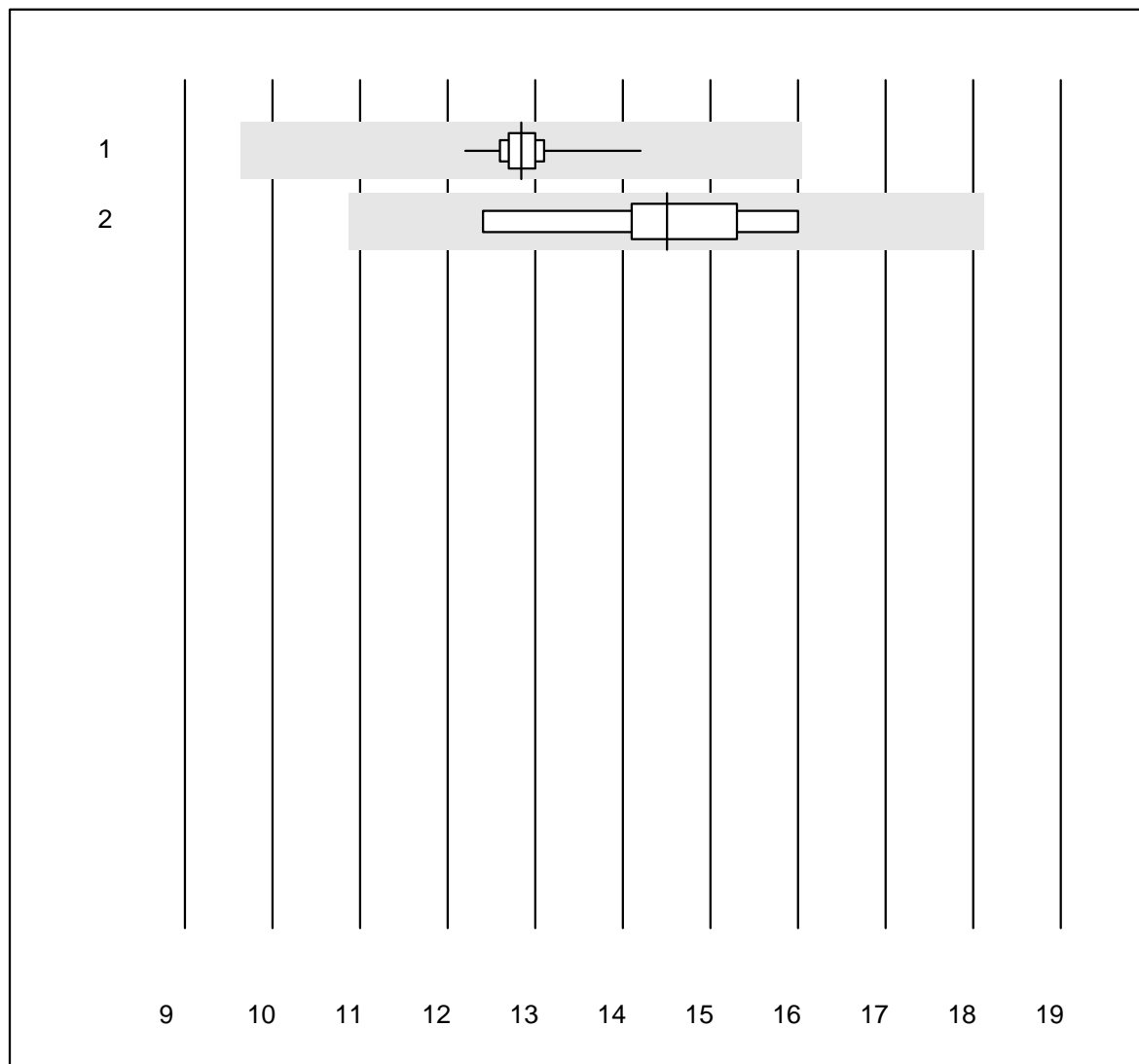
RDW

MQ tolerance : 25 %   RDW (%)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Sysmex	104	100.0	0.0	0.0	12.8	1.9	e
2	Yumizen/Pentra	9	100.0	0.0	0.0	14.5	9.0	e

6 additional results were submitted but not published because the method groups were too small. (< results per group)
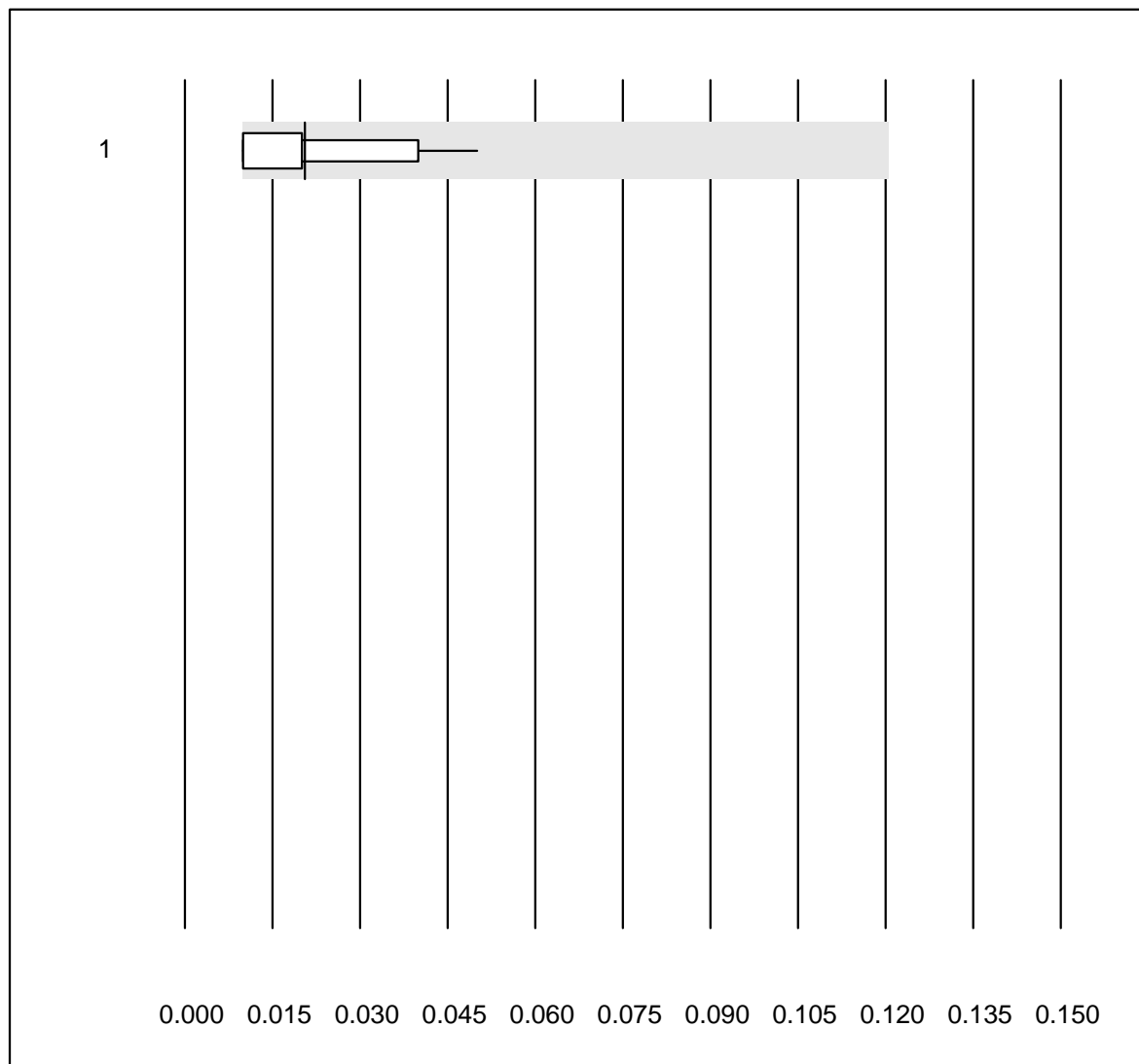
Immature Granulocytes

0.000 0.015 0.030 0.045 0.060 0.075 0.090 0.105 0.120 0.135 0.150

Immature Granulocytes (G/l)

MQ tolerance : 25 %
(< 0.10: +/- 0.10 G/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Sysmex	102	100.0	0.0	0.0	0.02	51.1	e*

Reticulocytes
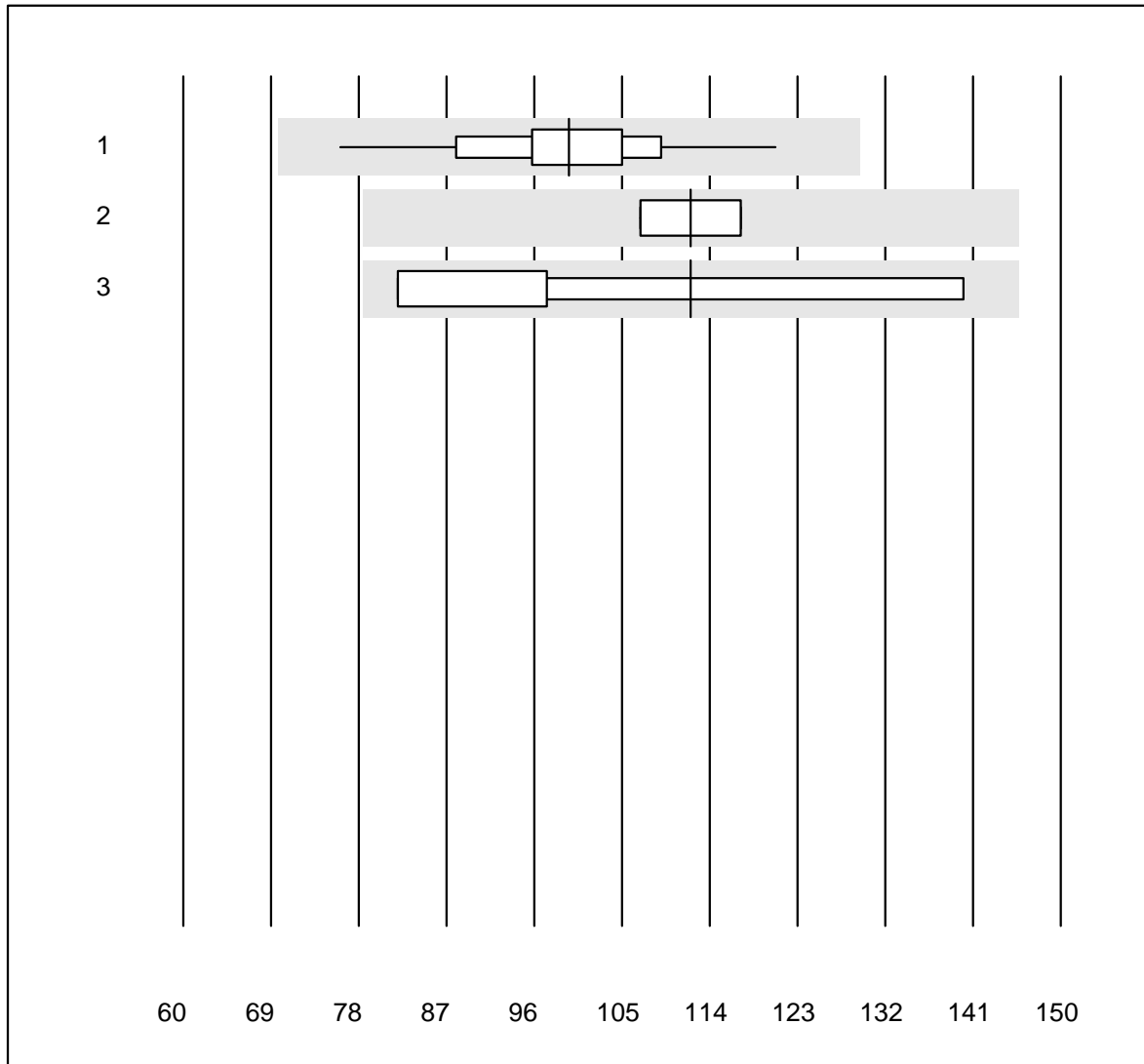
MQ tolerance : 30 %

Reticulocytes (G/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Sysmex	66	98.5	0.0	1.5	99.5	9.0	e
2	Advia	5	40.0	0.0	60.0	112.1	6.5	a
3	Beckman	4	100.0	0.0	0.0	112.1	26.5	a

Hämolyseindex Probe A
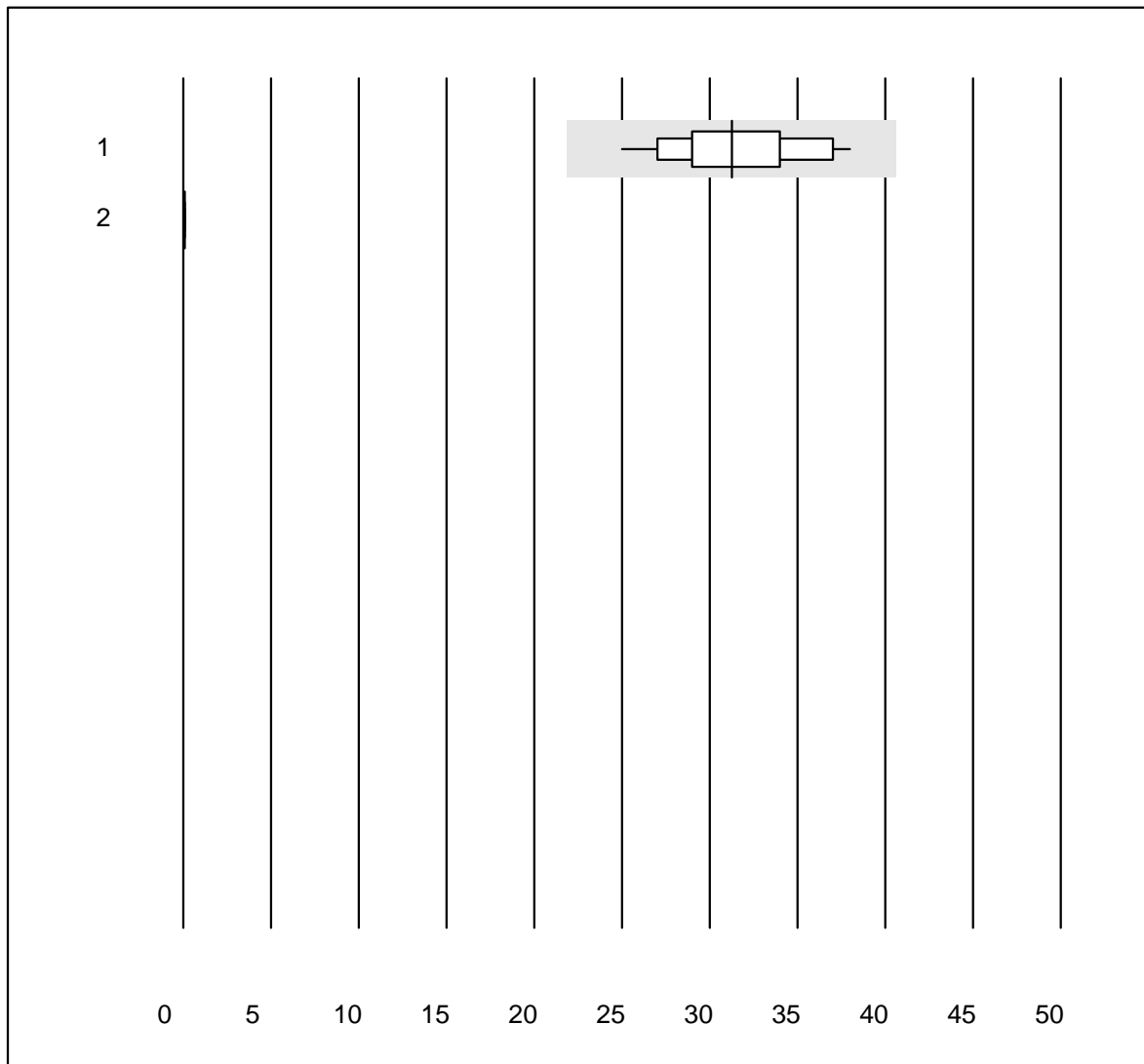
MQ tolerance : 30 %   Hämolyseindex Probe A ()

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Cobas	22	100.0	0.0	0.0	31.25	11.6	e
2	Abbott	8	62.5	0.0	37.5	0.07	20.3	e*

One result was submitted but not pubished because the method group was too small. (< 4 results per group)

Hämolyseindex Probe B
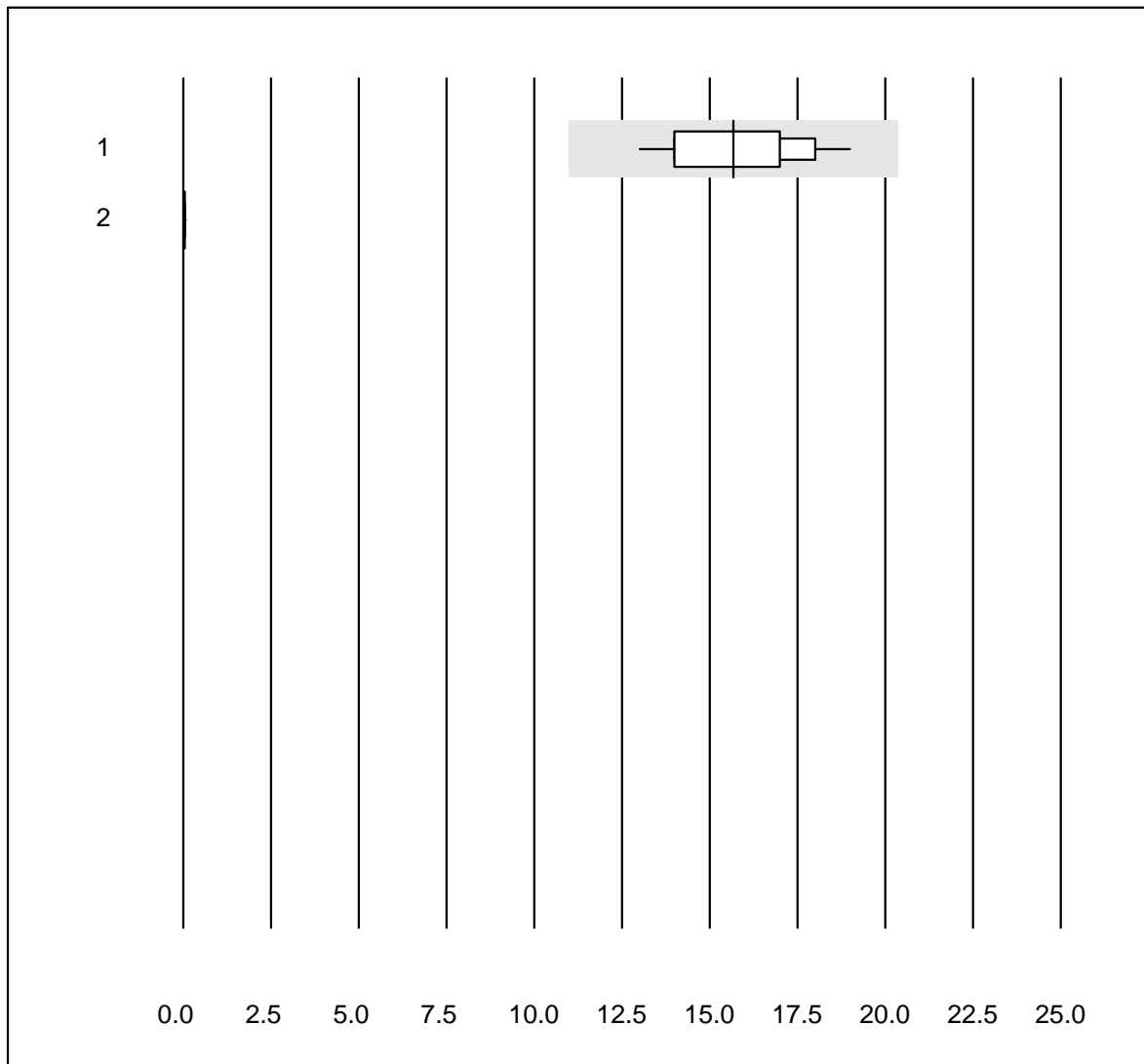
MQ tolerance : 30 %   Hämolyseindex Probe B ()

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Cobas	22	100.0	0.0	0.0	15.68	11.2	e
2	Abbott	8	50.0	0.0	50.0	0.04	11.8	e*

One result was submitted but not pubished because the method group was too small. (< 4 results per group)
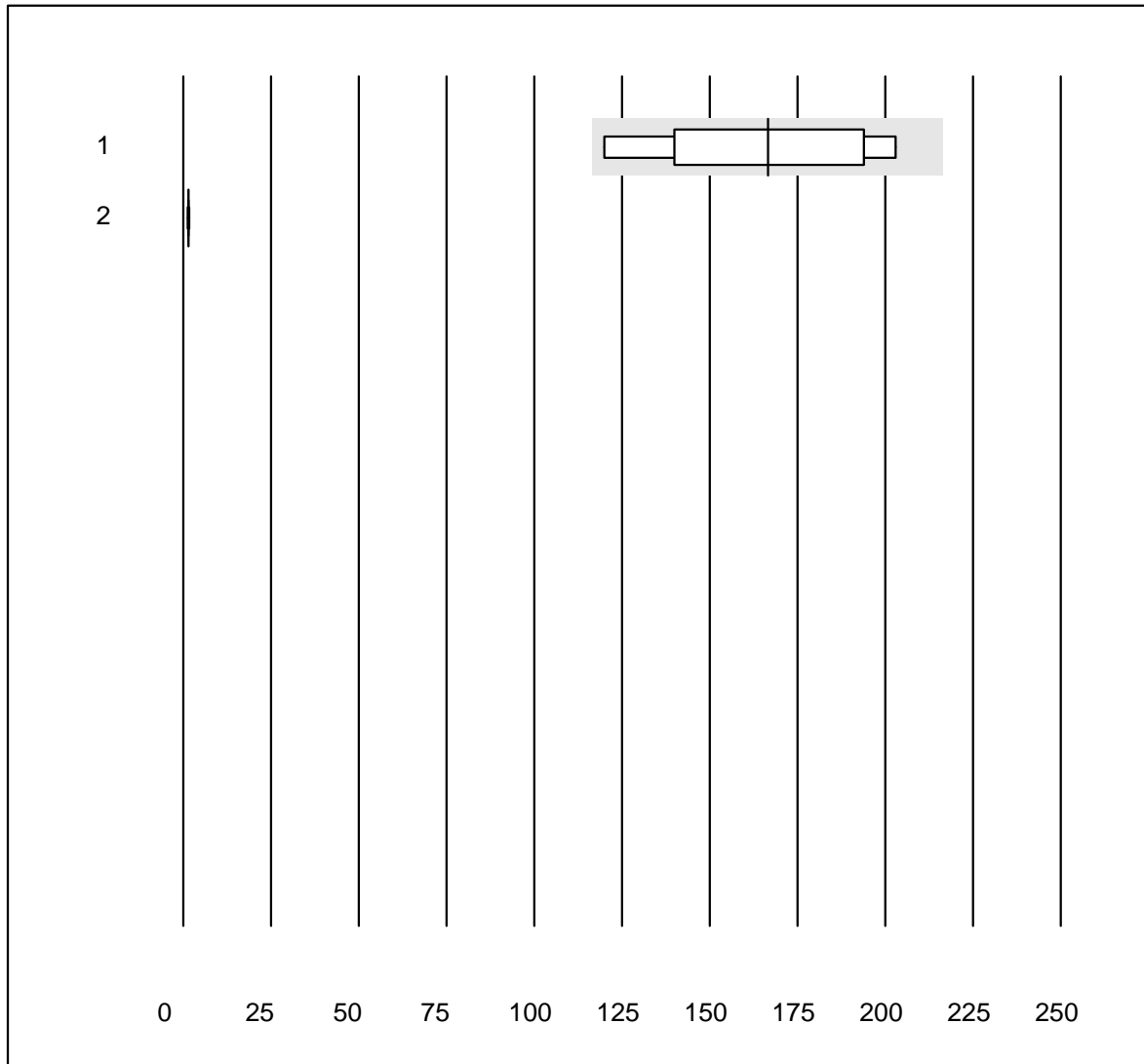
Lipemia index A

MQ tolerance : 30 %   Lipemia index A ()

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Cobas	8	87.5	0.0	12.5	166.50	18.1	e*
2	Abbott	6	100.0	0.0	0.0	1.43	9.6	e*

Lipemia index B
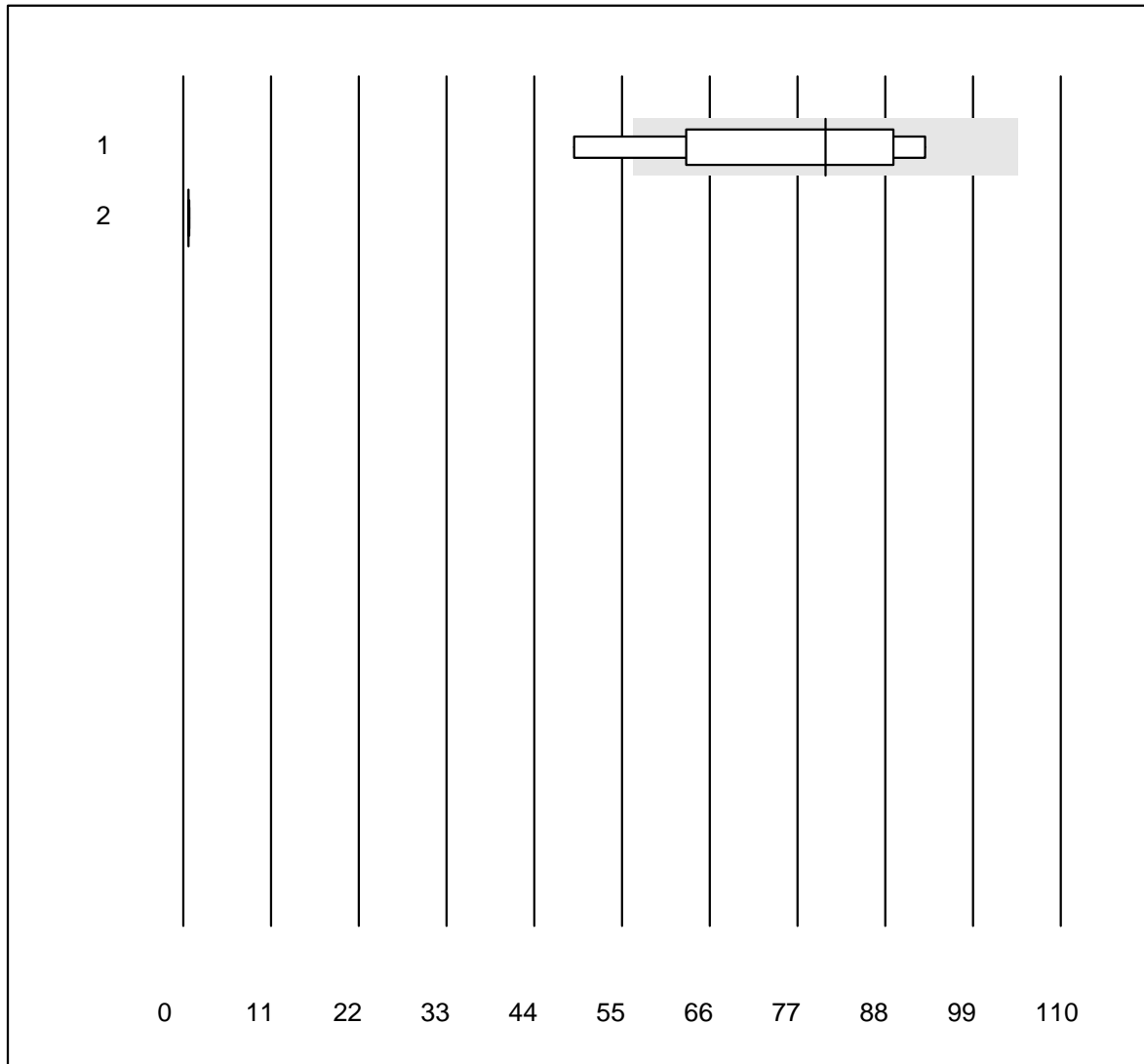
MQ tolerance : 30 %   Lipemia index B ()

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Cobas	8	87.5	12.5	0.0	80.50	19.5	e*
2	Abbott	6	100.0	0.0	0.0	0.65	8.6	e

Icteria Index A

Icteria Index A ()

MQ tolerance : 30 %
(< 5.00: +/- 1.50)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Cobas	8	100.0	0.0	0.0	0.01	0.0	e
2	Abbott	6	83.3	0.0	16.7	26.18	6.9	e

Icteria Index B

0.0	1.6	3.2	4.8	6.4	8.0	9.6	11.2	12.8	14.4	16.0
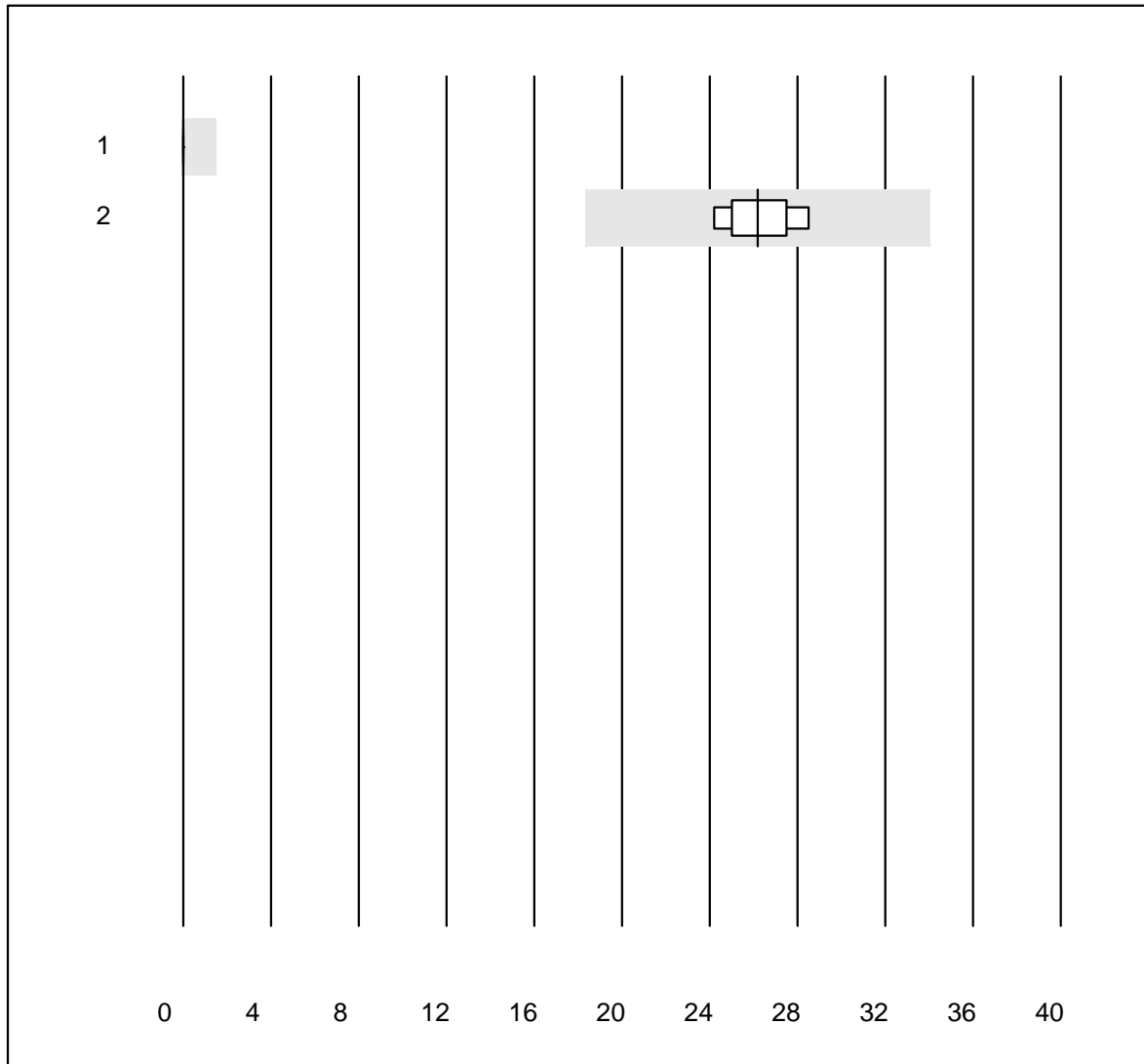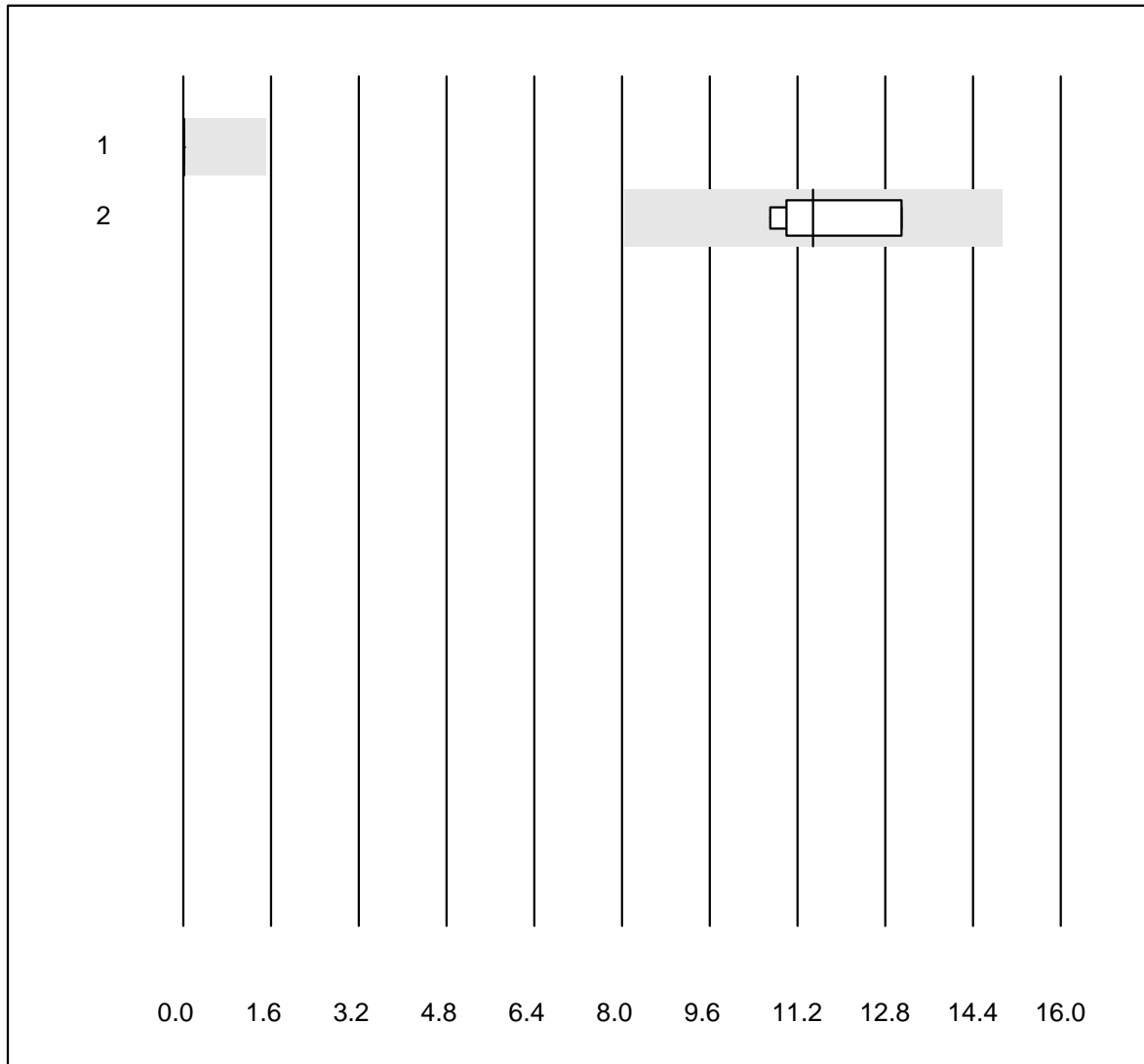
MQ tolerance : 30 %
(< 5.00: +/- 1.50)

Icteria Index B ()

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Cobas	8	100.0	0.0	0.0	0.01	0.0	e
2	Abbott	6	83.3	0.0	16.7	11.49	9.4	e*

Erythrocyte sedimentation rate 1h
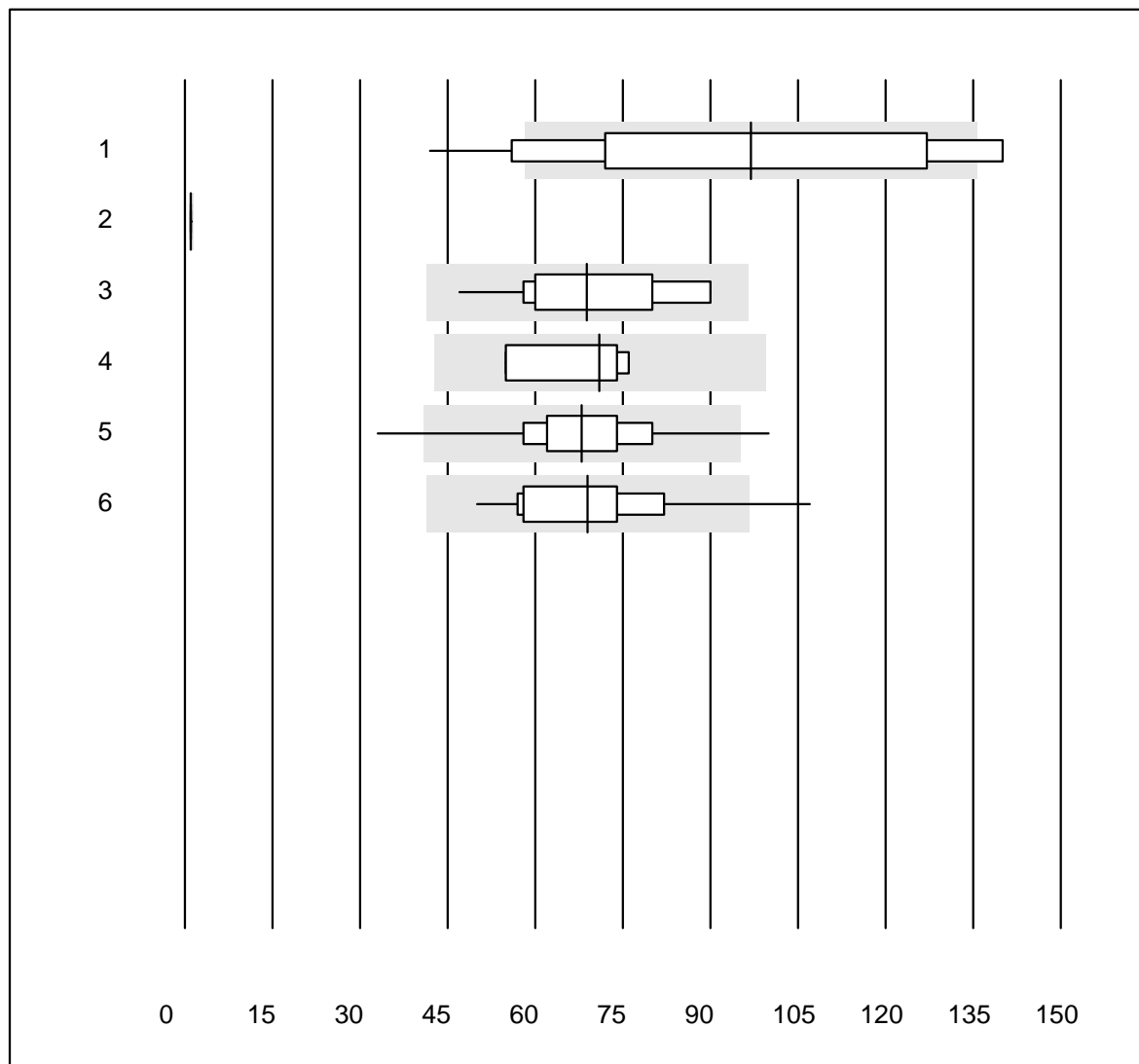
MQ tolerance : 40 %   Erythrocyte sedimentation rate 1h (mm/h)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	MINI-CUBE	26	69.2	30.8	0.0	97	32.3	e*
2	miniiSed	10	90.0	0.0	10.0	1	0.0	e
3	Sarstedt Sedivette	15	93.3	0.0	6.7	69	18.5	e
4	Sarstedt Microvette	4	100.0	0.0	0.0	71	13.9	e*
5	BD Seditainer	45	93.4	4.4	2.2	68	17.0	e
6	Other methods	22	95.5	4.5	0.0	69	19.3	e

Erythrocyte sedimentation rate 2h
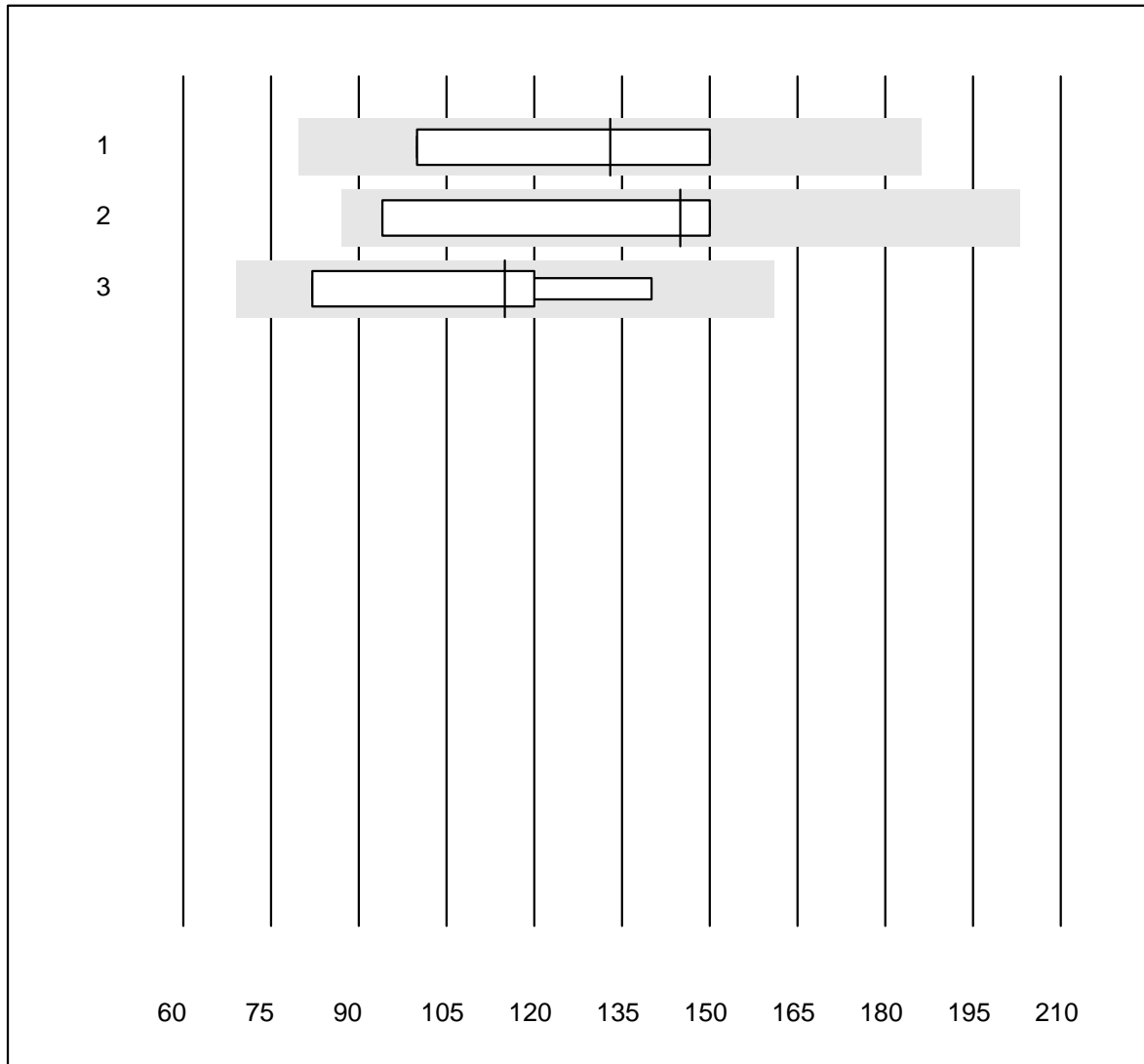
MQ tolerance : 40 % Erythrocyte sedimentation rate 2h (mm/2h)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Sarstedt Sedivette	7	100.0	0.0	0.0	133	16.5	e*
2	BD Seditainer	4	100.0	0.0	0.0	145	20.0	e*
3	Other methods	4	100.0	0.0	0.0	115	21.4	e*

Hemoglobin HS

140   144   148   152   156   160   164   168   172   176   180
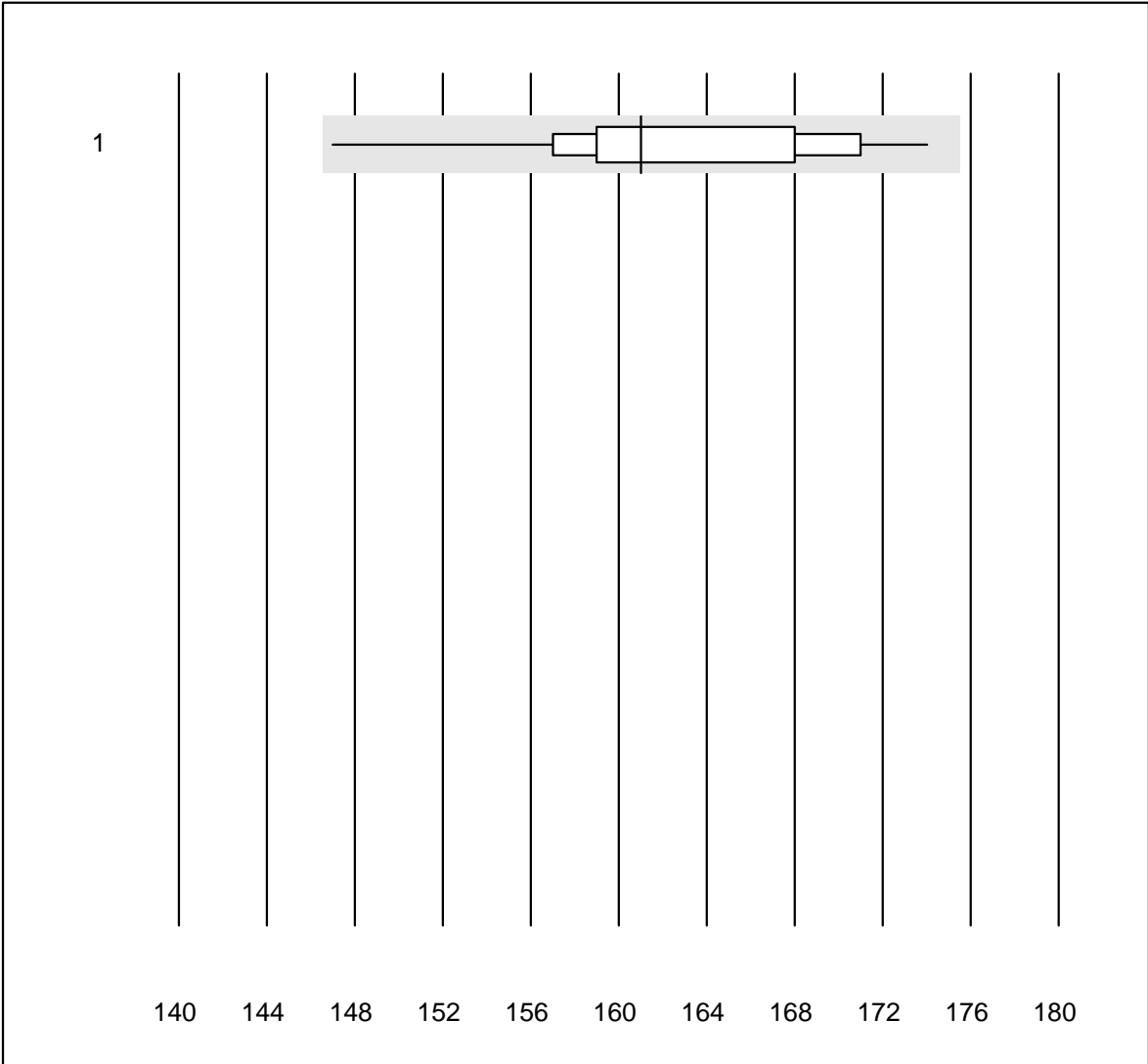
MQ tolerance : 9 %

Hemoglobin HS (g/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	PixCell HemoScreen	21	71.4	0.0	28.6	161.0	4.1	e

Hematocrit HS

1

0.35 0.36 0.37 0.38 0.39 0.40 0.41 0.42 0.43 0.44 0.45
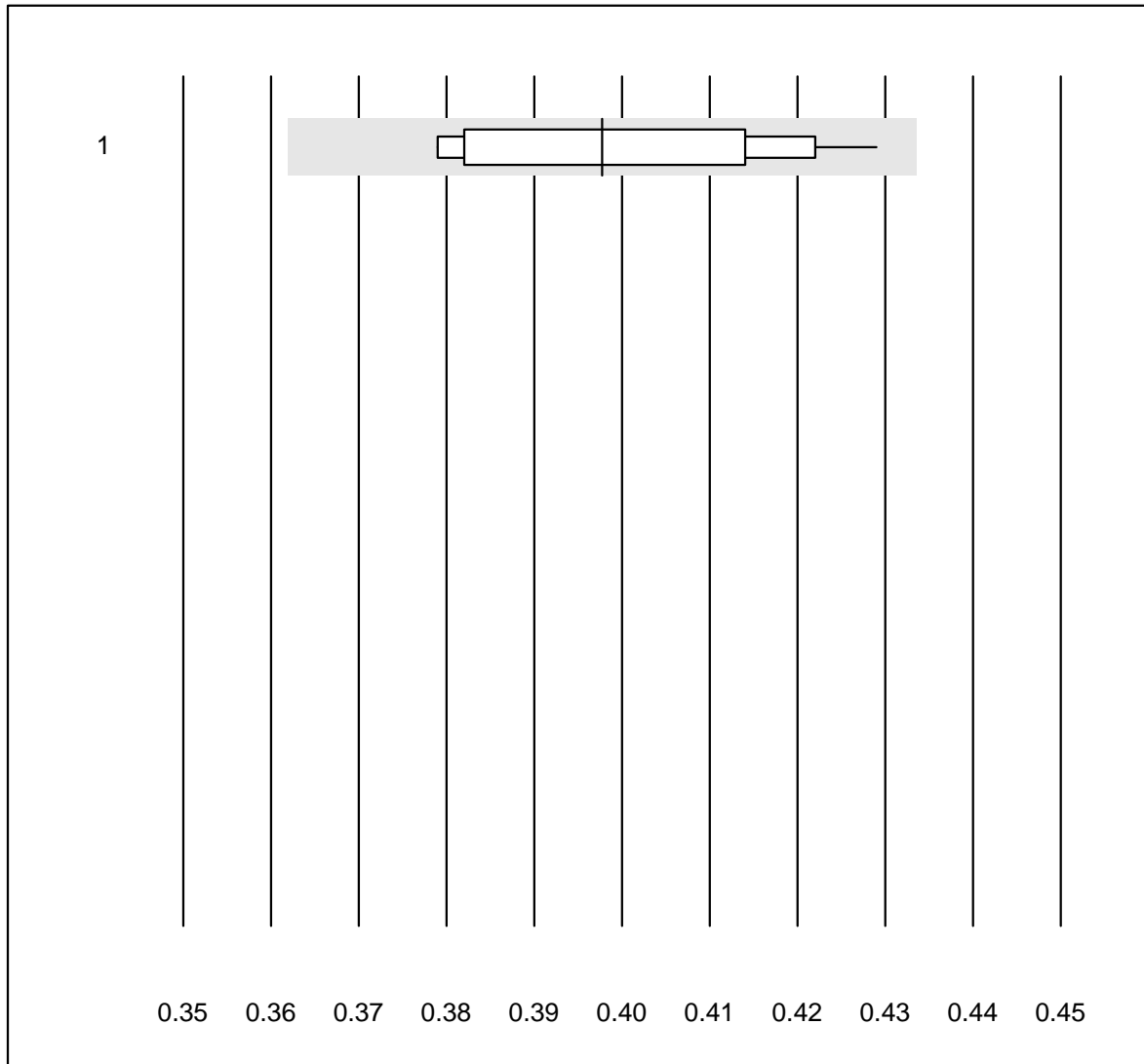
MQ tolerance : 9 %   Hematocrit HS (l/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	PixCell HemoScreen	21	71.4	0.0	28.6	0.4	4.2	e

Erythrocytes HS
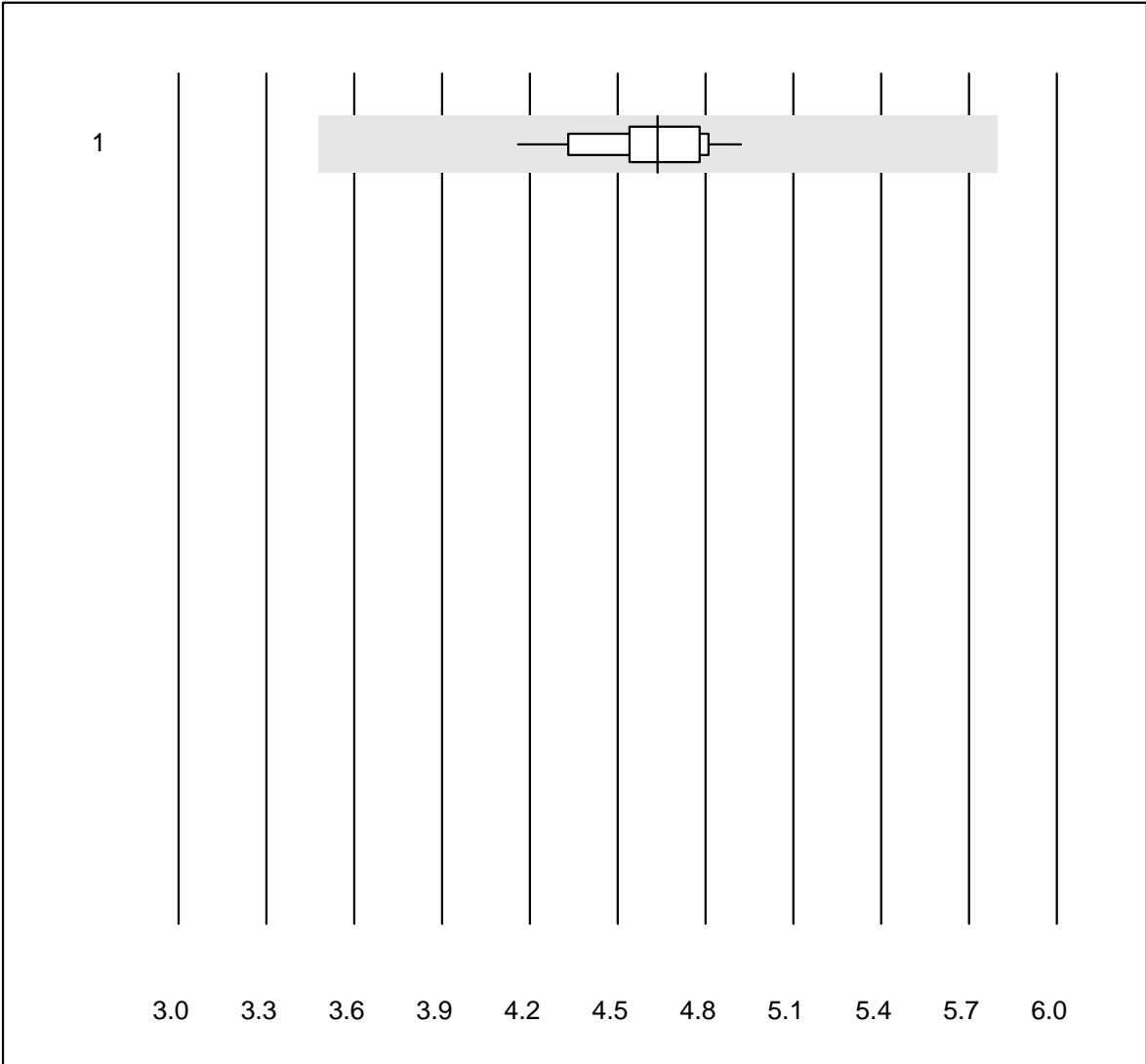
MQ tolerance : 25 %   Erythrocytes HS (T/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	PixCell HemoScreen	21	71.4	0.0	28.6	4.64	4.2	e

Leucocytes HS

5.0   5.6   6.2   6.8   7.4   8.0   8.6   9.2   9.8   10.4   11.0
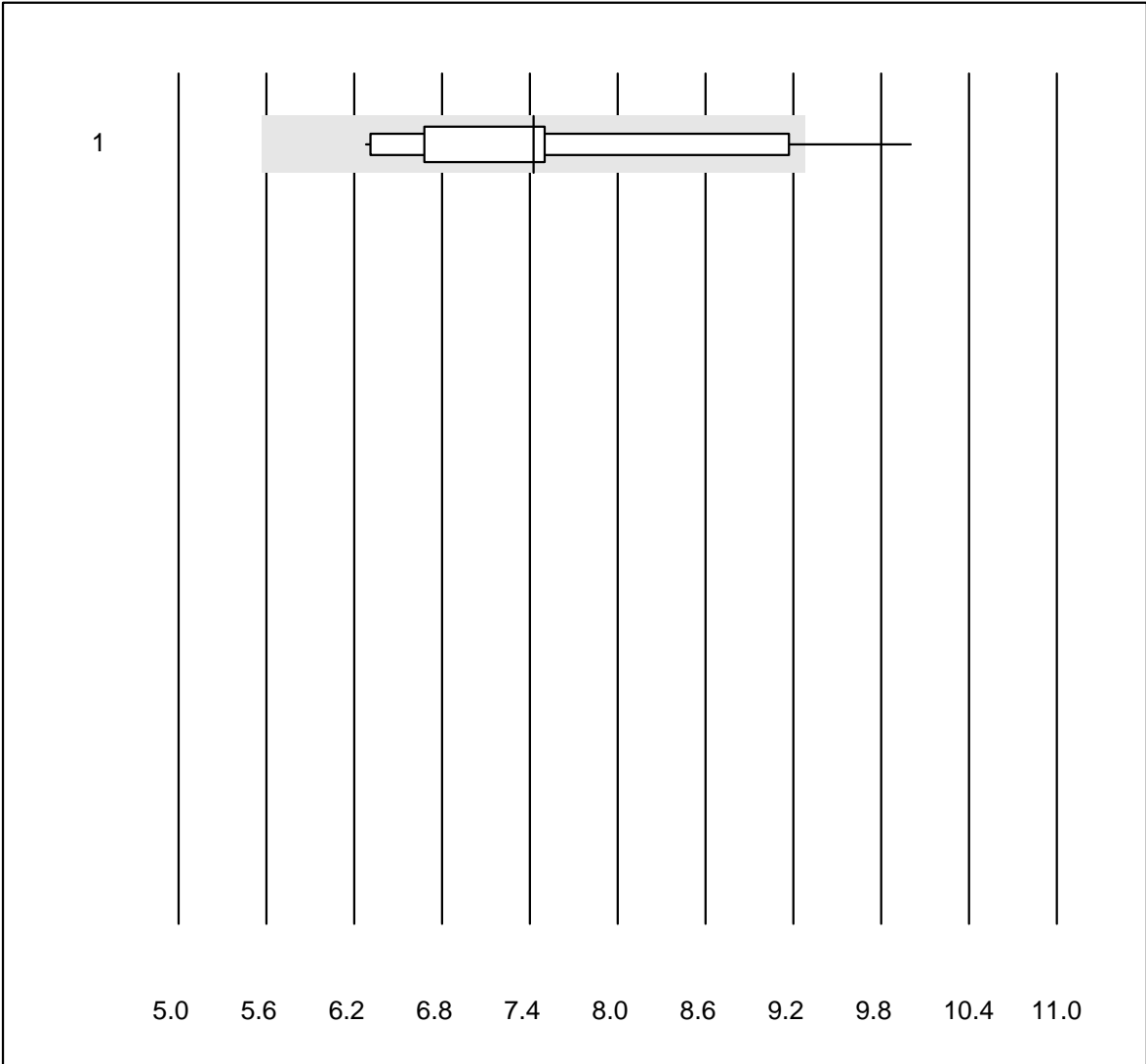
MQ tolerance : 25 %   Leucocytes HS (G/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	PixCell HemoScreen	21	90.4	4.8	4.8	7.43	14.5	e*

Trombocytes HS
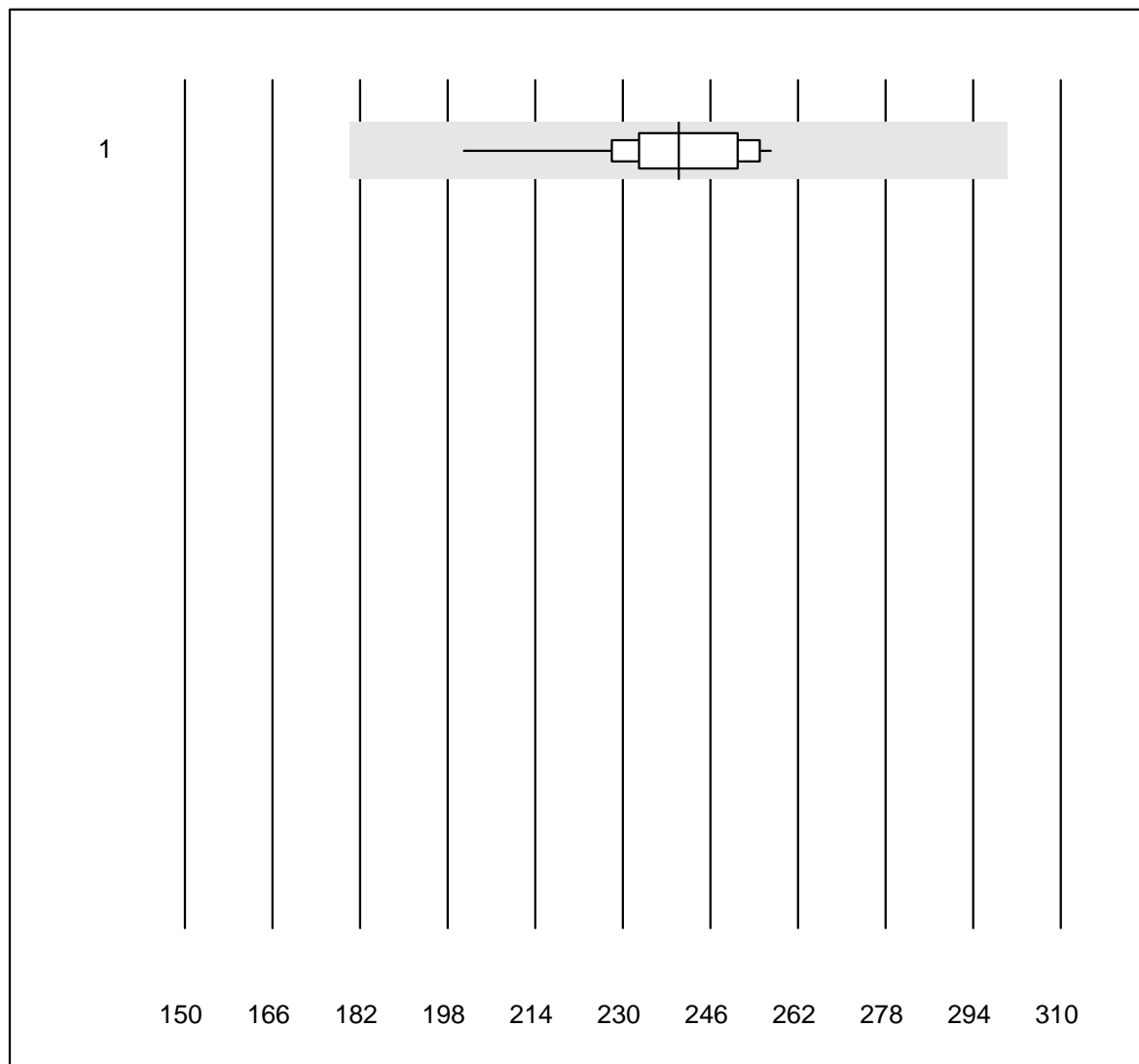
MQ tolerance : 25 %   Trombocytes HS (G/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	PixCell HemoScreen	21	100.0	0.0	0.0	240.2	5.4	e

CRP
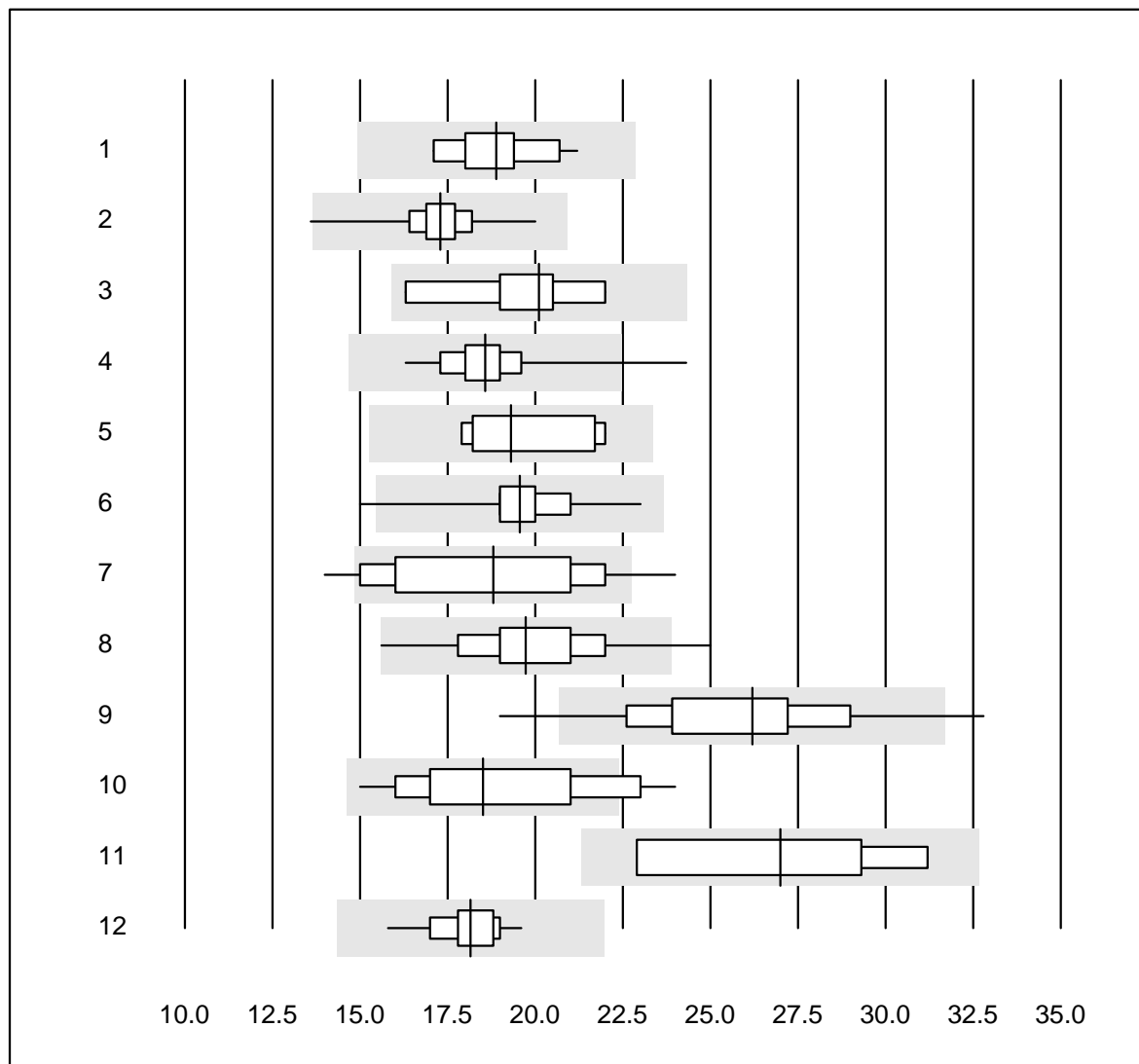
QUALAB tolerance : 21 %

CRP (mg/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Autolyser	10	100.0	0.0	0.0	18.9	7.1	e
2	Cobas b101	397	98.9	0.3	0.8	17.3	4.3	e
3	Siemens	6	100.0	0.0	0.0	20.1	9.8	e*
4	Cobas	41	97.6	2.4	0.0	18.6	6.7	e
5	Turbidimetry	6	100.0	0.0	0.0	19.3	8.8	e*
6	Afinion	1101	99.4	0.1	0.5	19.6	4.6	e
7	NycoCard SingleTest-	54	79.6	14.8	5.6	18.8	14.7	e
8	Quick Read go	82	96.4	2.4	1.2	19.7	9.0	e
9	Eurolyser	65	75.4	4.6	20.0	26.2	10.8	e
10	Fuji Dri-Chem	14	64.3	14.3	21.4	18.5	14.7	e*
11	Piccolo	5	80.0	0.0	20.0	27.0	12.9	e*
12	Celltac chemi	32	100.0	0.0	0.0	18.2	4.9	e

2 additional results were submitted but not published because the method groups were too small. (< results per group)

CRP

| | 24.0 | 25.5 | 27.0 | 28.5 | 30.0 | 31.5 | 33.0 | 34.5 | 36.0 | 37.5 | 39.0 |
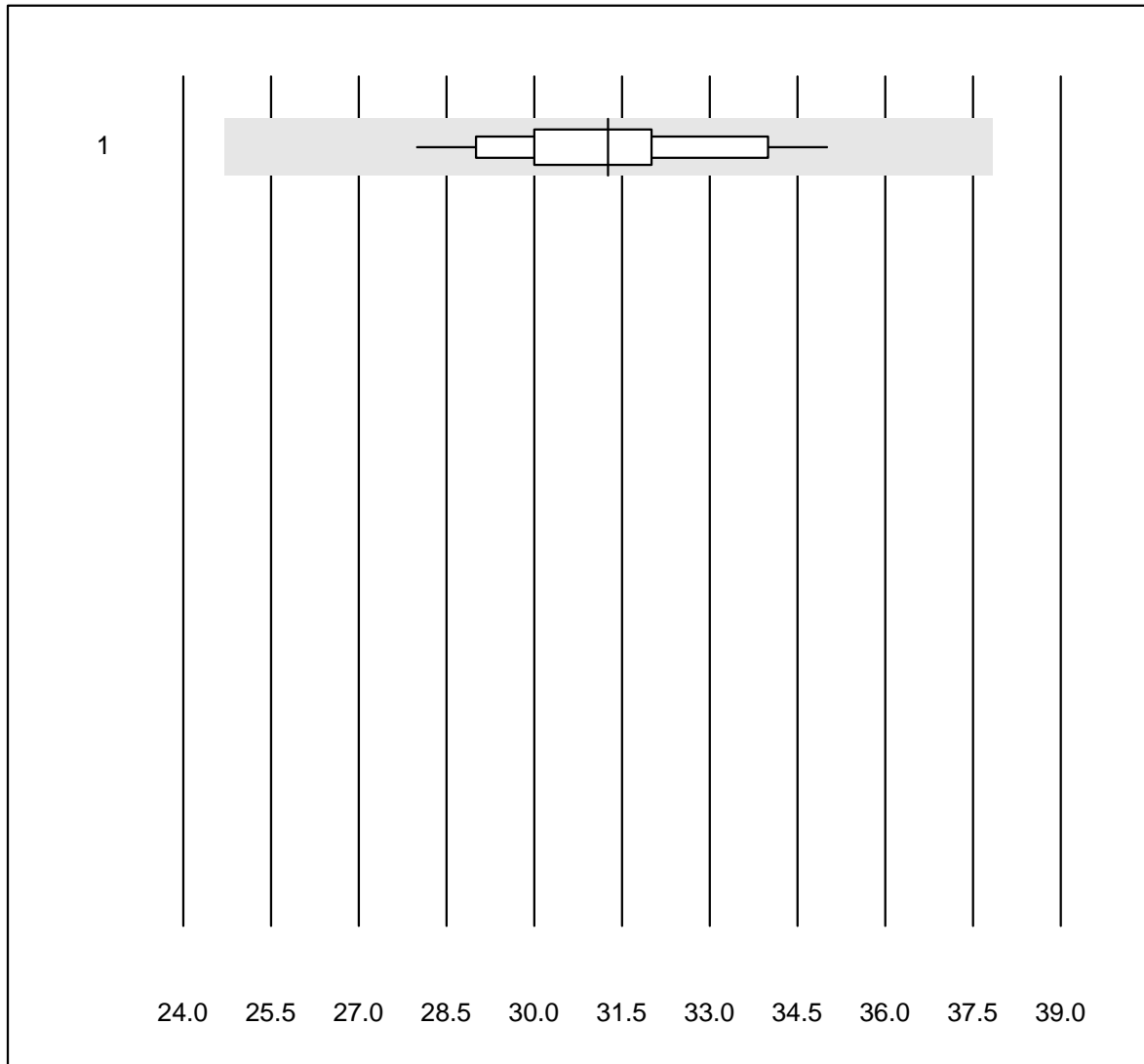
QUALAB tolerance : 21 %

CRP (mg/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	QuikRead (Vollblut)	15	100.0	0.0	0.0	31.3	6.2	e

CRP

QUALAB tolerance : 21 %

CRP (mg/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Spinit	10	100.0	0.0	0.0	17.1	4.2	e
2	Abbott	16	100.0	0.0	0.0	20.0	3.3	e
3	Beckman	4	75.0	0.0	25.0	19.2	9.2	e*
4	AQT 90 FLEX	7	85.7	0.0	14.3	20.0	5.9	e
5	Spotchem D-Concept	6	100.0	0.0	0.0	22.4	10.6	e*

2 additional results were submitted but not published because the method groups were too small. (< results per group)

IgG

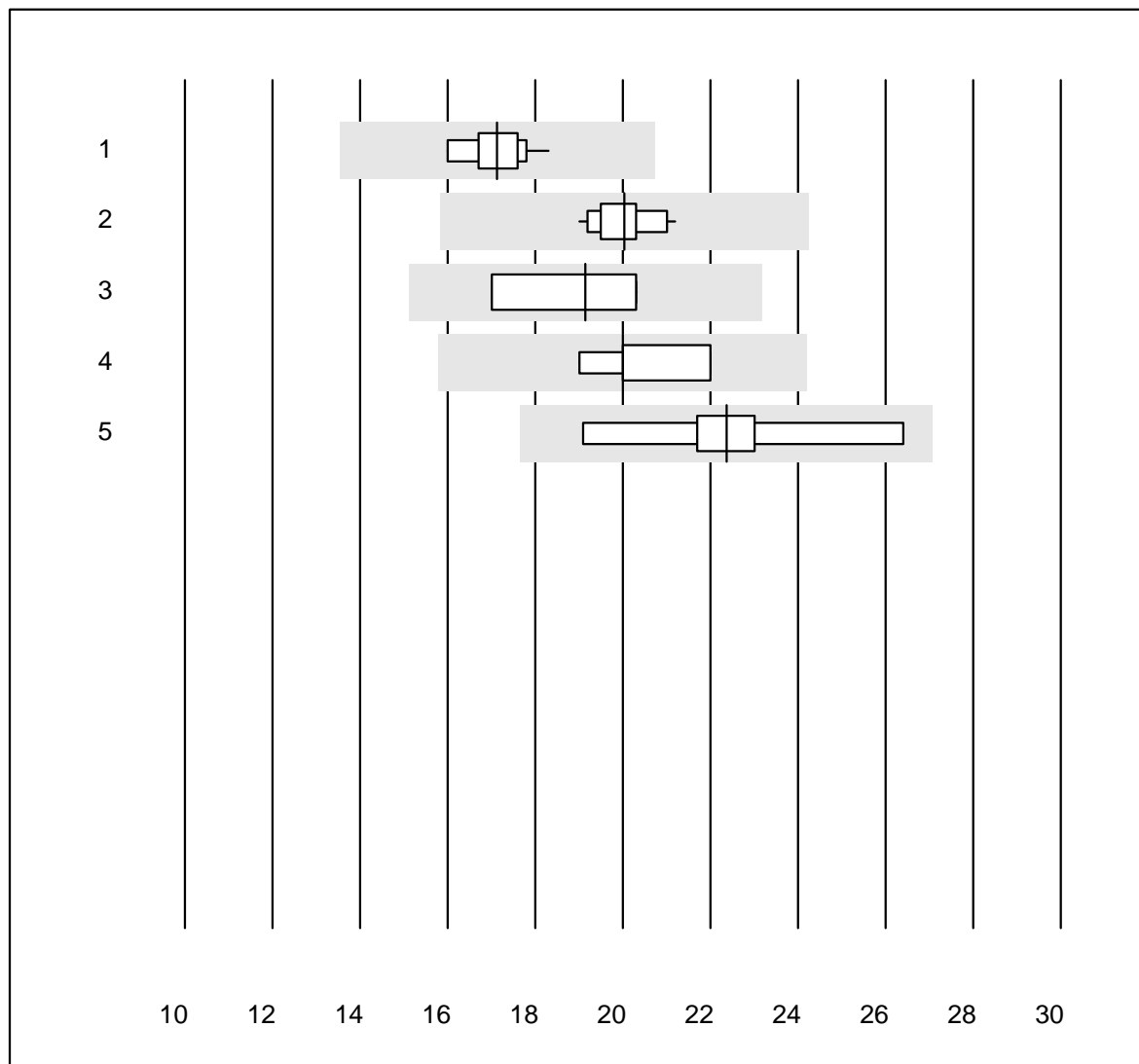QUALAB tolerance : 15 %

IgG (g/l)
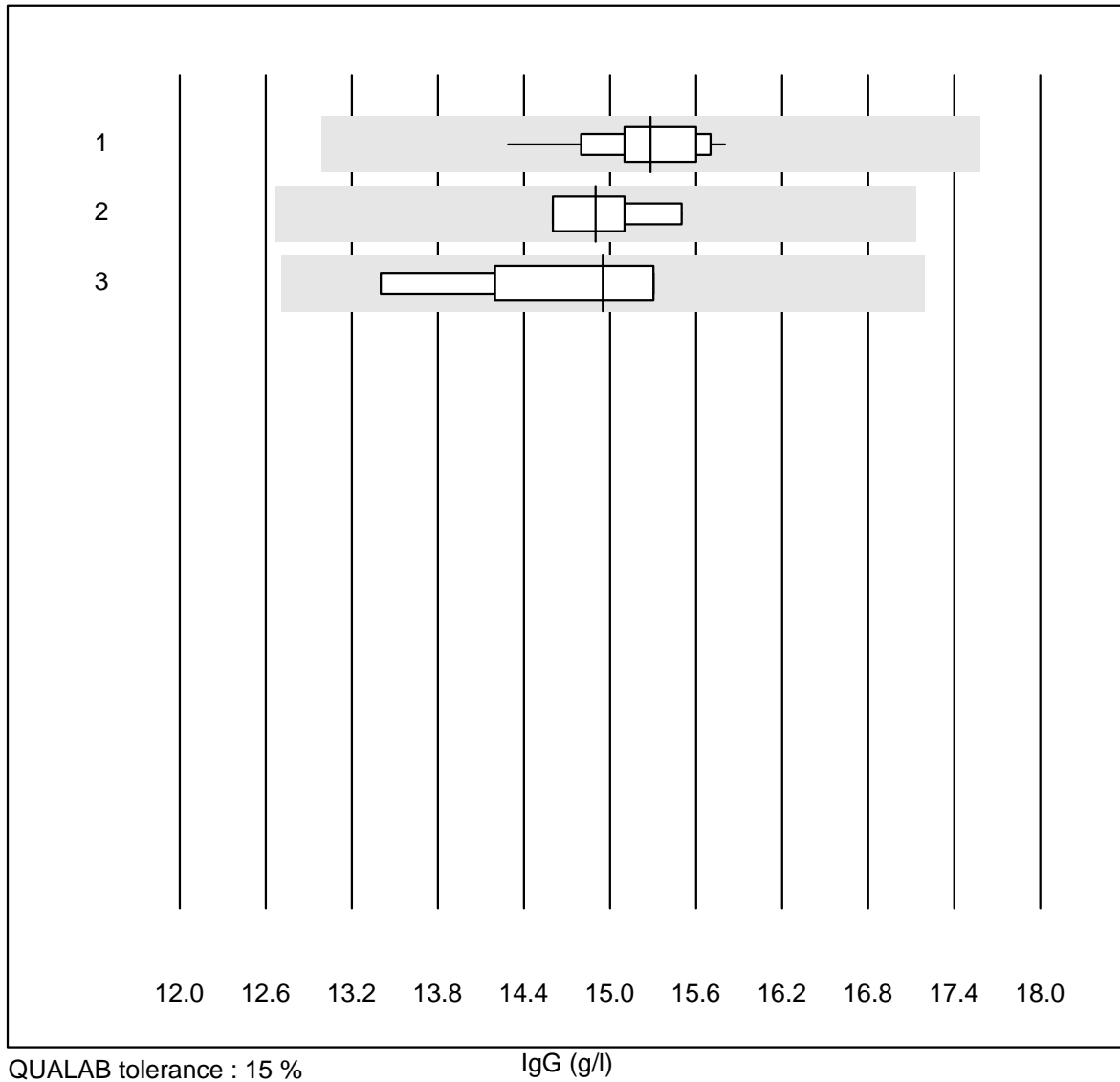
No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Turbidimetry	22	100.0	0.0	0.0	15.28	2.4	e
2	Nephelometry	4	100.0	0.0	0.0	14.90	2.7	e
3	Other methods	6	100.0	0.0	0.0	14.95	5.2	e*

IgA

QUALAB tolerance : 15 %

IgA (g/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Turbidimetry	20	100.0	0.0	0.0	2.41	4.2	e
2	Nephelometry	5	100.0	0.0	0.0	2.74	3.3	e
3	Other methods	5	100.0	0.0	0.0	2.36	4.9	e*

IgM
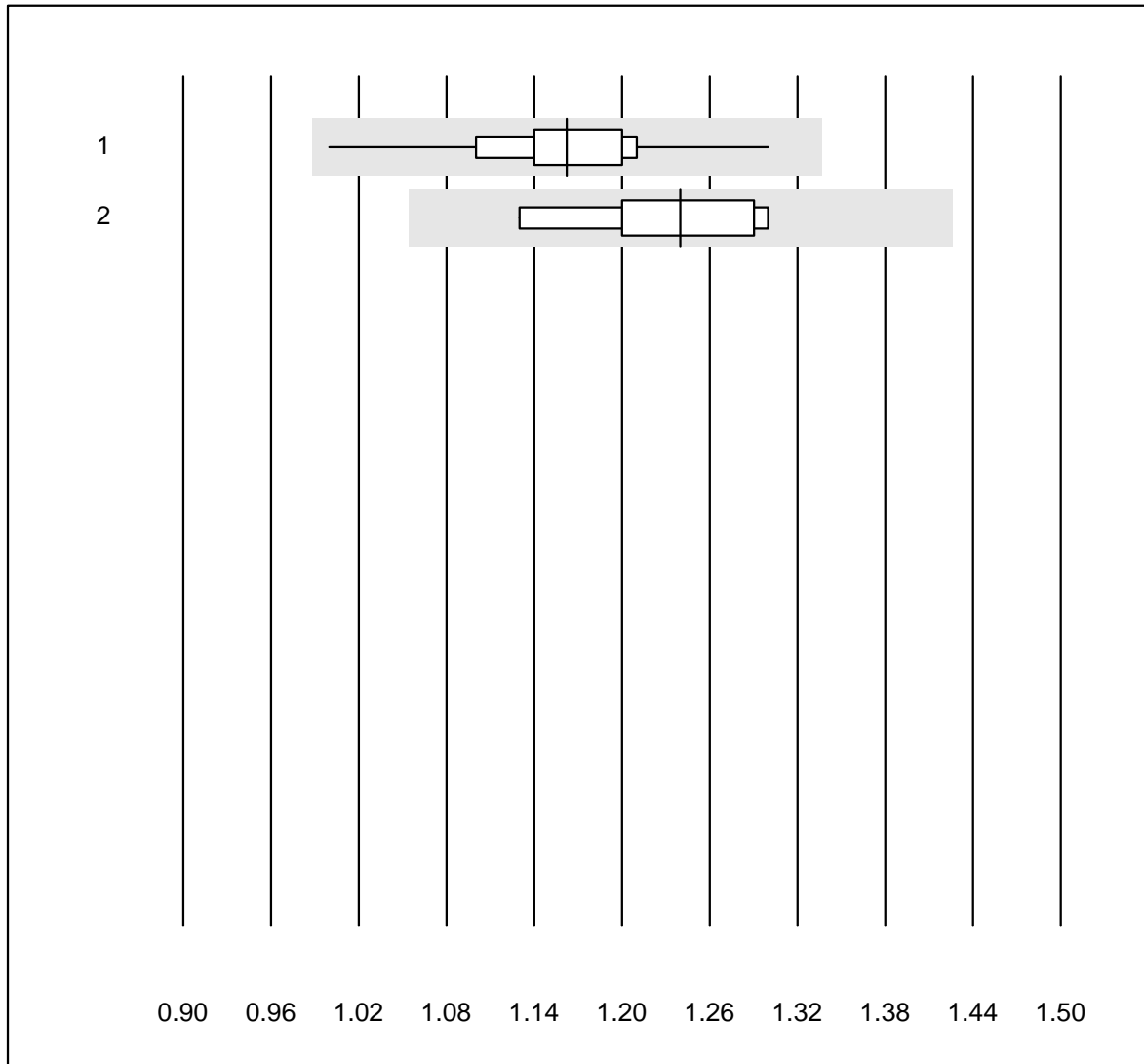
QUALAB tolerance : 15 %

IgM (g/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Turbidimetry	21	100.0	0.0	0.0	1.16	5.6	e
2	Nephelometry	7	100.0	0.0	0.0	1.24	4.8	e*

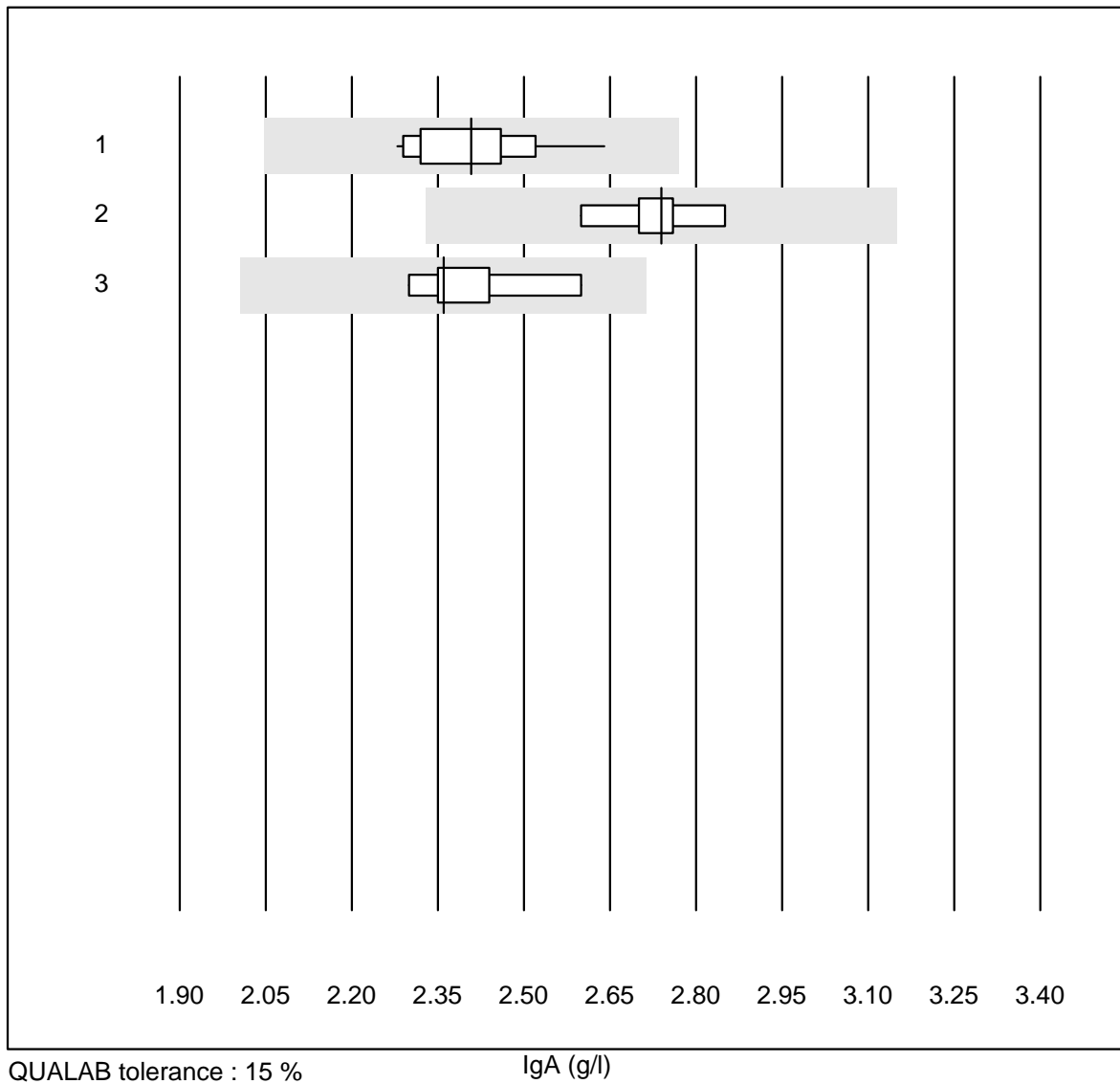2 additional results were submitted but not published because the method groups were too small. (< results per group)
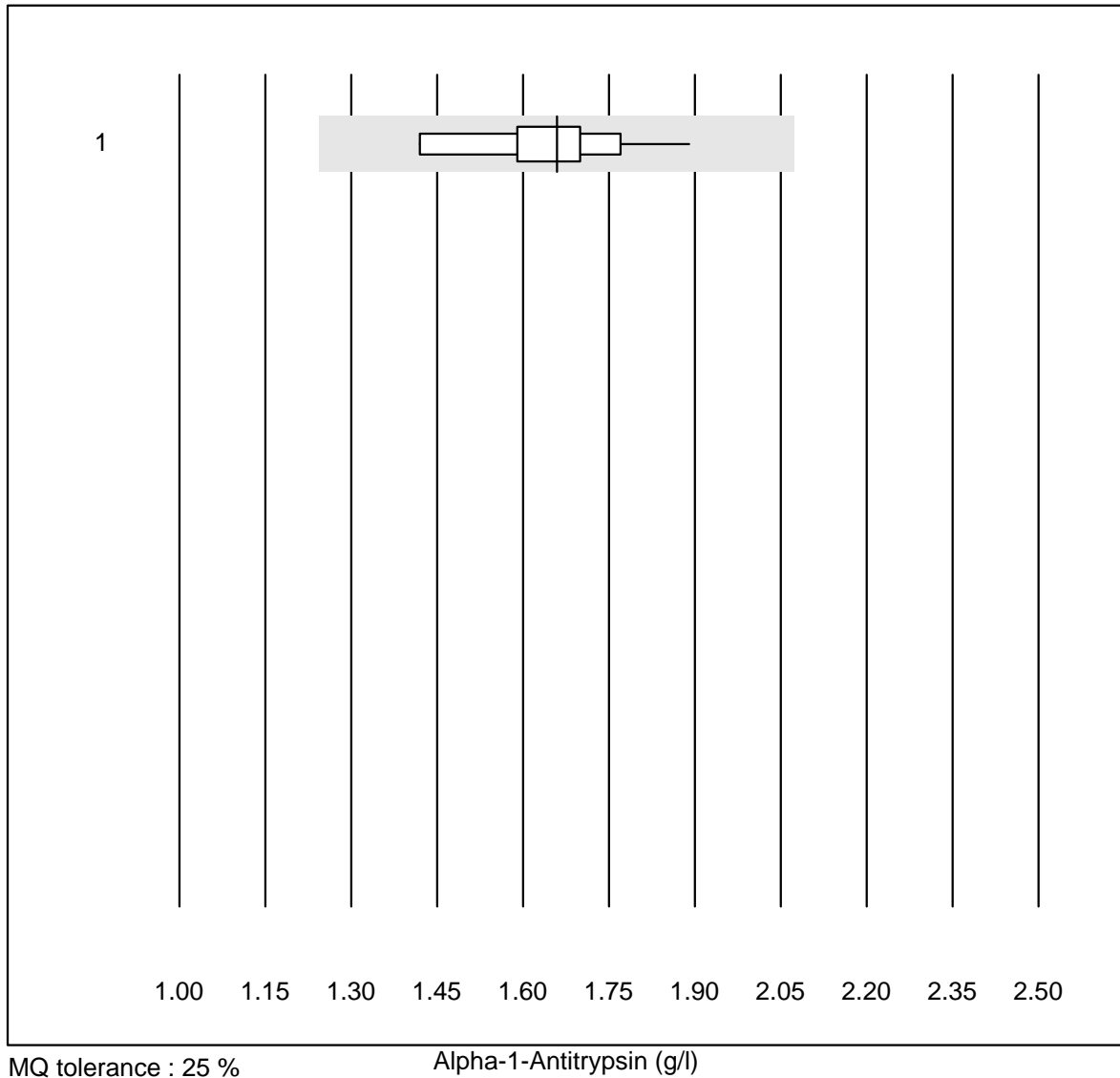
IgE

QUALAB tolerance : 30 %

IgE (kU/L)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	all Participants	5	100.0	0.0	0.0	101	5.9	e
2	Cobas	6	100.0	0.0	0.0	130	5.9	e

Alpha-1-Antitrypsin

1

| 1.00 | 1.15 | 1.30 | 1.45 | 1.60 | 1.75 | 1.90 | 2.05 | 2.20 | 2.35 | 2.50 |

Alpha-1-Antitrypsin (g/l)

MQ tolerance : 25 %

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	all Participants	10	100.0	0.0	0.0	1.66	7.6	e

3 additional results were submitted but not published because the method groups were too small. (< results per group)
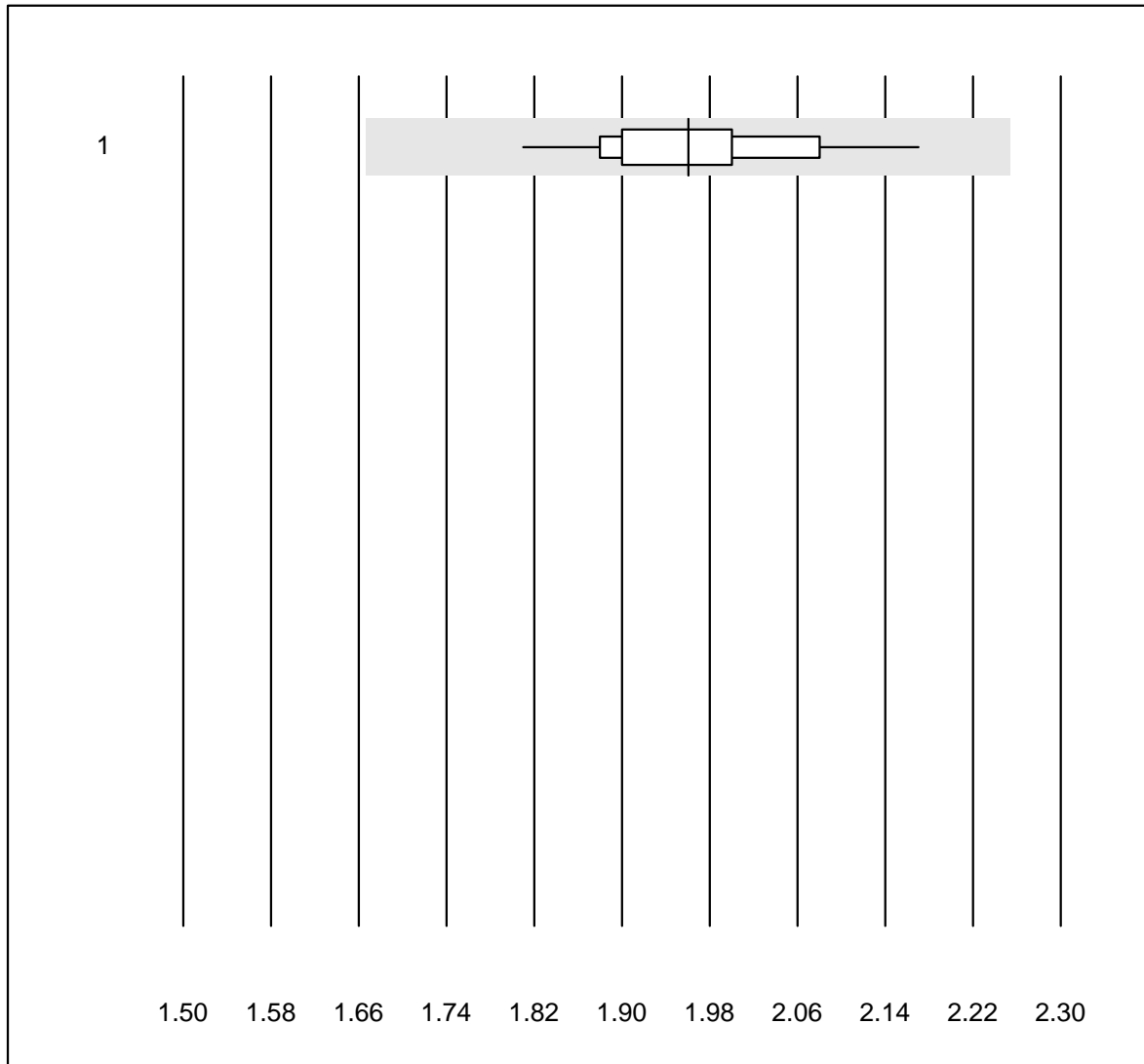
Anti-Streptolysin-Antibodies
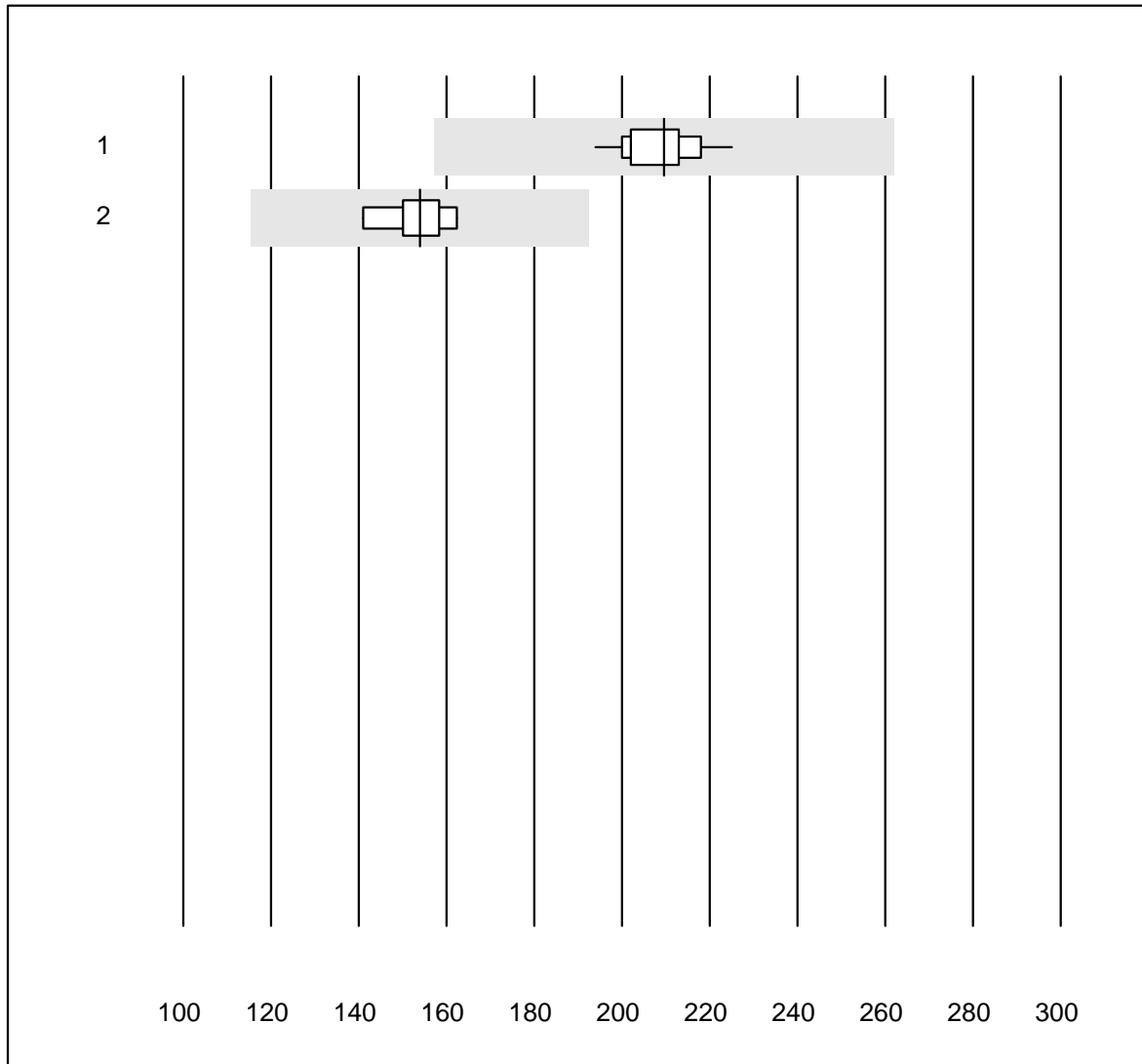
MQ tolerance : 25 %   Anti-Streptolysin-Antibodies (kIU/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	all Participants	12	100.0	0.0	0.0	210	4.1	e
2	Other methods	6	100.0	0.0	0.0	154	4.9	e

Complement C3

1.50   1.58   1.66   1.74   1.82   1.90   1.98   2.06   2.14   2.22   2.30

QUALAB tolerance : 15 %   Complement C3 (g/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	all Participants	19	100.0	0.0	0.0	1.96	4.1	e

2 additional results were submitted but not published because the method groups were too small. (< results per group)

Complement C4

0.280 0.296 0.312 0.328 0.344 0.360 0.376 0.392 0.408 0.424 0.440
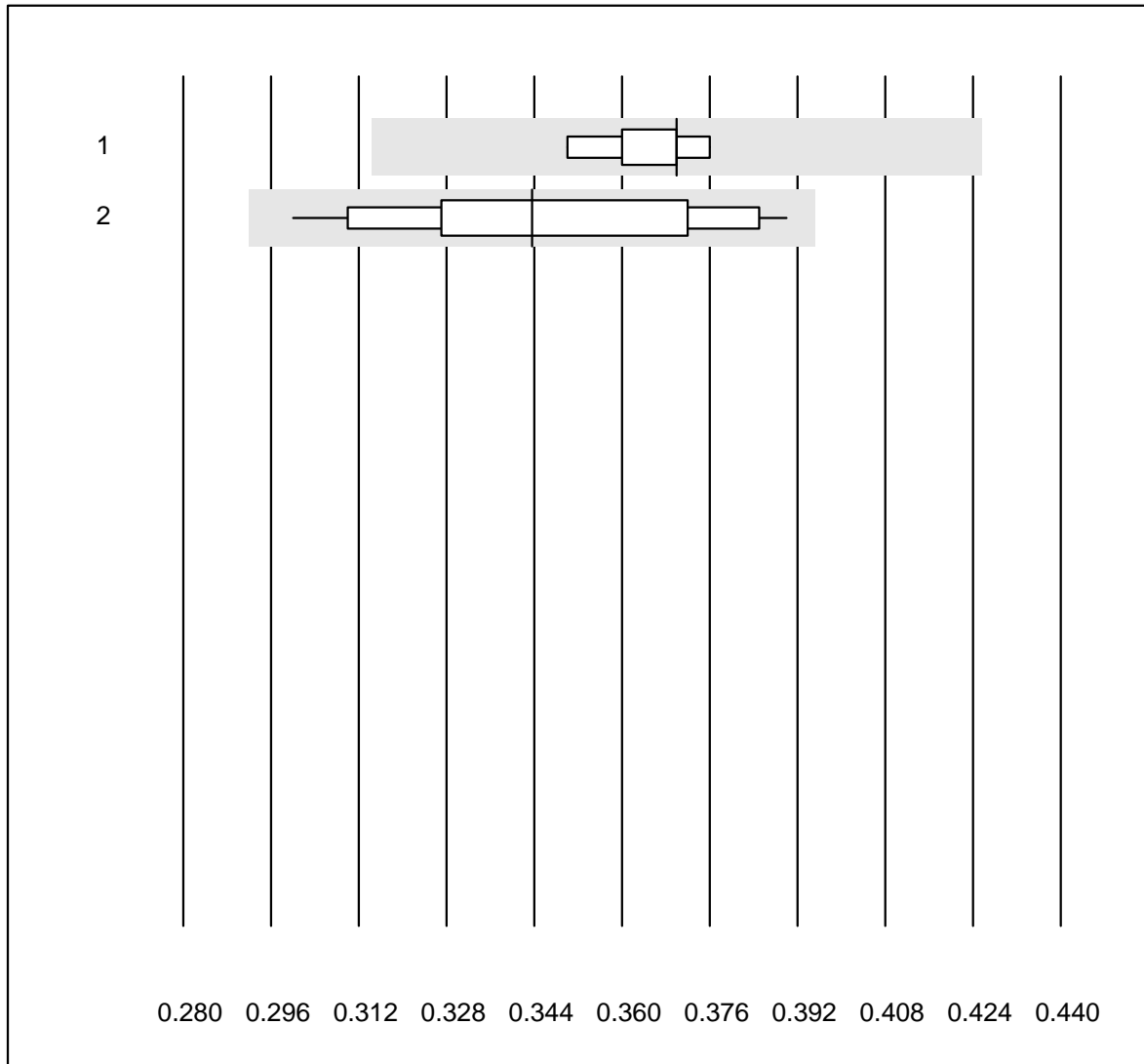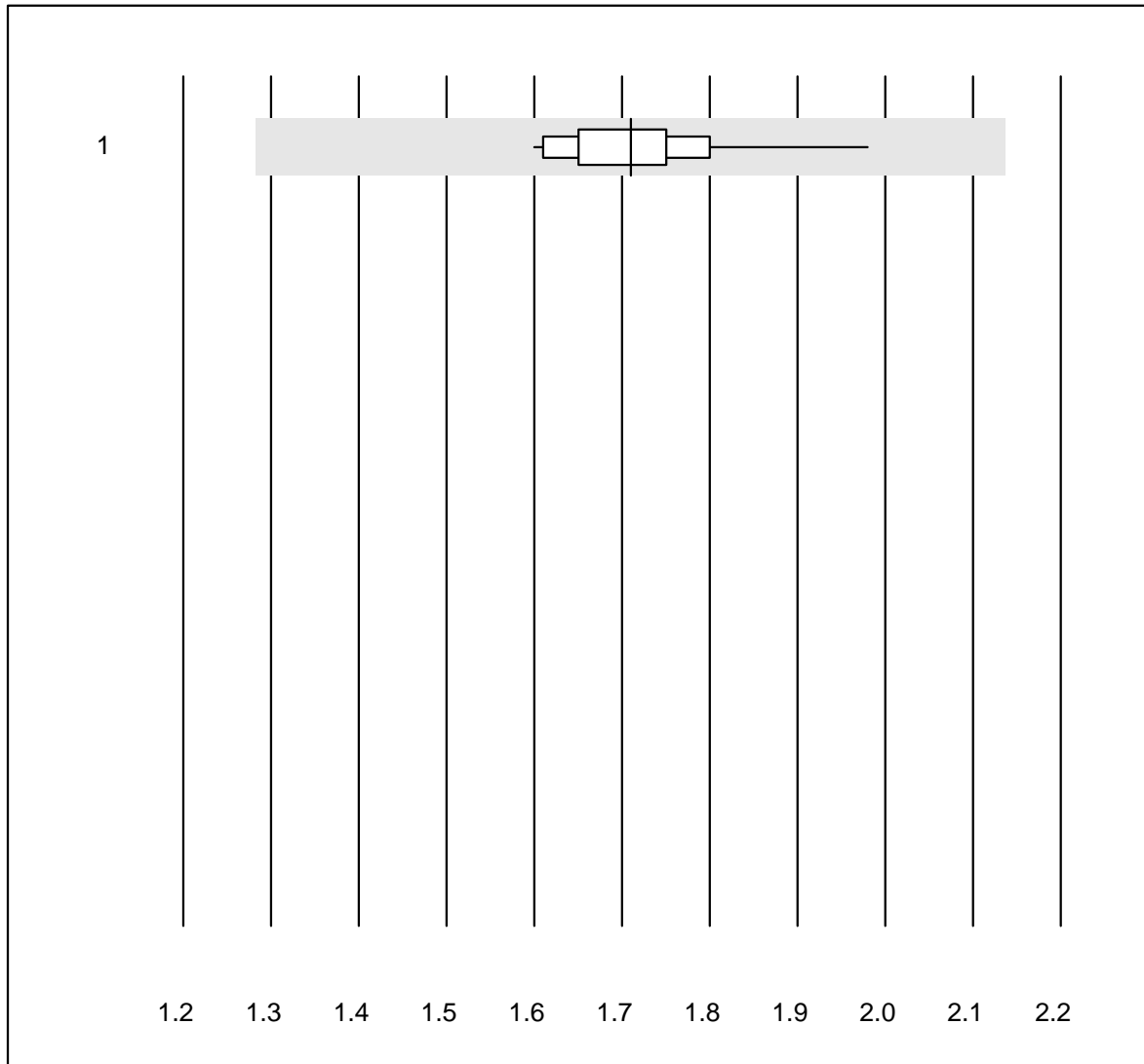
QUALAB tolerance : 15 %   Complement C4 (g/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Alinity	5	100.0	0.0	0.0	0.37	2.8	e
2	Other methods	15	100.0	0.0	0.0	0.34	8.3	e*

Haptoglobin

1.2   1.3   1.4   1.5   1.6   1.7   1.8   1.9   2.0   2.1   2.2

MQ tolerance : 25 %

Haptoglobin (g/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	all Participants	29	100.0	0.0	0.0	1.71	5.0	e

Transferrin

2.0   2.2   2.4   2.6   2.8   3.0   3.2   3.4   3.6   3.8   4.0
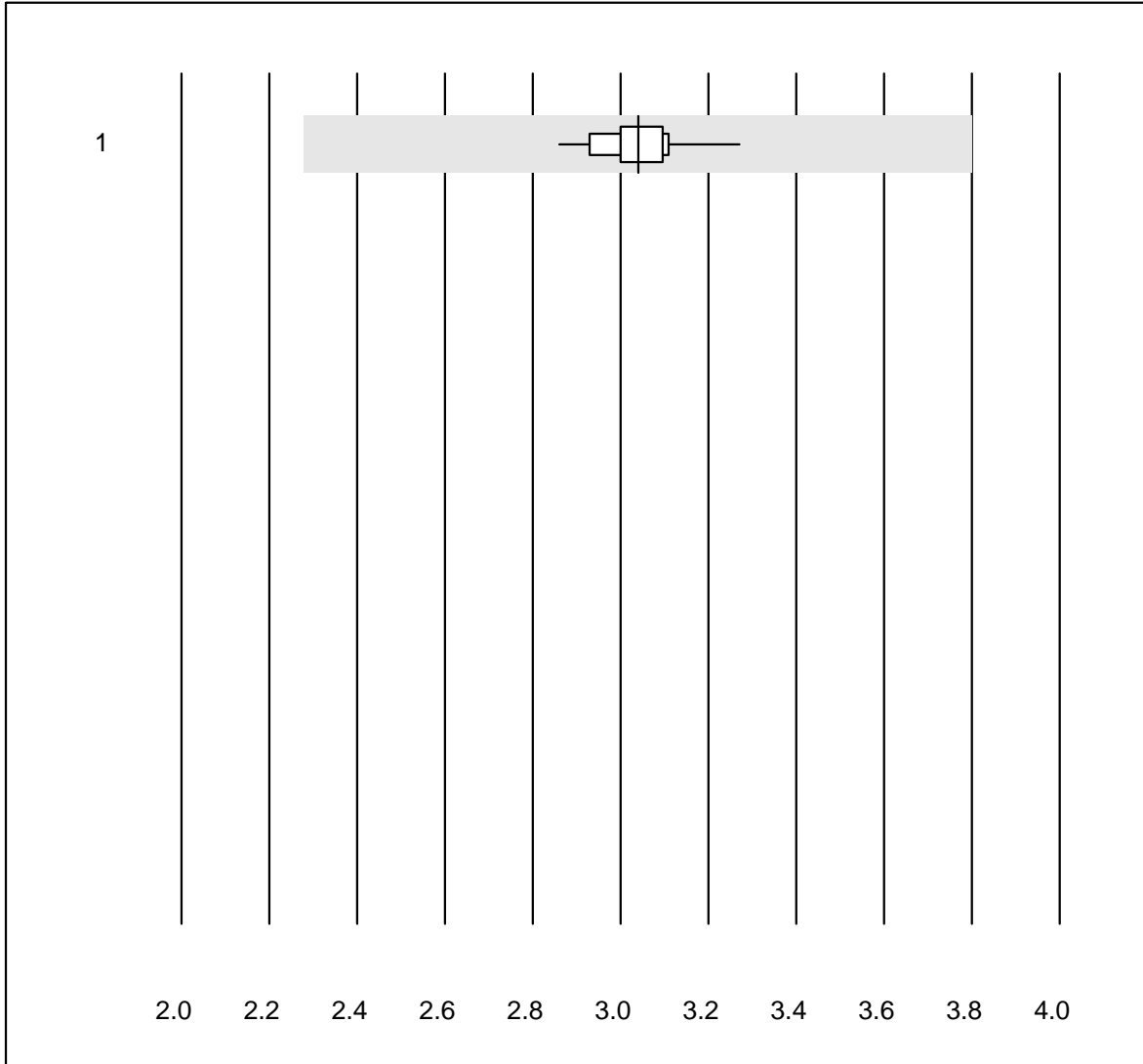
MQ tolerance : 25 %   Transferrin (g/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	all Participants	38	100.0	0.0	0.0	3.04	2.6	e

Beta-2 microglobuline

```
        1
```

1.50   1.65   1.80   1.95   2.10   2.25   2.40   2.55   2.70   2.85   3.00
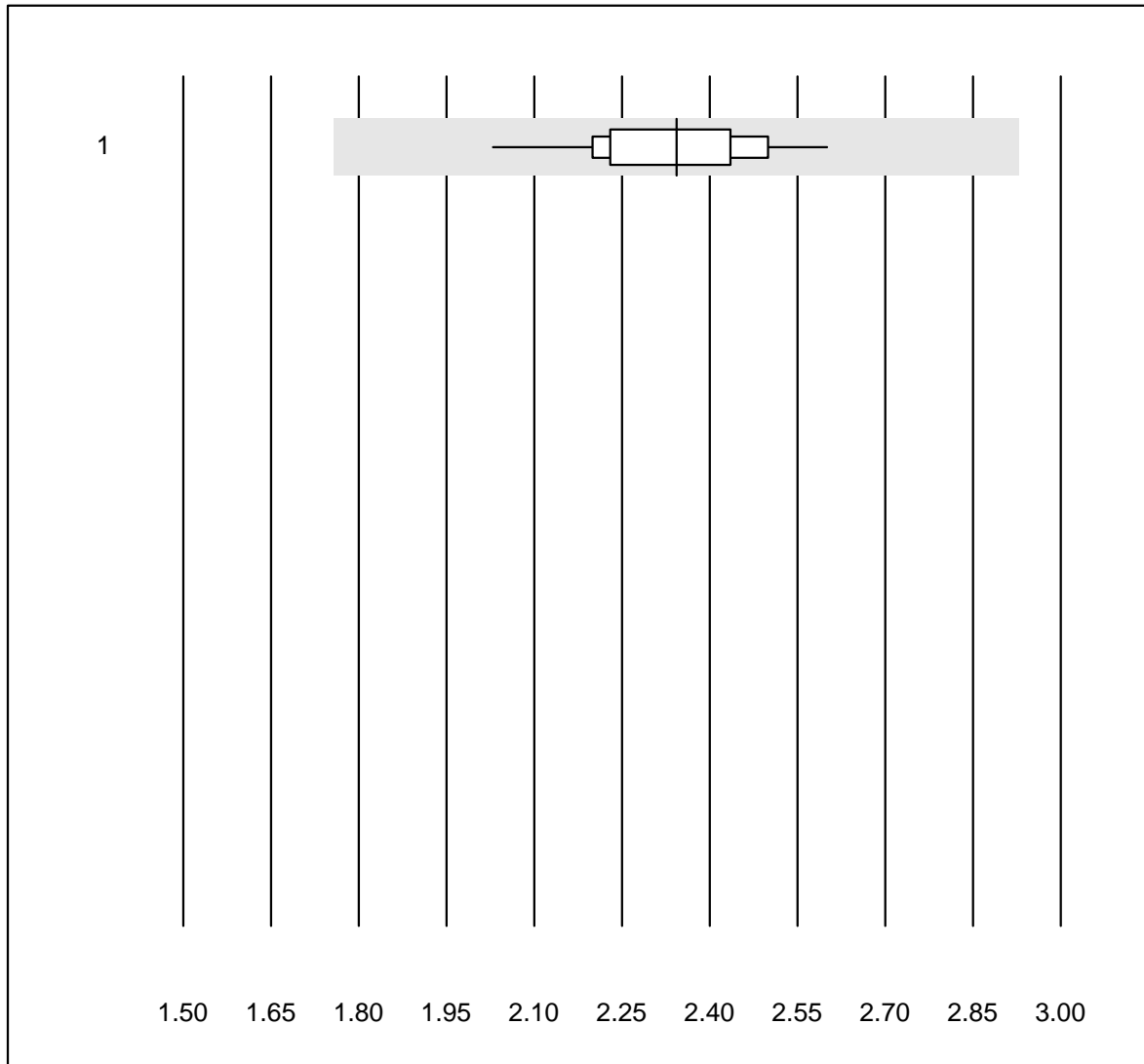
MQ tolerance : 25 %   Beta-2 microglobuline (mg/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	all Participants	12	100.0	0.0	0.0	2.34	6.7	e

2 additional results were submitted but not published because the method groups were too small. (< results per group)

Rheumatoid factor

MQ tolerance : 25 %   Rheumatoid factor (U/ml)
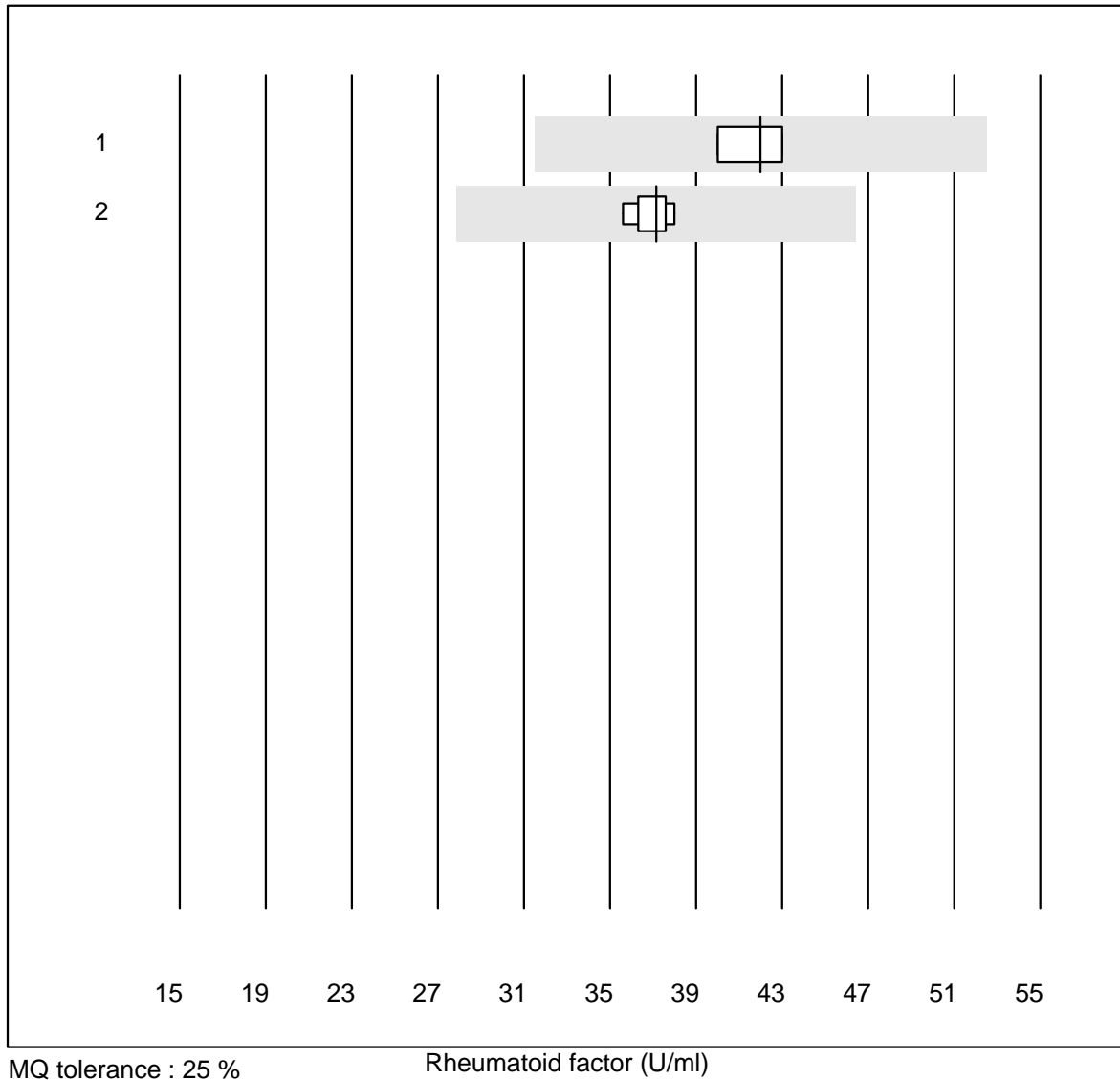
No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Abbott	7	100.0	0.0	0.0	42.0	3.2	e
2	Other methods	8	100.0	0.0	0.0	37.2	2.2	e

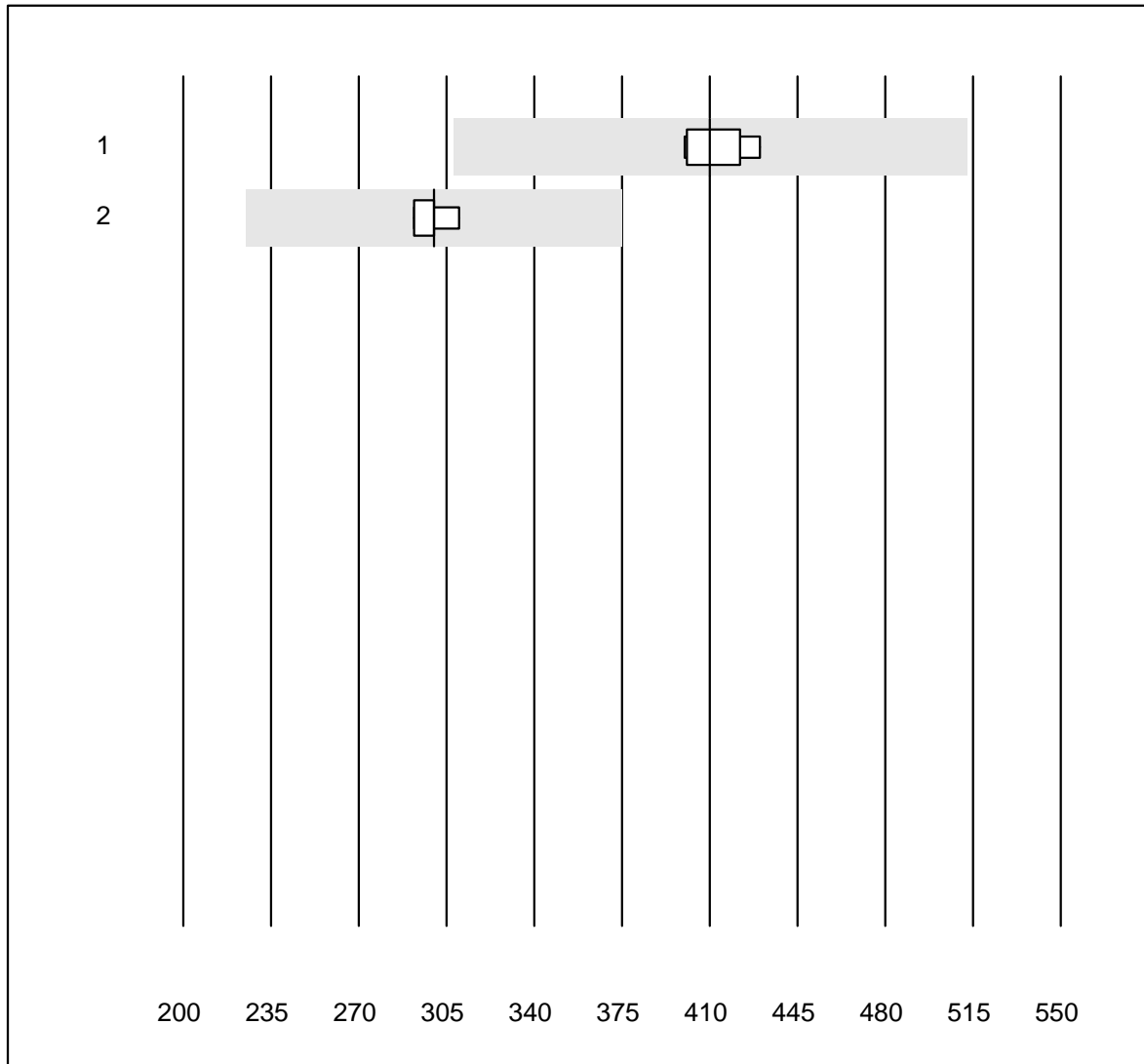3 additional results were submitted but not published because the method groups were too small. (< results per group)
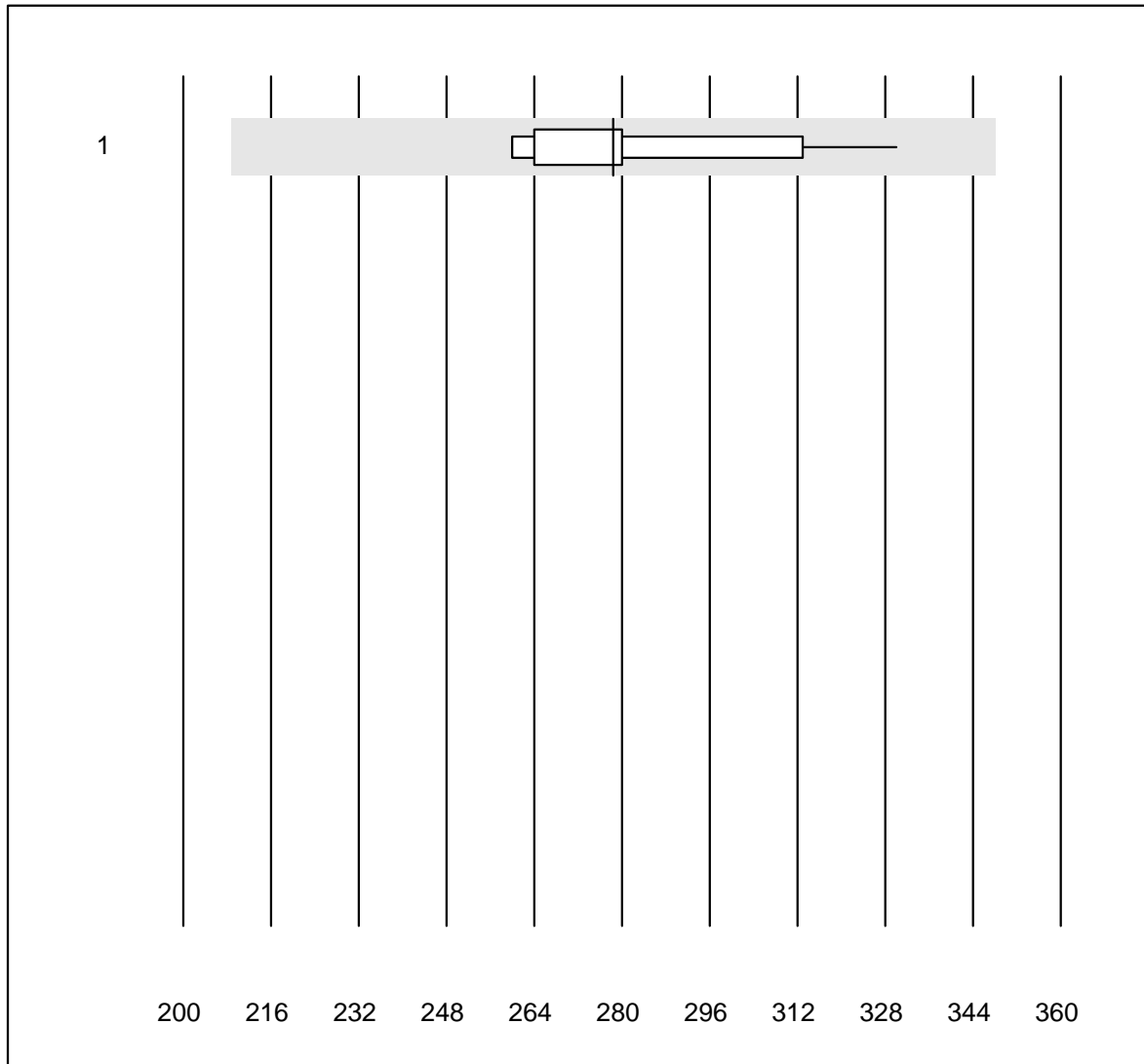
Ceruloplasmin

MQ tolerance : 25 %

Ceruloplasmin (mg/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Siemens	9	100.0	0.0	0.0	410.00	2.9	e
2	Other methods	4	100.0	0.0	0.0	300.00	2.5	e

Prealbumin

MQ tolerance : 25 %

Prealbumin (mg/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	all Participants	19	100.0	0.0	0.0	278.39	6.7	e

Soluble transferrin receptor
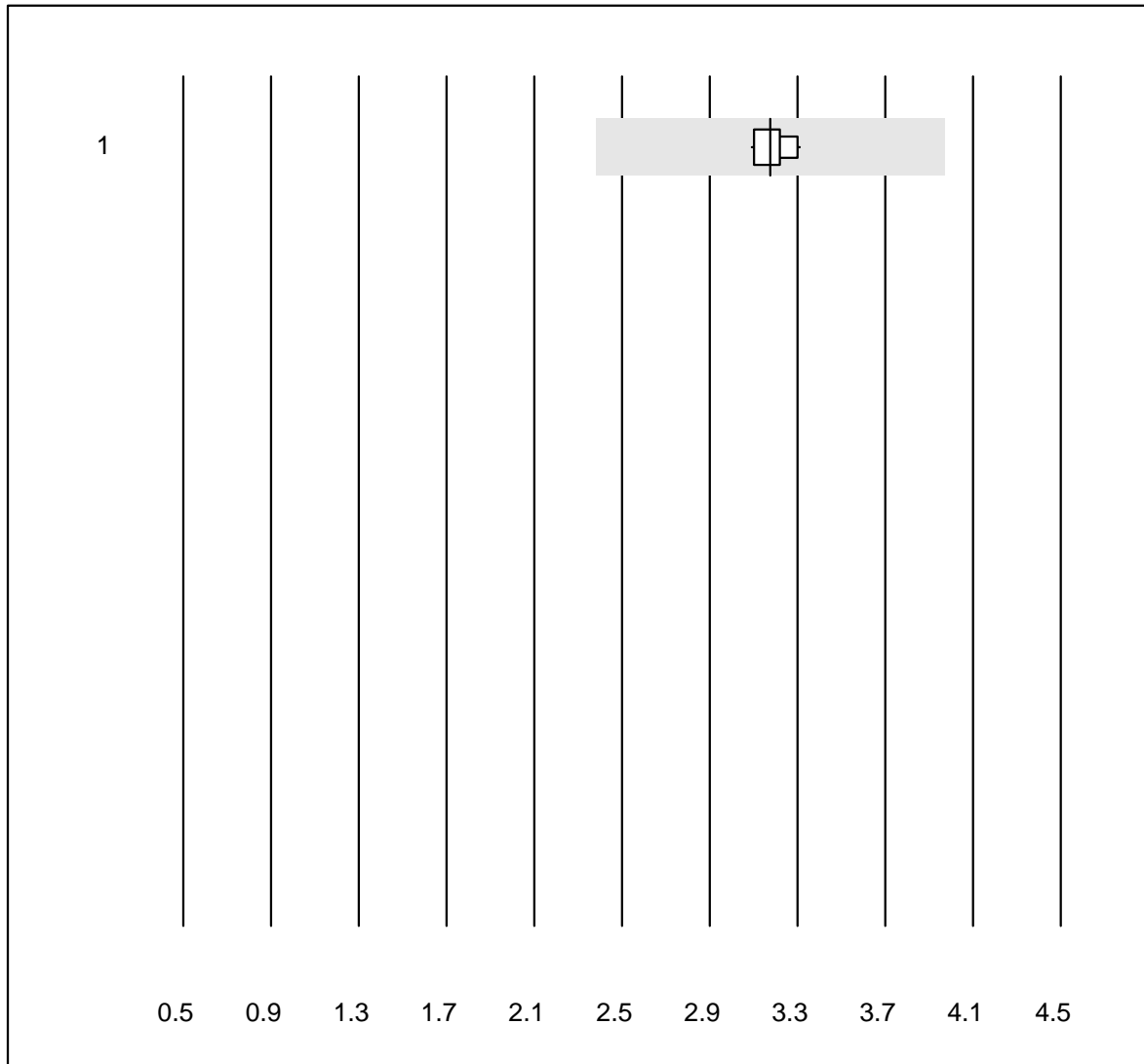
MQ tolerance : 25 %

Soluble transferrin receptor (mg/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	all Participants	14	100.0	0.0	0.0	3.2	2.3	e

3 additional results were submitted but not published because the method groups were too small. (< results per group)

free light chain kappa
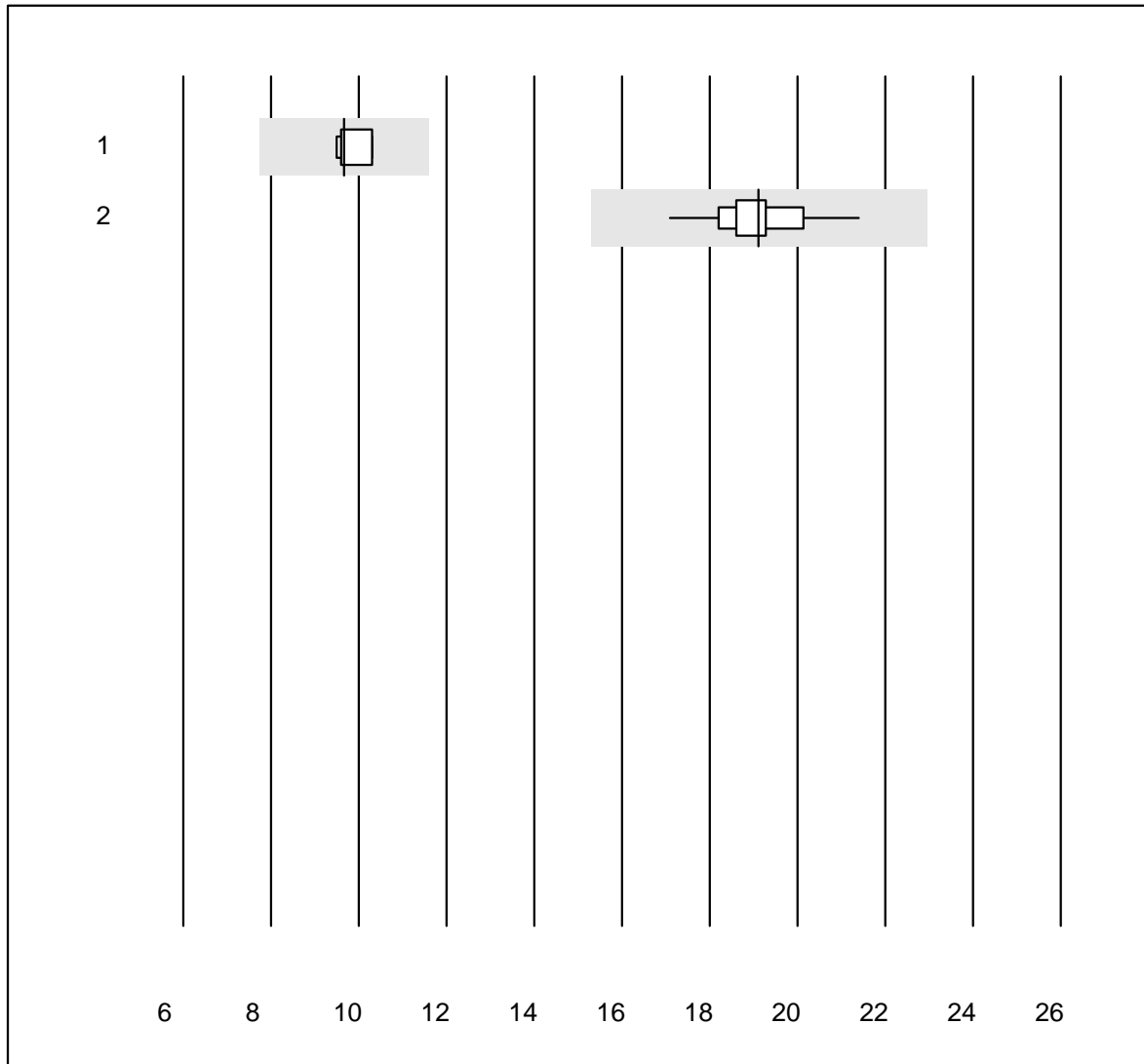
QUALAB tolerance : 20 %   free light chain kappa (mg/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	N Latex	6	83.3	0.0	16.7	9.67	3.9	e
2	Freelite	16	100.0	0.0	0.0	19.11	5.0	e

free light chain lambda
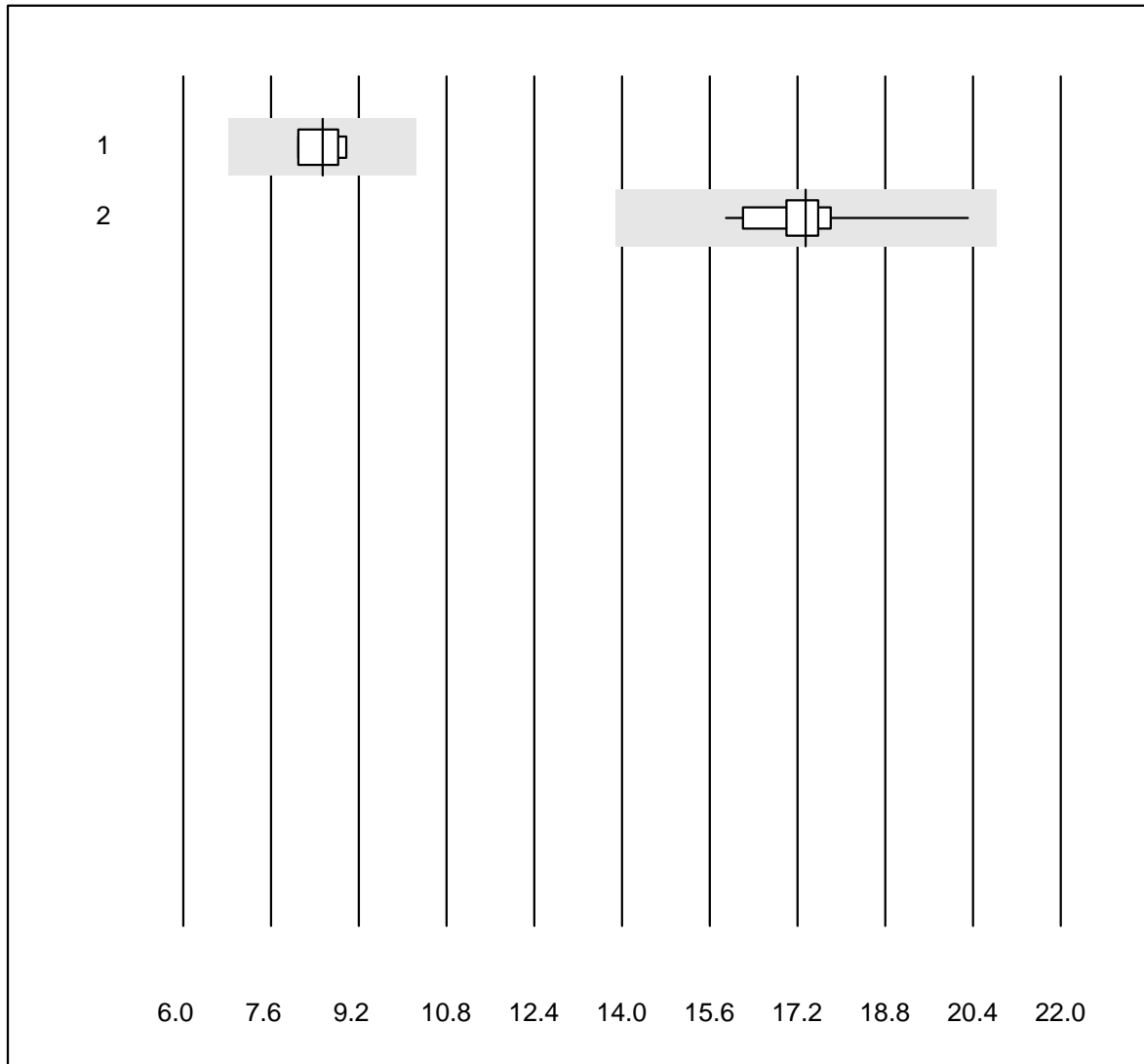
QUALAB tolerance : 20 %

free light chain lambda (mg/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	N Latex	6	100.0	0.0	0.0	8.54	4.3	e
2	Freelite	16	100.0	0.0	0.0	17.35	5.5	e

IgE peanut qn
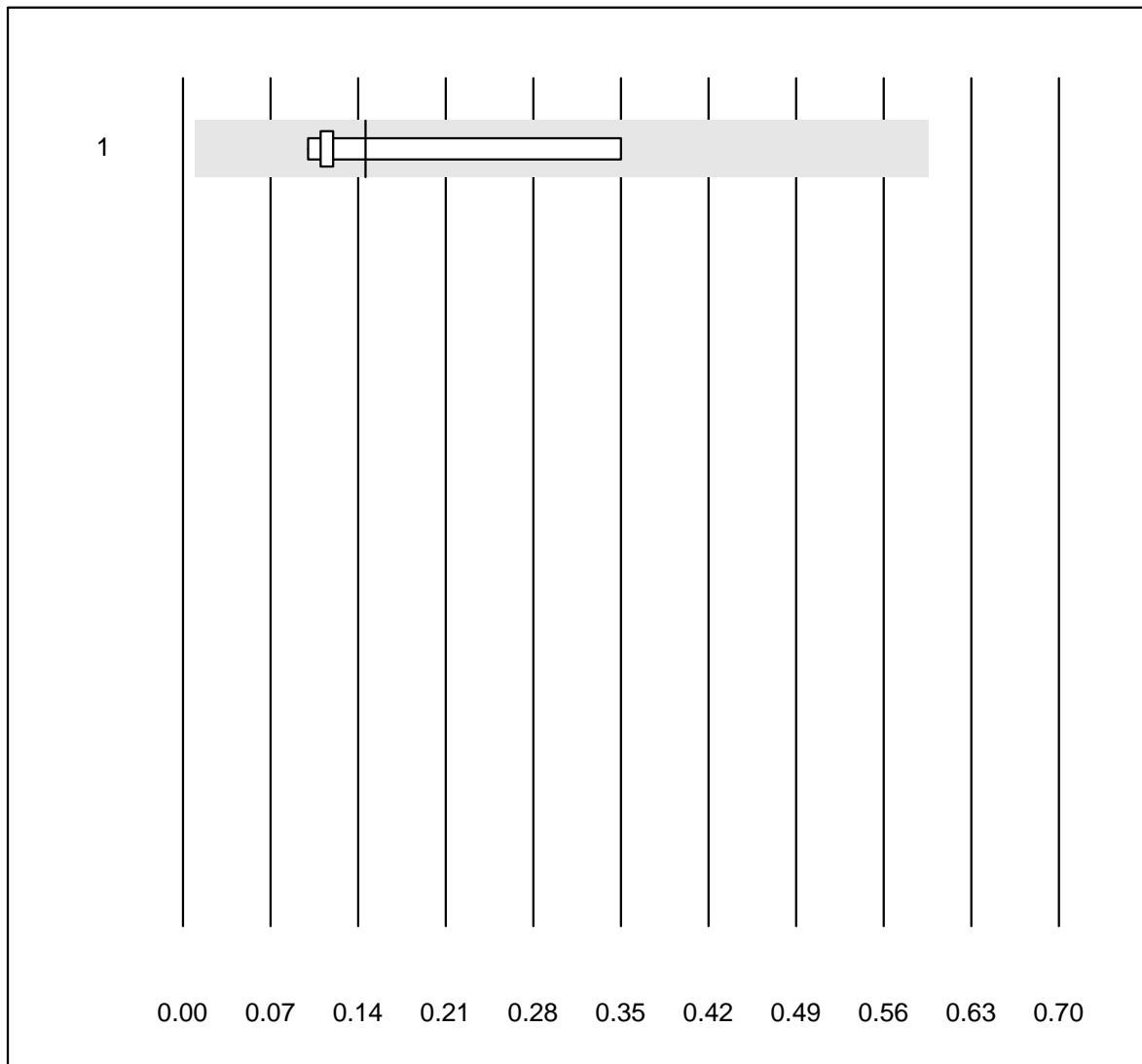
MQ tolerance : 30 %
(< 1.50: +/- 0.45 kU/L)

IgE peanut qn (kU/L)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	all Participants	14	100.0	0.0	0.0	0.15	59.6	e*

IgE birch qn
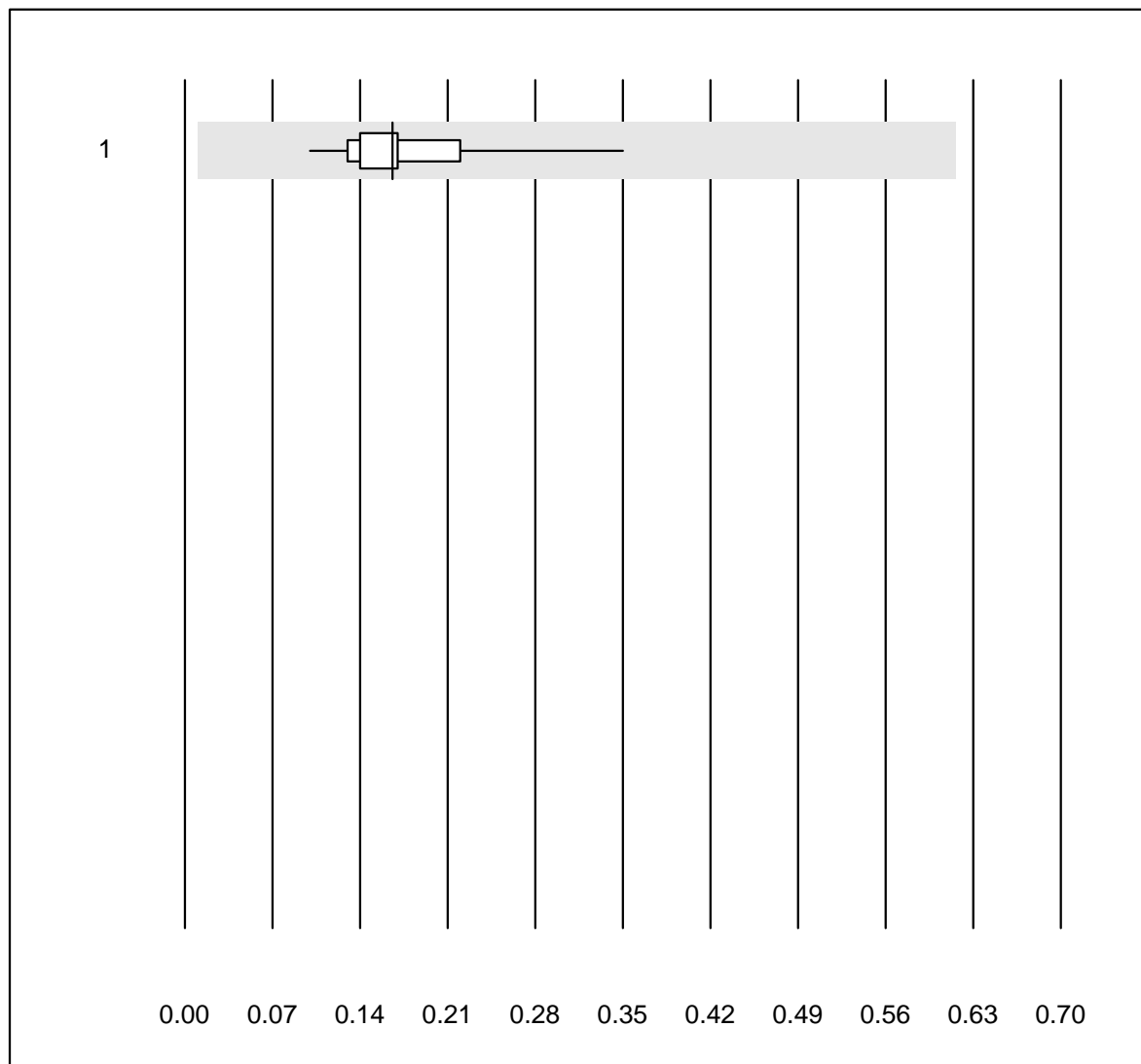
| | 0.00 | 0.07 | 0.14 | 0.21 | 0.28 | 0.35 | 0.42 | 0.49 | 0.56 | 0.63 | 0.70 |

IgE birch qn (kU/L)

QUALAB tolerance : 30 %
(< 1.50: +/- 0.45 kU/L)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	all Participants	15	100.0	0.0	0.0	0.17	34.7	e*

IgE cat qn
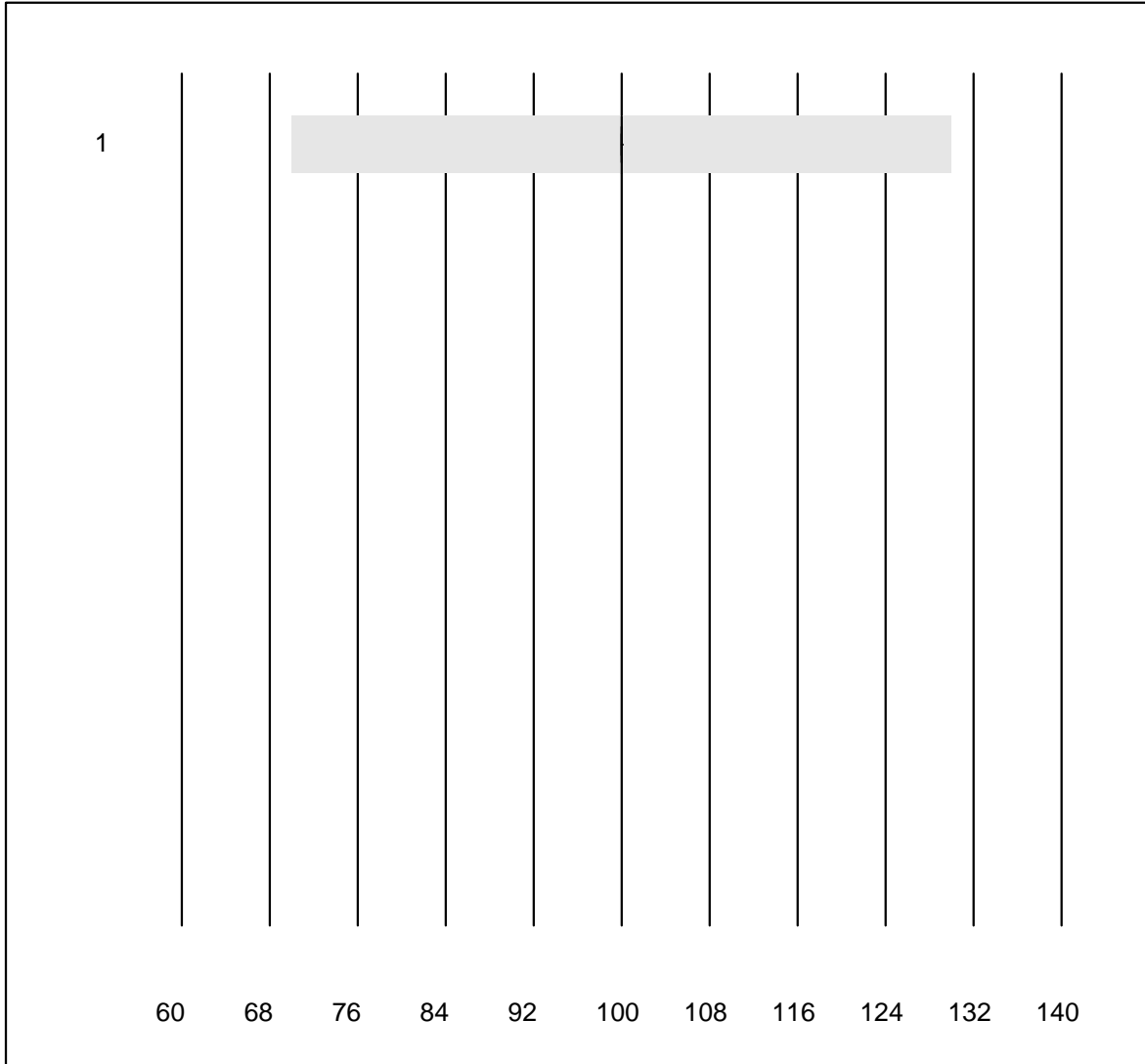
QUALAB tolerance : 30 %   IgE cat qn (kU/L)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	all Participants	14	100.0	0.0	0.0	100.00	0.0	e

IgE total
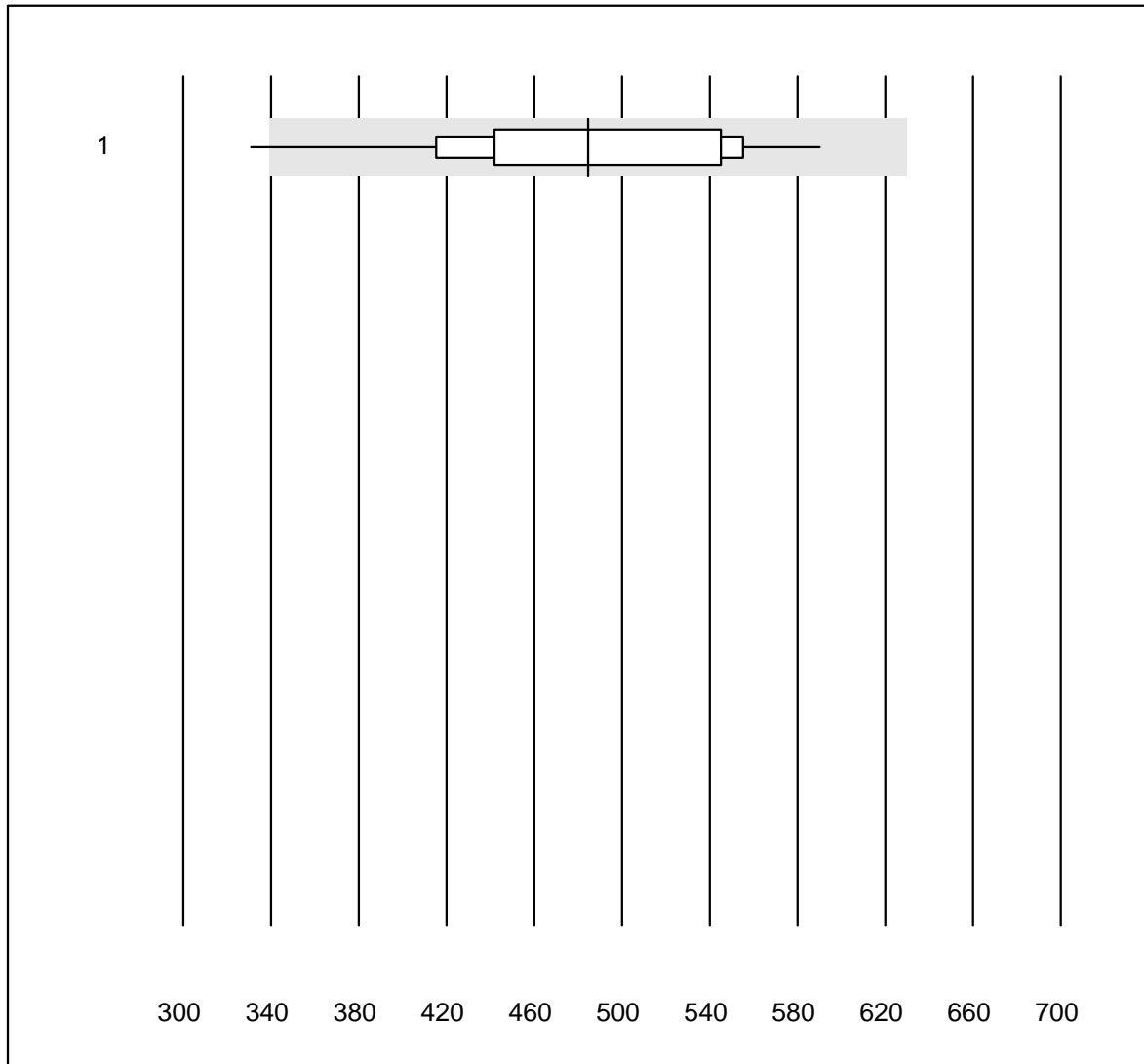
QUALAB tolerance : 30 %

IgE total (kU/L)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	all Participants	14	92.9	7.1	0.0	485	13.9	e*

One result was submitted but not pubished because the method group was too small. (< 4 results per group)

IgE sx1 qn
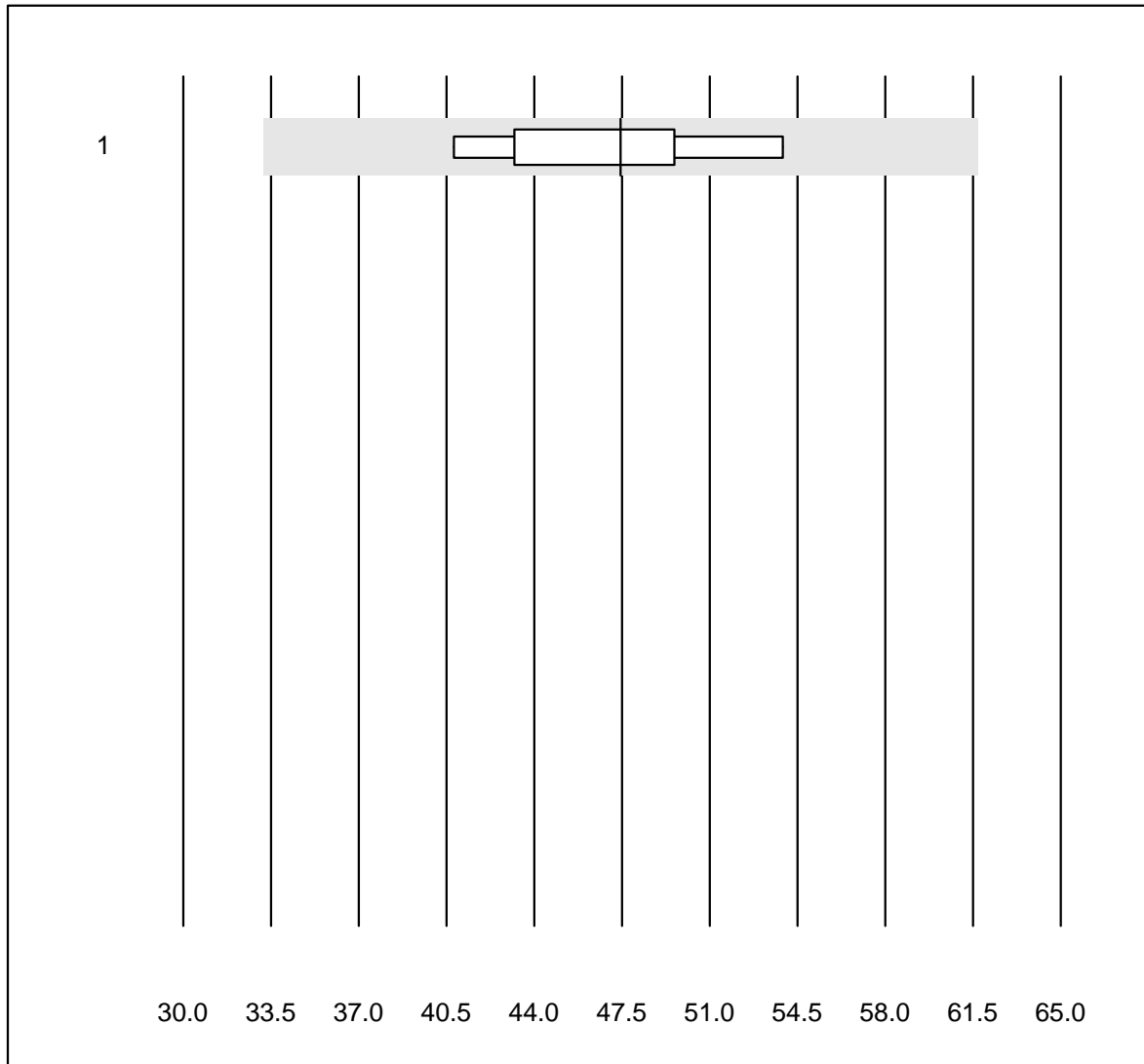
MQ tolerance : 30 %

IgE sx1 qn (kU/L)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	all Participants	10	90.0	0.0	10.0	47.46	8.9	e

IgE fx5 qn
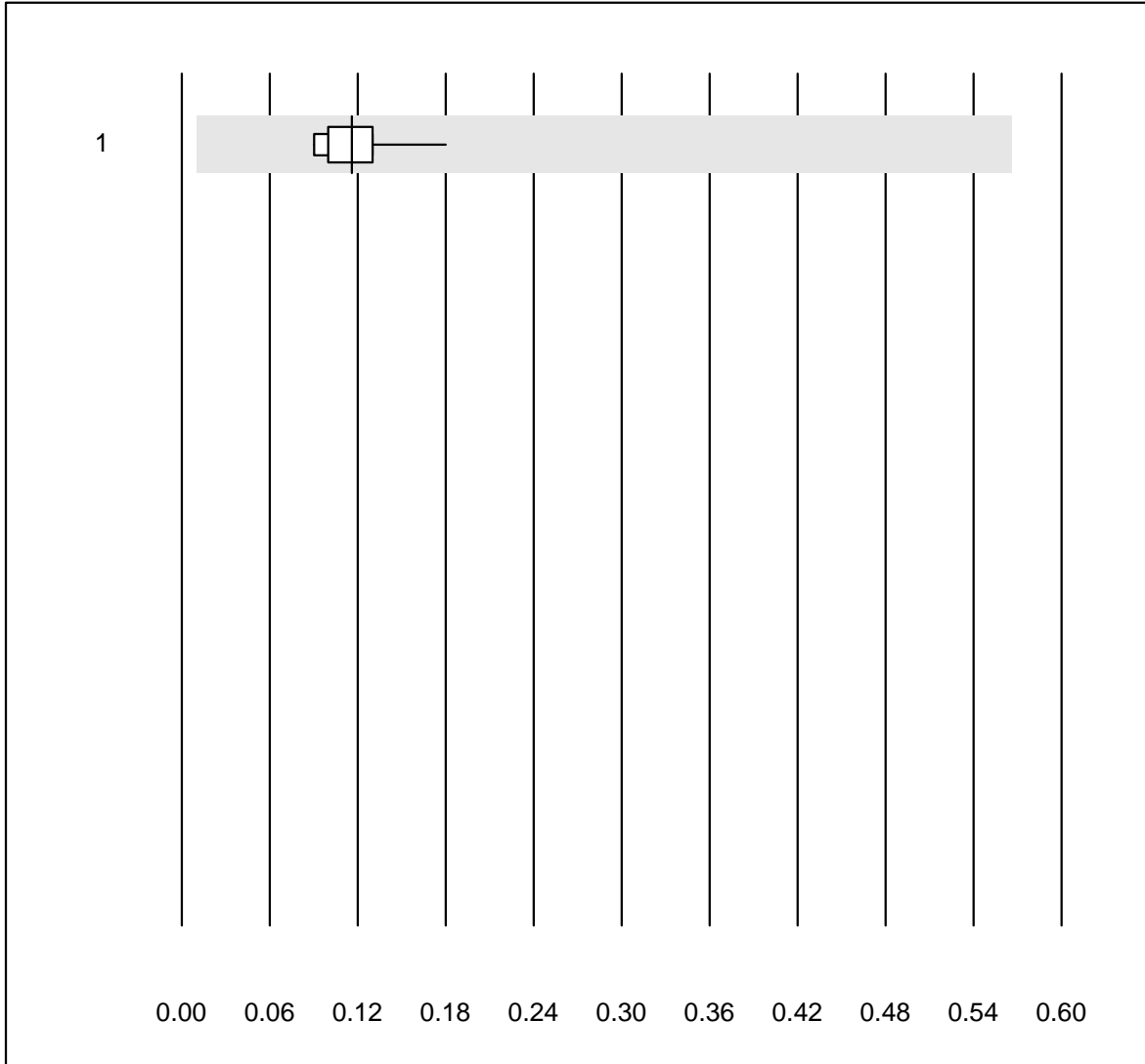
MQ tolerance : 30 %
(< 1.50: +/- 0.45 kU/L)

IgE fx5 qn (kU/L)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	all Participants	10	100.0	0.0	0.0	0.12	22.7	e*

IgE rx1qn

```
                          1
```

0.00   0.11   0.22   0.33   0.44   0.55   0.66   0.77   0.88   0.99   1.10
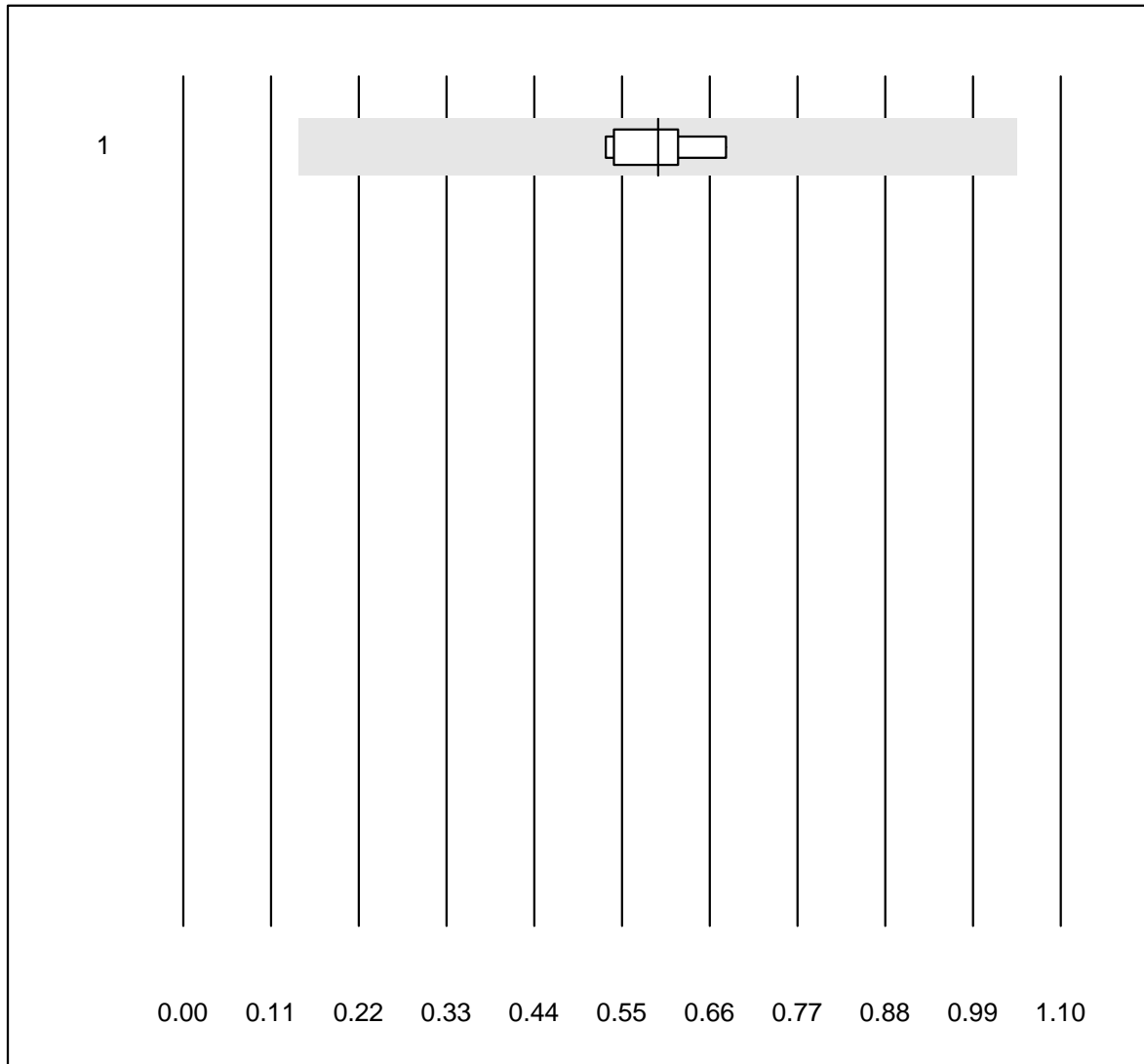
MQ tolerance : 30 %
(< 1.50: +/- 0.45 kU/L)

IgE rx1qn (kU/L)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	all Participants	8	100.0	0.0	0.0	0.60	8.9	e

IgE rx2 qn
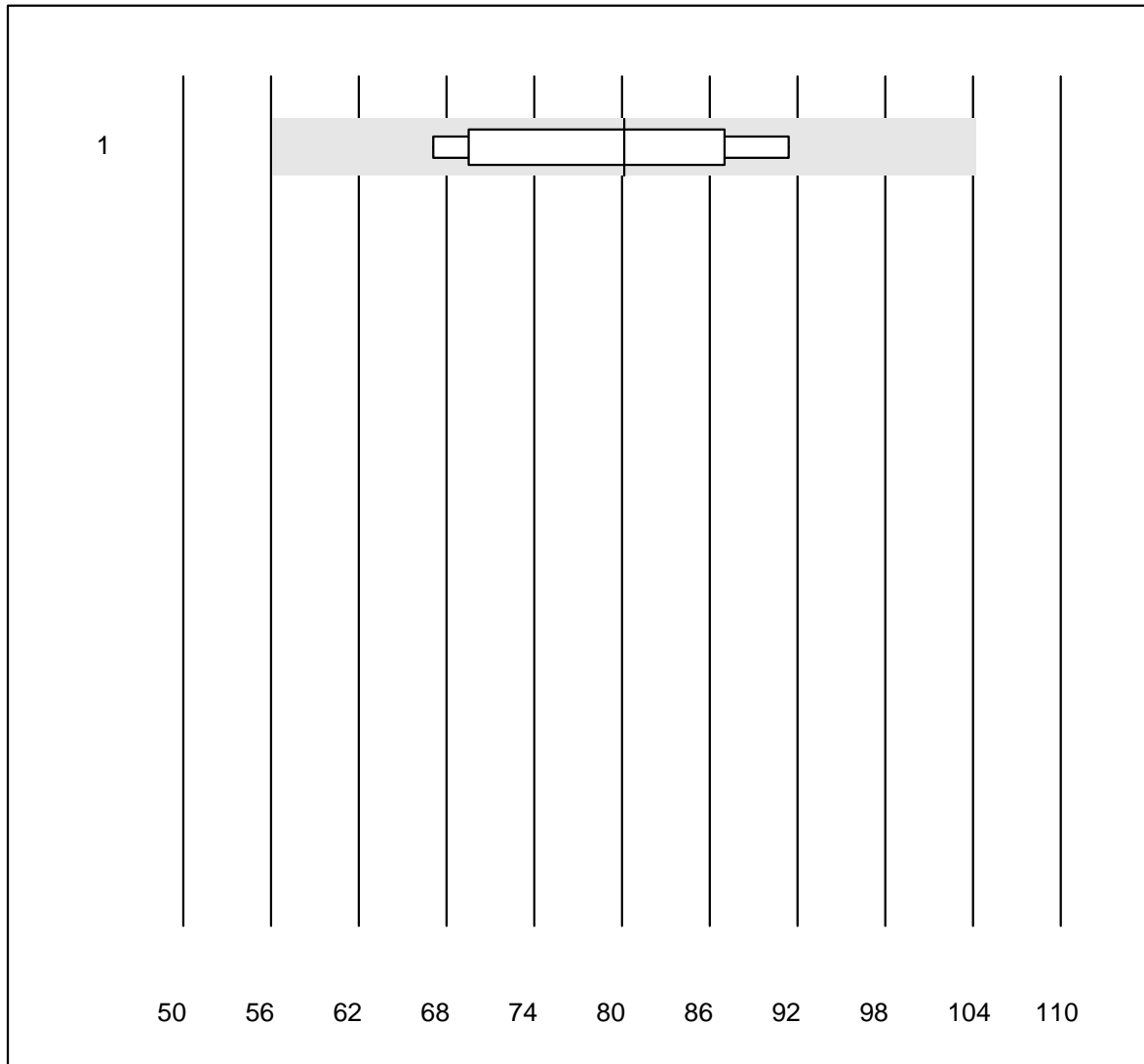
MQ tolerance : 30 %

IgE rx2 qn (kU/L)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	all Participants	8	100.0	0.0	0.0	80.15	11.5	e*

IgE D. pteronyssinus qn

0.00   0.08   0.16   0.24   0.32   0.40   0.48   0.56   0.64   0.72   0.80
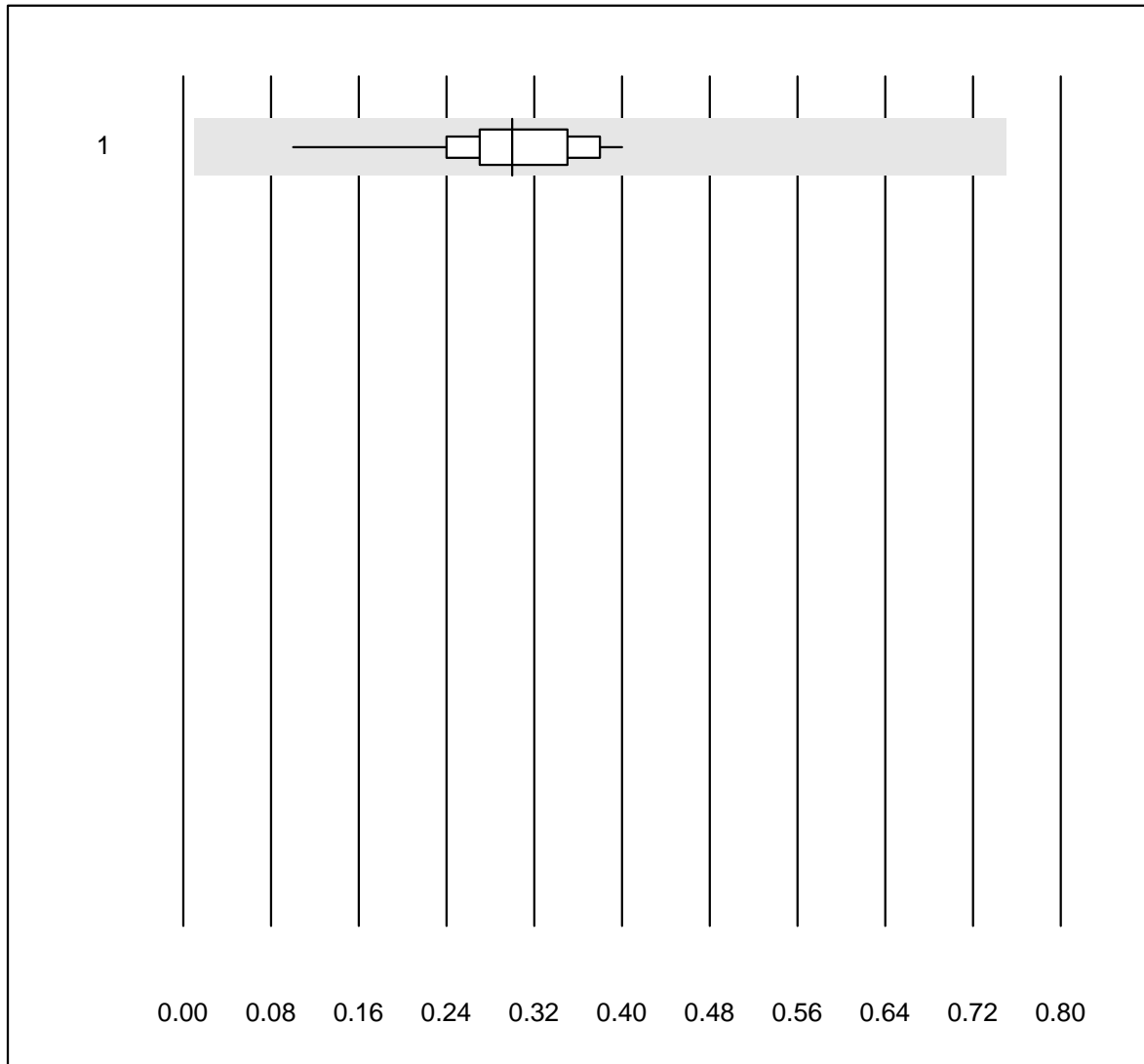
QUALAB tolerance : 30 %
(< 1.50: +/- 0.45 kU/L)

IgE D. pteronyssinus qn (kU/L)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	all Participants	12	100.0	0.0	0.0	0.30	25.9	e*

CRP HS
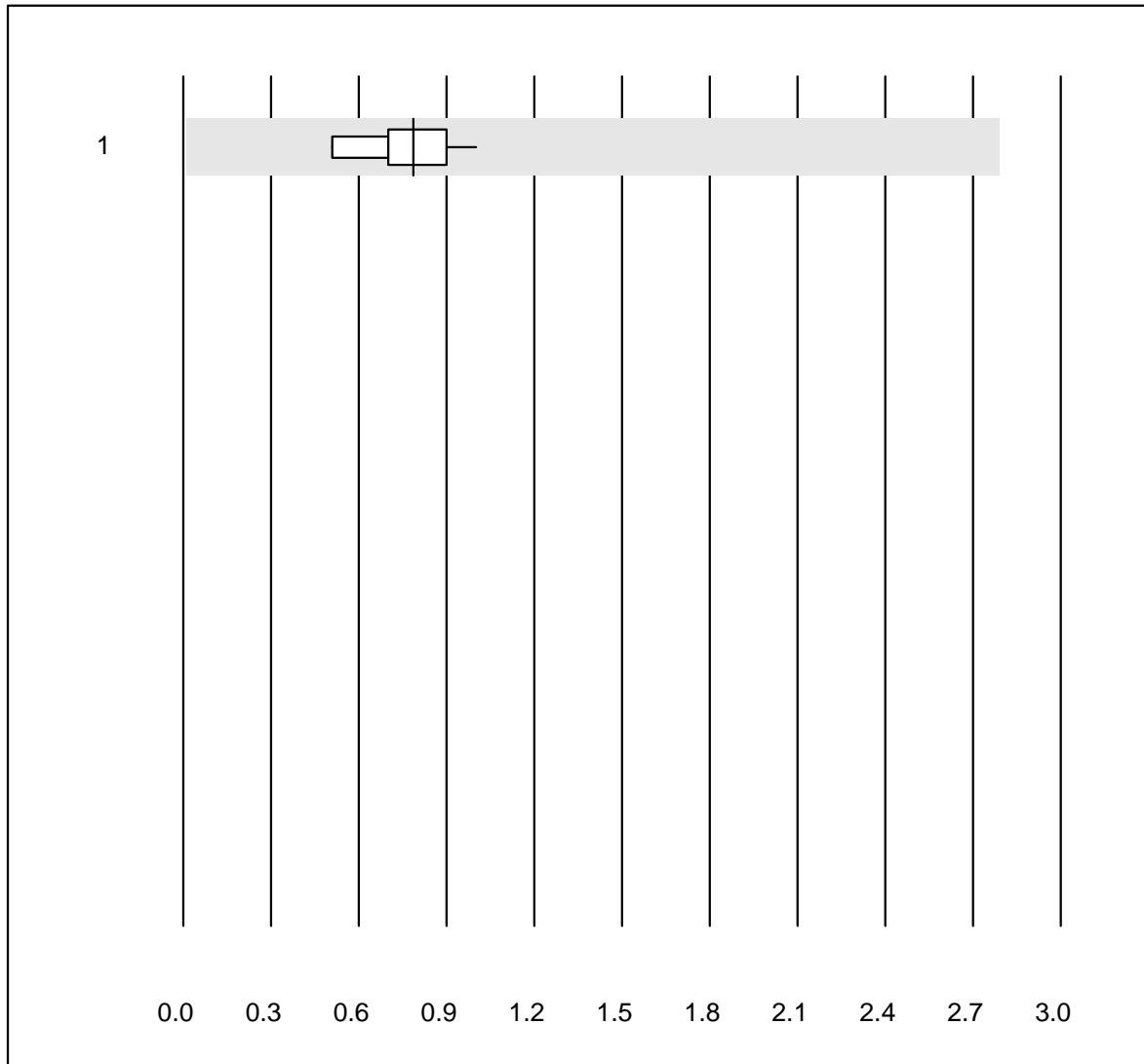
QUALAB tolerance : 21 %
(< 10.00: +/- 2.00 mg/l)

CRP HS (mg/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Turbidimetry	10	100.0	0.0	0.0	0.79	18.2	e*

One result was submitted but not pubished because the method group was too small. (< 4 results per group)

Lipoprotein (a)
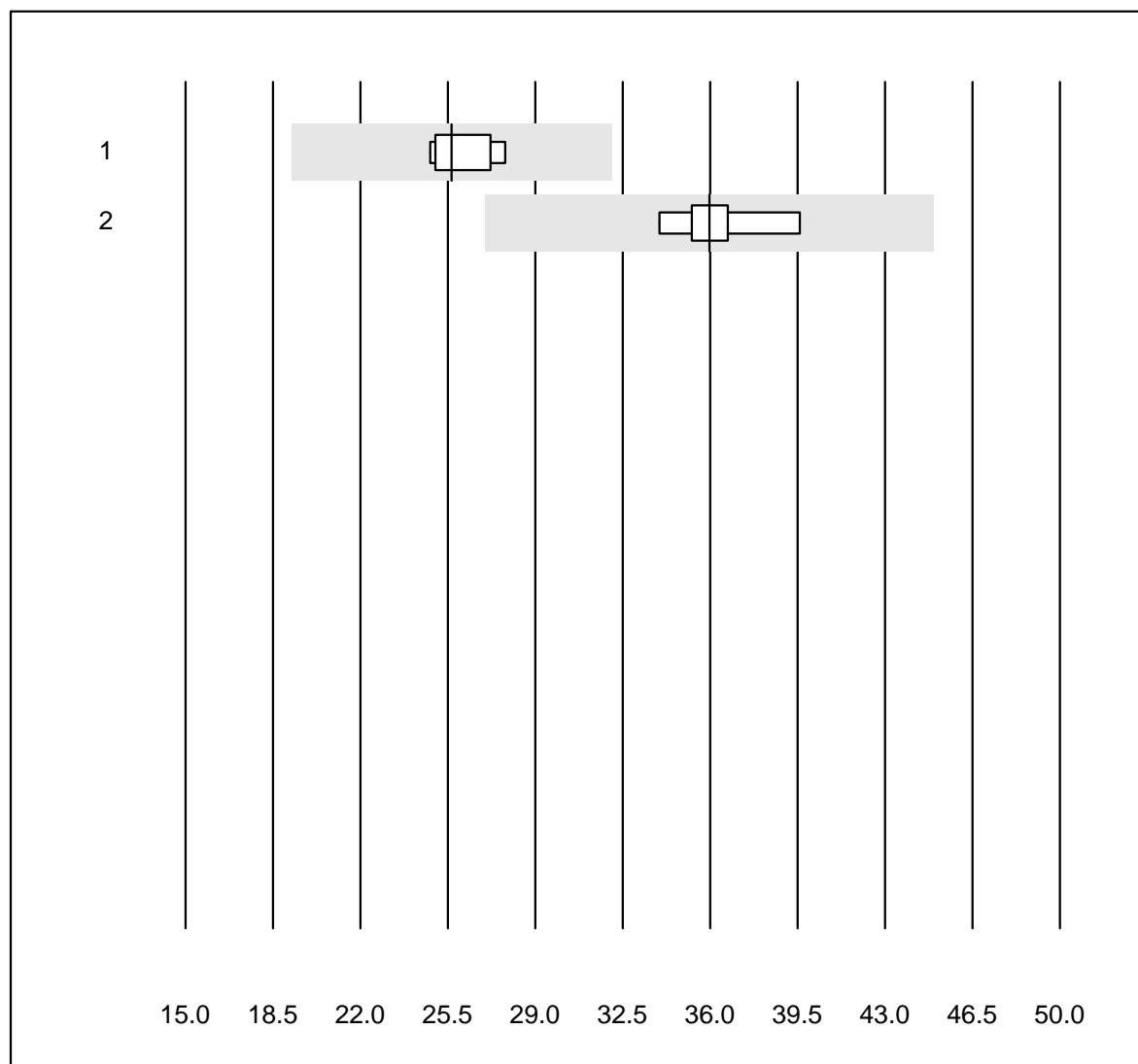
MQ tolerance : 25 %

Lipoprotein (a) (nmol/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	all Participants	6	100.0	0.0	0.0	26	4.9	e
2	Others	5	100.0	0.0	0.0	36	5.8	e

CRP


```
        1
```

25.0 28.5 32.0 35.5 39.0 42.5 46.0 49.5 53.0 56.5 60.0
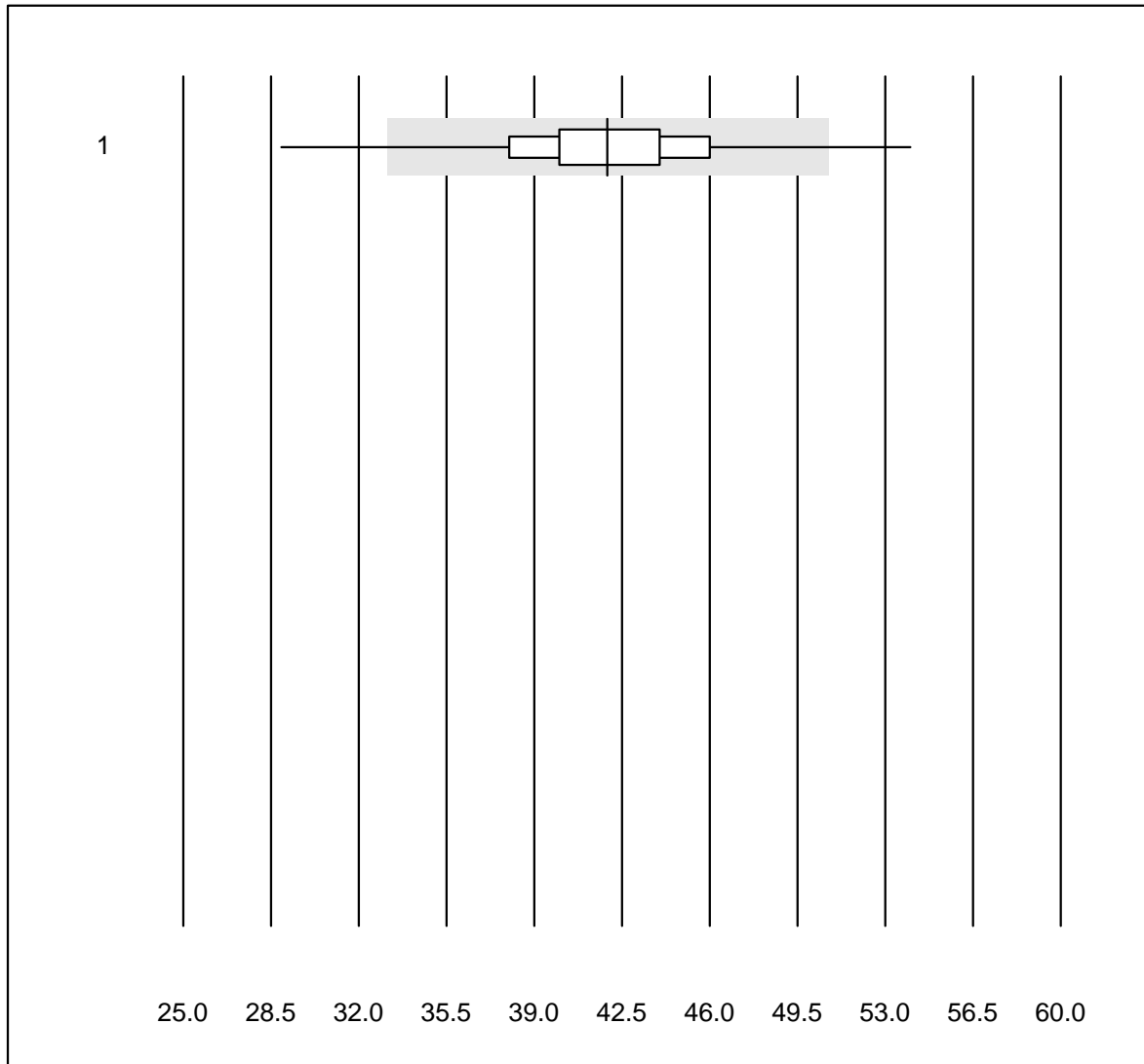
QUALAB tolerance : 21 %   CRP (mg/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	AFIAS	179	91.1	2.8	6.1	41.9	8.7	e

Anti deam. Gliadin IgG
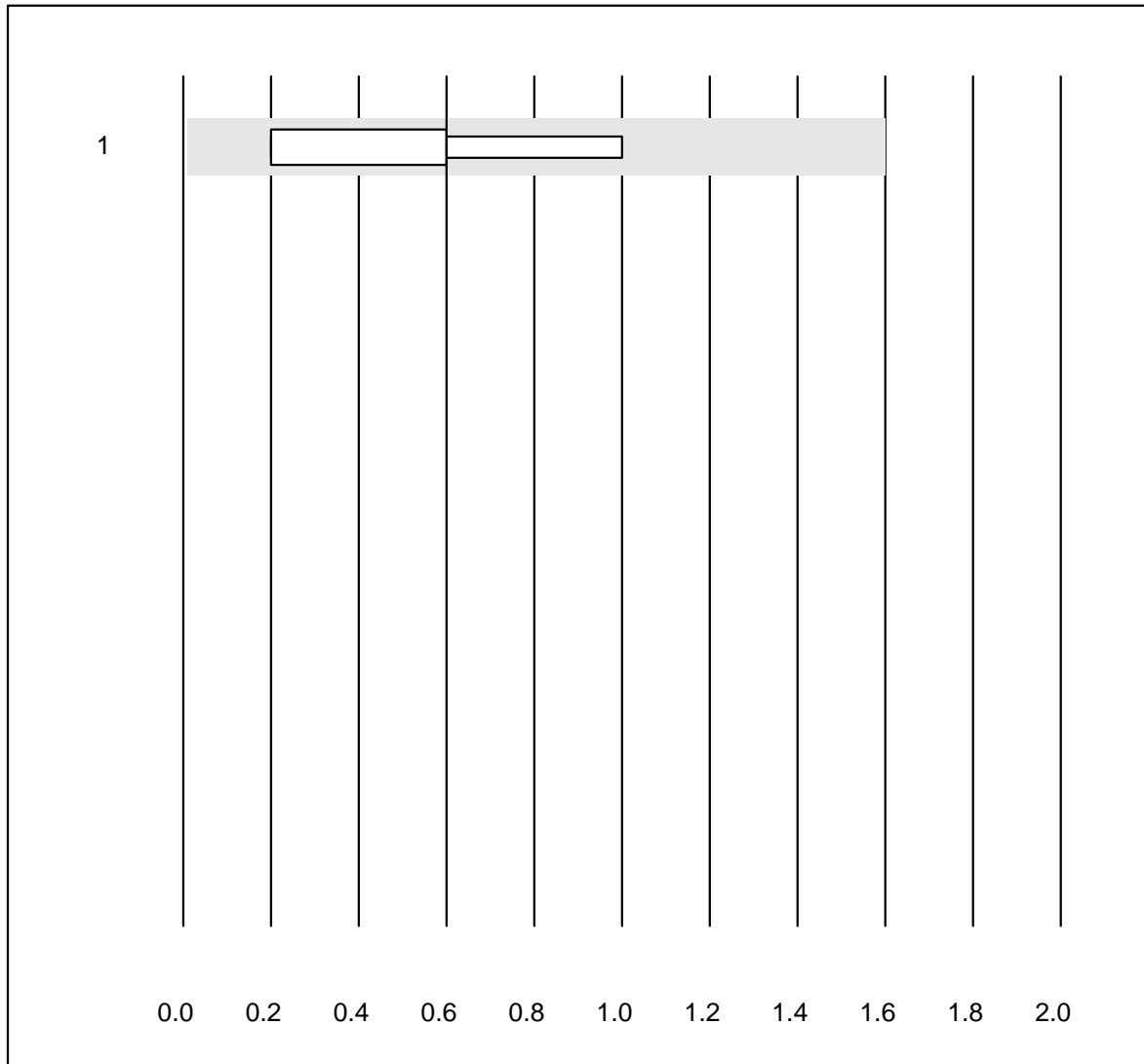
Anti deam. Gliadin IgG (U/ml)

MQ tolerance : 30 %
(< 2.00: +/- 1.00 U/ml)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Phadia	4	100.0	0.0	0.0	0.60	54.4	e*

4 additional results were submitted but not published because the method groups were too small. (< results per group)

Anti deam. Gliadin IgA
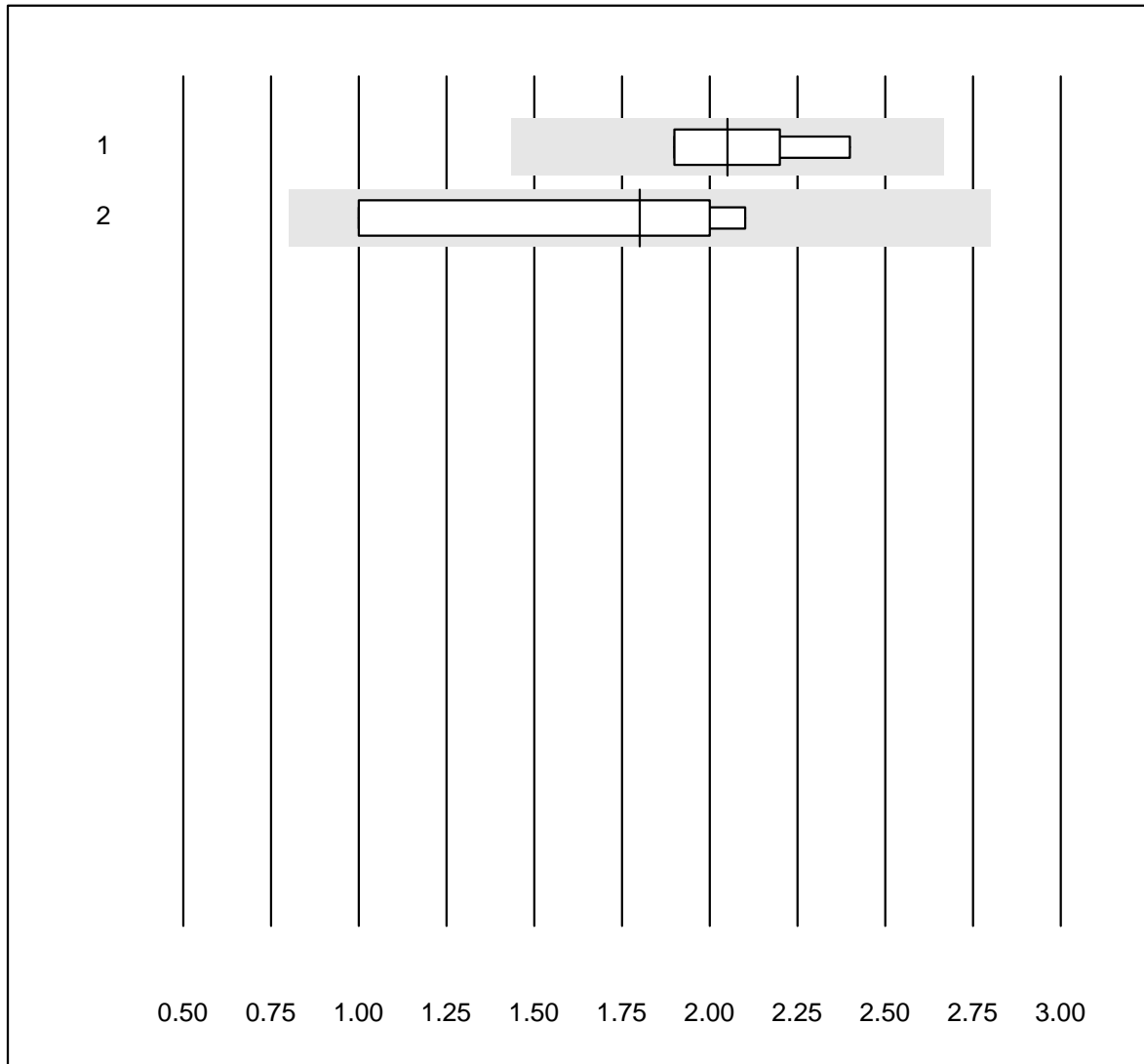
Anti deam. Gliadin IgA (U/ml)

MQ tolerance : 30 %
(< 2.00: +/- 1.00 U/ml)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Other methods	4	100.0	0.0	0.0	2.05	11.7	e*
2	Phadia	4	100.0	0.0	0.0	1.80	29.8	e*

Anti tTG IgG
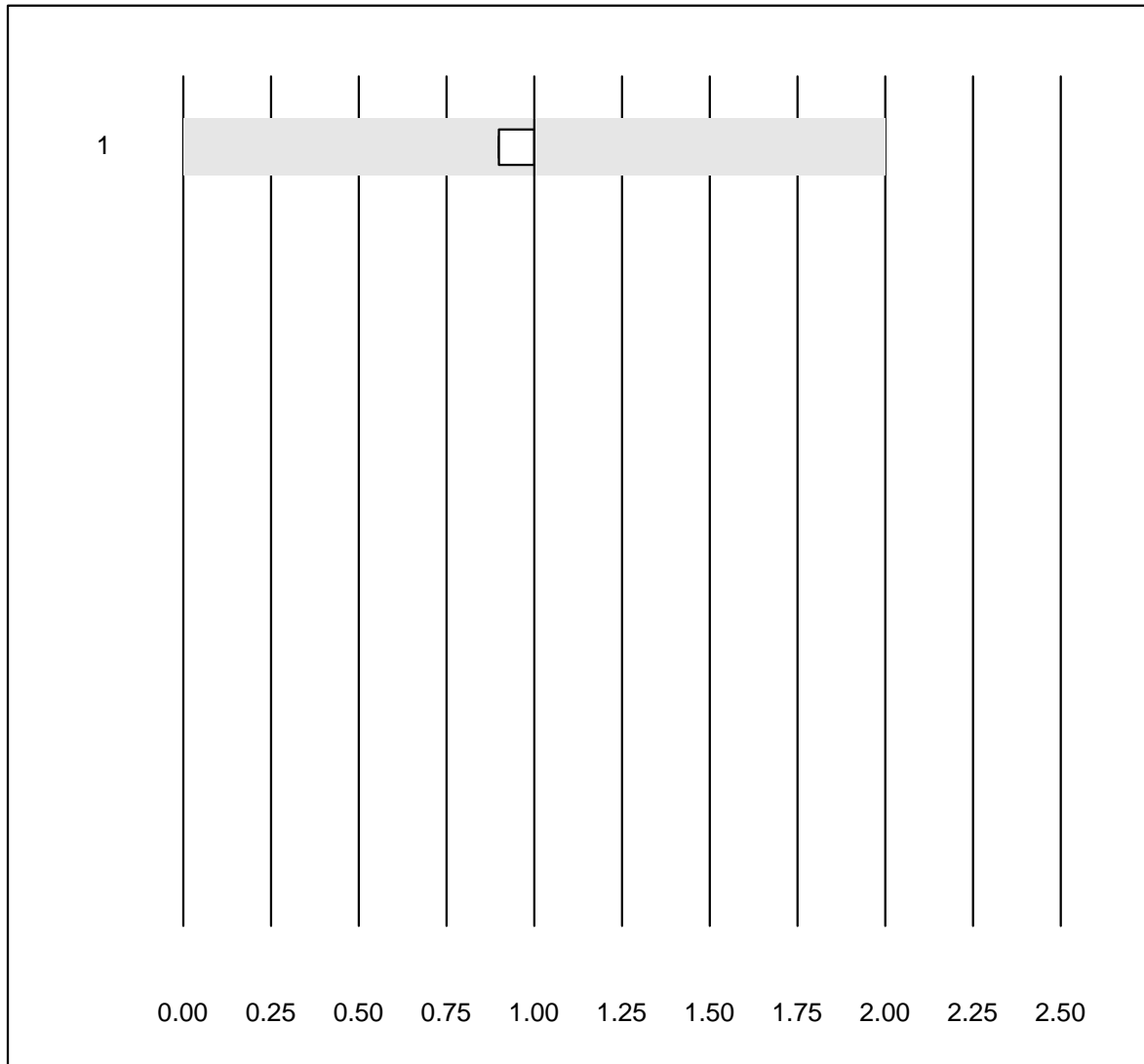
Anti tTG IgG (U/ml)

MQ tolerance : 30 %
(< 2.00: +/- 1.00 U/ml)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Other methods	4	100.0	0.0	0.0	1.00	5.1	e

Anti tTG IgA
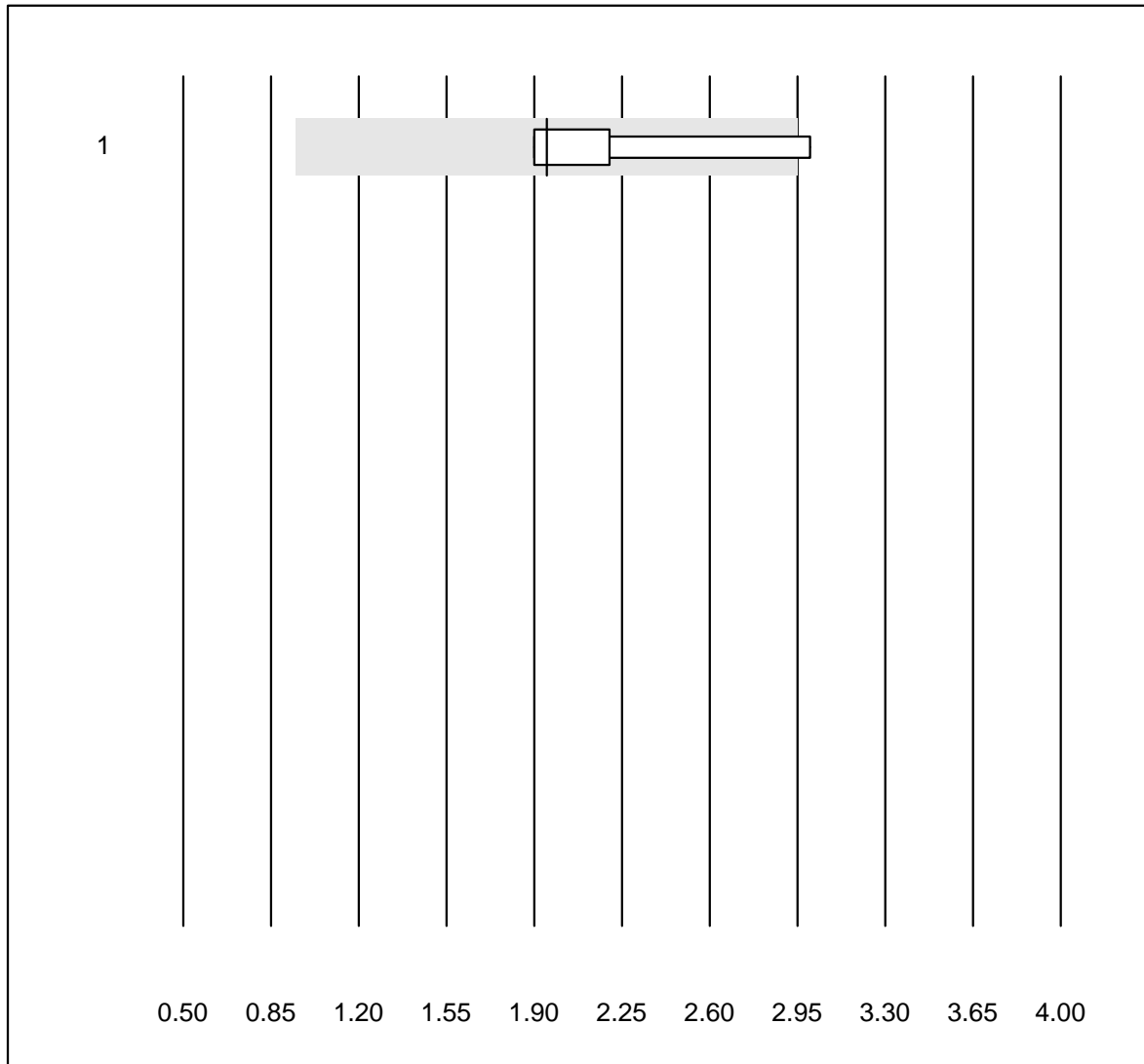

```
              0.50    0.85    1.20    1.55    1.90    2.25    2.60    2.95    3.30    3.65    4.00
```

Anti tTG IgA (U/ml)

MQ tolerance : 30 %
(< 2.00: +/- 1.00 U/ml)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Other methods	6	83.3	16.7	0.0	1.95	20.1	e*

3 additional results were submitted but not published because the method groups were too small. (< results per group)

CRP Lumira
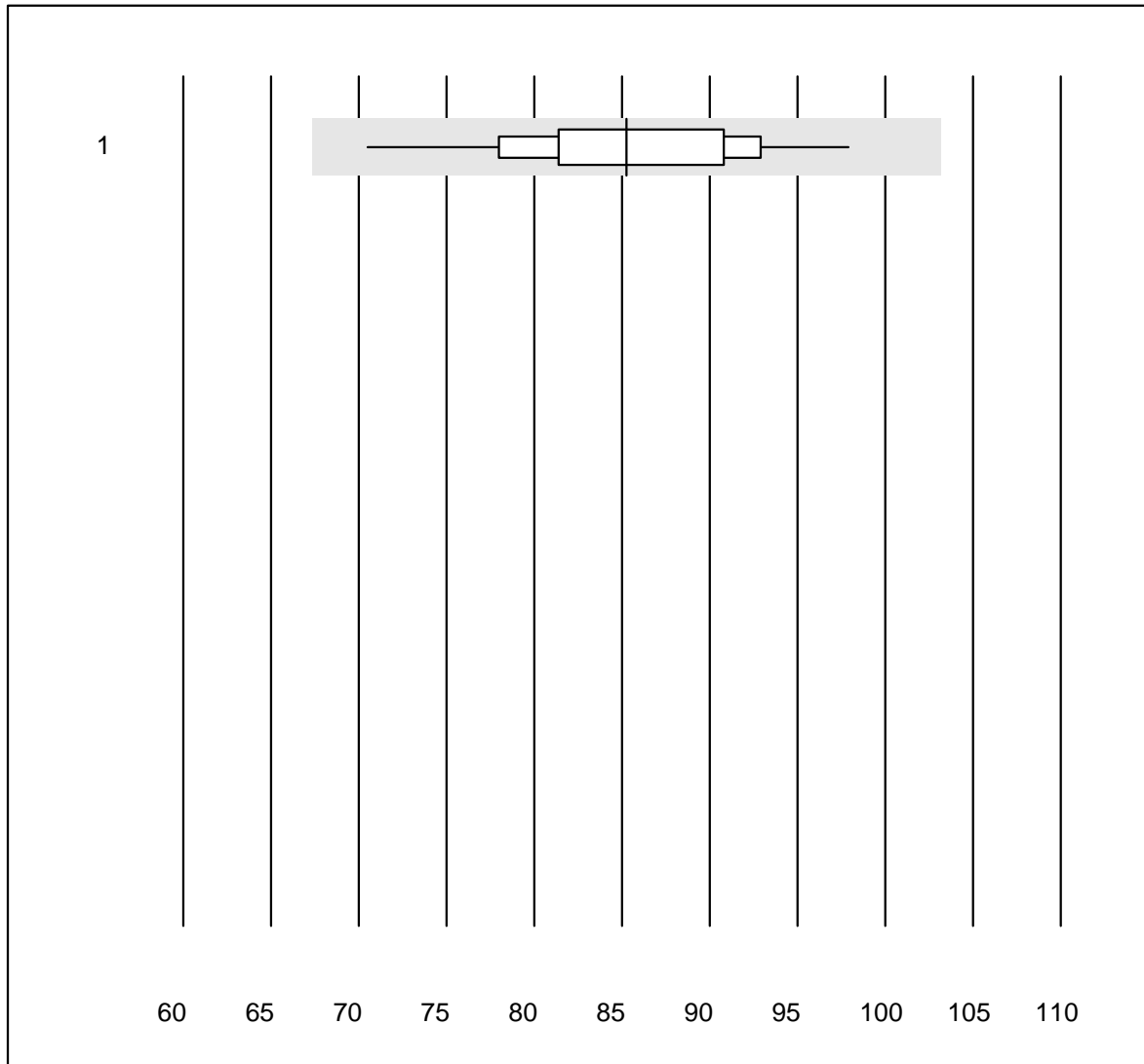
QUALAB tolerance : 21 %

CRP Lumira (mg/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Lumira Dx	12	91.7	0.0	8.3	85.2	8.8	e*

Albumine
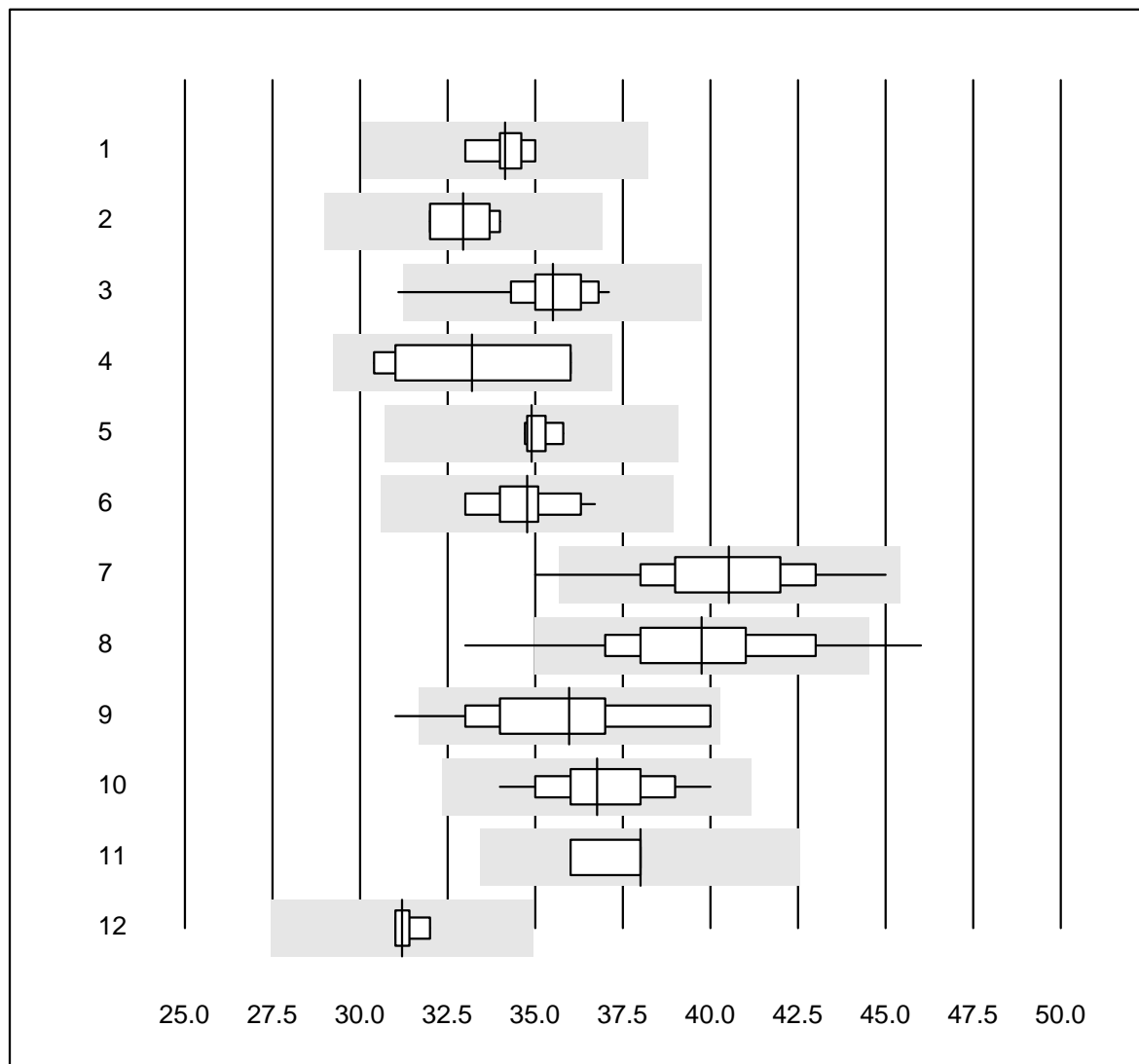
QUALAB tolerance : 12 %

Albumine (g/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Abbott	12	100.0	0.0	0.0	34.1	2.0	e
2	Beckman	4	100.0	0.0	0.0	33.0	3.1	e*
3	Roche	35	97.1	2.9	0.0	35.5	3.5	e
4	Siemens	5	100.0	0.0	0.0	33.2	8.7	a
5	Autolyser	8	100.0	0.0	0.0	34.9	1.1	e
6	Selectra Pro	10	100.0	0.0	0.0	34.8	3.3	e
7	Fuji Dri-Chem	245	99.6	0.4	0.0	40.5	4.4	e
8	Spotchem D-Concept	237	95.3	3.4	1.3	39.8	5.9	e
9	Spotchem SP-4430	31	93.6	3.2	3.2	36.0	6.6	e
10	Piccolo	56	96.4	0.0	3.6	36.8	3.9	e
11	Skyla	4	100.0	0.0	0.0	38.0	2.7	e
12	Hitachi S40/M40	4	100.0	0.0	0.0	31.2	1.5	e

3 additional results were submitted but not published because the method groups were too small. (< results per group)

Alkaline phosphatase
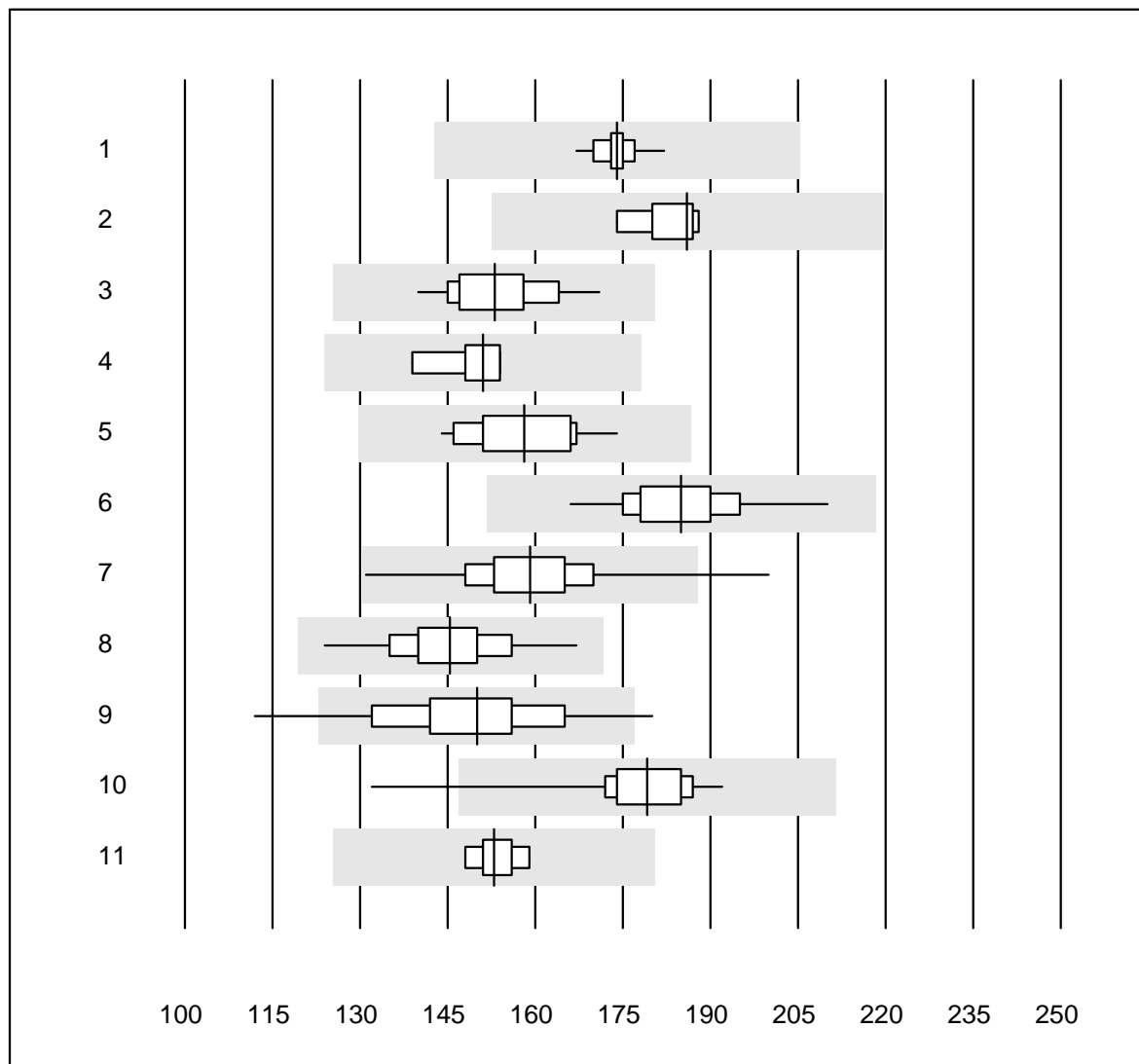
QUALAB tolerance : 18 % Alkaline phosphatase (U/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Abbott	16	100.0	0.0	0.0	174	1.9	e
2	Beckman	6	100.0	0.0	0.0	186	3.0	e
3	Roche	34	100.0	0.0	0.0	153	5.0	e
4	Siemens	6	100.0	0.0	0.0	151	3.8	e
5	Autolyser	20	100.0	0.0	0.0	158	5.6	e
6	Selectra Pro	14	100.0	0.0	0.0	185	5.7	e
7	Fuji Dri-Chem	1024	99.2	0.3	0.5	159	5.5	e
8	Spotchem D-Concept	552	99.1	0.0	0.9	145	5.2	e
9	Spotchem SP-4430	89	93.3	5.6	1.1	150	8.3	e
10	Piccolo	47	95.8	2.1	2.1	179	5.2	e
11	Skyla	5	100.0	0.0	0.0	153	2.8	e

4 additional results were submitted but not published because the method groups were too small. (< results per group)

Amylase

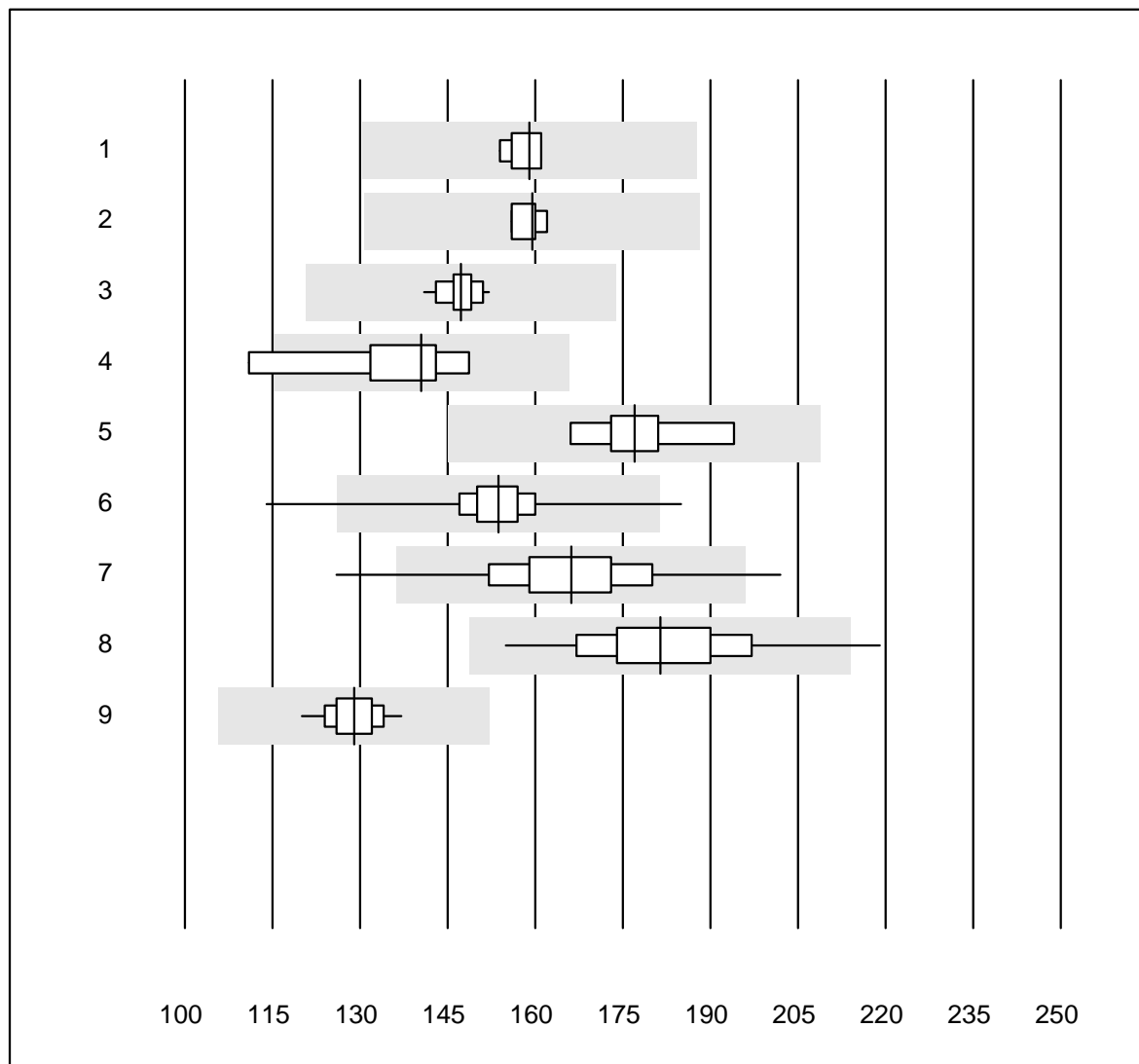QUALAB tolerance : 18 %

Amylase (U/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Abbott	9	100.0	0.0	0.0	159	1.8	e
2	Beckman	4	100.0	0.0	0.0	160	1.6	e
3	Roche	13	100.0	0.0	0.0	147	2.1	e
4	Autolyser	8	87.5	12.5	0.0	141	8.6	e*
5	Selectra Pro	9	100.0	0.0	0.0	177	4.4	e
6	Fuji Dri-Chem	739	99.2	0.5	0.3	154	3.9	e
7	Spotchem D-Concept	407	99.0	1.0	0.0	166	6.5	e
8	Spotchem SP-4430	62	96.8	1.6	1.6	181	7.0	e
9	Piccolo	51	100.0	0.0	0.0	129	3.0	e

5 additional results were submitted but not published because the method groups were too small. (< results per group)
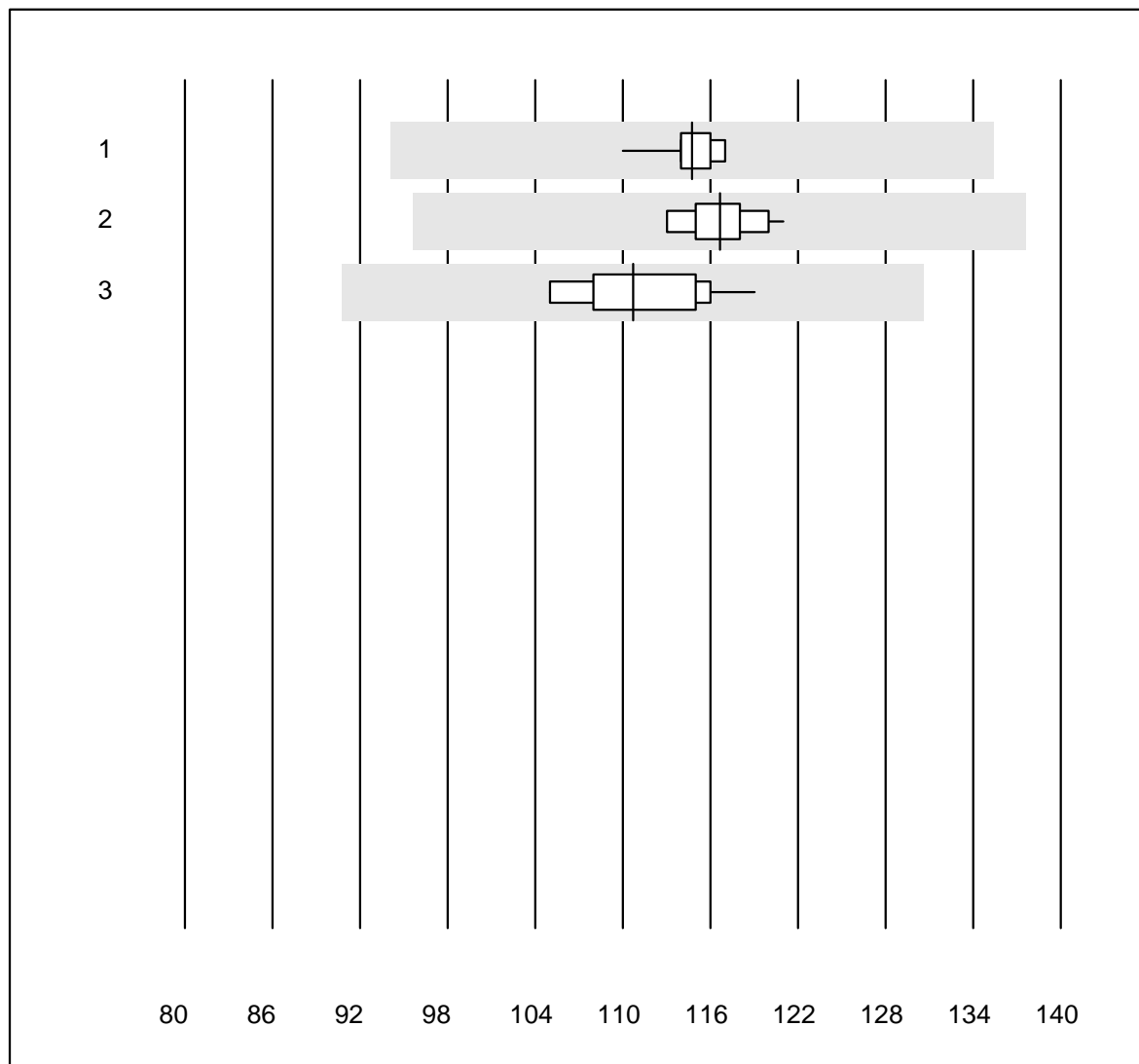
Pancreatic amylase

QUALAB tolerance : 18 %   Pancreatic amylase (U/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Abbott	14	100.0	0.0	0.0	115	1.6	e
2	Roche	17	100.0	0.0	0.0	117	2.0	e
3	Autolyser	10	100.0	0.0	0.0	111	4.0	e

4 additional results were submitted but not published because the method groups were too small. (< results per group)
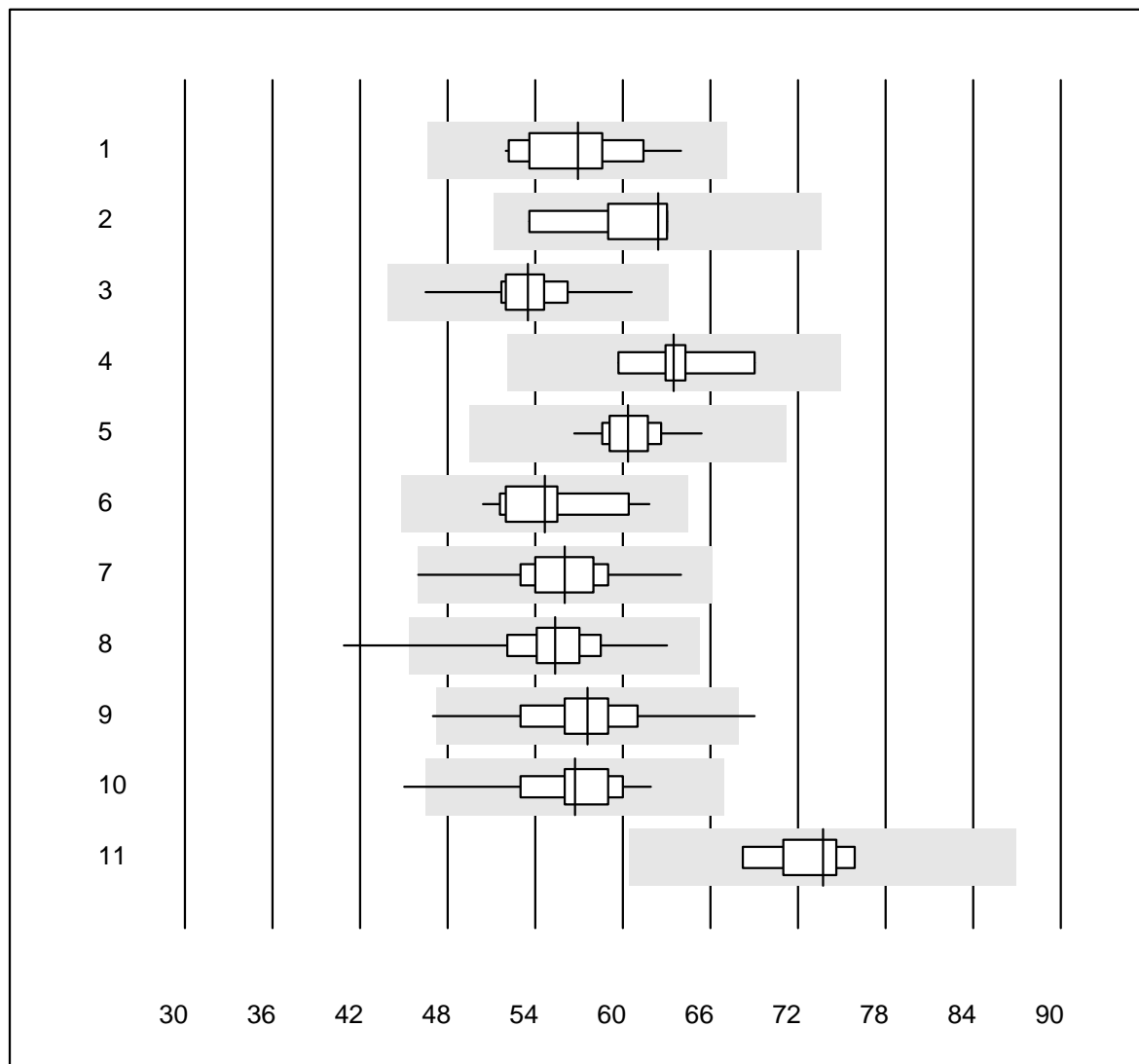
Bilirubin

QUALAB tolerance : 18 %

Bilirubin (µmol/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Abbott	17	100.0	0.0	0.0	56.9	6.3	e
2	Beckman	6	100.0	0.0	0.0	62.4	6.2	e*
3	Roche	33	100.0	0.0	0.0	53.5	4.5	e
4	Siemens	5	100.0	0.0	0.0	63.5	5.2	e*
5	Autolyser	17	100.0	0.0	0.0	60.4	3.3	e
6	Selectra Pro	16	93.7	0.0	6.3	54.7	6.3	e
7	Fuji Dri-Chem	836	99.4	0.0	0.6	56.0	4.8	e
8	Spotchem D-Concept	444	97.3	2.5	0.2	55.4	5.7	e
9	Spotchem SP-4430	81	95.1	3.7	1.2	57.6	5.9	e
10	Piccolo	54	94.4	3.7	1.9	56.7	5.8	e
11	Skyla	5	100.0	0.0	0.0	73.7	4.2	e

3 additional results were submitted but not published because the method groups were too small. (< results per group)
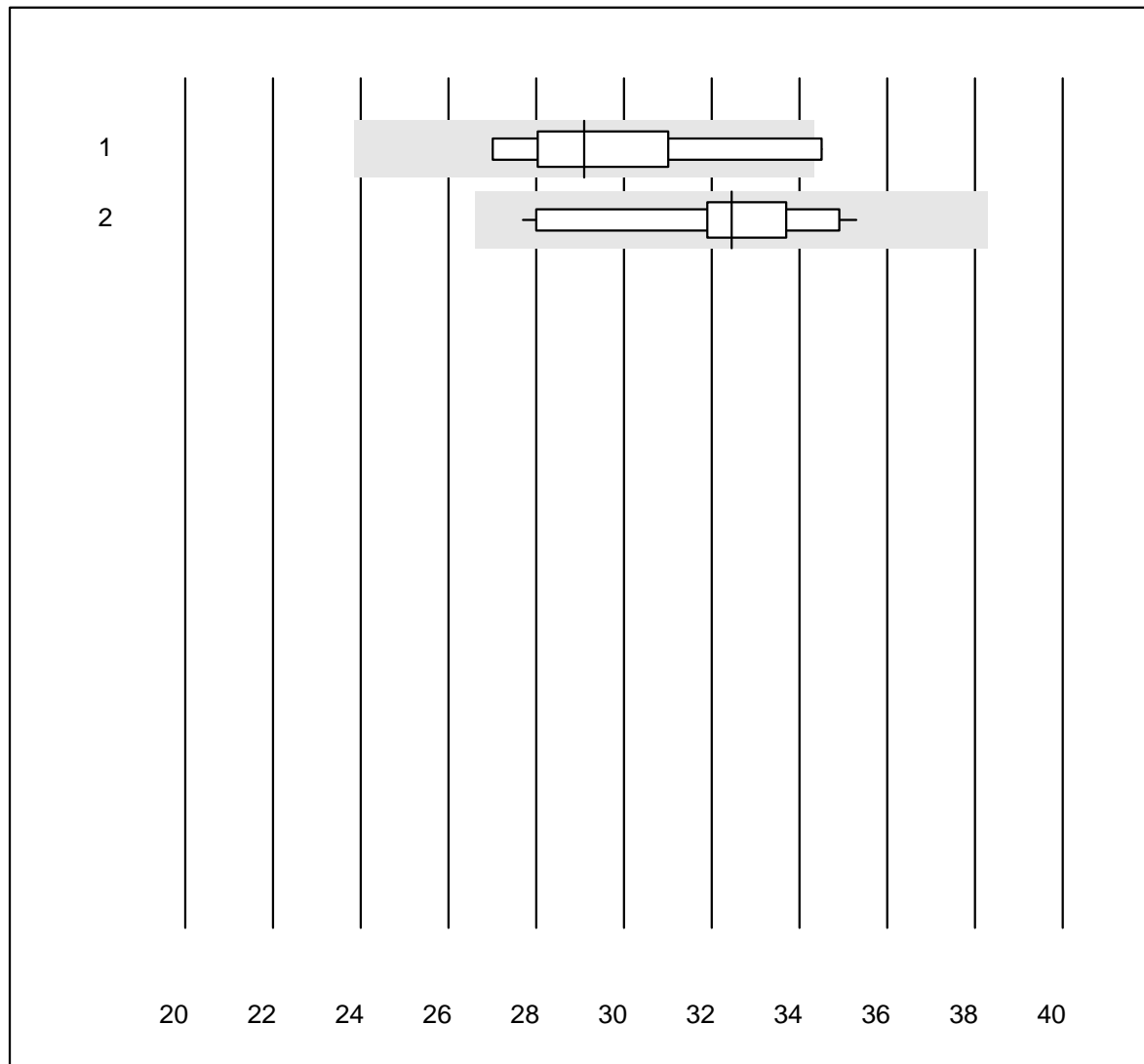
Bilirubin direct

MQ tolerance : 18 %

Bilirubin direct (µmol/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Autolyser	8	87.5	12.5	0.0	29.1	8.1	e*
2	Fuji Dri-Chem	20	100.0	0.0	0.0	32.4	7.3	e

4 additional results were submitted but not published because the method groups were too small. (< results per group)

Calcium

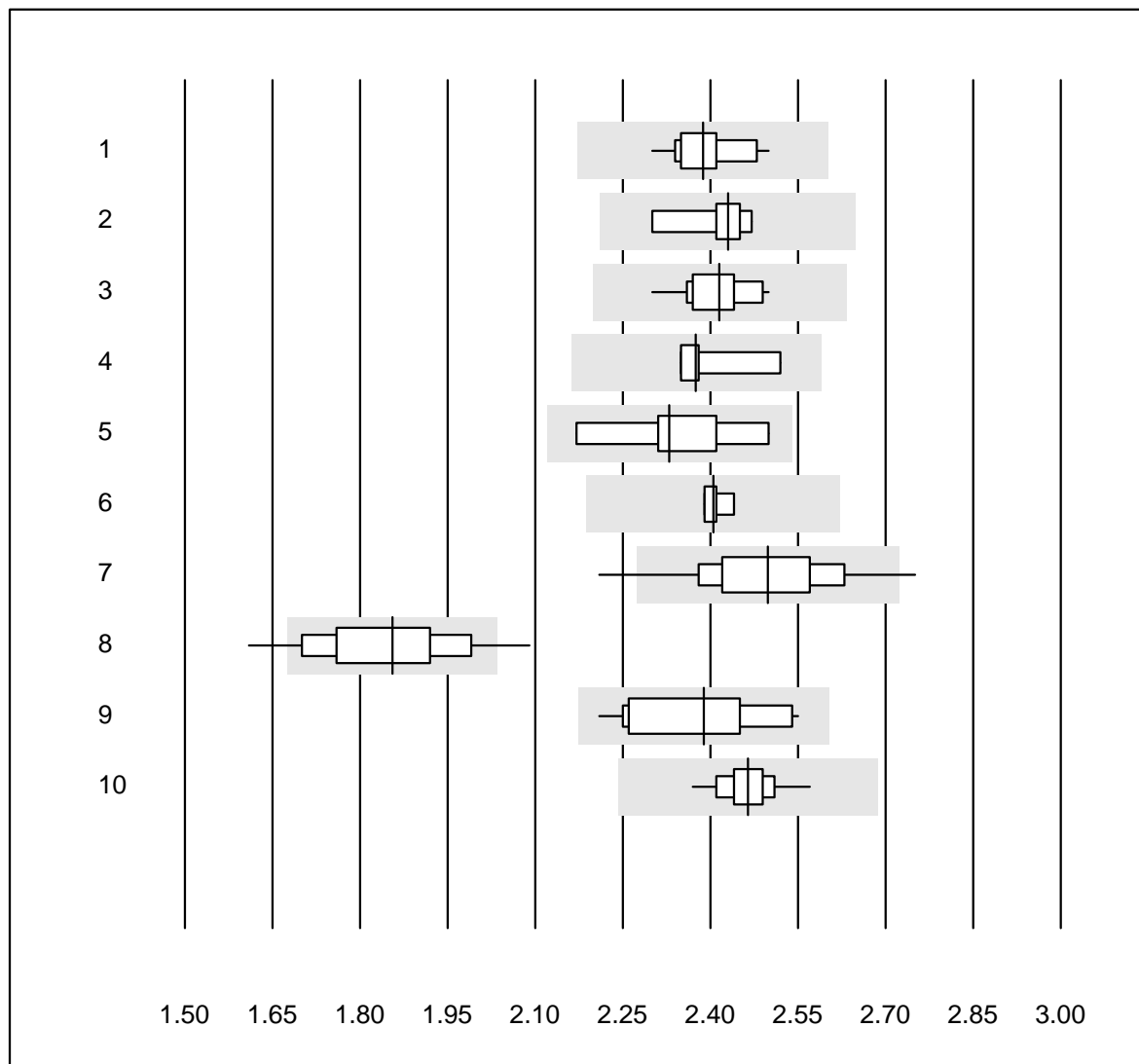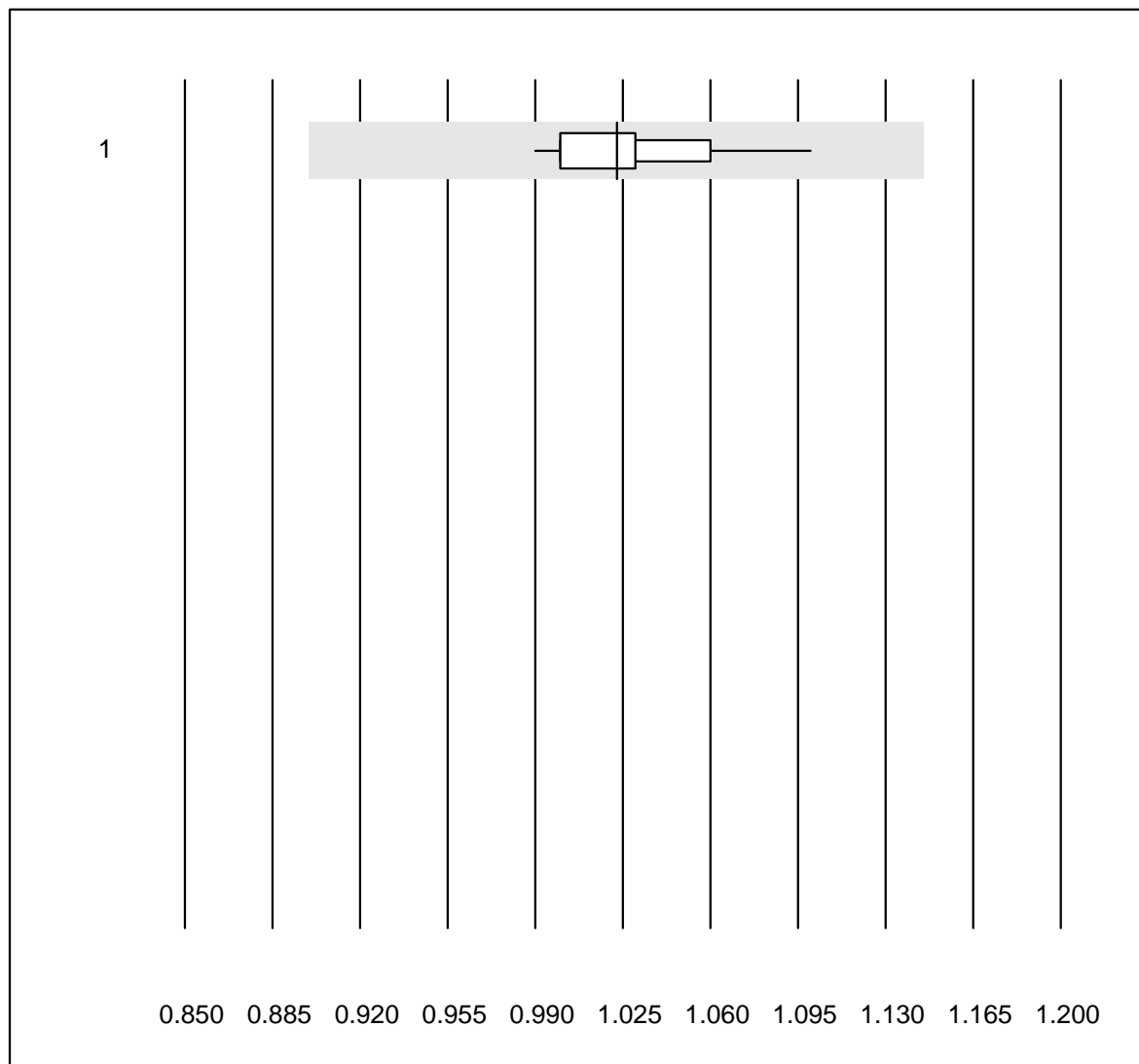Calcium (mmol/l)

QUALAB tolerance : 9 %
(< 2.00: +/- 0.18 mmol/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Abbott	18	100.0	0.0	0.0	2.39	2.0	e
2	Beckman	5	100.0	0.0	0.0	2.43	2.8	e*
3	Roche	35	100.0	0.0	0.0	2.42	2.0	e
4	Siemens	4	100.0	0.0	0.0	2.38	3.2	e*
5	Autolyser	9	100.0	0.0	0.0	2.33	4.4	e*
6	Selectra Pro	4	100.0	0.0	0.0	2.41	0.9	e
7	Fuji Dri-Chem	289	95.9	1.7	2.4	2.50	3.9	e
8	Spotchem D-Concept	78	87.2	9.0	3.8	1.86	6.0	e
9	Spotchem SP-4430	13	92.3	0.0	7.7	2.39	4.8	e*
10	Piccolo	48	95.8	0.0	4.2	2.46	1.6	e

4 additional results were submitted but not published because the method groups were too small. (< results per group)

Calcium ISE

0.850 0.885 0.920 0.955 0.990 1.025 1.060 1.095 1.130 1.165 1.200

MQ tolerance : 12 %

Calcium ISE (mmol/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	iStat Chem8	12	100.0	0.0	0.0	1.02	3.0	e

2 additional results were submitted but not published because the method groups were too small. (< results per group)

Chloride

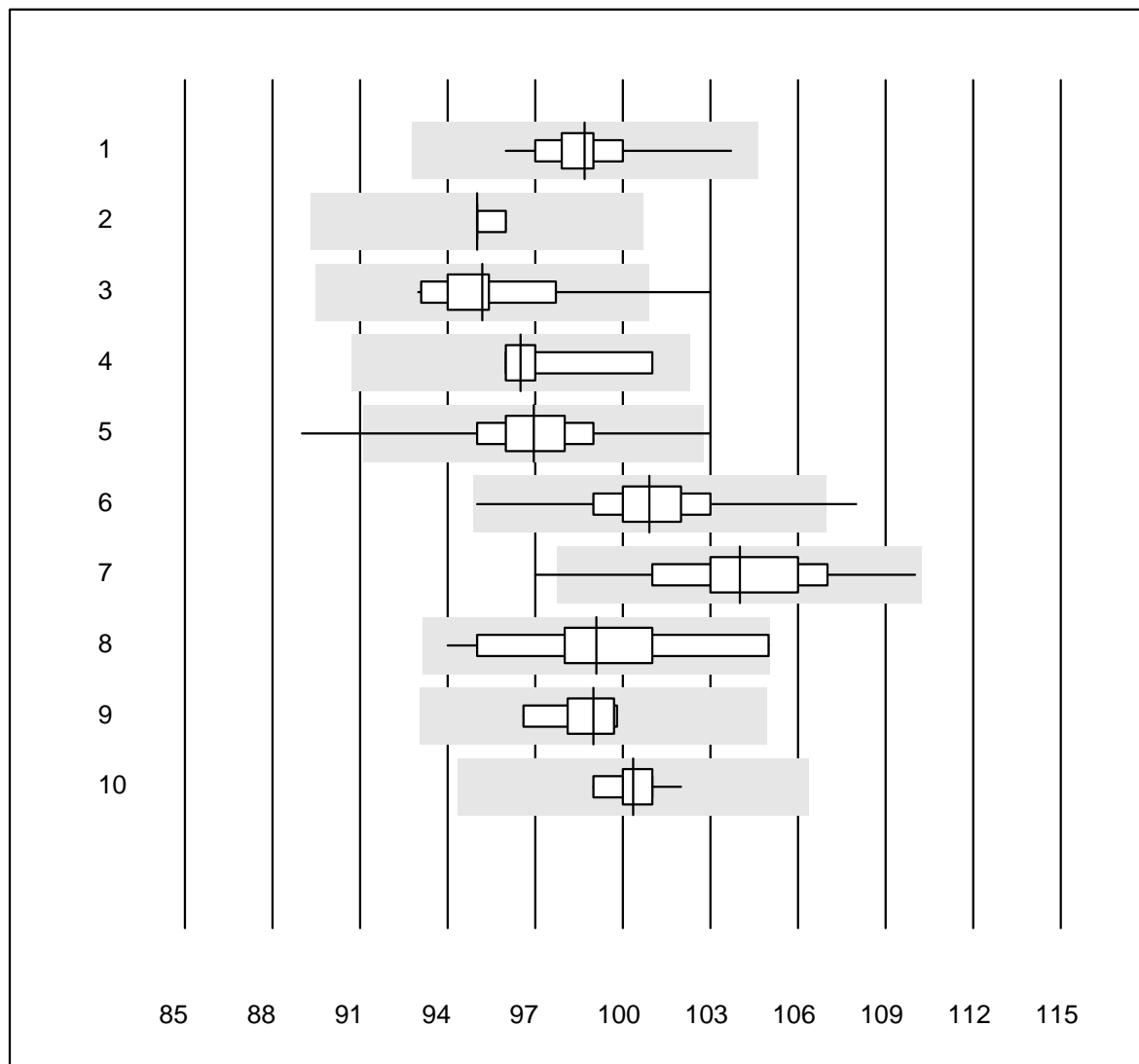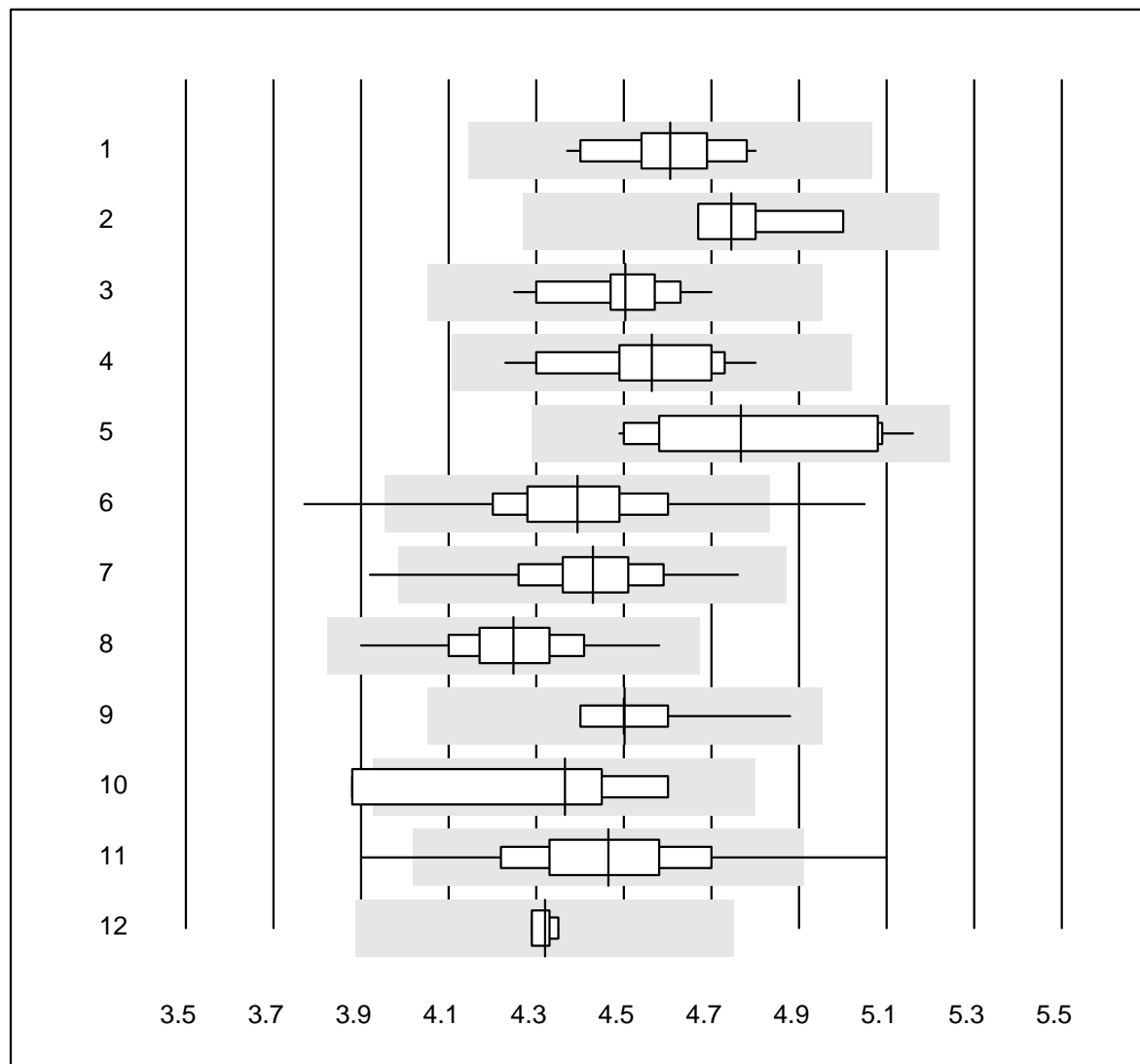QUALAB tolerance : 6 %

Chloride (mmol/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Abbott	20	100.0	0.0	0.0	99	1.8	e
2	Beckman	5	100.0	0.0	0.0	95	0.5	e
3	Roche	25	96.0	4.0	0.0	95	2.2	e
4	Siemens	4	100.0	0.0	0.0	97	2.4	e*
5	Fuji Dri-Chem	936	97.9	1.5	0.6	97	2.0	e
6	Spotchem D-Concept	408	99.1	0.2	0.7	101	1.6	e
7	Spotchem EL-SE 1520	54	98.1	1.9	0.0	104	2.5	e
8	Piccolo	29	100.0	0.0	0.0	99	2.9	e
9	Exias	5	100.0	0.0	0.0	99	1.3	e
10	iStat Chem8	11	100.0	0.0	0.0	100	0.9	e

4 additional results were submitted but not published because the method groups were too small. (< results per group)
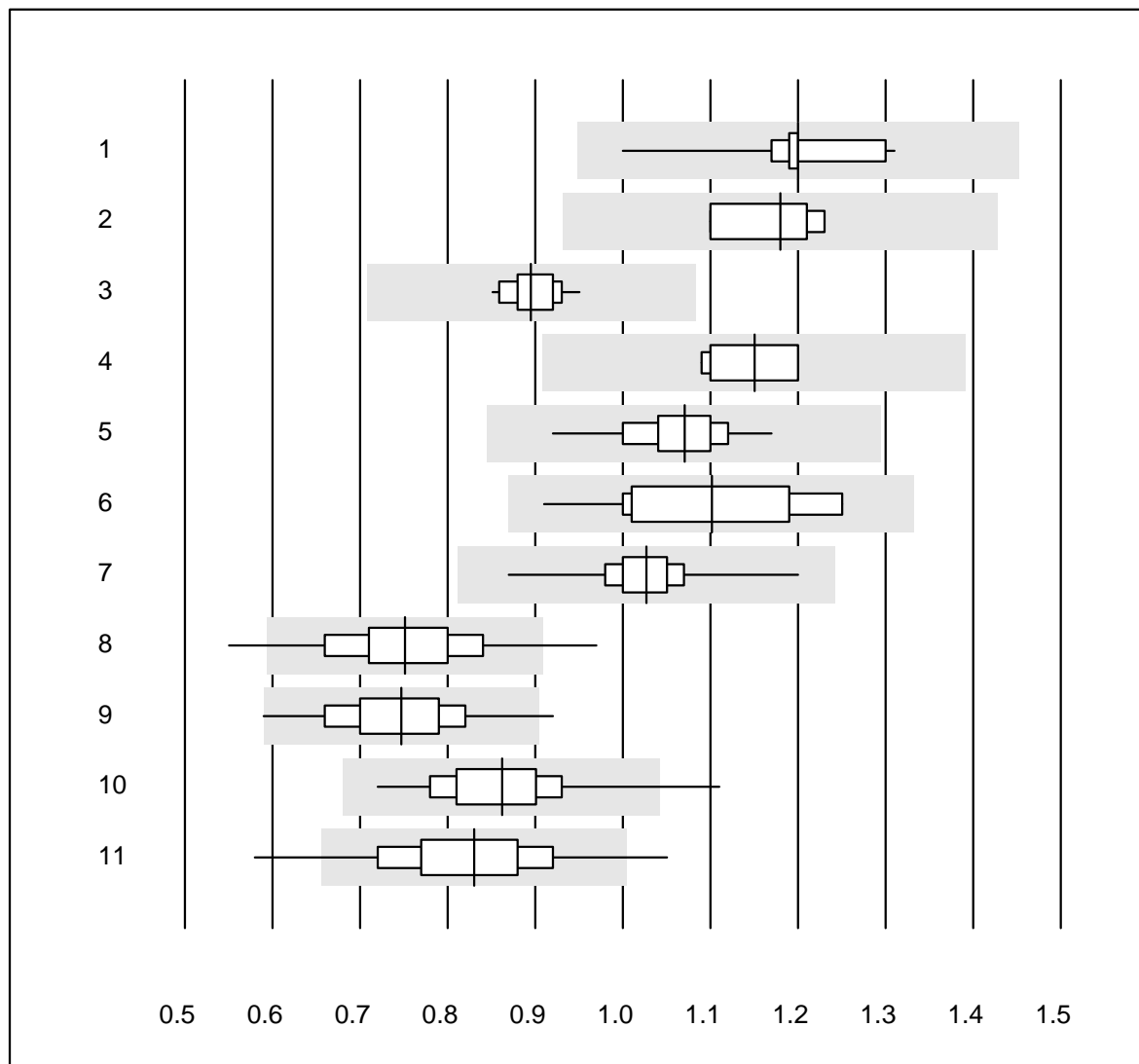
Cholesterol total

QUALAB tolerance : 10 %

Cholesterol total (mmol/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Abbott	19	100.0	0.0	0.0	4.61	2.4	e
2	Beckman	4	100.0	0.0	0.0	4.75	3.2	e*
3	Roche	29	100.0	0.0	0.0	4.50	2.4	e
4	Autolyser	20	100.0	0.0	0.0	4.56	3.3	e
5	Selectra Pro	14	100.0	0.0	0.0	4.77	5.3	e*
6	Fuji Dri-Chem	968	96.9	1.4	1.7	4.39	3.8	e
7	Spotchem D-Concept	465	98.5	0.4	1.1	4.43	3.0	e
8	Spotchem SP-4430	84	98.8	0.0	1.2	4.25	3.2	e
9	Piccolo	25	100.0	0.0	0.0	4.50	2.1	e
10	Reflotron	4	75.0	25.0	0.0	4.37	7.2	e*
11	Cholestech LDX	275	94.9	2.9	2.2	4.47	4.3	e
12	Other methods	4	100.0	0.0	0.0	4.32	0.6	e

9 additional results were submitted but not published because the method groups were too small. (< results per group)

Cholesterin HDL

QUALAB tolerance : 21 %

Cholesterin HDL (mmol/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Abbott	16	100.0	0.0	0.0	1.20	5.5	e
2	Beckman	6	100.0	0.0	0.0	1.18	4.8	e
3	Roche	27	100.0	0.0	0.0	0.90	2.9	e
4	Siemens	5	100.0	0.0	0.0	1.15	4.6	e
5	Autolyser	20	100.0	0.0	0.0	1.07	5.4	e
6	Selectra Pro	14	92.9	0.0	7.1	1.10	10.1	e*
7	Fuji Dri-Chem	937	99.6	0.0	0.4	1.03	3.4	e
8	Spotchem D-Concept	450	96.7	2.0	1.3	0.75	9.1	e
9	Spotchem SP-4430	73	94.5	5.5	0.0	0.75	9.7	e
10	Piccolo	25	96.0	4.0	0.0	0.86	9.7	e
11	Cholestech LDX	275	92.0	5.8	2.2	0.83	9.9	e

3 additional results were submitted but not published because the method groups were too small. (< results per group)

Creatine kinase
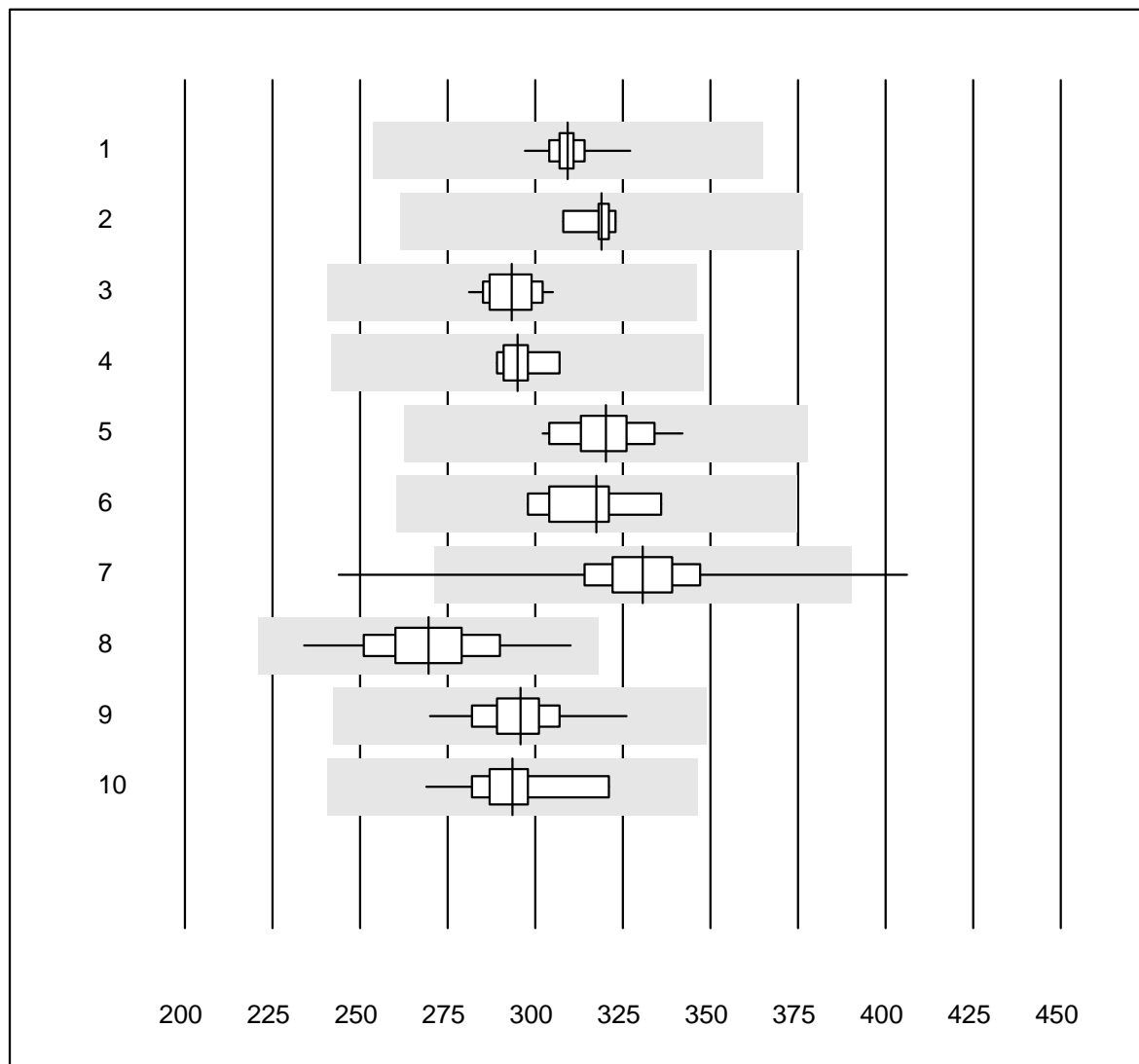
QUALAB tolerance : 18 %

Creatine kinase (U/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Abbott	16	100.0	0.0	0.0	309	2.0	e
2	Beckman	5	100.0	0.0	0.0	319	1.8	e
3	Roche	31	100.0	0.0	0.0	293	2.3	e
4	Siemens	6	100.0	0.0	0.0	295	2.2	e
5	Autolyser	17	100.0	0.0	0.0	320	3.1	e
6	Selectra Pro	8	100.0	0.0	0.0	318	3.7	e
7	Fuji Dri-Chem	669	98.1	1.2	0.7	331	4.9	e
8	Spotchem D-Concept	322	99.7	0.0	0.3	270	5.5	e
9	Spotchem SP-4430	43	97.7	0.0	2.3	296	3.9	e
10	Piccolo	18	94.4	0.0	5.6	294	4.6	e

One result was submitted but not pubished because the method group was too small. (< 4 results per group)
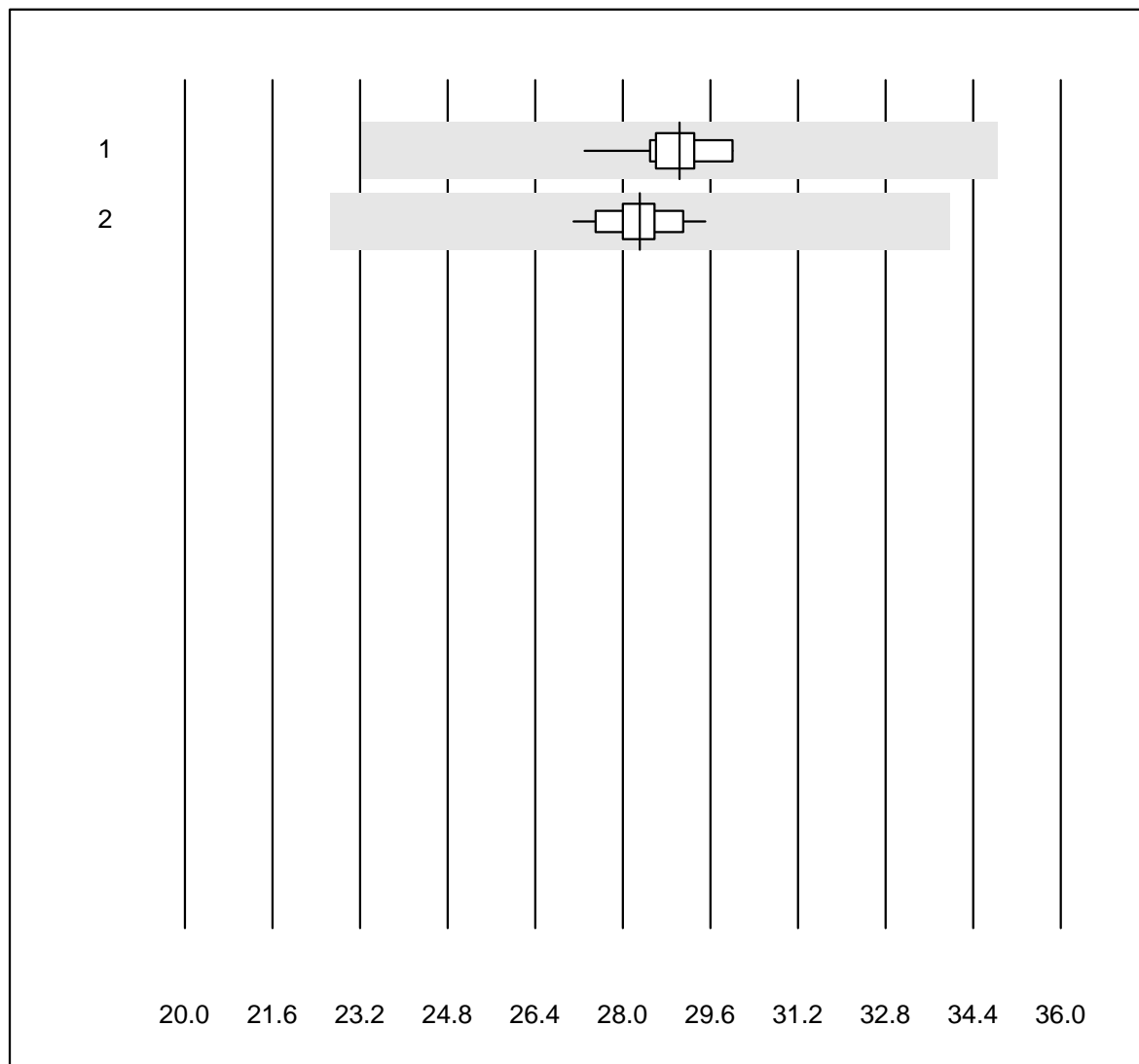
Cholesterol LDL
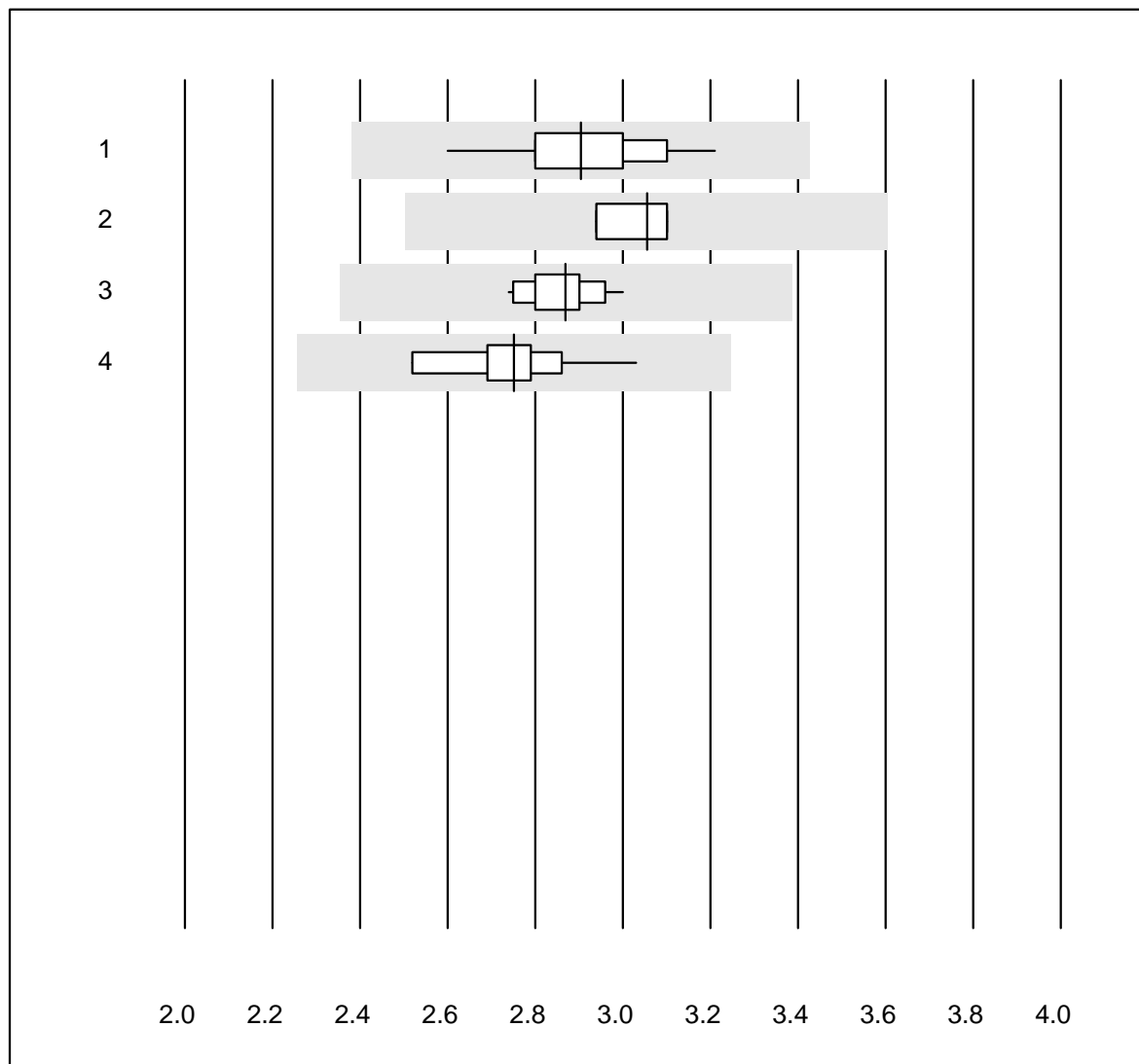
QUALAB tolerance : 18 %

Cholesterol LDL (mmol/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Abbott	17	100.0	0.0	0.0	2.9	4.7	e
2	Beckman	4	100.0	0.0	0.0	3.1	2.6	e
3	Roche, Cobas	18	100.0	0.0	0.0	2.9	2.4	e
4	Autolyser	10	100.0	0.0	0.0	2.8	5.0	e

4 additional results were submitted but not published because the method groups were too small. (< results per group)

Iron

QUALAB tolerance : 20 %

Iron (µmol/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Abbott	14	100.0	0.0	0.0	29	2.4	e
2	Roche	21	100.0	0.0	0.0	28	2.2	e

3 additional results were submitted but not published because the method groups were too small. (< results per group)
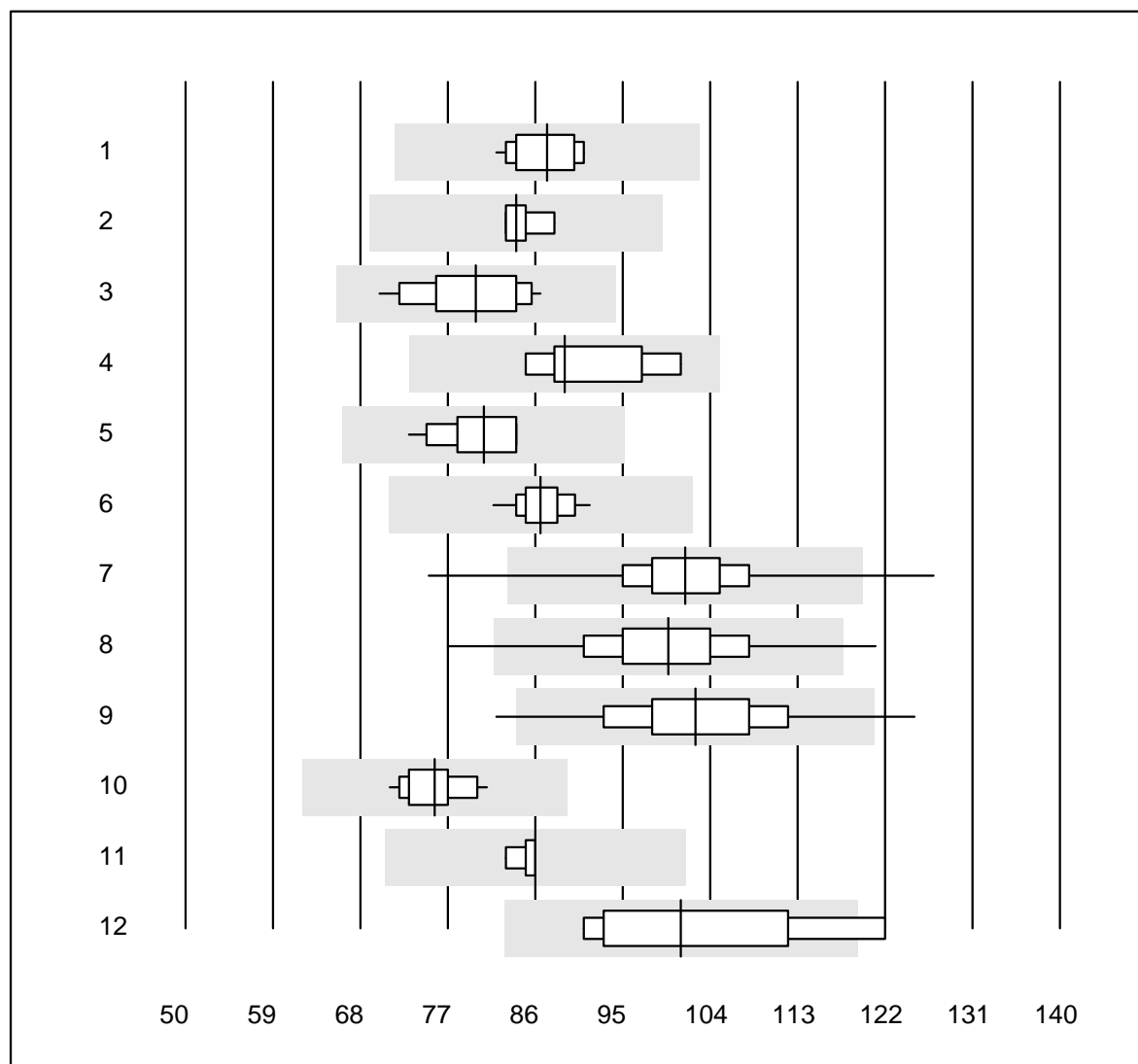
Gamma-glutamyltransferase

QUALAB tolerance : 18 %   Gamma-glutamyltransferase (U/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Abbott	17	100.0	0.0	0.0	87	3.6	e
2	Beckman	6	100.0	0.0	0.0	84	2.2	e
3	Cobas	36	100.0	0.0	0.0	80	6.4	e
4	Siemens	6	100.0	0.0	0.0	89	6.7	e*
5	Autolyser	20	100.0	0.0	0.0	81	4.2	e
6	Selectra Pro	15	100.0	0.0	0.0	87	3.0	e
7	Fuji Dri-Chem	1134	99.2	0.2	0.6	101	5.1	e
8	Spotchem D-Concept	623	98.3	1.1	0.6	100	6.6	e
9	Spotchem SP-4430	134	96.3	3.0	0.7	102	7.5	e
10	Piccolo	56	98.2	0.0	1.8	76	3.7	e
11	Skyla	5	100.0	0.0	0.0	86	1.5	e
12	Reflotron	5	80.0	20.0	0.0	101	12.6	e*

One result was submitted but not pubished because the method group was too small. (< 4 results per group)
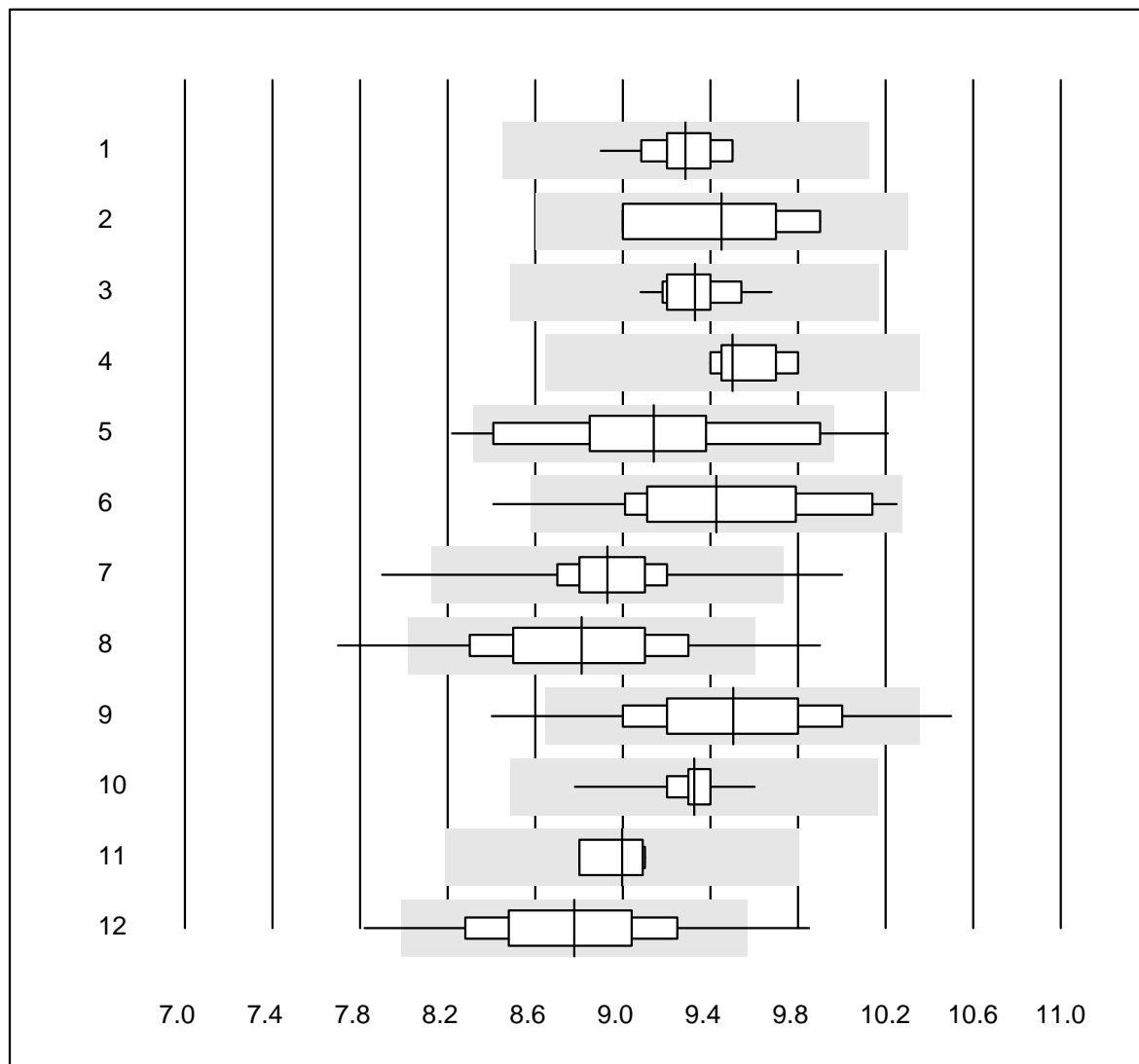
Glucose

QUALAB tolerance : 9 %   Glucose (mmol/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Abbott	18	100.0	0.0	0.0	9.3	1.8	e
2	Beckman	6	100.0	0.0	0.0	9.5	4.0	e*
3	Roche	36	100.0	0.0	0.0	9.3	1.5	e
4	Siemens	5	100.0	0.0	0.0	9.5	1.8	e
5	Autolyser	18	88.9	11.1	0.0	9.1	5.6	e*
6	Selectra Pro	16	87.4	6.3	6.3	9.4	5.0	e*
7	Fuji Dri-Chem	1071	98.7	0.7	0.6	8.9	2.6	e
8	Spotchem D-Concept	584	95.6	3.4	1.0	8.8	4.5	e
9	Spotchem SP-4430	111	92.8	5.4	1.8	9.5	4.5	e
10	Piccolo	68	98.5	0.0	1.5	9.3	1.2	e
11	Reflotron	6	83.3	0.0	16.7	9.0	1.7	e
12	Cholestech LDX	269	95.1	3.0	1.9	8.8	4.3	e
13	iStat Chem8	12	100.0	0.0	0.0	8.6	0.9	e
14	Cobas Pulse	32	90.6	0.0	9.4	8.8	2.8	e

3 additional results were submitted but not published because the method groups were too small. (< results per group)
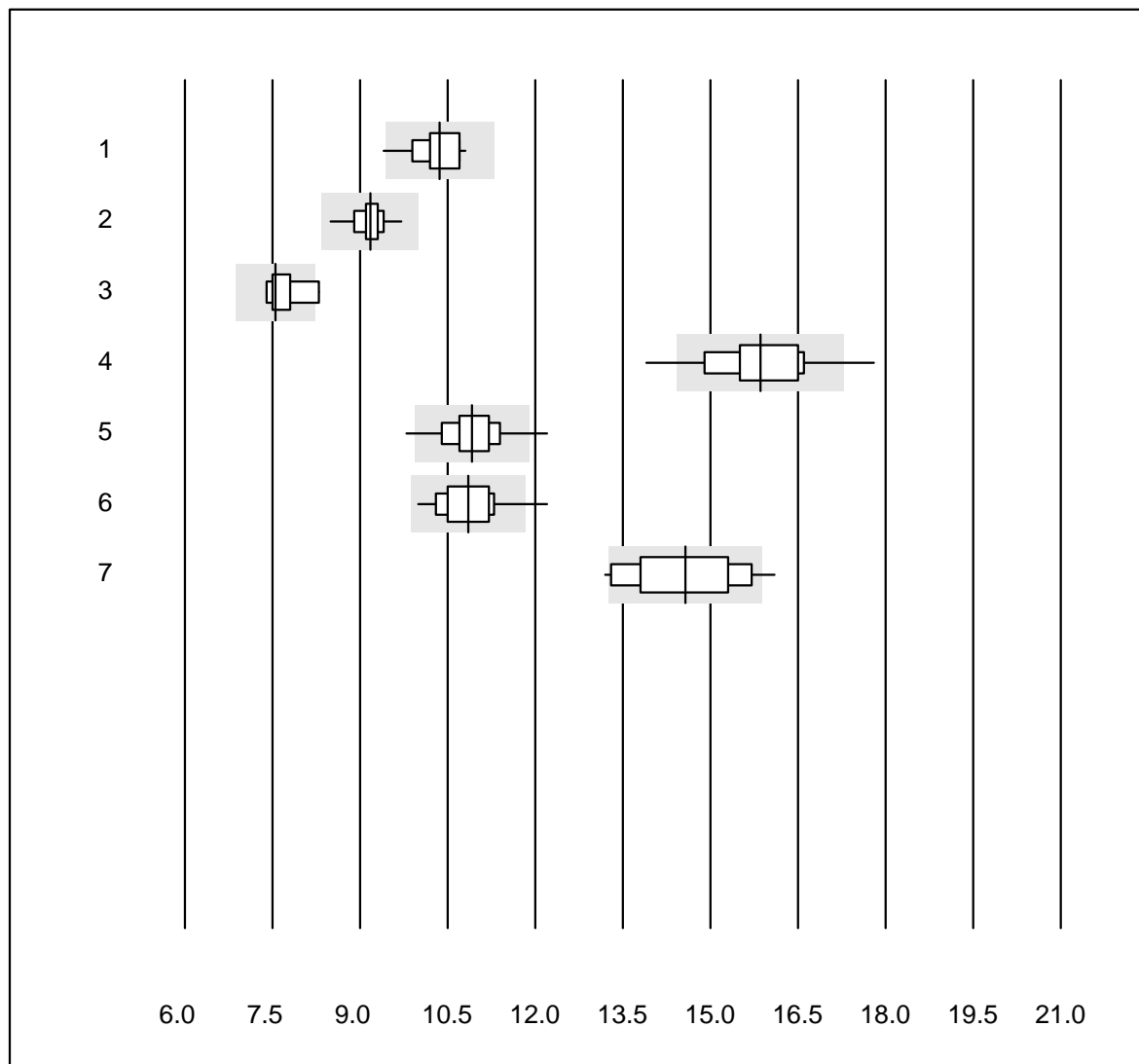
Glucose

QUALAB tolerance : 9 %   Glucose (mmol/l)
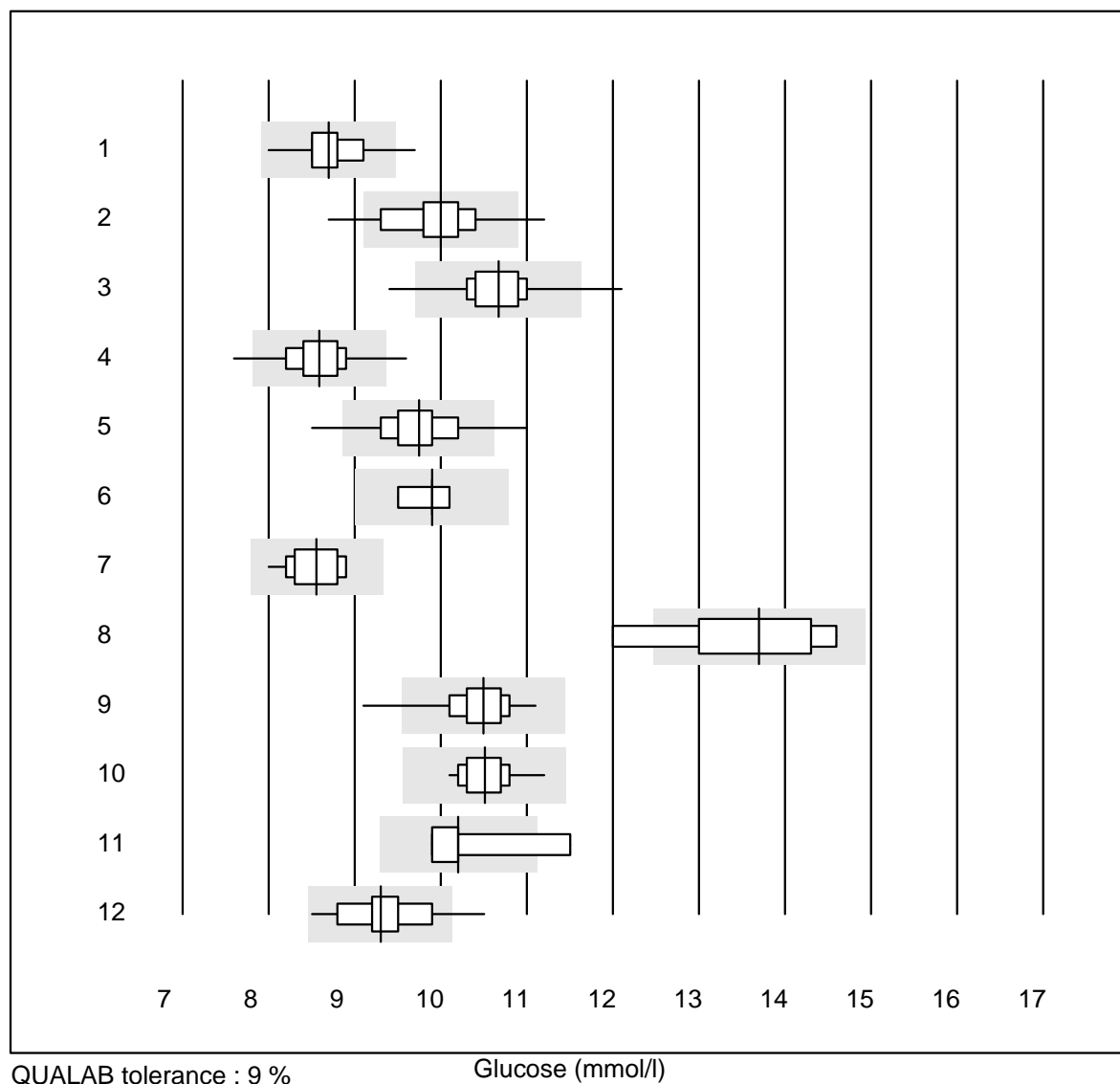
No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Accu-Chek Instant	131	97.0	1.5	1.5	8.7	3.1	e
2	Accu-Chek Aviva	112	90.2	8.0	1.8	10.0	4.5	e
3	Accu-Chek Inform 2	986	98.3	0.8	0.9	10.7	3.0	e
4	Accu-Check Guide	342	96.5	1.5	2.0	8.6	3.6	e
5	Contour XT	1433	95.2	3.4	1.4	9.7	4.0	e
6	Skyla	5	100.0	0.0	0.0	9.9	2.2	e
7	Statstrip/Xpress	98	100.0	0.0	0.0	8.6	3.1	e
8	Glucocard	7	85.7	14.3	0.0	13.7	6.4	e*
9	Hemocue 201+ P-equiv	117	94.8	2.6	2.6	10.5	3.0	e
10	Hemocue 201RT P-equi	130	97.7	0.0	2.3	10.5	2.2	e
11	Freestyle Freedom li	4	75.0	25.0	0.0	10.2	6.8	e*
12	Contour NEXT	42	92.8	2.4	4.8	9.3	4.3	e

8 additional results were submitted but not published because the method groups were too small. (< results per group)

Glucose B

QUALAB tolerance : 9 %

Glucose B (mmol/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Hemocue 201+ (alt)	31	96.8	3.2	0.0	10.4	3.5	e
2	OneTouch Verio	28	100.0	0.0	0.0	9.2	2.6	e
3	Contour 2 (5s)	8	87.5	12.5	0.0	7.6	4.2	e*
4	Healthpro	21	90.5	9.5	0.0	15.9	5.4	e*
5	Mylife UNIO	403	96.3	3.0	0.7	10.9	3.6	e
6	mylife Pura	88	97.7	2.3	0.0	10.9	3.9	e
7	Alpha Check	22	81.9	13.6	4.5	14.6	6.2	e*

One result was submitted but not pubished because the method group was too small. (< 4 results per group)

Uric Acid
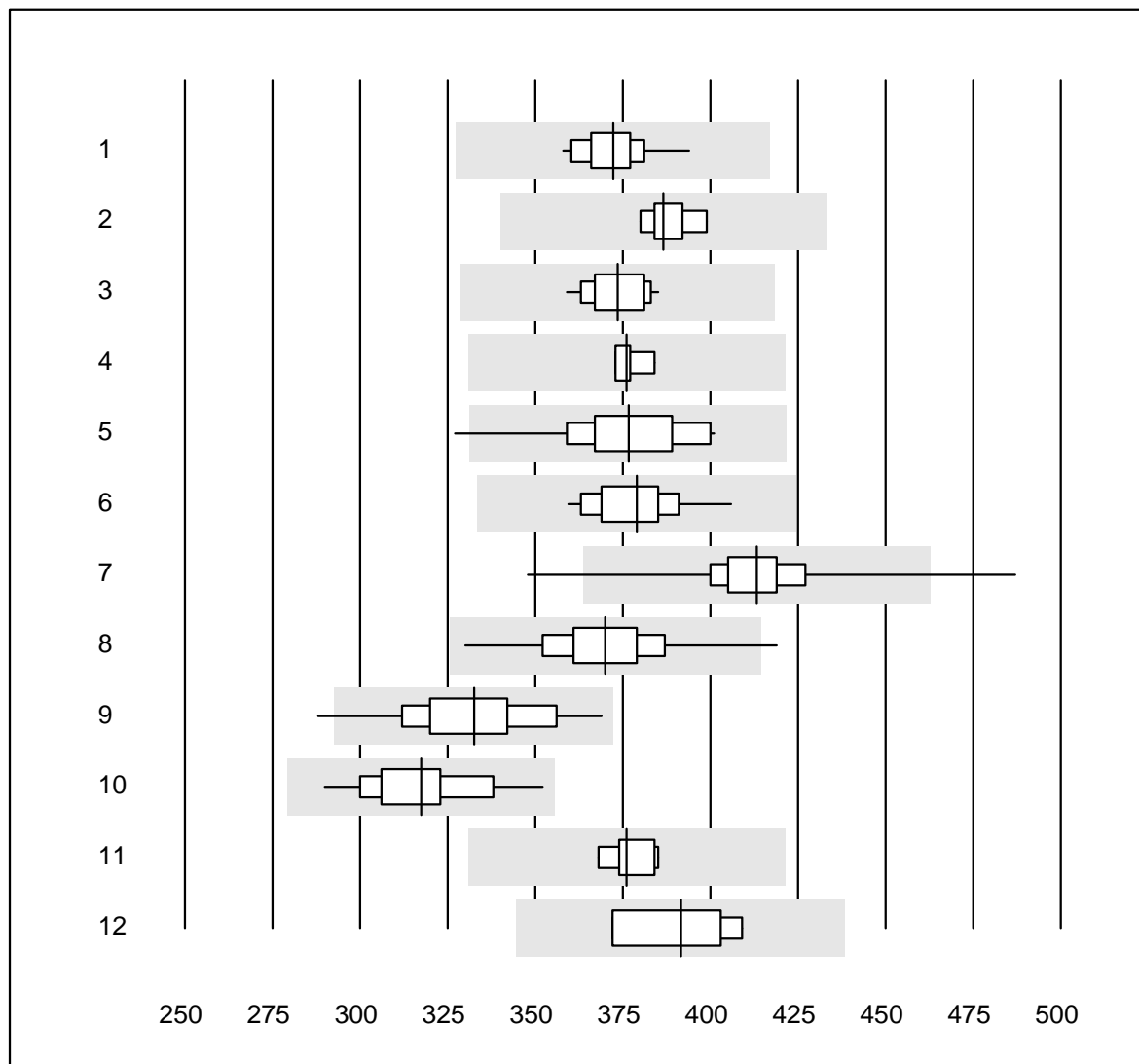
QUALAB tolerance : 12 %   Uric Acid (µmol/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Abbott	19	100.0	0.0	0.0	372	2.3	e
2	Beckman	6	100.0	0.0	0.0	387	1.7	e
3	Roche	33	100.0	0.0	0.0	374	2.1	e
4	Siemens	4	100.0	0.0	0.0	376	1.3	e
5	Autolyser	18	94.4	5.6	0.0	377	4.8	e
6	Selectra Pro	16	100.0	0.0	0.0	379	3.2	e
7	Fuji Dri-Chem	1053	98.7	0.4	0.9	413	2.8	e
8	Spotchem D-Concept	587	98.0	0.3	1.7	370	3.8	e
9	Spotchem SP-4430	111	98.2	0.9	0.9	332	4.9	e
10	Piccolo	33	87.9	0.0	12.1	317	4.4	e
11	Skyla	5	100.0	0.0	0.0	376	1.9	e
12	Reflotron	4	100.0	0.0	0.0	392	4.6	e*

One result was submitted but not pubished because the method group was too small. (< 4 results per group)

Urea
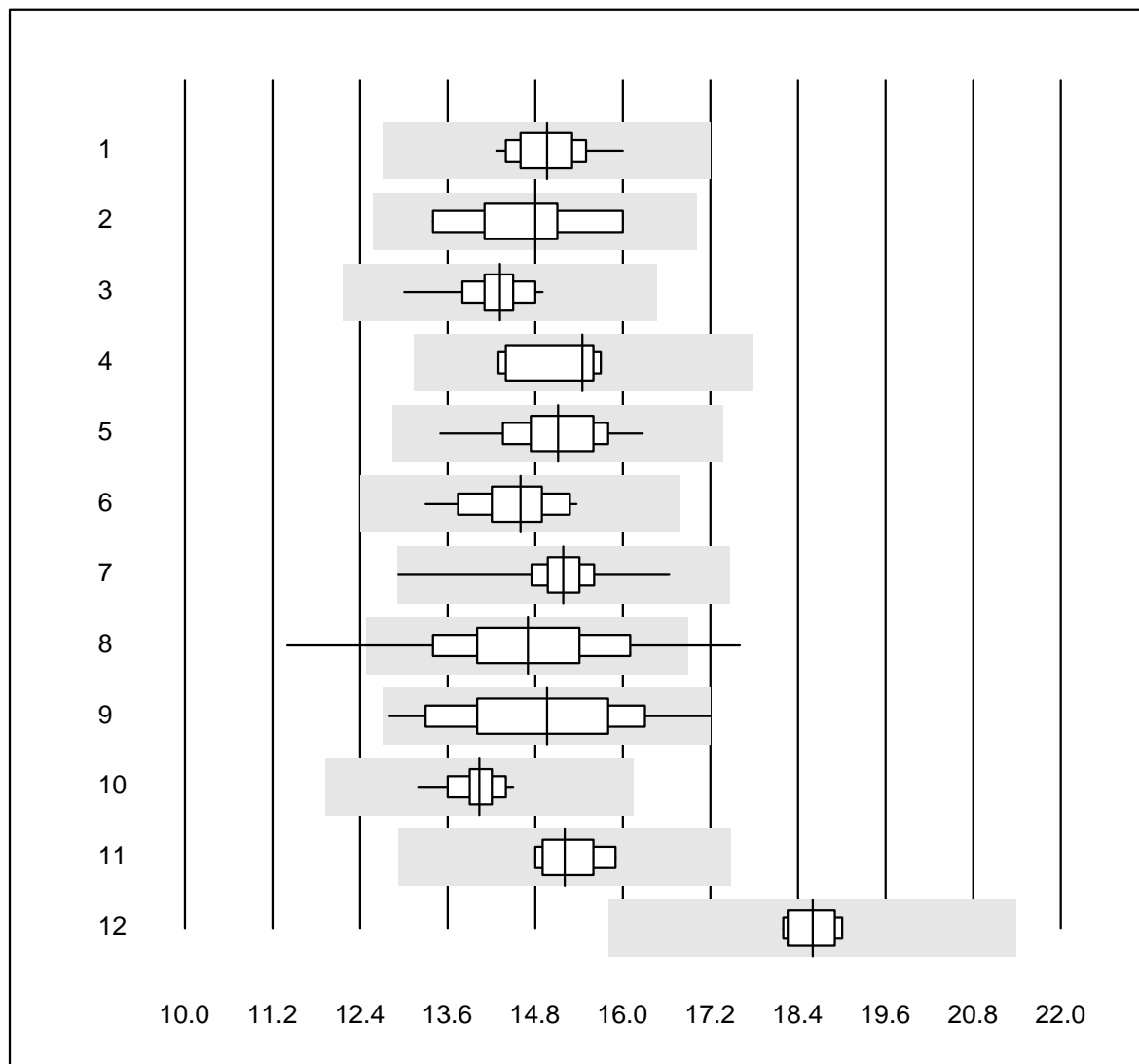
QUALAB tolerance : 15 %

Urea (mmol/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Abbott	17	100.0	0.0	0.0	15.0	3.1	e
2	Beckman	8	100.0	0.0	0.0	14.8	5.8	e*
3	Roche	33	100.0	0.0	0.0	14.3	2.8	e
4	Siemens	6	100.0	0.0	0.0	15.5	4.1	e
5	Autolyser	15	100.0	0.0	0.0	15.1	4.6	e
6	Selectra Pro	12	100.0	0.0	0.0	14.6	4.2	e
7	Fuji Dri-Chem	632	98.9	0.0	1.1	15.2	2.4	e
8	Spotchem D-Concept	329	94.2	4.3	1.5	14.7	7.3	e
9	Spotchem SP-4430	57	98.2	0.0	1.8	15.0	7.6	e
10	Piccolo	61	98.4	0.0	1.6	14.0	2.1	e
11	Skyla	5	100.0	0.0	0.0	15.2	3.0	e
12	iStat Chem8	12	75.0	0.0	25.0	18.6	1.8	a

3 additional results were submitted but not published because the method groups were too small. (< results per group)
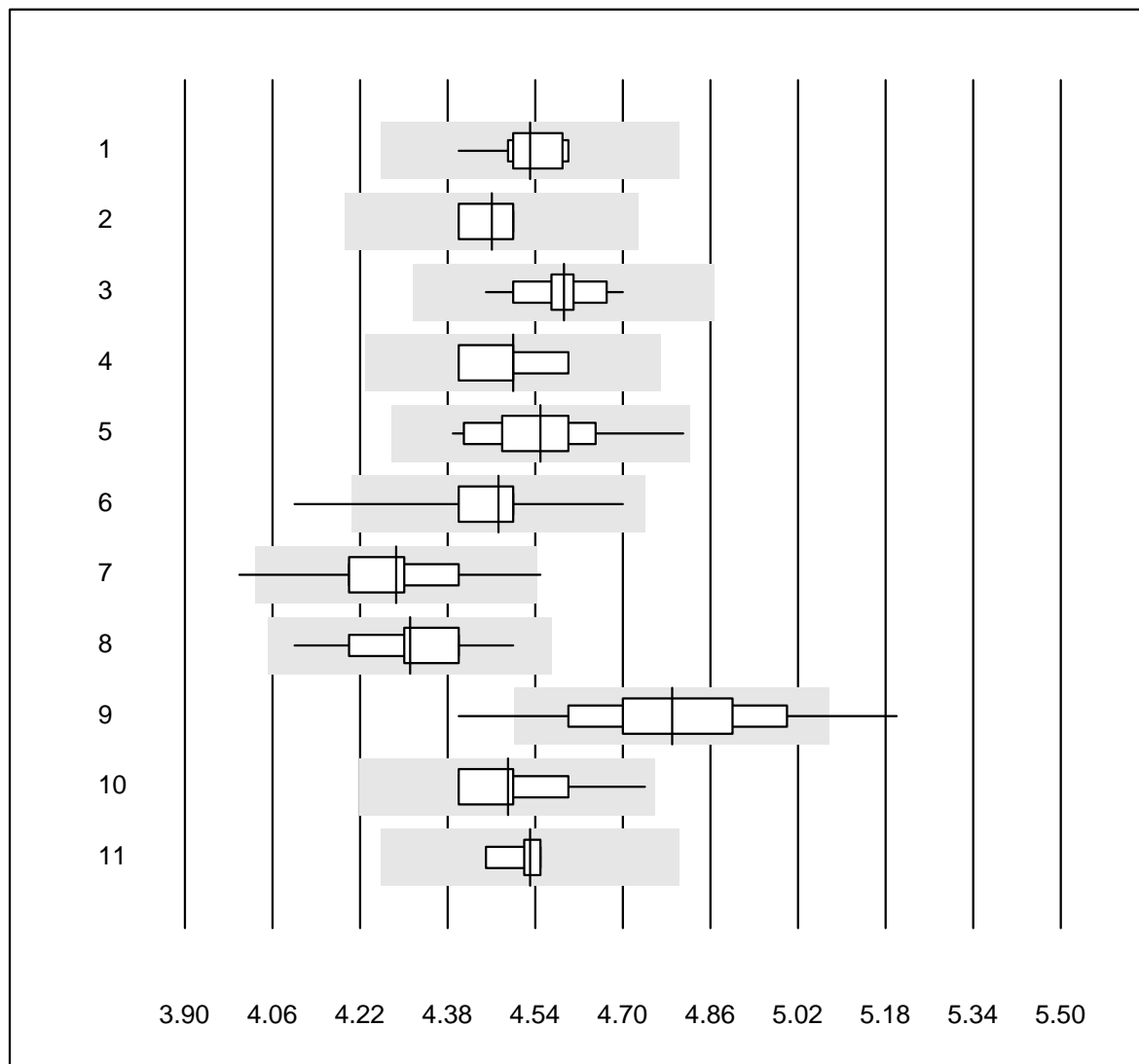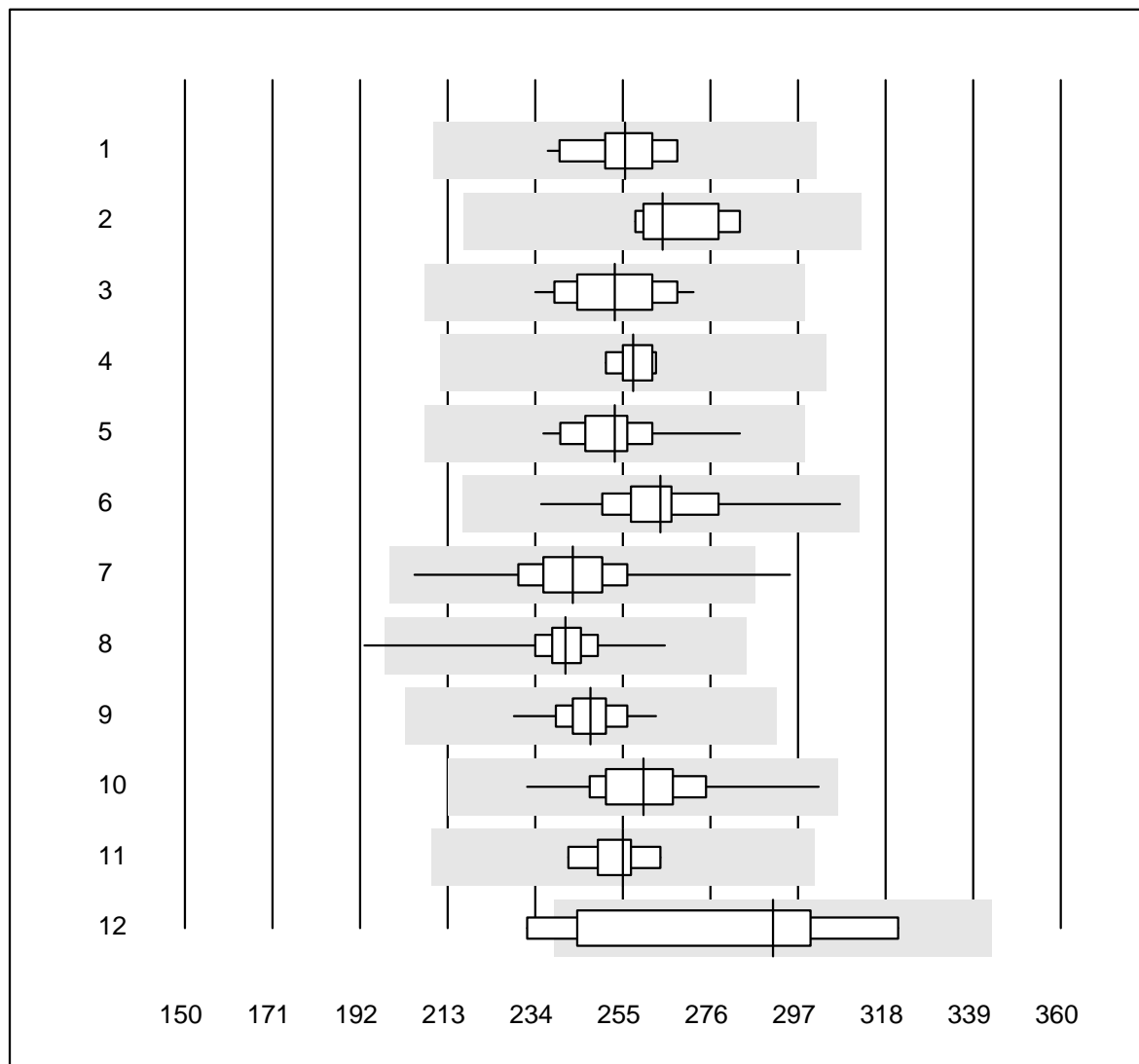
Potassium

QUALAB tolerance : 6 %

Potassium (mmol/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Abbott	18	100.0	0.0	0.0	4.53	1.2	e
2	Beckman	6	100.0	0.0	0.0	4.46	1.1	e
3	Roche	35	100.0	0.0	0.0	4.59	1.1	e
4	Siemens	4	100.0	0.0	0.0	4.50	1.8	e*
5	Autolyser	19	100.0	0.0	0.0	4.55	2.2	e
6	Fuji Dri-Chem	1110	97.4	1.5	1.1	4.47	1.7	e
7	Spotchem D-Concept	518	98.0	1.0	1.0	4.29	2.0	e
8	Spotchem EL-SE 1520	73	100.0	0.0	0.0	4.31	2.2	e
9	Piccolo	38	65.8	15.8	18.4	4.79	3.7	e
10	iStat Chem8	16	100.0	0.0	0.0	4.49	2.0	e
11	Exias	6	100.0	0.0	0.0	4.53	0.8	e

8 additional results were submitted but not published because the method groups were too small. (< results per group)
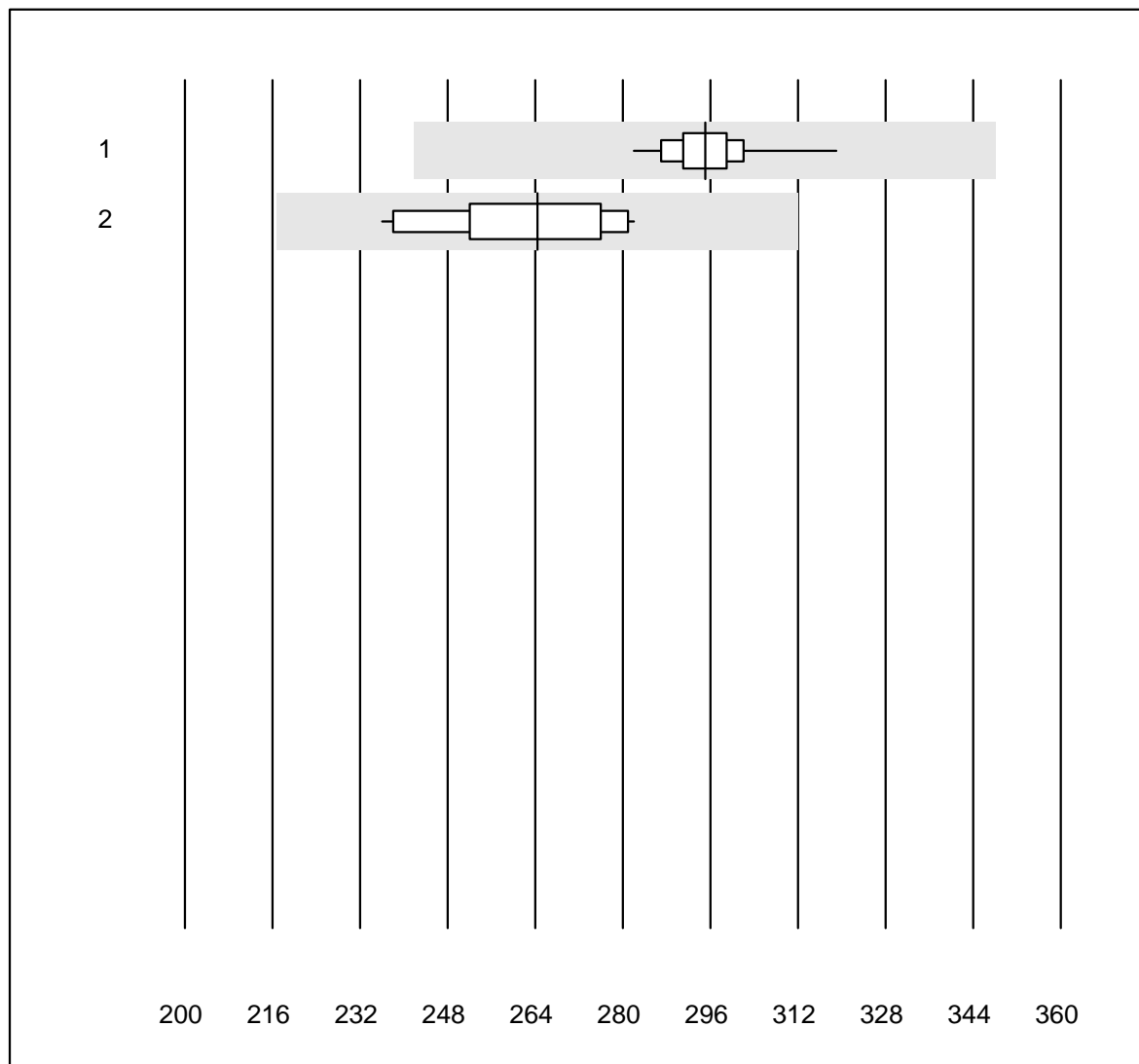
Creatinine

QUALAB tolerance : 18 %

Creatinine (µmol/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Abbott	17	100.0	0.0	0.0	256	3.6	e
2	Beckman	6	100.0	0.0	0.0	265	3.9	e
3	Roche	36	100.0	0.0	0.0	253	4.3	e
4	Siemens	6	100.0	0.0	0.0	258	1.7	e
5	Autolyser	20	100.0	0.0	0.0	253	4.1	e
6	Selectra Pro	16	100.0	0.0	0.0	264	5.7	e
7	Fuji Dri-Chem	1166	99.4	0.1	0.5	243	4.2	e
8	Spotchem D-Concept	635	99.5	0.2	0.3	241	2.7	e
9	Spotchem SP-4430	151	100.0	0.0	0.0	247	2.5	e
10	Piccolo	64	98.4	0.0	1.6	260	4.7	e
11	Skyla	5	100.0	0.0	0.0	255	3.3	e
12	Reflotron	9	77.8	11.1	11.1	291	11.5	e*
13	EPOC	10	80.0	0.0	20.0	259	7.4	e*

4 additional results were submitted but not published because the method groups were too small. (< results per group)
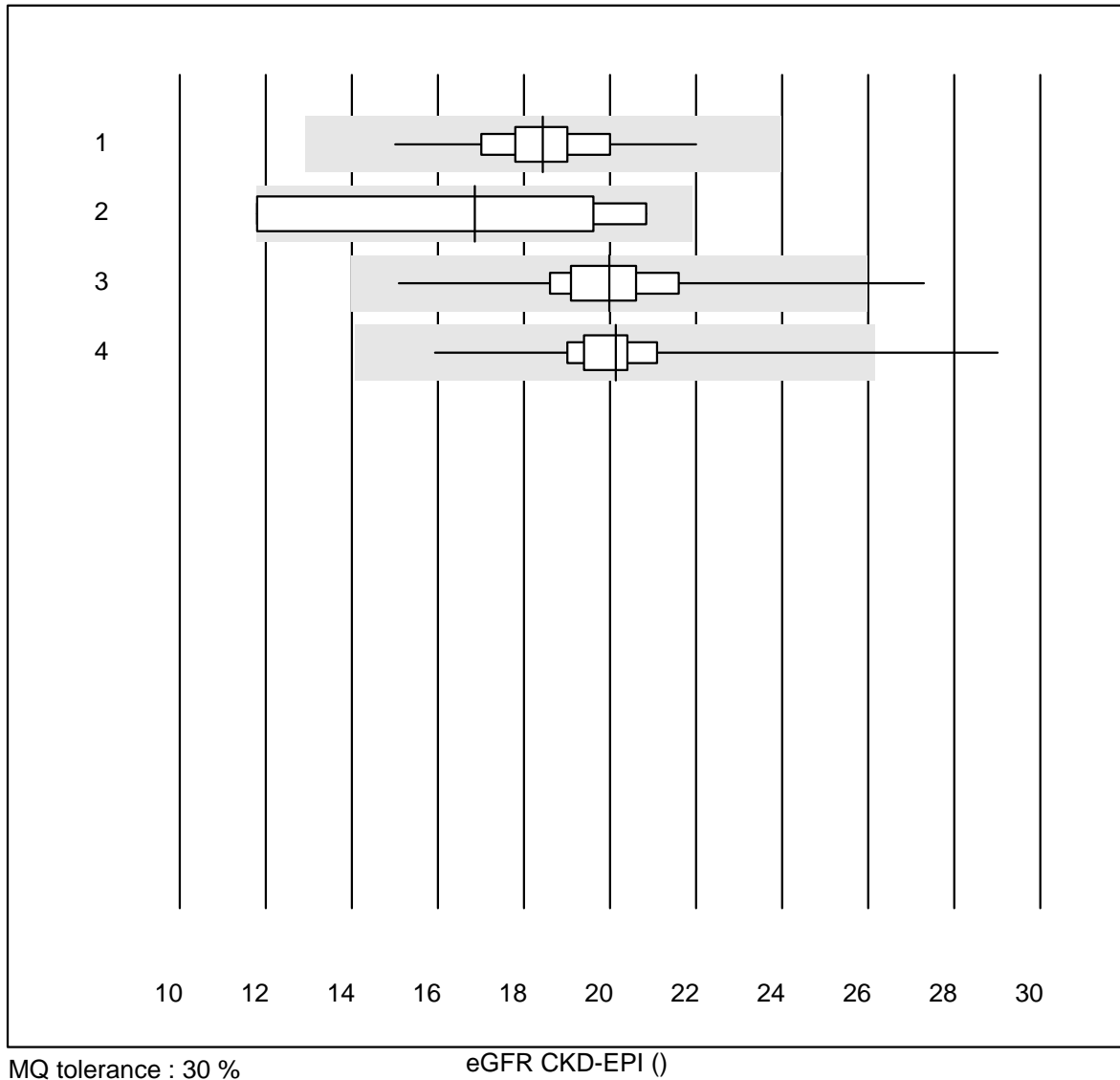
Creatinine E

200 216 232 248 264 280 296 312 328 344 360

QUALAB tolerance : 18 %

Creatinine E (µmol/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	iStat Chem8	43	97.7	0.0	2.3	295	2.3	e
2	ABL700/800	13	100.0	0.0	0.0	264	6.0	e

eGFR CKD-EPI

MQ tolerance : 30 %   eGFR CKD-EPI ()

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Standard chemistry	57	96.5	0.0	3.5	18	6.9	e
2	Reflotron	4	100.0	0.0	0.0	17	26.1	e*
3	Fuji Dri-Chem	413	95.9	1.2	2.9	20	7.4	e
4	Spotchem	280	94.3	1.1	4.6	20	7.9	e

eGFR Cockcroft-Gault
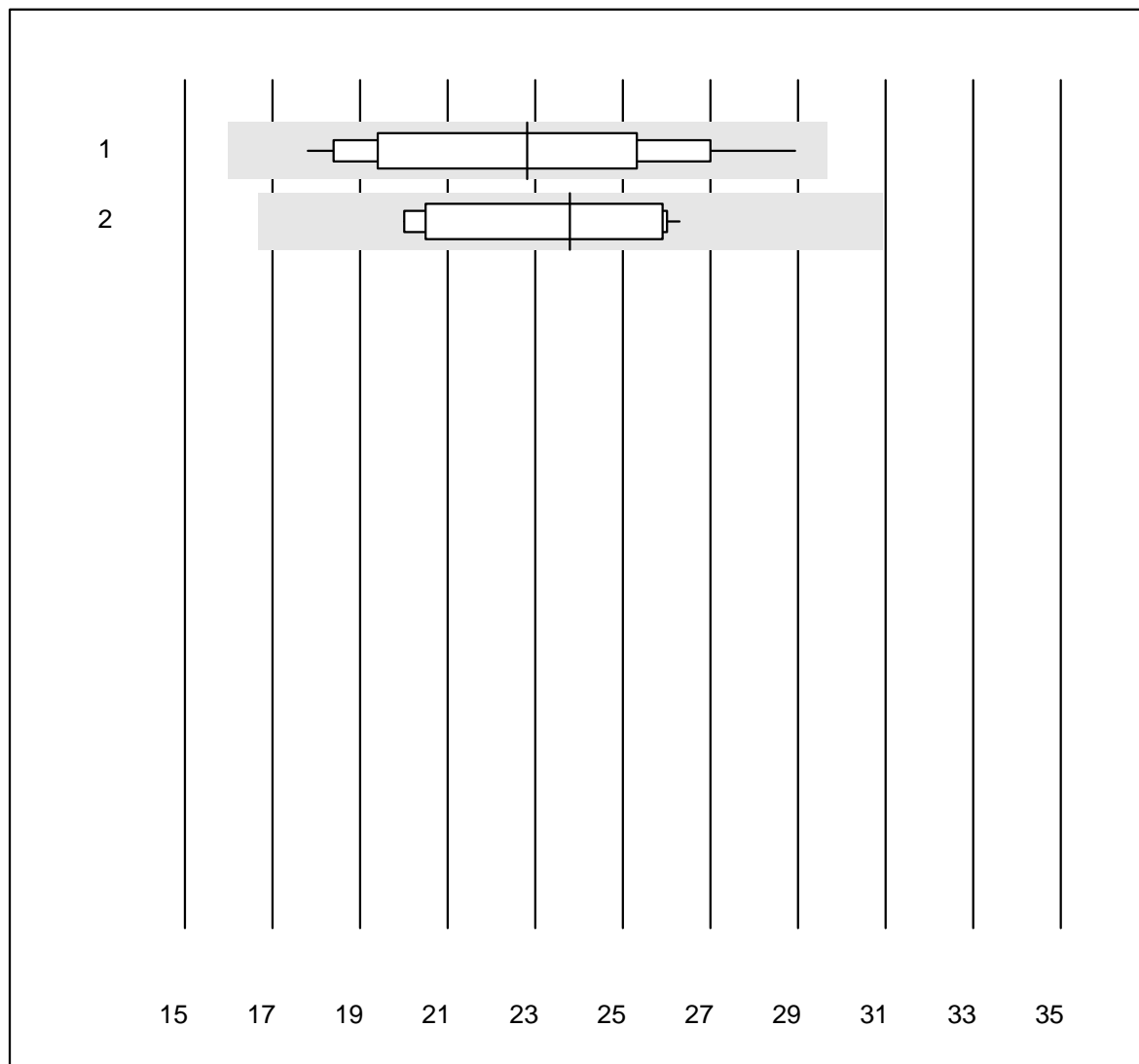
MQ tolerance : 30 %   eGFR Cockcroft-Gault ()

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Fuji Dri-Chem	31	96.8	0.0	3.2	23	15.3	e
2	Spotchem	15	100.0	0.0	0.0	24	11.0	e

2 additional results were submitted but not published because the method groups were too small. (< results per group)

LDH
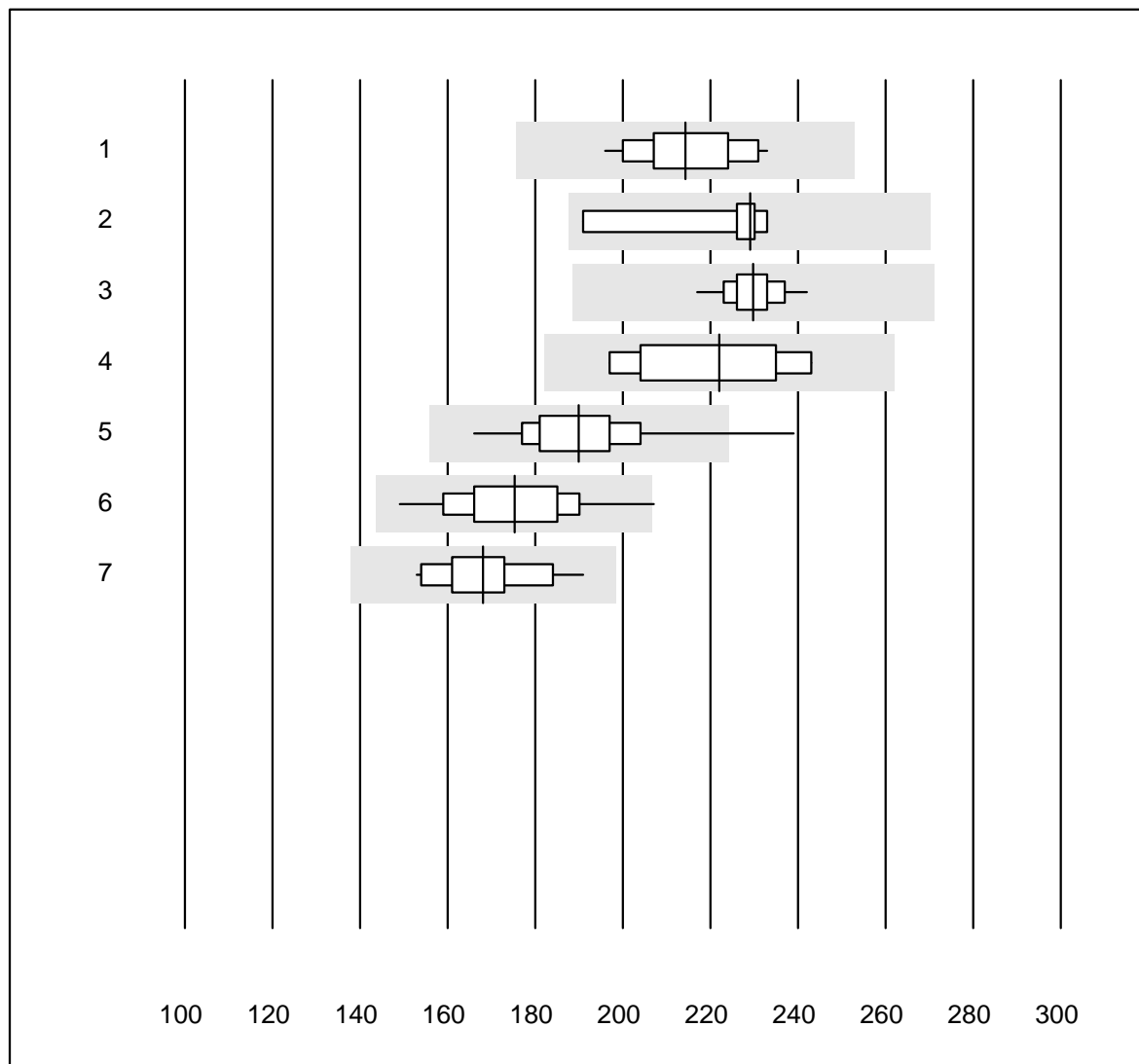
QUALAB tolerance : 18 %

LDH (U/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Abbott	18	100.0	0.0	0.0	214	5.3	e
2	Beckman	5	100.0	0.0	0.0	229	7.8	e*
3	Roche	32	100.0	0.0	0.0	230	2.5	e
4	Autolyser	7	100.0	0.0	0.0	222	7.4	e*
5	Fuji Dri-Chem	111	98.2	1.8	0.0	190	6.5	e
6	Spotchem D-Concept	42	95.2	2.4	2.4	175	7.6	e
7	Spotchem SP-4430	13	100.0	0.0	0.0	168	7.0	e

9 additional results were submitted but not published because the method groups were too small. (< results per group)

Magnesium
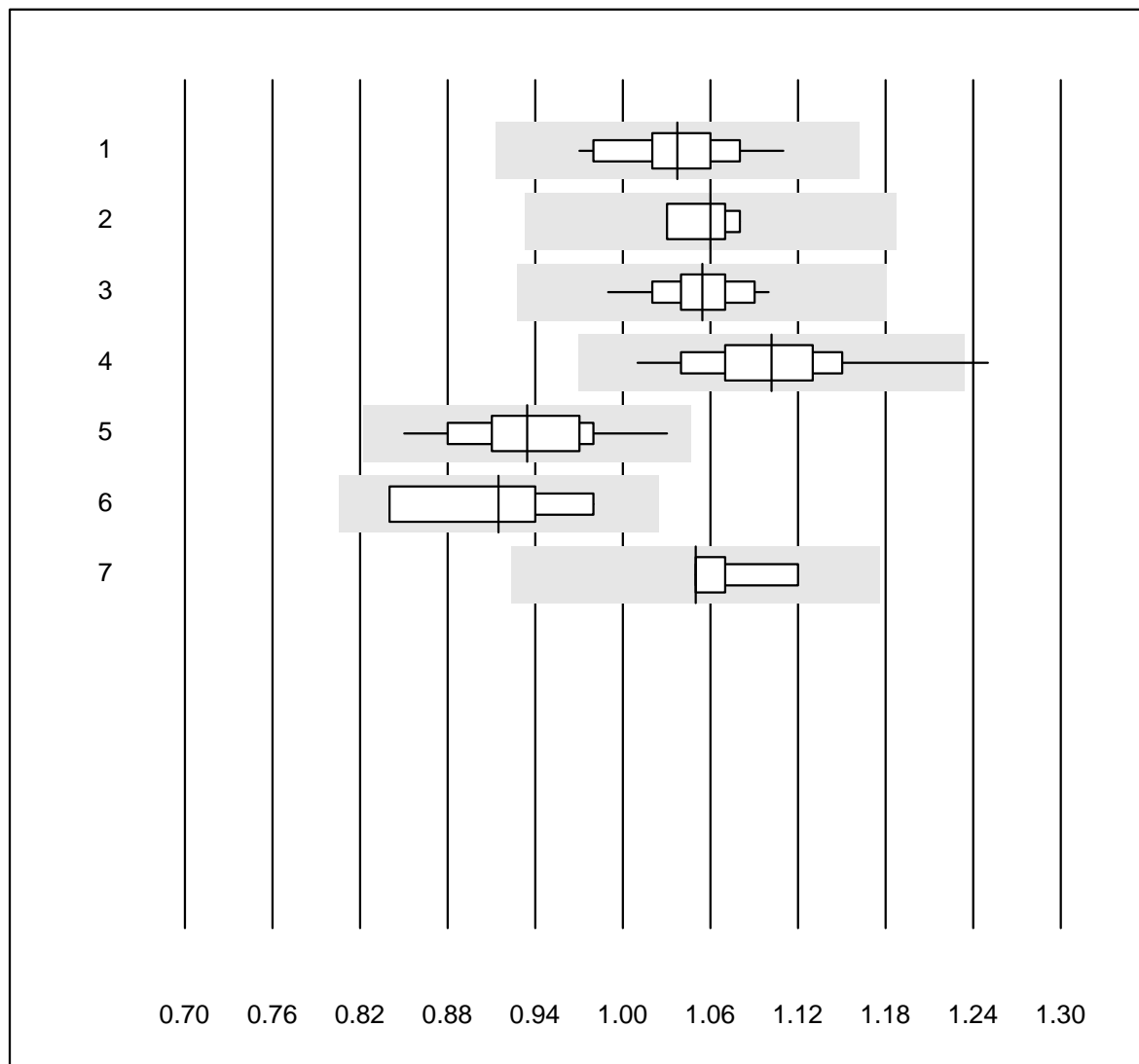
QUALAB tolerance : 12 %   Magnesium (mmol/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Abbott	17	100.0	0.0	0.0	1.04	3.5	e
2	Beckman	4	100.0	0.0	0.0	1.06	2.1	e
3	Roche	27	100.0	0.0	0.0	1.05	2.4	e
4	Fuji Dri-Chem	73	97.3	2.7	0.0	1.10	4.2	e
5	Spotchem D-Concept	38	100.0	0.0	0.0	0.93	4.1	e
6	Spotchem SP-4430	4	100.0	0.0	0.0	0.92	6.7	e*
7	Piccolo	5	100.0	0.0	0.0	1.05	2.8	e

9 additional results were submitted but not published because the method groups were too small. (< results per group)
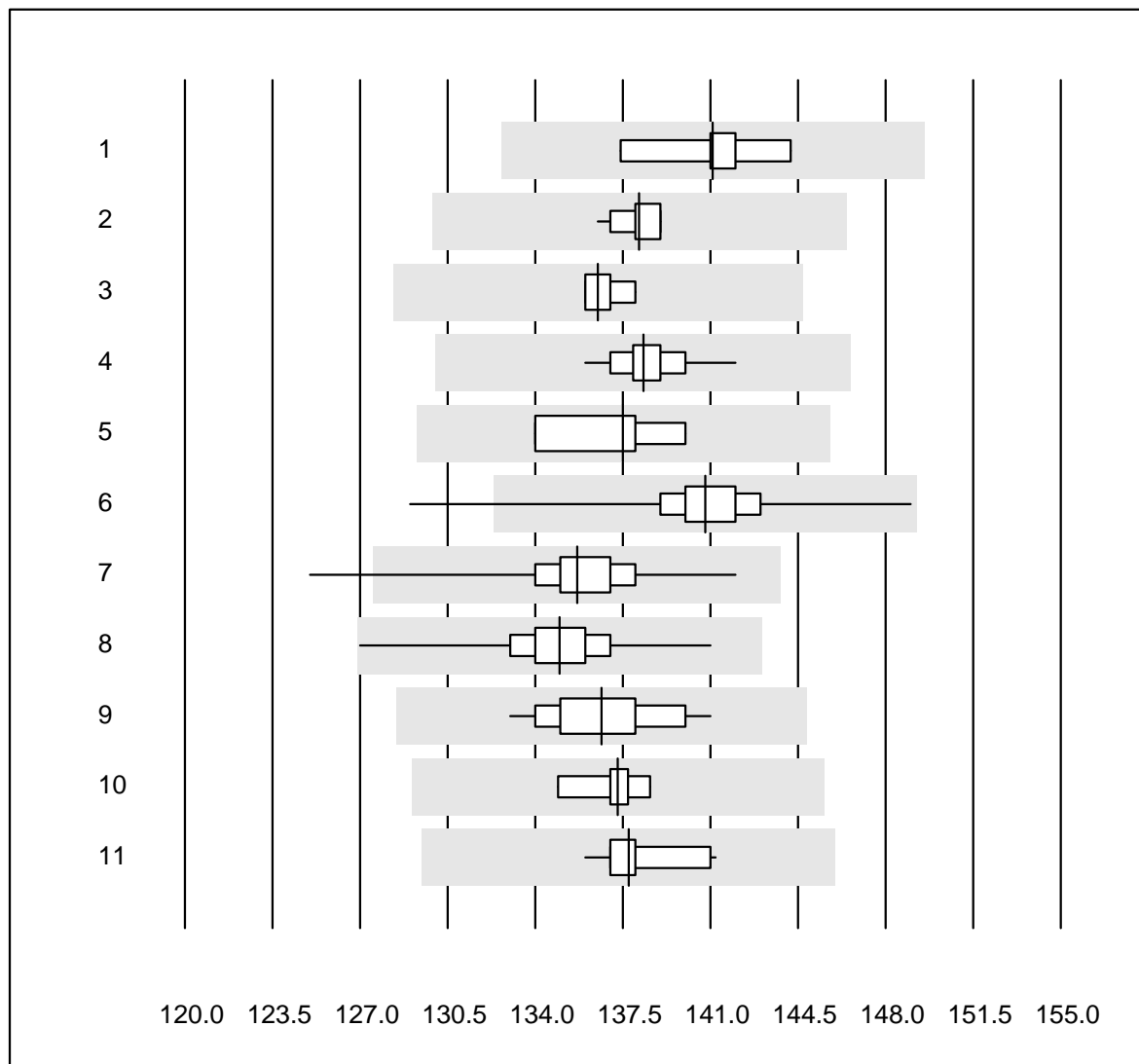
Sodium

QUALAB tolerance : 6 %

Sodium (mmol/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Autolyser	9	100.0	0.0	0.0	141	1.3	e
2	Abbott	19	100.0	0.0	0.0	138	0.5	e
3	Beckman	6	100.0	0.0	0.0	137	0.6	e
4	Roche	35	100.0	0.0	0.0	138	0.9	e
5	Siemens	4	100.0	0.0	0.0	138	1.8	e*
6	Fuji Dri-Chem	1019	98.7	0.7	0.6	141	1.5	e
7	Spotchem D-Concept	453	99.6	0.2	0.2	136	1.3	e
8	Spotchem EL-SE 1520	60	100.0	0.0	0.0	135	1.9	e
9	Piccolo	37	97.3	0.0	2.7	137	1.6	e
10	Exias	6	100.0	0.0	0.0	137	0.9	e
11	iStat Chem8	15	100.0	0.0	0.0	138	1.1	e

4 additional results were submitted but not published because the method groups were too small. (< results per group)
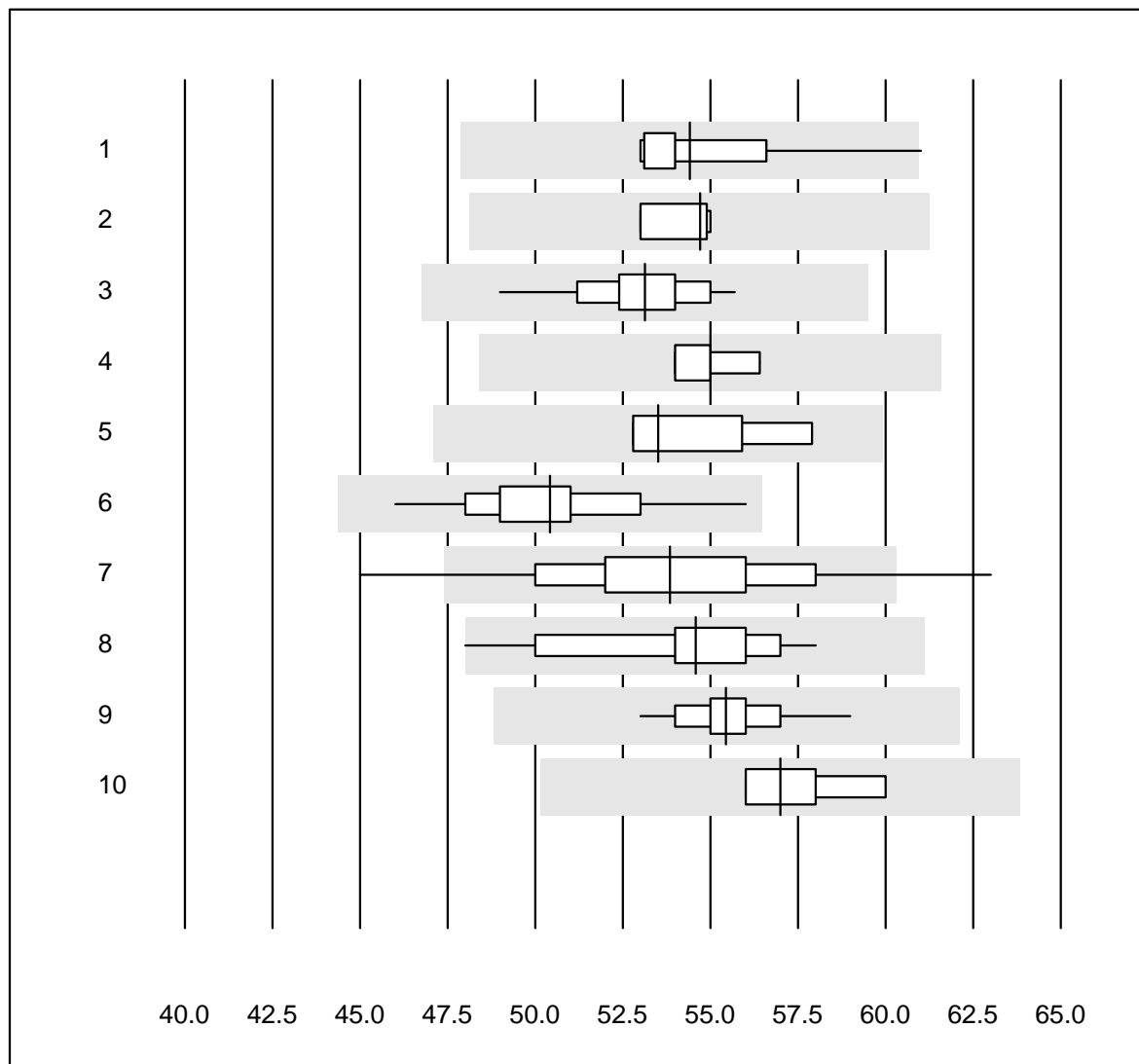
Phosphate
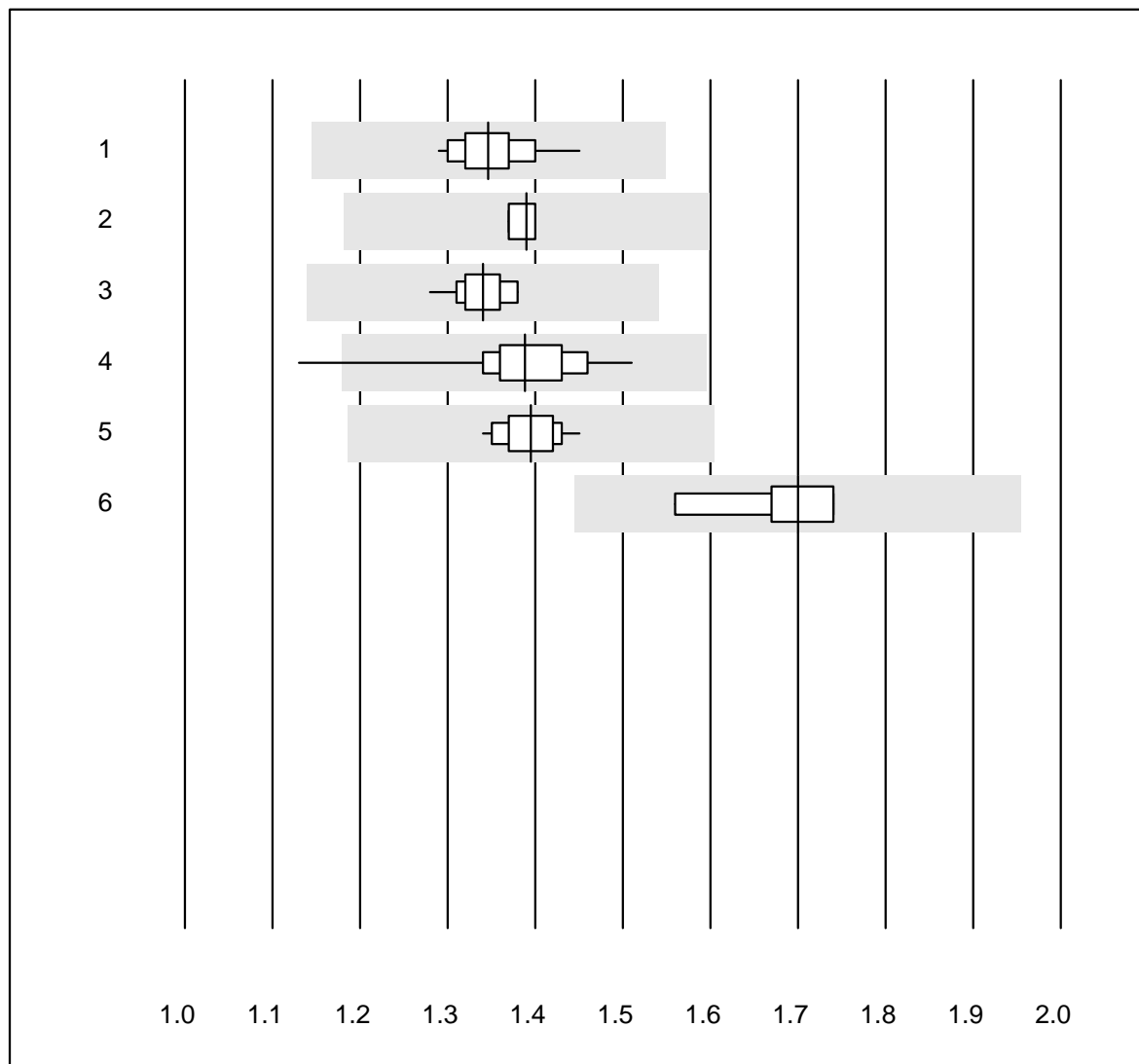
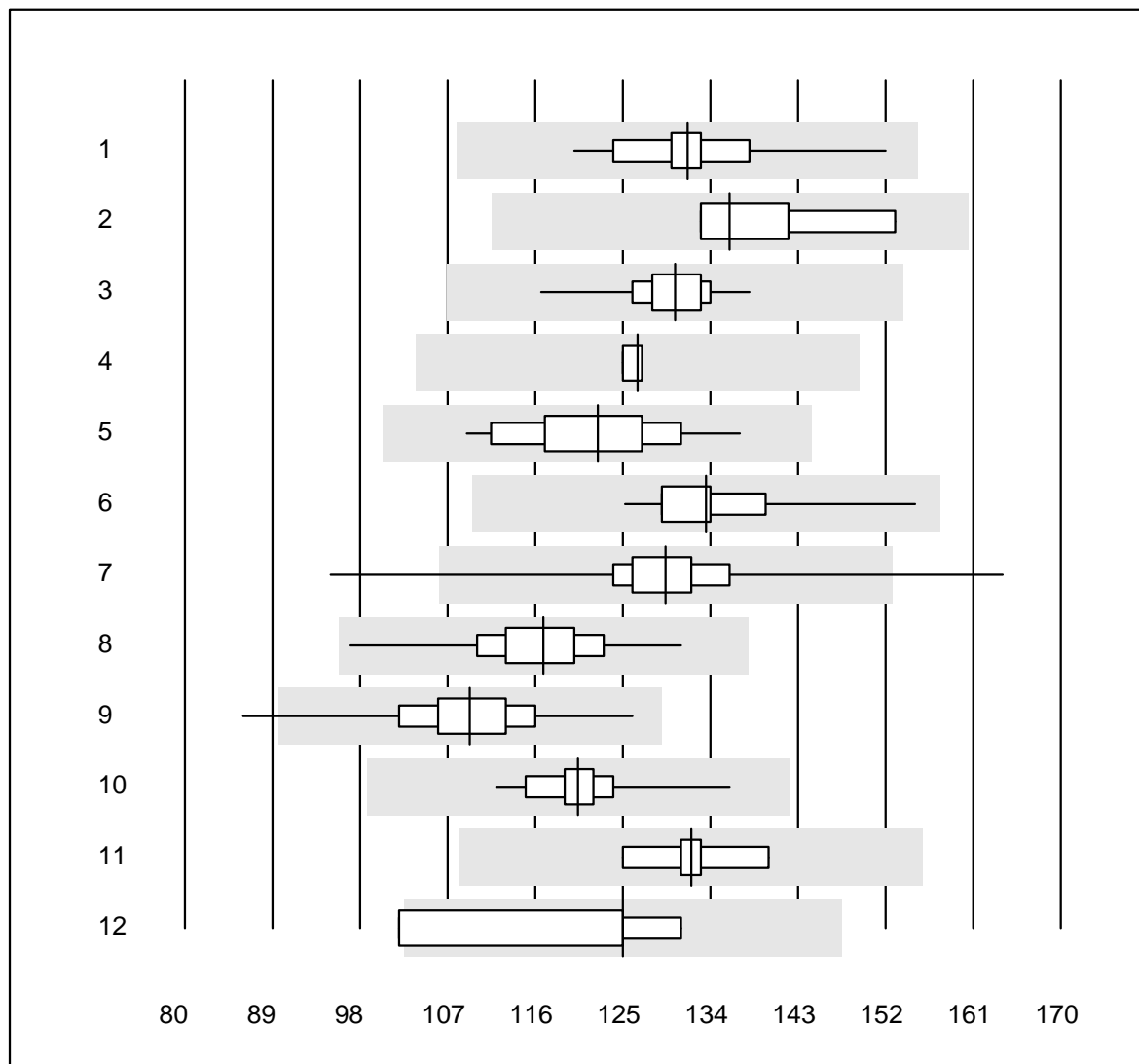QUALAB tolerance : 15 %   Phosphate (mmol/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Abbott	16	100.0	0.0	0.0	1.35	3.1	e
2	Beckman	4	100.0	0.0	0.0	1.39	1.1	e
3	Roche	32	100.0	0.0	0.0	1.34	1.9	e
4	Fuji Dri-Chem	75	98.7	1.3	0.0	1.39	4.1	e
5	Spotchem D-Concept	14	92.9	0.0	7.1	1.39	2.4	e
6	Piccolo	6	100.0	0.0	0.0	1.70	4.1	e

14 additional results were submitted but not published because the method groups were too small. (< results per group)

Protein total

QUALAB tolerance : 12 %

Protein total (g/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Abbott	17	94.1	5.9	0.0	54.4	3.6	e
2	Beckman	4	100.0	0.0	0.0	54.7	1.7	e
3	Roche	31	96.8	0.0	3.2	53.1	2.8	e
4	Siemens	4	100.0	0.0	0.0	55.0	1.8	e
5	Selectra Pro	8	100.0	0.0	0.0	53.5	3.8	e
6	Fuji Dri-Chem	189	98.4	0.0	1.6	50.4	3.6	e
7	Spotchem D-Concept	184	96.2	2.7	1.1	53.8	5.4	e
8	Spotchem SP-4430	28	96.4	3.6	0.0	54.6	4.5	e
9	Piccolo	45	93.3	0.0	6.7	55.4	2.3	e
10	Skyla	5	80.0	0.0	20.0	57.0	3.0	e

4 additional results were submitted but not published because the method groups were too small. (< results per group)
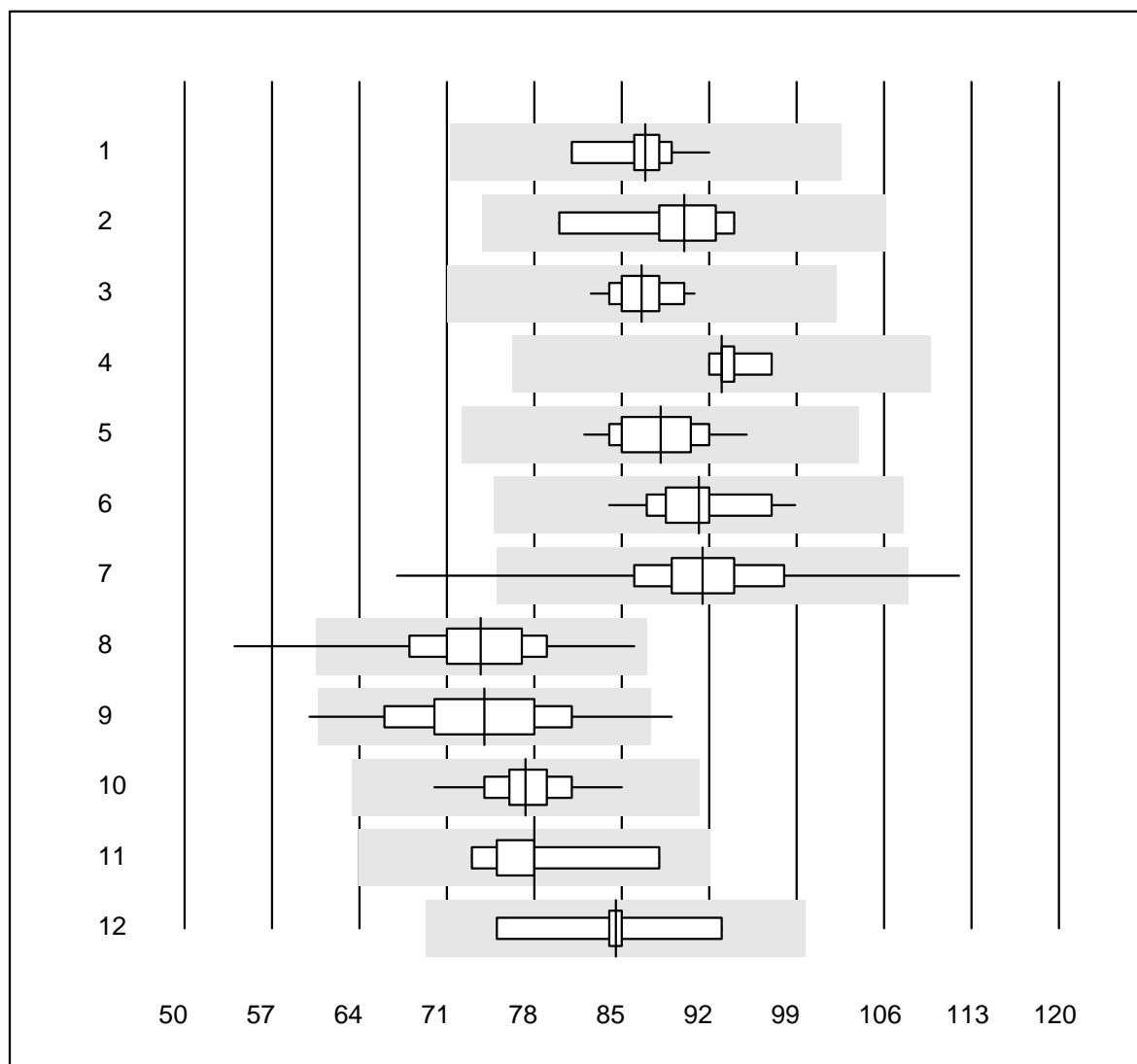
Aspartate aminotransferase

QUALAB tolerance : 18 %   Aspartate aminotransferase (U/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Abbott	19	100.0	0.0	0.0	132	4.9	e
2	Beckman	6	100.0	0.0	0.0	136	5.5	e*
3	Roche	36	100.0	0.0	0.0	130	3.0	e
4	Siemens	4	100.0	0.0	0.0	127	0.8	e
5	Autolyser	20	100.0	0.0	0.0	122	6.2	e
6	Selectra Pro	16	100.0	0.0	0.0	134	5.0	e
7	Fuji Dri-Chem	1143	98.4	0.8	0.8	129	4.2	e
8	Spotchem D-Concept	626	99.2	0.0	0.8	117	4.5	e
9	Spotchem SP-4430	144	98.6	0.7	0.7	109	5.5	e
10	Piccolo	70	97.1	0.0	2.9	120	2.9	e
11	Skyla	5	100.0	0.0	0.0	132	4.1	e
12	Reflotron	5	60.0	20.0	20.0	125	10.6	e*

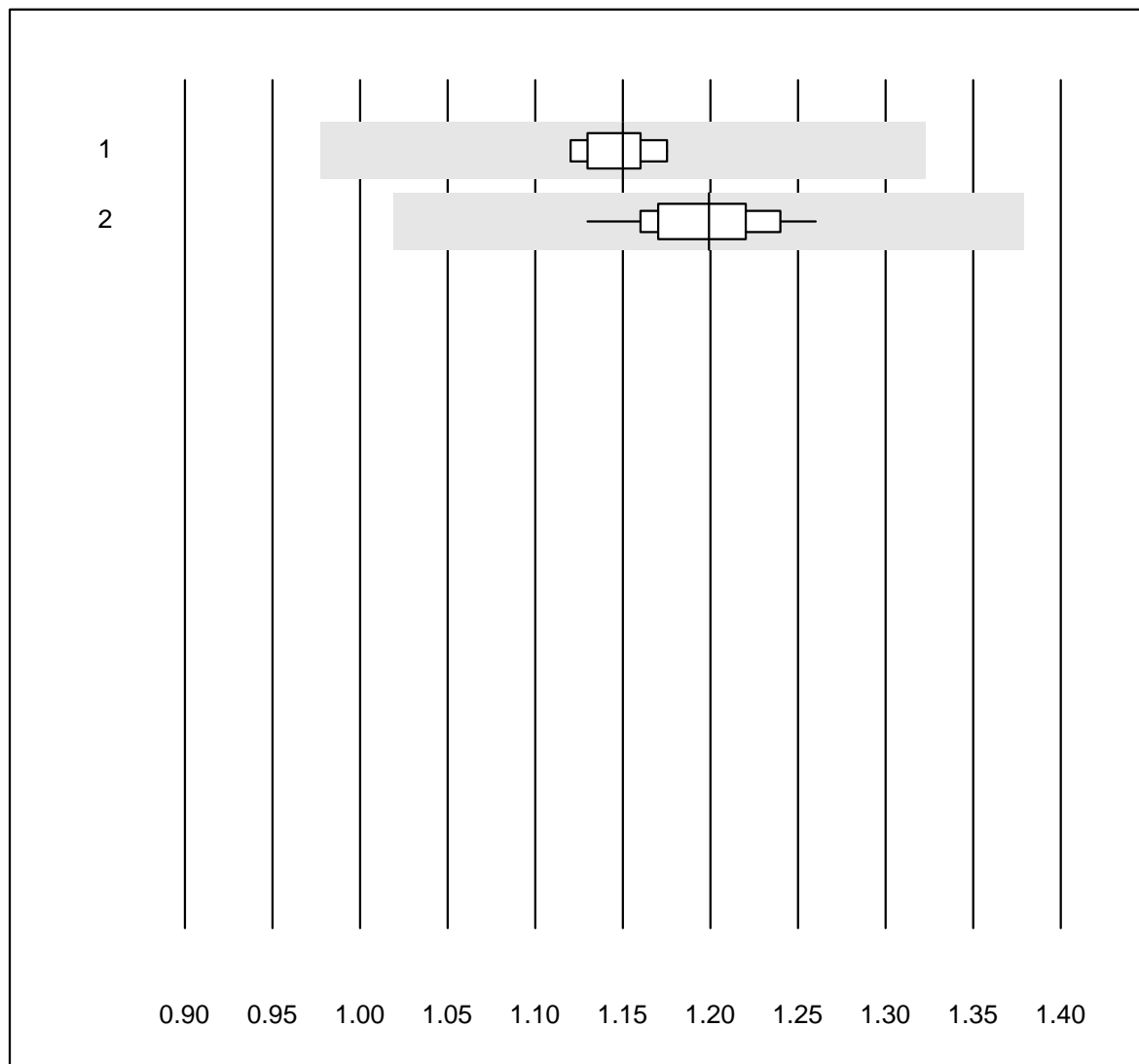One result was submitted but not pubished because the method group was too small. (< 4 results per group)

Alanine aminotransferase

QUALAB tolerance : 18 %   Alanine aminotransferase (U/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Abbott	17	100.0	0.0	0.0	87	3.2	e
2	Beckman	6	100.0	0.0	0.0	90	5.6	e*
3	Roche	36	100.0	0.0	0.0	87	2.4	e
4	Siemens	6	100.0	0.0	0.0	93	1.9	e
5	Autolyser	20	100.0	0.0	0.0	88	3.8	e
6	Selectra Pro	16	100.0	0.0	0.0	91	4.3	e
7	Fuji Dri-Chem	1157	99.4	0.5	0.1	91	5.0	e
8	Spotchem D-Concept	632	97.3	2.1	0.6	74	6.4	e
9	Spotchem SP-4430	146	97.2	2.1	0.7	74	8.1	e
10	Piccolo	68	95.6	0.0	4.4	77	3.8	e
11	Skyla	5	100.0	0.0	0.0	78	7.4	e*
12	Reflotron	5	100.0	0.0	0.0	85	7.6	e*

One result was submitted but not pubished because the method group was too small. (< 4 results per group)

Triglycerides
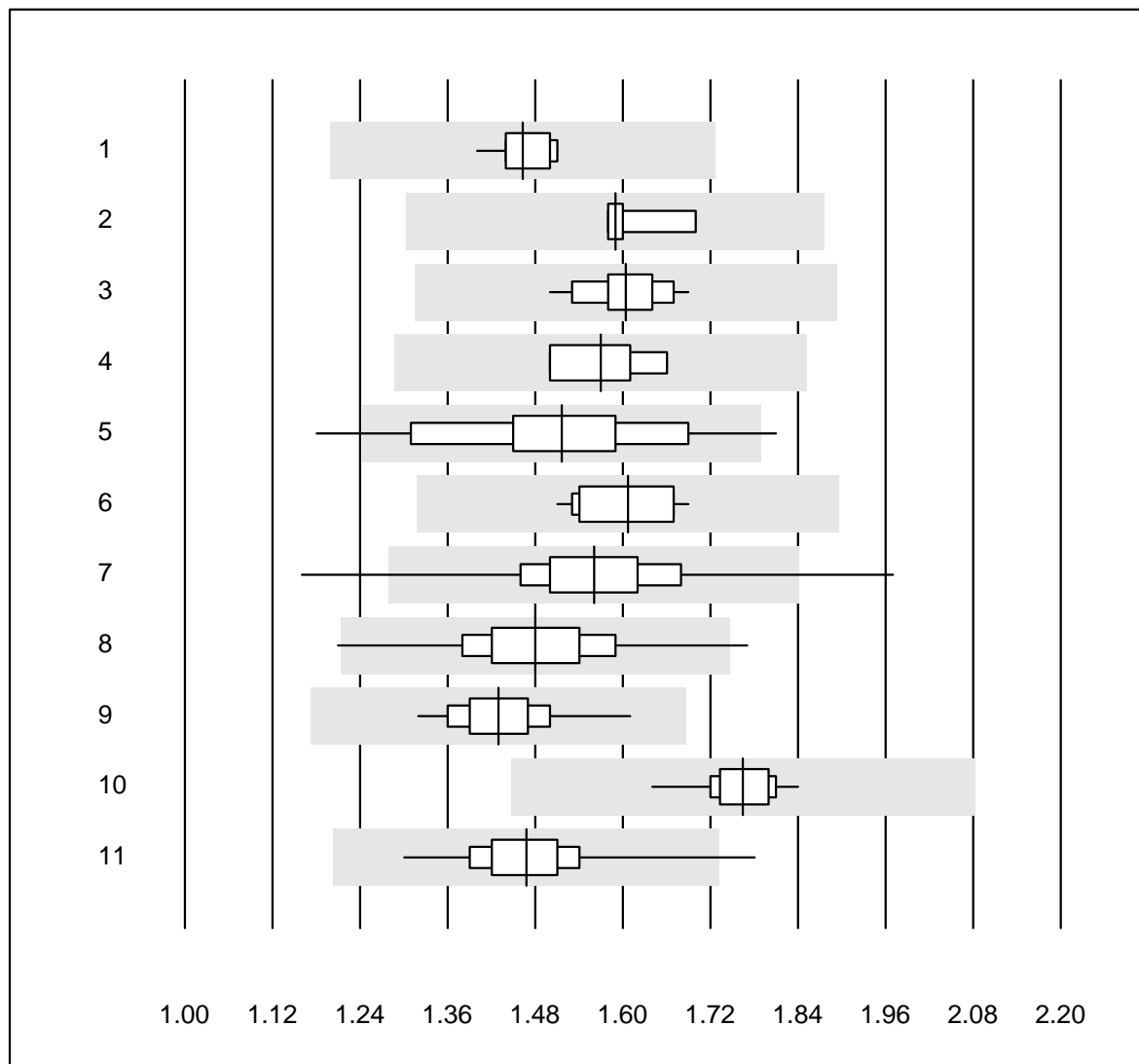
QUALAB tolerance : 18 %   Triglycerides (mmol/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Abbott	15	100.0	0.0	0.0	1.46	2.2	e
2	Beckman	4	100.0	0.0	0.0	1.59	3.6	e
3	Roche	29	100.0	0.0	0.0	1.60	3.0	e
4	Siemens	7	100.0	0.0	0.0	1.57	3.9	e
5	Autolyser	20	85.0	10.0	5.0	1.52	9.0	e
6	Selectra Pro	13	92.3	0.0	7.7	1.61	3.8	e
7	Fuji Dri-Chem	955	98.8	0.5	0.7	1.56	5.6	e
8	Spotchem D-Concept	448	96.7	0.4	2.9	1.48	5.5	e
9	Spotchem SP-4430	78	100.0	0.0	0.0	1.43	4.1	e
10	Piccolo	23	100.0	0.0	0.0	1.76	2.6	e
11	Cholestech LDX	275	99.6	0.4	0.0	1.47	4.5	e

5 additional results were submitted but not published because the method groups were too small. (< results per group)

Lithium

0.90 0.95 1.00 1.05 1.10 1.15 1.20 1.25 1.30 1.35 1.40

QUALAB tolerance : 15 %

Lithium (mmol/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Abbott	6	100.0	0.0	0.0	1.15	1.7	e
2	Roche	12	100.0	0.0	0.0	1.20	3.0	e

3 additional results were submitted but not published because the method groups were too small. (< results per group)
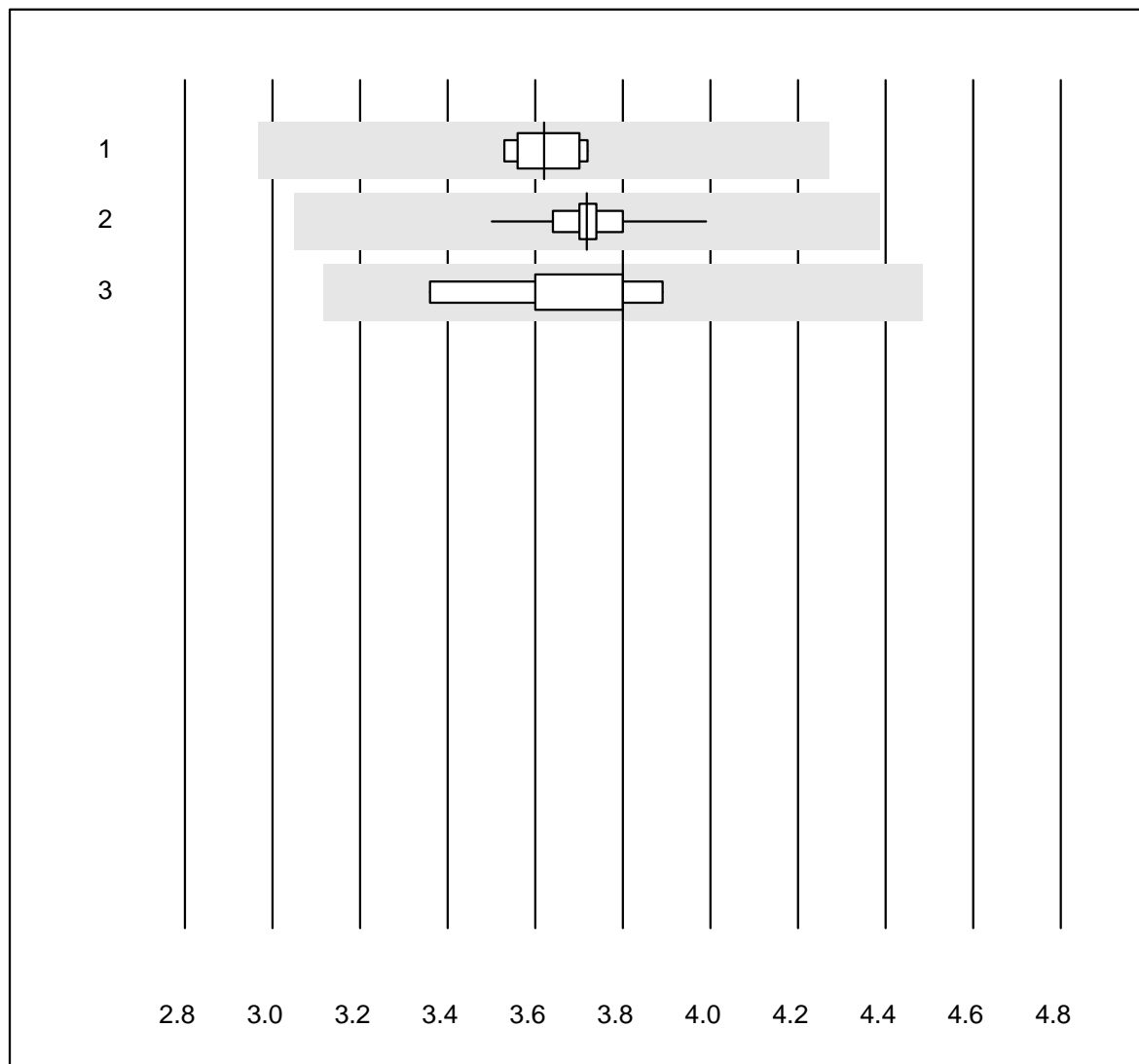
Lactate

QUALAB tolerance : 18 %

Lactate (mmol/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Abbott	7	100.0	0.0	0.0	3.62	1.9	e
2	Roche	13	100.0	0.0	0.0	3.72	2.9	e
3	Other methods	5	100.0	0.0	0.0	3.80	5.8	e*

HbA1c sample A
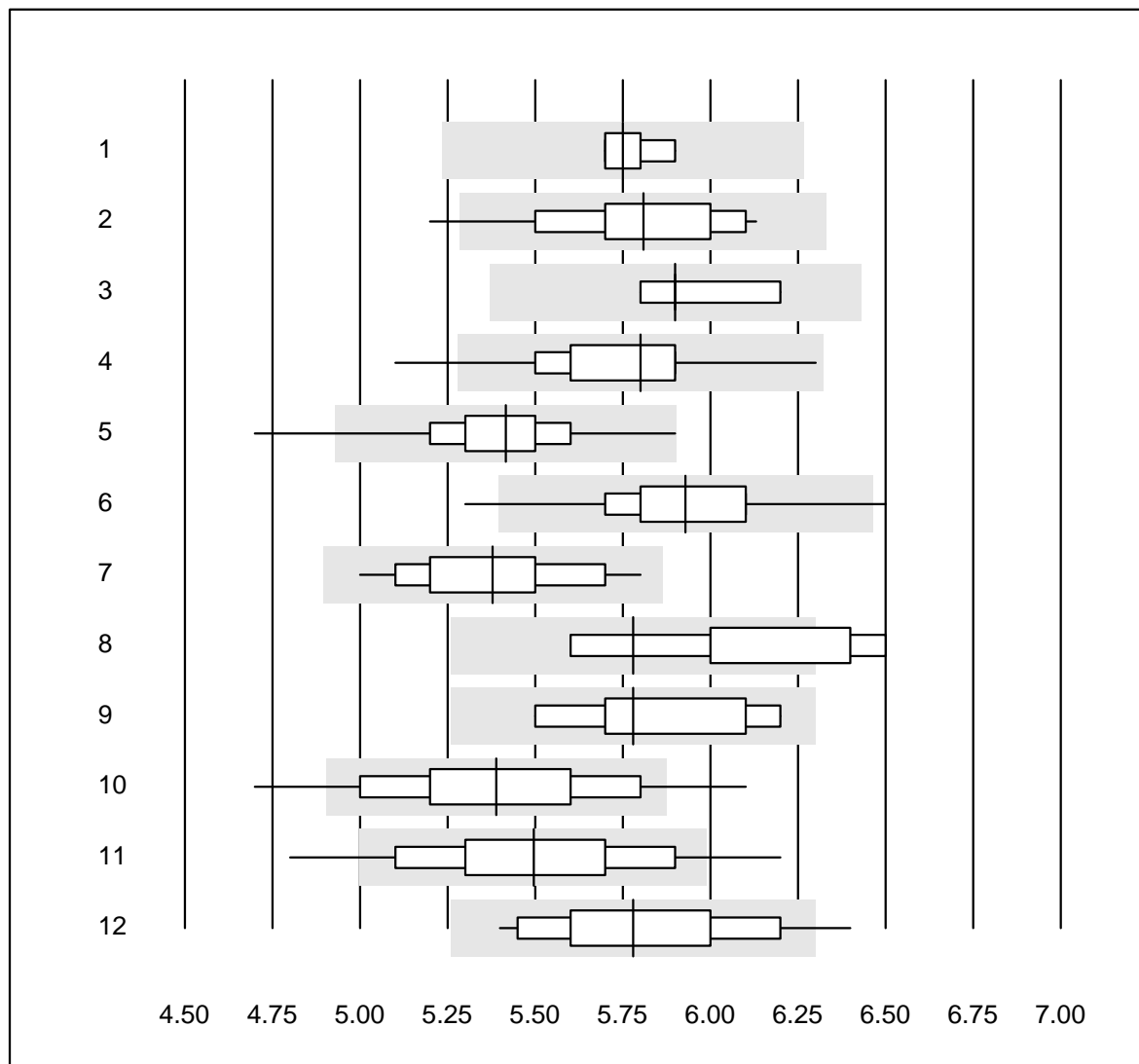
QUALAB tolerance : 9 %   HbA1c sample A (%)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Abbott	6	100.0	0.0	0.0	5.8	1.4	e
2	Roche, Cobas	19	94.7	5.3	0.0	5.8	4.1	e
3	HPLC	9	100.0	0.0	0.0	5.9	2.0	e
4	Afinion	524	98.8	0.8	0.4	5.8	3.1	e
5	Cobas b101	199	98.0	2.0	0.0	5.4	3.5	e
6	DCA2000/Vantage	130	97.7	1.5	0.8	5.9	3.3	e
7	Celltac chemi	20	95.0	0.0	5.0	5.4	4.1	e
8	NycoCard	7	71.4	28.6	0.0	5.8	4.8	d
9	Eurolyser	8	100.0	0.0	0.0	5.8	3.9	d
10	A1c Now	219	85.9	11.4	2.7	5.4	5.3	e
11	AFIAS	121	87.6	9.9	2.5	5.5	5.1	e
12	Others	21	85.7	9.5	4.8	5.8	4.8	d
13	Spinit	6	100.0	0.0	0.0	5.8	4.2	d

2 additional results were submitted but not published because the method groups were too small. (< results per group)

HbA1c sample B

QUALAB tolerance : 9 %　　　　　　HbA1c sample B (%)
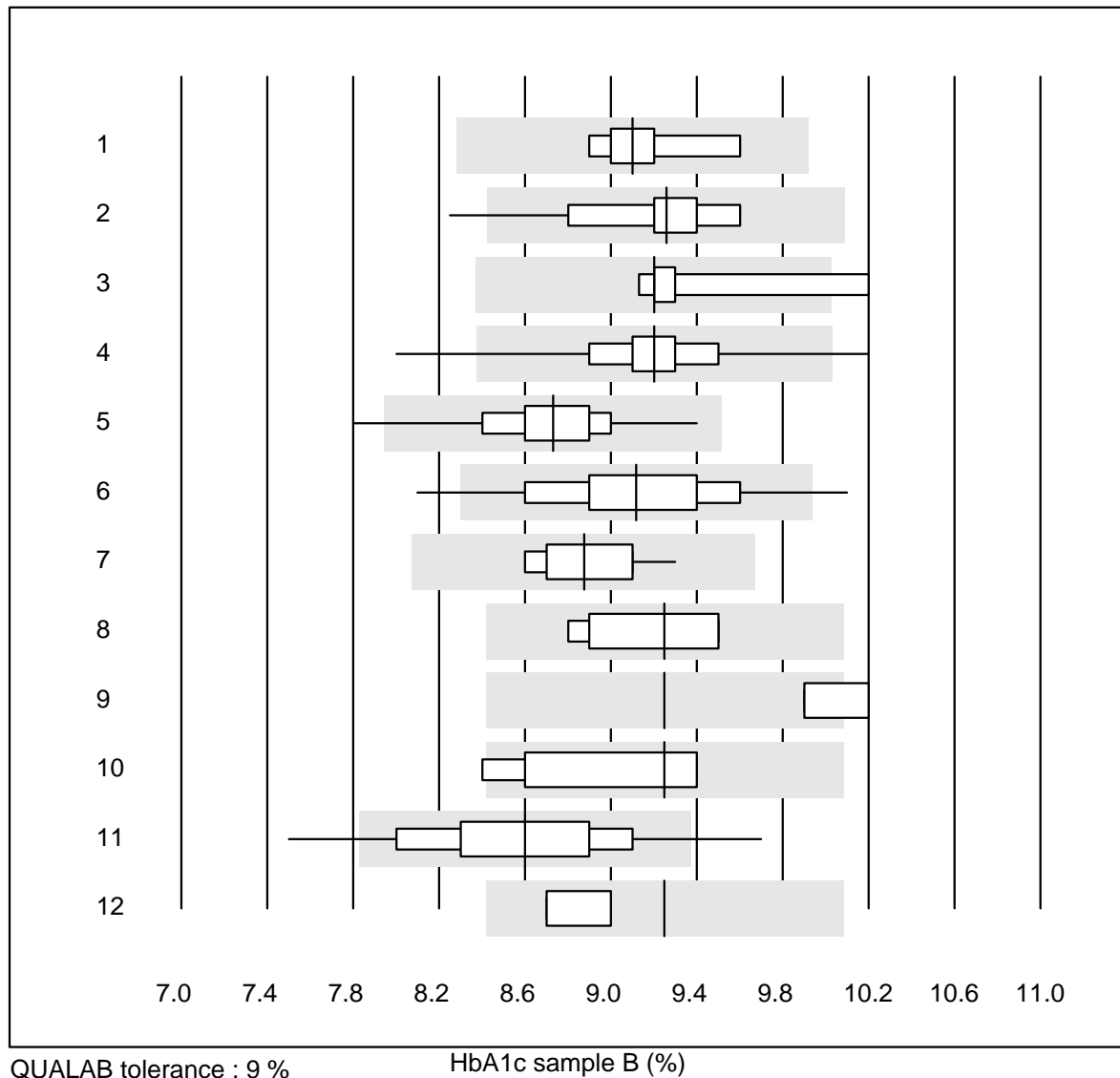
No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Abbott	5	100.0	0.0	0.0	9.1	2.9	e*
2	Roche, Cobas	18	94.4	5.6	0.0	9.3	3.5	e
3	HPLC	9	88.9	11.1	0.0	9.2	3.6	e*
4	Afinion	756	98.8	0.7	0.5	9.2	2.7	e
5	Cobas b101	199	98.5	1.5	0.0	8.7	3.0	e
6	DCA2000/Vantage	191	97.4	2.1	0.5	9.1	4.2	e
7	Celltac chemi	16	100.0	0.0	0.0	8.9	2.4	e
8	NycoCard	5	100.0	0.0	0.0	9.3	3.7	d
9	Eurolyser	5	20.0	40.0	40.0	9.3	1.5	d
10	A1c Now	6	83.3	16.7	0.0	9.3	4.9	d
11	AFIAS	161	86.3	8.1	5.6	8.6	5.2	e
12	Spinit	4	75.0	0.0	25.0	9.3	1.7	d
13	Others	13	100.0	0.0	0.0	9.3	3.3	d
14	Quick Read go	6	66.6	16.7	16.7	9.3	7.4	d

One result was submitted but not pubished because the method group was too small. (< 4 results per group)

pCO2

QUALAB tolerance : 12 %

pCO2 (kPa)
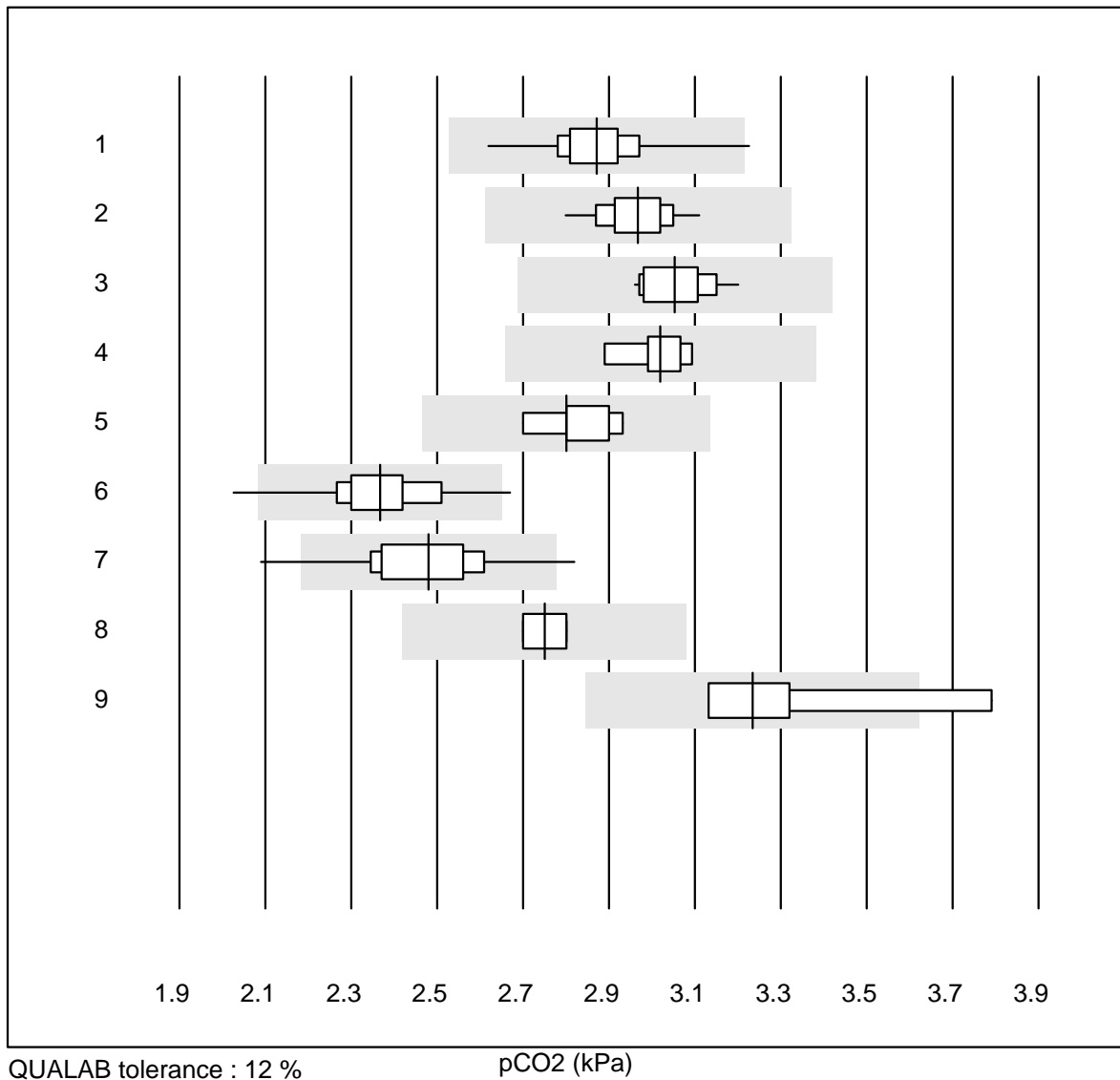
No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	ABL700/800	108	99.1	0.9	0.0	2.87	3.0	e
2	ABL90 FLEX / PLUS	116	100.0	0.0	0.0	2.97	2.2	e
3	Cobas b 123	14	100.0	0.0	0.0	3.05	2.4	e
4	Cobas b 221	5	100.0	0.0	0.0	3.02	2.6	e
5	GEM	9	100.0	0.0	0.0	2.80	2.6	e
6	iStat	49	91.8	4.1	4.1	2.37	4.7	e
7	EPOC	54	90.7	5.6	3.7	2.48	5.4	e
8	IL	4	100.0	0.0	0.0	2.75	2.1	e
9	Other methods	4	75.0	25.0	0.0	3.24	9.2	e*

9 additional results were submitted but not published because the method groups were too small. (< results per group)

pO2

5.0   6.1   7.2   8.3   9.4   10.5   11.6   12.7   13.8   14.9   16.0

QUALAB tolerance : 15 %   pO2 (kPa)
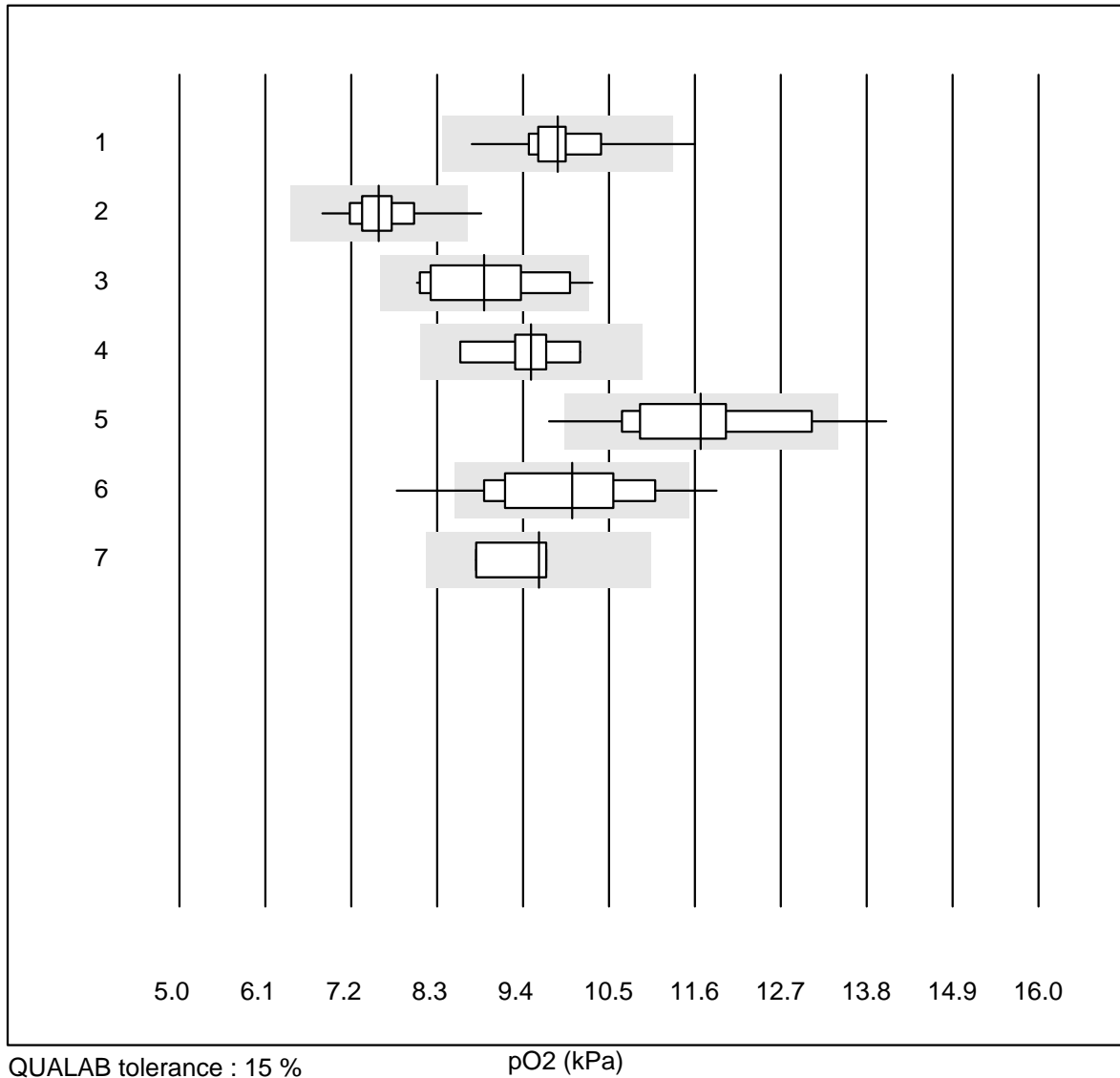
No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	ABL700/800	106	92.5	0.9	6.6	9.84	4.3	e
2	ABL90 FLEX / PLUS	116	94.8	0.9	4.3	7.55	4.6	e
3	Cobas b 123	16	93.7	6.3	0.0	8.90	8.2	e*
4	GEM	9	100.0	0.0	0.0	9.50	4.8	e
5	iStat	47	78.7	6.4	14.9	11.68	8.3	e
6	EPOC	53	81.1	5.7	13.2	10.02	8.9	e
7	IL	4	100.0	0.0	0.0	9.60	4.5	e*

14 additional results were submitted but not published because the method groups were too small. (< results per group)

pH
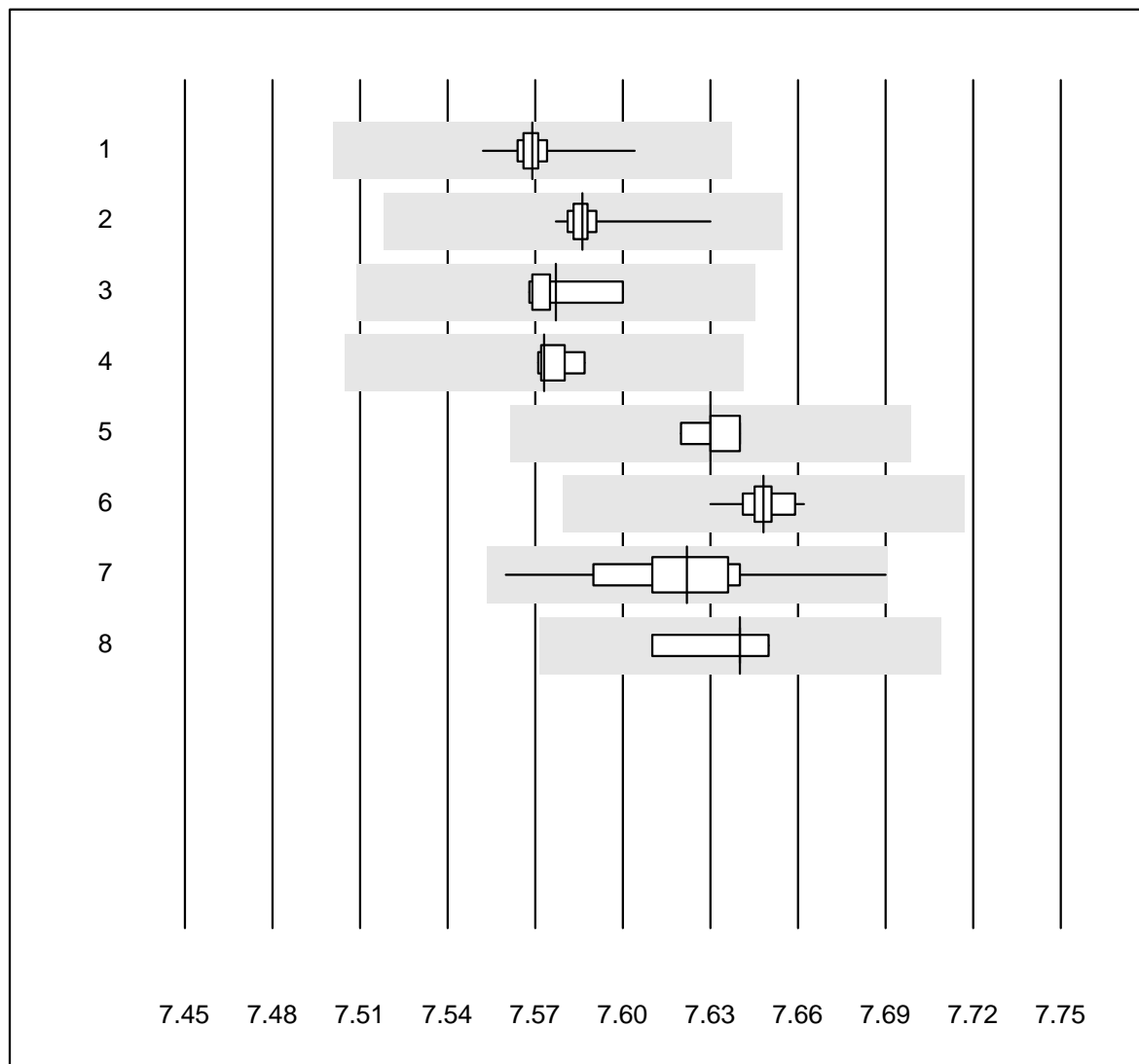
QUALAB tolerance : 1 %   pH ()

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	ABL700/800	106	100.0	0.0	0.0	7.57	0.1	e
2	ABL90 FLEX / PLUS	117	100.0	0.0	0.0	7.59	0.1	e
3	Cobas b 123	15	100.0	0.0	0.0	7.58	0.2	e
4	Cobas b 221	5	100.0	0.0	0.0	7.57	0.1	e
5	GEM	9	100.0	0.0	0.0	7.63	0.1	e
6	iStat	50	96.0	0.0	4.0	7.65	0.1	e
7	EPOC	54	100.0	0.0	0.0	7.62	0.3	e
8	IL	5	100.0	0.0	0.0	7.64	0.2	e

12 additional results were submitted but not published because the method groups were too small. (< results per group)

Glucose BG
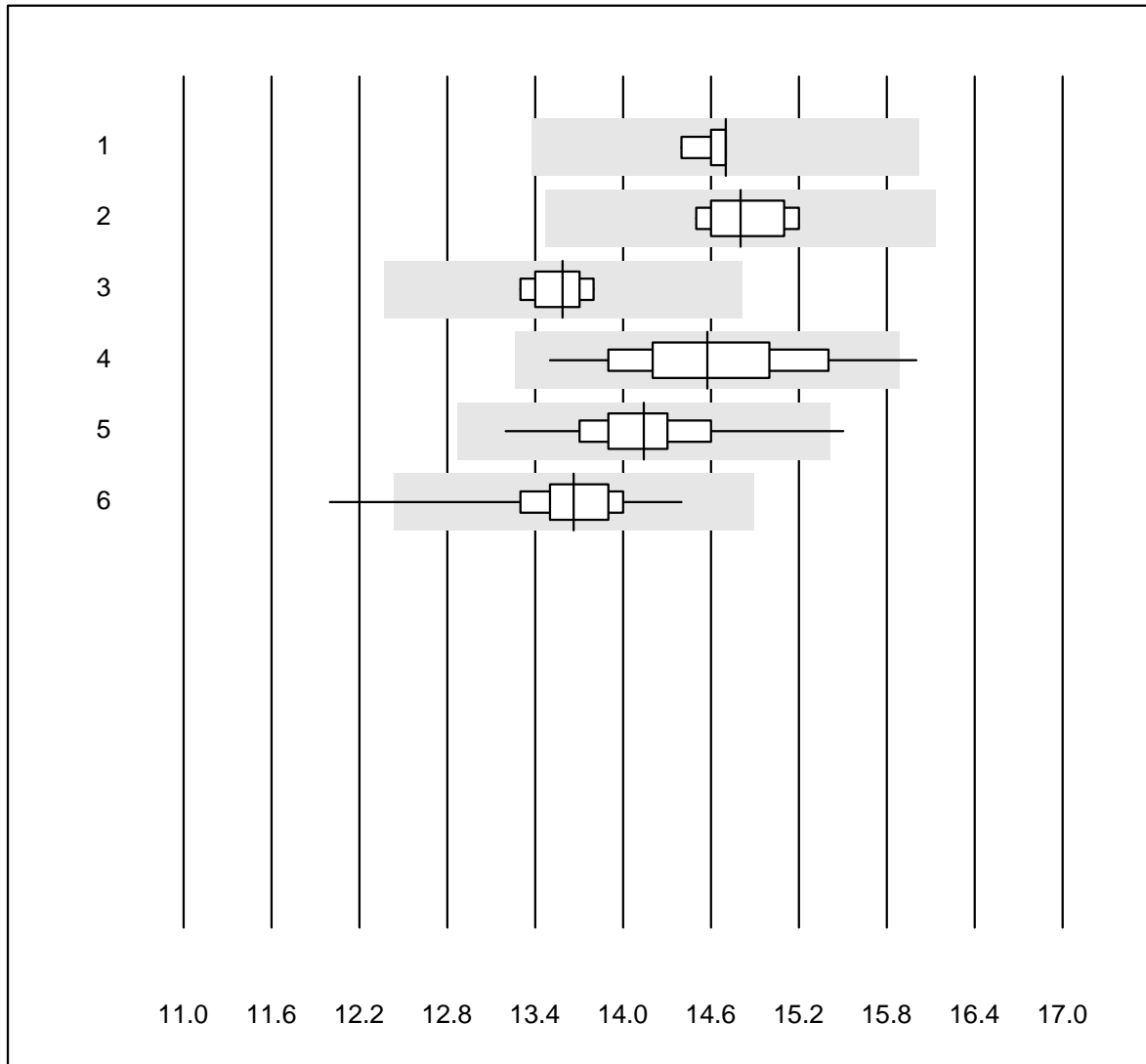
QUALAB tolerance : 9 %

Glucose BG (mmol/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	GEM	5	100.0	0.0	0.0	14.7	0.9	e
2	Cobas b 123	9	100.0	0.0	0.0	14.8	1.7	e
3	iStat	10	80.0	0.0	20.0	13.6	1.2	e
4	EPOC	42	95.2	2.4	2.4	14.6	3.9	e
5	ABL700/800	97	99.0	1.0	0.0	14.1	2.9	e
6	ABL90 FLEX / PLUS	103	96.2	1.9	1.9	13.7	2.8	e

6 additional results were submitted but not published because the method groups were too small. (< results per group)

Hemoglobin BG
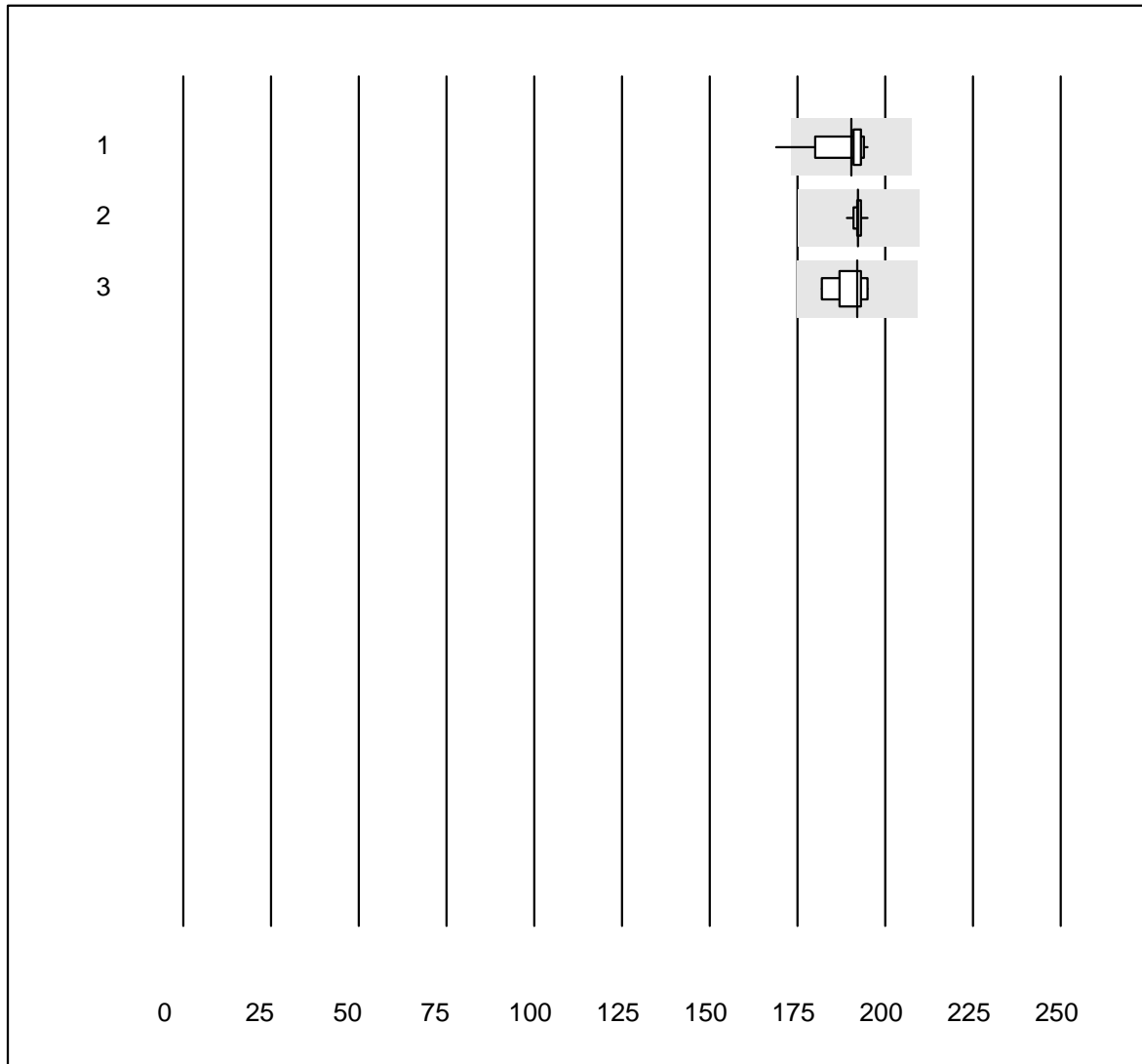

QUALAB tolerance : 9 %

Hemoglobin BG (g/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	ABL700/800	99	91.9	1.0	7.1	190.3	2.9	e
2	ABL90 FLEX / PLUS	102	94.1	0.0	5.9	192.3	0.5	e
3	ABL80 FLEX CO-OX / O	5	100.0	0.0	0.0	192.0	2.8	e*

2 additional results were submitted but not published because the method groups were too small. (< results per group)

Potassium BG
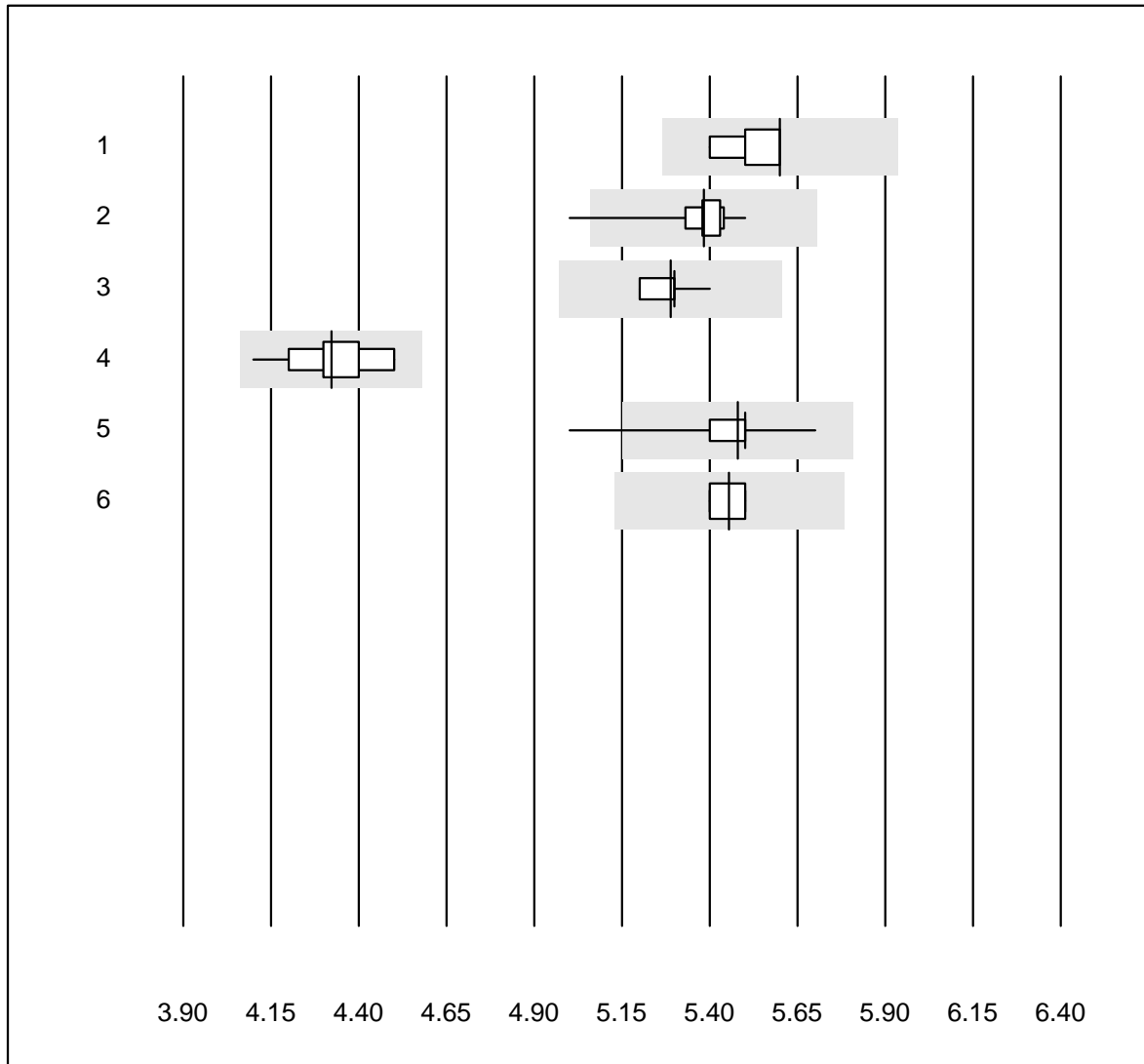
QUALAB tolerance : 6 %   Potassium BG (mmol/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	GEM	6	100.0	0.0	0.0	5.6	1.5	e
2	Cobas b 123	17	94.1	5.9	0.0	5.4	2.0	e
3	iStat	20	90.0	0.0	10.0	5.3	0.9	e
4	EPOC	46	93.5	0.0	6.5	4.3	2.4	e
5	ABL700/800	98	99.0	1.0	0.0	5.5	1.5	e
6	ABL90 FLEX / PLUS	109	99.1	0.0	0.9	5.5	0.9	e

9 additional results were submitted but not published because the method groups were too small. (< results per group)

Sodium BG
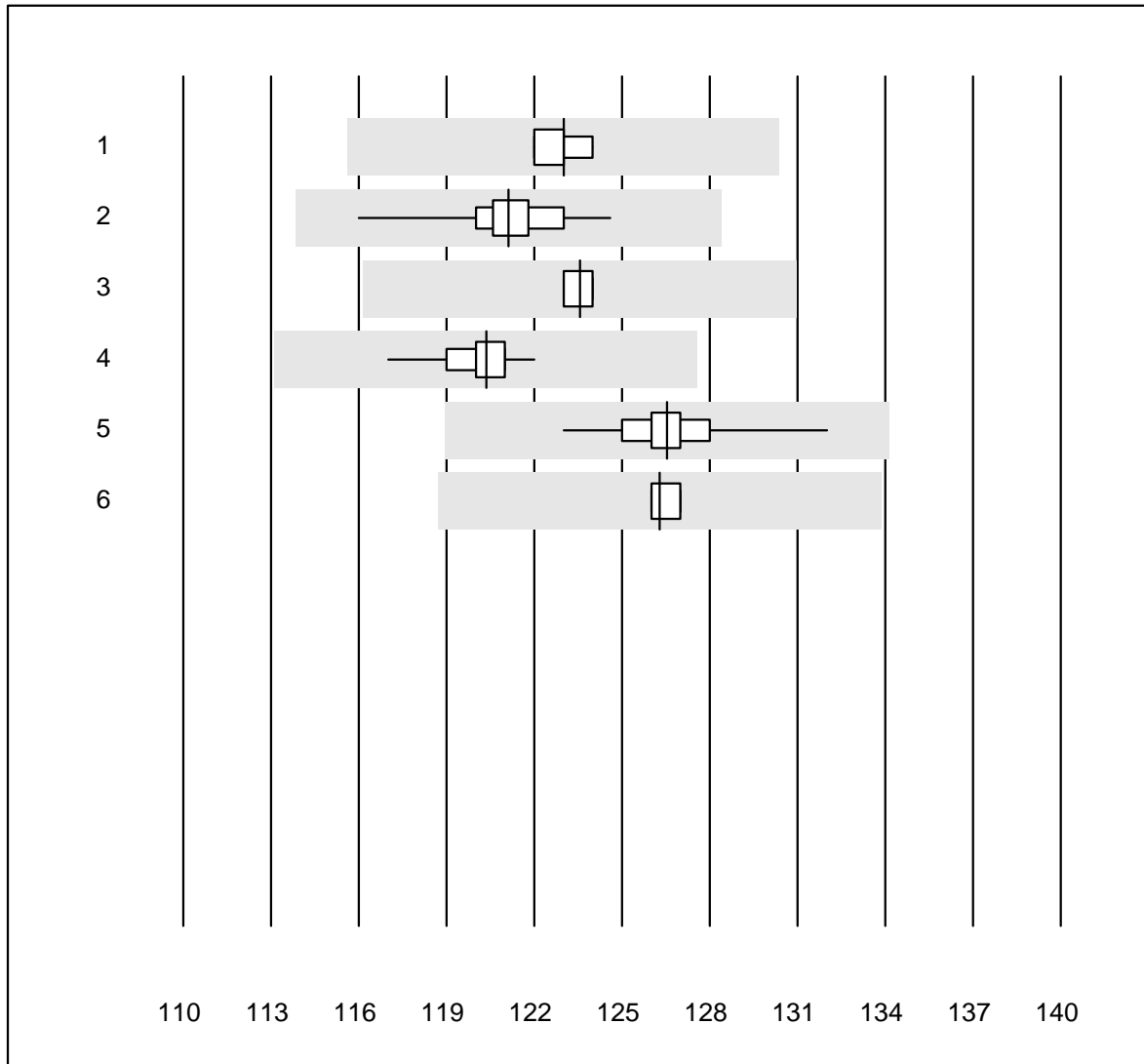
QUALAB tolerance : 6 %

Sodium BG (mmol/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	GEM	7	100.0	0.0	0.0	123.0	0.6	e
2	Cobas b 123	17	100.0	0.0	0.0	121.1	1.4	e
3	iStat	20	90.0	0.0	10.0	123.6	0.4	e
4	EPOC	44	97.7	0.0	2.3	120.3	0.8	e
5	ABL700/800	97	100.0	0.0	0.0	126.5	0.9	e
6	ABL90 FLEX / PLUS	108	99.1	0.0	0.9	126.3	0.4	e

8 additional results were submitted but not published because the method groups were too small. (< results per group)

Chlorid-BG

QUALAB tolerance : 6 % Chlorid-BG (mmol/l)
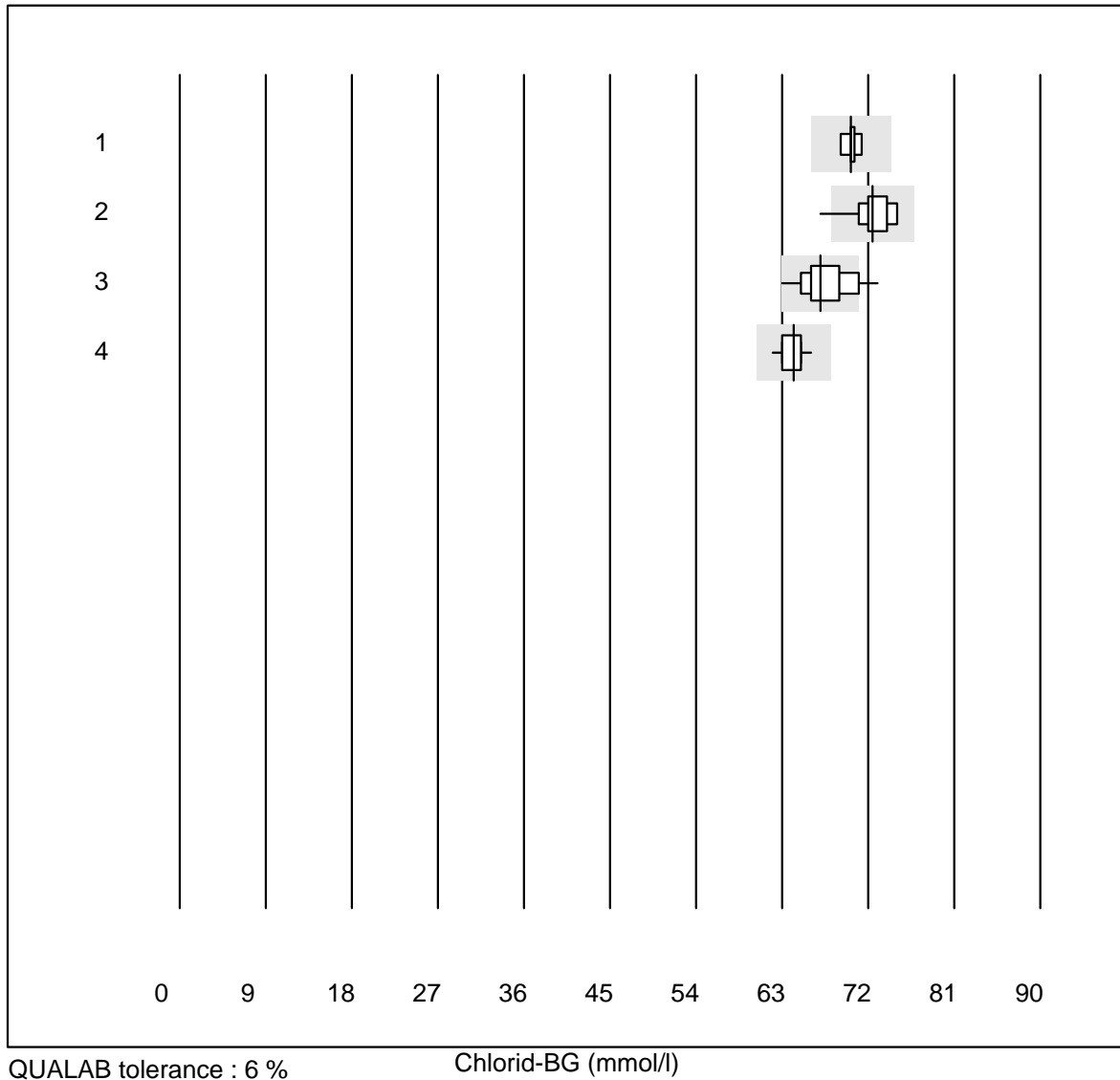
No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Cobas b 123	9	100.0	0.0	0.0	70.2	0.8	e
2	EPOC	16	87.4	6.3	6.3	72.5	2.7	e
3	ABL700/800	91	92.3	4.4	3.3	67.0	3.2	e
4	ABL90 FLEX / PLUS	104	99.0	0.0	1.0	64.2	1.4	e

5 additional results were submitted but not published because the method groups were too small. (< results per group)

Calcium-BG

0.00   0.07   0.14   0.21   0.28   0.35   0.42   0.49   0.56   0.63   0.70
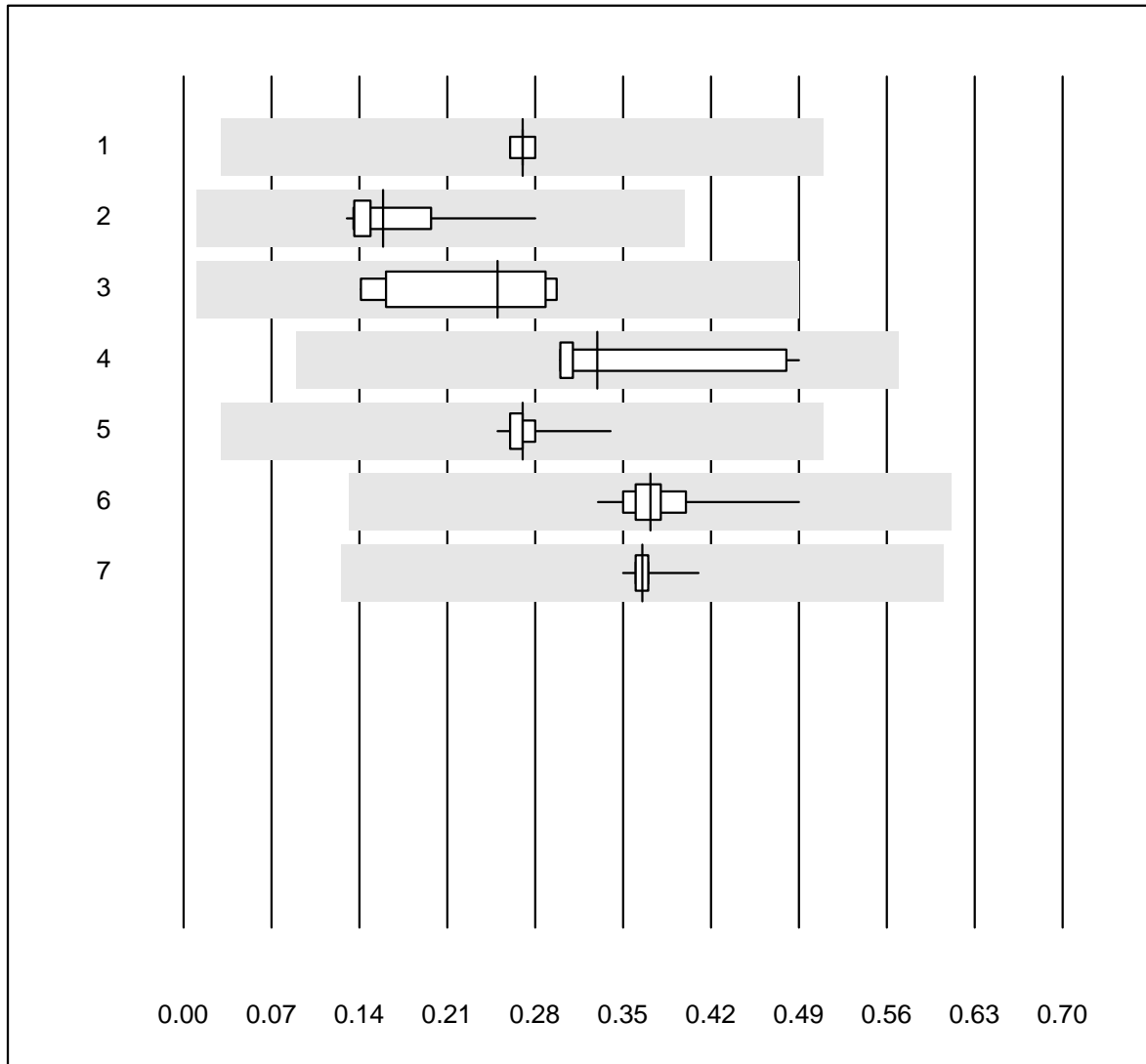
Calcium-BG (mmol/l)

MQ tolerance : 12 %
(< 2.00: +/- 0.24 mmol/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	GEM	6	100.0	0.0	0.0	0.27	2.3	e
2	Cobas b123	11	100.0	0.0	0.0	0.16	27.7	e*
3	Roche, Cobas	5	100.0	0.0	0.0	0.25	31.8	e*
4	iStat	14	100.0	0.0	0.0	0.33	20.1	e*
5	EPOC	41	97.6	0.0	2.4	0.27	5.5	e
6	ABL700/800	97	100.0	0.0	0.0	0.37	6.5	e
7	ABL90 FLEX / PLUS	106	99.1	0.0	0.9	0.37	2.0	e

7 additional results were submitted but not published because the method groups were too small. (< results per group)

FHHb

```
1
```

15.0   16.1   17.2   18.3   19.4   20.5   21.6   22.7   23.8   24.9   26.0
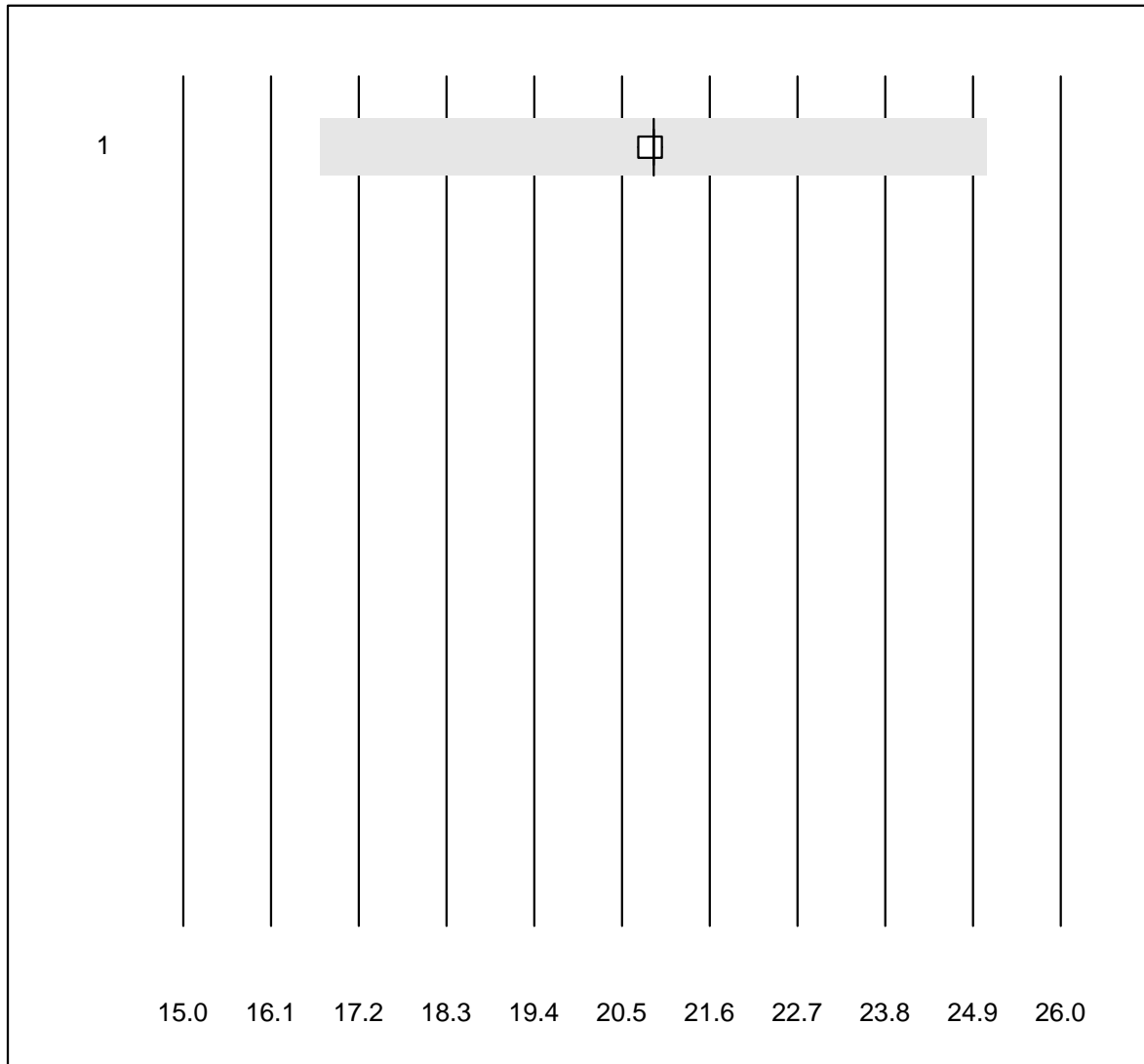
FHHb (%)

MQ tolerance : 20 %

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	ABL90 FLEX / PLUS	9	100.0	0.0	0.0	20.900	0.4	e

2 additional results were submitted but not published because the method groups were too small. (< results per group)

Lactate-BG
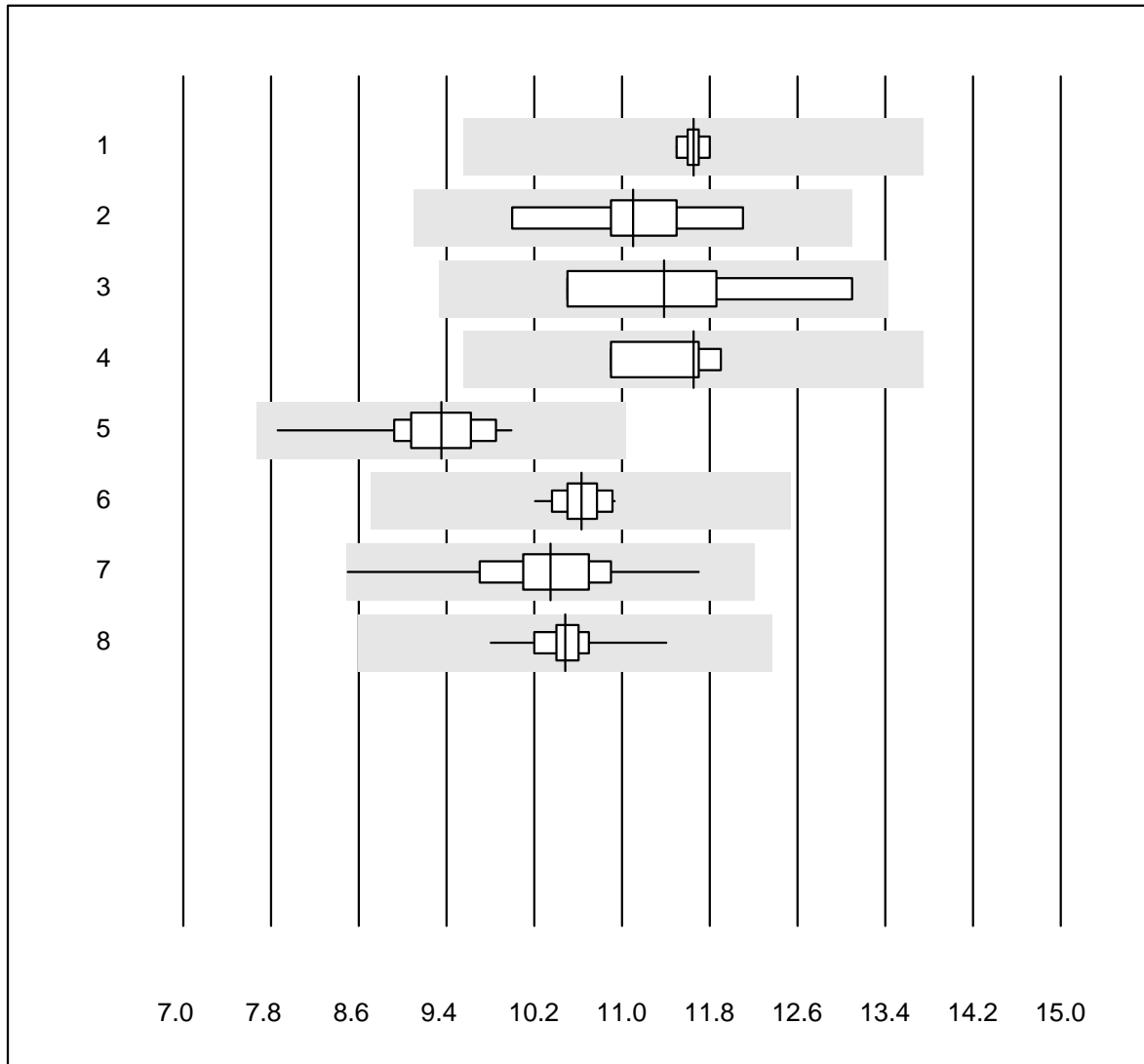
QUALAB tolerance : 18 %

Lactate-BG (mmol/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	GEM	6	100.0	0.0	0.0	11.65	0.9	e
2	Cobas b123	9	100.0	0.0	0.0	11.10	5.7	e
3	Roche, Cobas	4	100.0	0.0	0.0	11.38	10.0	e*
4	IL	4	100.0	0.0	0.0	11.65	3.8	e
5	EPOC	39	97.4	0.0	2.6	9.36	4.4	e
6	iStat	18	100.0	0.0	0.0	10.63	1.8	e
7	ABL700/800	101	100.0	0.0	0.0	10.35	5.1	e
8	ABL90 FLEX / PLUS	111	99.1	0.0	0.9	10.49	2.1	e

2 additional results were submitted but not published because the method groups were too small. (< results per group)

sO2 OR
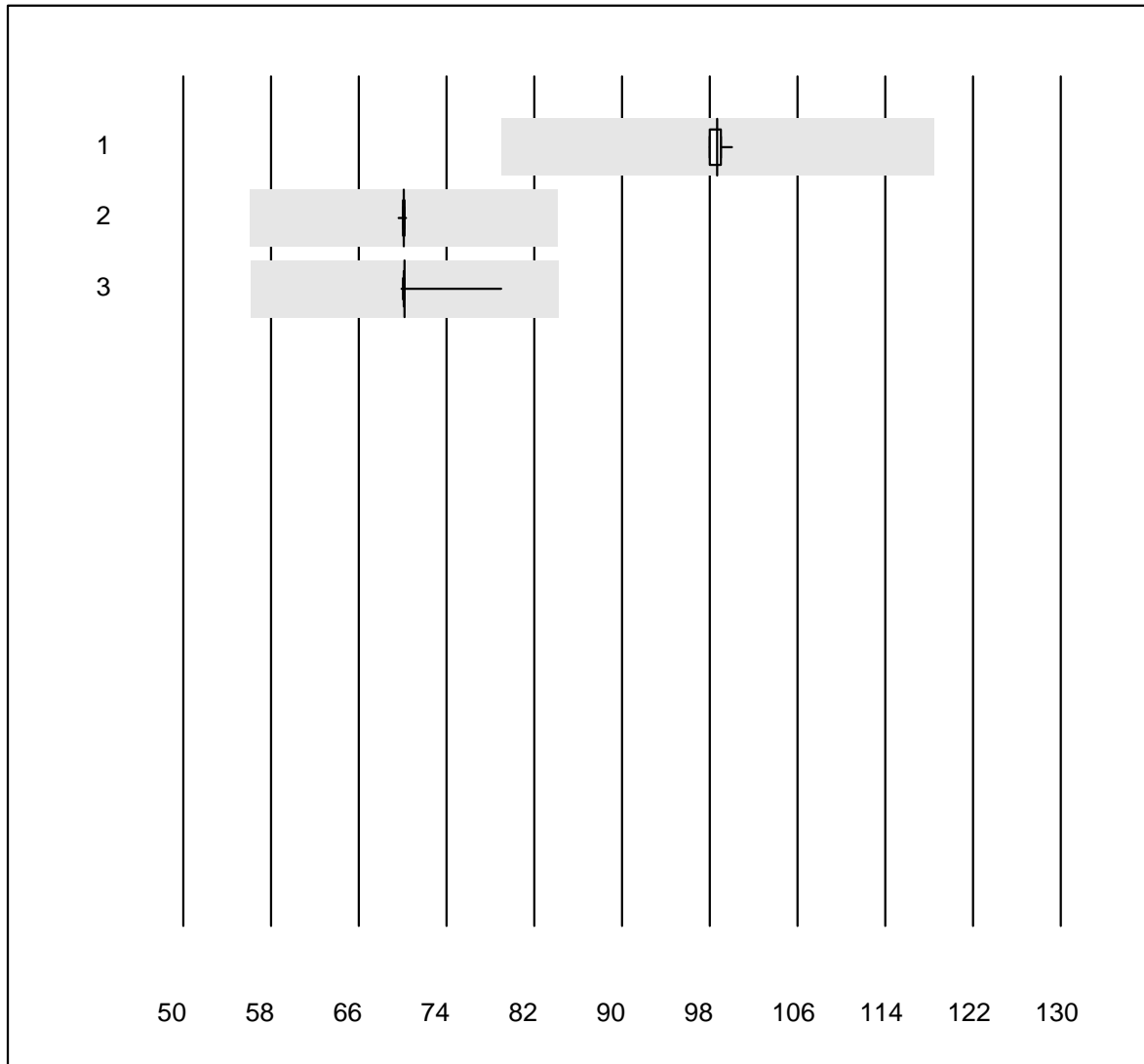
MQ tolerance : 20 %　　　　　sO2 OR (%)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	iStat	23	100.0	0.0	0.0	98.696	0.6	e
2	ABL700/800	88	100.0	0.0	0.0	70.093	0.1	e
3	ABL90 FLEX / PLUS	94	100.0	0.0	0.0	70.199	1.3	e

4 additional results were submitted but not published because the method groups were too small. (< results per group)

FO2Hb OR
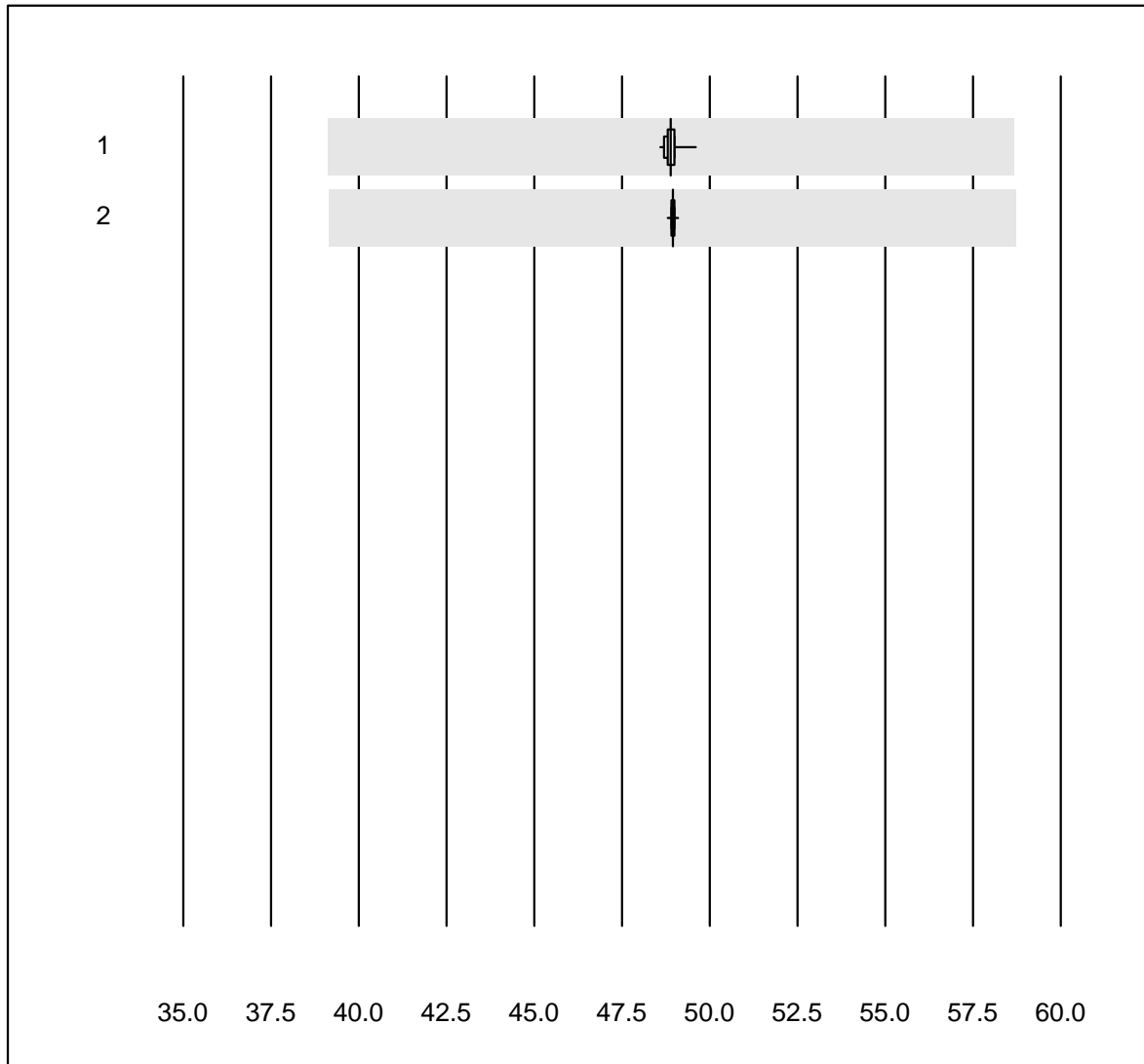
MQ tolerance : 20 % FO2Hb OR (%)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	ABL700/800	86	98.8	0.0	1.2	48.894	0.3	e
2	ABL90 FLEX / PLUS	94	100.0	0.0	0.0	48.945	0.1	e

3 additional results were submitted but not published because the method groups were too small. (< results per group)

FCOHb OR
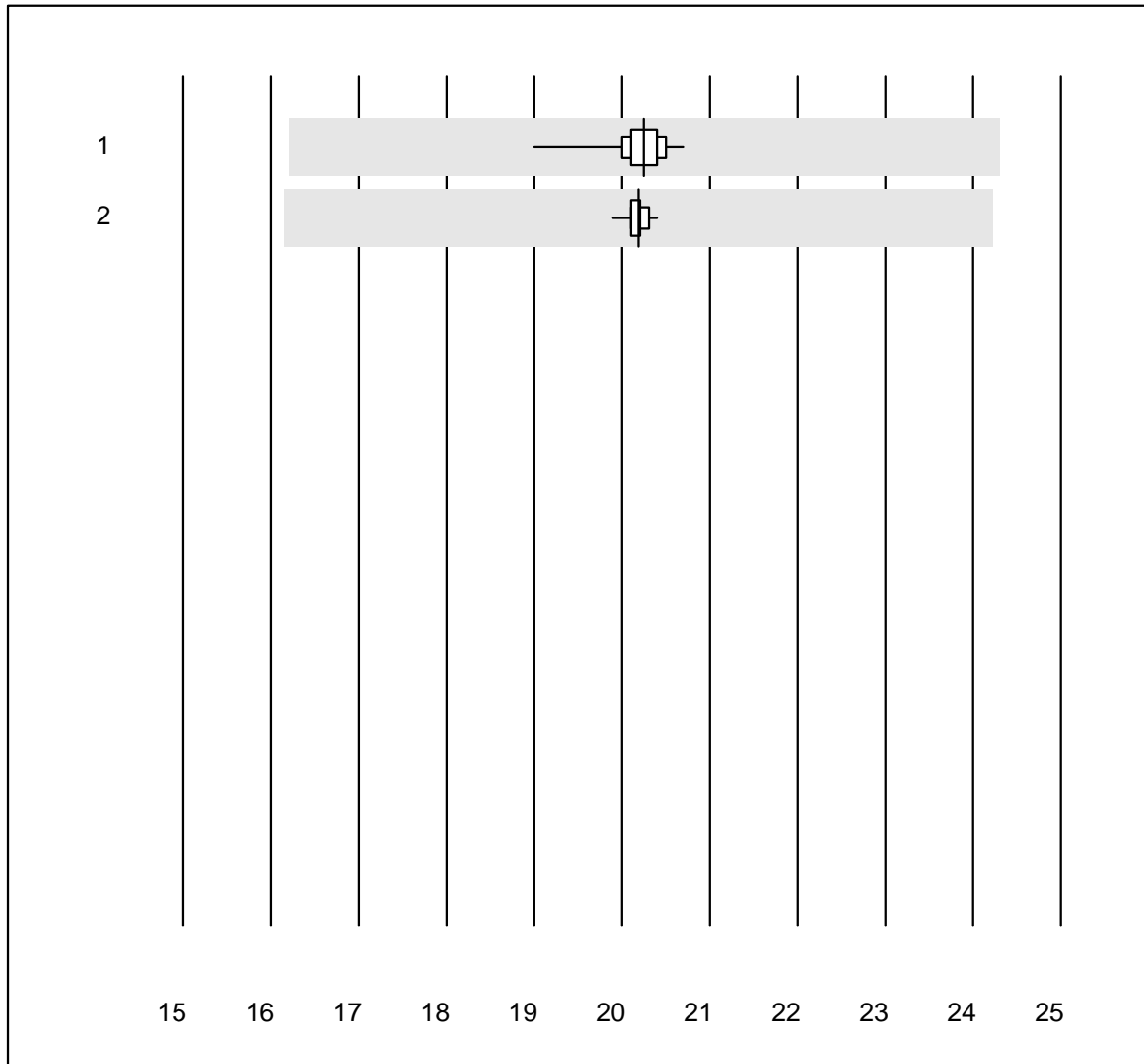
MQ tolerance : 20 %

FCOHb OR (%)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	ABL700/800	87	100.0	0.0	0.0	20.247	1.2	e
2	ABL90 FLEX / PLUS	94	100.0	0.0	0.0	20.183	0.5	e

3 additional results were submitted but not published because the method groups were too small. (< results per group)

FMetHb OR
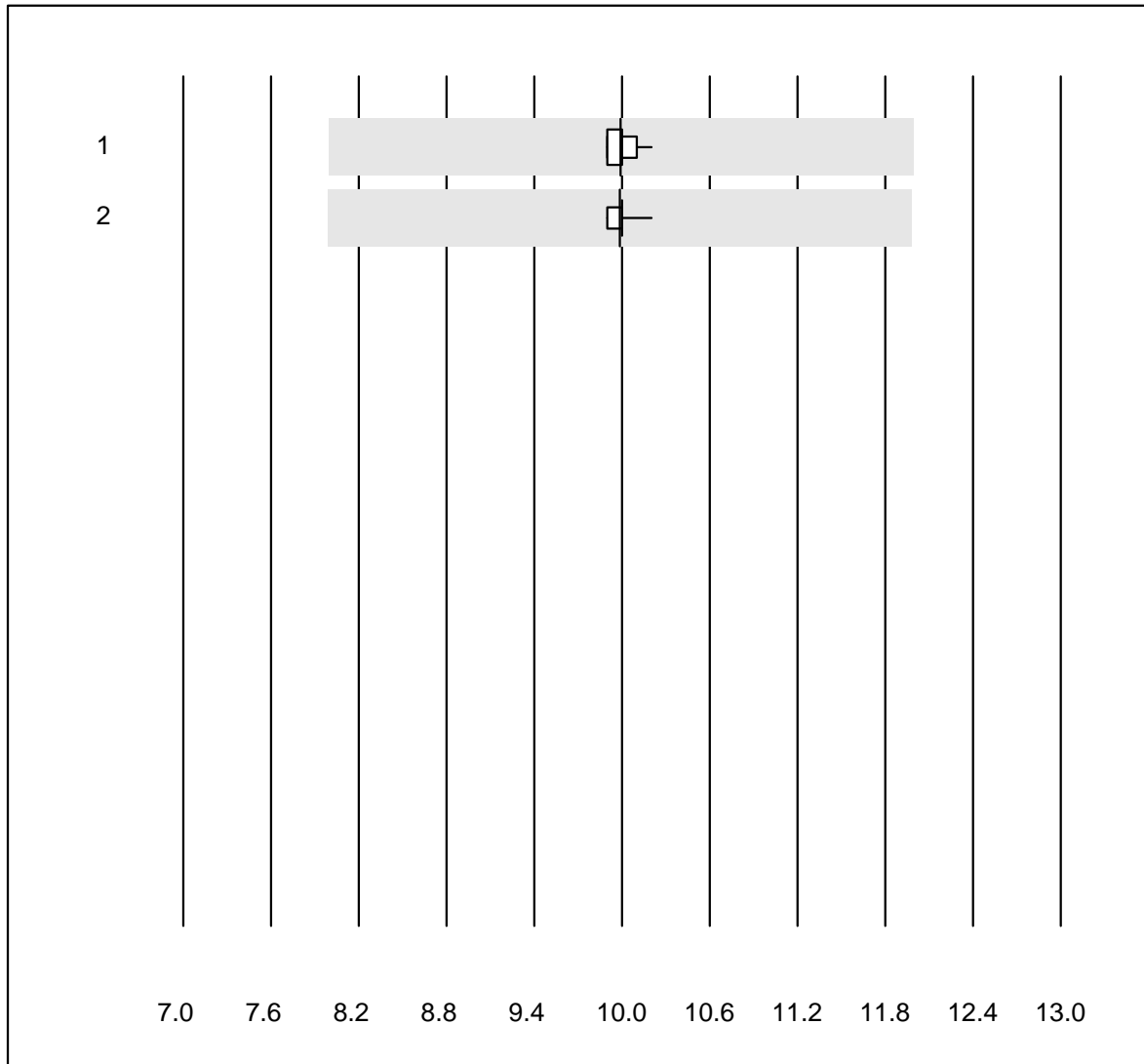
MQ tolerance : 20 %   FMetHb OR (%)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	ABL700/800	87	100.0	0.0	0.0	9.992	0.8	e
2	ABL90 FLEX / PLUS	94	98.9	0.0	1.1	9.985	0.5	e

3 additional results were submitted but not published because the method groups were too small. (< results per group)

FHbF OR

```
1
```

40.0   42.5   45.0   47.5   50.0   52.5   55.0   57.5   60.0   62.5   65.0
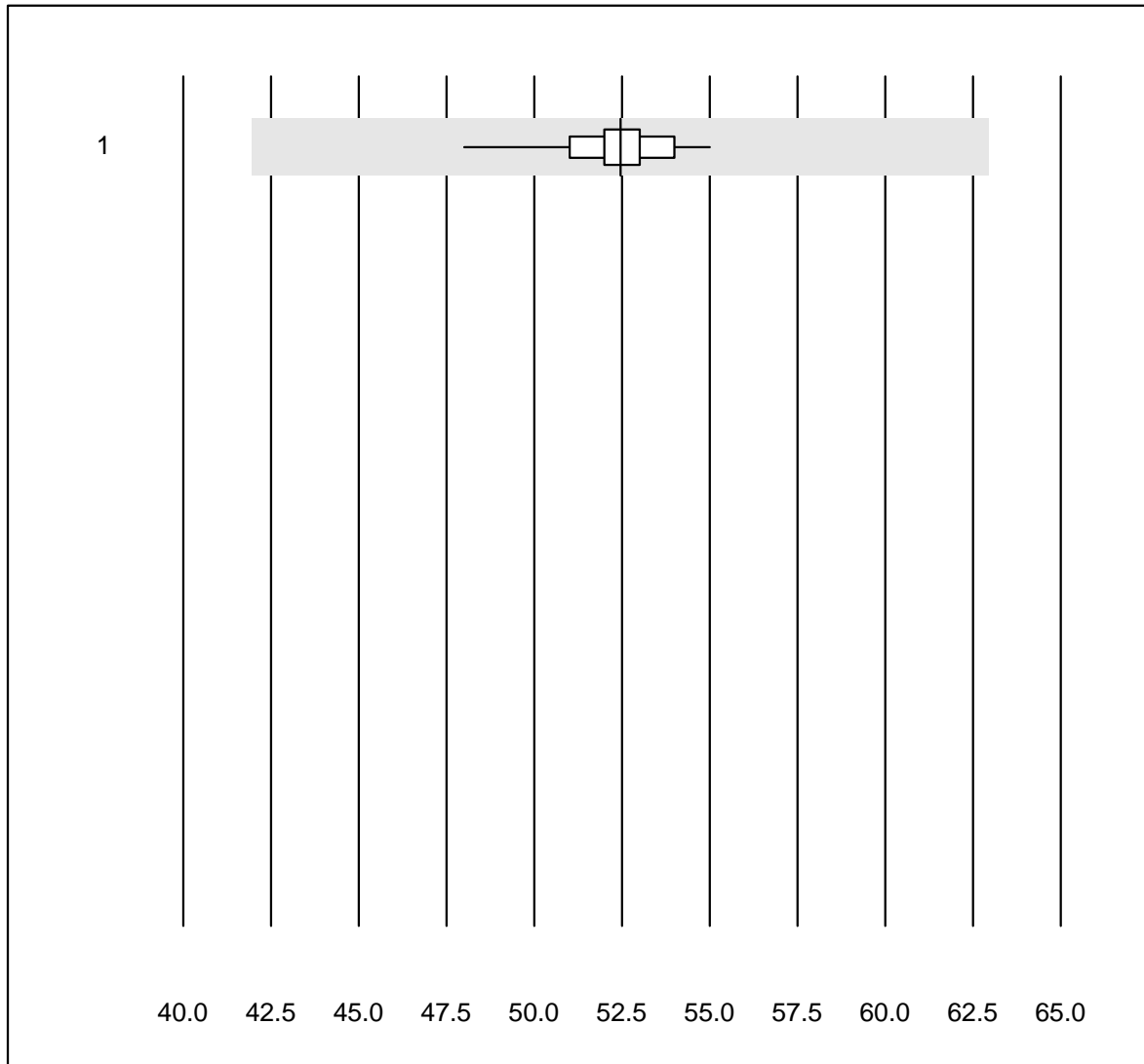
FHbF OR (%)

MQ tolerance : 20 %

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	ABL90 FLEX / PLUS	34	97.1	0.0	2.9	52.455	2.7	e

2 additional results were submitted but not published because the method groups were too small. (< results per group)

Bilirubin OR
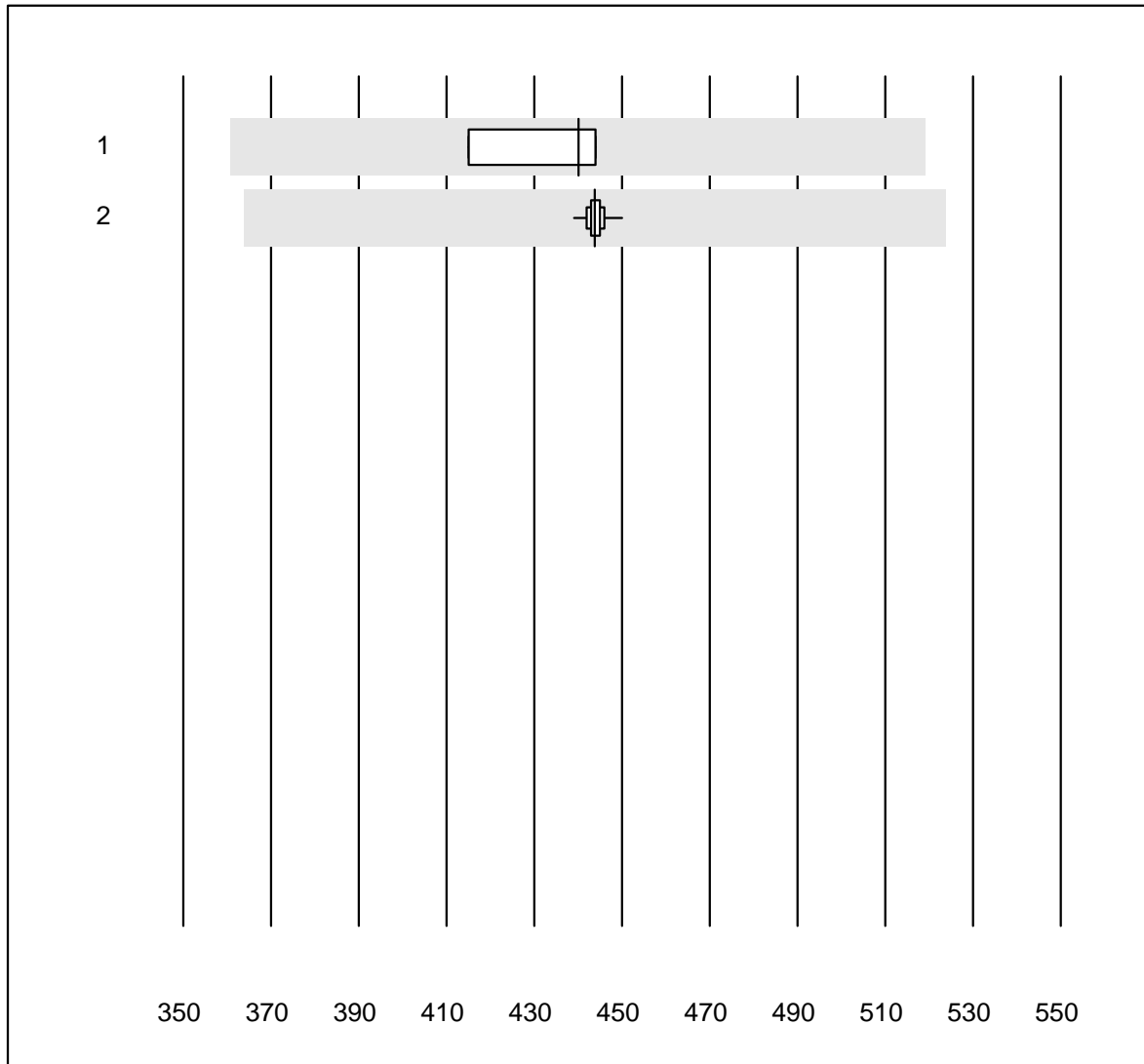
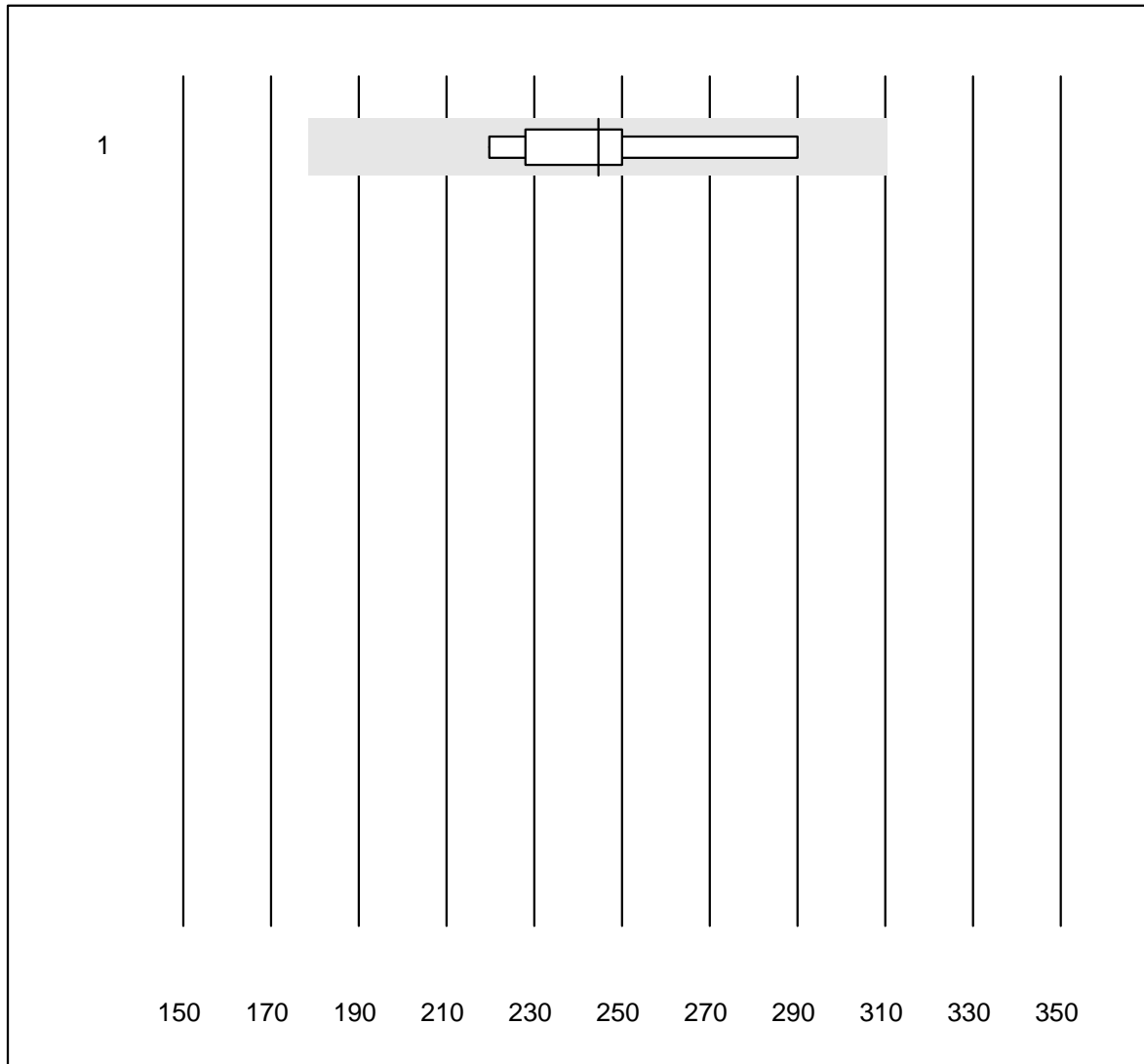QUALAB tolerance : 18 %

Bilirubin OR (µmol/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	ABL700/800	5	80.0	0.0	20.0	440.0	3.2	e
2	ABL90 FLEX / PLUS	33	100.0	0.0	0.0	443.8	0.5	e

Troponin I
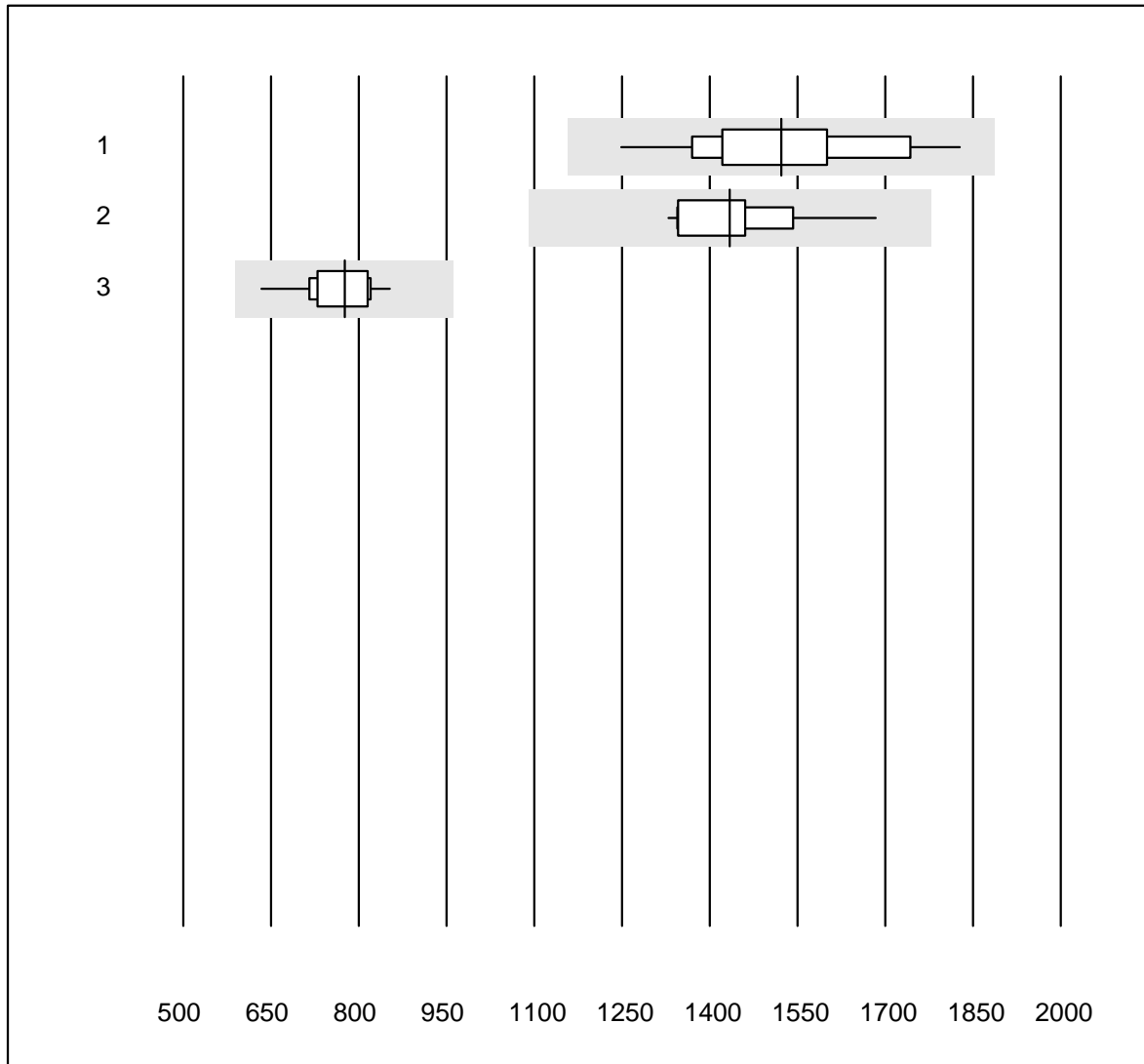
QUALAB tolerance : 24 %

Troponin I (ng/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Pathfast	25	96.0	0.0	4.0	1521.9	9.7	e
2	Vidas	12	100.0	0.0	0.0	1433.9	7.1	e
3	Architect High Sensi	11	100.0	0.0	0.0	775.5	8.0	e

9 additional results were submitted but not published because the method groups were too small. (< results per group)

Troponin T
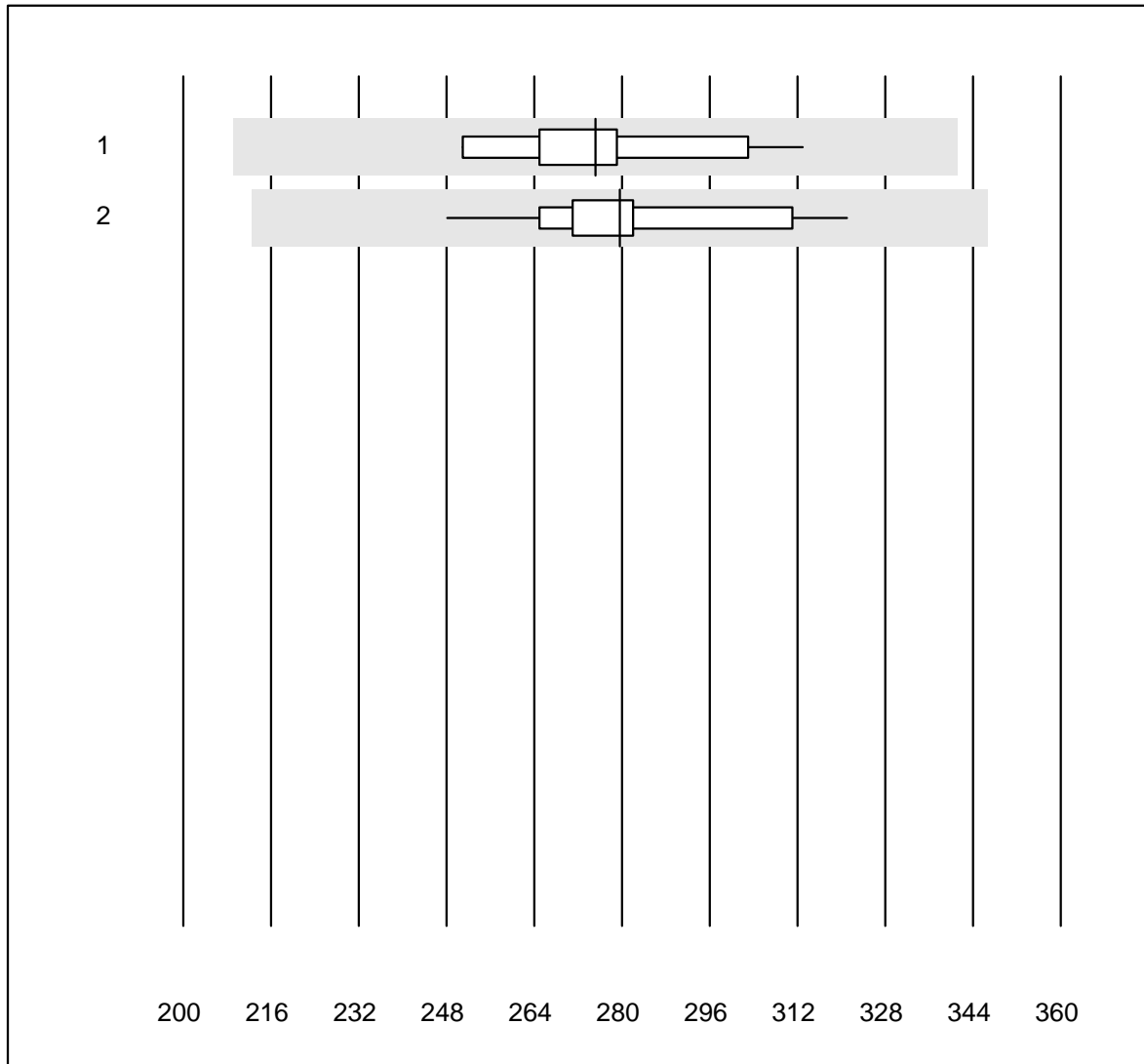
QUALAB tolerance : 24 %

Troponin T (ng/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Cobas hs	14	92.9	0.0	7.1	275.16	7.2	e
2	Cobas hs STAT	13	100.0	0.0	0.0	279.55	6.7	e

One result was submitted but not pubished because the method group was too small. (< 4 results per group)

Myoglobin
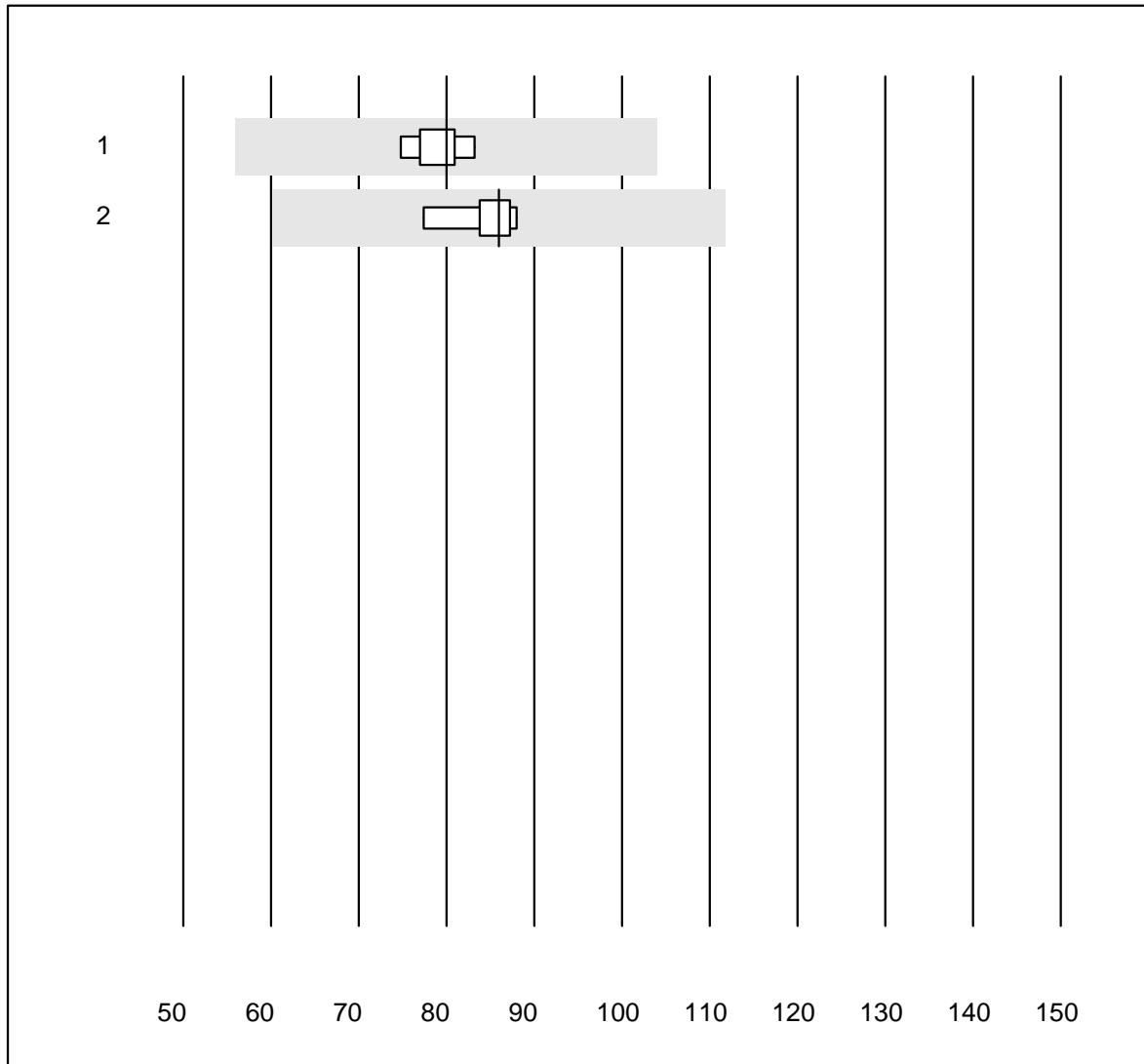
QUALAB tolerance : 30 %

Myoglobin (µg/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Cobas E / Elecsys	7	100.0	0.0	0.0	80.0	3.5	e
2	Abbott	5	100.0	0.0	0.0	86.0	5.0	e

4 additional results were submitted but not published because the method groups were too small. (< results per group)

CK-MB mass

3.0   4.3   5.6   6.9   8.2   9.5   10.8   12.1   13.4   14.7   16.0
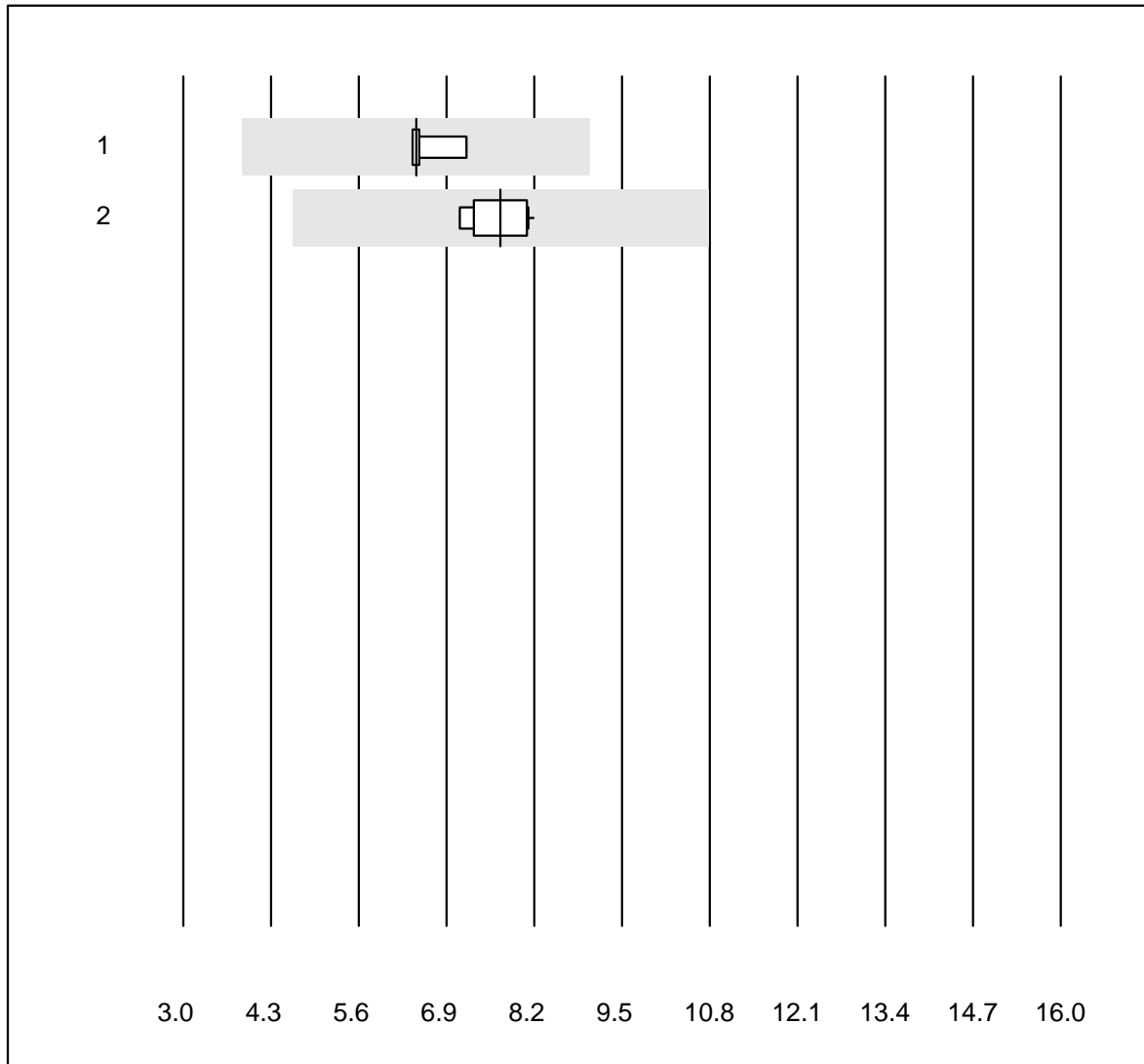
MQ tolerance : 40 %

CK-MB mass (µg/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Abbott	4	100.0	0.0	0.0	6.5	5.8	e
2	Cobas E / Elecsys	10	100.0	0.0	0.0	7.7	5.2	e

6 additional results were submitted but not published because the method groups were too small. (< results per group)

BNP

150   170   190   210   230   250   270   290   310   330   350

QUALAB tolerance : 27 %   BNP (ng/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Other methods	6	100.0	0.0	0.0	244.5	10.6	a

2 additional results were submitted but not published because the method groups were too small. (< results per group)

NT-proBNP

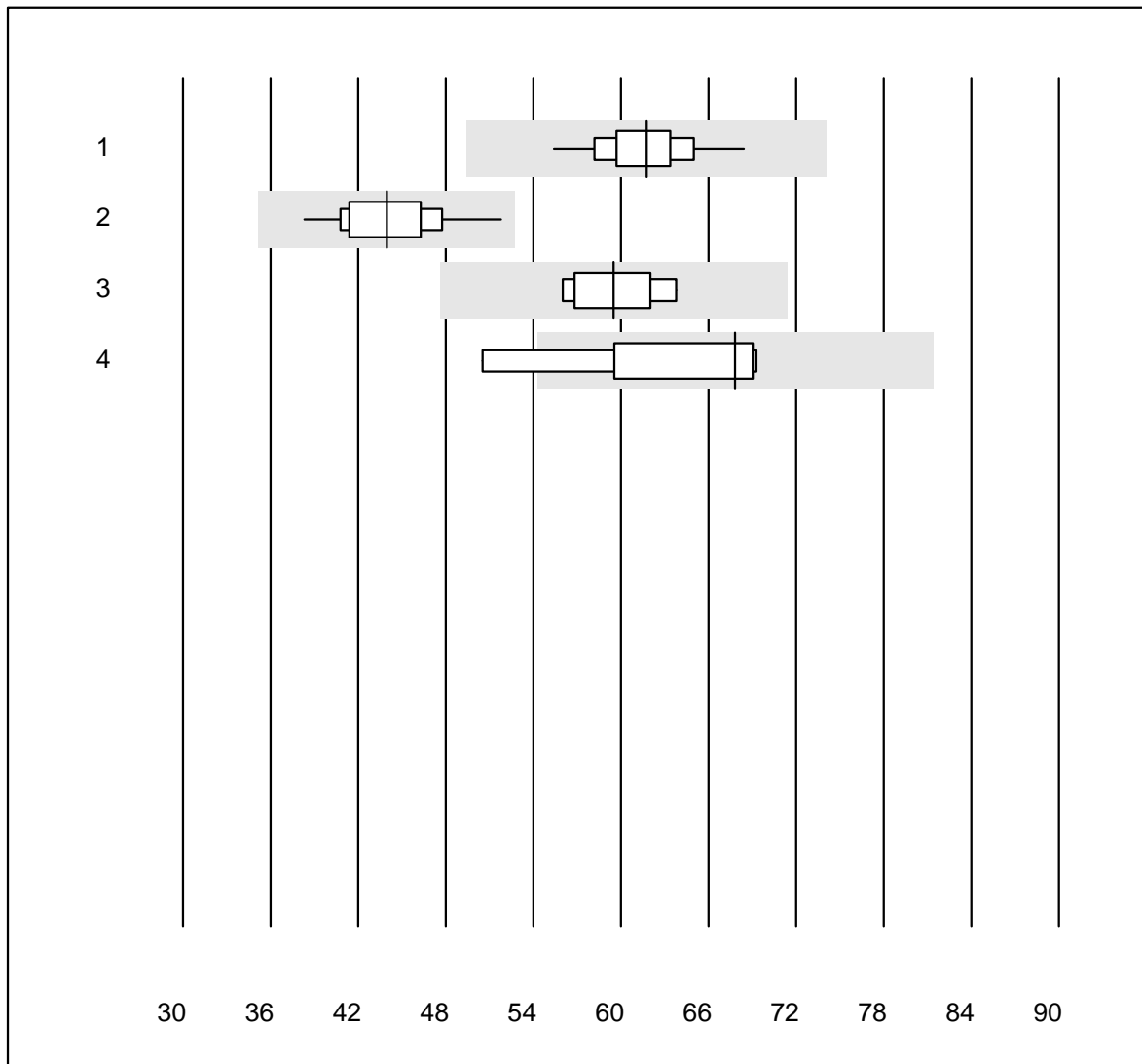QUALAB tolerance : 27 %

NT-proBNP (ng/l)
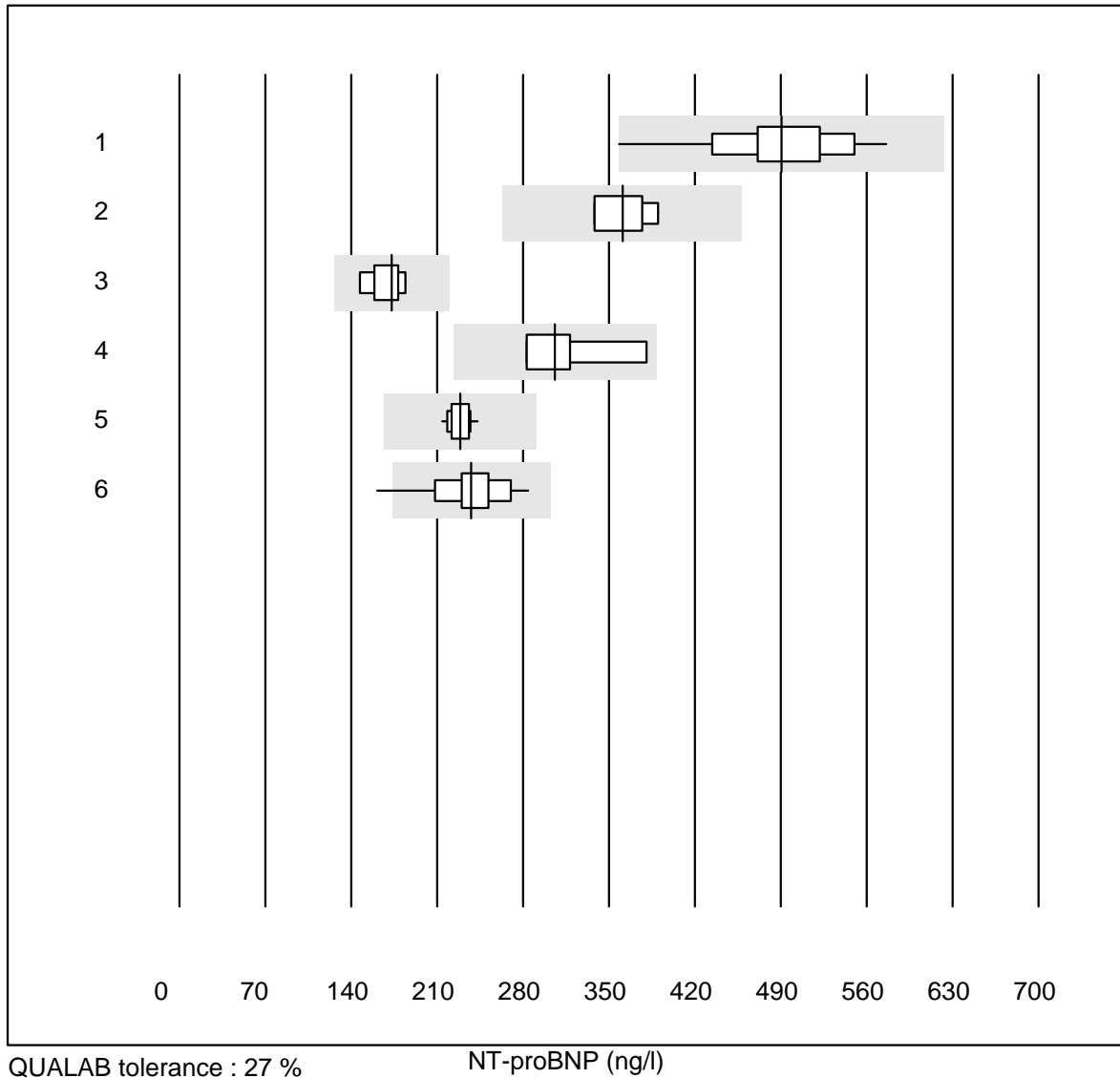
No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Pathfast	21	95.2	4.8	0.0	490.9	10.6	e
2	AQT 90 FLEX	4	100.0	0.0	0.0	361.0	6.9	e*
3	VIDAS	9	100.0	0.0	0.0	173.0	8.5	e
4	Other methods	4	100.0	0.0	0.0	306.0	13.7	e*
5	Cobas E / Elecsys	22	100.0	0.0	0.0	229.1	3.4	e
6	Abbott	11	90.9	9.1	0.0	237.9	13.6	e*

3 additional results were submitted but not published because the method groups were too small. (< results per group)

TSH
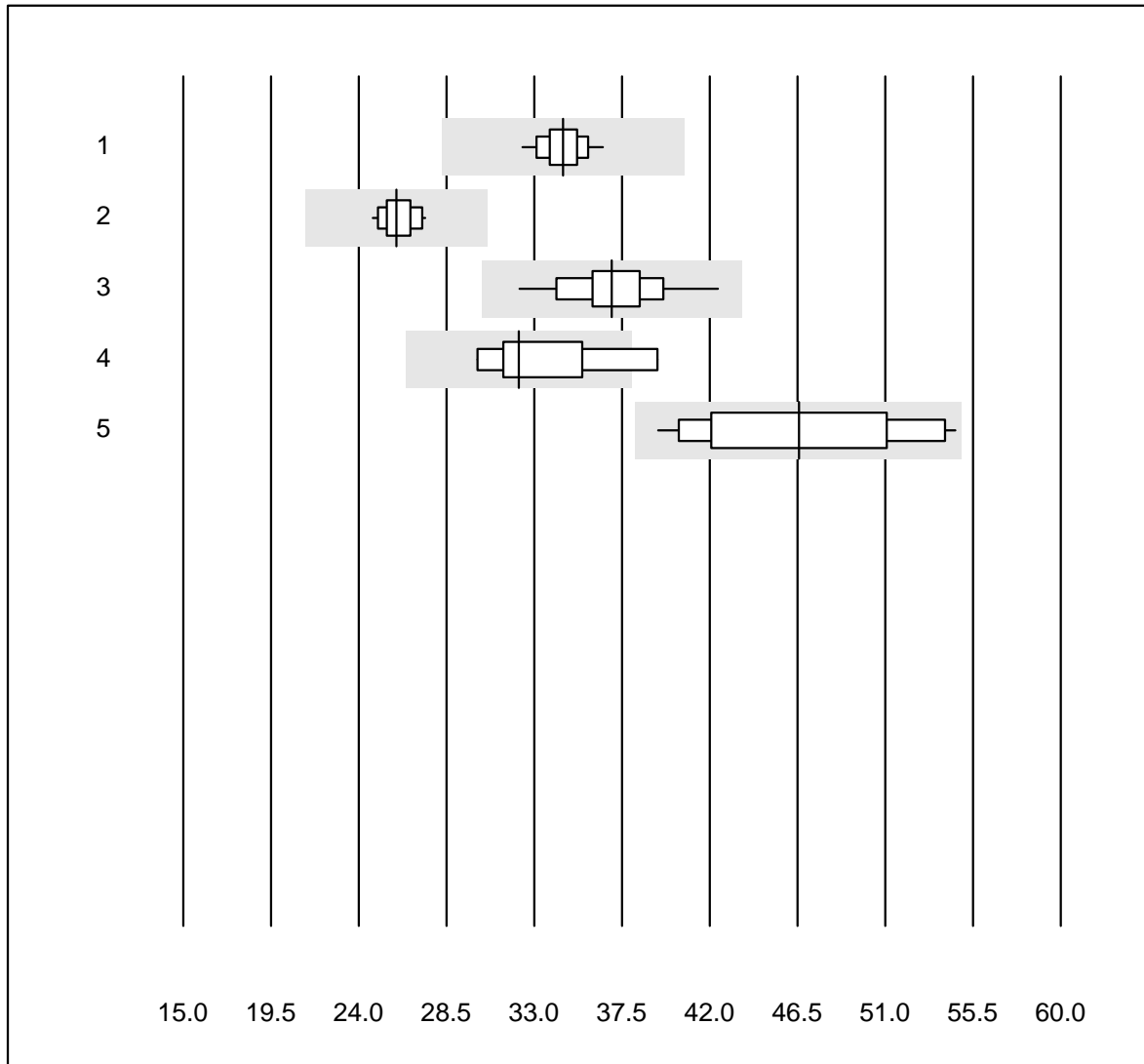
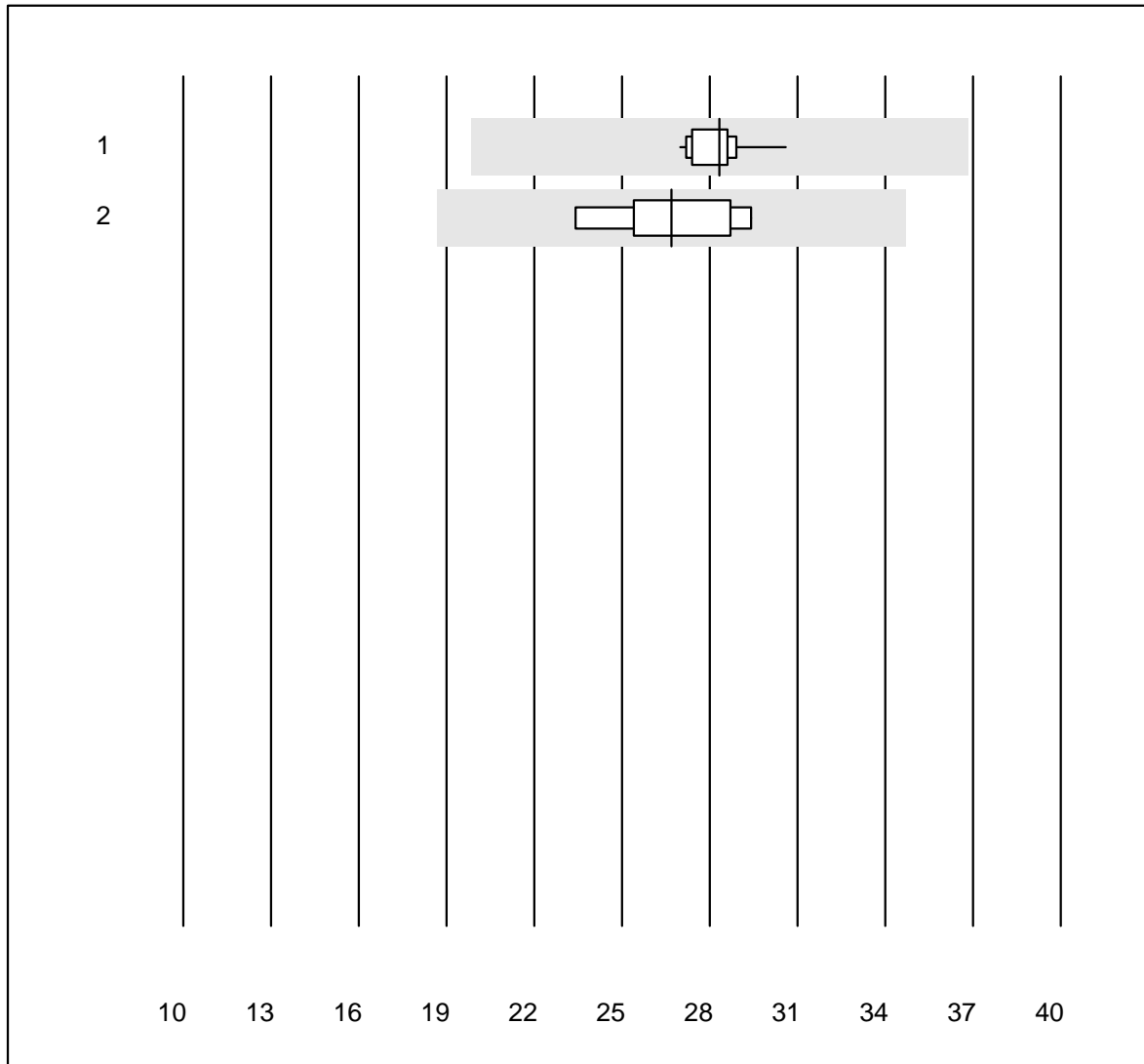QUALAB tolerance : 18 %

TSH (mU/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Cobas E / Elecsys	29	100.0	0.0	0.0	34.49	2.9	e
2	Abbott	13	100.0	0.0	0.0	25.93	3.4	e
3	VIDAS	14	100.0	0.0	0.0	36.96	6.8	e
4	Dimension	6	66.6	16.7	16.7	32.20	10.8	e*
5	AFIAS	16	93.7	0.0	6.3	46.56	11.1	e*

6 additional results were submitted but not published because the method groups were too small. (< results per group)

T3
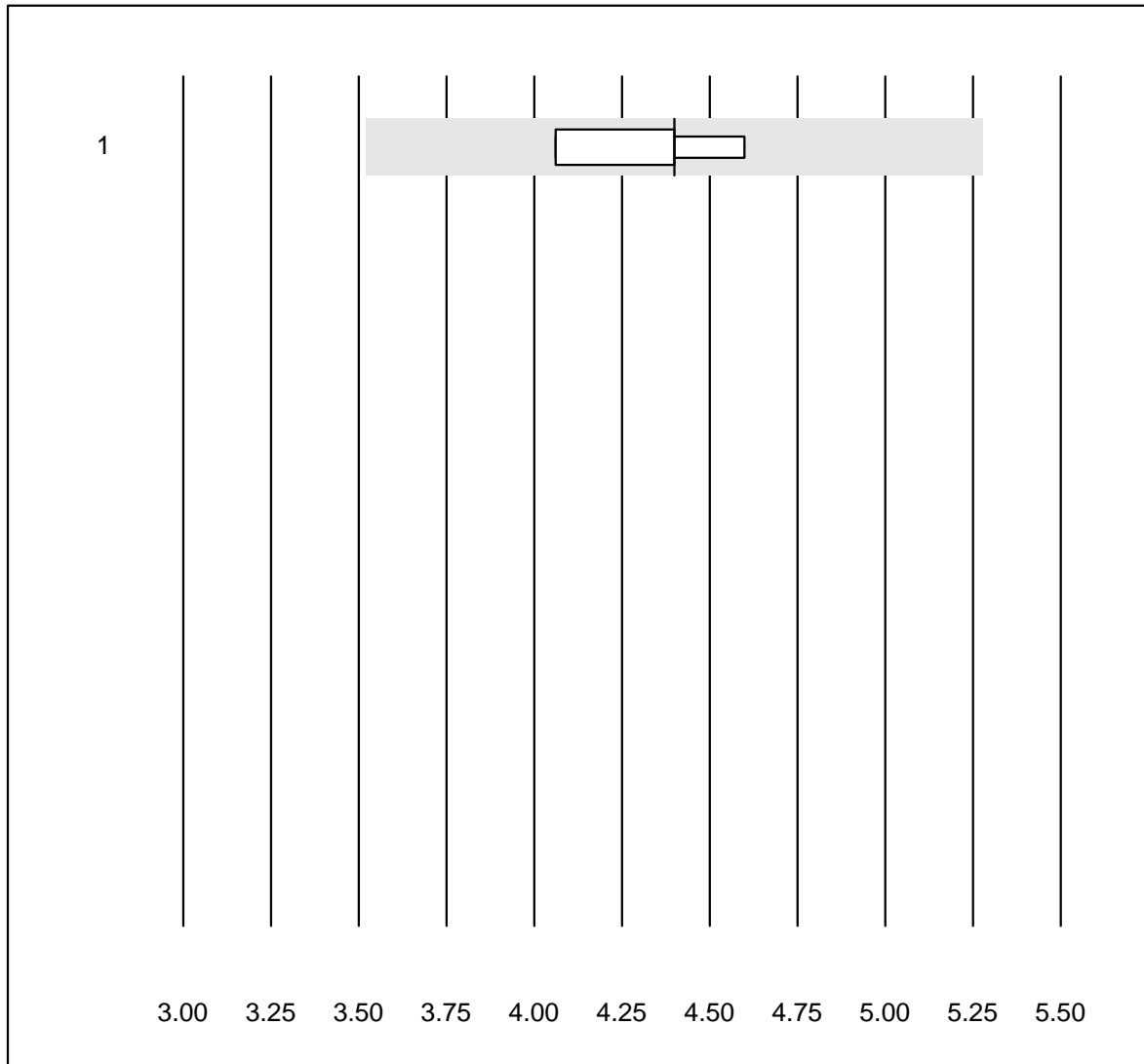
3.00 3.25 3.50 3.75 4.00 4.25 4.50 4.75 5.00 5.25 5.50

T3 (nmol/l)

MQ tolerance : 20 %

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Abbott	4	100.0	0.0	0.0	4.4	5.1	e*

4 additional results were submitted but not published because the method groups were too small. (< results per group)

T4

150 163 176 189 202 215 228 241 254 267 280
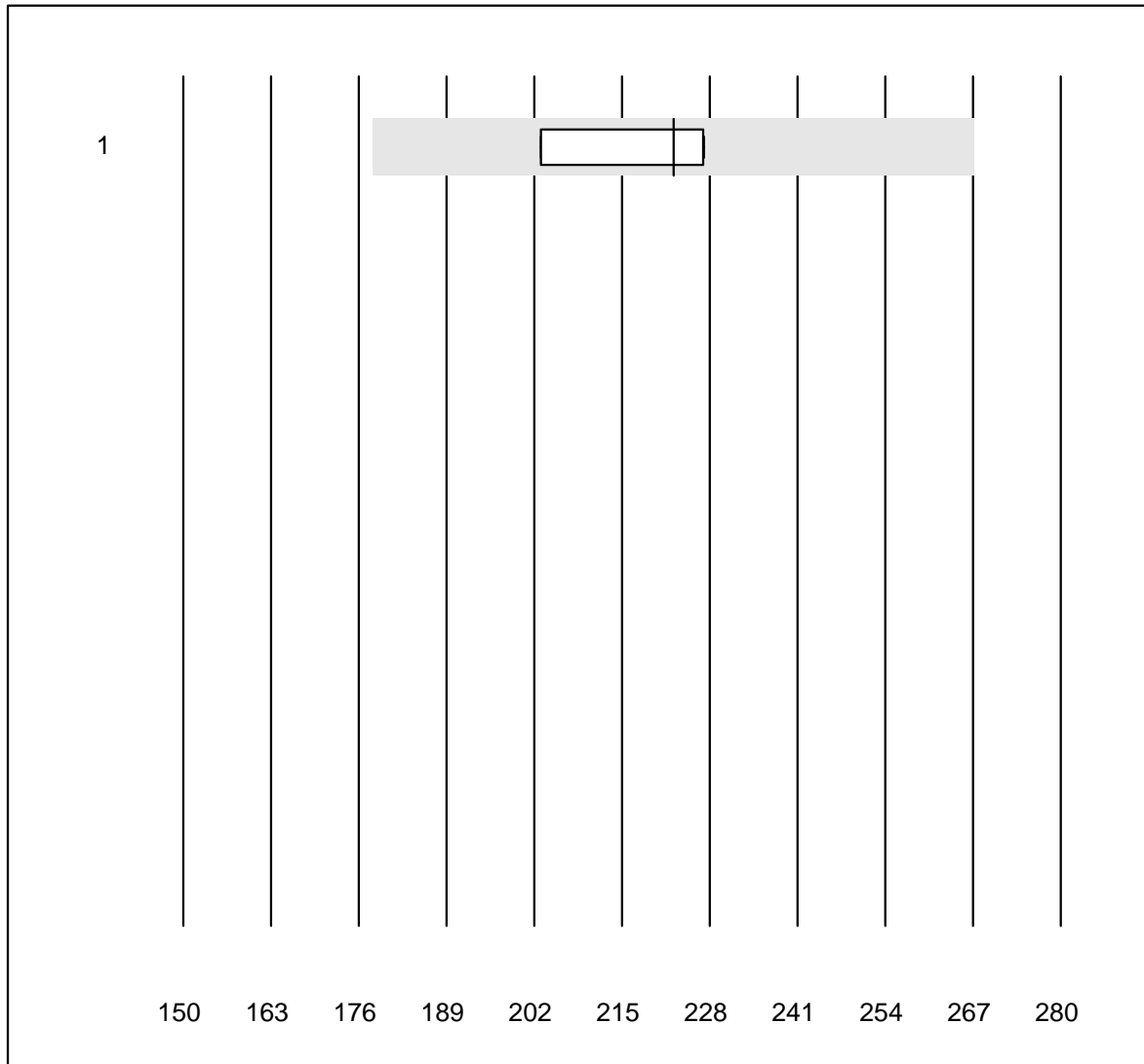
MQ tolerance : 20 %   T4 (nmol/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Abbott	4	100.0	0.0	0.0	223	5.2	e*

3 additional results were submitted but not published because the method groups were too small. (< results per group)

FT3
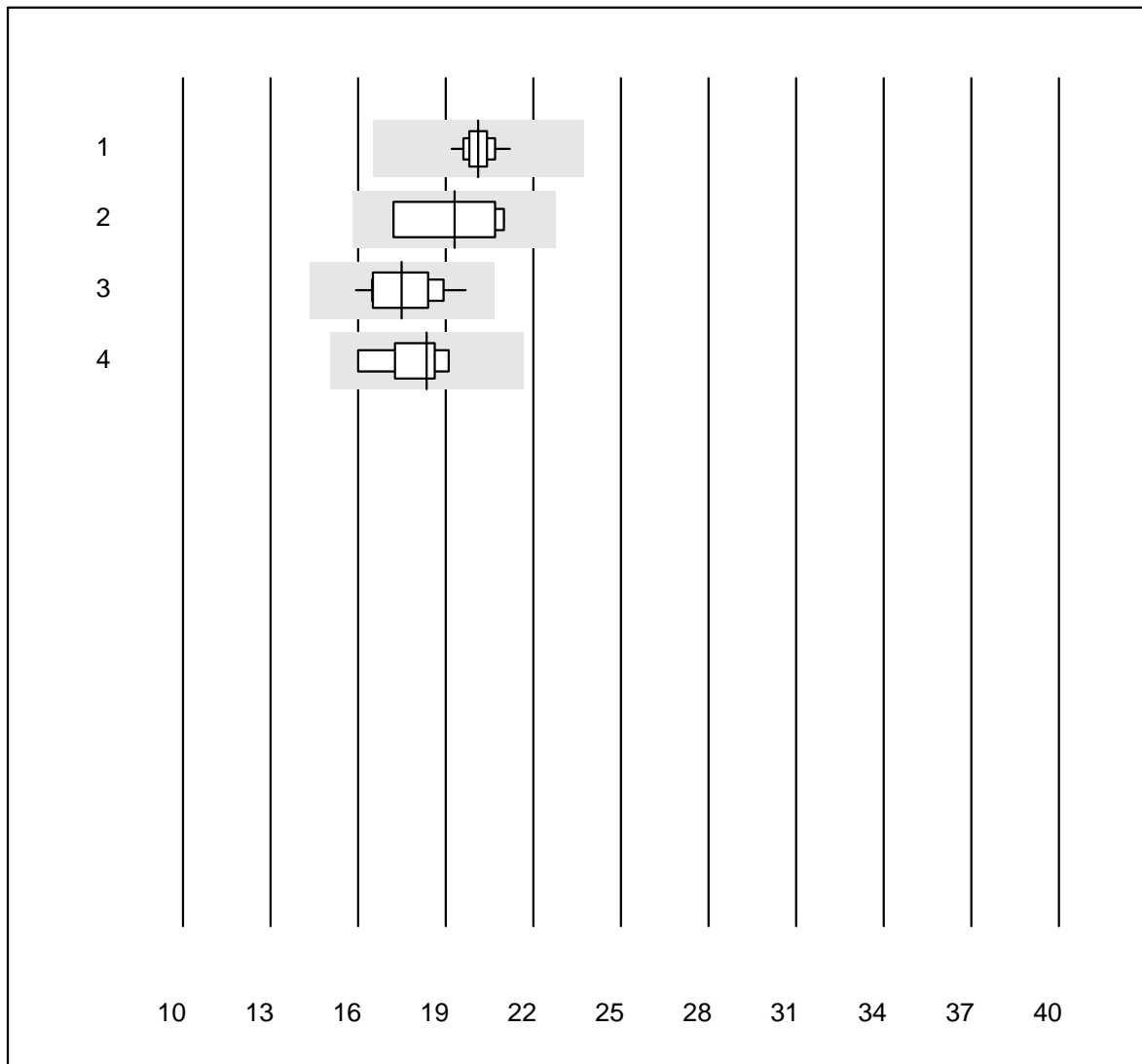
QUALAB tolerance : 18 %

FT3 (pmol/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Cobas E / Elecsys	25	100.0	0.0	0.0	20.1	2.3	e
2	ADVIA Centaur XP/CP	4	100.0	0.0	0.0	19.3	10.1	e*
3	Abbott	11	100.0	0.0	0.0	17.5	6.8	e
4	VIDAS	7	100.0	0.0	0.0	18.4	5.8	e*

3 additional results were submitted but not published because the method groups were too small. (< results per group)

FT4

QUALAB tolerance : 20 %   FT4 (pmol/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Cobas E / Elecsys	26	100.0	0.0	0.0	61.7	4.6	e
2	Abbott	12	100.0	0.0	0.0	44.0	8.3	e
3	VIDAS	8	100.0	0.0	0.0	59.5	4.9	e
4	Other methods	7	85.7	14.3	0.0	67.8	10.8	e*

4 additional results were submitted but not published because the method groups were too small. (< results per group)

Testosterone

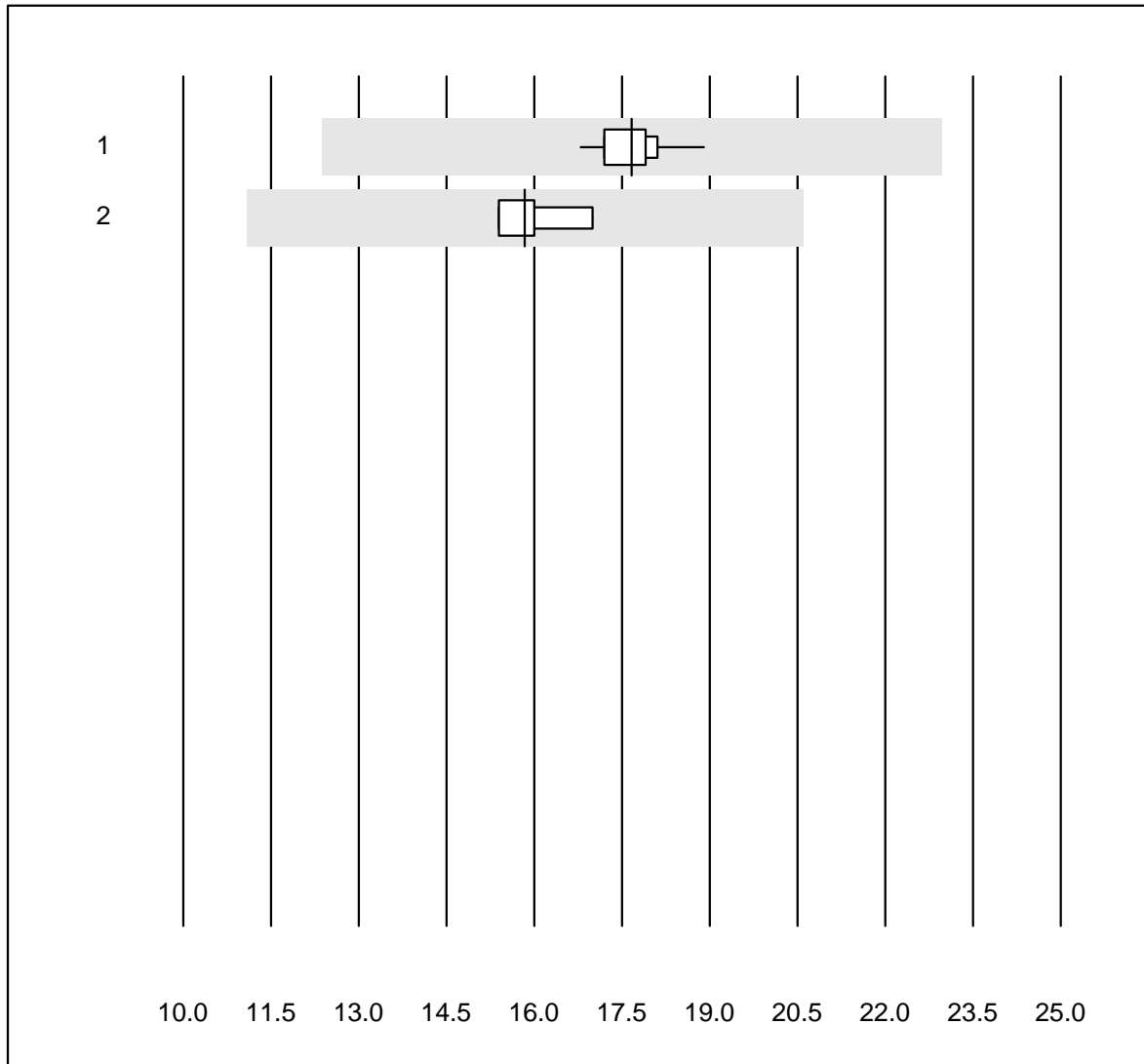QUALAB tolerance : 30 %

Testosterone (nmol/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Cobas	12	100.0	0.0	0.0	28.3	3.3	e
2	ADVIA Centaur XP/CP	6	100.0	0.0	0.0	26.7	8.2	e

4 additional results were submitted but not published because the method groups were too small. (< results per group)

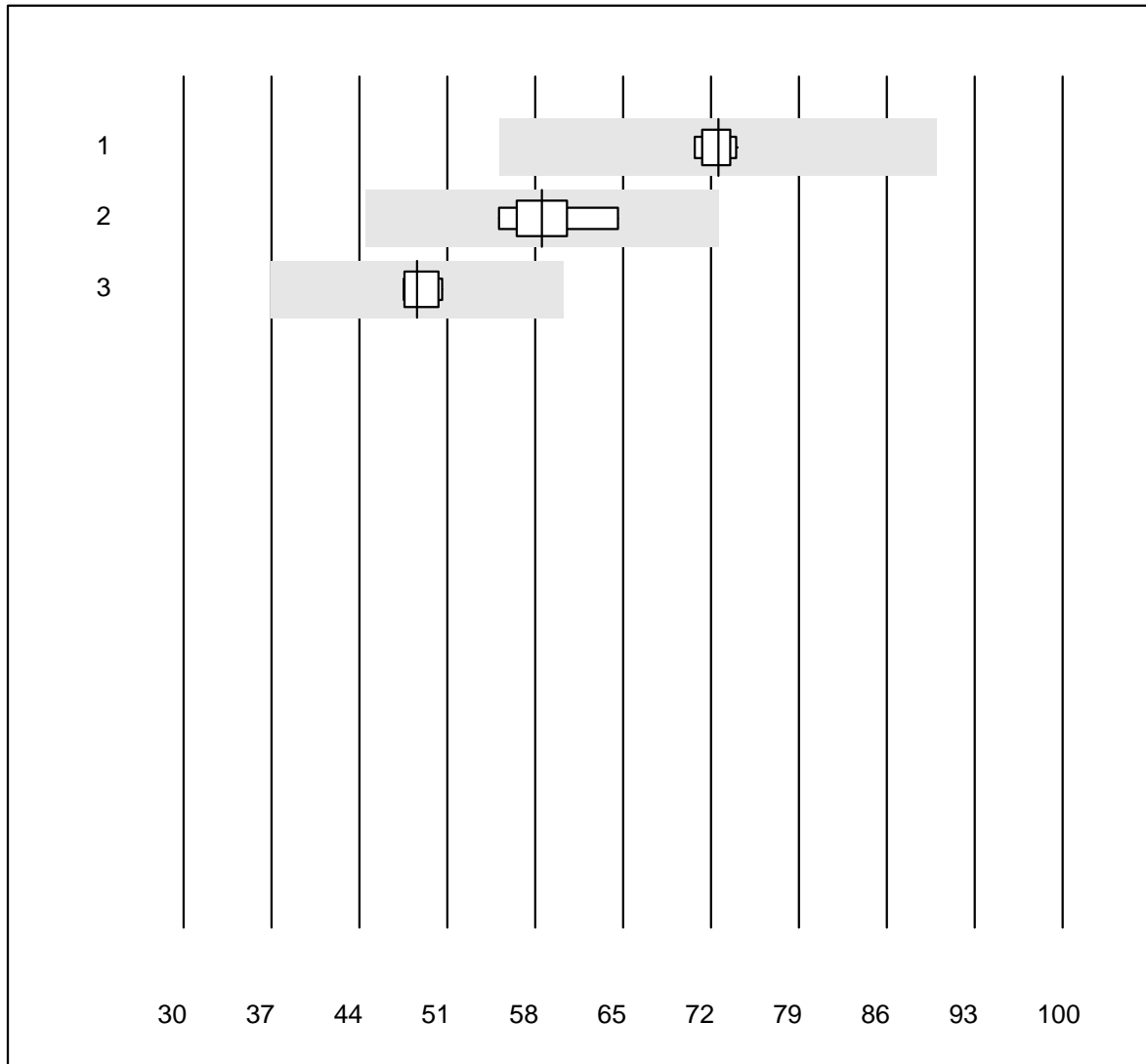# Estradiol
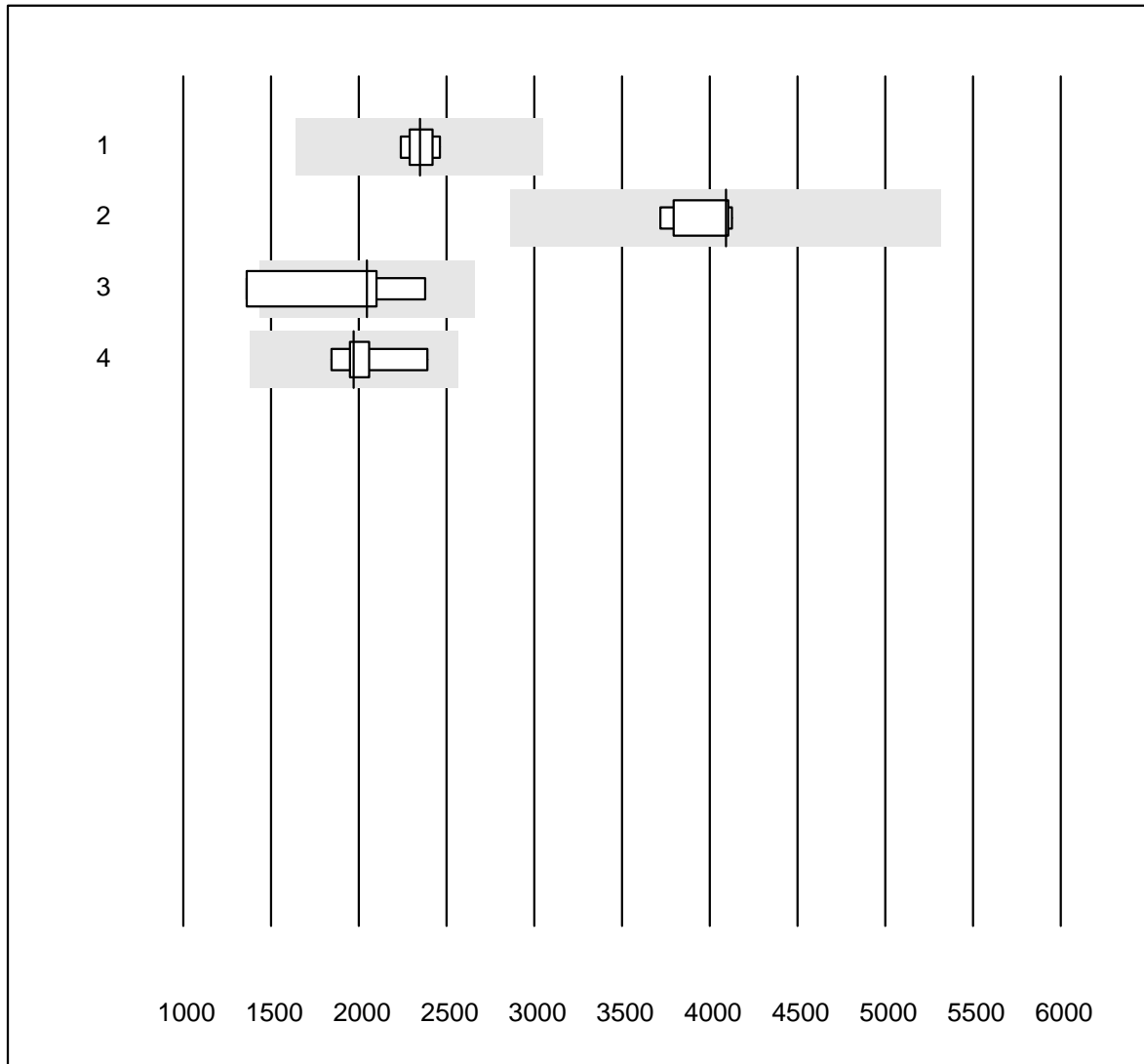
QUALAB tolerance : 30 % Estradiol (pmol/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Cobas	10	100.0	0.0	0.0	2348	3.3	e
2	ADVIA Centaur XP/CP	5	100.0	0.0	0.0	4093	4.9	e
3	all Participants	4	75.0	25.0	0.0	2047	21.9	e*
4	Abbott	7	100.0	0.0	0.0	1970	8.6	e

SHBG
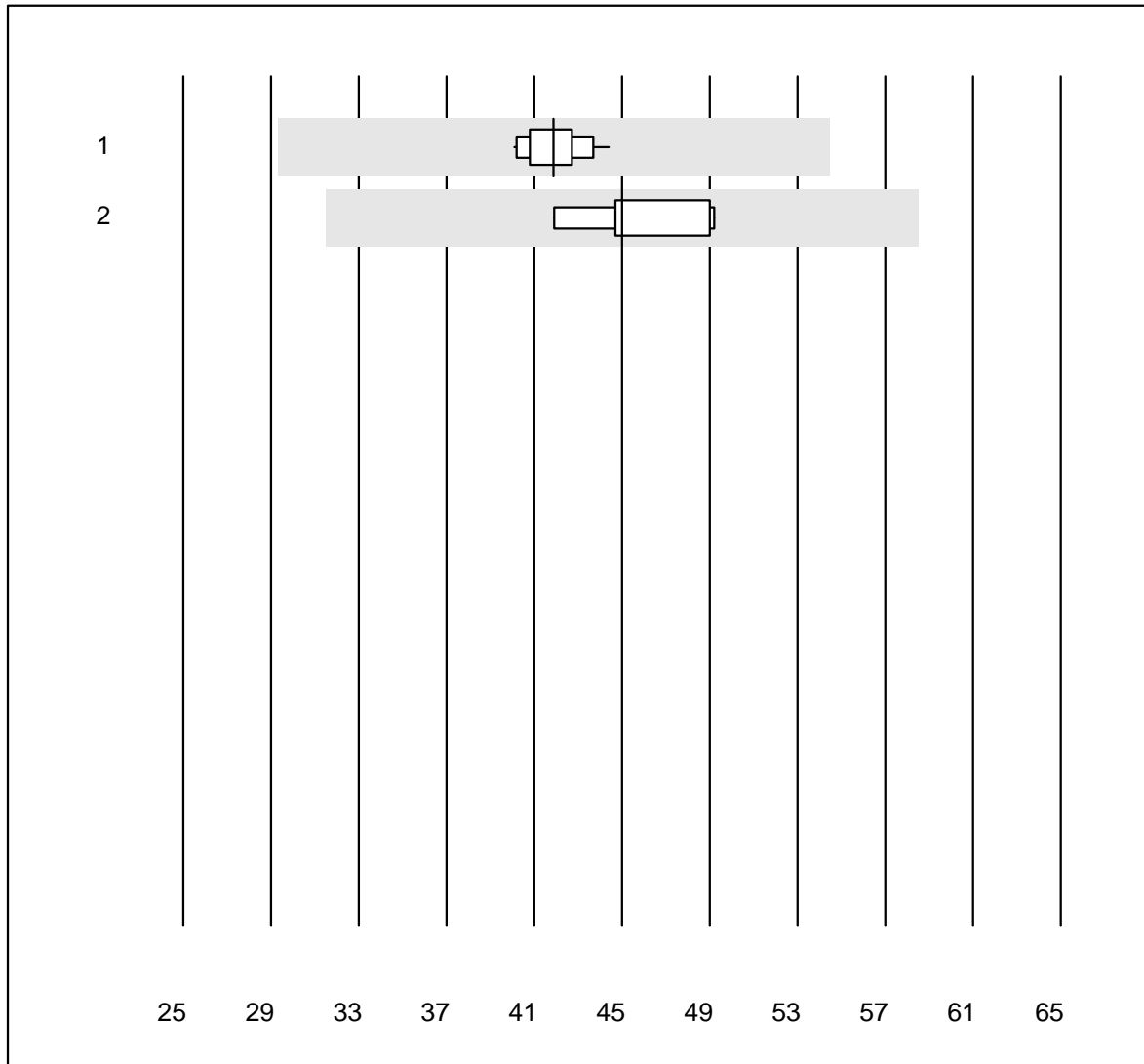
MQ tolerance : 30 %

SHBG (nmol/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Cobas	16	100.0	0.0	0.0	41.9	3.1	e
2	Abbott	5	100.0	0.0	0.0	45.0	6.8	e

3 additional results were submitted but not published because the method groups were too small. (< results per group)

Cortisol
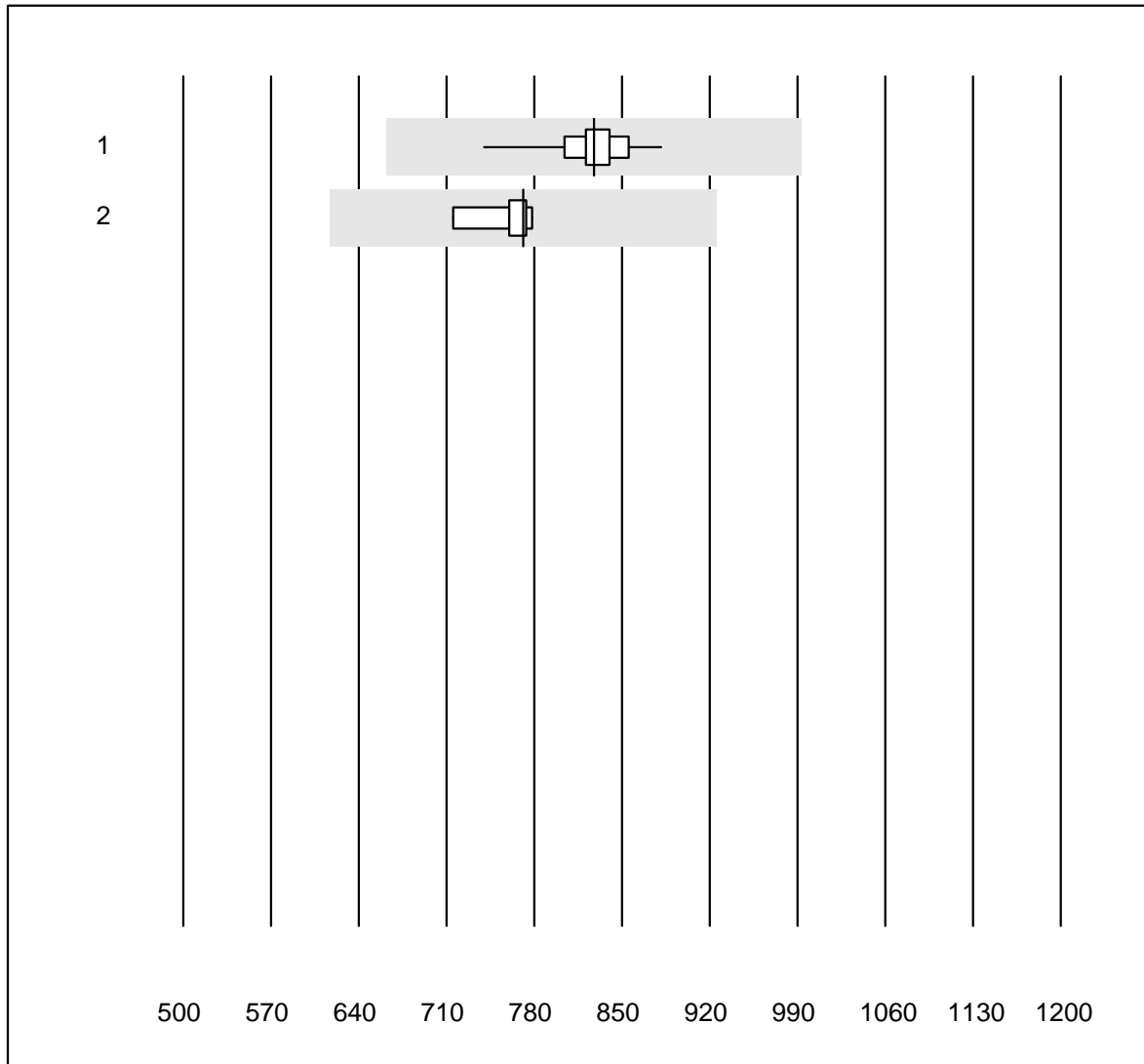
QUALAB tolerance : 20 %

Cortisol (nmol/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Cobas E / Elecsys	21	100.0	0.0	0.0	828	3.4	e
2	Abbott	5	100.0	0.0	0.0	771	3.4	e

4 additional results were submitted but not published because the method groups were too small. (< results per group)

Progesteron

40 47 54 61 68 75 82 89 96 103 110
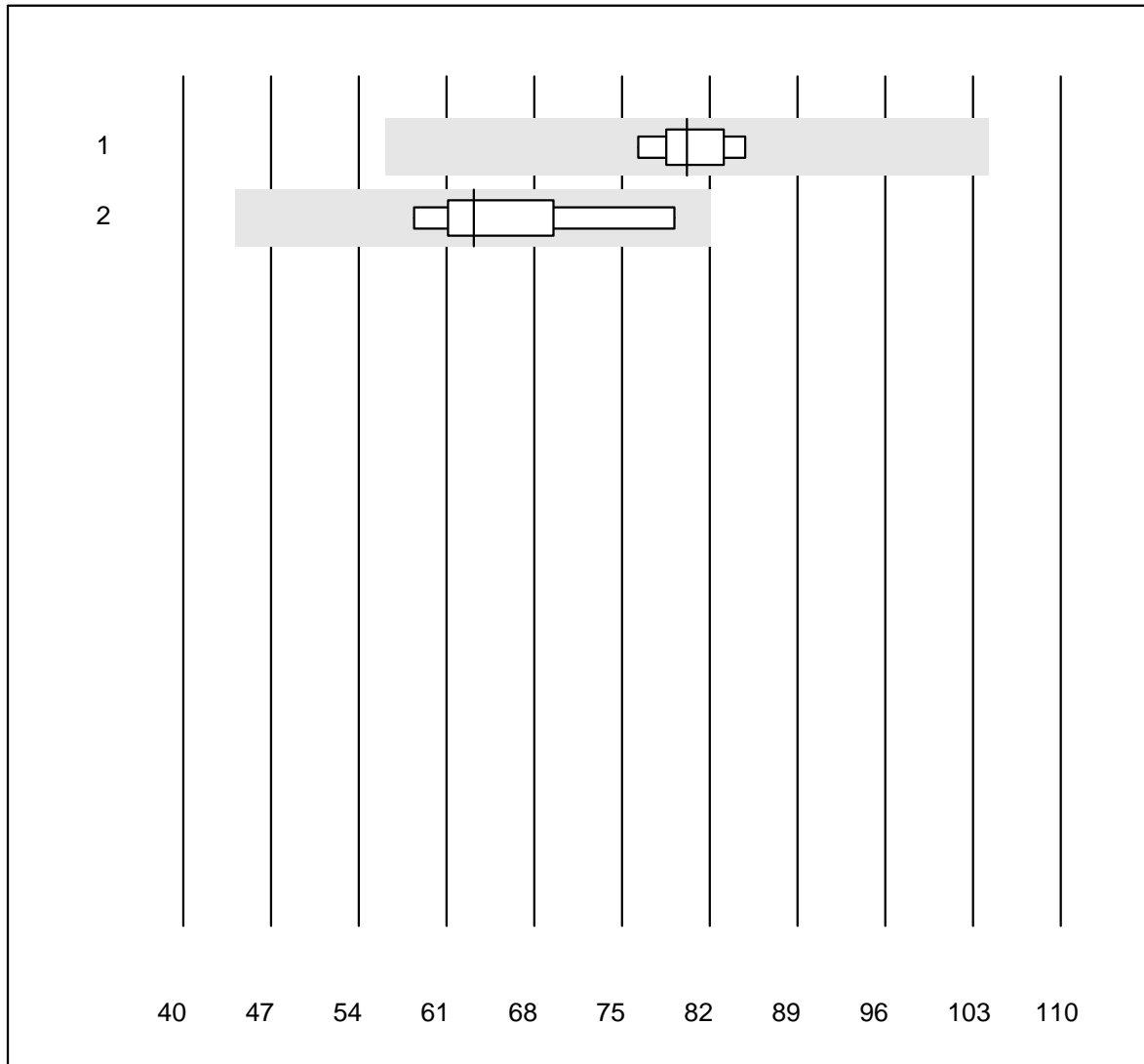
MQ tolerance : 30 %

Progesteron (nmol/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Cobas	7	100.0	0.0	0.0	80.2	3.5	e
2	Abbott	6	100.0	0.0	0.0	63.2	11.5	e*

5 additional results were submitted but not published because the method groups were too small. (< results per group)

DHEAS

MQ tolerance : 30 %

DHEAS (µmol/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Cobas	12	100.0	0.0	0.0	17.67	3.1	e
2	Abbott	4	100.0	0.0	0.0	15.84	4.4	e

One result was submitted but not pubished because the method group was too small. (< 4 results per group)

Luteinizing hormone

QUALAB tolerance : 24 %   Luteinizing hormone (U/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Roche, Cobas	10	100.0	0.0	0.0	72.6	1.7	e
2	ADVIA Centaur XP/CP	6	100.0	0.0	0.0	58.5	5.7	e
3	Abbott	7	100.0	0.0	0.0	48.6	2.5	e

One result was submitted but not pubished because the method group was too small. (< 4 results per group)

Follicle-stimulating hormone

1

2

3

0   6   12   18   24   30   36   42   48   54   60
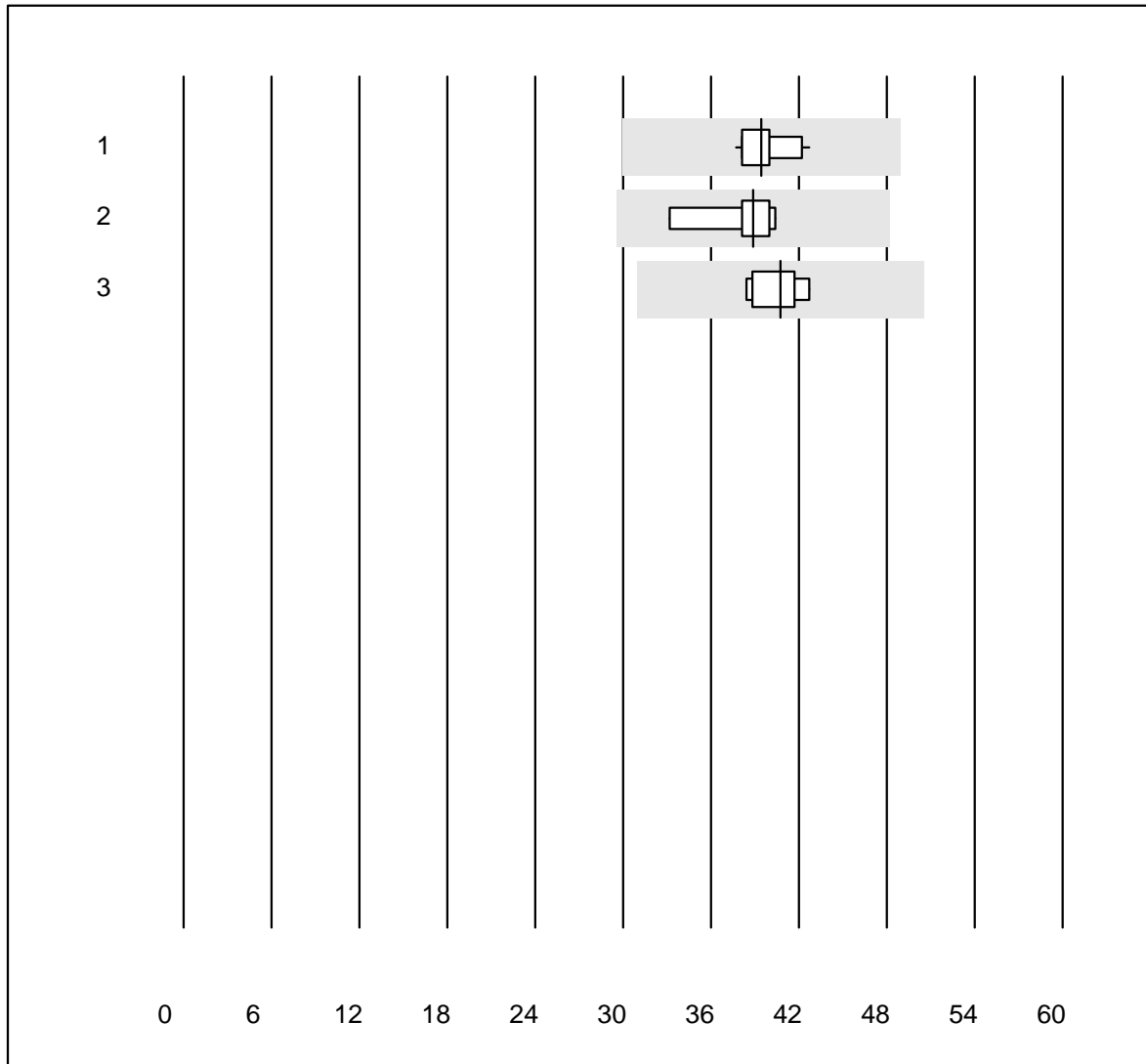
QUALAB tolerance : 24 %   Follicle-stimulating hormone (U/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Roche, Cobas	11	100.0	0.0	0.0	39.4	4.1	e
2	ADVIA Centaur XP/CP	6	100.0	0.0	0.0	38.9	6.8	e
3	Architect	8	100.0	0.0	0.0	40.7	3.8	e

One result was submitted but not pubished because the method group was too small. (< 4 results per group)

Prolactine
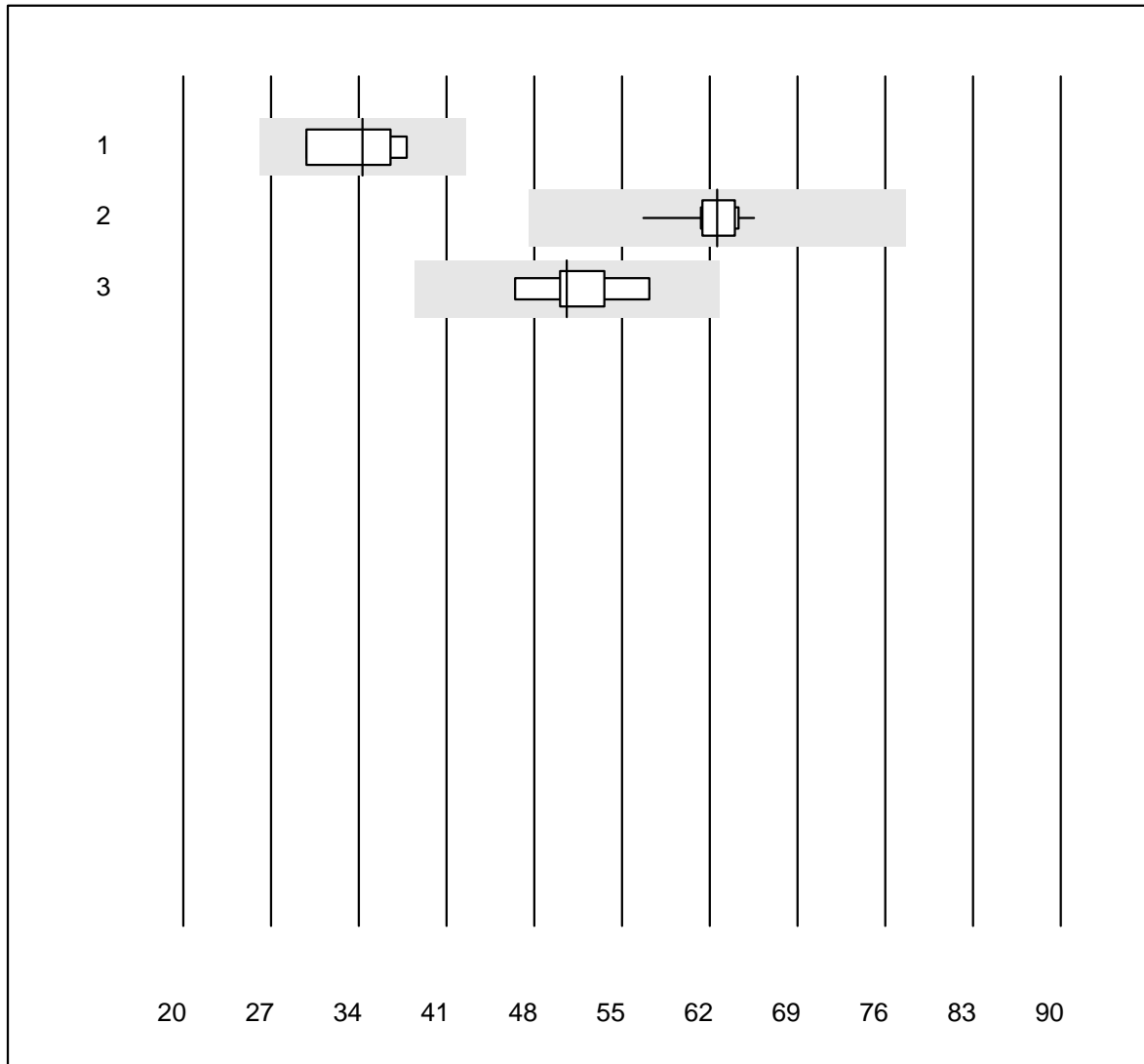
QUALAB tolerance : 24 %

Prolactine (µg/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	ADVIA Centaur XP/CP	4	100.0	0.0	0.0	34.3	11.0	e*
2	Cobas/Roche	12	100.0	0.0	0.0	62.6	3.6	e
3	Abbott	6	100.0	0.0	0.0	50.6	7.1	e*

Insulin
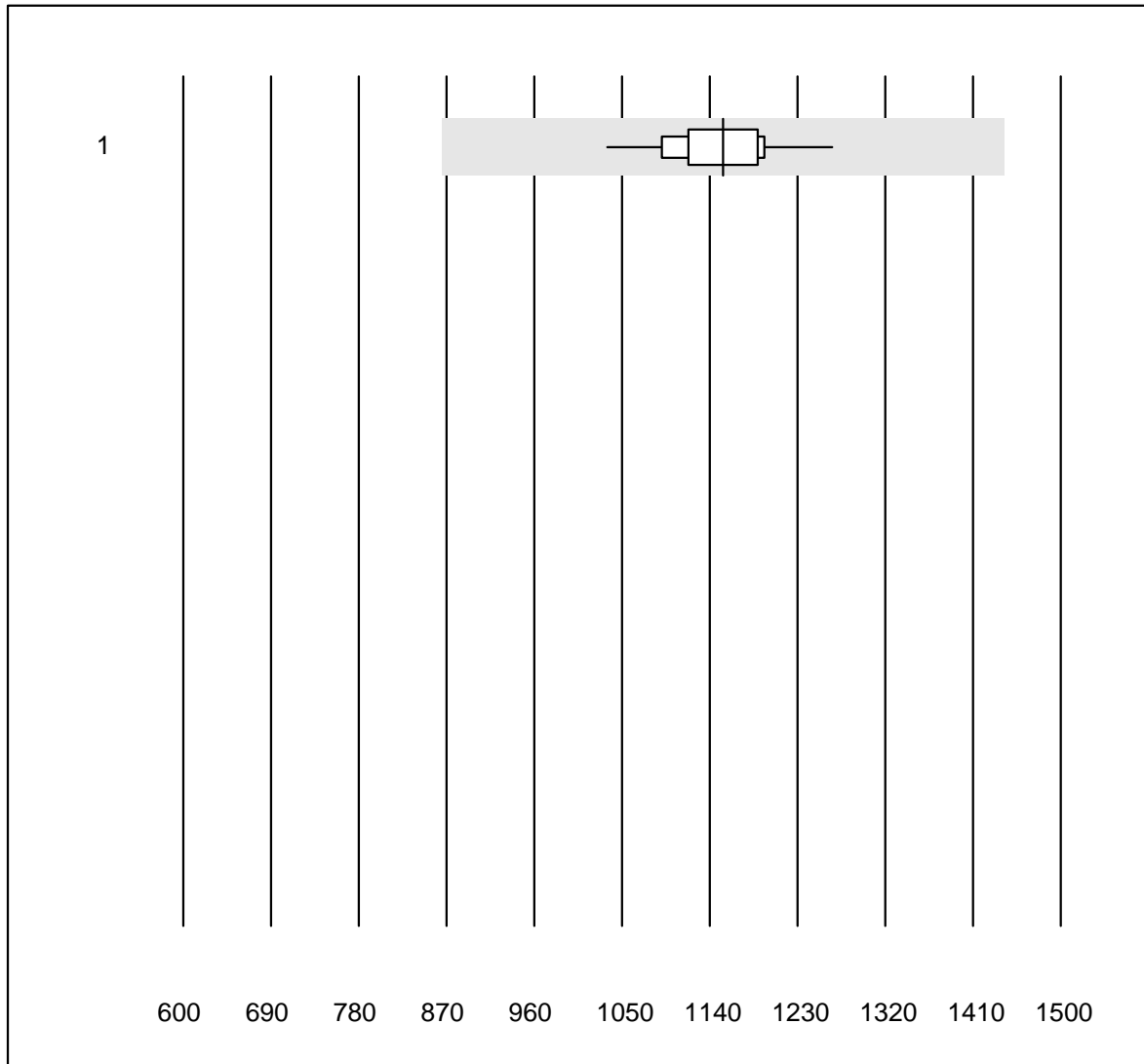
MQ tolerance : 25 %

Insulin (pmol/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Cobas	14	100.0	0.0	0.0	1154	4.8	e

5 additional results were submitted but not published because the method groups were too small. (< results per group)

HGH

15.0   16.5   18.0   19.5   21.0   22.5   24.0   25.5   27.0   28.5   30.0
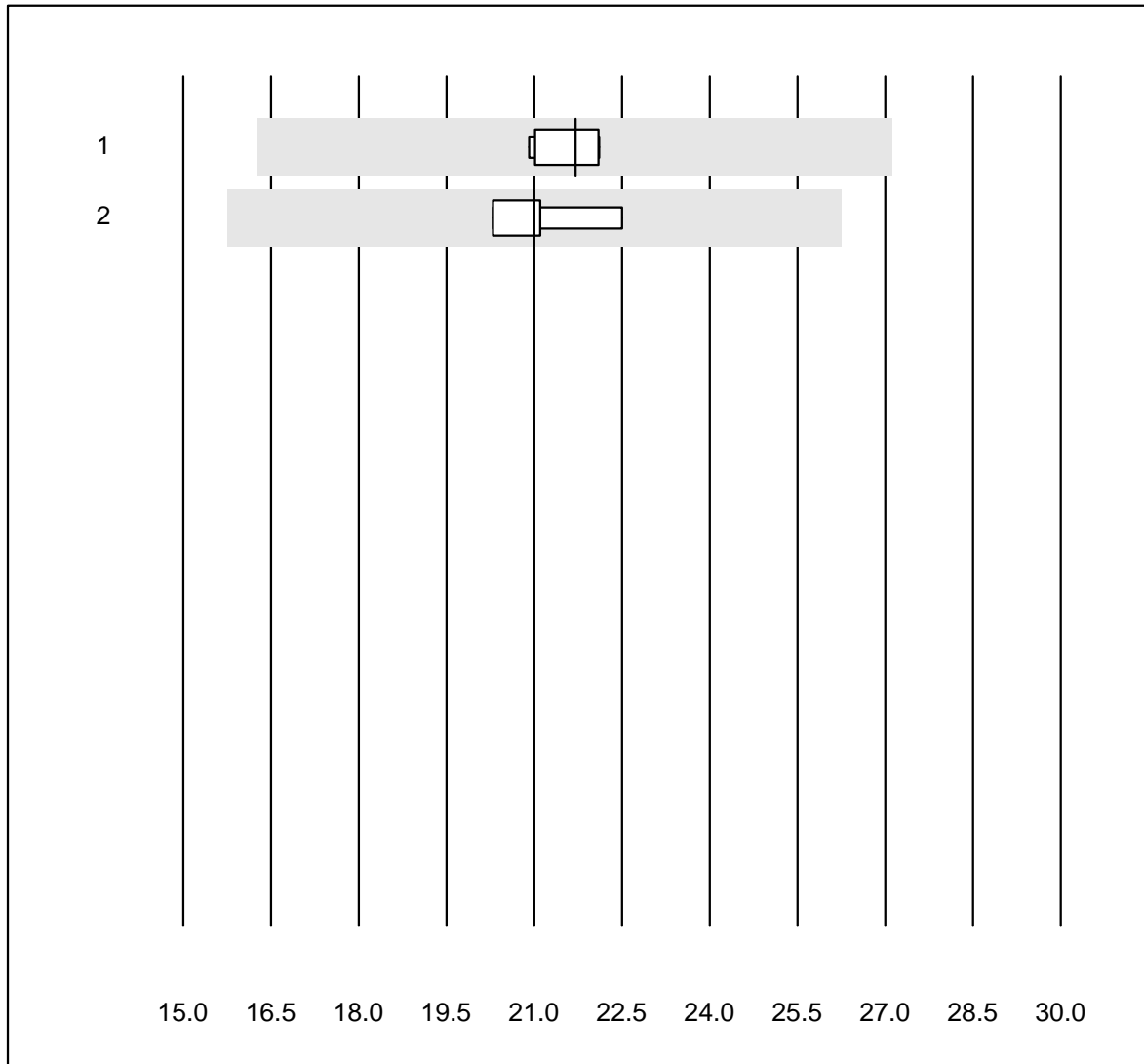
MQ tolerance : 25 %

HGH (µg/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	all Participants	7	100.0	0.0	0.0	21.70	2.4	e
2	Liaison	4	100.0	0.0	0.0	21.00	4.4	e

IGF-1
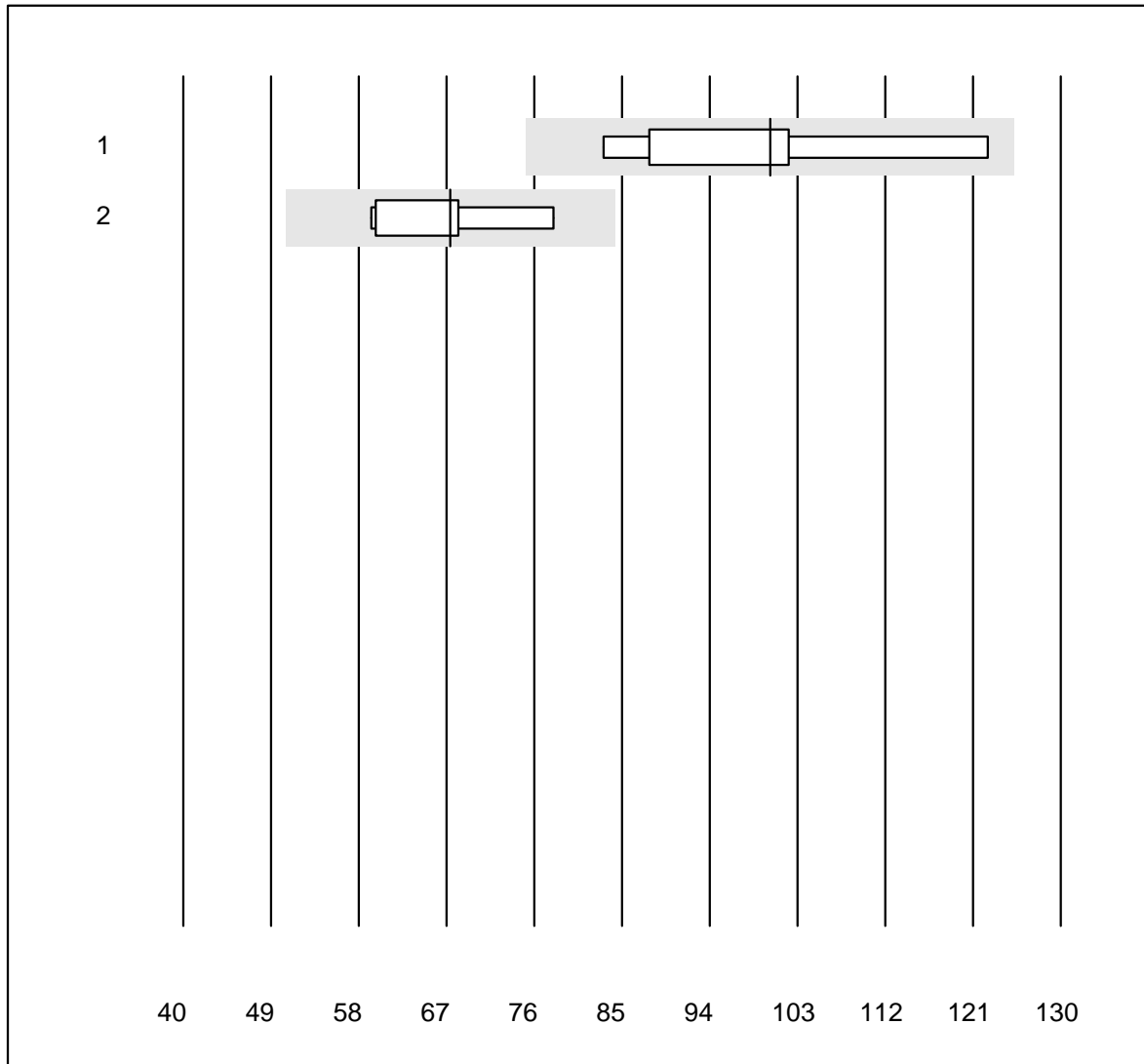
MQ tolerance : 25 %   IGF-1 (µg/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Liaison	9	88.9	0.0	11.1	100	14.0	e*
2	Other methods	5	100.0	0.0	0.0	67	11.5	e*

Troponin T CR
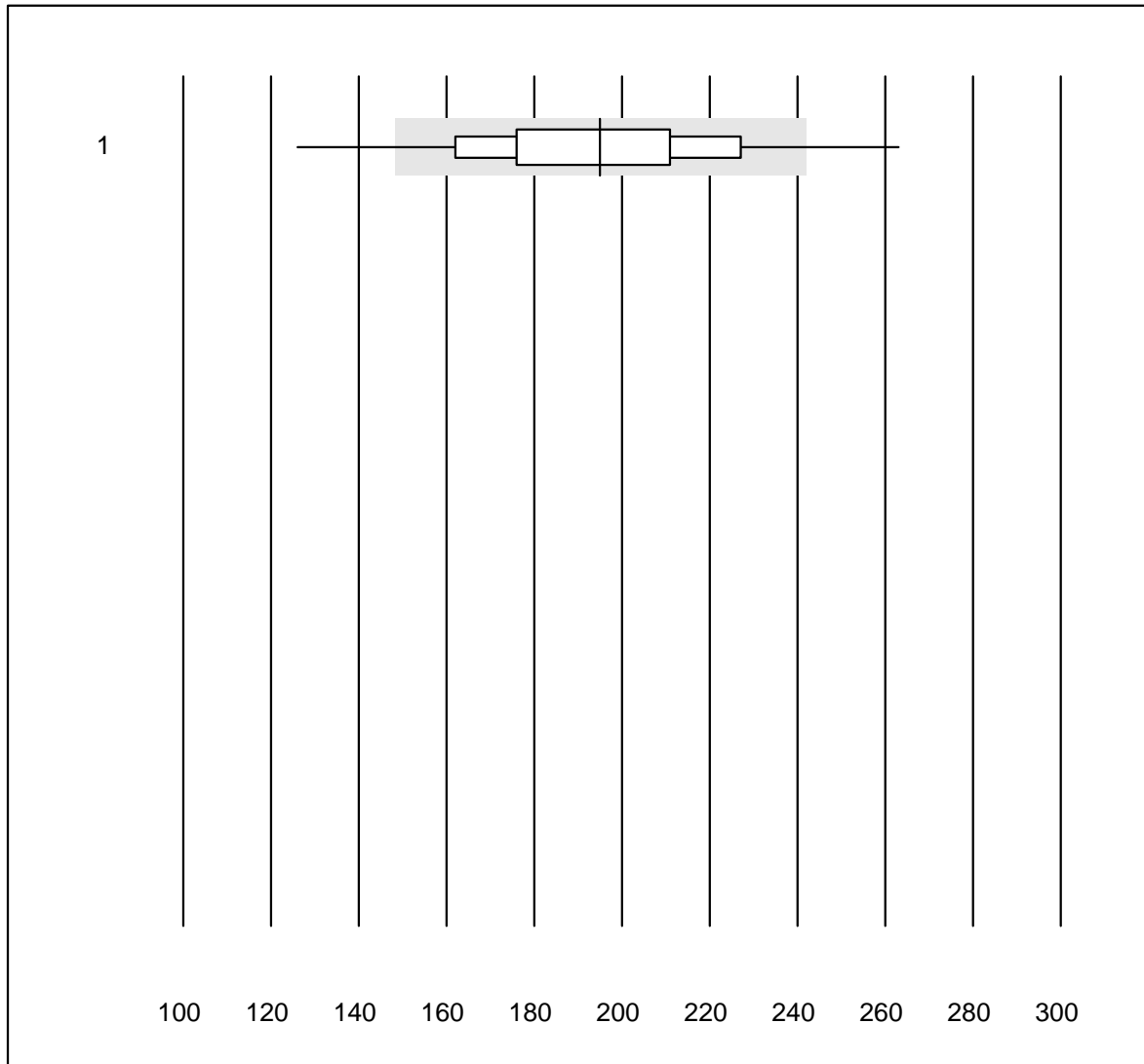
QUALAB tolerance : 24 %

Troponin T CR (ng/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Cobas h 232	961	89.8	7.1	3.1	195.00	13.2	e

D-dimer CR
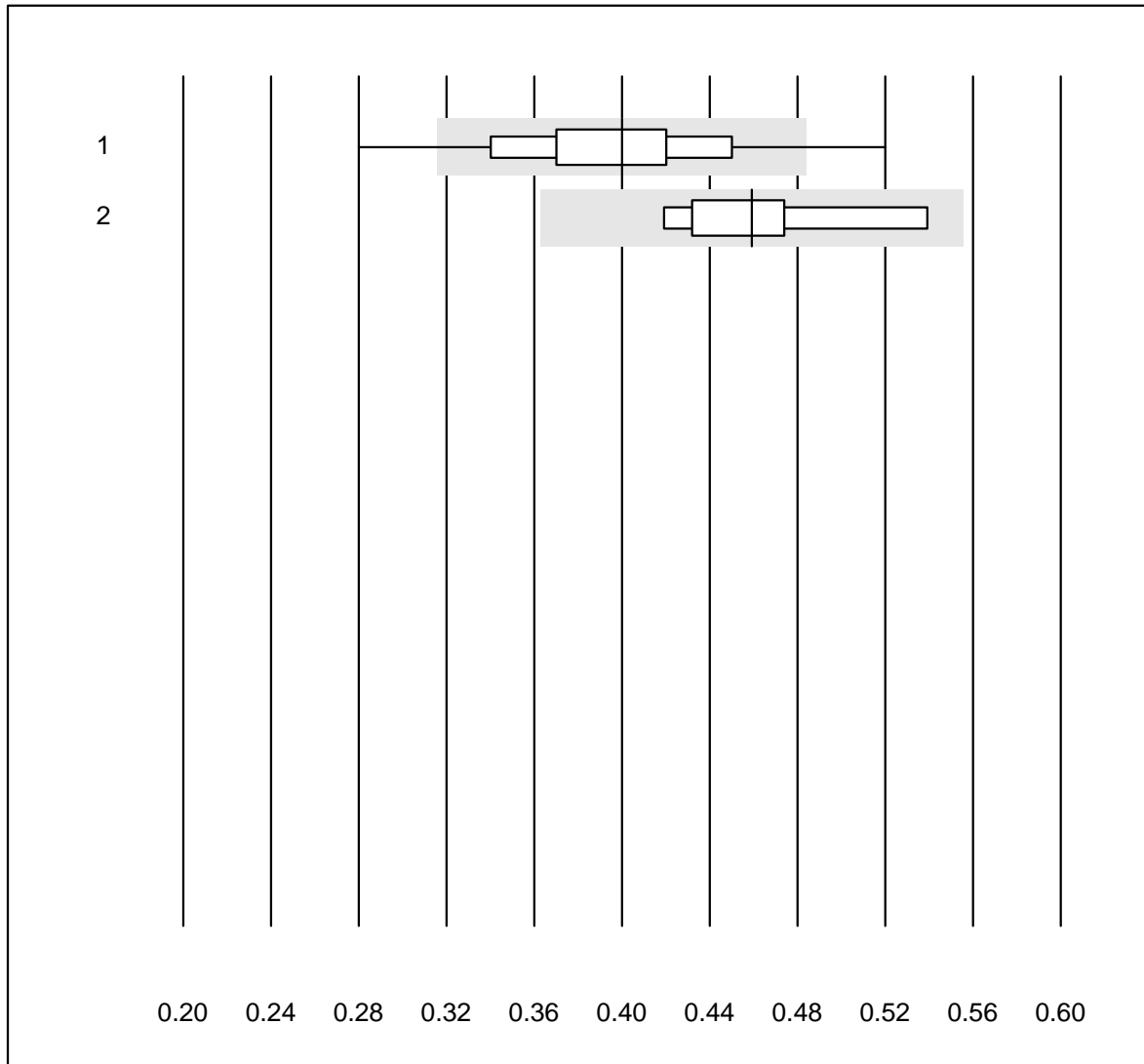
QUALAB tolerance : 21 %   D-dimer CR (mg/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Cobas h 232	1051	90.7	4.8	4.5	0.40	10.6	e
2	Lumira Dx	8	100.0	0.0	0.0	0.46	8.1	e*

CKMB- K8

```
1
```

9.0   10.7   12.4   14.1   15.8   17.5   19.2   20.9   22.6   24.3   26.0
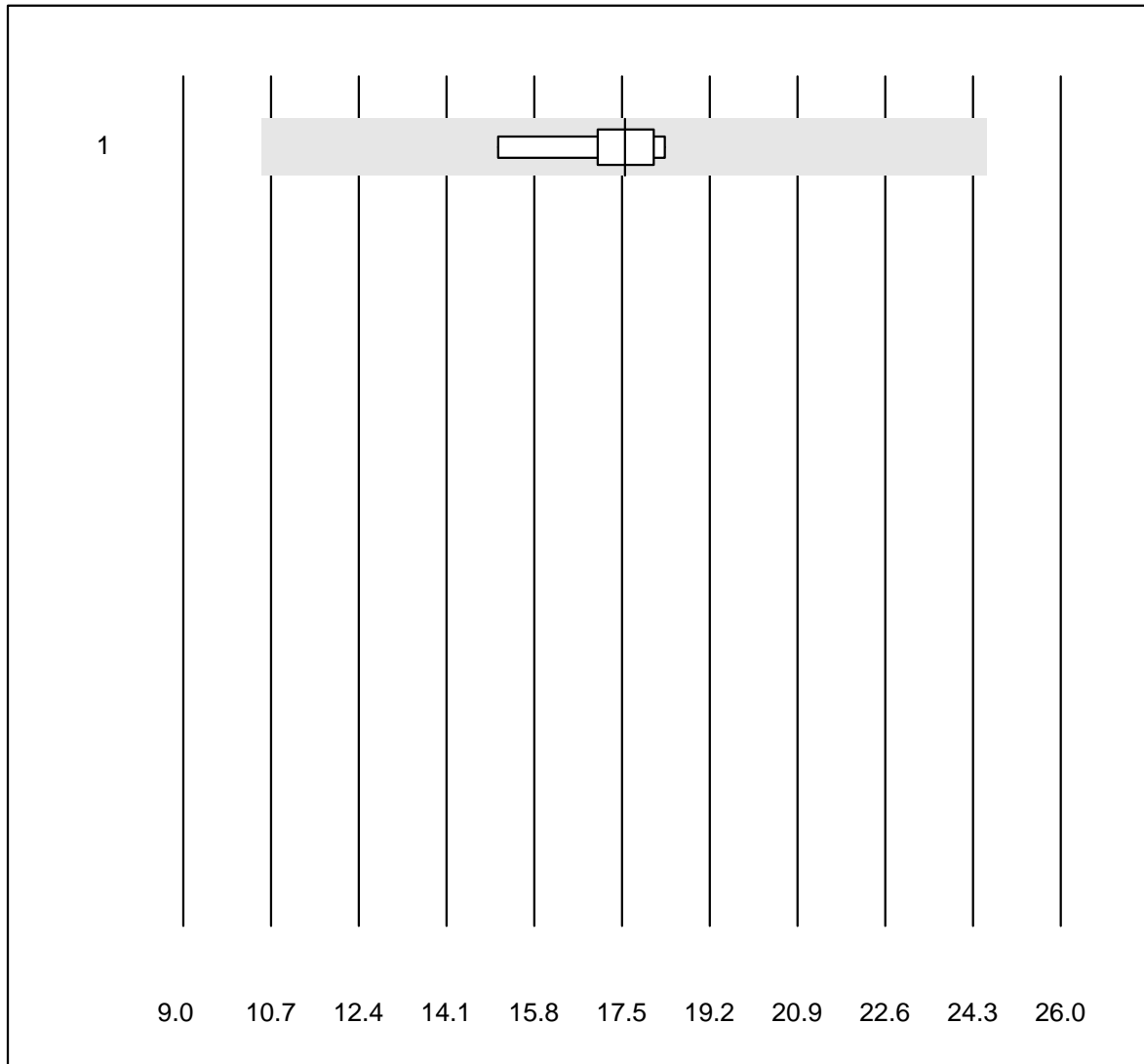
MQ tolerance : 40 %   CKMB- K8 (µg/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Cobas h 232	7	100.0	0.0	0.0	17.6	6.2	e

NT-proBNP CR
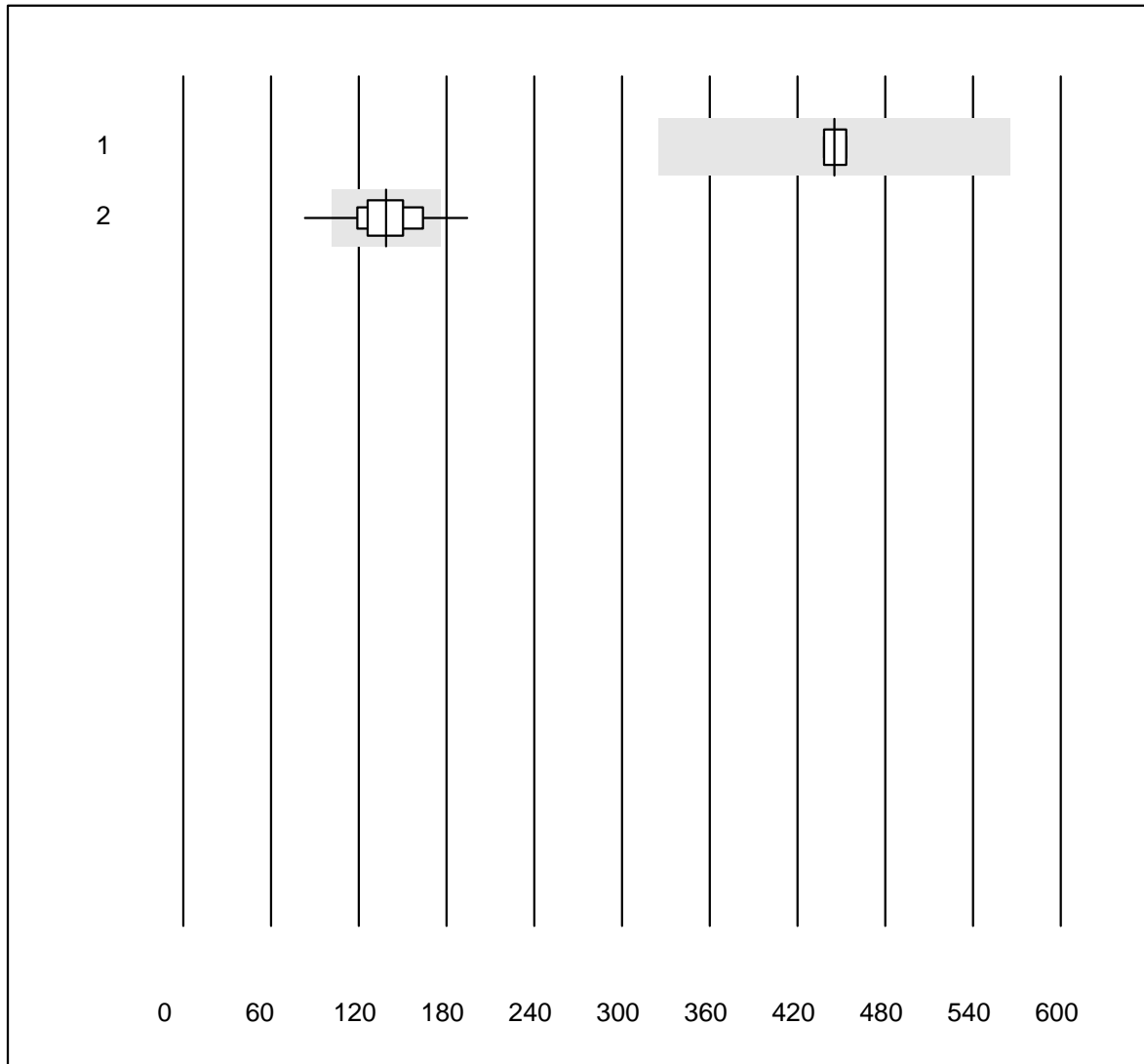
QUALAB tolerance : 27 %

NT-proBNP CR (ng/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Lumira Dx	4	75.0	0.0	25.0	445	1.9	e
2	Cobas h 232	652	88.2	6.4	5.4	139	13.7	e

PCO2 CCA

2.9   3.0   3.1   3.2   3.3   3.4   3.5   3.6   3.7   3.8   3.9
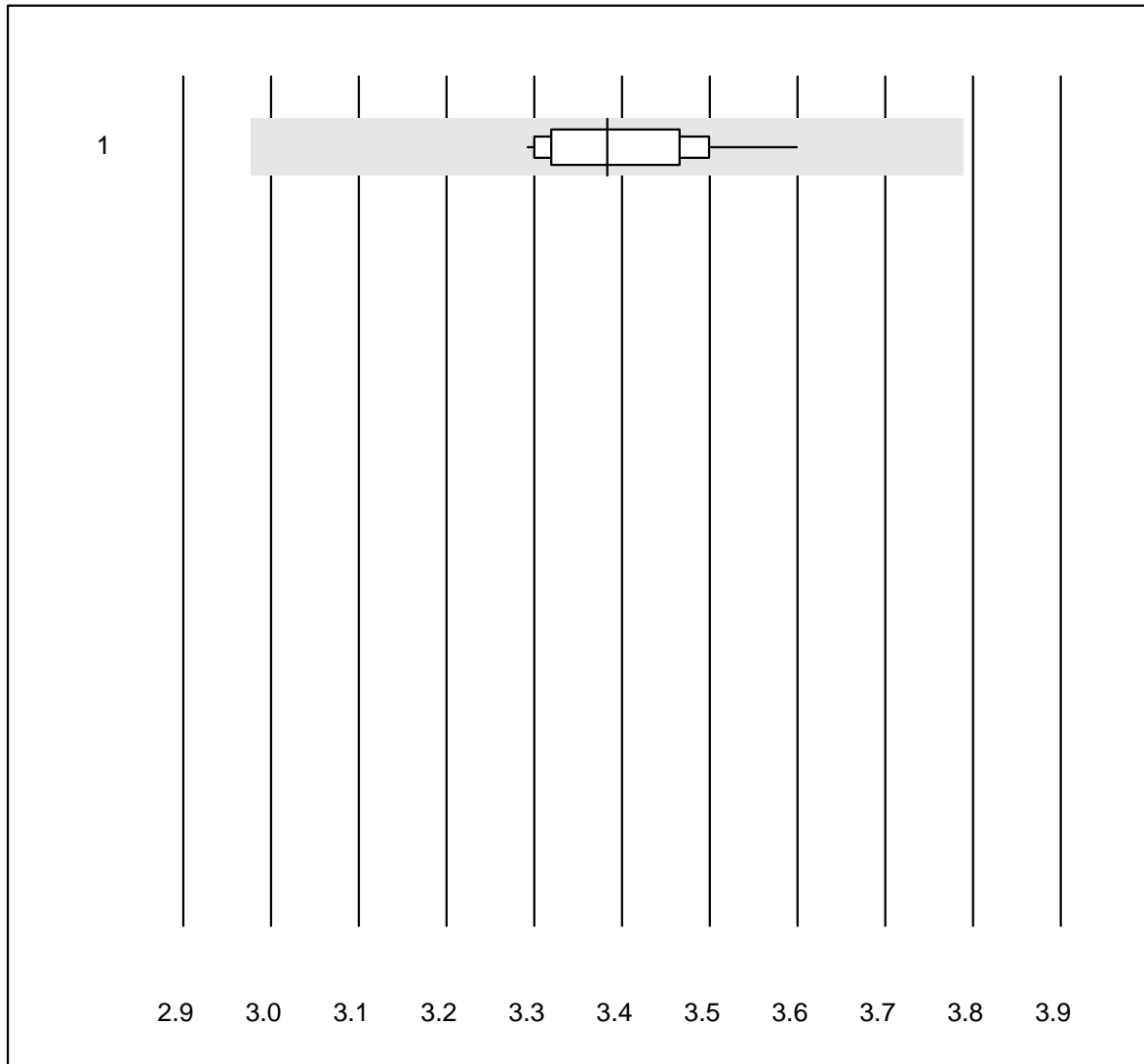
QUALAB tolerance : 12 %   PCO2 CCA (kPa)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	OPTI CCA	11	100.0	0.0	0.0	3.38	2.9	e

PO2 CCA

15.0   15.7   16.4   17.1   17.8   18.5   19.2   19.9   20.6   21.3   22.0
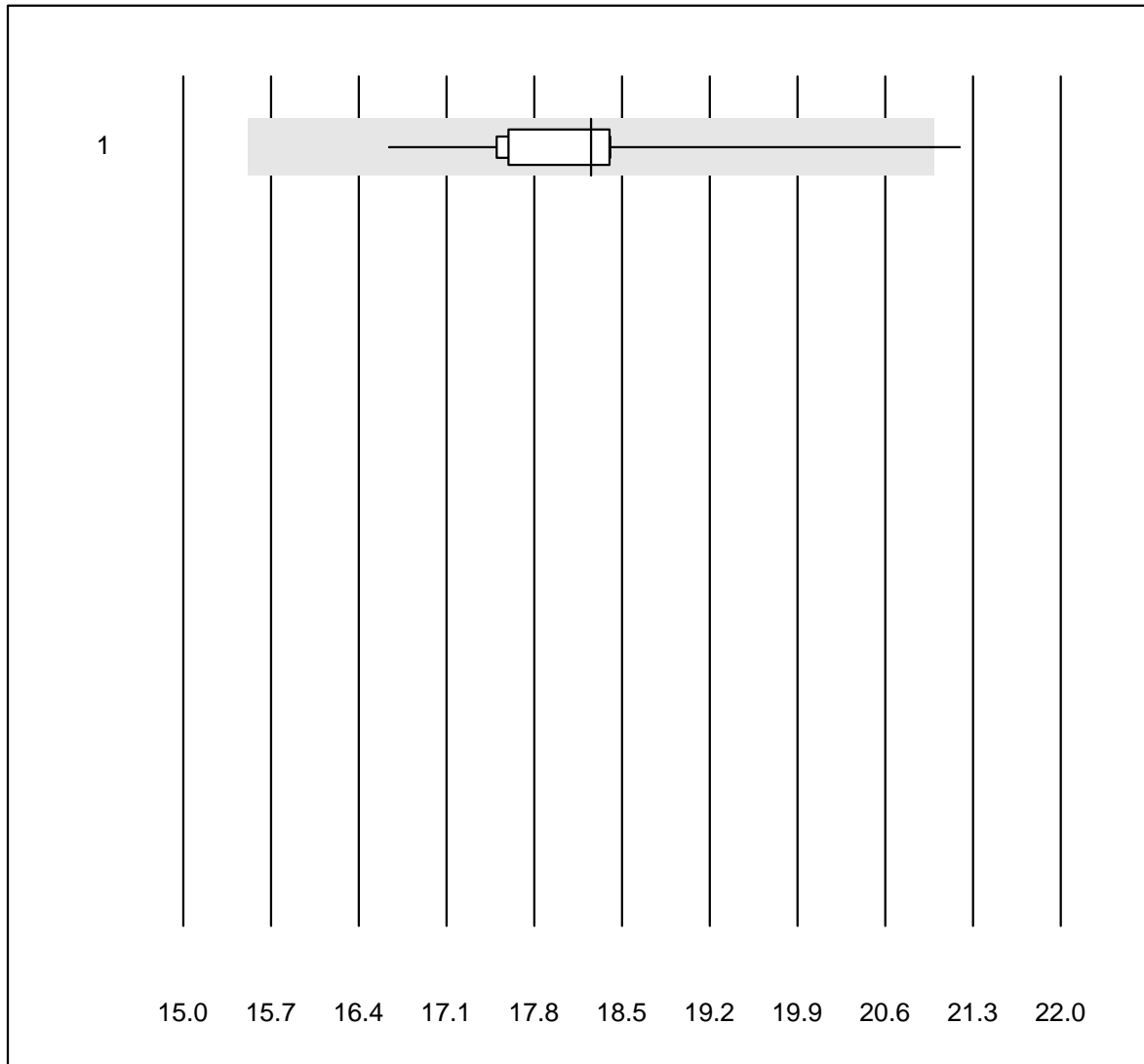
QUALAB tolerance : 15 %

PO2 CCA (kPa)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	OPTI CCA	11	90.9	9.1	0.0	18.26	6.1	e*

pH CCA

QUALAB tolerance : 1 %   pH CCA ()
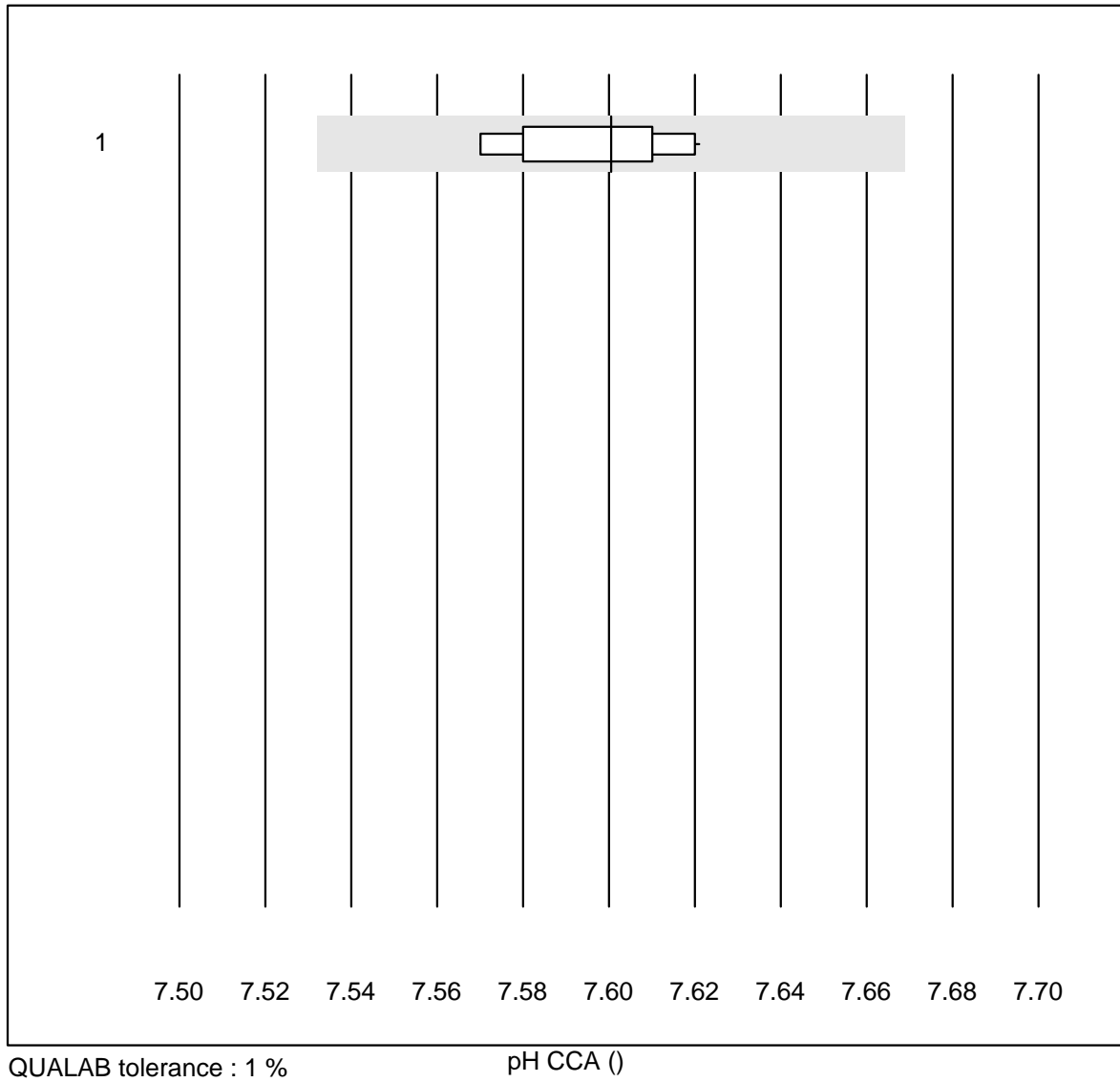
No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	OPTI CCA	10	100.0	0.0	0.0	7.60	0.2	e

Potassium CCA

1

5.5   5.6   5.7   5.8   5.9   6.0   6.1   6.2   6.3   6.4   6.5
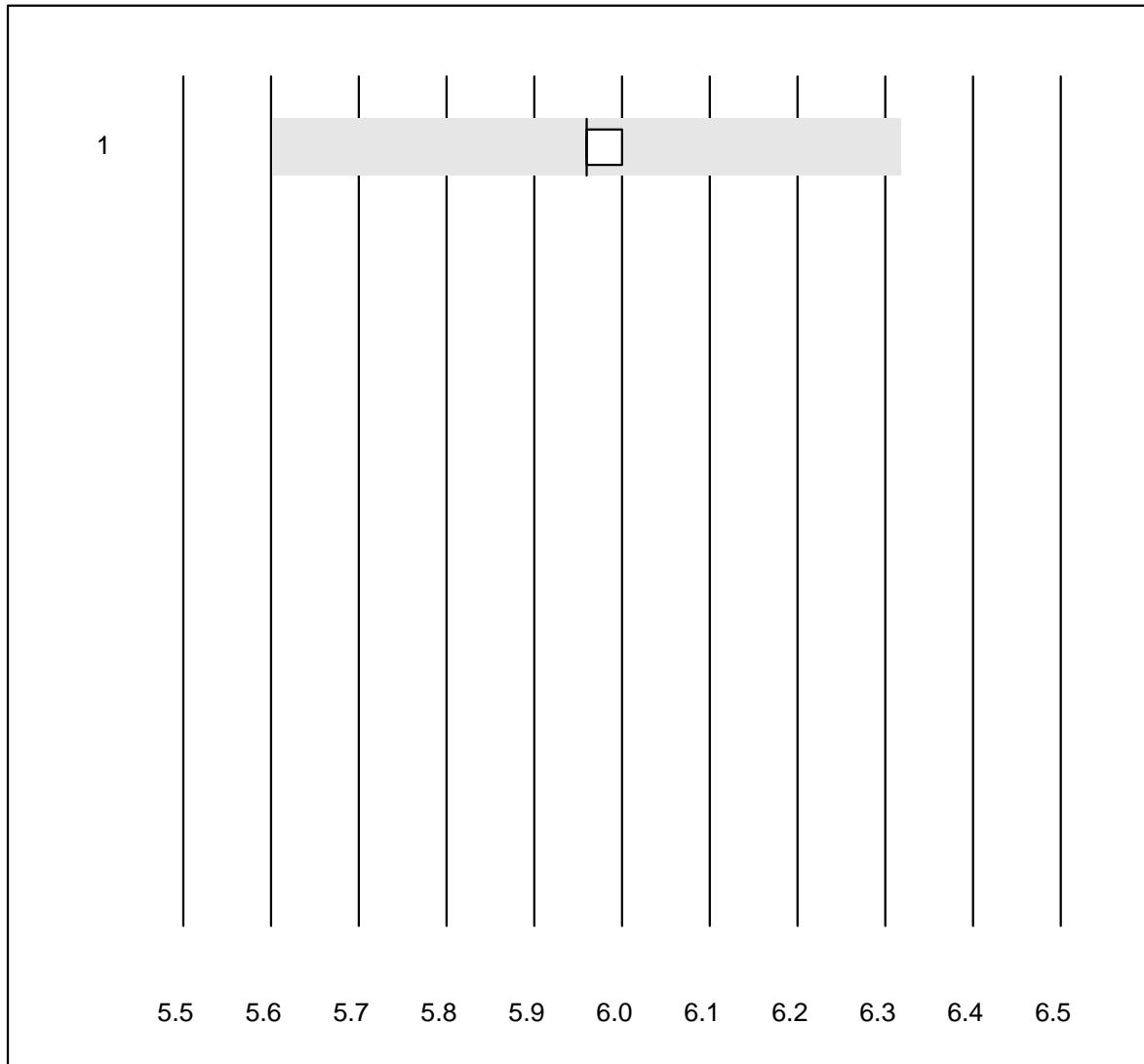
QUALAB tolerance : 6 %   Potassium CCA (mmol/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	OPTI CCA	5	60.0	0.0	40.0	6.0	0.3	e

Sodium CCA
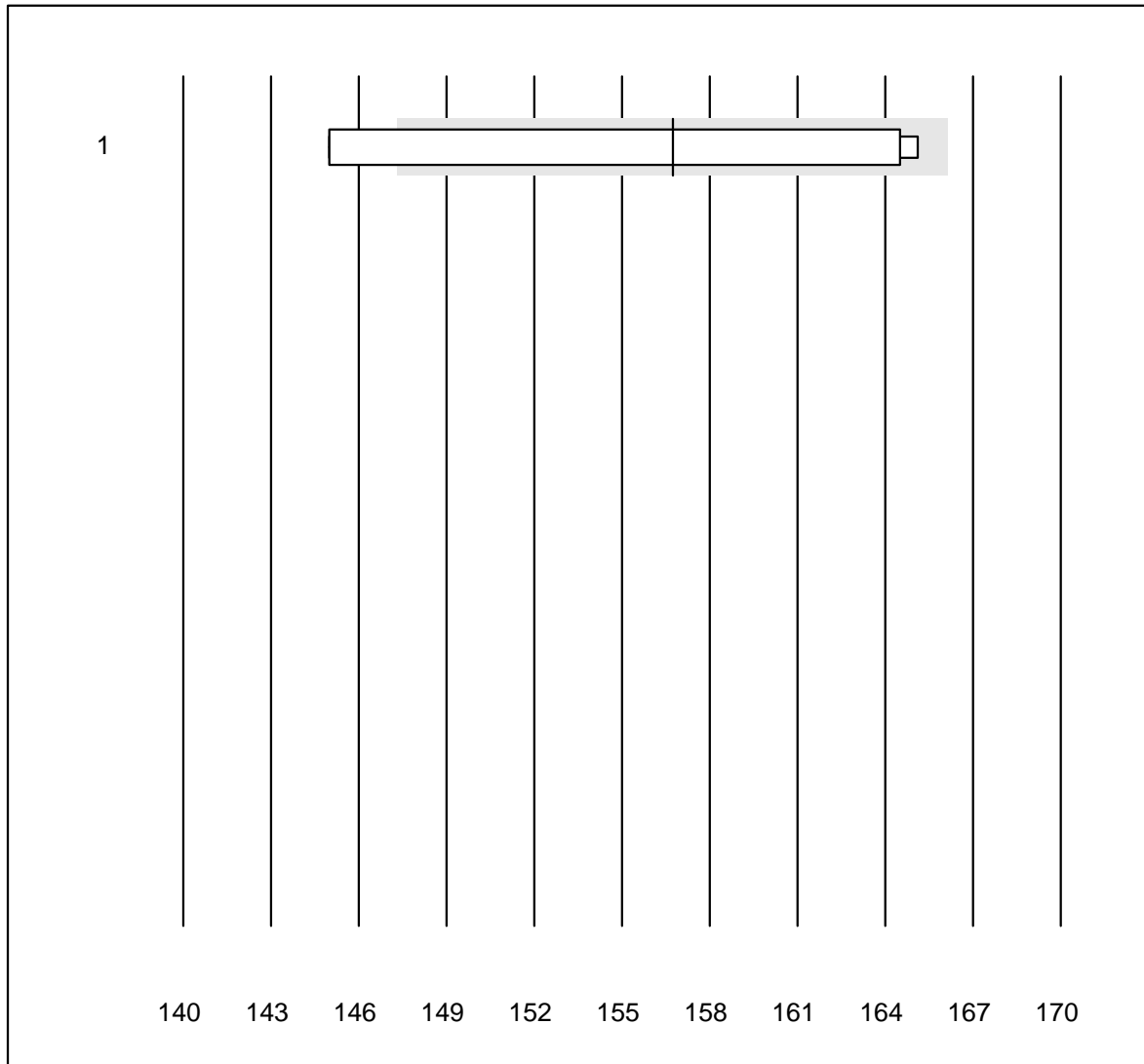
QUALAB tolerance : 6 %   Sodium CCA (mmol/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	OPTI CCA	4	75.0	25.0	0.0	156.8	6.7	e*

Ferritin
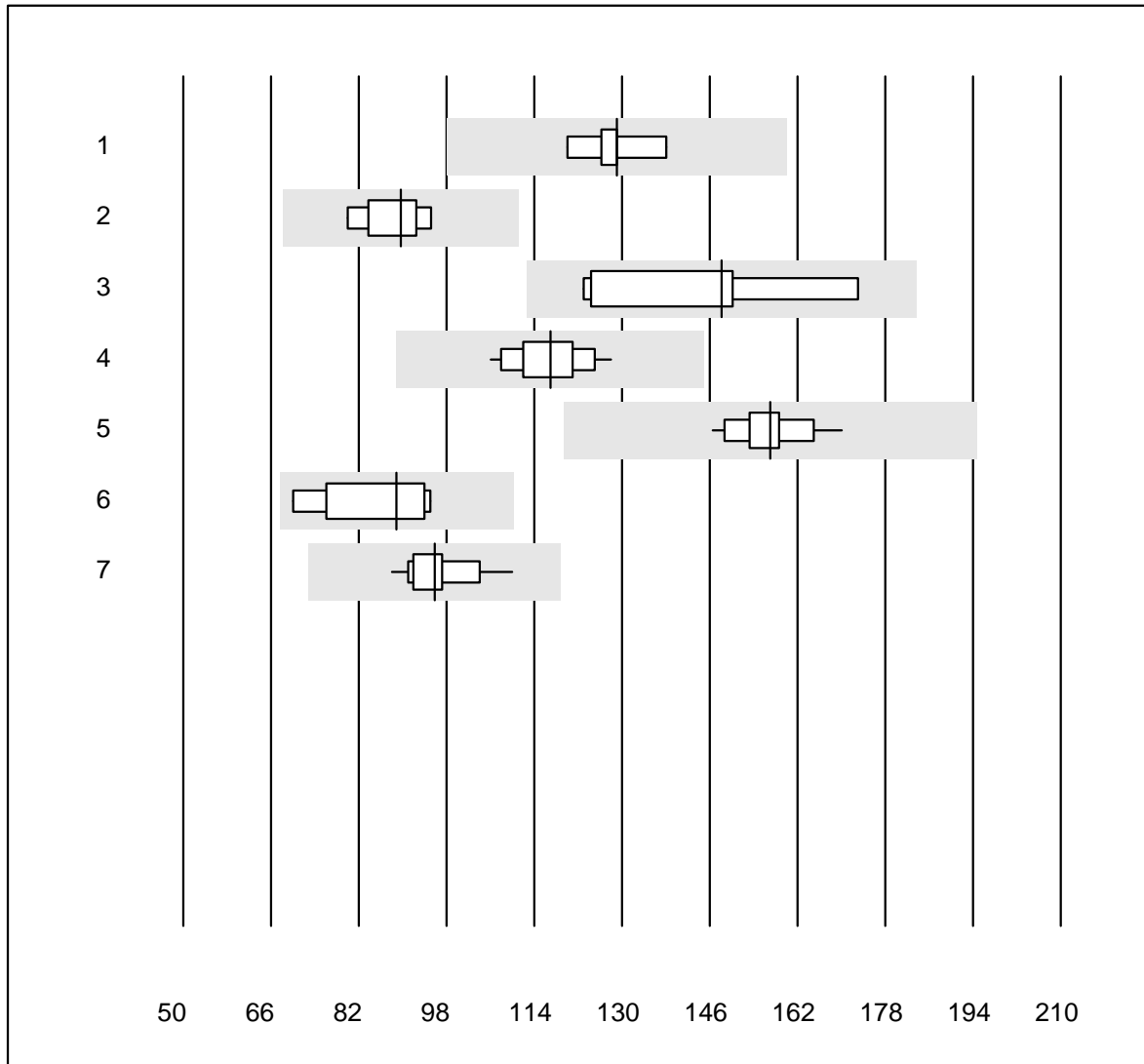
QUALAB tolerance : 24 %   Ferritin (µg/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Dimension	5	100.0	0.0	0.0	129.00	5.0	e
2	Beckman	7	100.0	0.0	0.0	89.60	5.9	e
3	all Participants	5	100.0	0.0	0.0	148.20	14.4	e*
4	Cobas E / Elecsys	28	100.0	0.0	0.0	116.91	5.1	e
5	Abbott	13	100.0	0.0	0.0	156.99	4.1	e
6	Mini Vidas	7	100.0	0.0	0.0	88.89	11.5	a
7	AFIAS	28	100.0	0.0	0.0	95.85	5.4	e

4 additional results were submitted but not published because the method groups were too small. (< results per group)
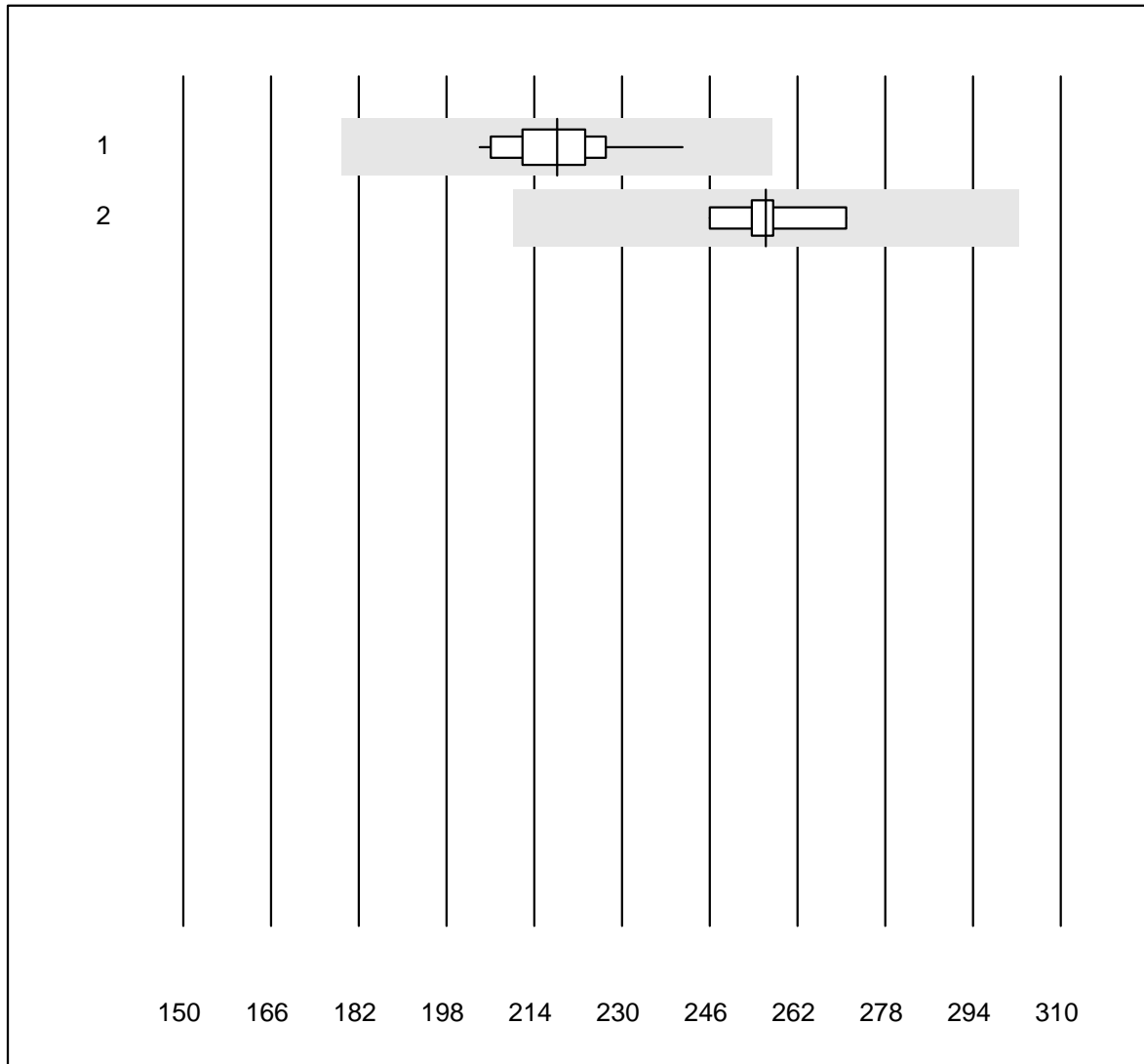
Vitamin B12
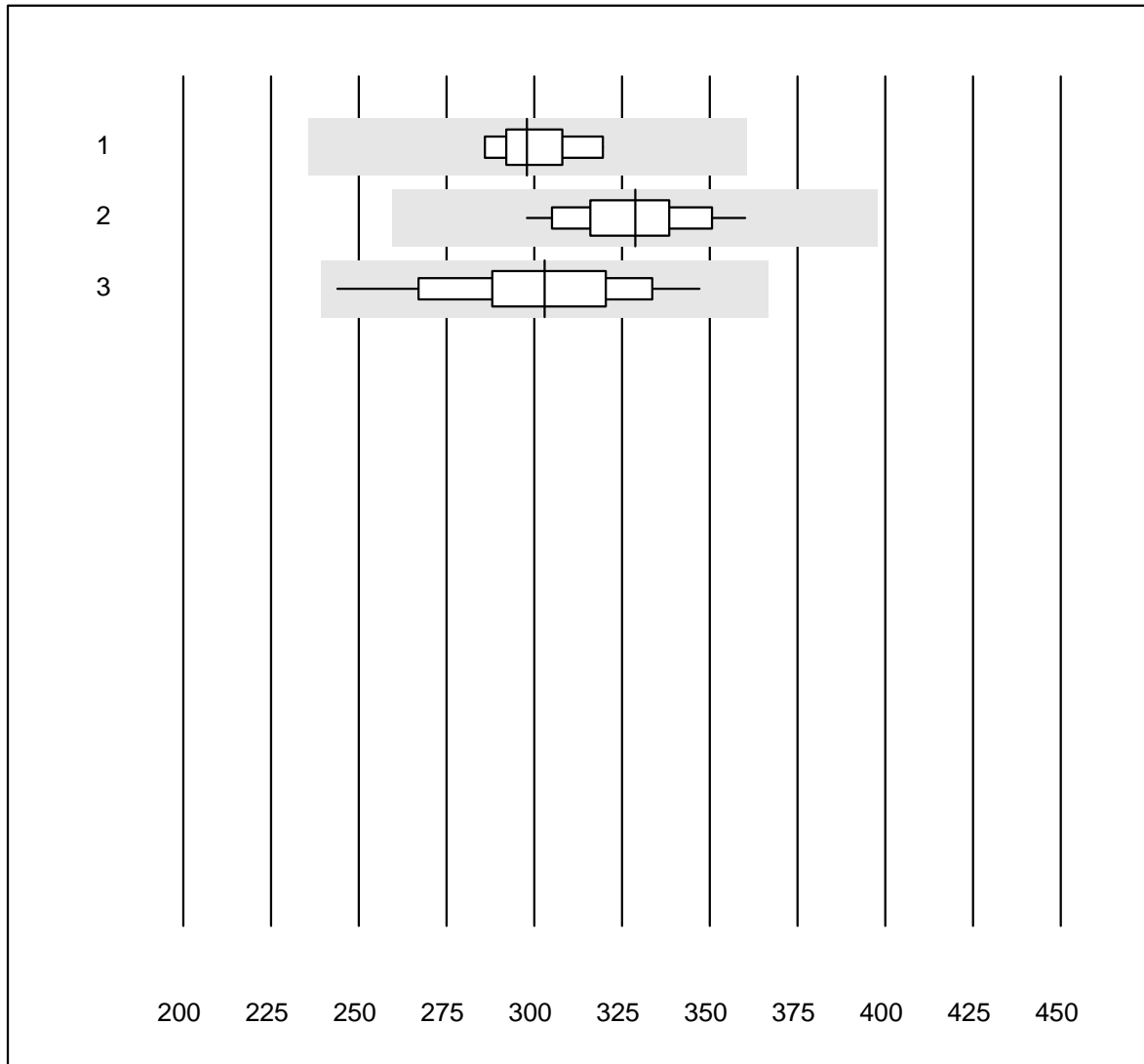
QUALAB tolerance : 21 %   Vitamin B12 (pmol/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	all Participants	5	100.0	0.0	0.0	298.00	4.4	e
2	Cobas E / Elecsys	22	100.0	0.0	0.0	328.76	5.1	e
3	Abbott	12	100.0	0.0	0.0	303.01	9.6	e*

3 additional results were submitted but not published because the method groups were too small. (< results per group)

Folate
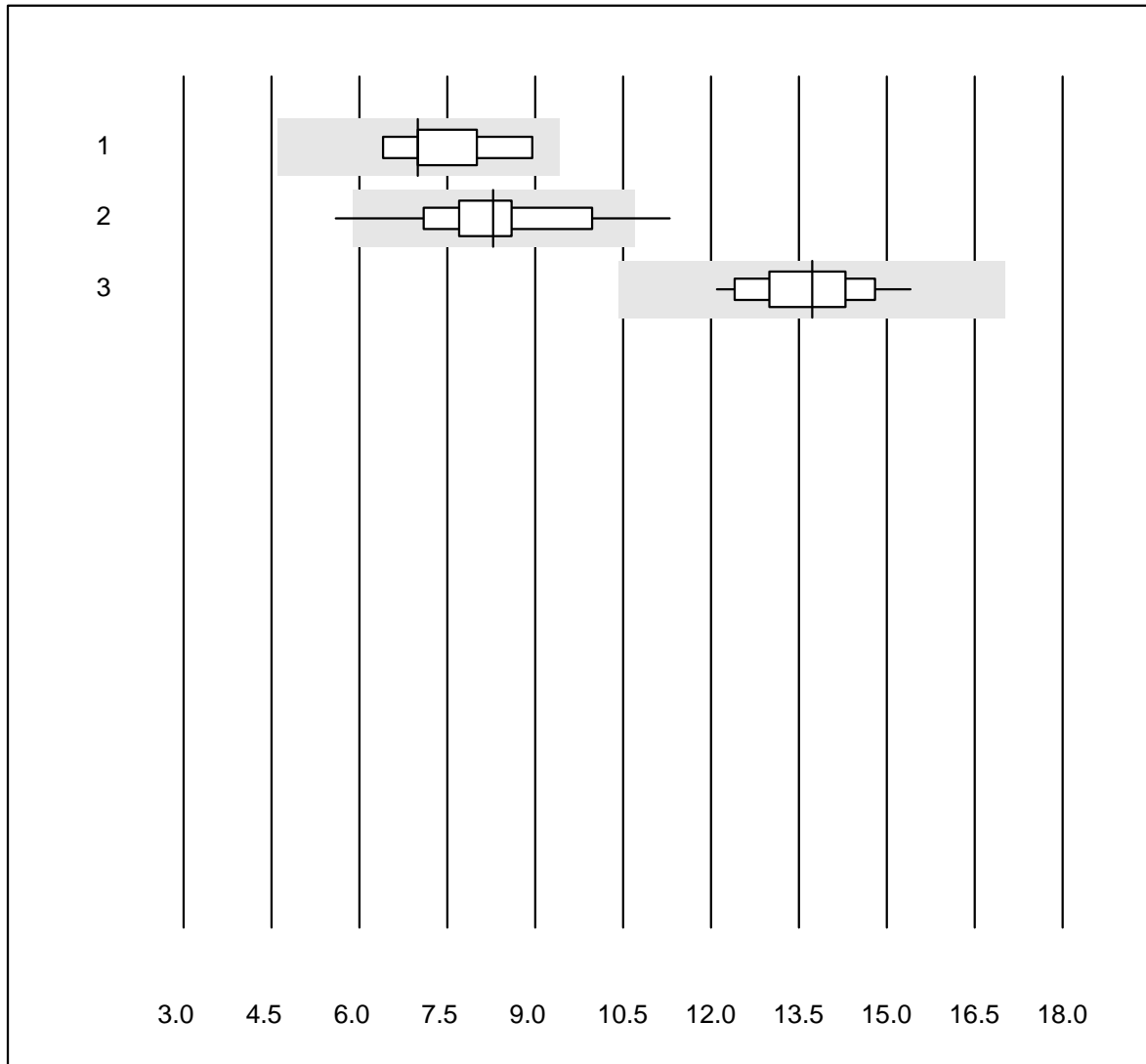
Folate (nmol/l)

QUALAB tolerance : 24 %
(< 10.00: +/- 2.40 nmol/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Siemens	6	100.0	0.0	0.0	7.00	12.5	e*
2	Cobas E / Elecsys	22	90.9	9.1	0.0	8.29	14.2	e*
3	Abbott	11	100.0	0.0	0.0	13.72	7.2	e

2 additional results were submitted but not published because the method groups were too small. (< results per group)

Holotranscobalamine
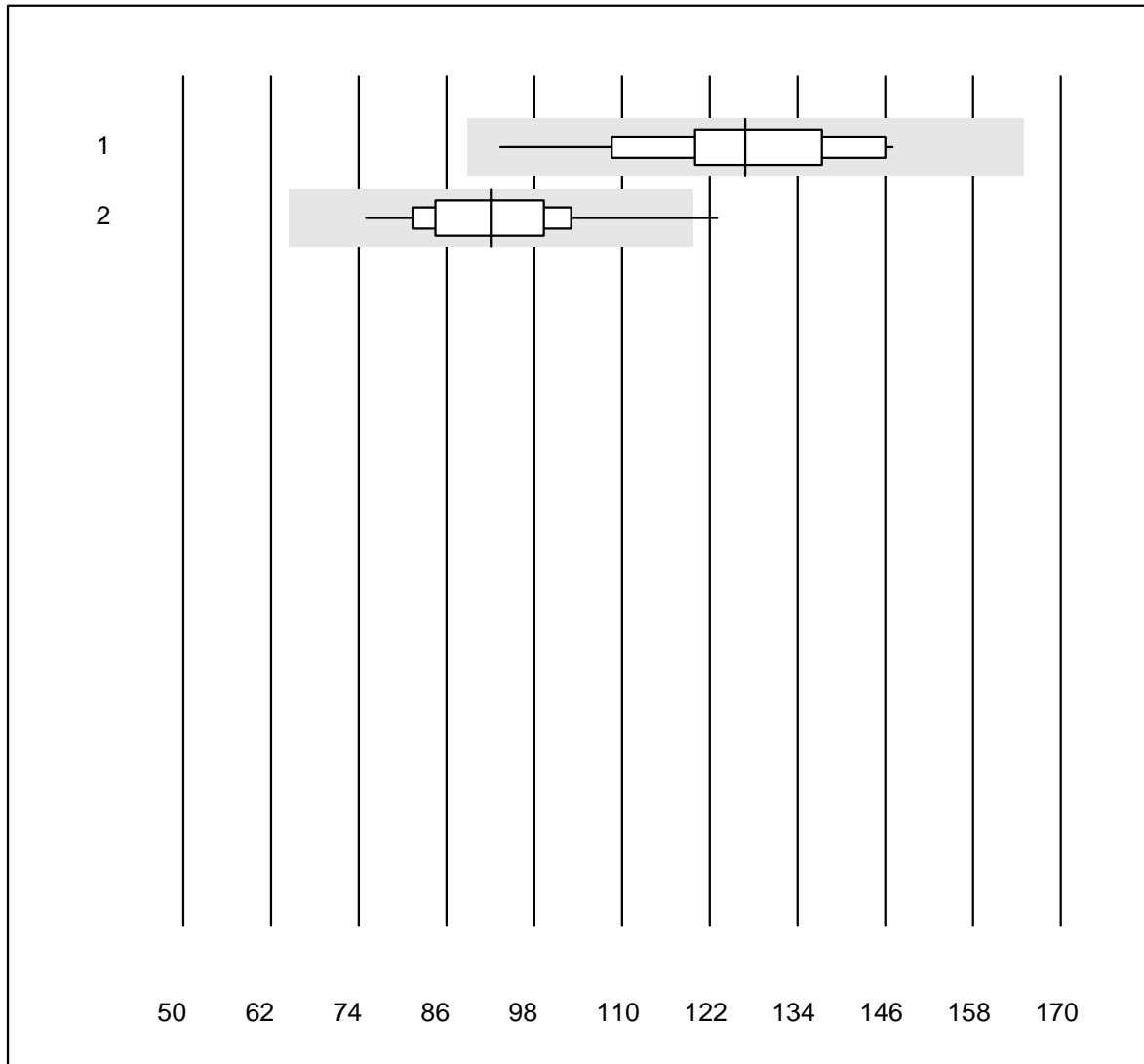
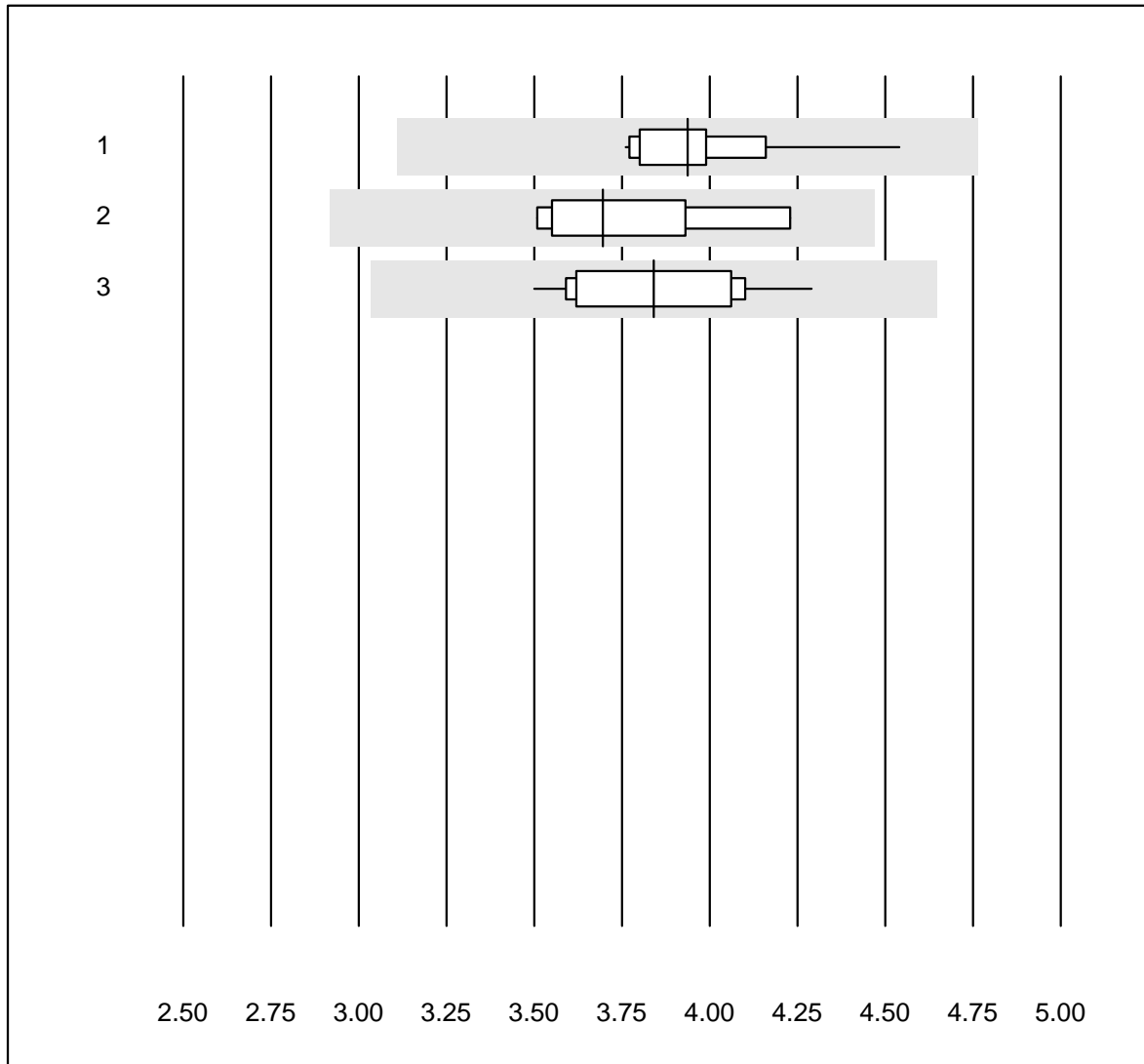

MQ tolerance : 30 %

Holotranscobalamine (pmol/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Abbott	18	100.0	0.0	0.0	126.9	11.2	e
2	Cobas	32	96.9	3.1	0.0	92.1	11.6	e

2 additional results were submitted but not published because the method groups were too small. (< results per group)

Bilirubin total Neo

QUALAB tolerance : 18 %

Bilirubin total Neo (µmol/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	all Participants	14	100.0	0.0	0.0	218	4.6	e
2	Dimension	5	100.0	0.0	0.0	256	3.5	e

Bilirubin direct
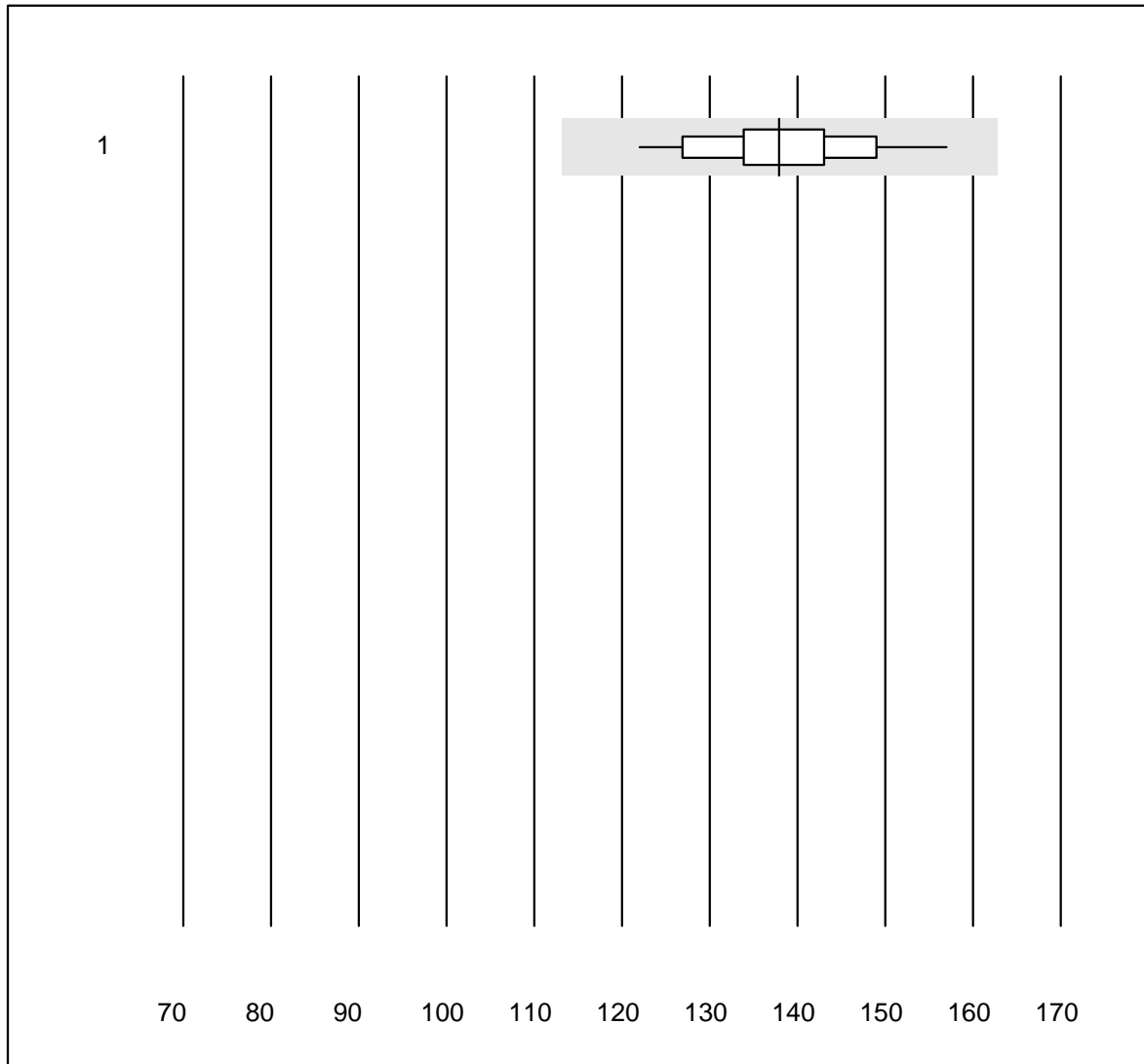
QUALAB tolerance : 18 %   Bilirubin direct (µmol/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	all Participants	22	100.0	0.0	0.0	138	6.6	e

3 additional results were submitted but not published because the method groups were too small. (< results per group)

Bilirubin neonatal
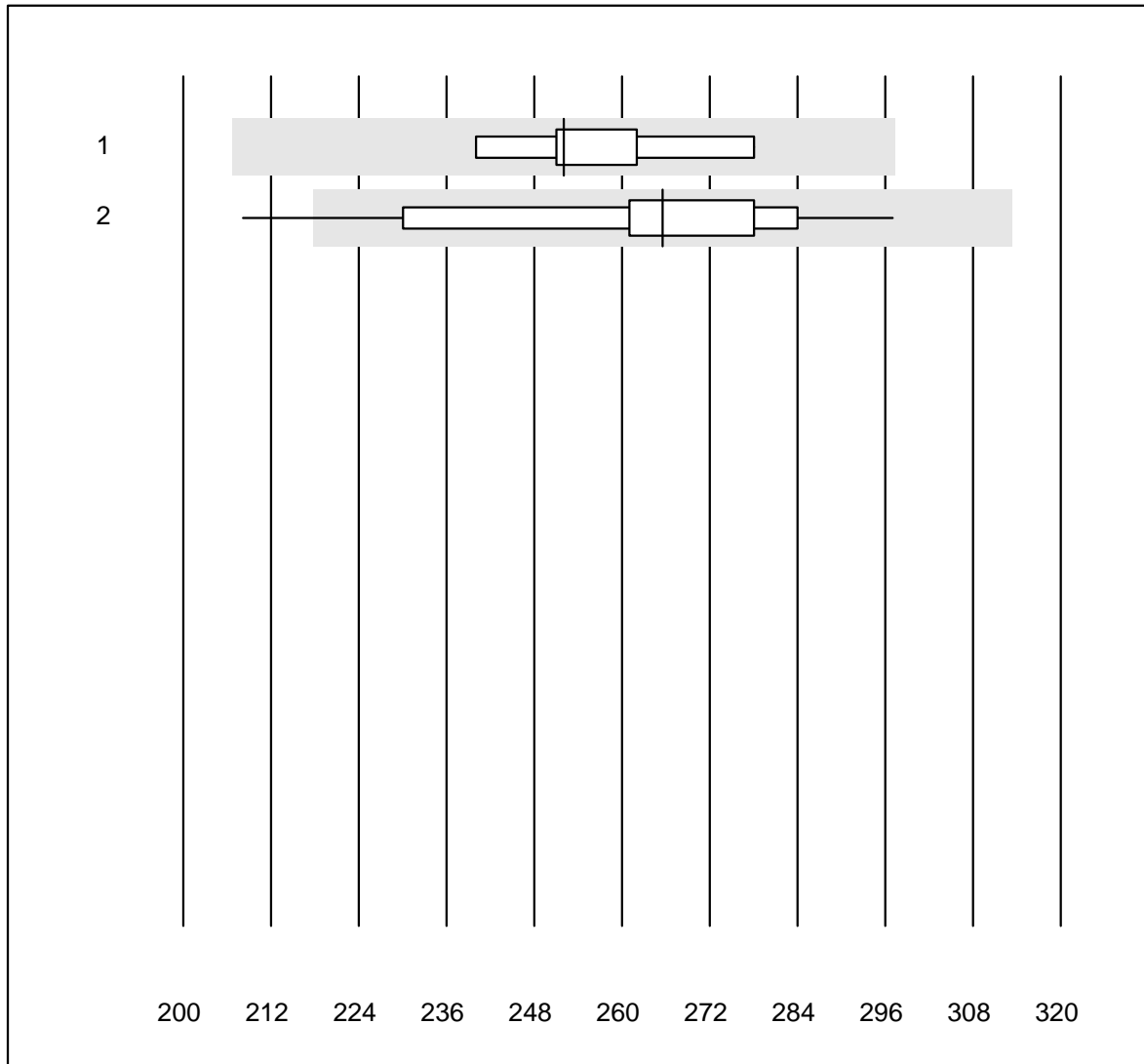
QUALAB tolerance : 18 %   Bilirubin neonatal (µmol/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	ABL700/800	9	100.0	0.0	0.0	252	4.6	e
2	Other methods	14	92.9	7.1	0.0	266	8.5	e*

PSA

PSA (µg/l)

QUALAB tolerance : 21 %

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Cobas E / Elecsys	18	100.0	0.0	0.0	3.94	4.9	e
2	Abbott	8	100.0	0.0	0.0	3.70	6.5	e
3	AFIAS	12	100.0	0.0	0.0	3.84	6.7	e

8 additional results were submitted but not published because the method groups were too small. (< results per group)

free PSA
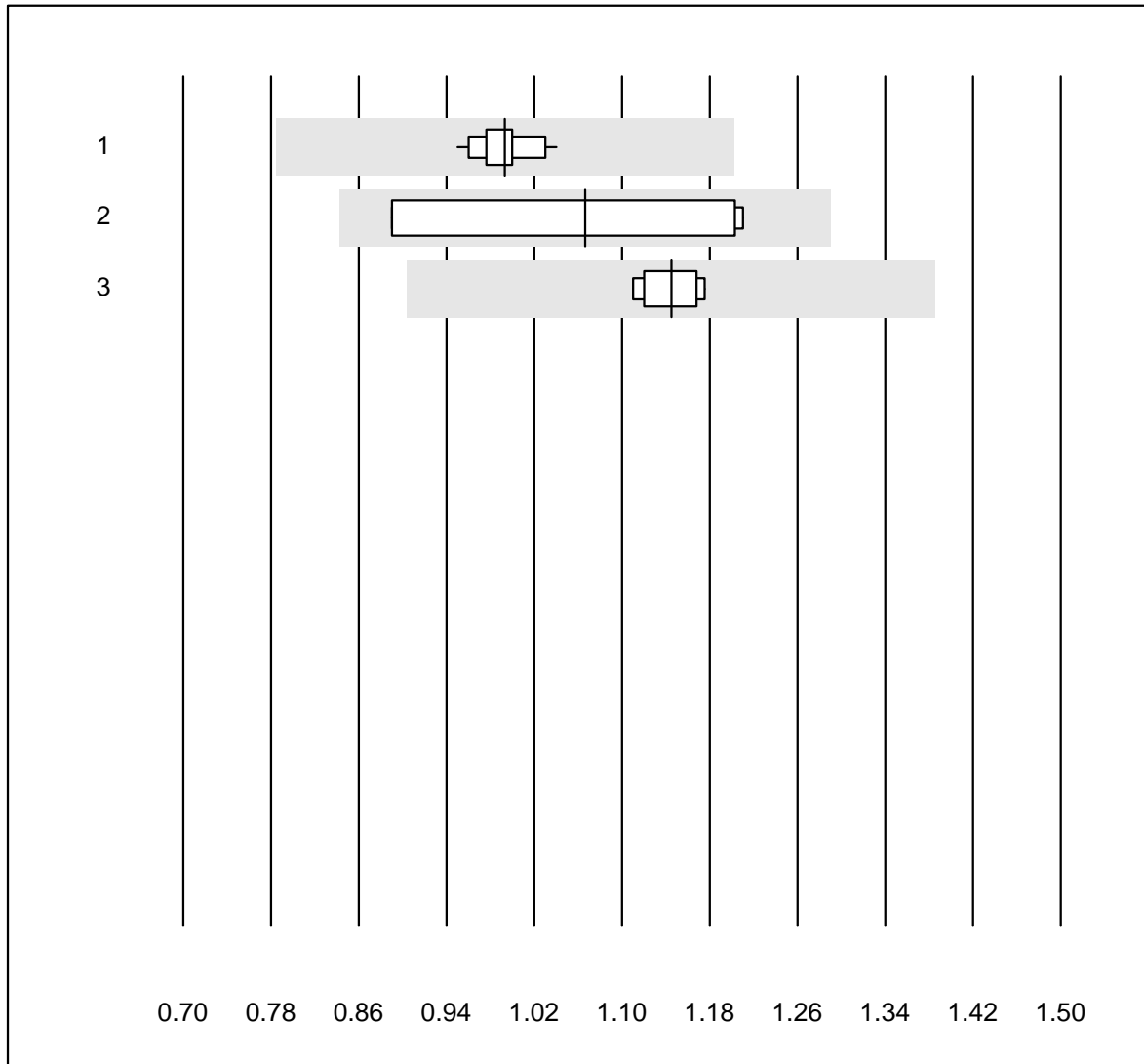
free PSA (µg/l)

QUALAB tolerance : 21 %

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Cobas E / Elecsys	11	100.0	0.0	0.0	0.99	2.7	e
2	ADVIA Centaur XP/CP	4	100.0	0.0	0.0	1.07	16.3	e*
3	Abbott	6	100.0	0.0	0.0	1.15	2.3	e

2 additional results were submitted but not published because the method groups were too small. (< results per group)

CEA


```
            1
            2
            3

        9.0   10.6   12.2   13.8   15.4   17.0   18.6   20.2   21.8   23.4   25.0
```
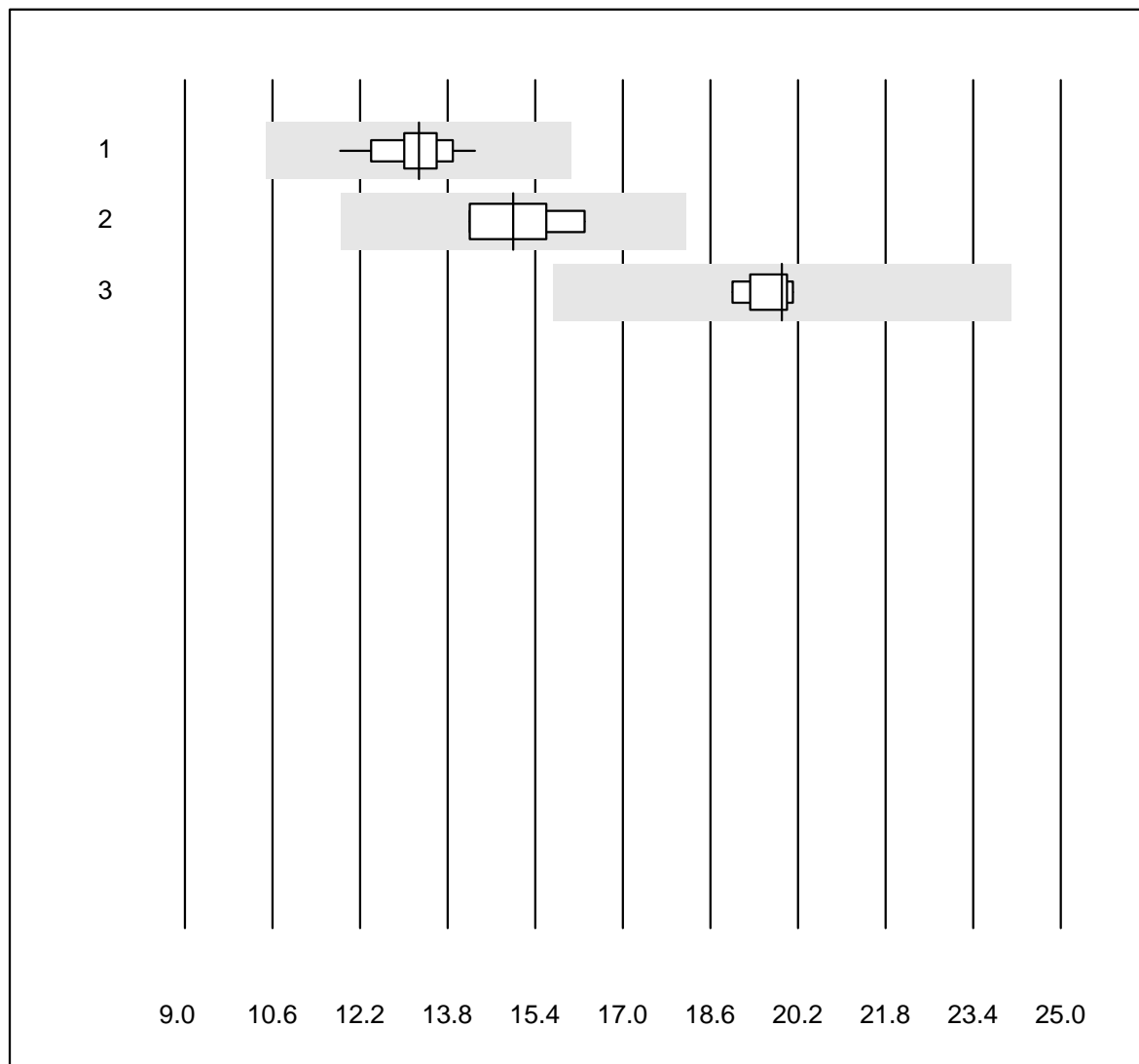
QUALAB tolerance : 21 %   CEA (µg/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Cobas E / Elecsys	12	100.0	0.0	0.0	13.3	5.1	e
2	ADVIA Centaur XP/CP	4	100.0	0.0	0.0	15.0	6.6	e*
3	Abbott	7	100.0	0.0	0.0	19.9	2.1	e

3 additional results were submitted but not published because the method groups were too small. (< results per group)

CA 125
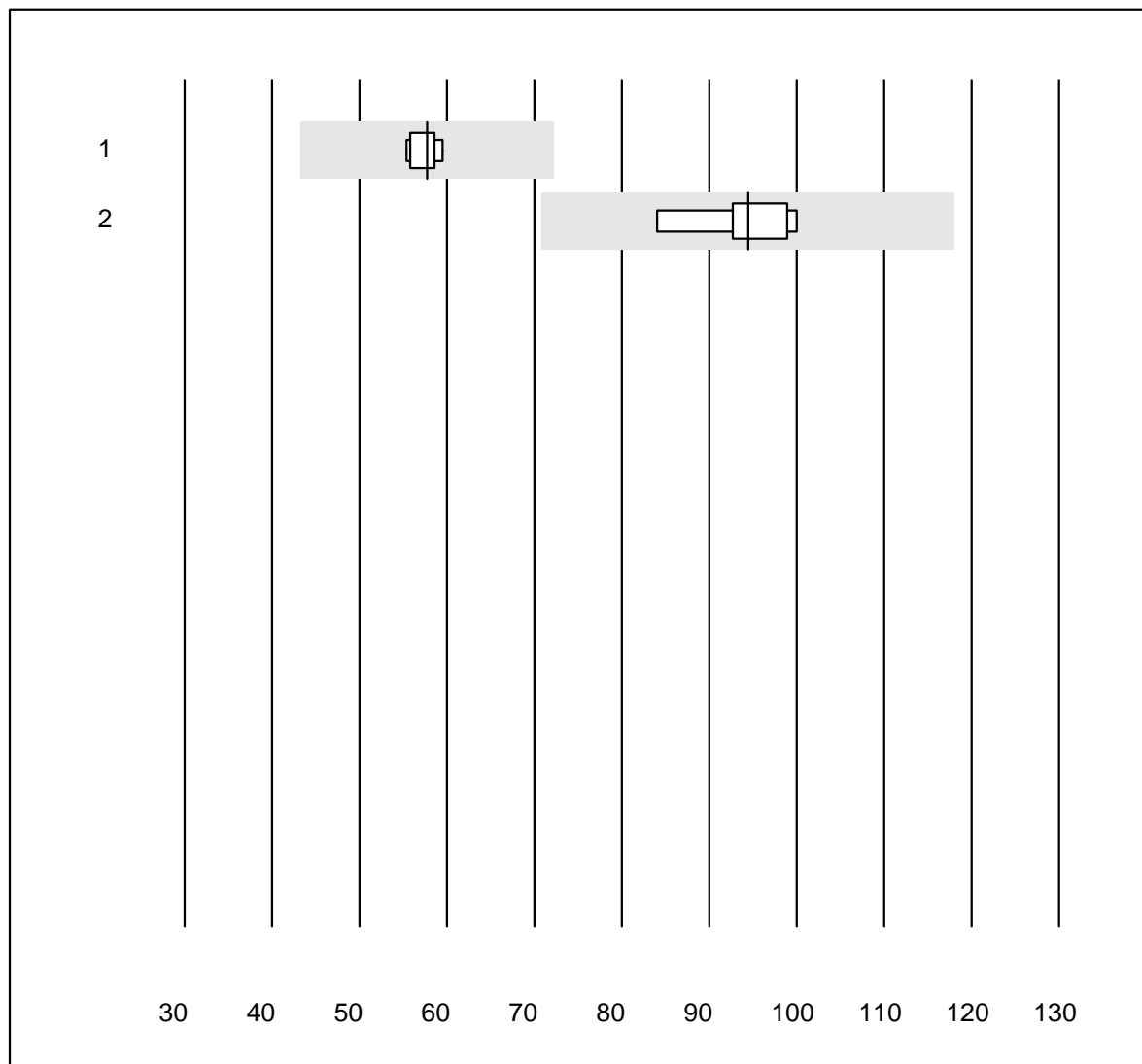
MQ tolerance : 25 %

CA 125 (kIU/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Cobas E / Elecsys	8	100.0	0.0	0.0	57.8	2.6	e
2	Abbott	6	100.0	0.0	0.0	94.5	6.1	e

5 additional results were submitted but not published because the method groups were too small. (< results per group)

CA 19-9
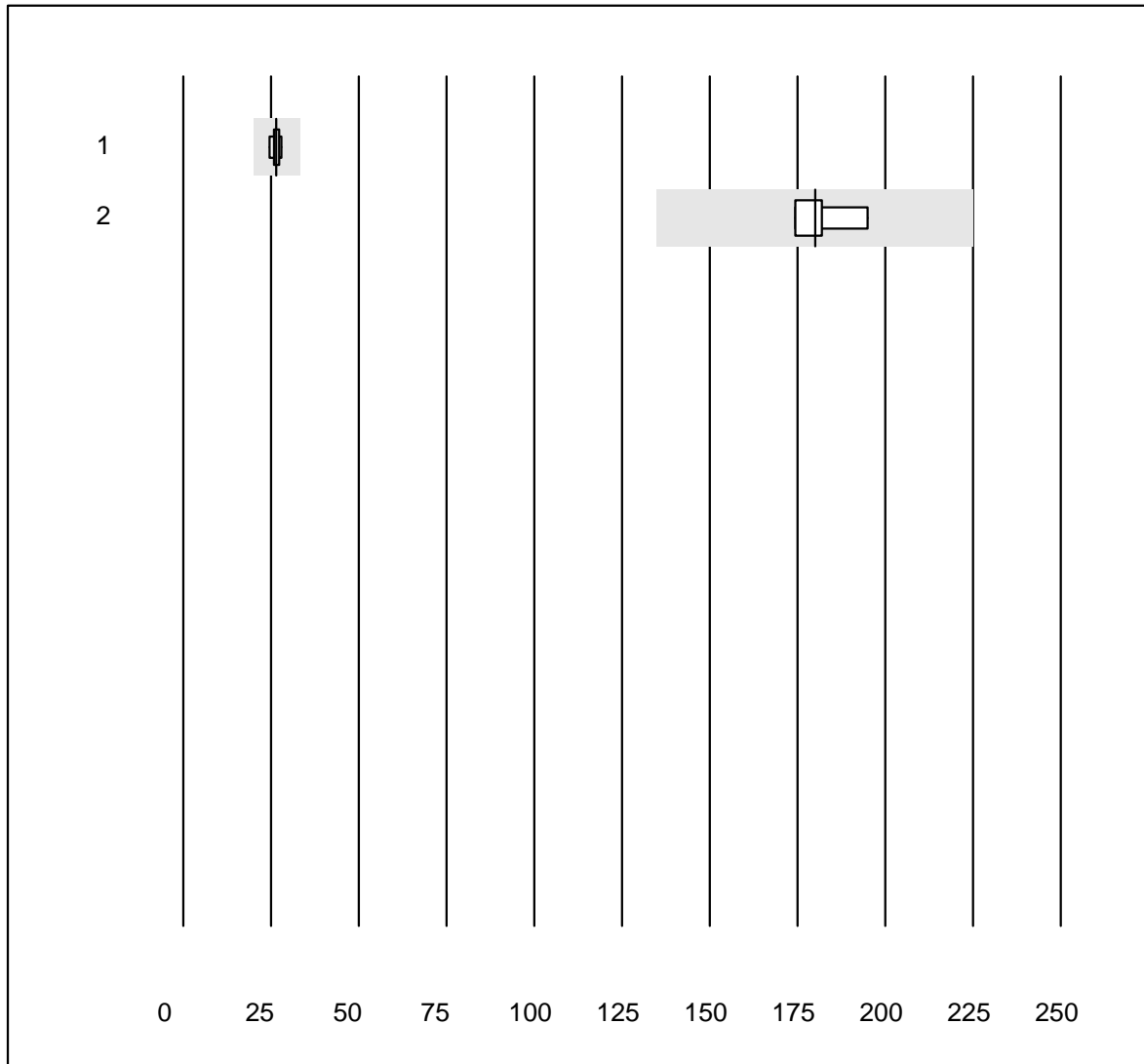
CA 19-9 (kIU/l)
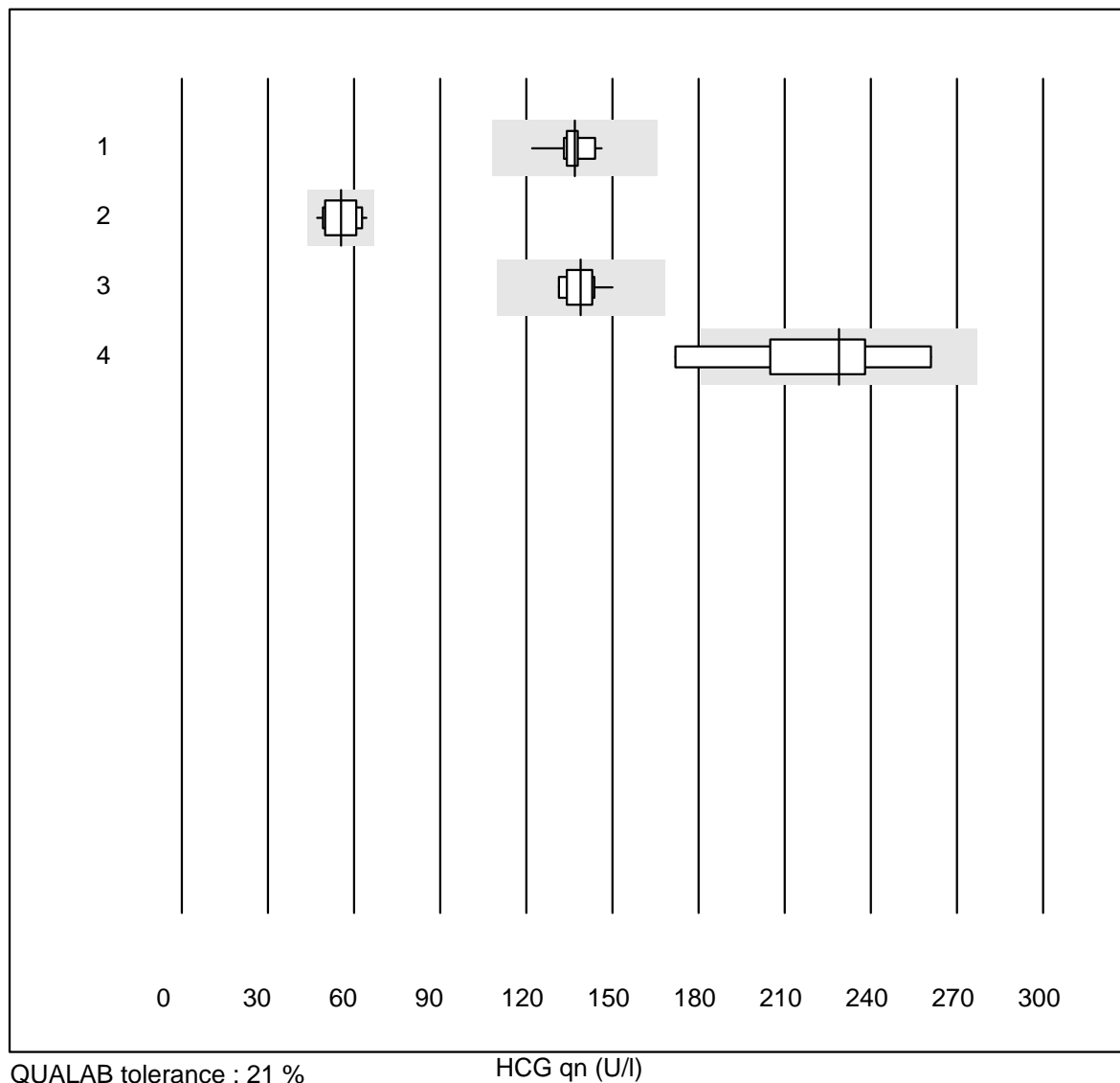
MQ tolerance : 25 %

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Cobas E / Elecsys	7	100.0	0.0	0.0	26.5	4.4	e
2	Abbott	4	100.0	0.0	0.0	180.0	5.0	e

7 additional results were submitted but not published because the method groups were too small. (< results per group)

CA 15-3
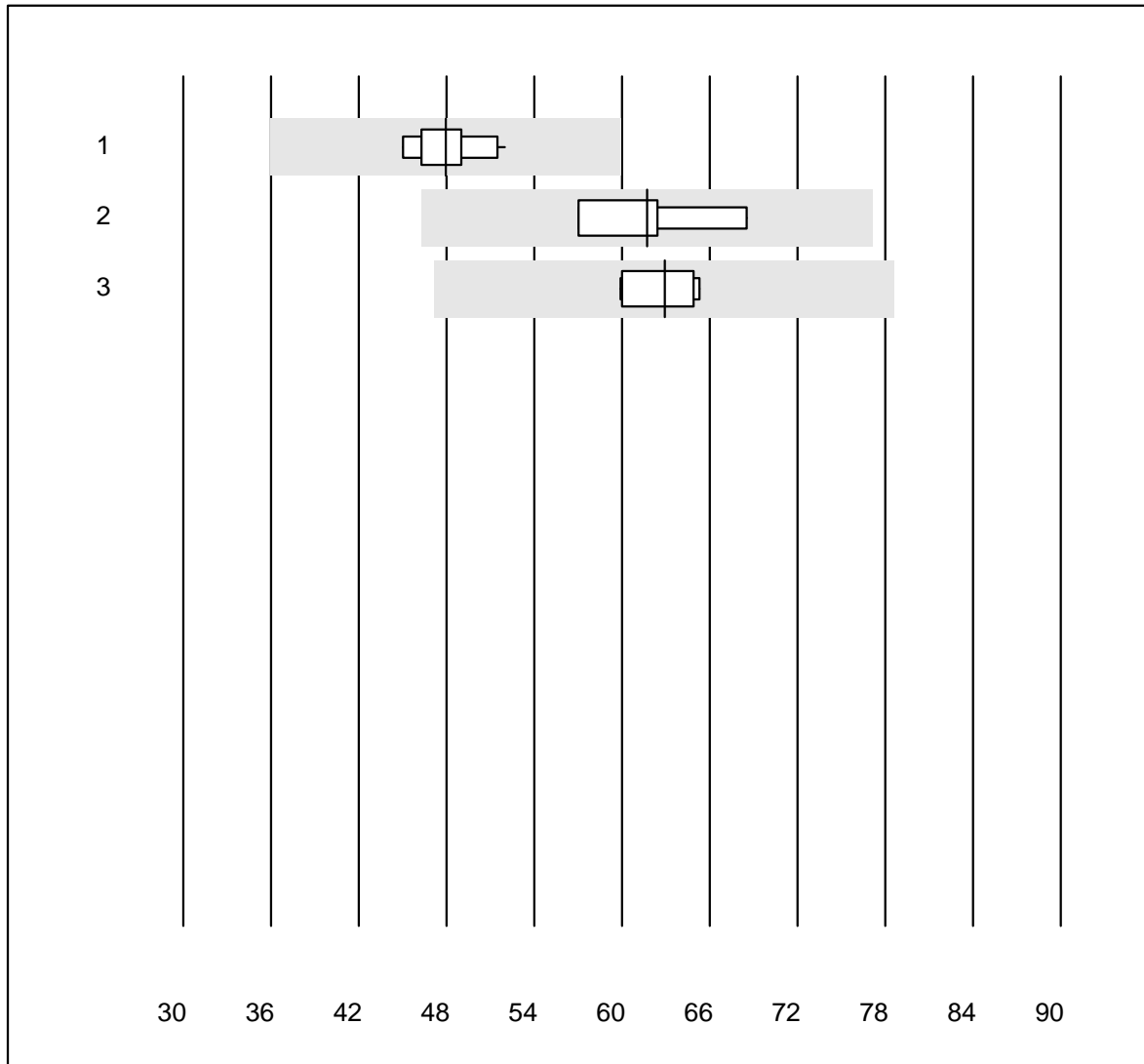
MQ tolerance : 25 %

CA 15-3 (kIU/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Cobas E / Elecsys	10	100.0	0.0	0.0	47.9	4.9	e
2	ADVIA Centaur XP/CP	4	100.0	0.0	0.0	61.7	7.7	e*
3	Abbott	6	100.0	0.0	0.0	62.9	3.9	e

4 additional results were submitted but not published because the method groups were too small. (< results per group)

AFP

70   77   84   91   98   105   112   119   126   133   140
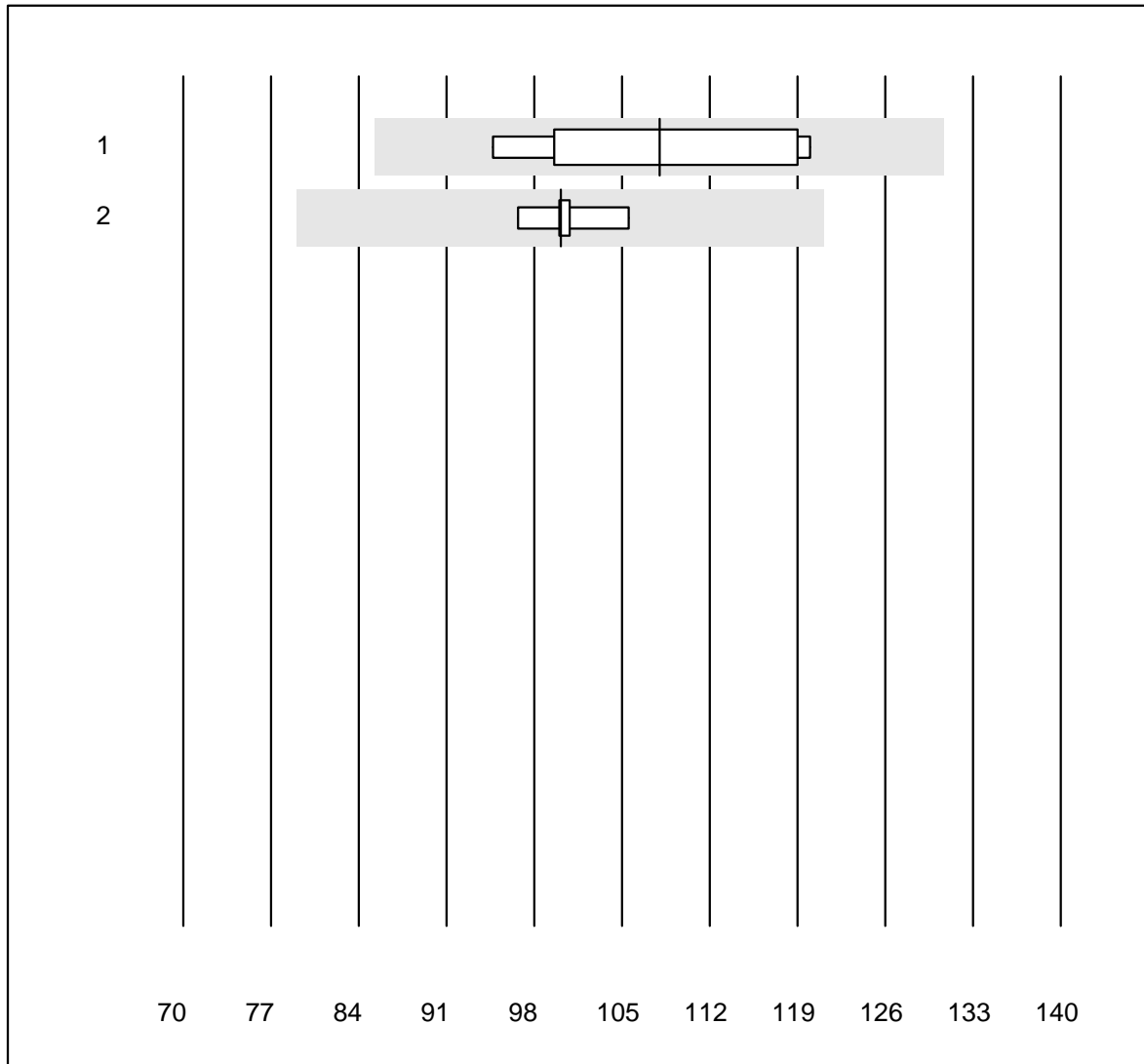
QUALAB tolerance : 21 %   AFP (µg/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Cobas E / Elecsys	7	100.0	0.0	0.0	108.0	9.5	e*
2	Abbott	5	100.0	0.0	0.0	100.1	3.1	e

7 additional results were submitted but not published because the method groups were too small. (< results per group)

HCG qn

QUALAB tolerance : 21 %

HCG qn (U/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Cobas E / Elecsys	16	100.0	0.0	0.0	137.0	4.0	e
2	VIDAS	11	100.0	0.0	0.0	55.4	10.3	e*
3	Abbott	10	100.0	0.0	0.0	138.9	4.2	e
4	AFIAS	9	88.9	11.1	0.0	229.0	12.0	e*

9 additional results were submitted but not published because the method groups were too small. (< results per group)

HCG intact
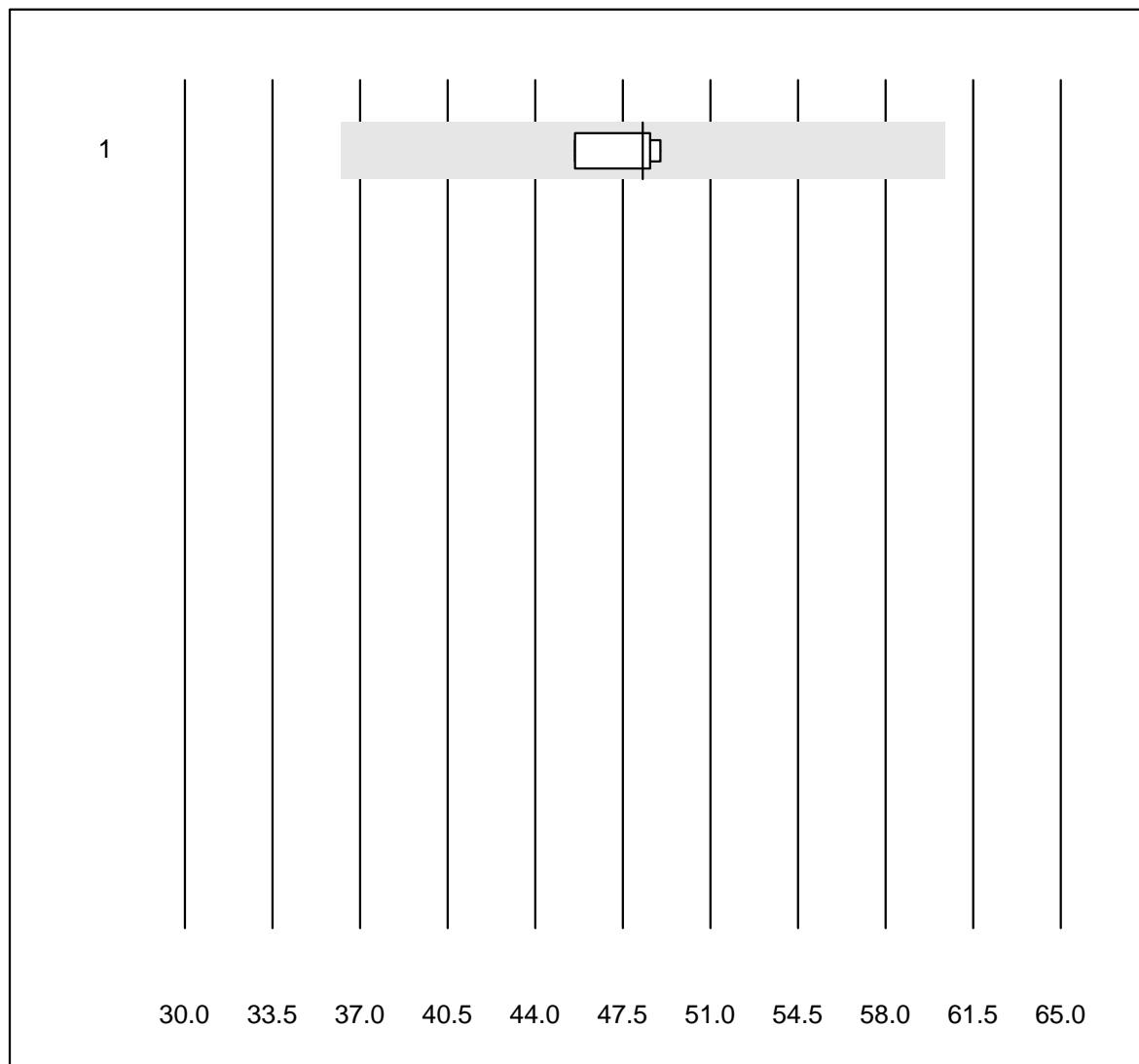
QUALAB tolerance : 25 %

HCG intact (U/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Cobas	4	100.0	0.0	0.0	48.3	3.2	e

S100
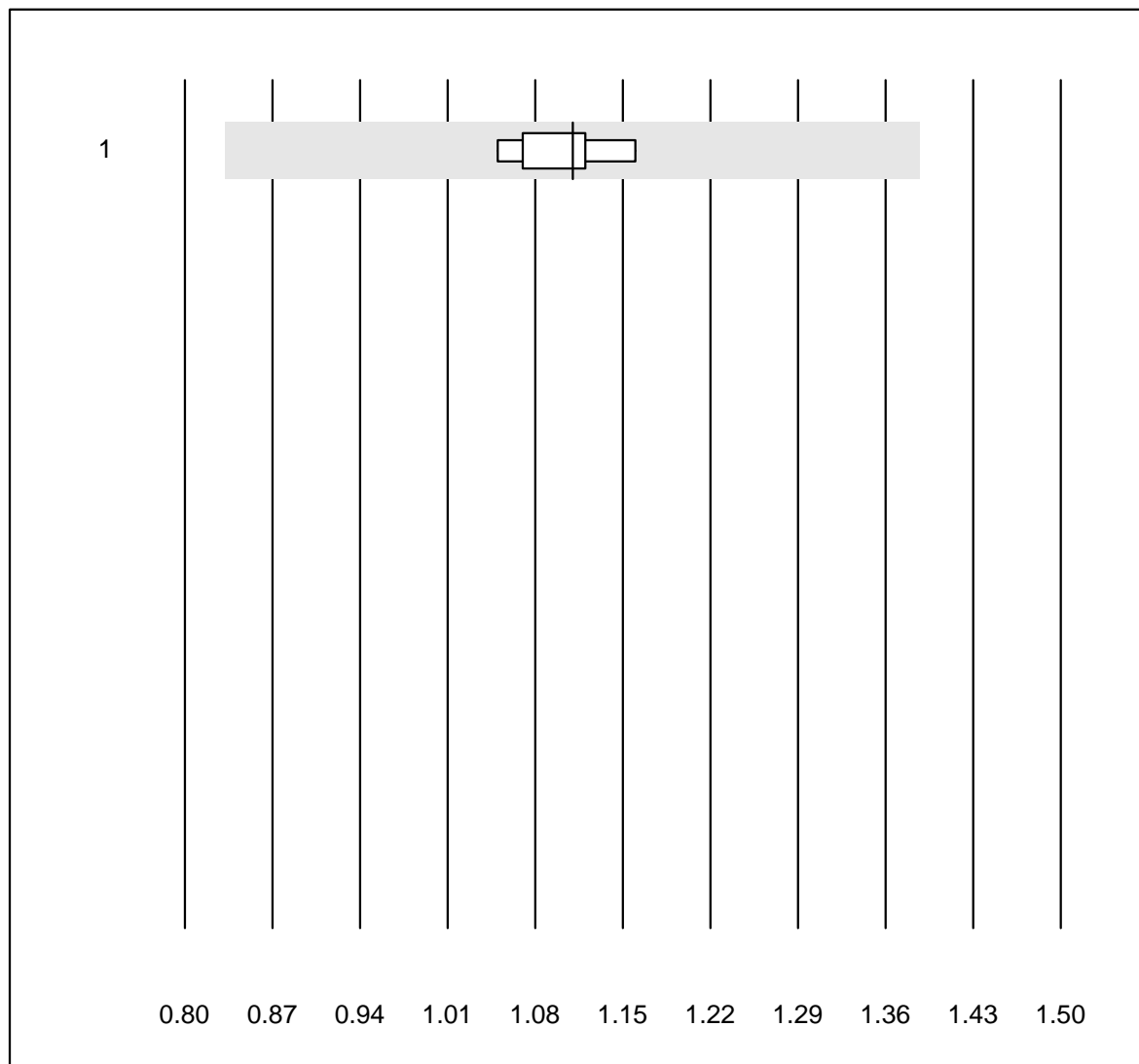
MQ tolerance : 25 %

S100 (µg/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Cobas	6	100.0	0.0	0.0	1.11	3.6	e

NSE

1

2.4   2.6   2.8   3.0   3.2   3.4   3.6   3.8   4.0   4.2   4.4
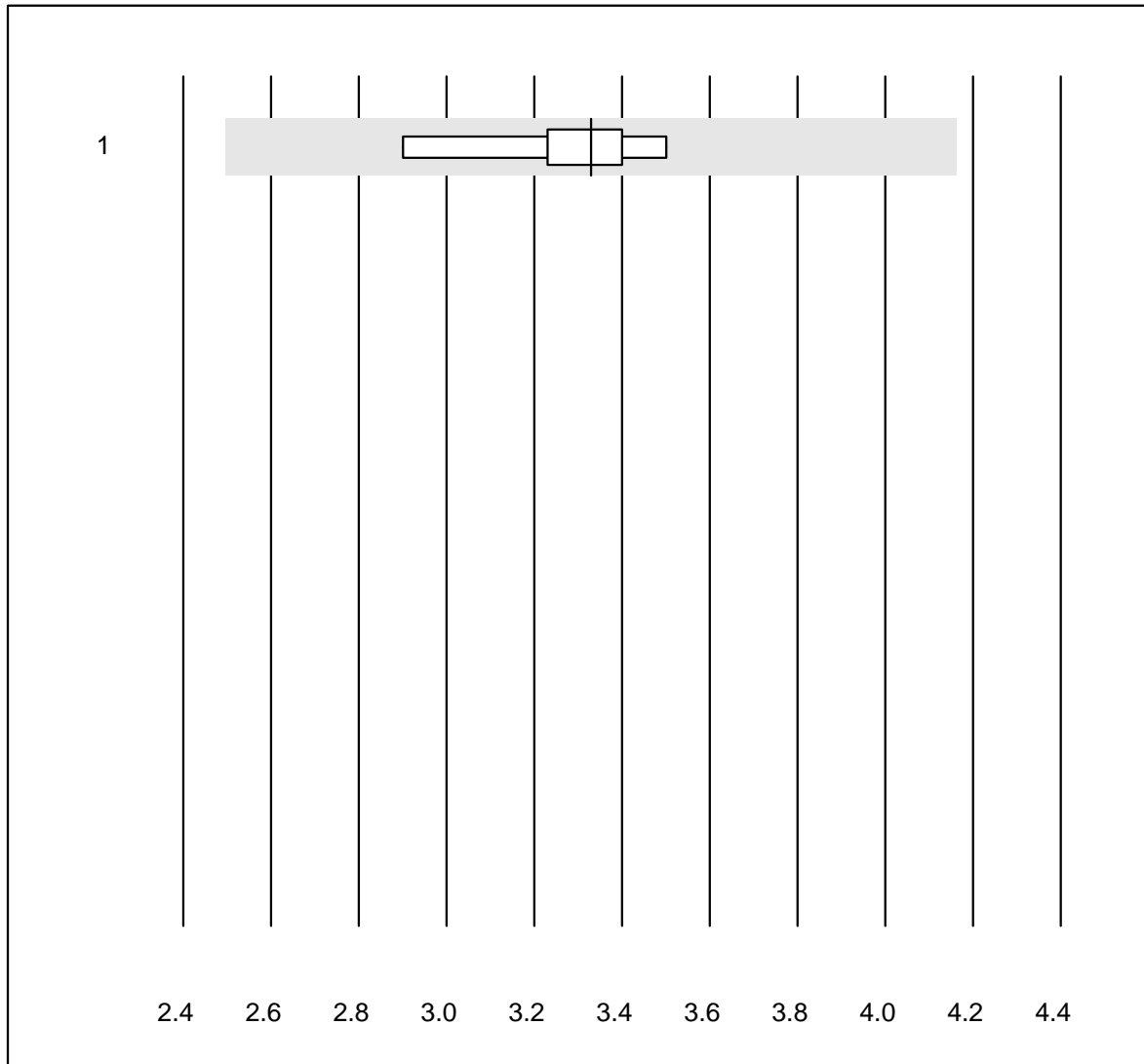
MQ tolerance : 25 %

NSE (ng/ml)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Cobas	5	100.0	0.0	0.0	3.3	7.0	e*

One result was submitted but not pubished because the method group was too small. (< 4 results per group)

Thyreoglobulin
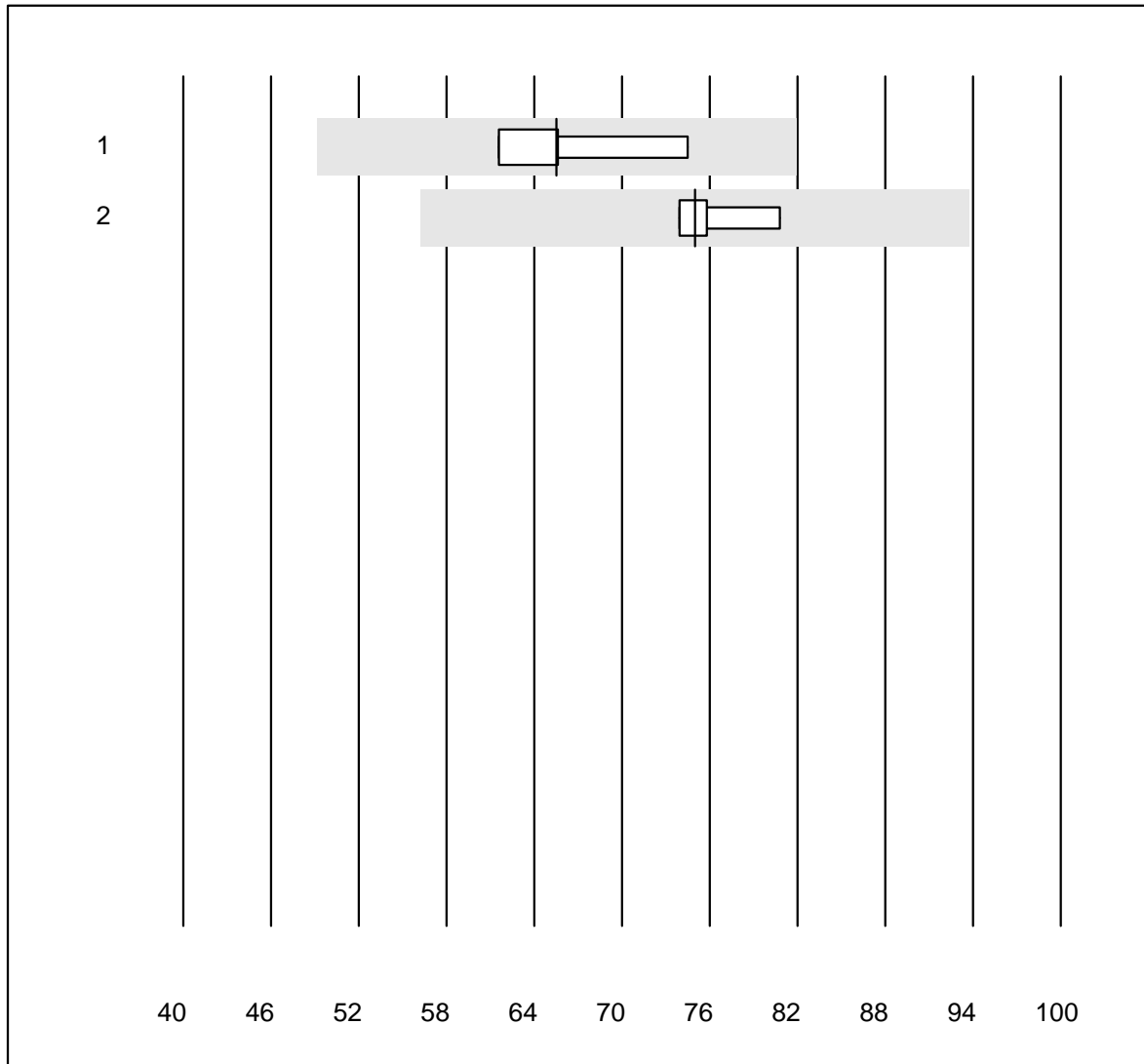
MQ tolerance : 25 %

Thyreoglobulin (µg/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Cobas	4	100.0	0.0	0.0	65.5	8.2	e*
2	Other methods	4	100.0	0.0	0.0	75.0	4.2	e

CK-MB

30   38   46   54   62   70   78   86   94   102   110
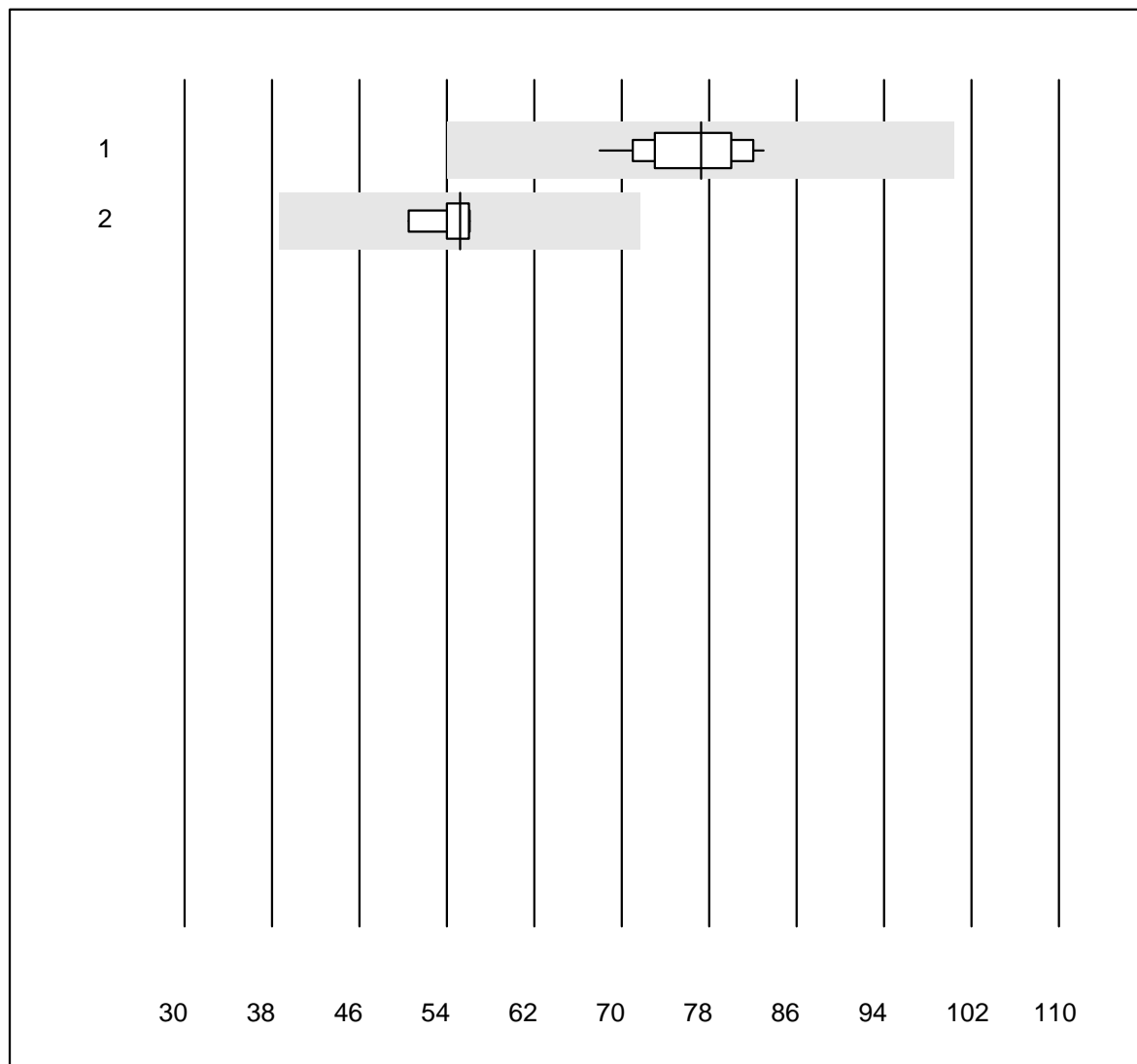
MQ tolerance : 30 %   CK-MB (U/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Fuji Dri-Chem	20	100.0	0.0	0.0	77.3	5.6	e
2	Cobas/Roche	7	100.0	0.0	0.0	55.2	3.6	e

2 additional results were submitted but not published because the method groups were too small. (< results per group)

C-Peptid

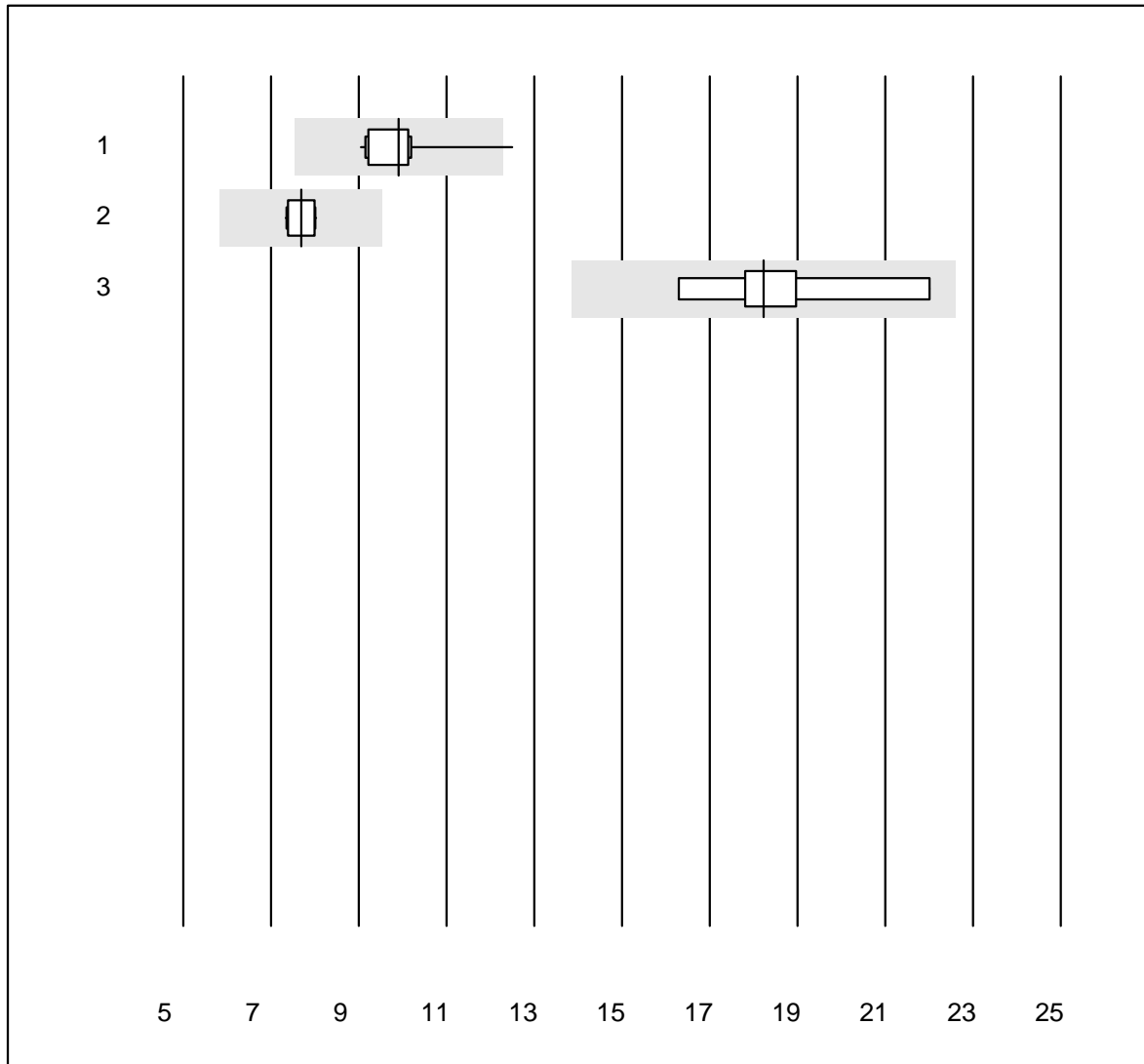MQ tolerance : 25 %

C-Peptid (nmol/l)
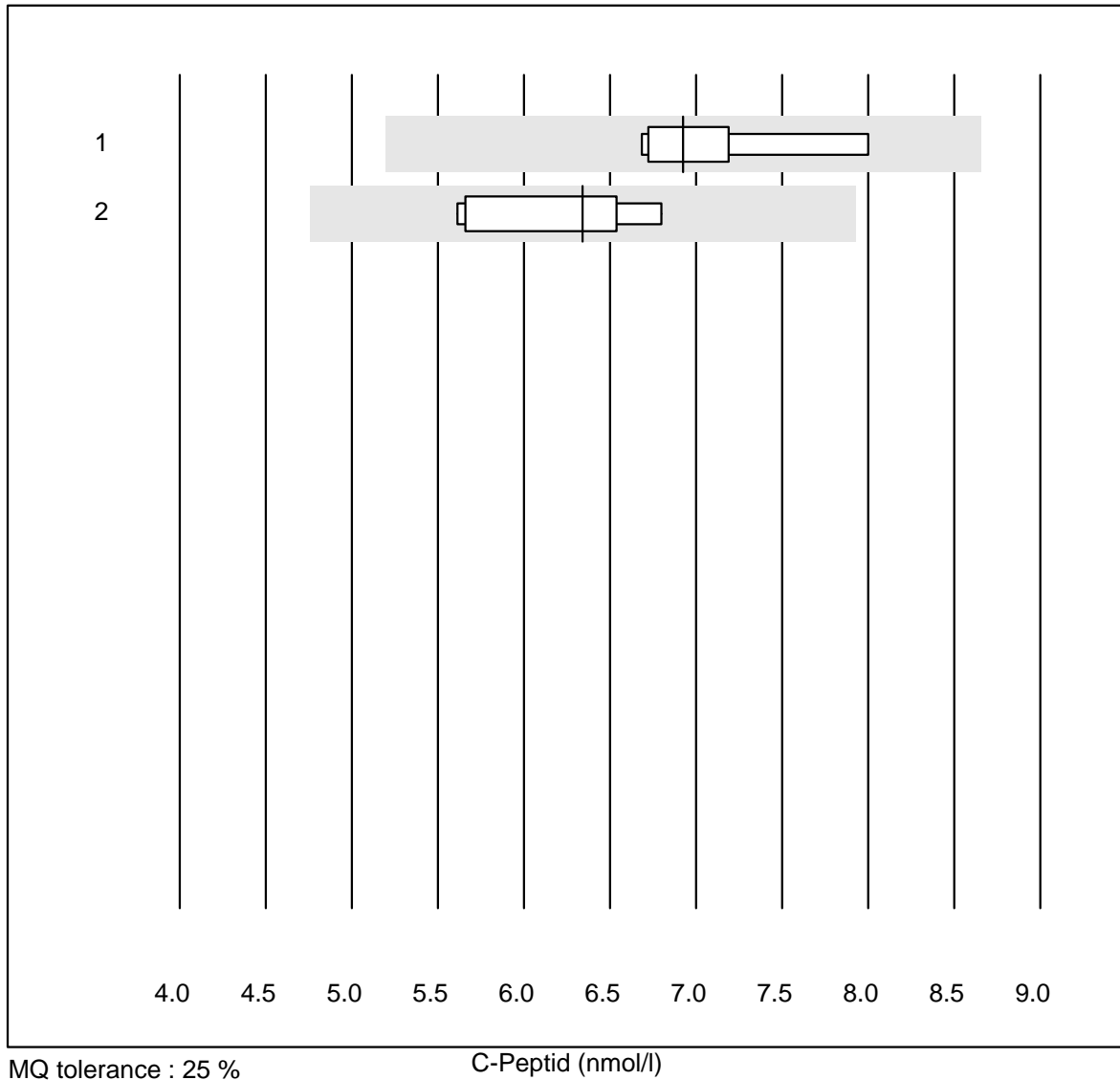
No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Cobas	7	100.0	0.0	0.0	6.92	6.5	e
2	Other methods	5	100.0	0.0	0.0	6.34	8.6	e*

ACTH
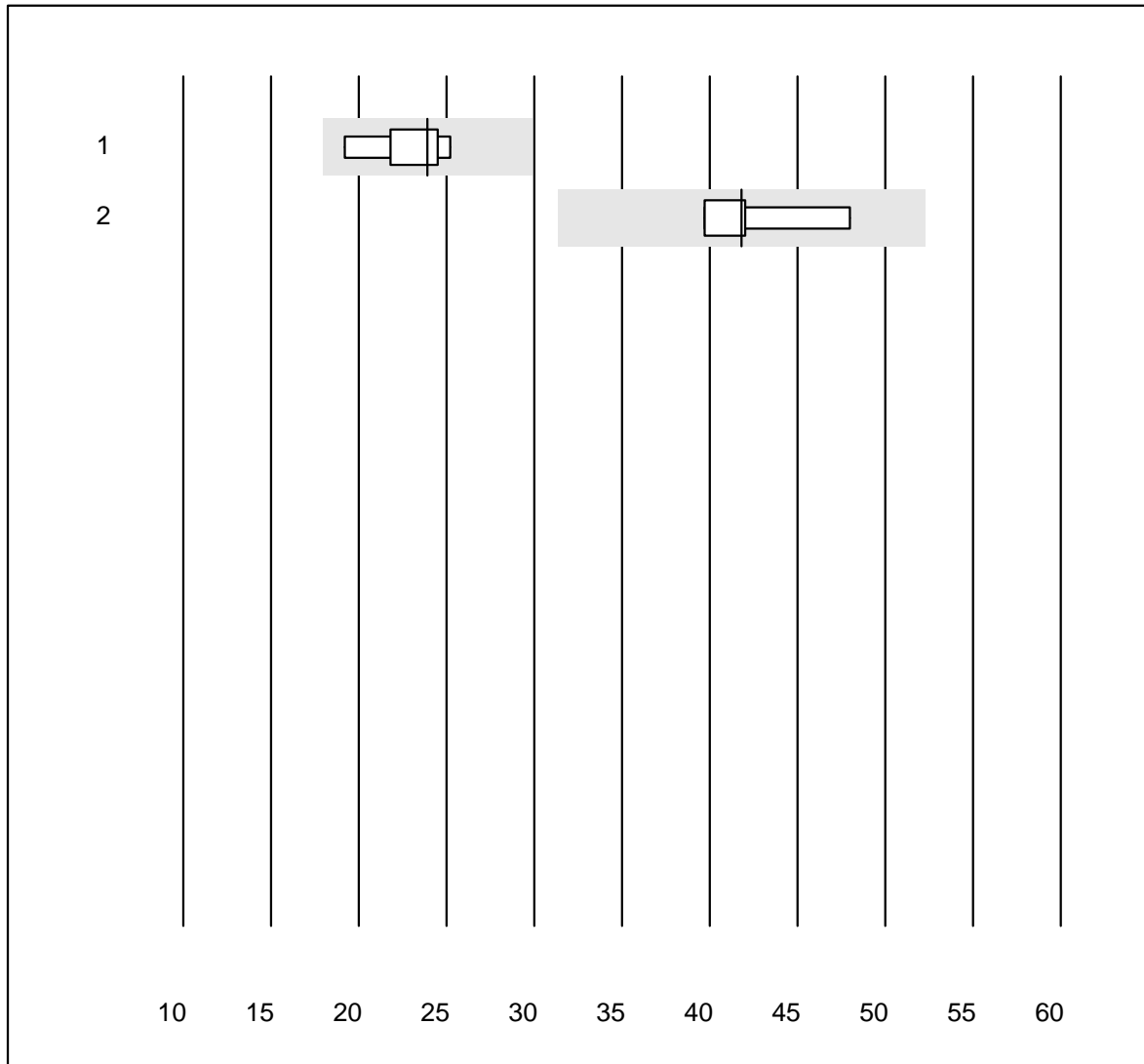
MQ tolerance : 25 %

ACTH (ng/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Cobas	8	100.0	0.0	0.0	23.90	8.6	e*
2	Liaison	4	100.0	0.0	0.0	41.81	8.4	e*

Procalcitonin
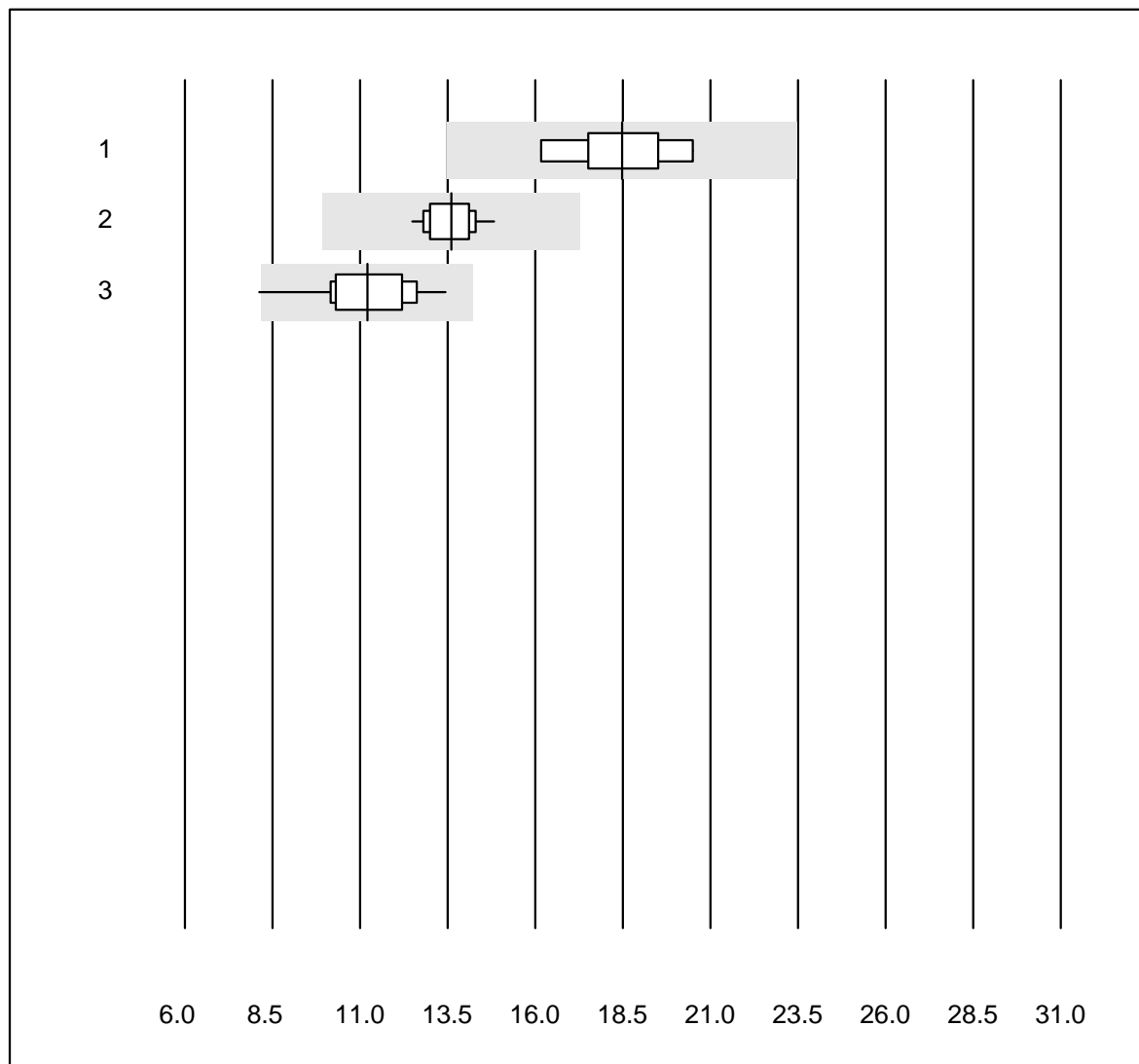
QUALAB tolerance : 27 %

Procalcitonin (µg/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Abbott	8	100.0	0.0	0.0	18.49	8.0	e
2	Cobas	19	100.0	0.0	0.0	13.61	4.4	e
3	VIDAS	15	86.6	6.7	6.7	11.20	12.2	e

11 additional results were submitted but not published because the method groups were too small. (< results per group)

EPO
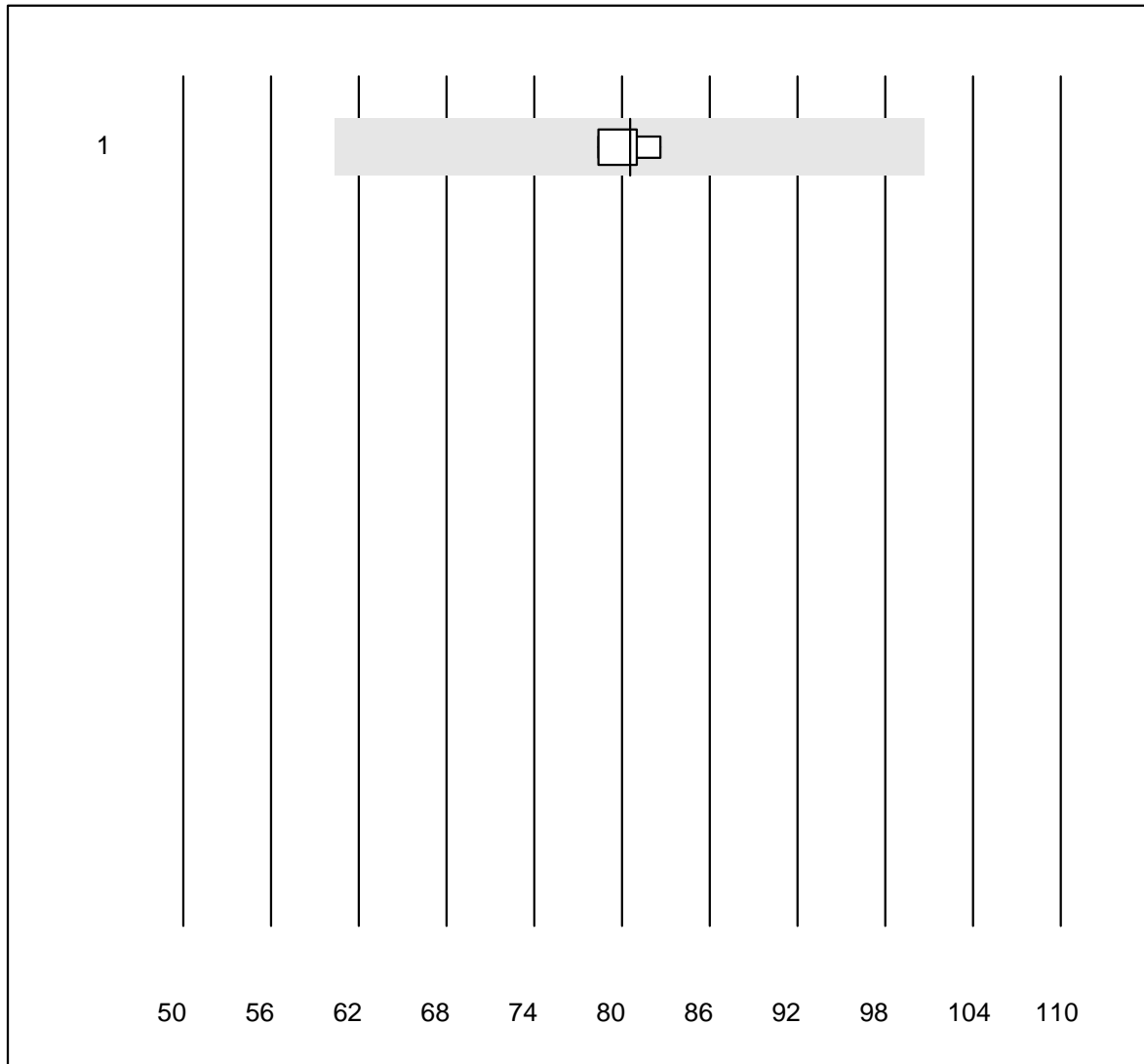
MQ tolerance : 25 %

EPO (U/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	all Participants	4	100.0	0.0	0.0	80.5	2.2	e

2 additional results were submitted but not published because the method groups were too small. (< results per group)

Parathyroid hormone

QUALAB tolerance : 24 %   Parathyroid hormone (pmol/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Cobas PTH STAT	11	90.9	9.1	0.0	9.9	9.7	e*
2	Cobas	11	100.0	0.0	0.0	7.7	3.6	e
3	Abbott	6	100.0	0.0	0.0	18.2	10.2	e*

9 additional results were submitted but not published because the method groups were too small. (< results per group)

Osmolality

295   300   305   310   315   320   325   330   335   340   345
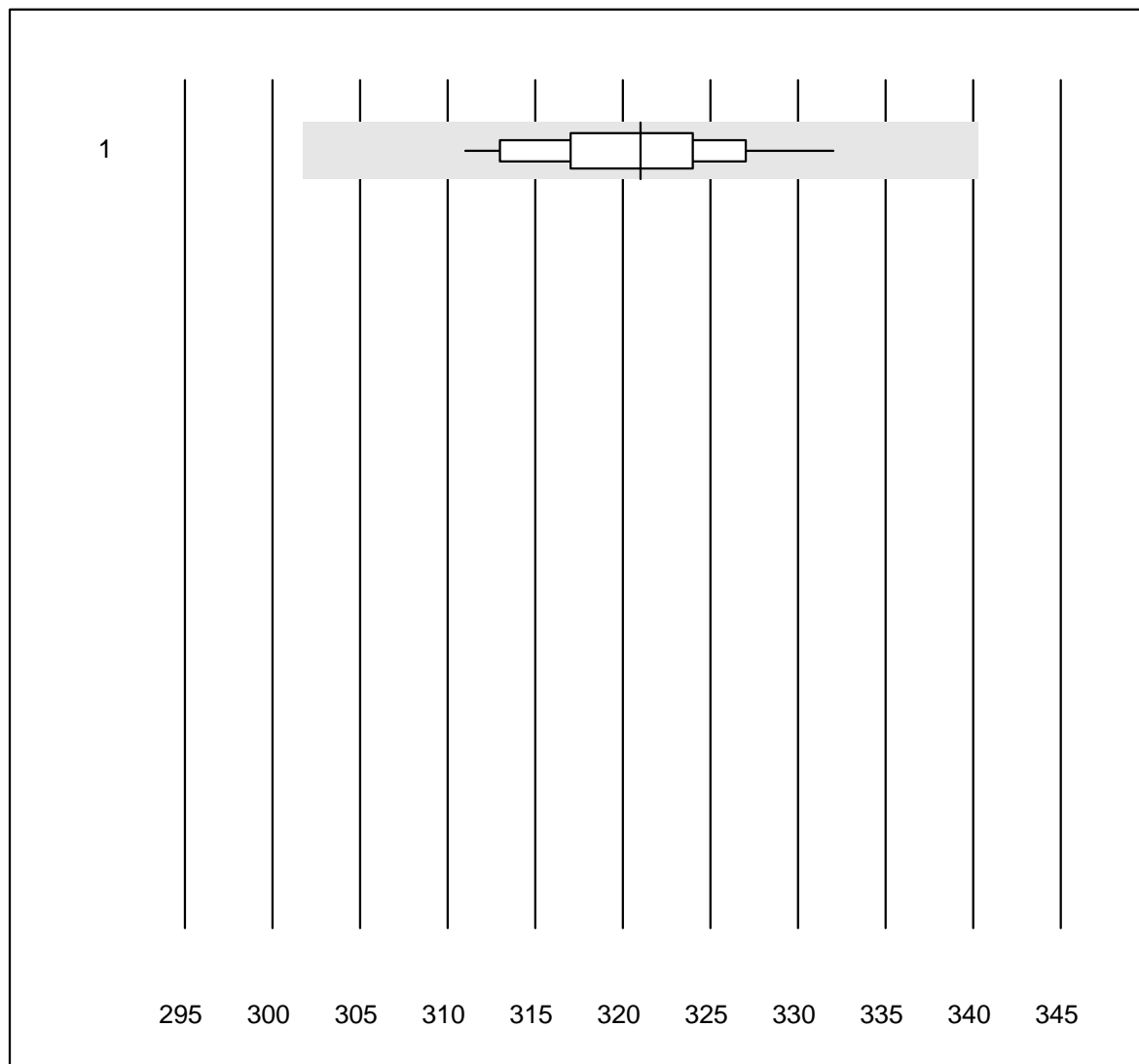
QUALAB tolerance : 6 %   Osmolality (mosm/kg)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Cryoskopy	22	95.5	0.0	4.5	321	1.7	e

Potassium-K22

3.40   3.46   3.52   3.58   3.64   3.70   3.76   3.82   3.88   3.94   4.00
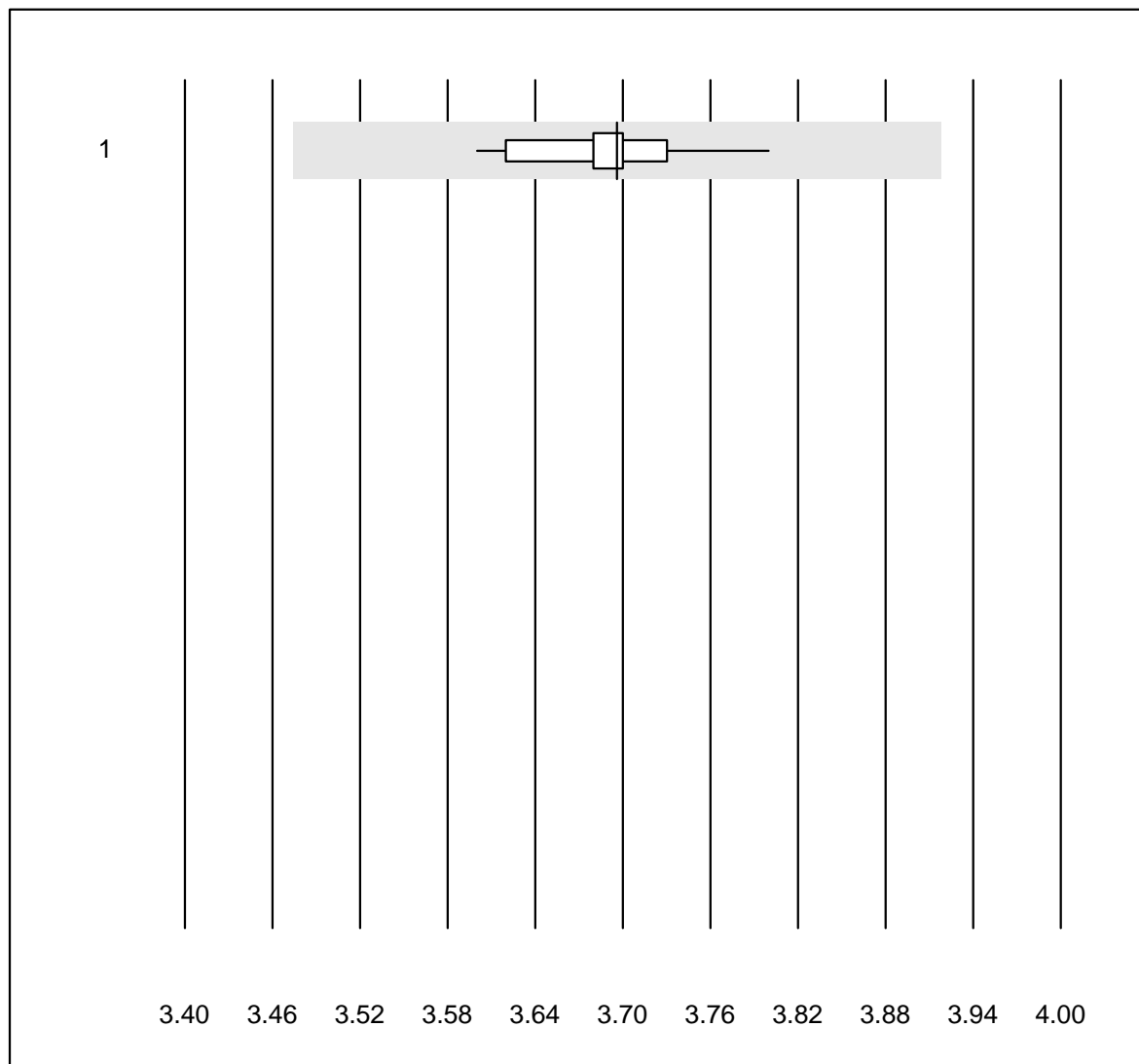
QUALAB tolerance : 6 %   Potassium-K22 (mmol/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	ISE	12	100.0	0.0	0.0	3.7	1.4	e

Sodium-K22
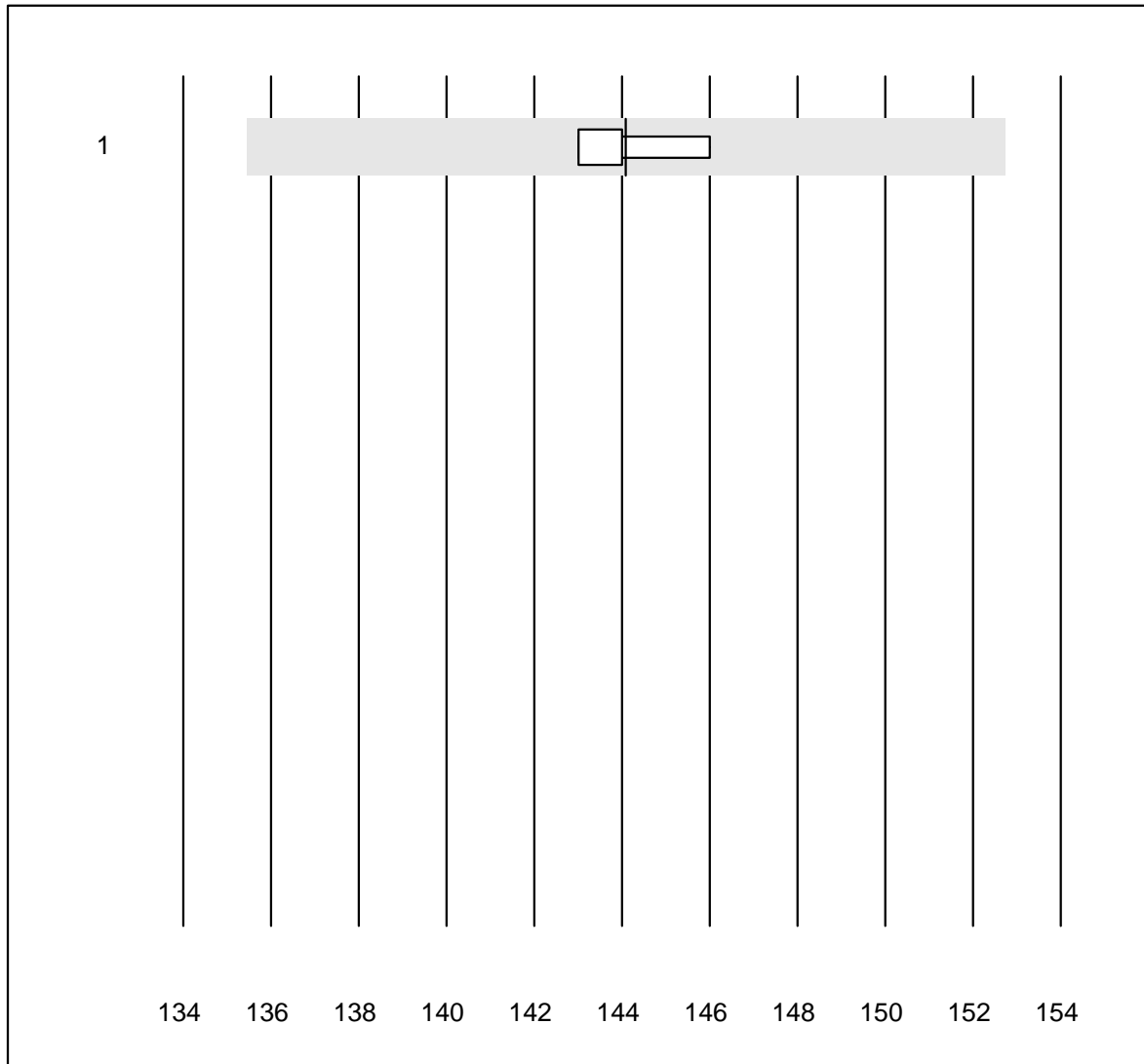
QUALAB tolerance : 6 %   Sodium-K22 (mmol/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	ISE	12	100.0	0.0	0.0	144	0.8	e

Glucose-K22

3.9   4.0   4.1   4.2   4.3   4.4   4.5   4.6   4.7   4.8   4.9
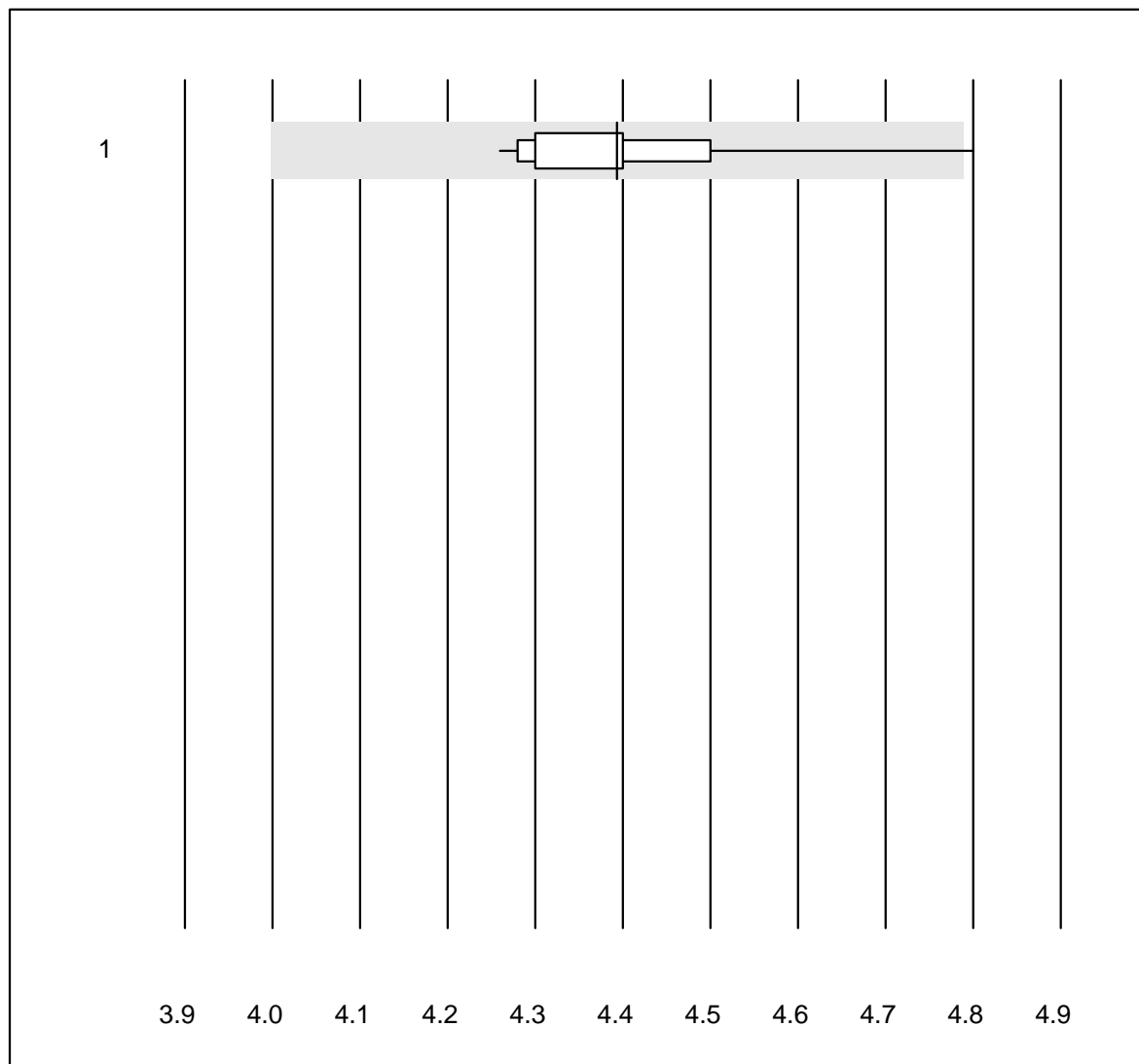
QUALAB tolerance : 9 %   Glucose-K22 (mmol/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Standard chemistry	12	91.7	8.3	0.0	4.4	3.5	e

Urea-K22

QUALAB tolerance : 15 %　　　　Urea-K22 (mmol/l)
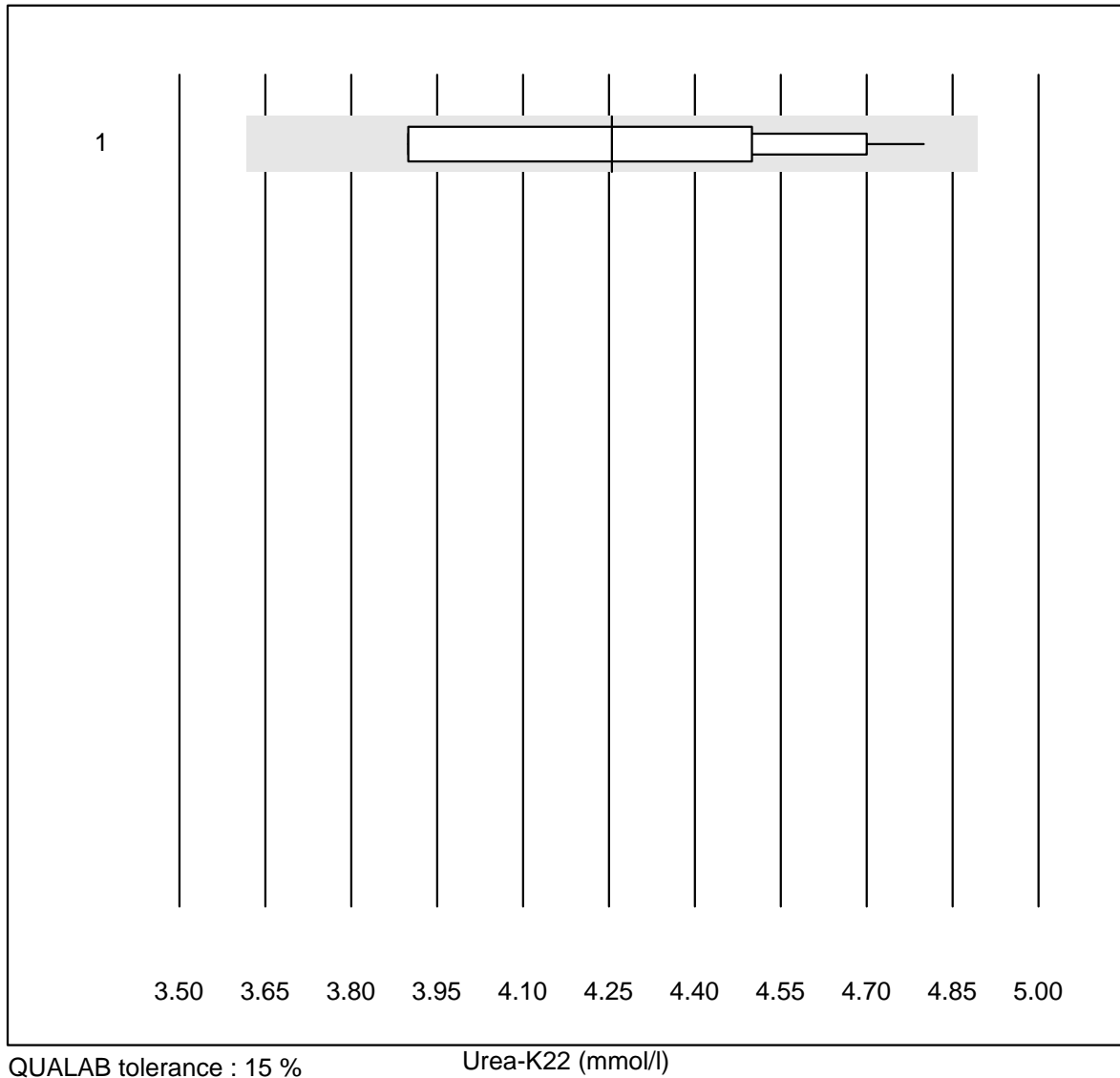
No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Standard chemistry	12	100.0	0.0	0.0	4.3	7.6	e*

Osmotic Gap
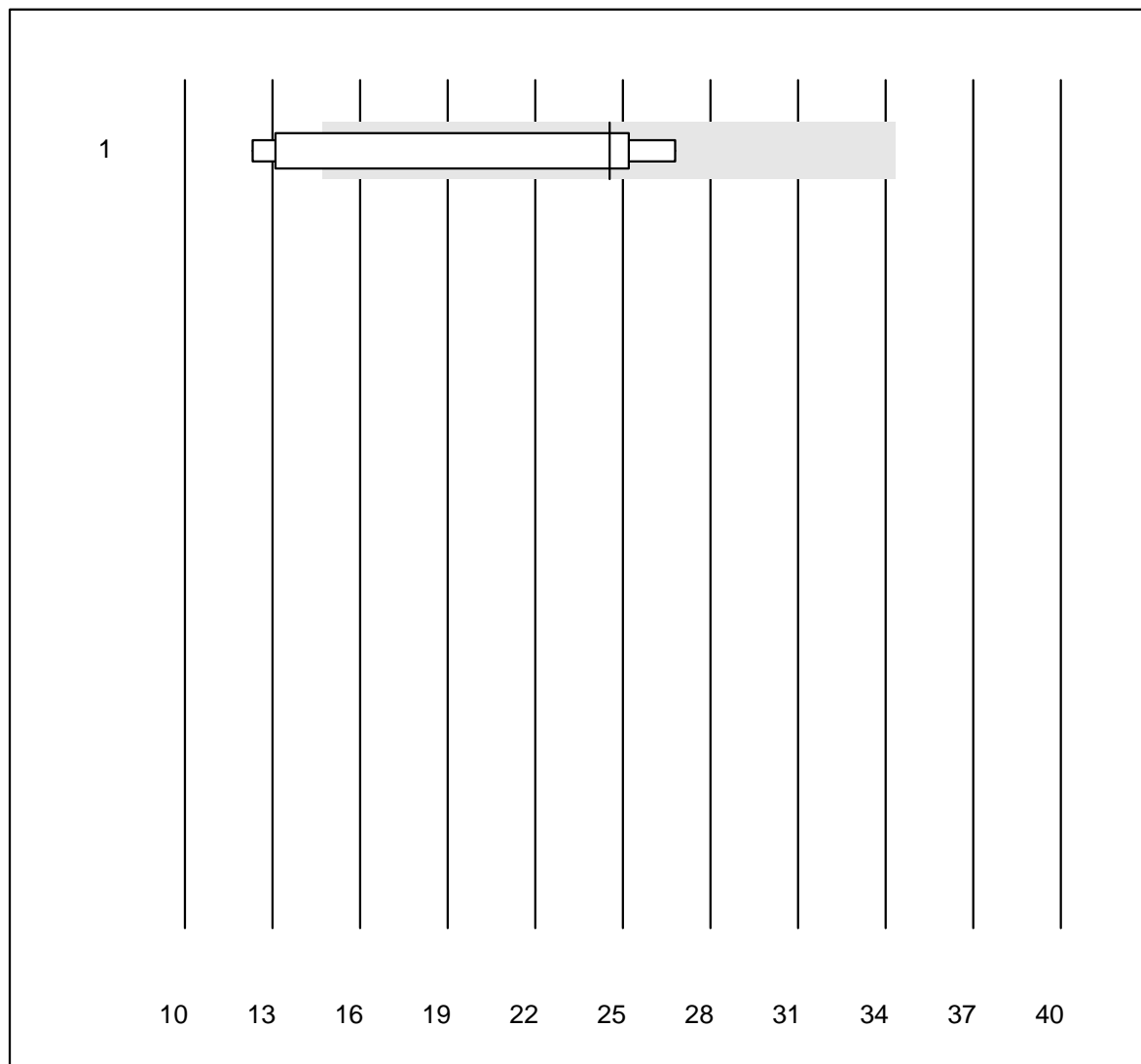
MQ tolerance : 40 %

Osmotic Gap (mmol/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Formel 1 (2Na+K+Glu+	10	60.0	30.0	10.0	24.5	29.7	a

2 additional results were submitted but not published because the method groups were too small. (< results per group)

Digoxin
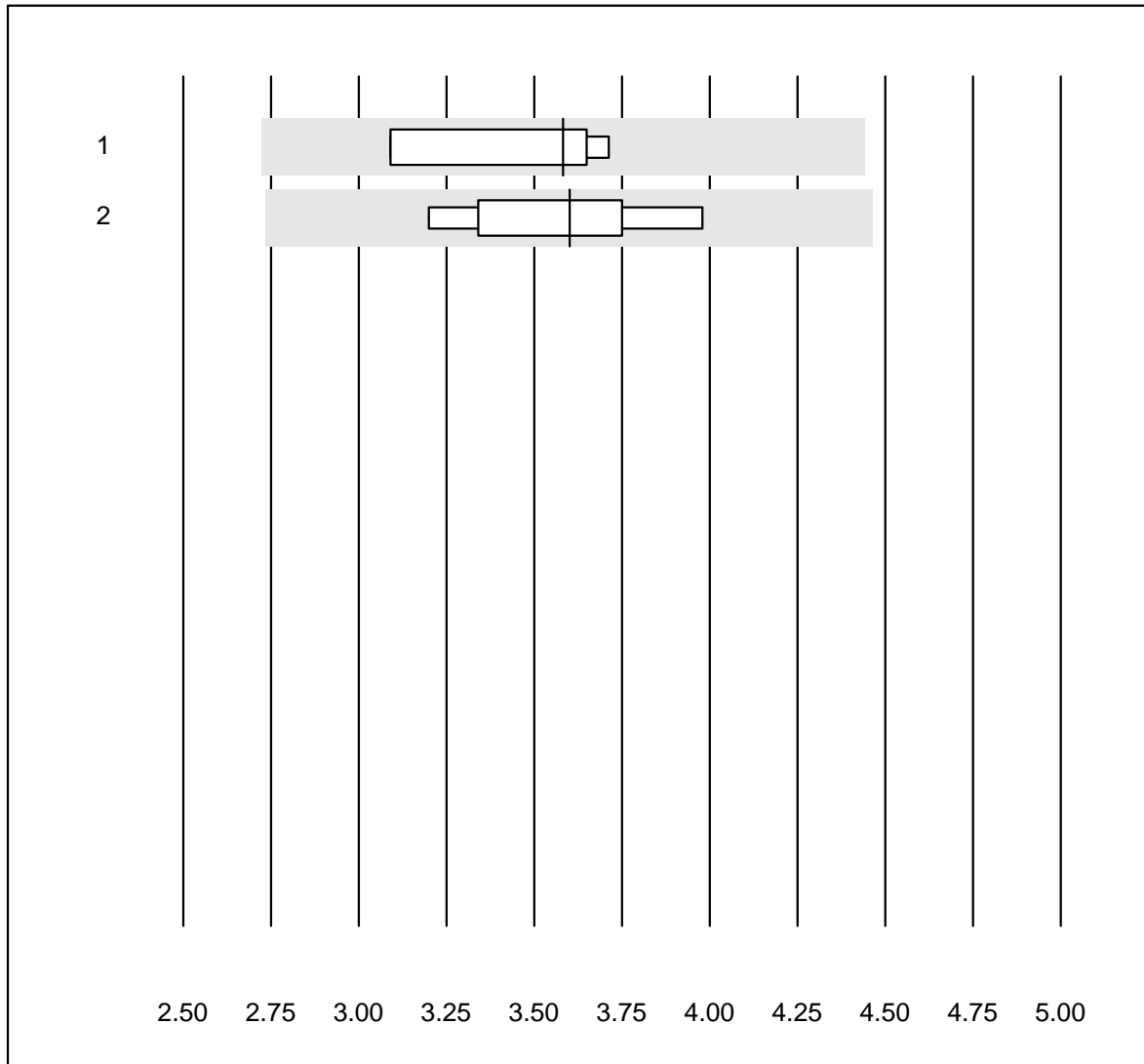
QUALAB tolerance : 24 %   Digoxin (nmol/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Alinity	4	100.0	0.0	0.0	3.58	8.0	e*
2	Other methods	8	100.0	0.0	0.0	3.60	7.6	e

Phenytoin


```
         1
```

50   56   62   68   74   80   86   92   98   104   110
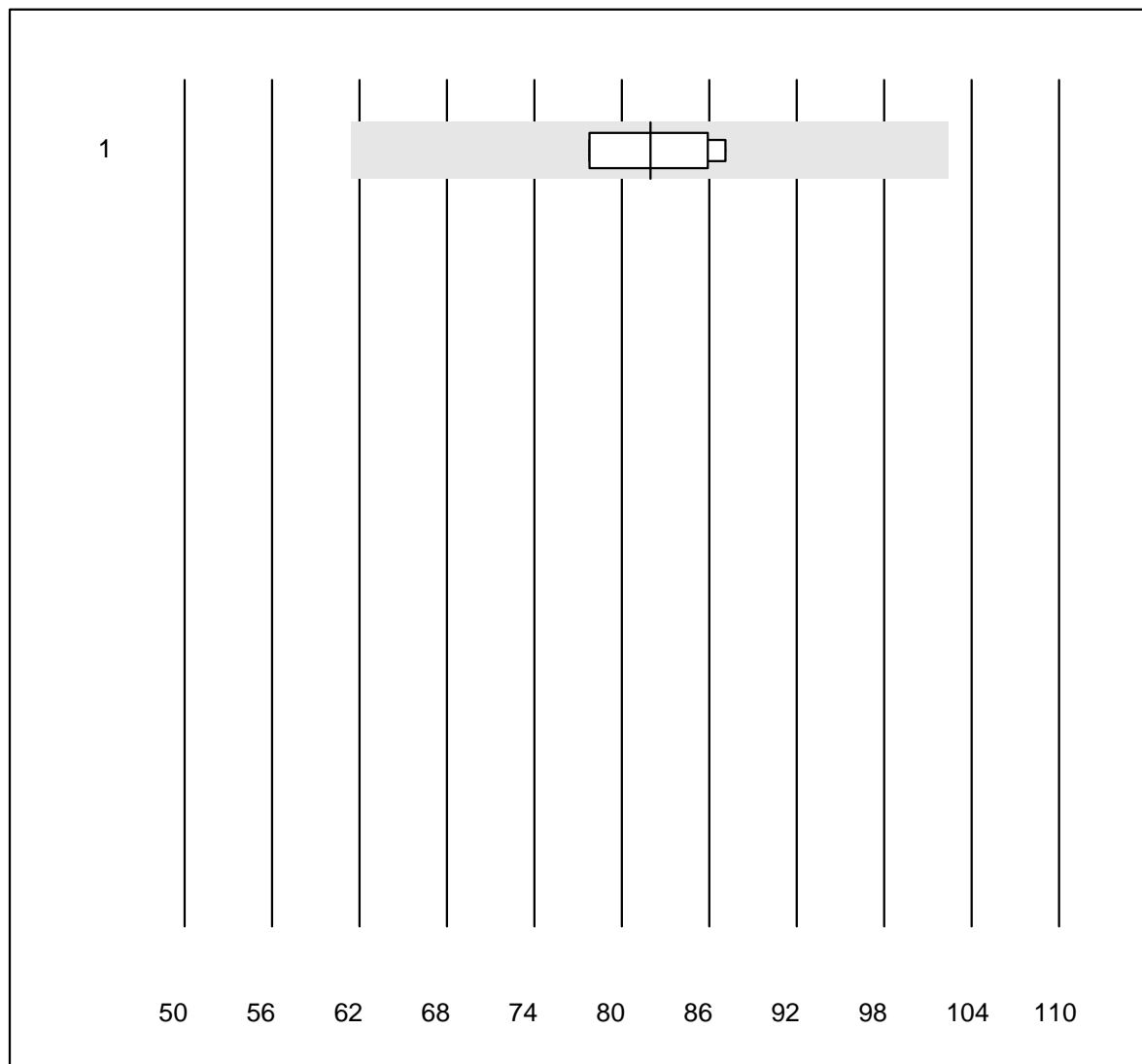
MQ tolerance : 25 %   Phenytoin (µmol/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	all Participants	4	100.0	0.0	0.0	82	6.1	e*

Phenobarbital

| | 150 | 162 | 174 | 186 | 198 | 210 | 222 | 234 | 246 | 258 | 270 |
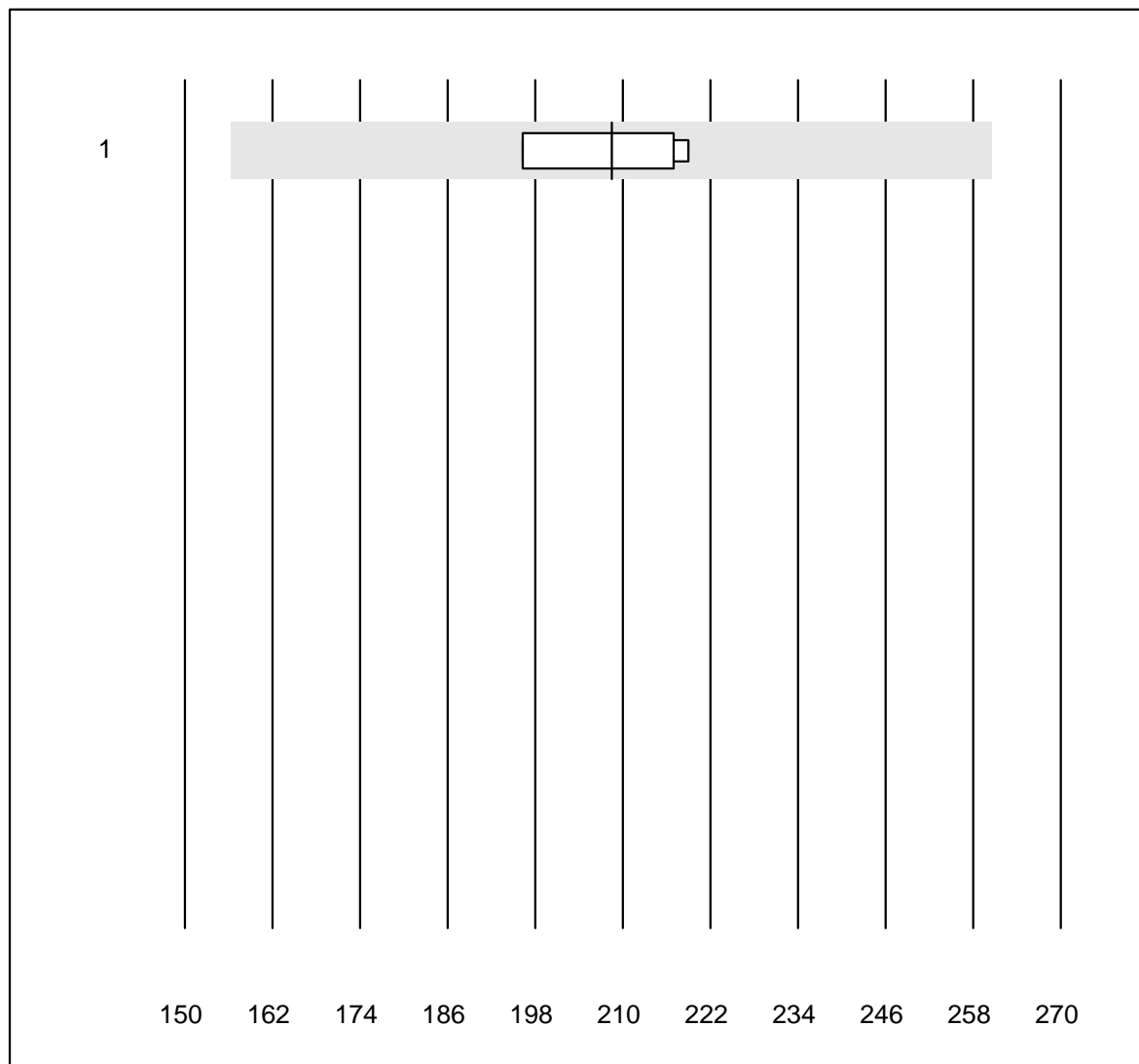
Phenobarbital (µmol/l)

MQ tolerance : 25 %

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	all Participants	4	100.0	0.0	0.0	209	5.6	e

Paracetamol

| | | 400 | 435 | 470 | 505 | 540 | 575 | 610 | 645 | 680 | 715 | 750 |
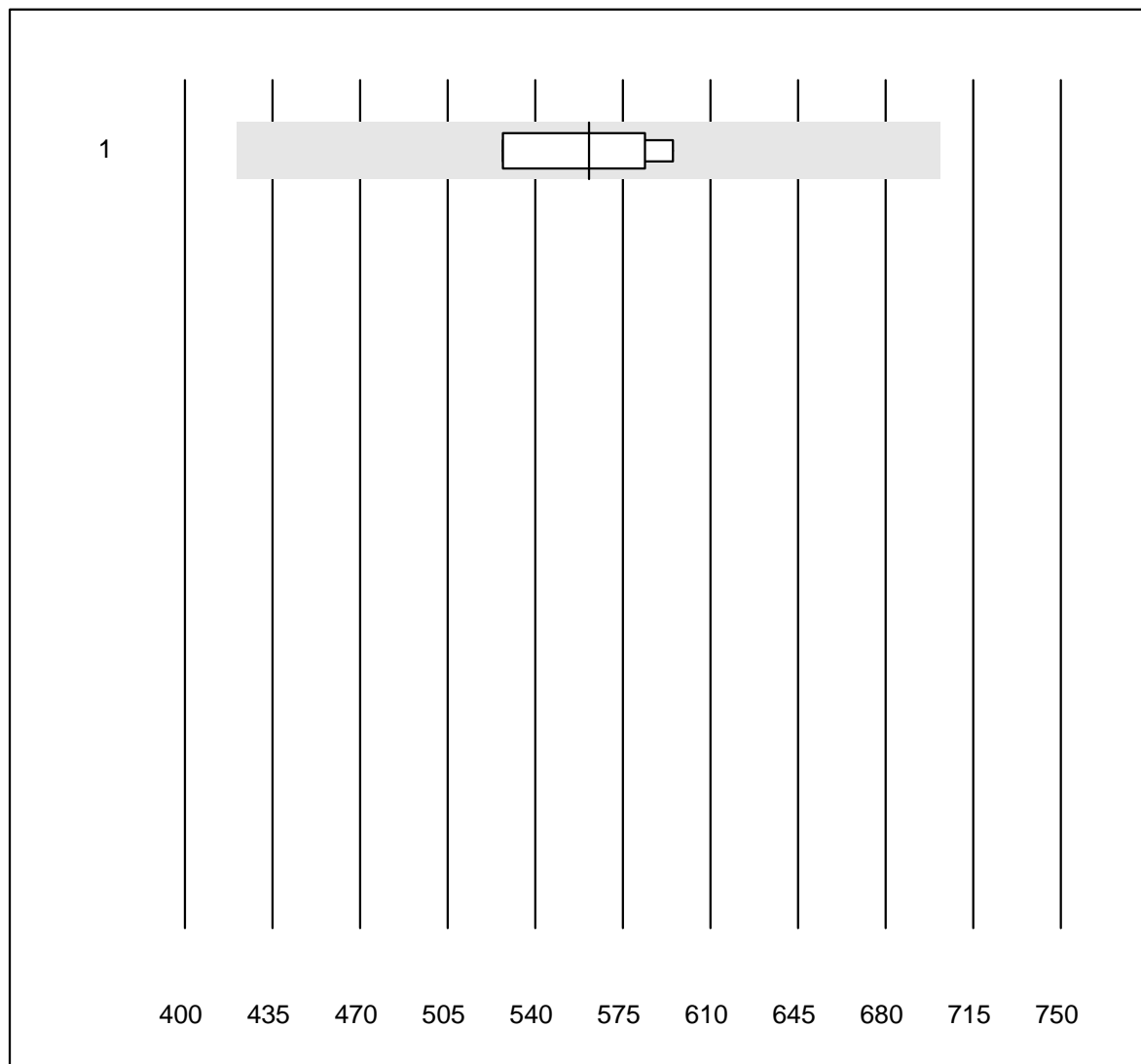
Paracetamol (µmol/l)

MQ tolerance : 25 %

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Roche, Cobas	4	100.0	0.0	0.0	561.4	5.9	e

One result was submitted but not pubished because the method group was too small. (< 4 results per group)

Vancomycin

| | 15.0 | 16.5 | 18.0 | 19.5 | 21.0 | 22.5 | 24.0 | 25.5 | 27.0 | 28.5 | 30.0 |
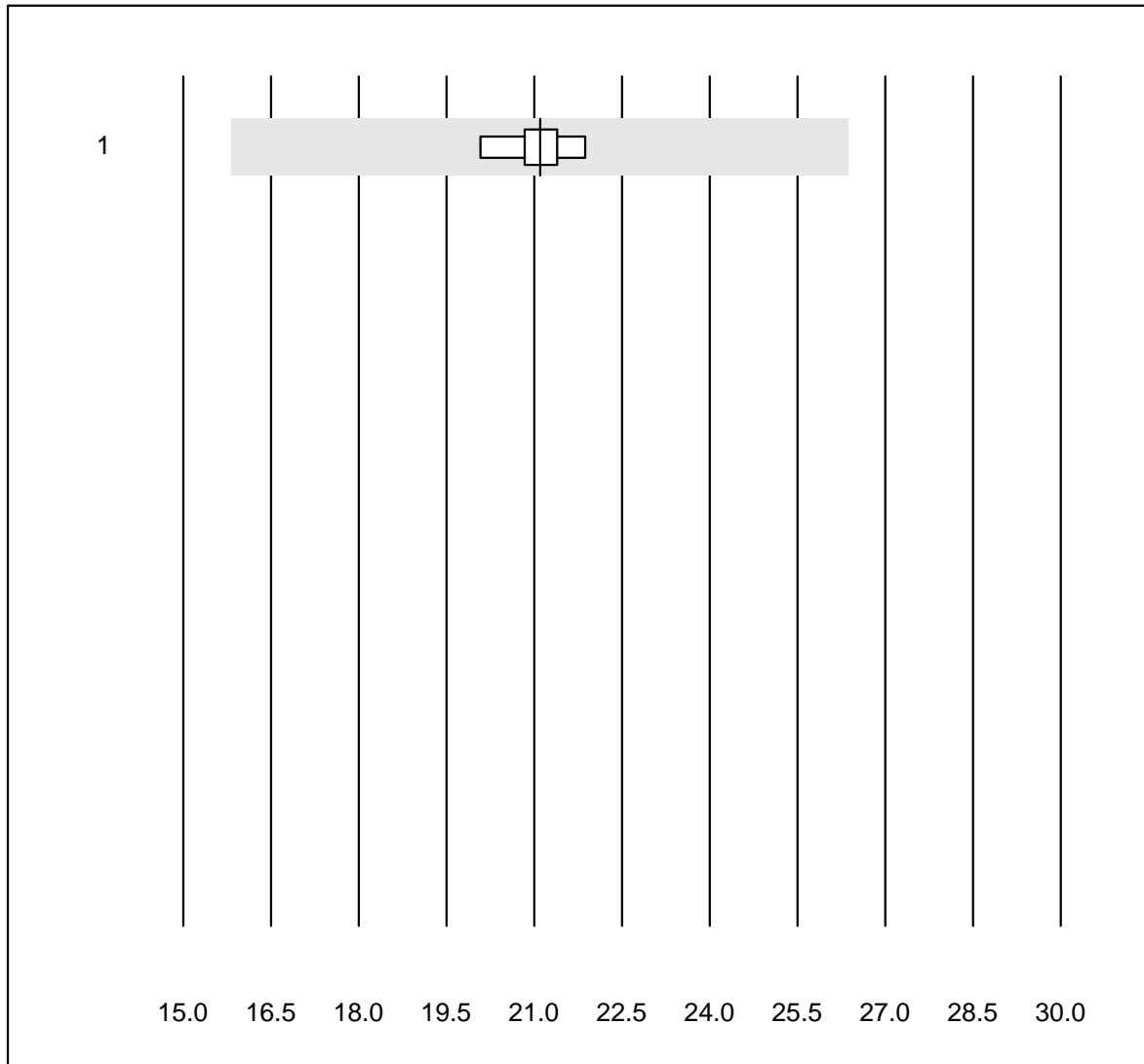
MQ tolerance : 25 %

Vancomycin (µmol/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Roche, Cobas	5	100.0	0.0	0.0	21.1	3.2	e

5 additional results were submitted but not published because the method groups were too small. (< results per group)

Valproat
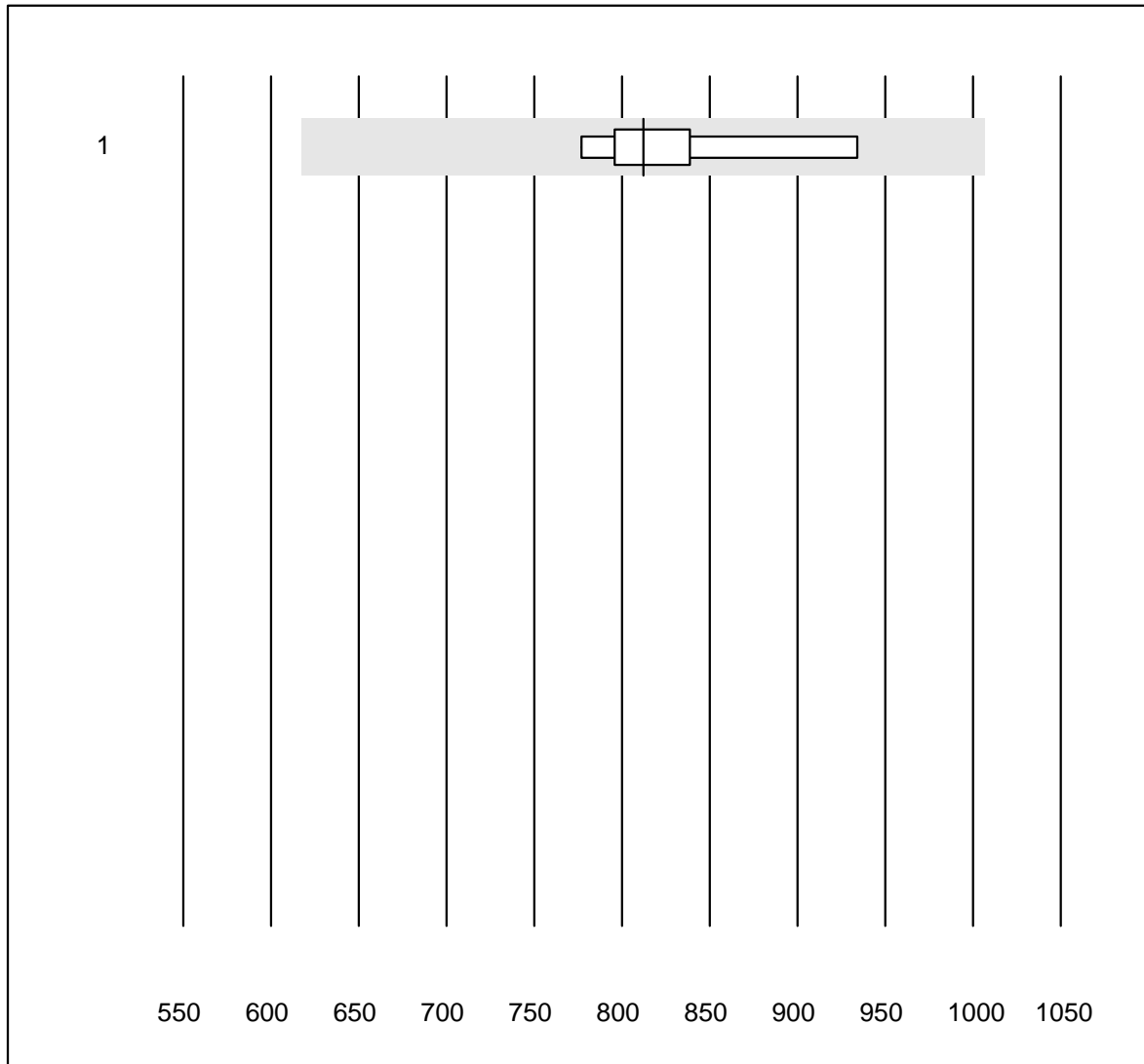
MQ tolerance : 24 %   Valproat (µmol/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	all Participants	9	100.0	0.0	0.0	812.0	5.8	e

Carbamazepin

35 38 41 44 47 50 53 56 59 62 65
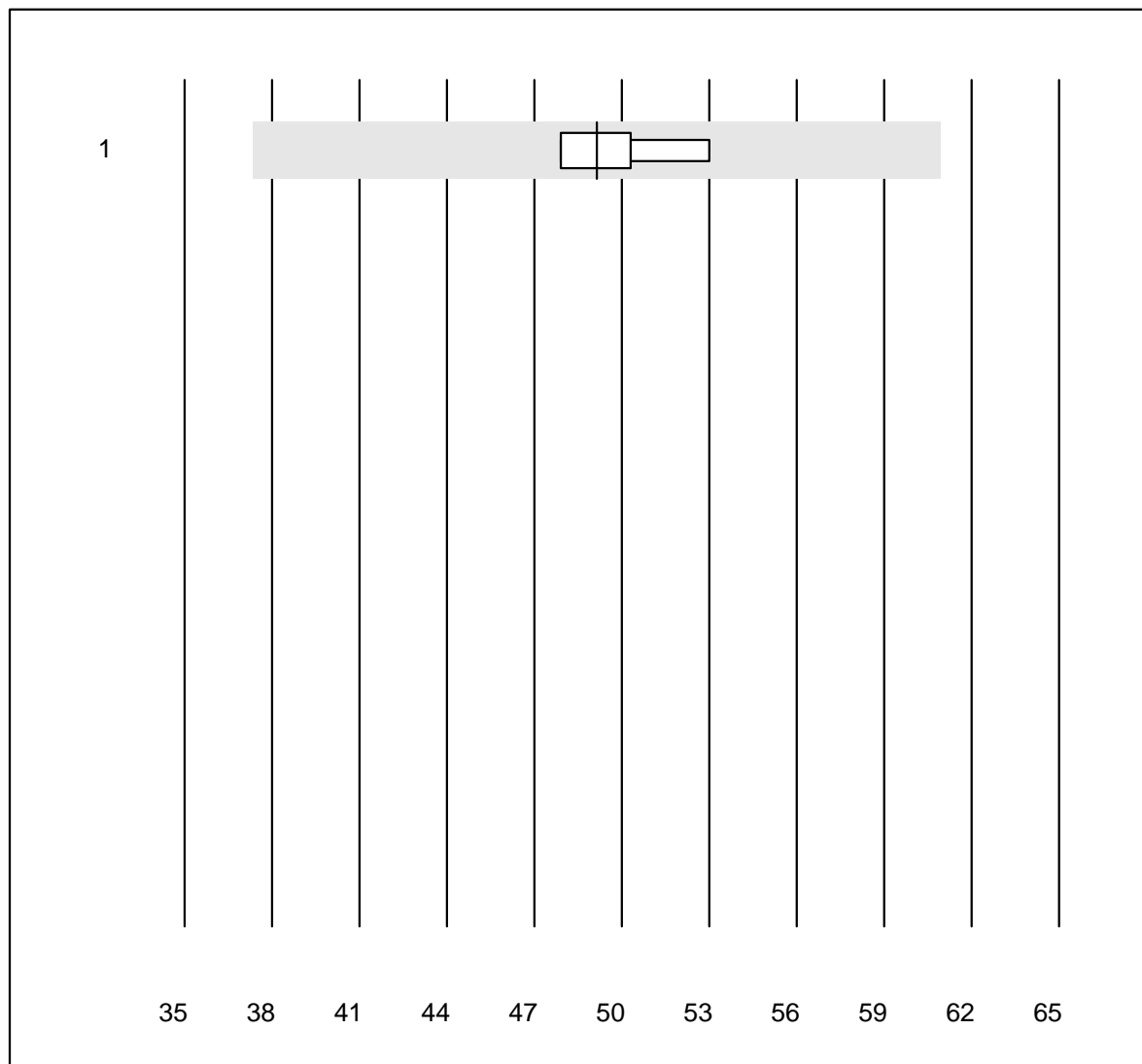
Carbamazepin (µmol/l)

MQ tolerance : 24 %

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	all Participants	4	100.0	0.0	0.0	49.2	4.8	e

Cystatin C
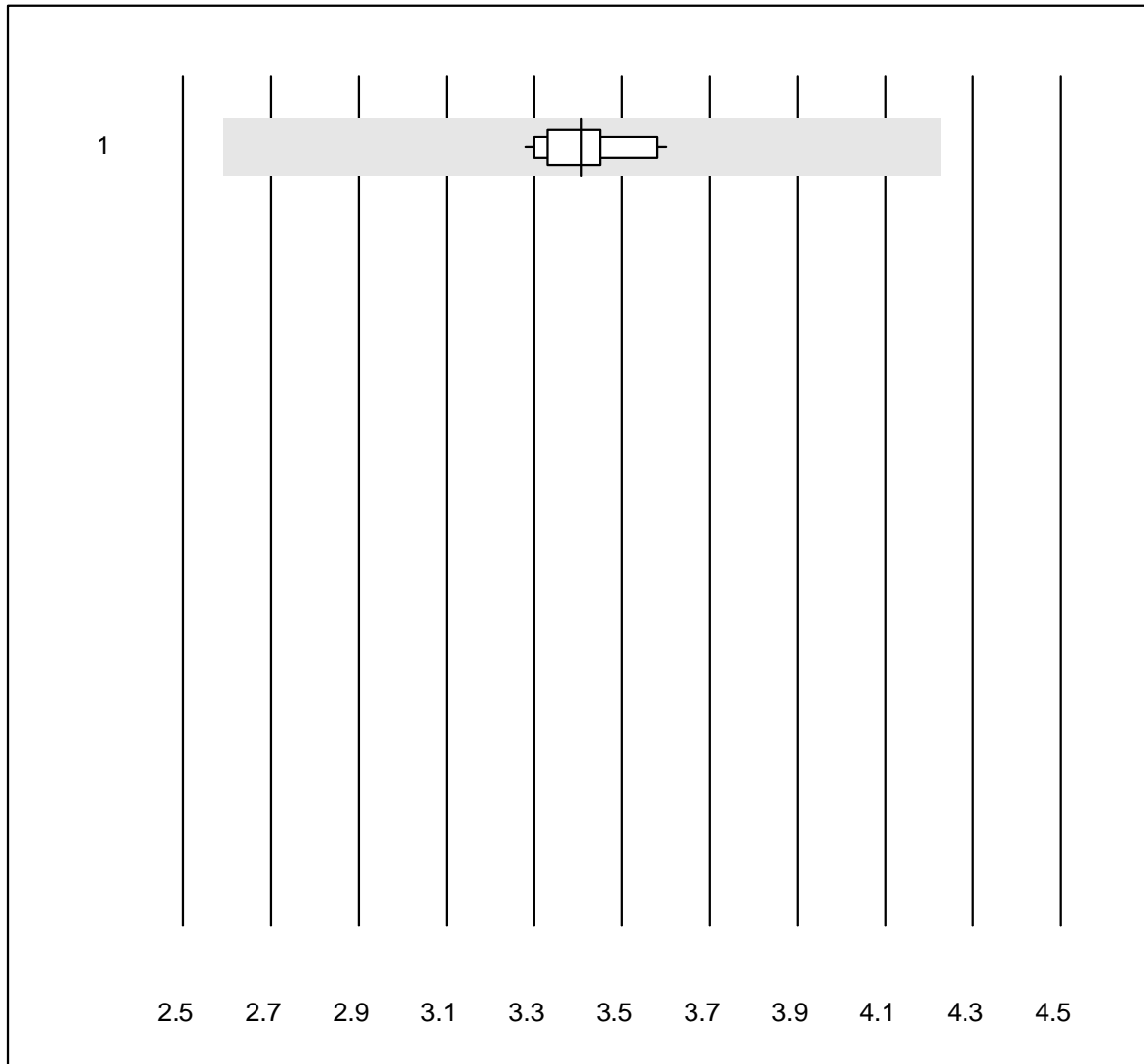
MQ tolerance : 24 %

Cystatin C (mg/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	all Participants	18	100.0	0.0	0.0	3.41	2.6	e

2 additional results were submitted but not published because the method groups were too small. (< results per group)
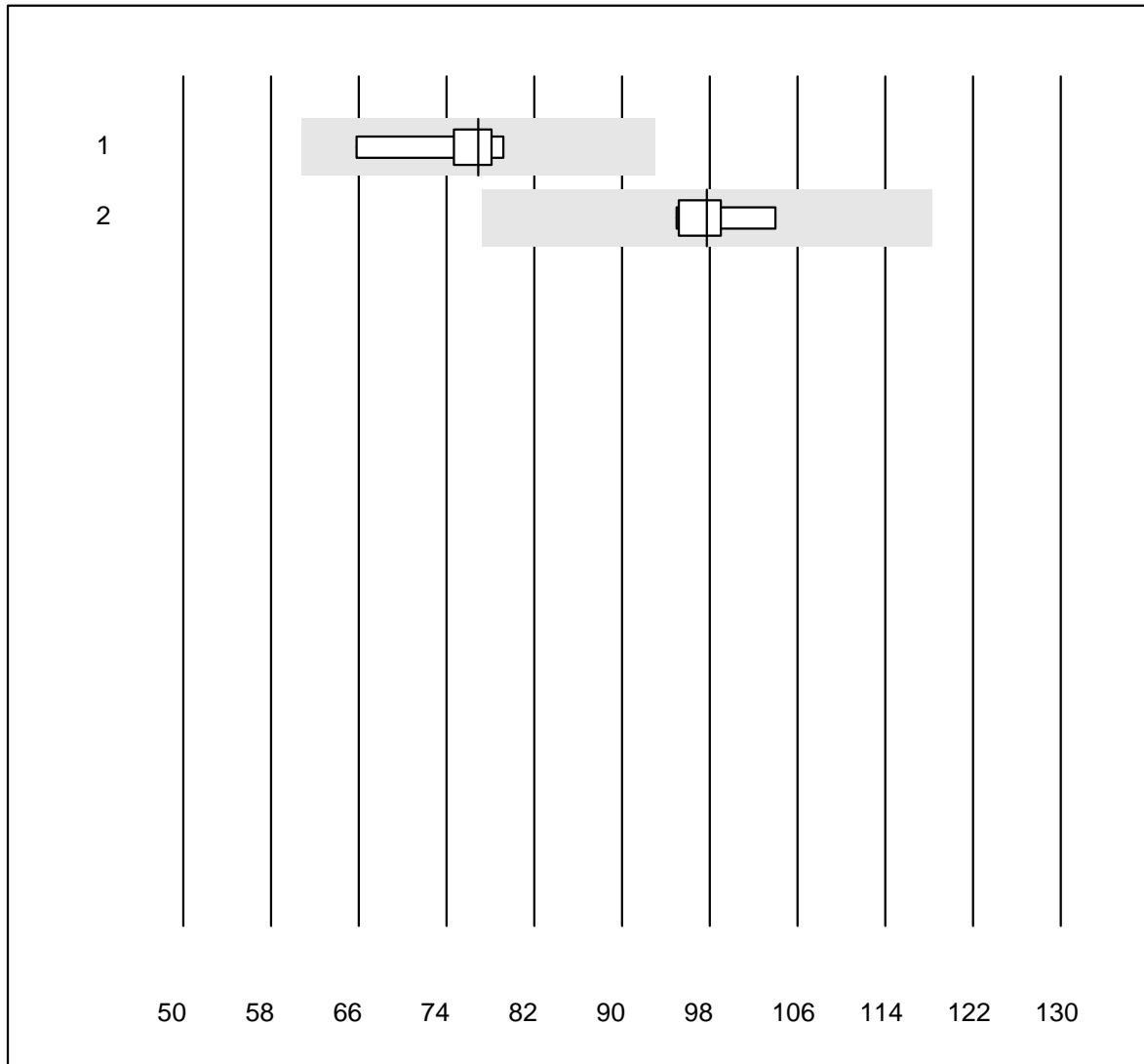
Ethanol
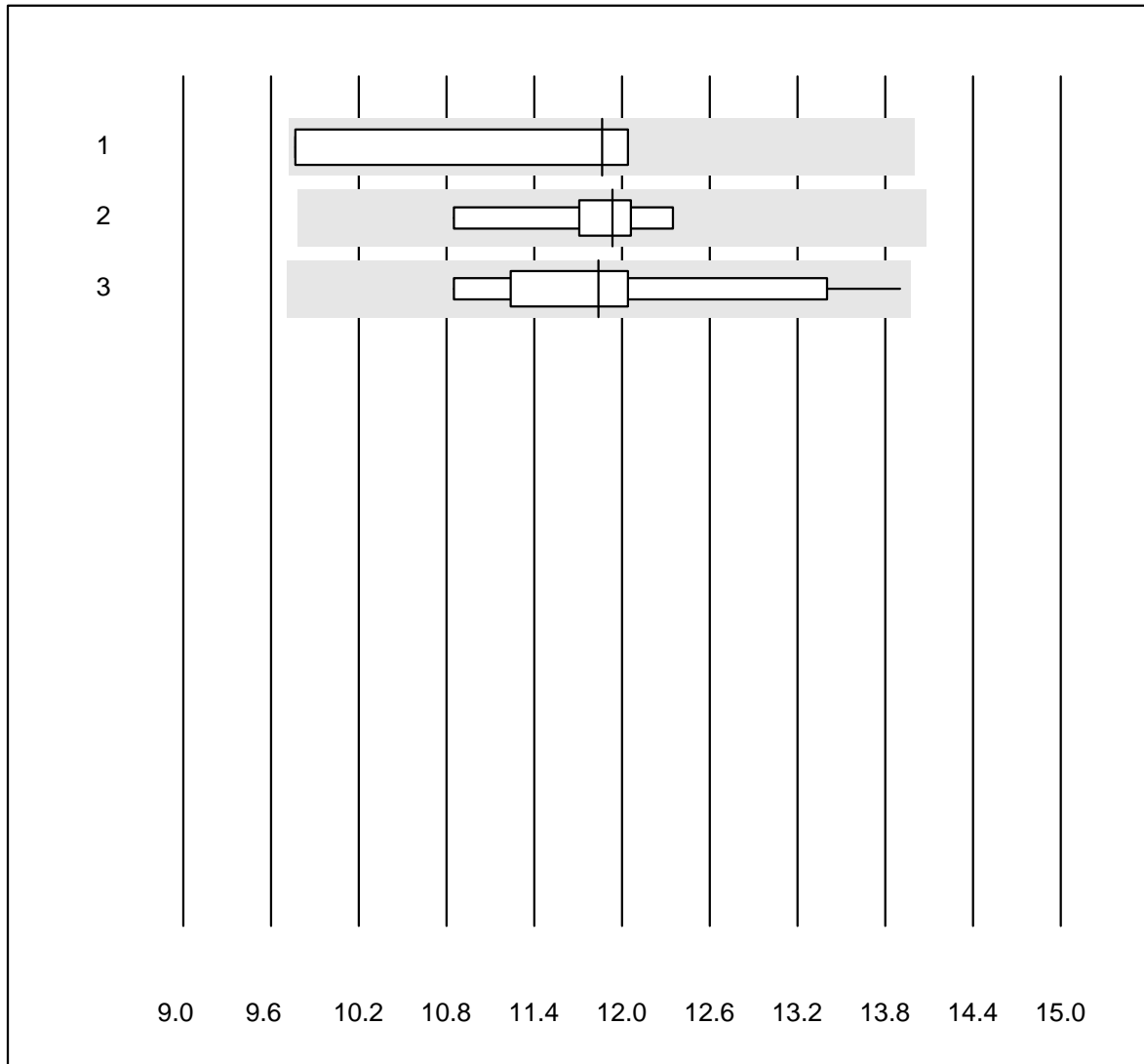
QUALAB tolerance : 18 %   Ethanol (mmol/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Others	5	60.0	0.0	40.0	11.9	11.0	a
2	Abbott	9	100.0	0.0	0.0	11.9	3.7	e
3	Roche, Cobas	19	100.0	0.0	0.0	11.8	7.2	e

Ammonia

QUALAB tolerance : 21 %

Ammonia (µmol/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Abbott	6	100.0	0.0	0.0	76.9	6.5	e*
2	all Participants	6	100.0	0.0	0.0	97.8	3.4	e

One result was submitted but not pubished because the method group was too small. (< 4 results per group)

Calprotectin

MQ tolerance : 40 %

Calprotectin (µg/g)
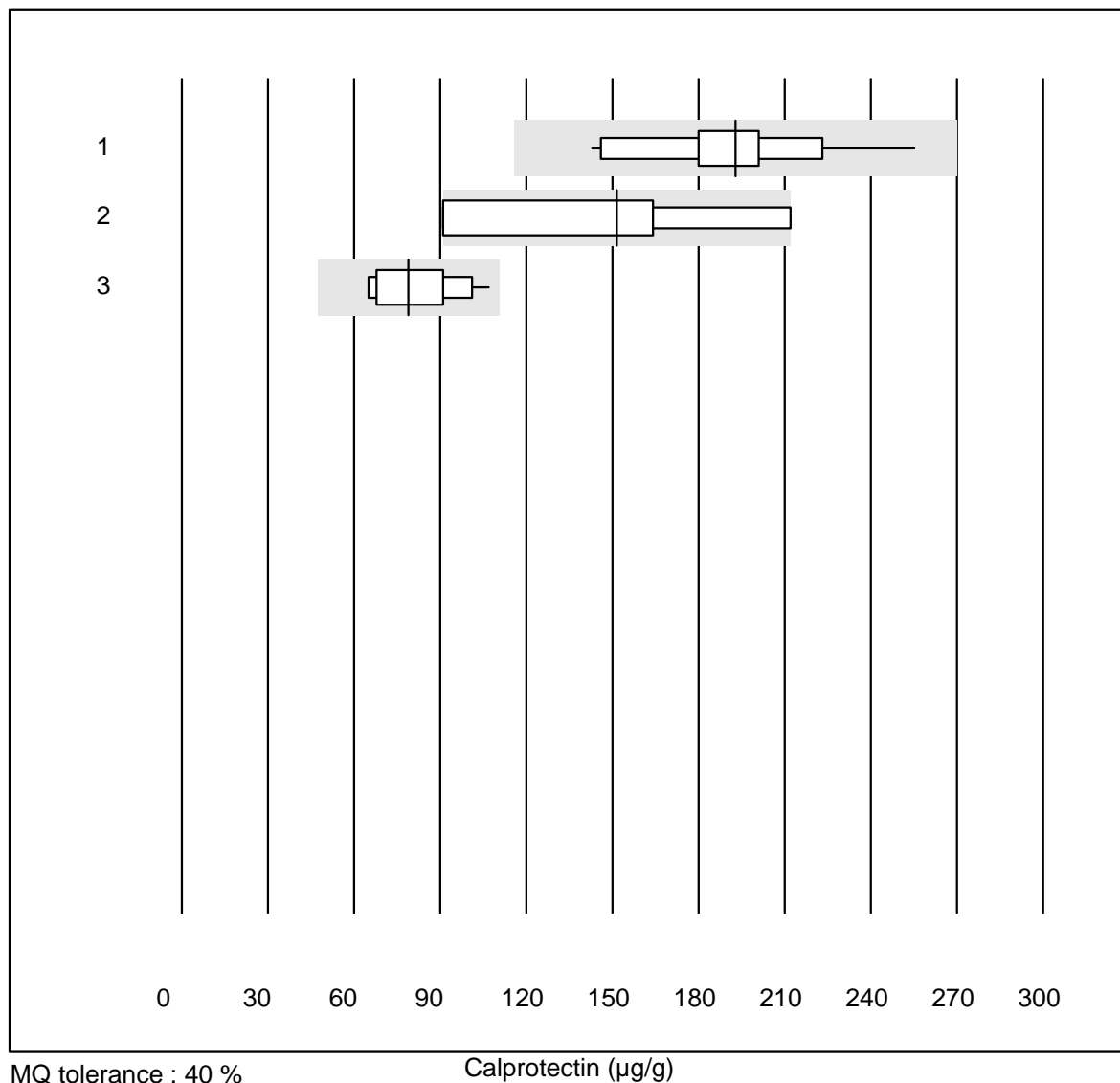
No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Bühlmann fCALturbo	21	95.2	0.0	4.8	193	13.4	e
2	Bühlmann Quantum Blu	5	80.0	0.0	20.0	152	40.2	a
3	Liaison	13	76.9	0.0	23.1	79	19.5	e*

4 additional results were submitted but not published because the method groups were too small. (< results per group)

Cholesterol total Af/b101

4.50   4.66   4.82   4.98   5.14   5.30   5.46   5.62   5.78   5.94   6.10
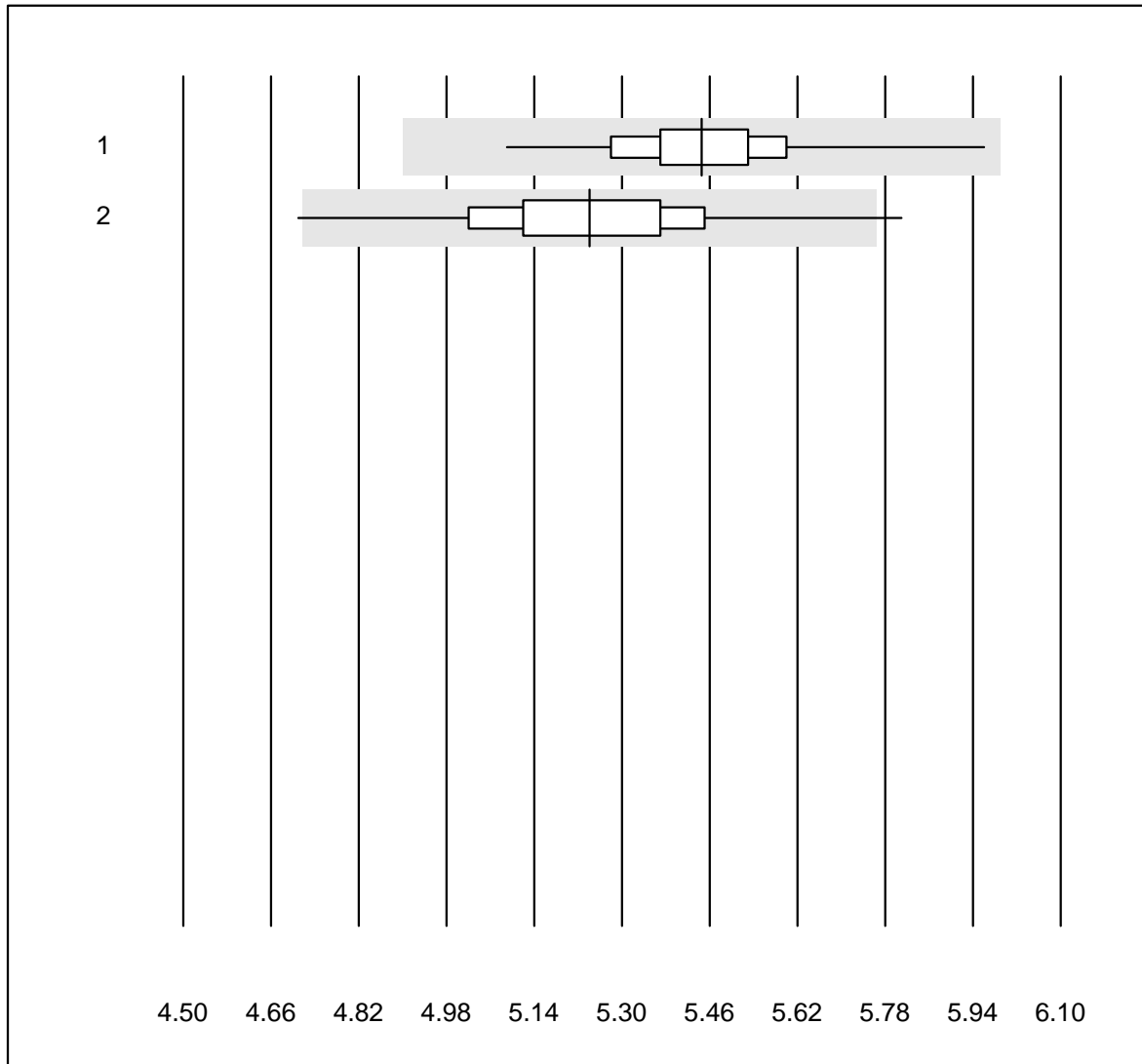
QUALAB tolerance : 10 %   Cholesterol total Af/b101 (mmol/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Cobas b101	308	98.7	0.0	1.3	5.45	2.4	e
2	Afinion	439	98.6	0.7	0.7	5.24	3.3	e

Cholesterol HDL Af/b101
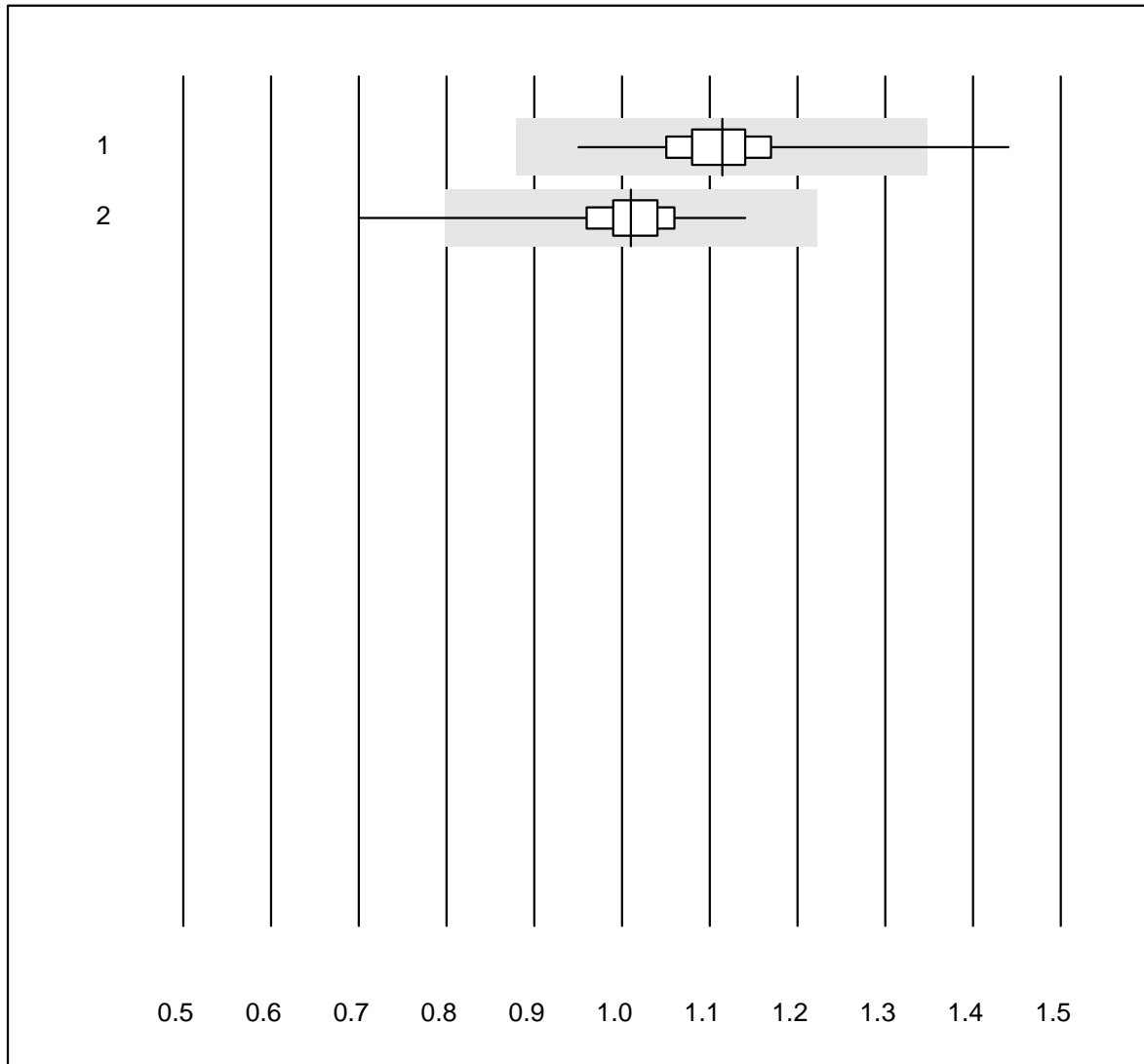
QUALAB tolerance : 21 %   Cholesterol HDL Af/b101 (mmol/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Cobas b101	305	93.1	0.3	6.6	1.11	4.6	e
2	Afinion	436	93.8	0.2	6.0	1.01	4.3	e

Tryglycerides Af/b101
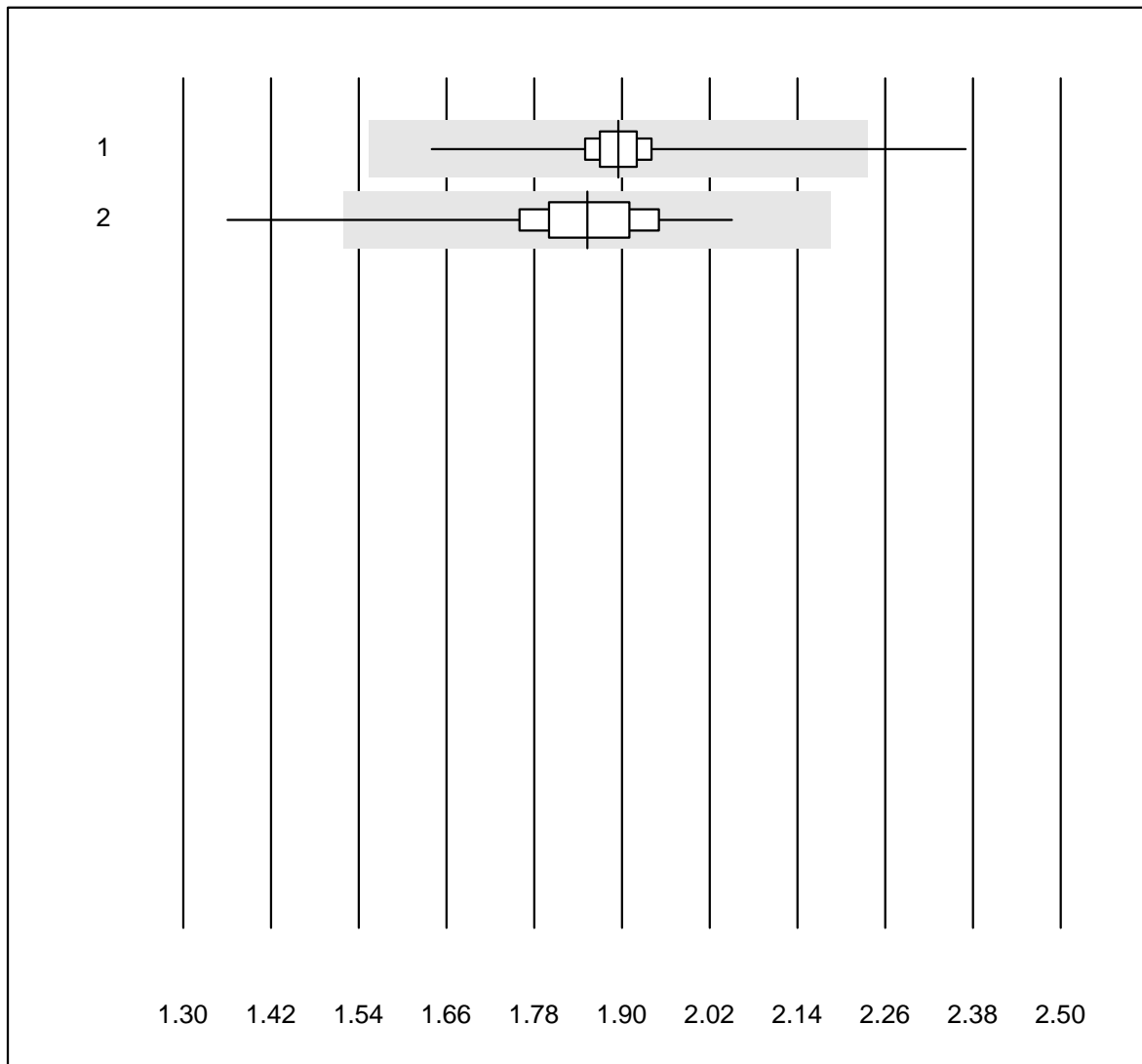
QUALAB tolerance : 18 %   Tryglycerides Af/b101 (mmol/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Cobas b101	305	98.4	0.3	1.3	1.89	2.5	e
2	Afinion	440	99.3	0.5	0.2	1.85	4.4	e

Cholesterol PTS
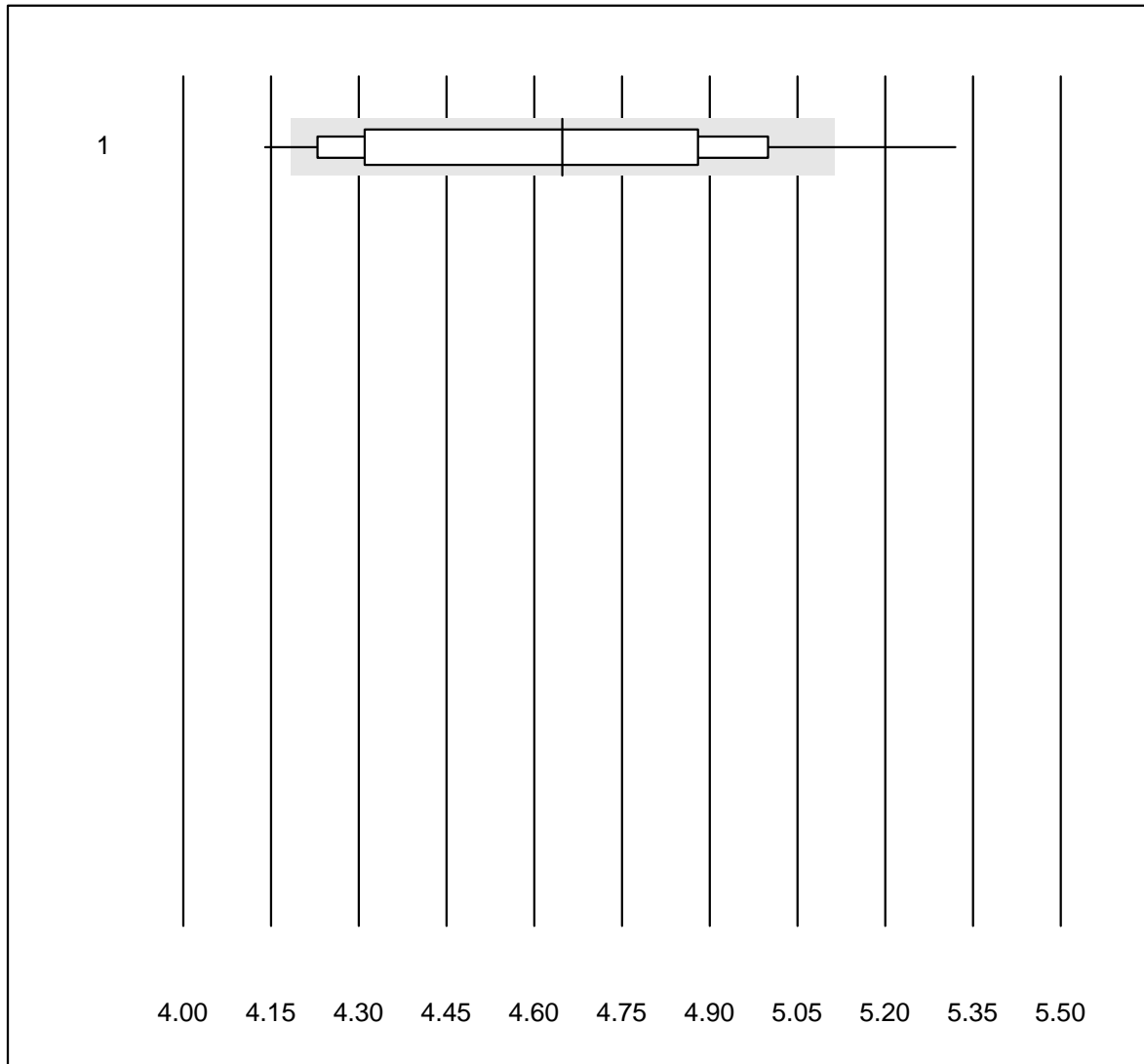
QUALAB tolerance : 10 %   Cholesterol PTS (mmol/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	CardioChek	11	81.8	18.2	0.0	4.65	8.0	e*

Cholesterol HDL PTS

1.50   1.65   1.80   1.95   2.10   2.25   2.40   2.55   2.70   2.85   3.00
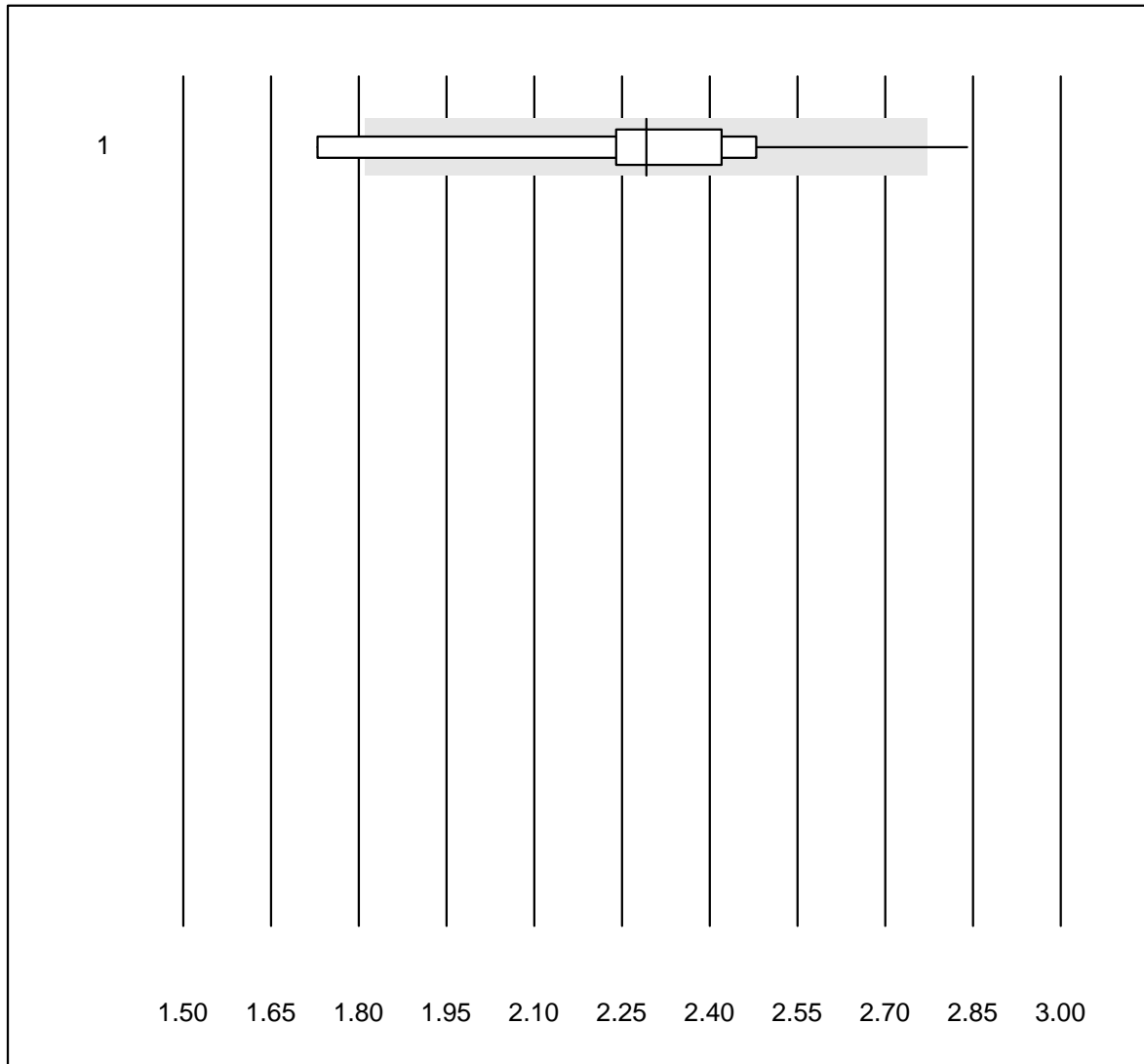
QUALAB tolerance : 21 %   Cholesterol HDL PTS (mmol/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	CardioChek	11	72.7	18.2	9.1	2.29	13.0	e*

Triglycerides
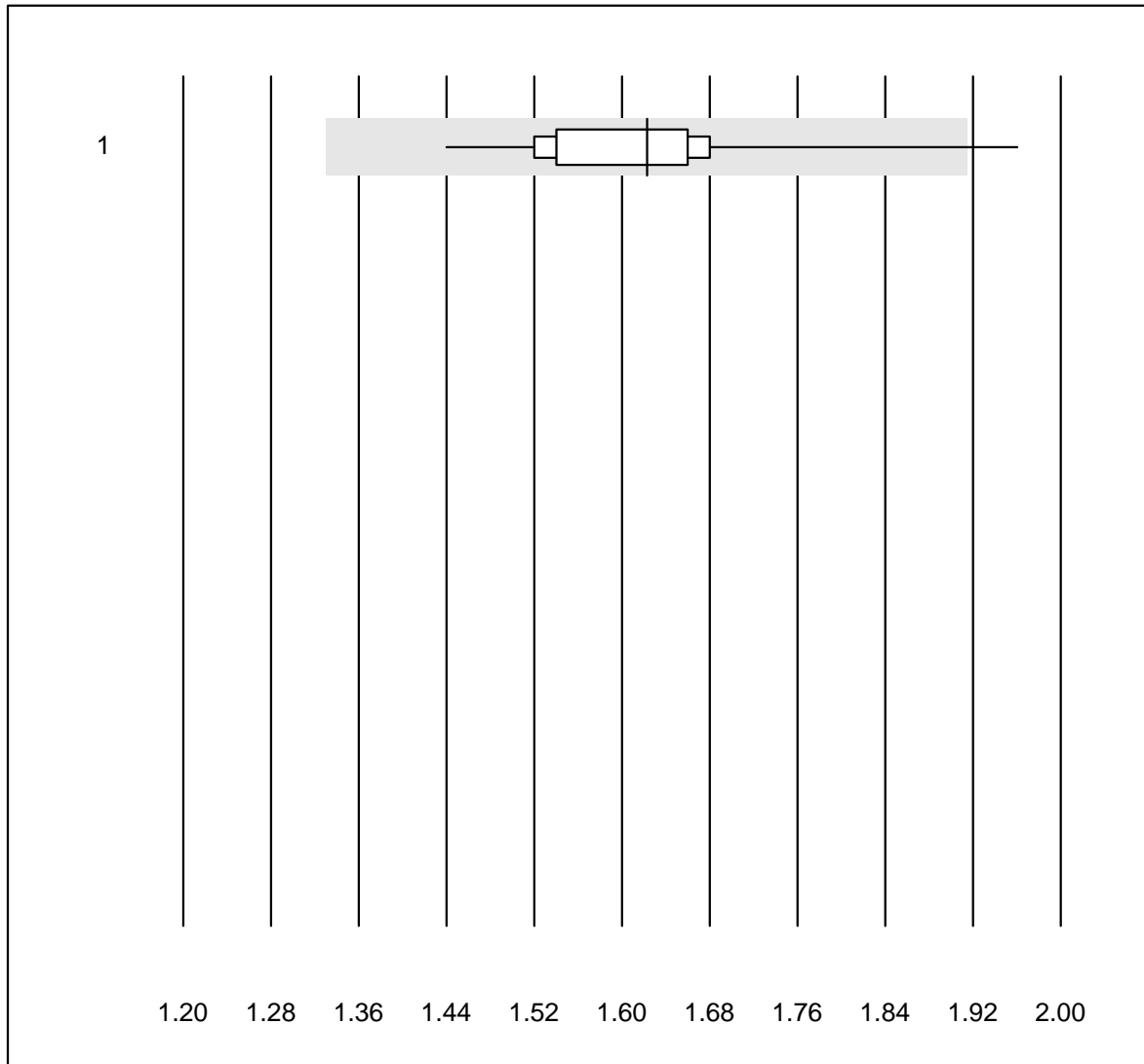

```
          1.20   1.28   1.36   1.44   1.52   1.60   1.68   1.76   1.84   1.92   2.00
```

QUALAB tolerance : 18 %   Triglycerides (mmol/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	CardioChek	11	90.9	9.1	0.0	1.62	8.1	e*

Troponin I AFIAS

QUALAB tolerance : 24 %   Troponin I AFIAS (ng/l)
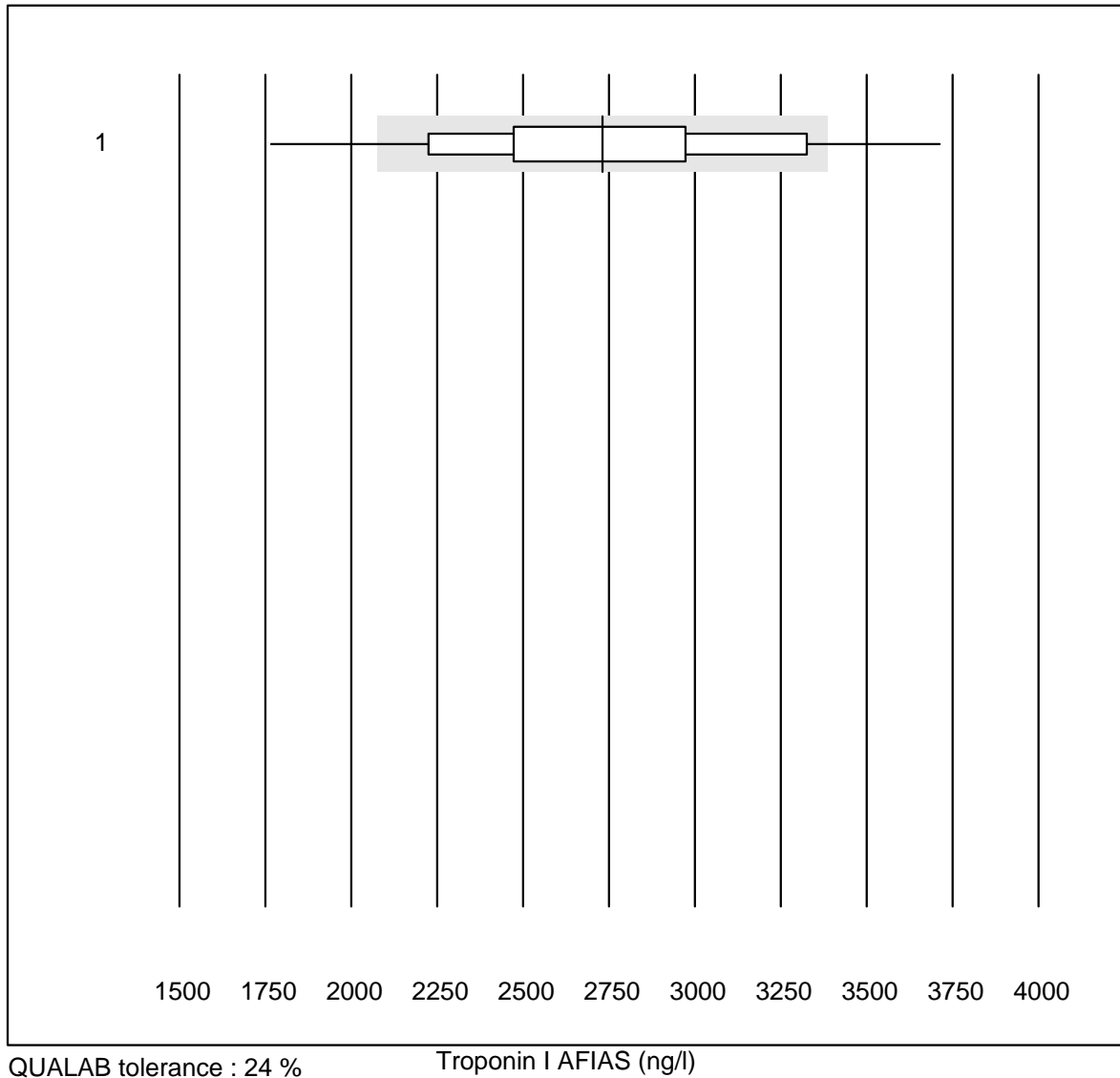
No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	AFIAS	384	80.5	9.9	9.6	2730.70	14.6	e

NT-proBNP AFIAS
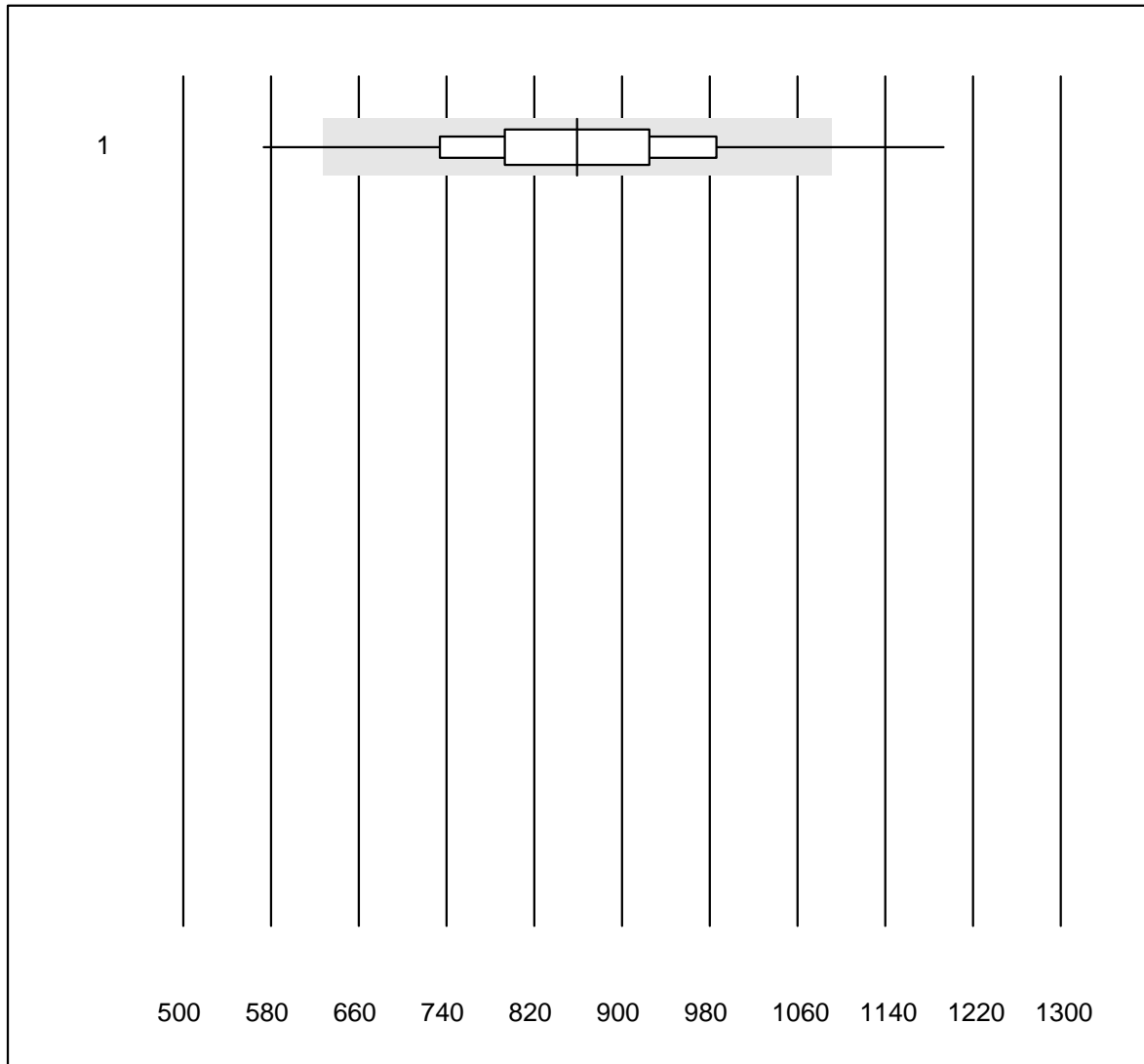
QUALAB tolerance : 27 %   NT-proBNP AFIAS (ng/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	AFIAS	286	90.9	3.5	5.6	859.2	12.2	e

Homocystein

MQ tolerance : 30 %

Homocystein (µmol/l)
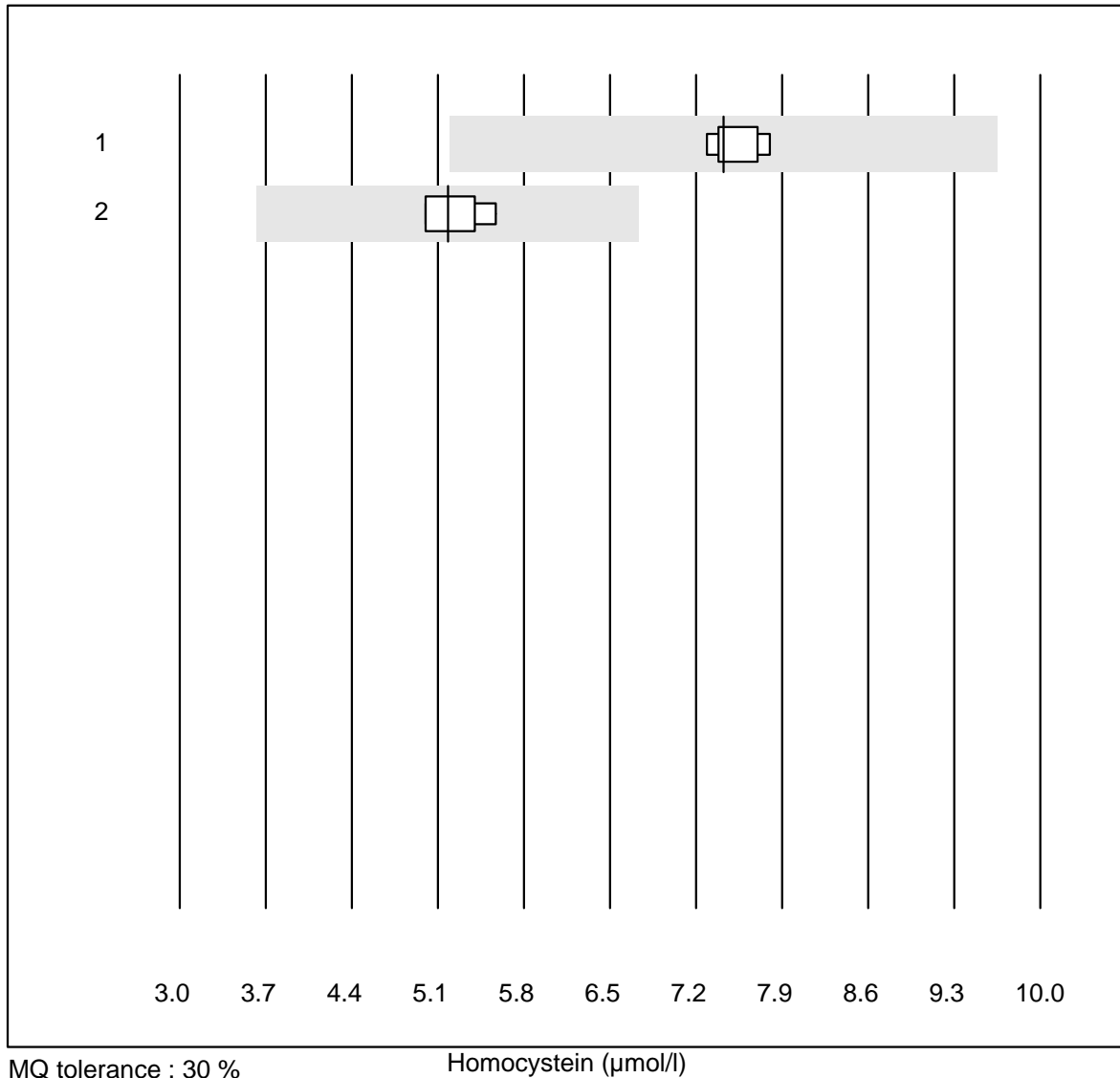
No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Beckman	6	100.0	0.0	0.0	7.4	2.7	e
2	all Participants	5	100.0	0.0	0.0	5.2	4.8	e

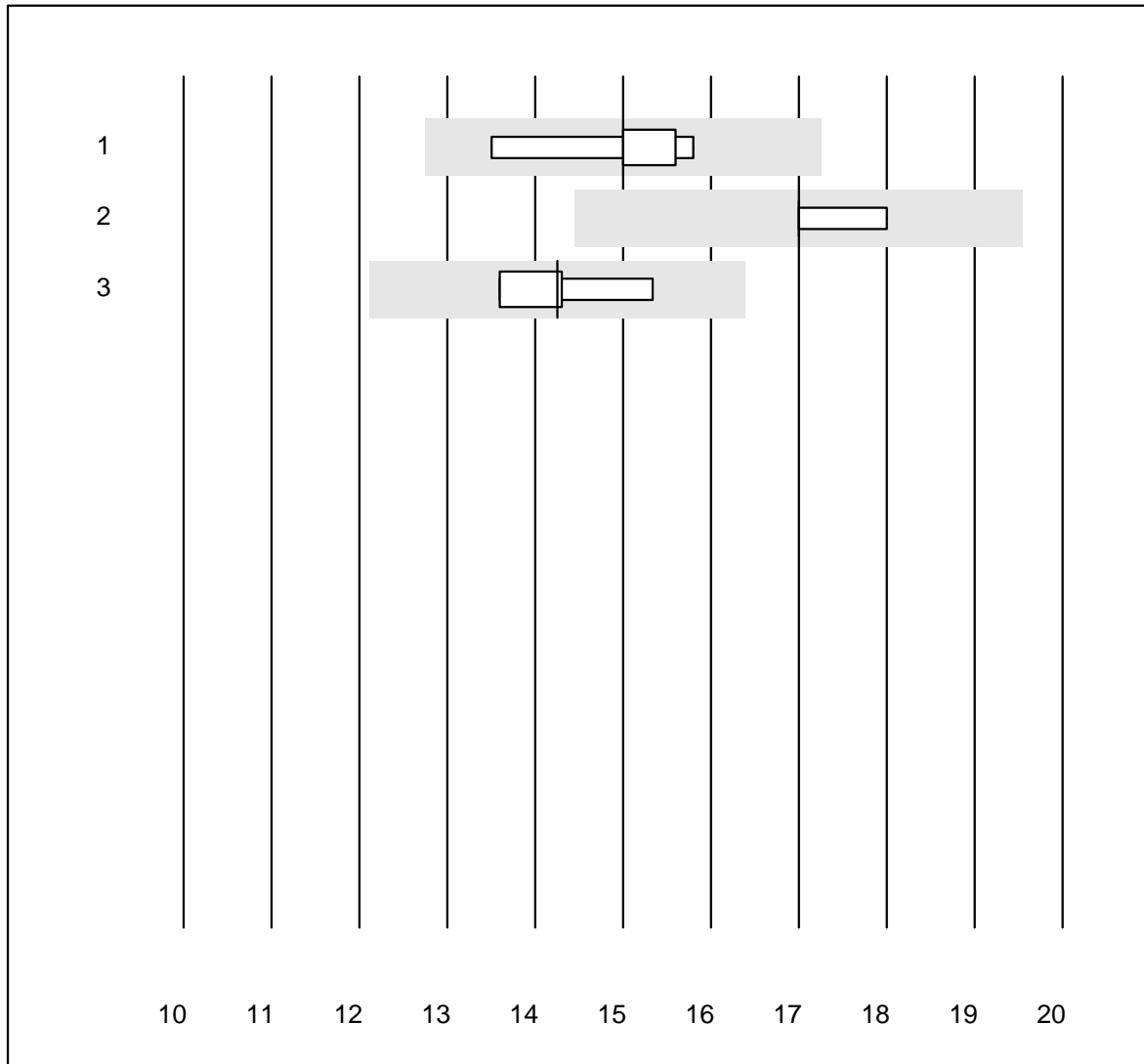One result was submitted but not pubished because the method group was too small. (< 4 results per group)

Lipase

QUALAB tolerance : 18 %

Lipase (U/l)
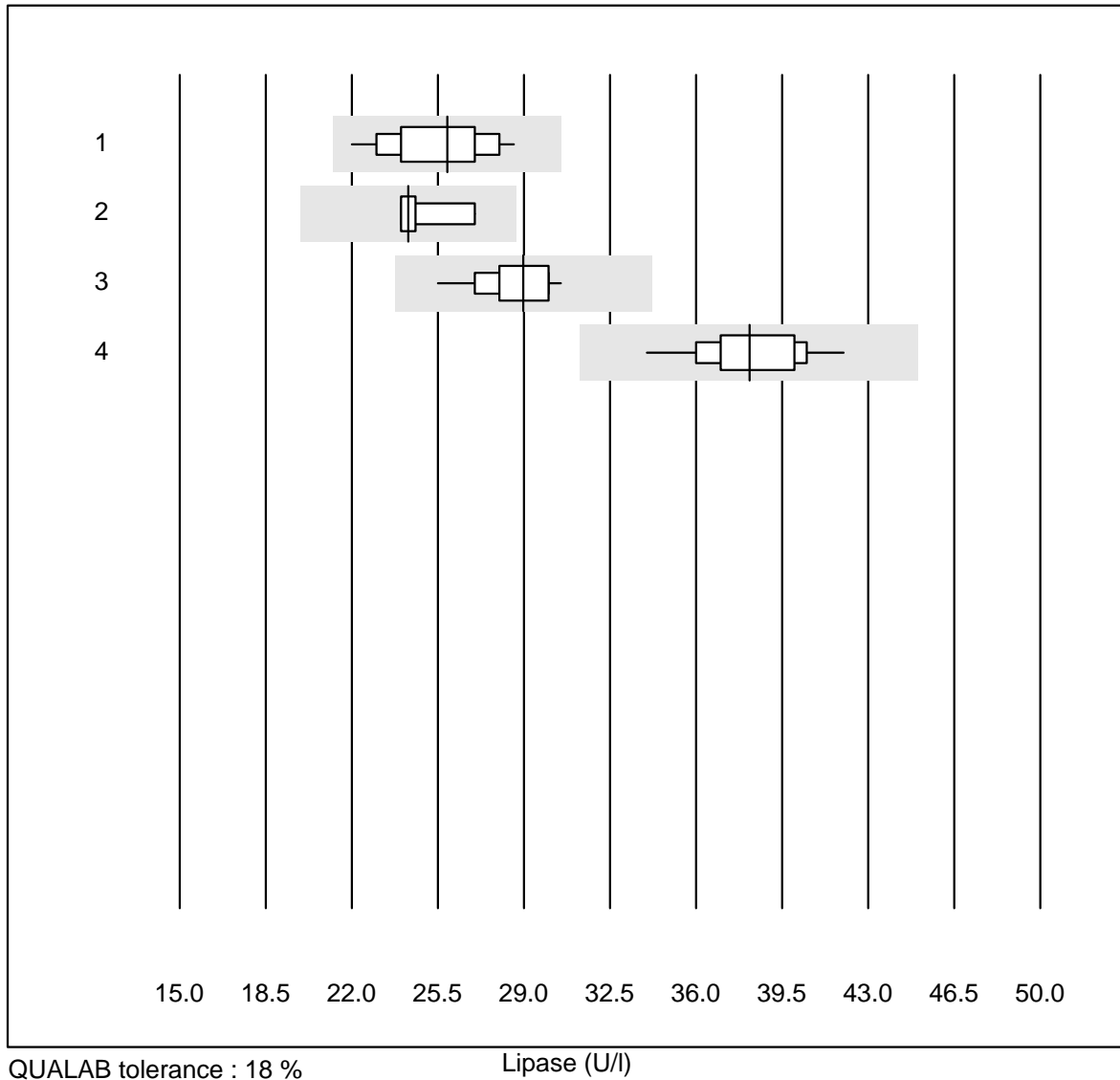
No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Abbott	15	100.0	0.0	0.0	25.9	7.9	e
2	Beckman	5	100.0	0.0	0.0	24.3	5.1	e*
3	Roche	26	100.0	0.0	0.0	29.0	4.5	e
4	Fuji Dri-Chem	175	98.3	0.0	1.7	38.2	5.0	e

12 additional results were submitted but not published because the method groups were too small. (< results per group)
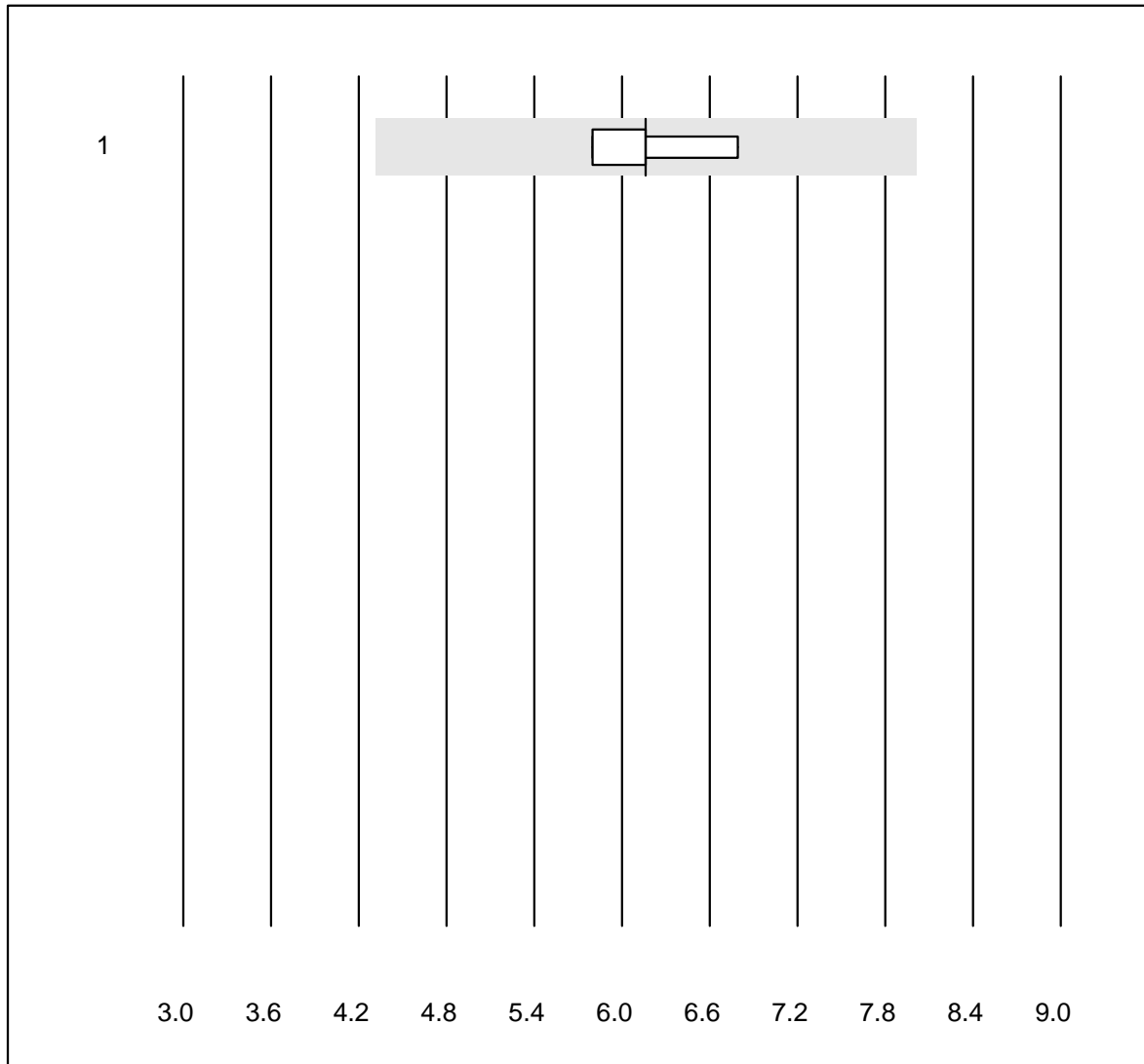
Bicarbonat

MQ tolerance : 15 %

Bicarbonat (mmol/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Cobas	5	100.0	0.0	0.0	15.0	6.0	e*
2	Piccolo	4	100.0	0.0	0.0	17.0	2.9	e
3	Abbott	4	100.0	0.0	0.0	14.3	5.0	e*

One result was submitted but not pubished because the method group was too small. (< 4 results per group)
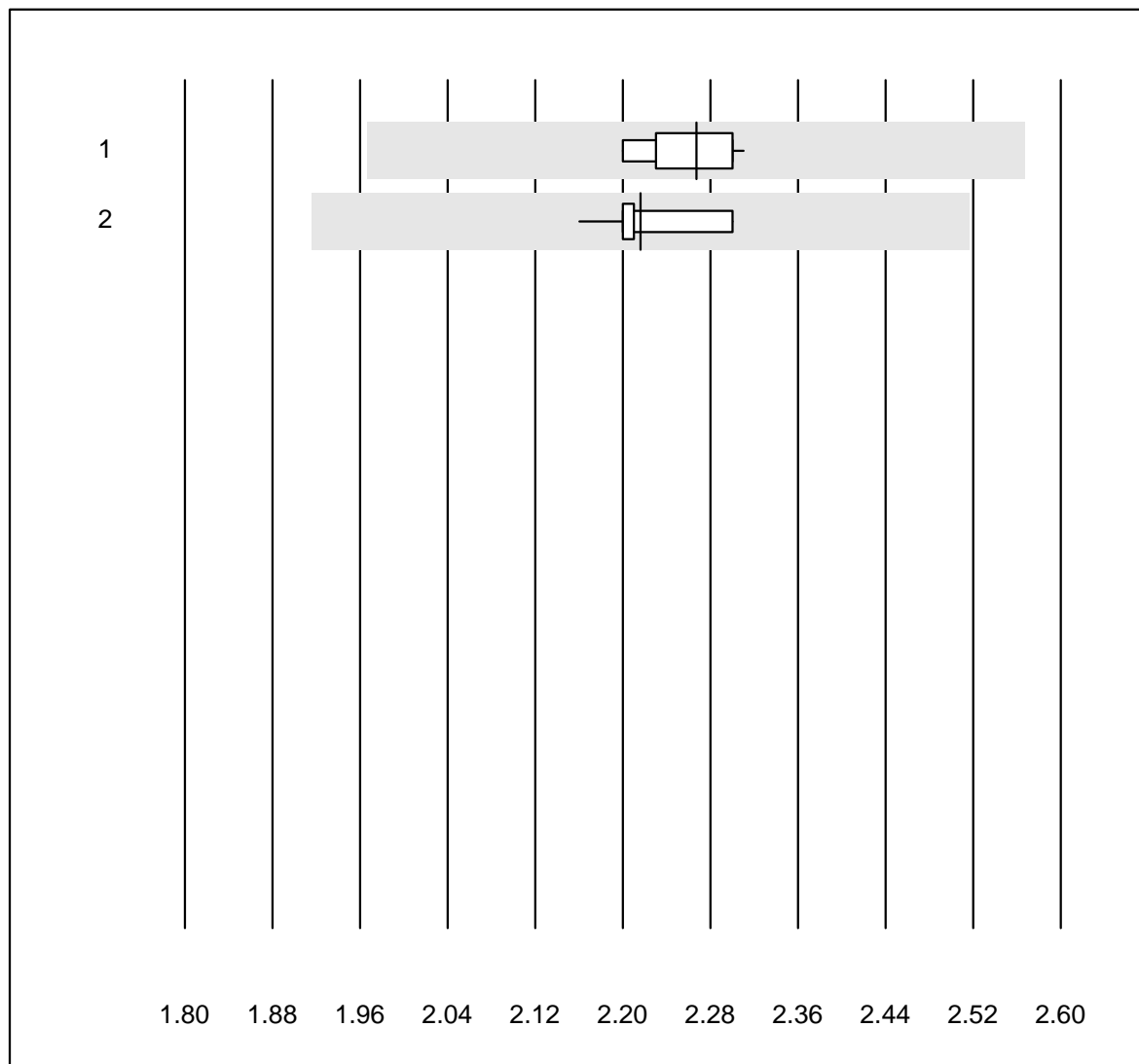
Cholinesterase

| | 3.0 | 3.6 | 4.2 | 4.8 | 5.4 | 6.0 | 6.6 | 7.2 | 7.8 | 8.4 | 9.0 |

Cholinesterase (kU/L)

MQ tolerance : 30 %

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	ADVIA Centaur XP/CP	4	100.0	0.0	0.0	6.2	6.6	e

3 additional results were submitted but not published because the method groups were too small. (< results per group)
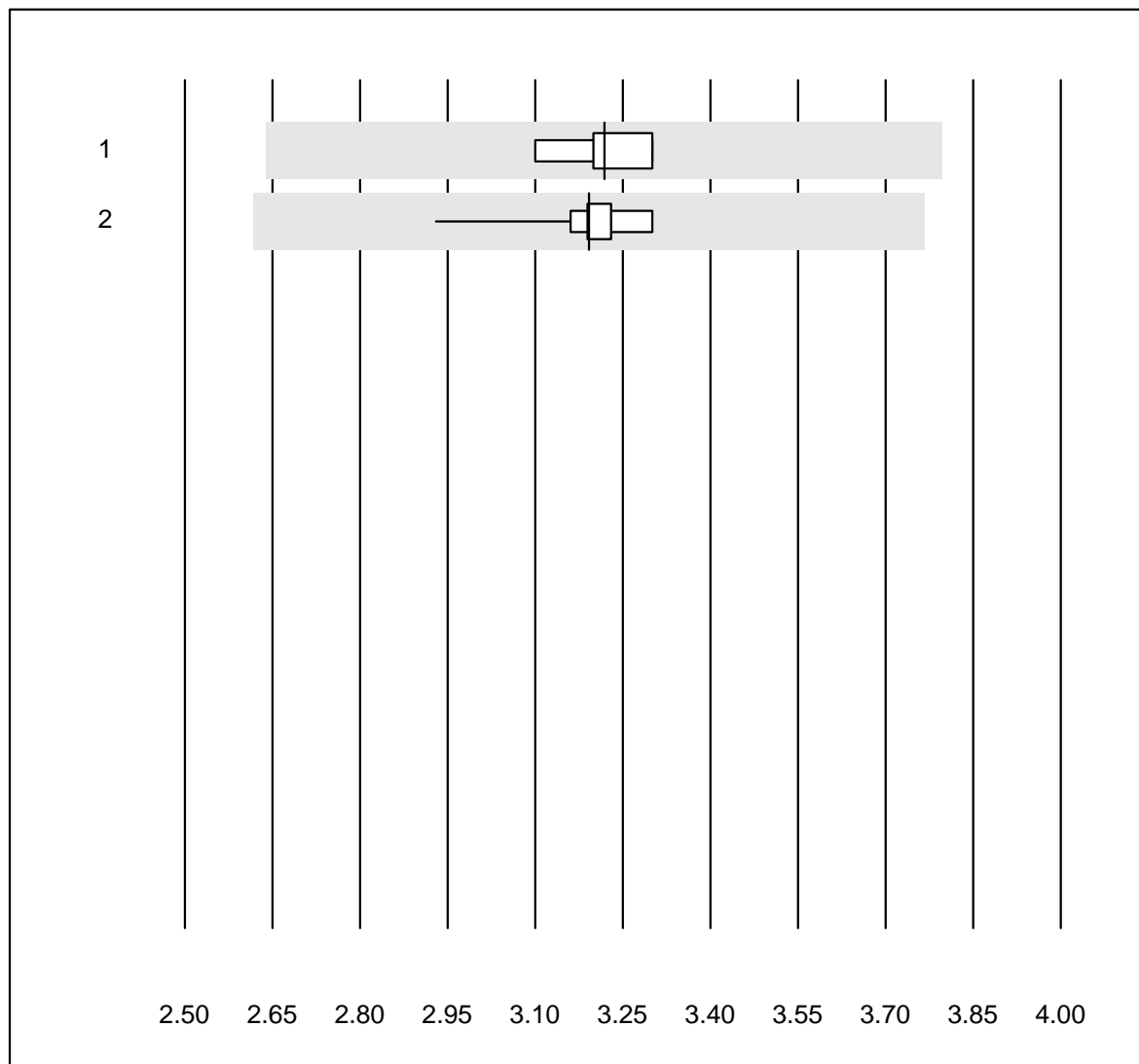
Glucose CSF

Glucose CSF (mmol/l)

QUALAB tolerance : 9 %
(< 3.30: +/- 0.30 mmol/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Cobas	13	100.0	0.0	0.0	2.27	1.9	e
2	Other methods	15	100.0	0.0	0.0	2.22	1.8	e

Lactate CSF

Lactate CSF (mmol/l)

QUALAB tolerance : 18 %

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Cobas	12	100.0	0.0	0.0	3.22	2.2	e
2	Other methods	12	91.7	0.0	8.3	3.19	3.0	e

Protein CSF
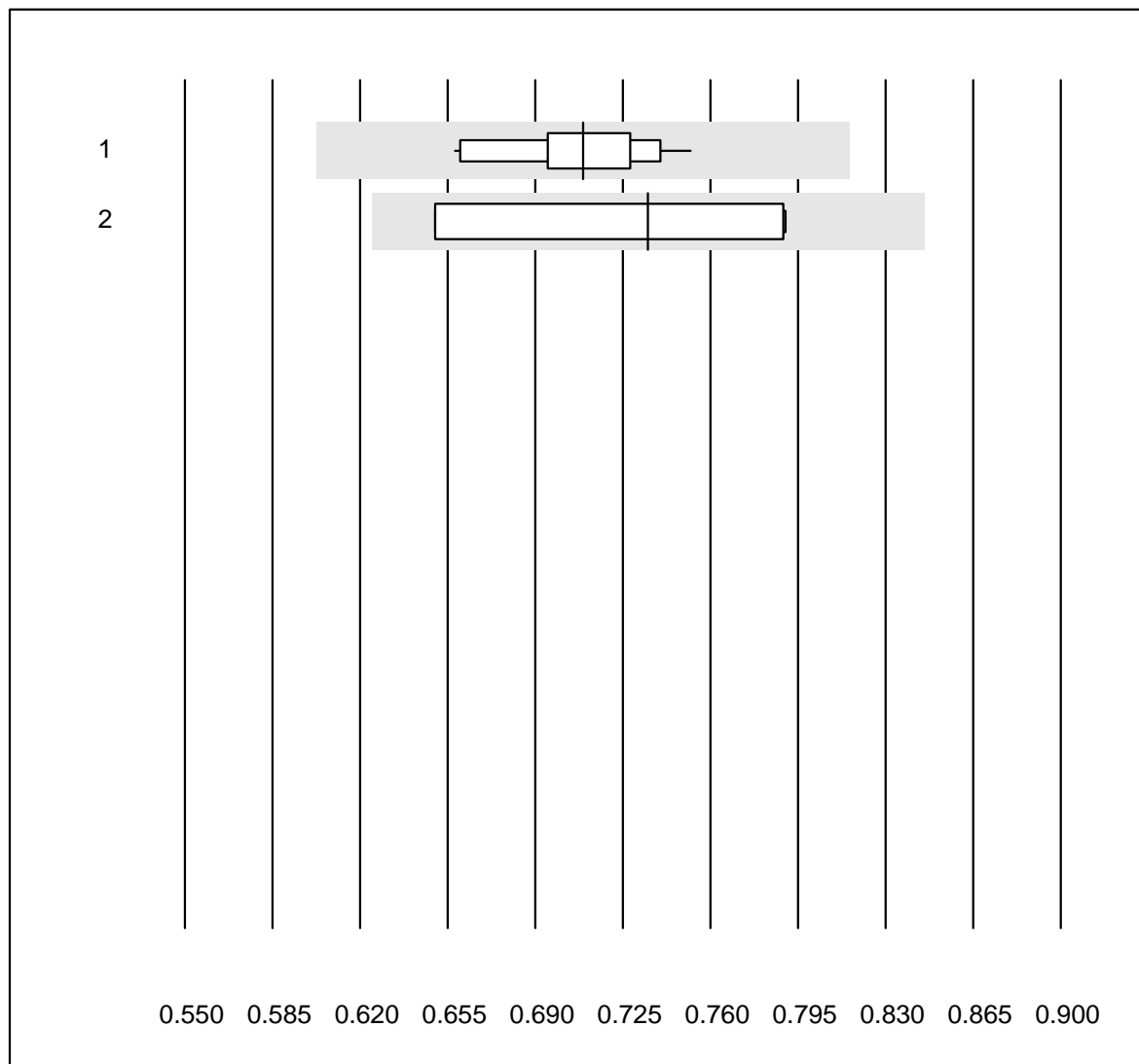
QUALAB tolerance : 15 %

Protein CSF (g/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Cobas	18	100.0	0.0	0.0	0.71	3.8	e
2	Other methods	6	100.0	0.0	0.0	0.74	8.8	e*

One result was submitted but not pubished because the method group was too small. (< 4 results per group)
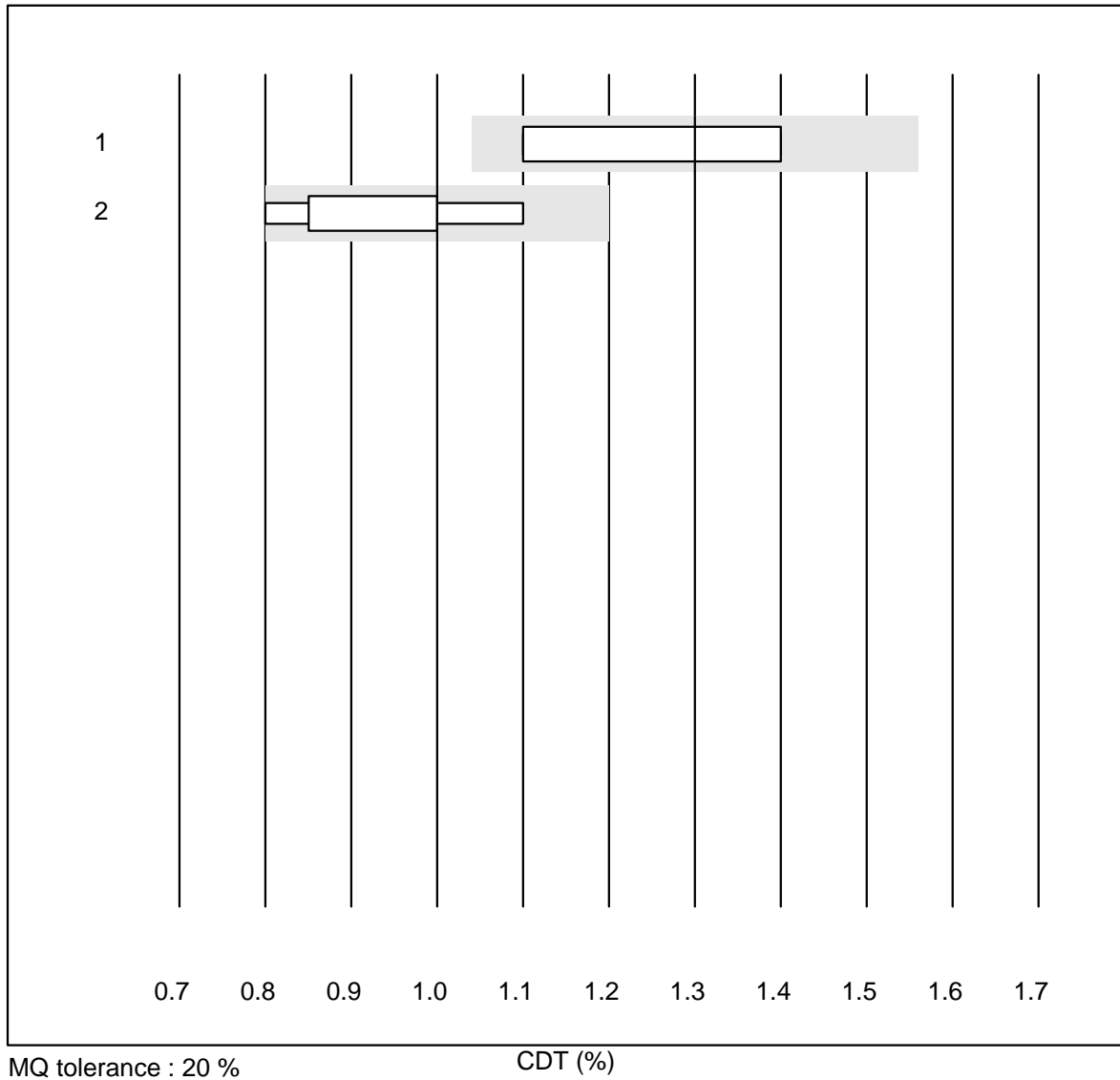
Albumine CSF
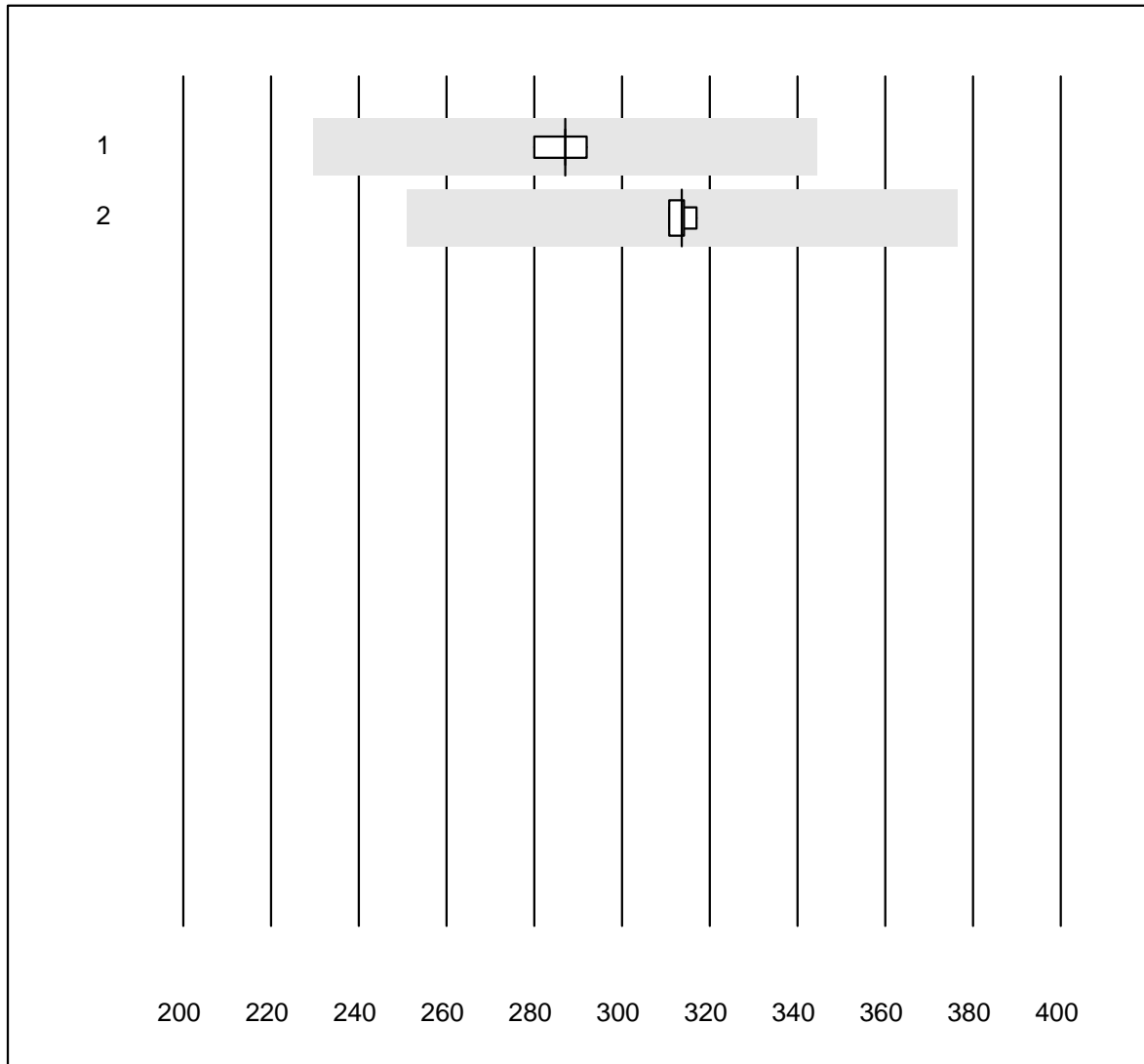
MQ tolerance : 20 %

Albumine CSF (mg/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Cobas	5	100.0	0.0	0.0	287.00	1.5	e
2	Other methods	4	100.0	0.0	0.0	313.60	0.8	e

CDT

MQ tolerance : 20 %

CDT (%)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Immunoassay	4	100.0	0.0	0.0	1.30	11.8	e*
2	all Participants	7	85.7	14.3	0.0	1.00	10.8	e*

Tacrolimus
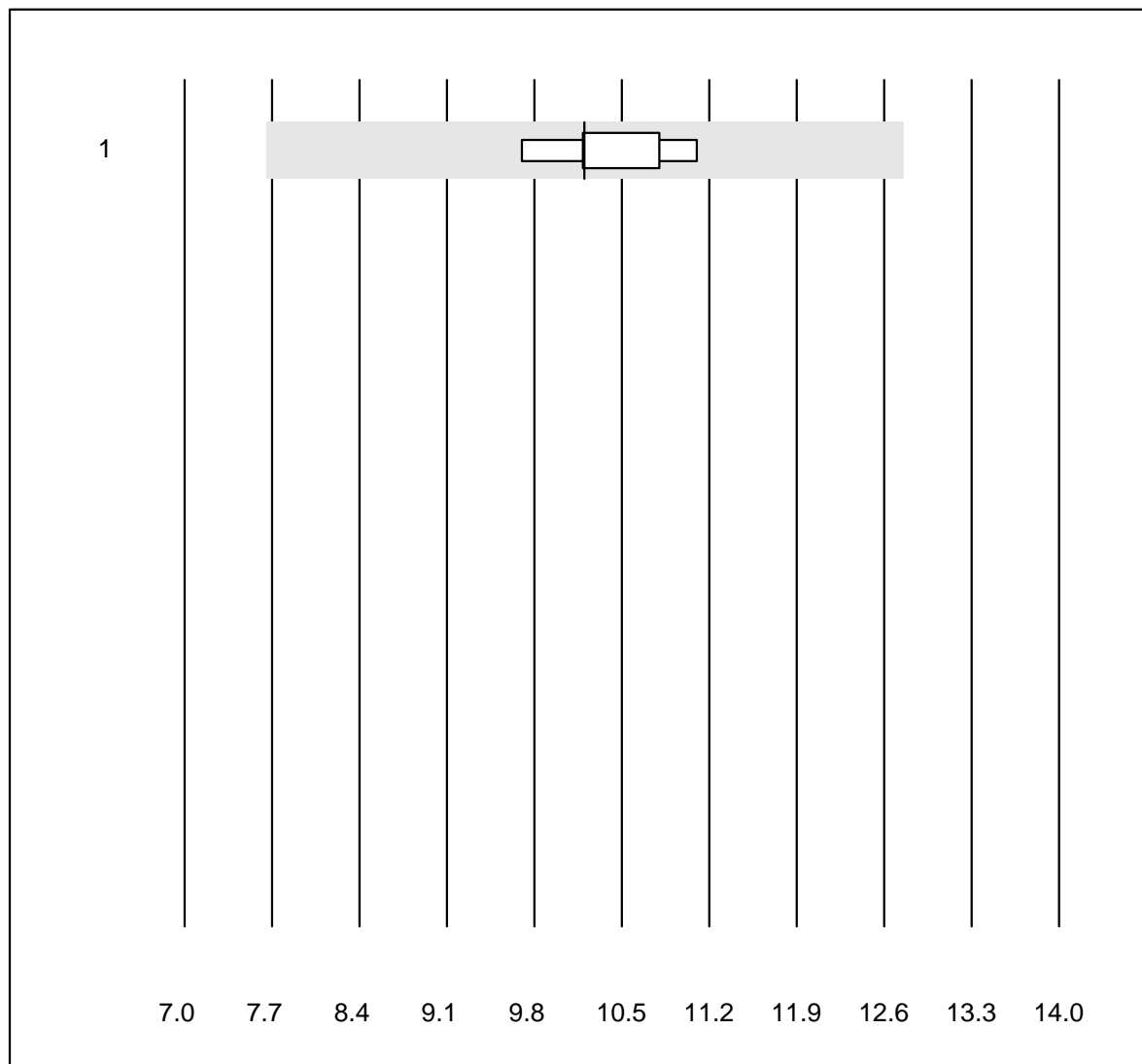
MQ tolerance : 25 %   Tacrolimus (µg/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	all Participants	9	100.0	0.0	0.0	10.2	4.6	e

Totalprotein E

1

55.0   57.1   59.2   61.3   63.4   65.5   67.6   69.7   71.8   73.9   76.0
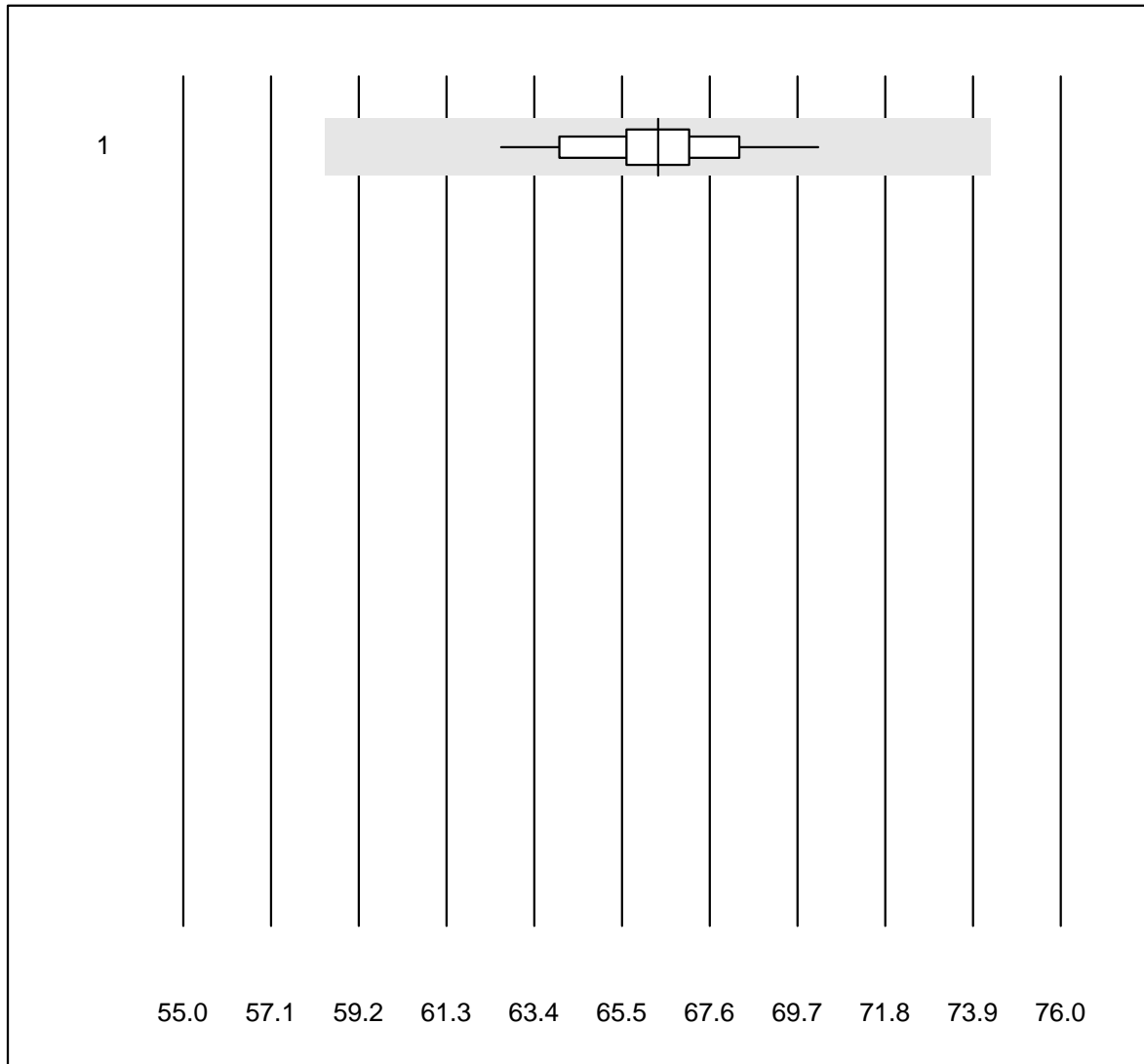
MQ tolerance : 12 %

Totalprotein E (g/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	all Participants	19	100.0	0.0	0.0	66.4	2.5	e

Albumin E

1

55 57 59 61 63 65 67 69 71 73 75
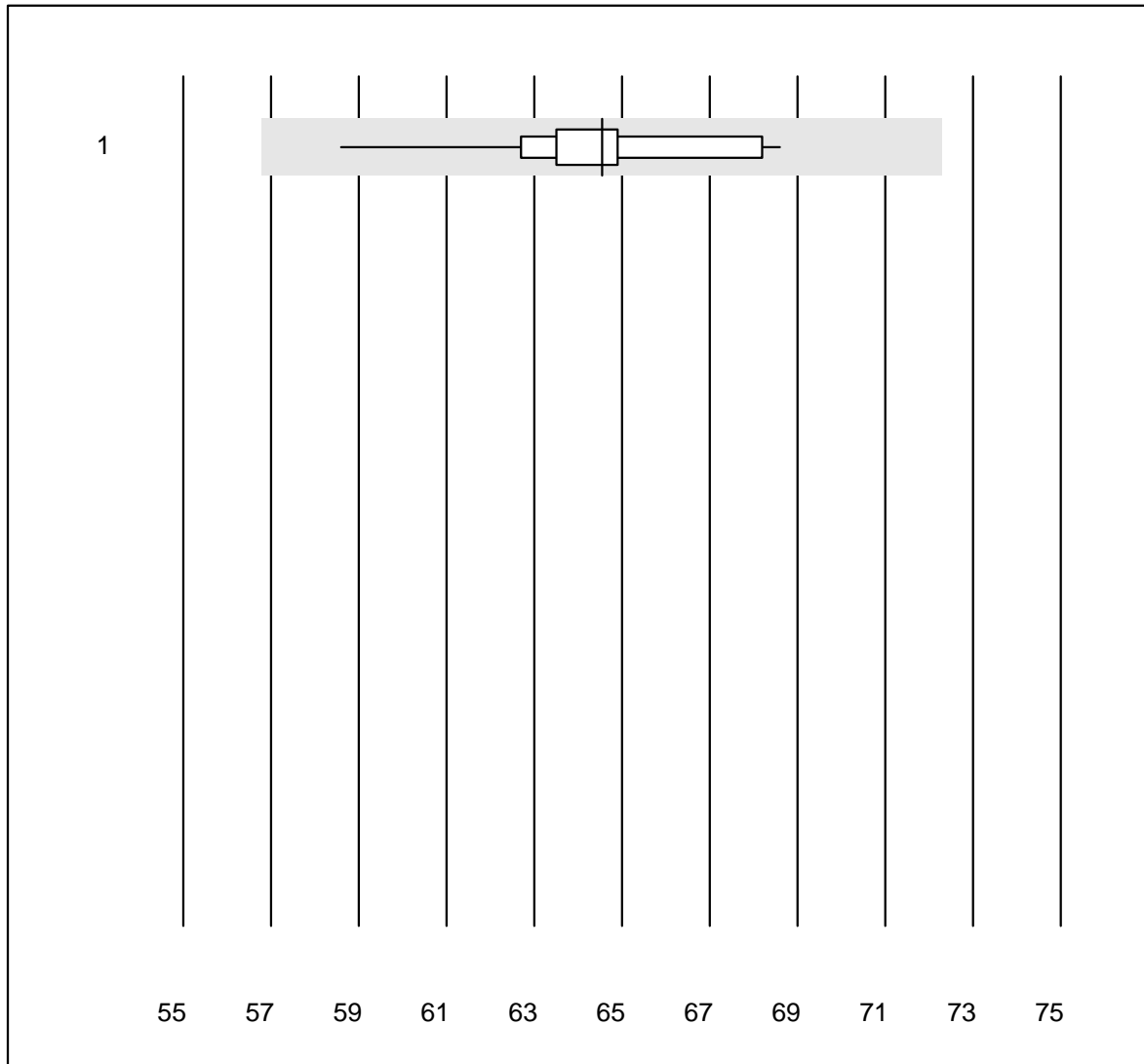
MQ tolerance : 12 %

Albumin E (%)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Electrophoresis	32	100.0	0.0	0.0	64.5	3.5	e

alpha-1-Globuline
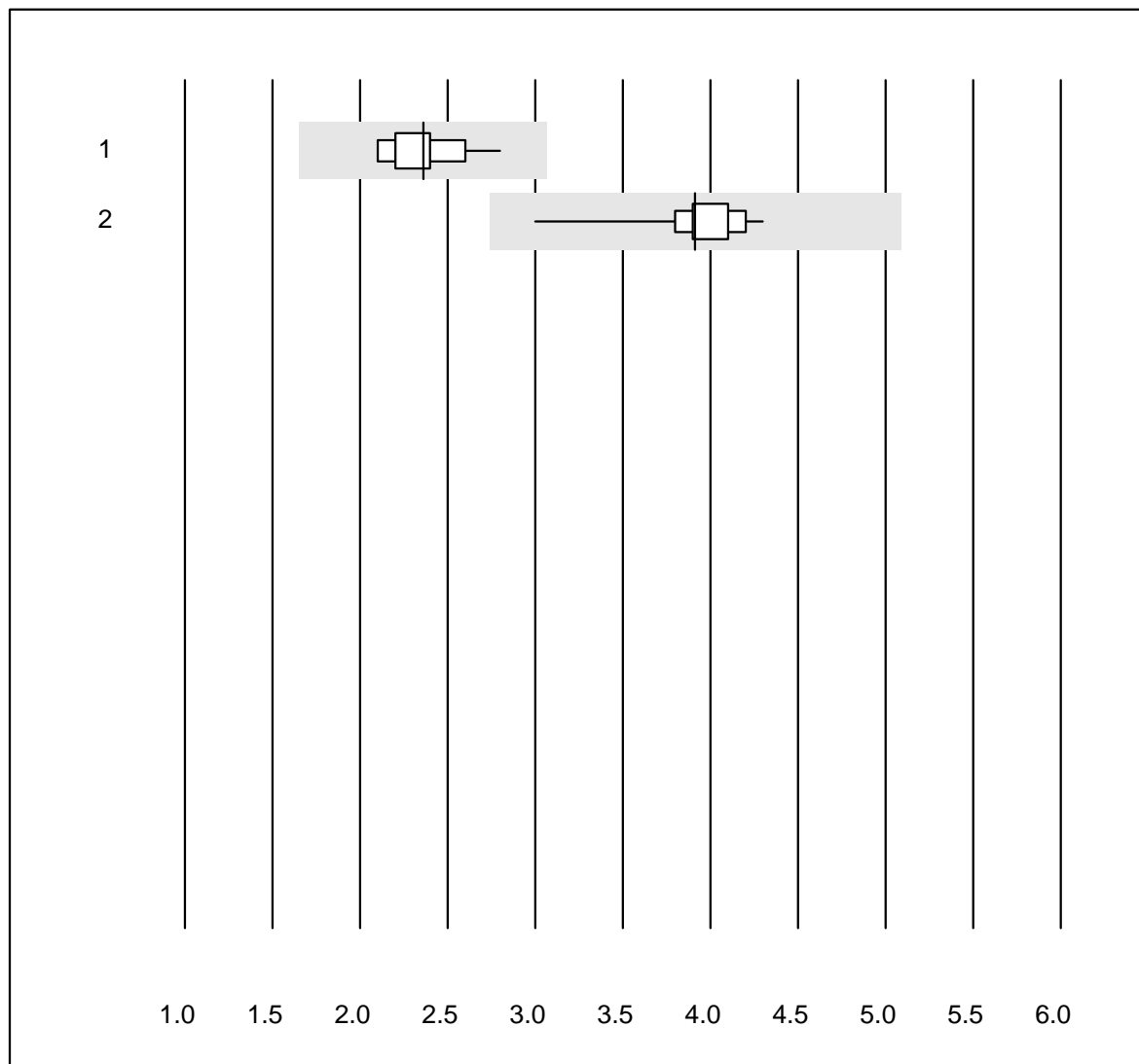
MQ tolerance : 30 %

alpha-1-Globuline (%)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Electrophoresis	10	100.0	0.0	0.0	2.4	9.0	e
2	capillary electropho	22	100.0	0.0	0.0	3.9	8.0	e

alpha-2-Globuline
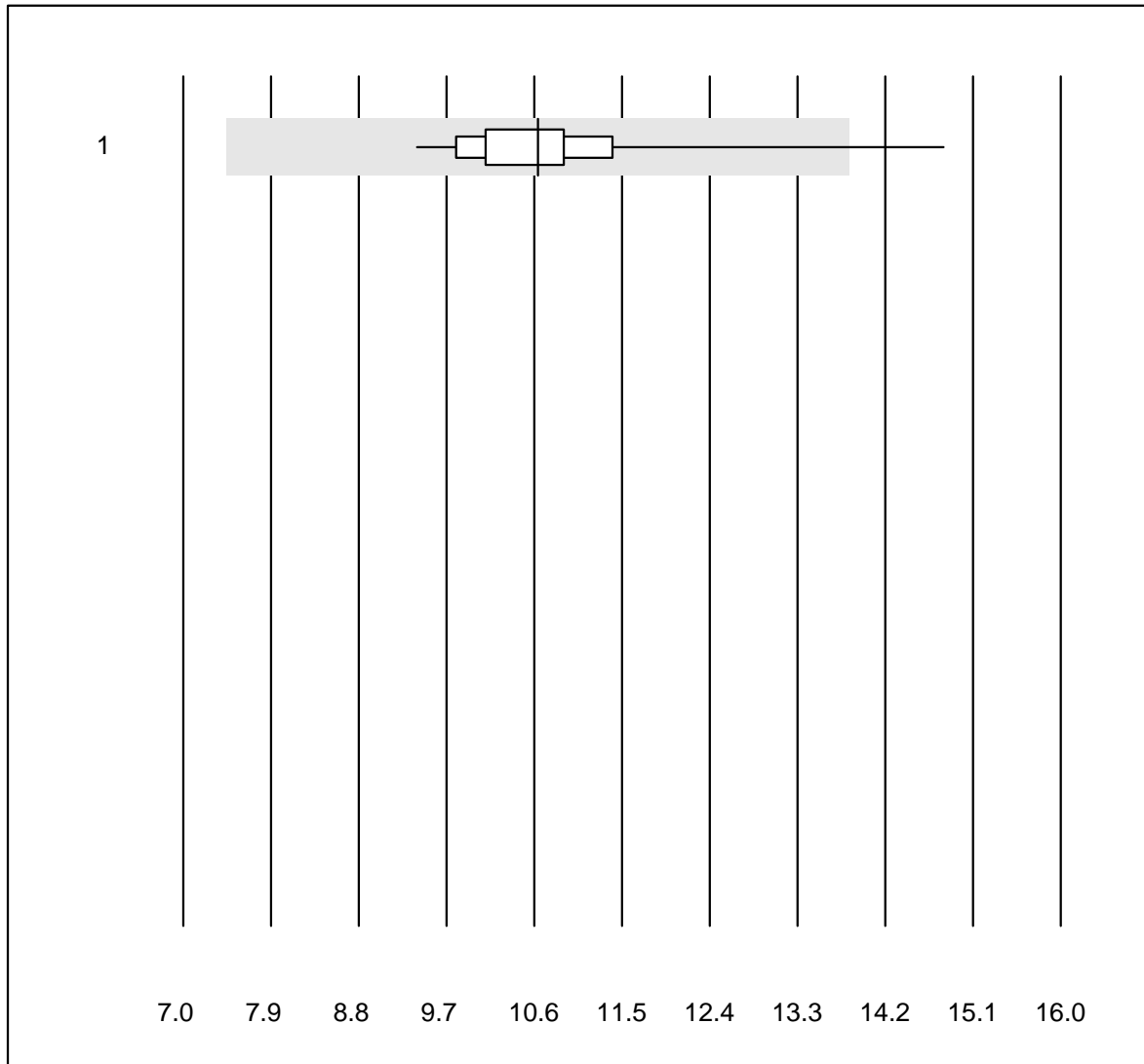
| | 7.0 | 7.9 | 8.8 | 9.7 | 10.6 | 11.5 | 12.4 | 13.3 | 14.2 | 15.1 | 16.0 |

alpha-2-Globuline (%)

MQ tolerance : 30 %

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Electrophoresis	32	96.9	3.1	0.0	10.6	9.7	e

beta-Globuline
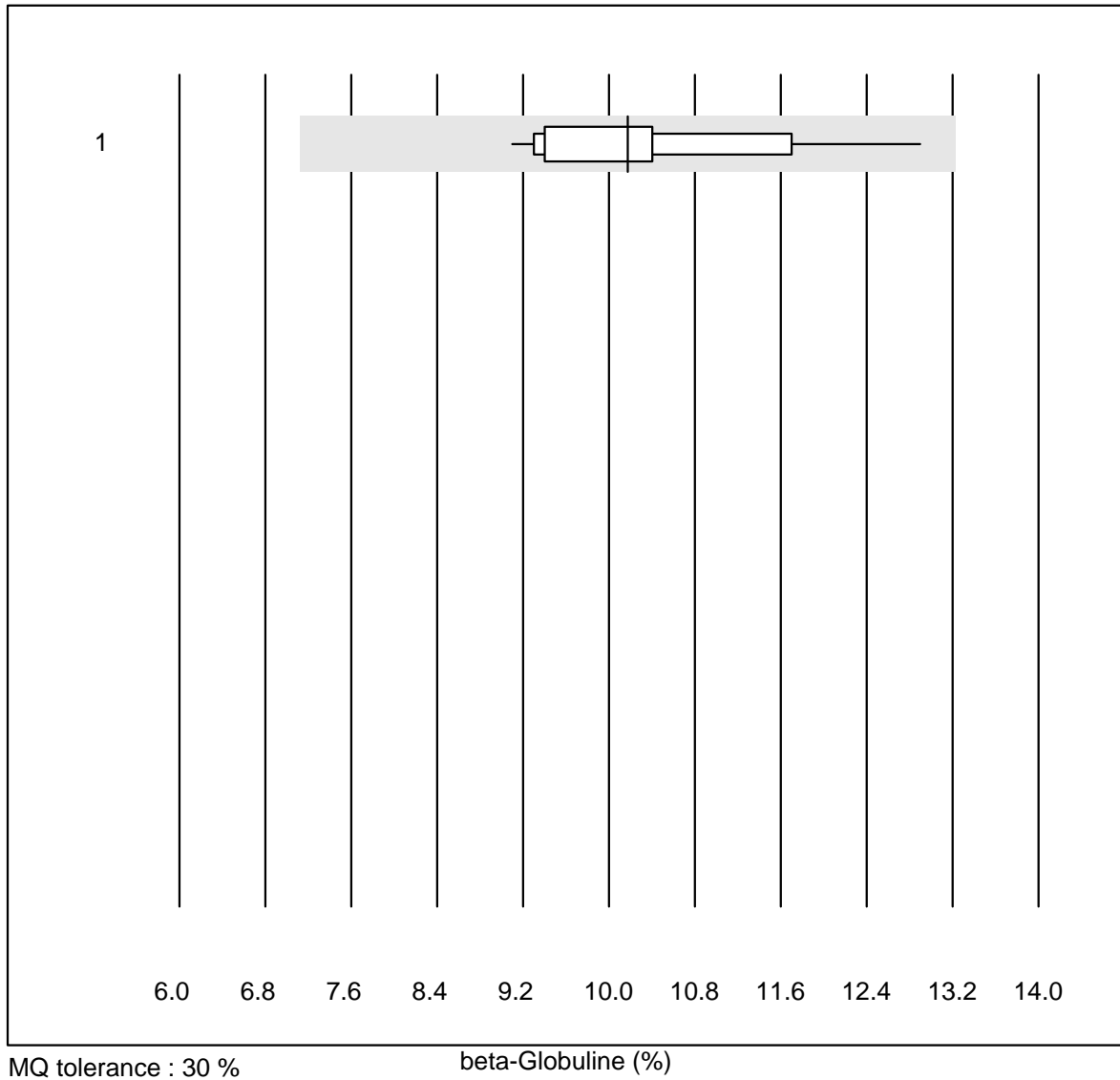
MQ tolerance : 30 %

beta-Globuline (%)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Electrophoresis	16	100.0	0.0	0.0	10.2	9.6	e

Beta-1-Globulin
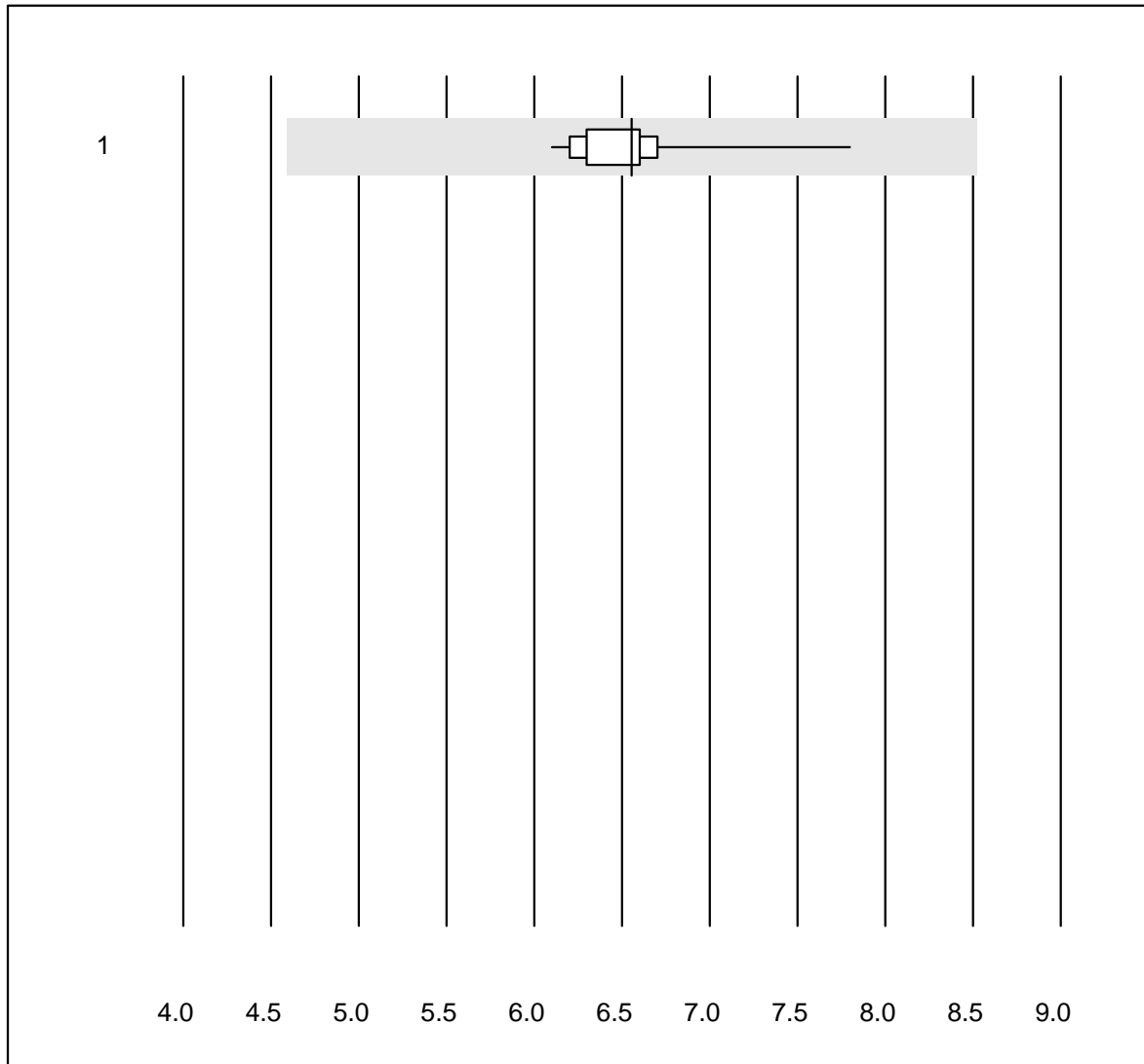
4.0   4.5   5.0   5.5   6.0   6.5   7.0   7.5   8.0   8.5   9.0

Beta-1-Globulin (%)

MQ tolerance : 30 %

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Electrophoresis	11	100.0	0.0	0.0	6.6	6.9	e

Beta-2-Globulin

1

2.5   2.8   3.1   3.4   3.7   4.0   4.3   4.6   4.9   5.2   5.5
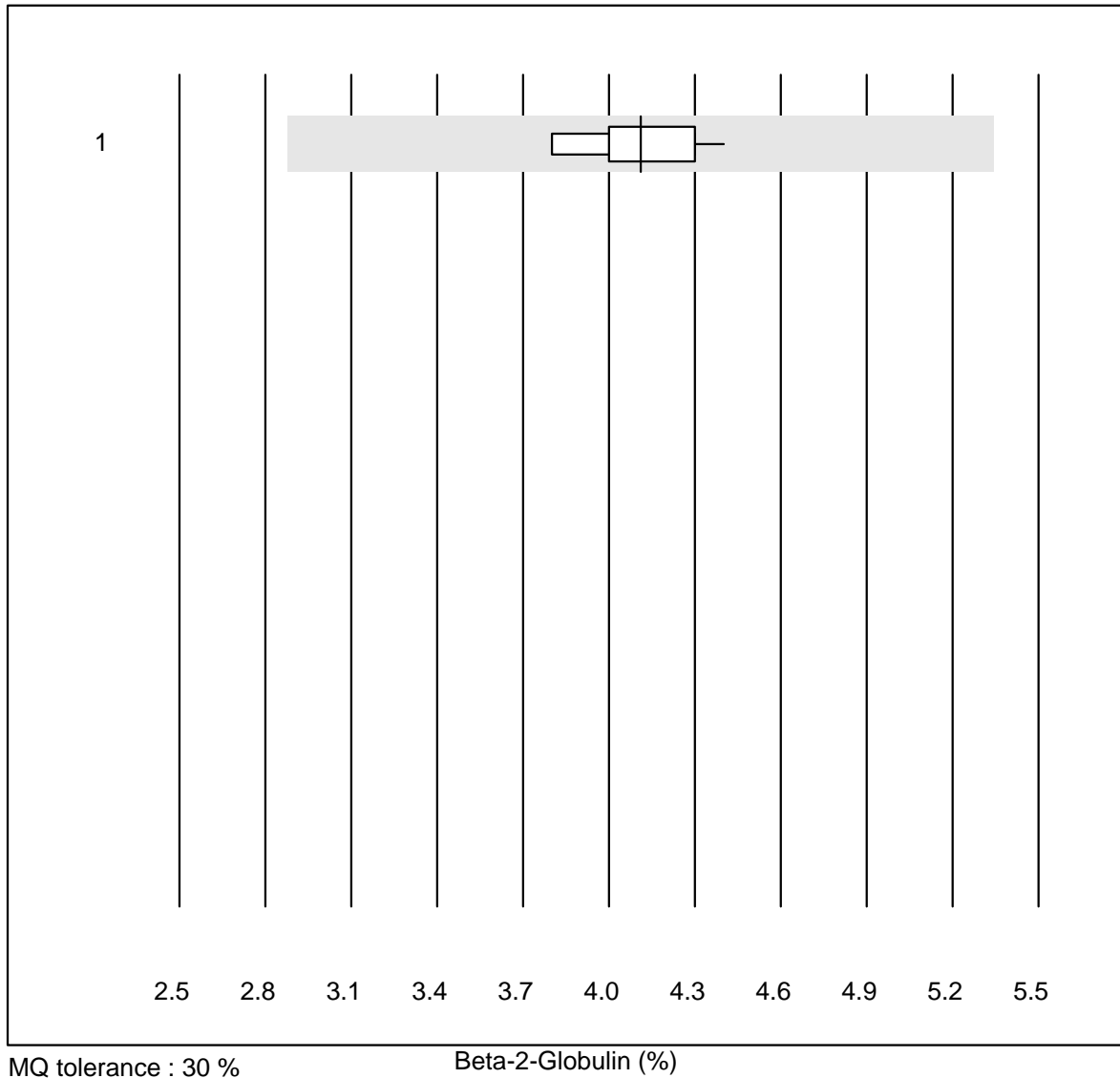
MQ tolerance : 30 %   Beta-2-Globulin (%)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Electrophoresis	10	100.0	0.0	0.0	4.1	4.7	e

gamma-Globuline

1

| | 7.0 | 7.8 | 8.6 | 9.4 | 10.2 | 11.0 | 11.8 | 12.6 | 13.4 | 14.2 | 15.0 |

gamma-Globuline (%)

MQ tolerance : 30 %

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Electrophoresis	10	100.0	0.0	0.0	11.2	9.1	e

Gamma-Globuline+P

1

7.0   7.8   8.6   9.4   10.2   11.0   11.8   12.6   13.4   14.2   15.0
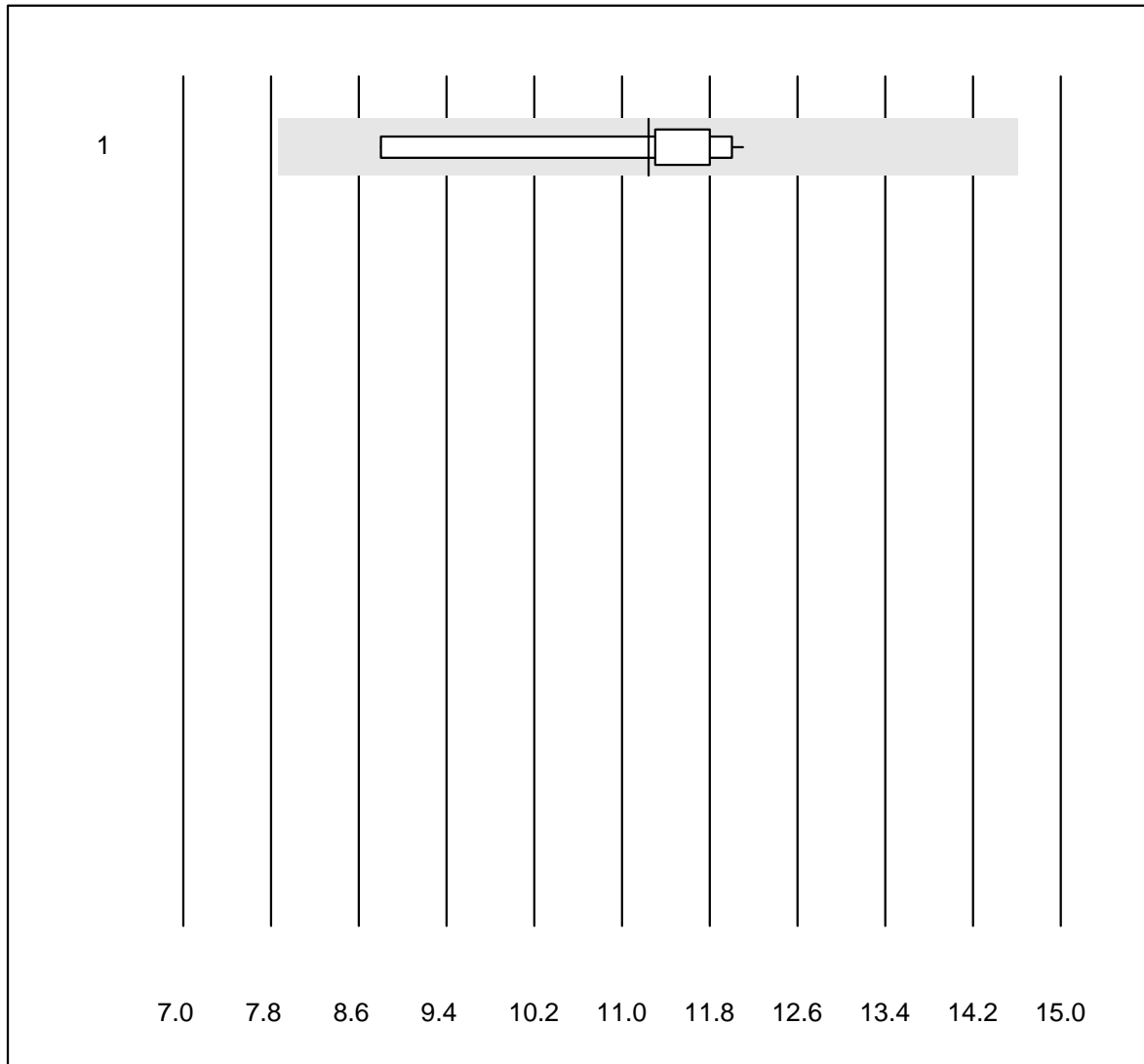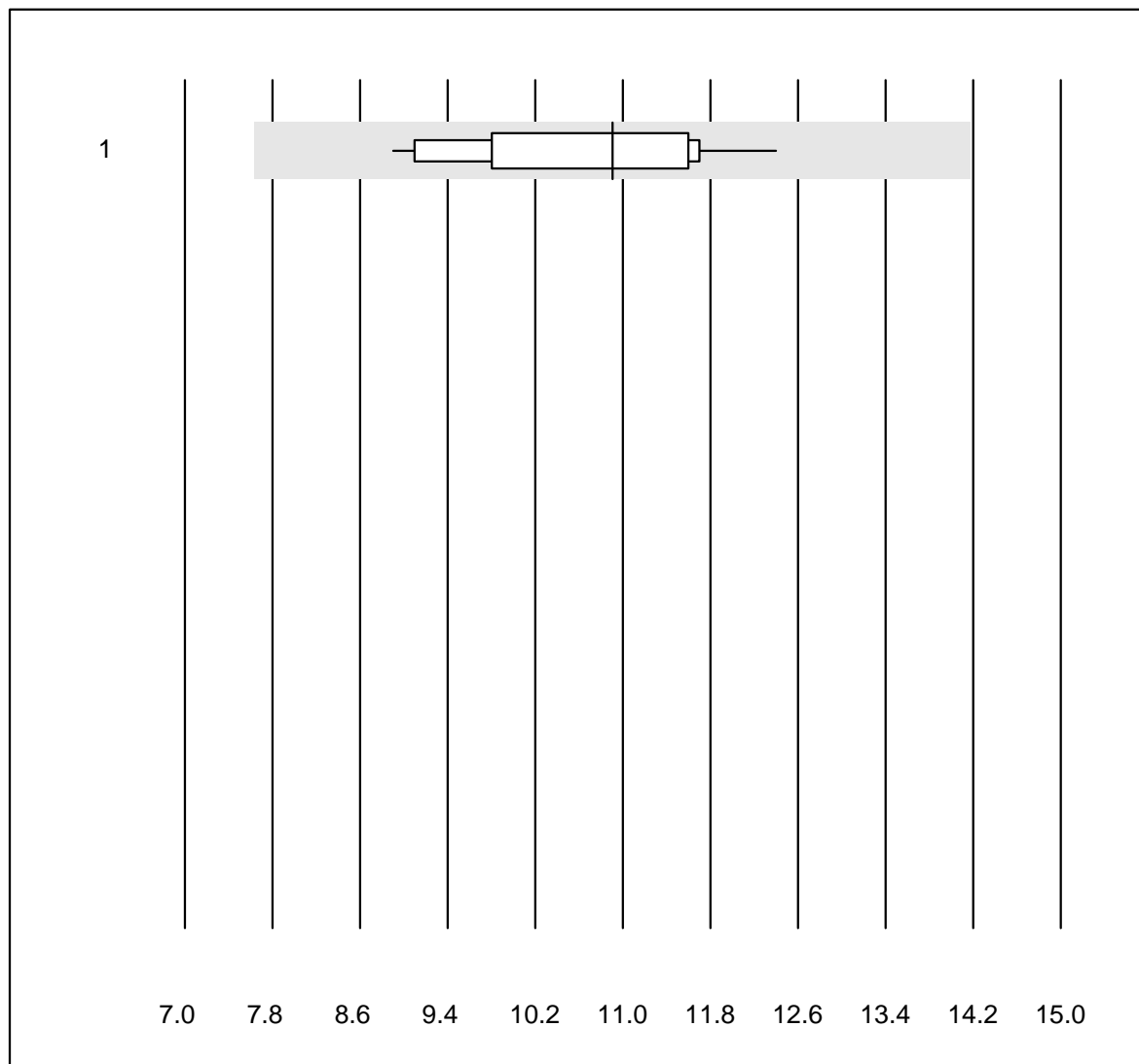
MQ tolerance : 30 %   Gamma-Globuline+P (%)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Electrophoresis	22	100.0	0.0	0.0	10.9	10.3	e

Beta-Globuline+P


```
1
```

7.0   7.8   8.6   9.4   10.2   11.0   11.8   12.6   13.4   14.2   15.0
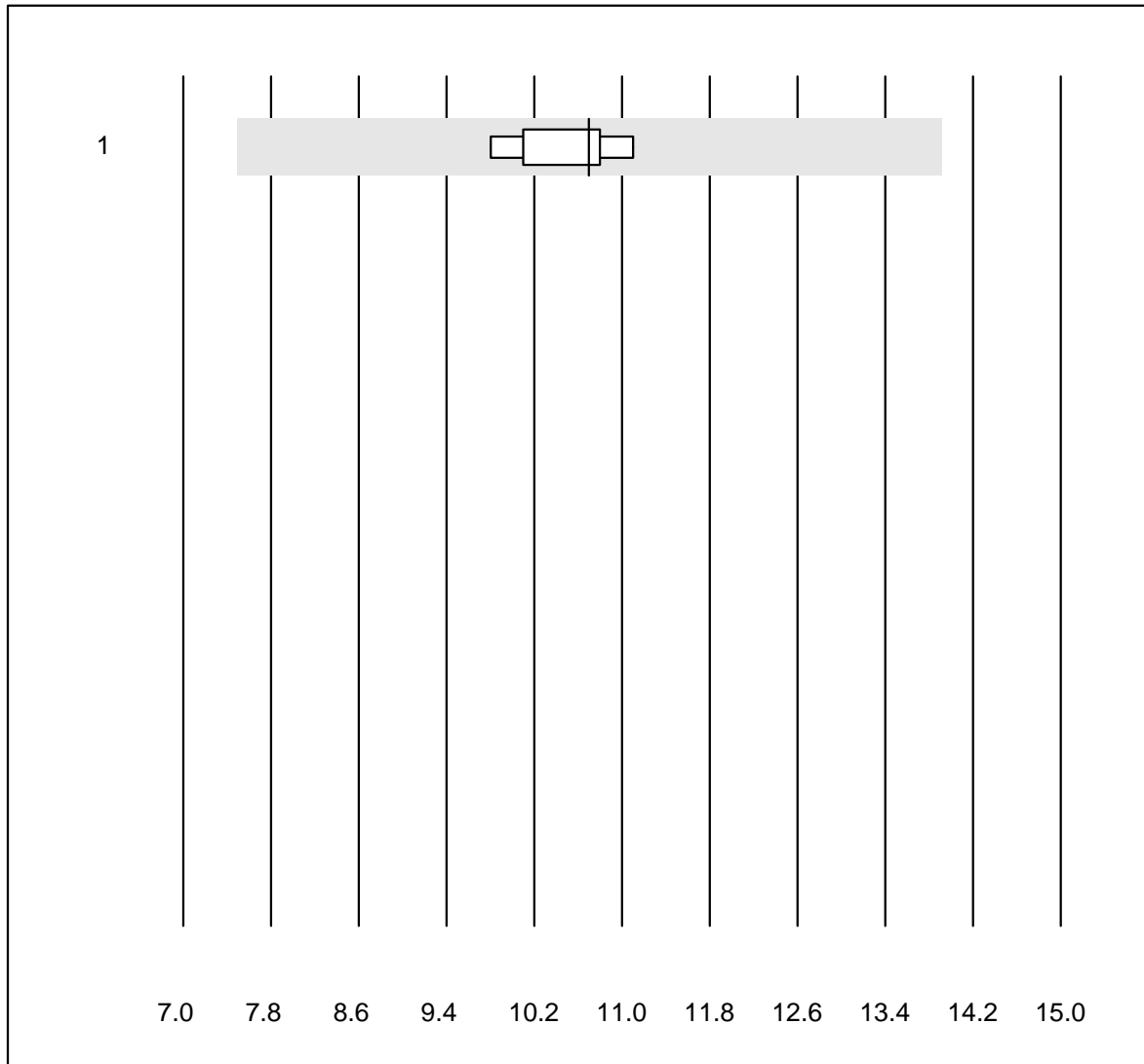
MQ tolerance : 30 %   Beta-Globuline+P (%)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Electrophoresis	5	100.0	0.0	0.0	10.7	5.1	e

Immunfixation

| | 2.960 | 2.968 | 2.976 | 2.984 | 2.992 | 3.000 | 3.008 | 3.016 | 3.024 | 3.032 | 3.040 |
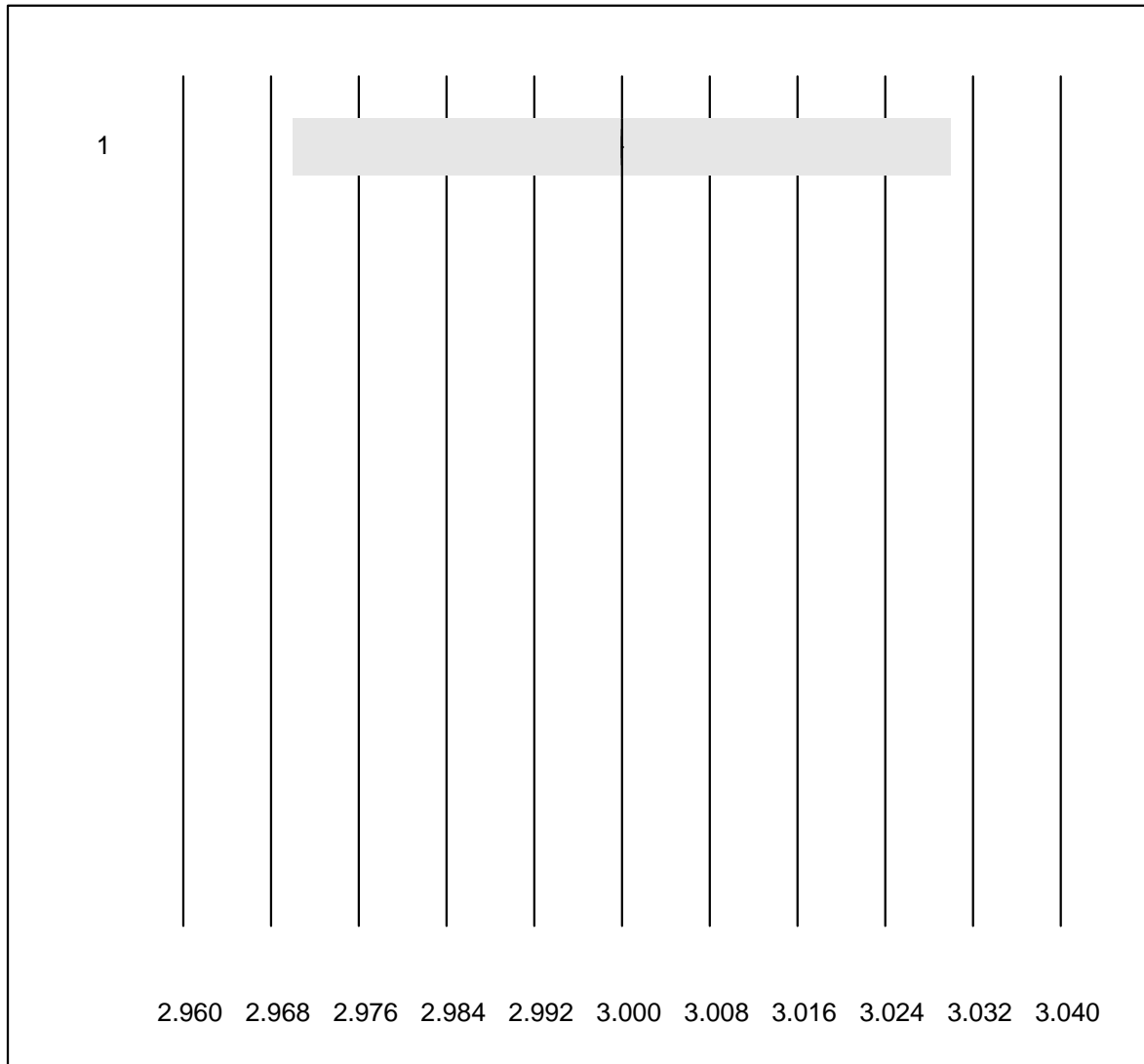
QUALAB tolerance : 1 %   Immunfixation (Code)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Interpretation	26	92.3	0.0	7.7	3	0.0	e

Folate in Erythrocytes
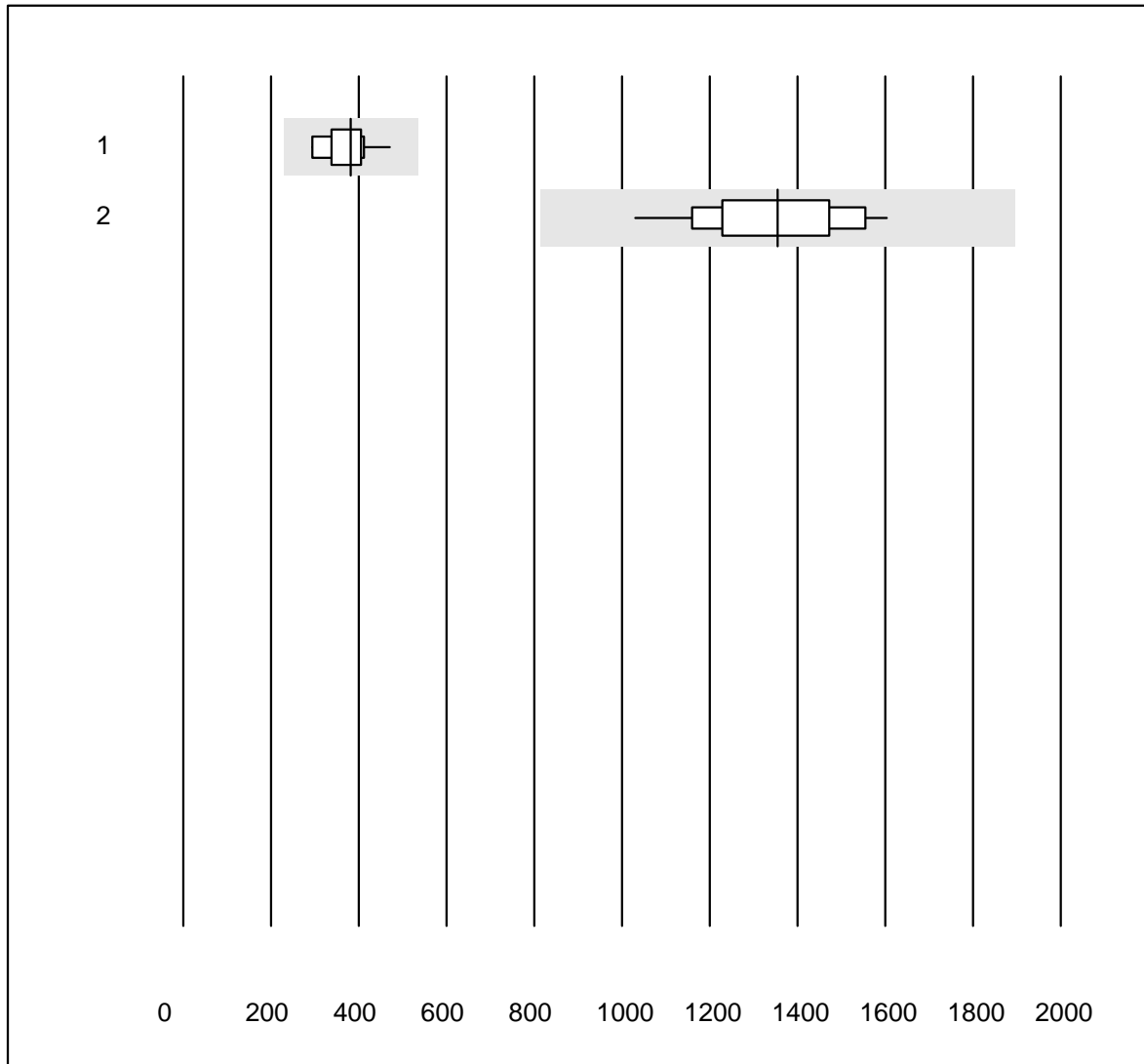
MQ tolerance : 40 %

Folate in Erythrocytes (nmol/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Abbott	11	90.9	0.0	9.1	382	13.8	a
2	Roche, Cobas	22	100.0	0.0	0.0	1355	11.7	e

5 additional results were submitted but not published because the method groups were too small. (< results per group)
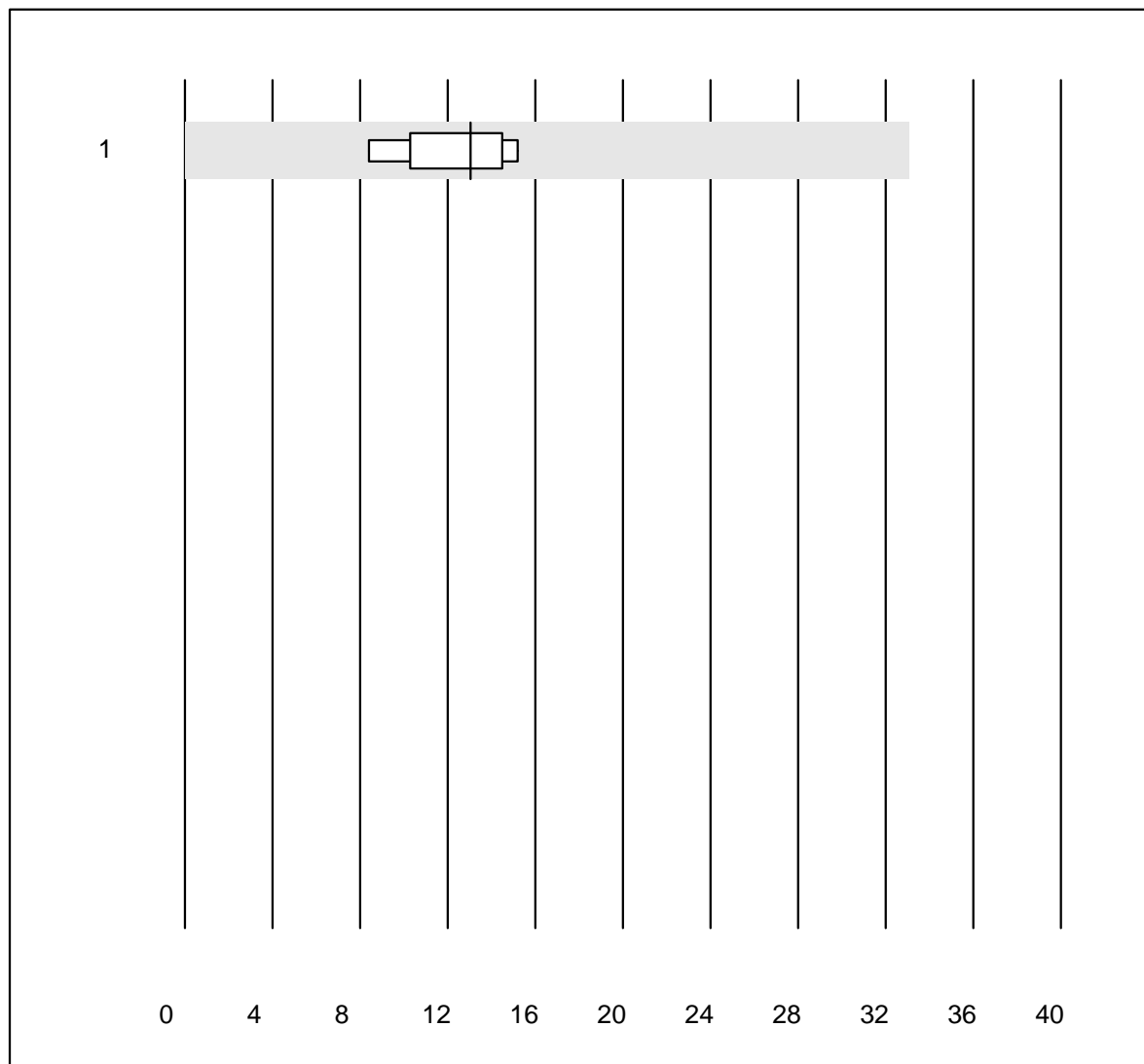
Gallensäure

4.0 4.7 5.4 6.1 6.8 7.5 8.2 8.9 9.6 10.3 11.0
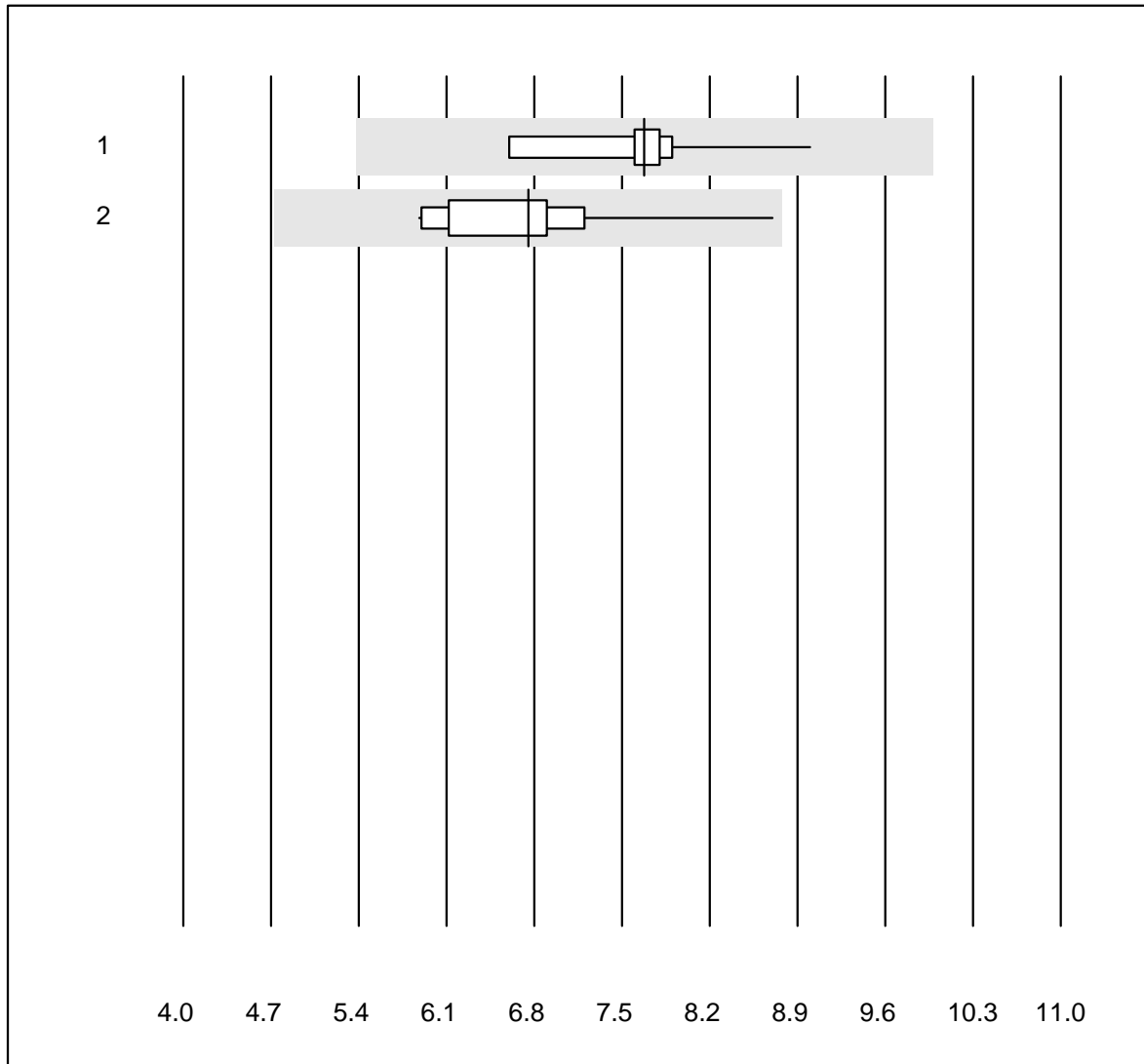
MQ tolerance : 30 %   Gallensäure (µmol/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Other methods	10	100.0	0.0	0.0	7.7	7.9	e
2	all Participants	16	100.0	0.0	0.0	6.8	10.1	e

BNP

QUALAB tolerance : 27 %
(< 75.0: +/- 20.0 ng/l)

BNP (ng/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Triage	8	87.5	0.0	12.5	13.1	20.2	e*

Troponin I Triage
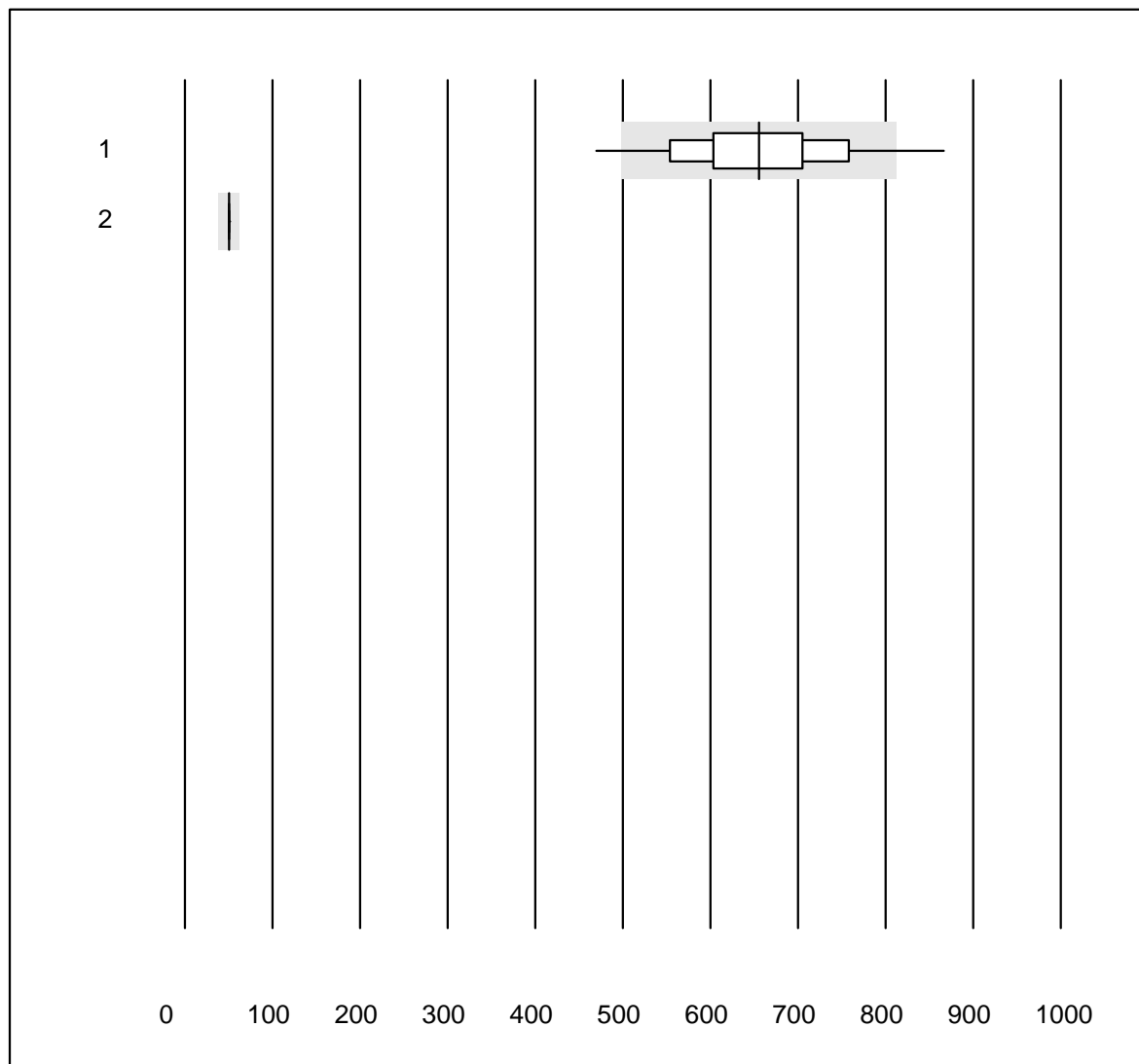
QUALAB tolerance : 24 %

Troponin I Triage (ng/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Triage high sensitiv	175	94.3	4.6	1.1	655.35	11.8	e
2	Triage Next Gen	6	33.3	0.0	66.7	50.00	0.0	e

2 additional results were submitted but not published because the method groups were too small. (< results per group)
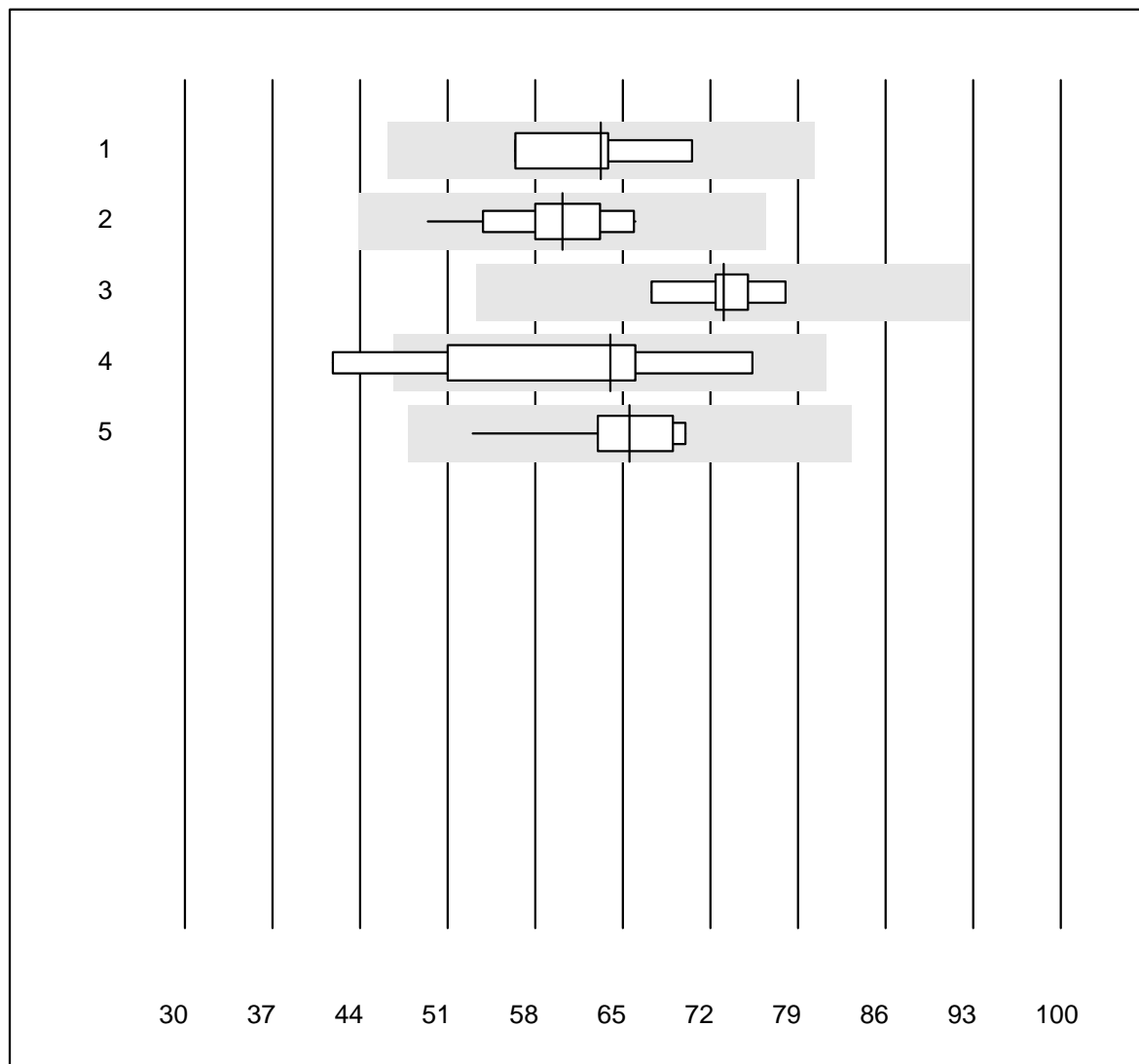
NT-pro BNP

200 235 270 305 340 375 410 445 480 515 550
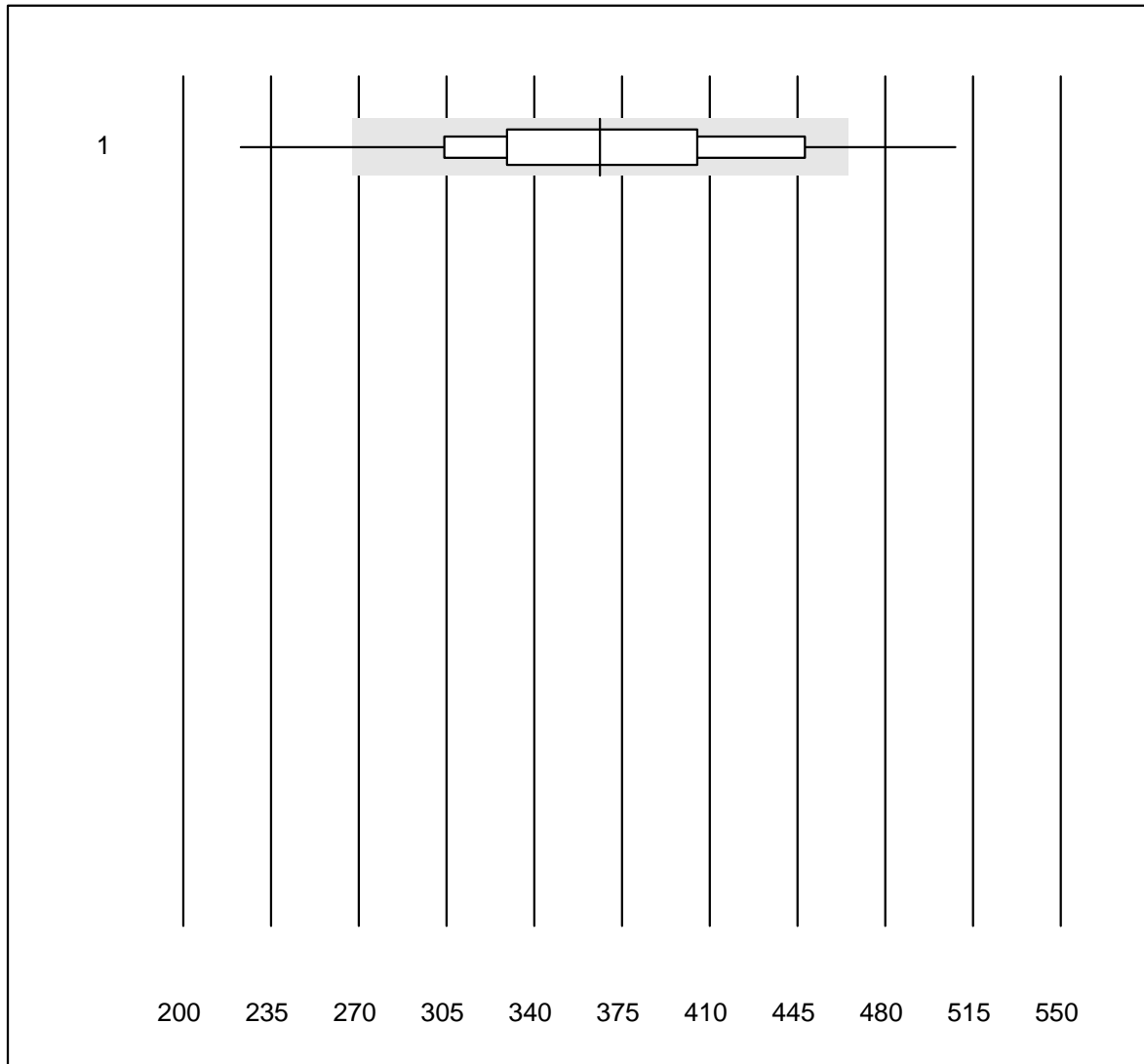
QUALAB tolerance : 27 %   NT-pro BNP (ng/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Triage	84	90.4	6.0	3.6	366	15.2	e

Vitamin D 25 (OH)

QUALAB tolerance : 27 %

Vitamin D 25 (OH) (nmol/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	LCMS	4	100.0	0.0	0.0	63.2	9.1	e*
2	Cobas	18	100.0	0.0	0.0	60.1	7.3	e
3	VIDAS	6	100.0	0.0	0.0	73.0	4.8	e
4	Other methods	9	77.8	11.1	11.1	64.0	19.0	e*
5	Architect	11	100.0	0.0	0.0	65.5	7.3	e

2 additional results were submitted but not published because the method groups were too small. (< results per group)
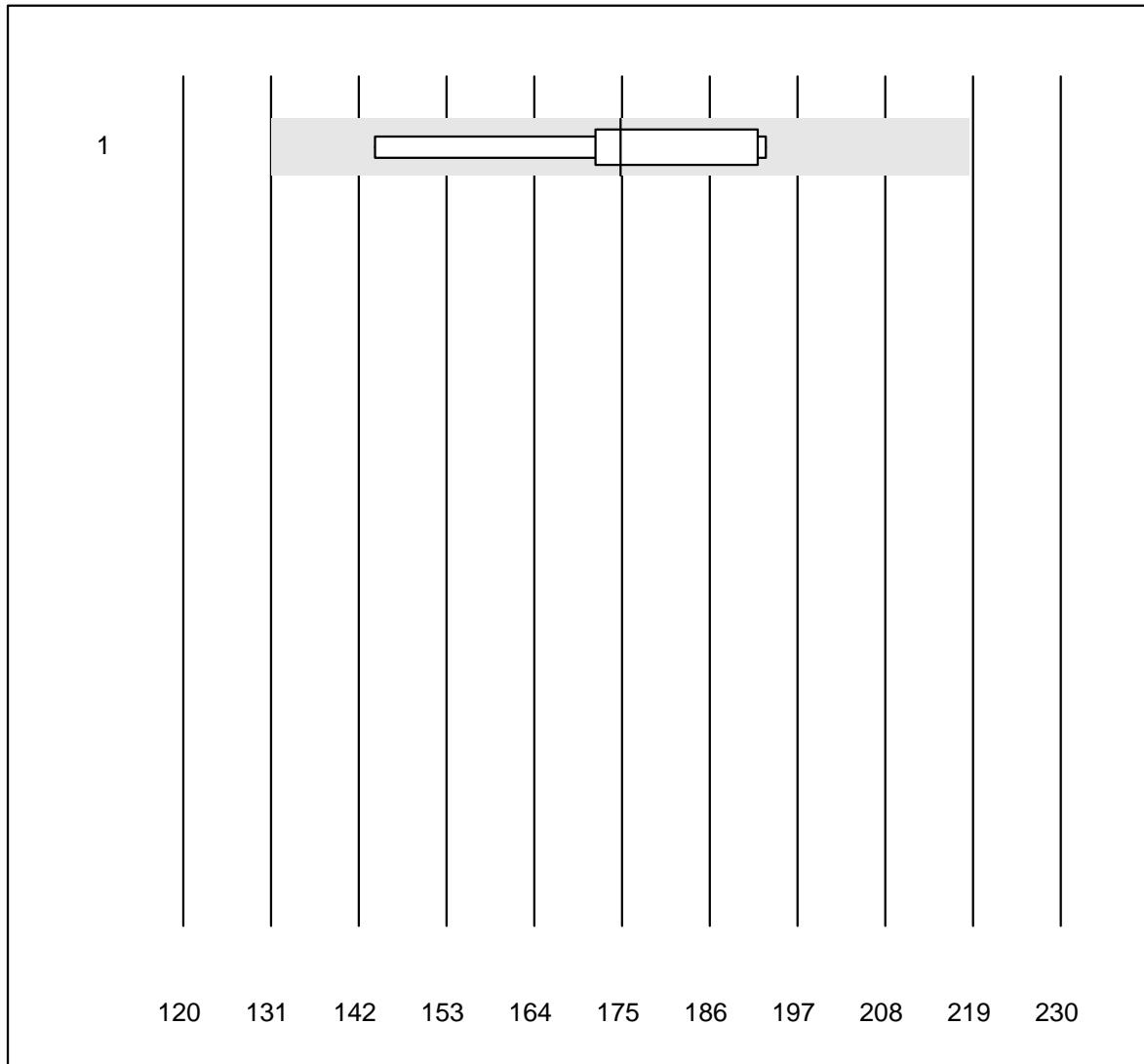
AMH


```
            14.0   15.6   17.2   18.8   20.4   22.0   23.6   25.2   26.8   28.4   30.0
```
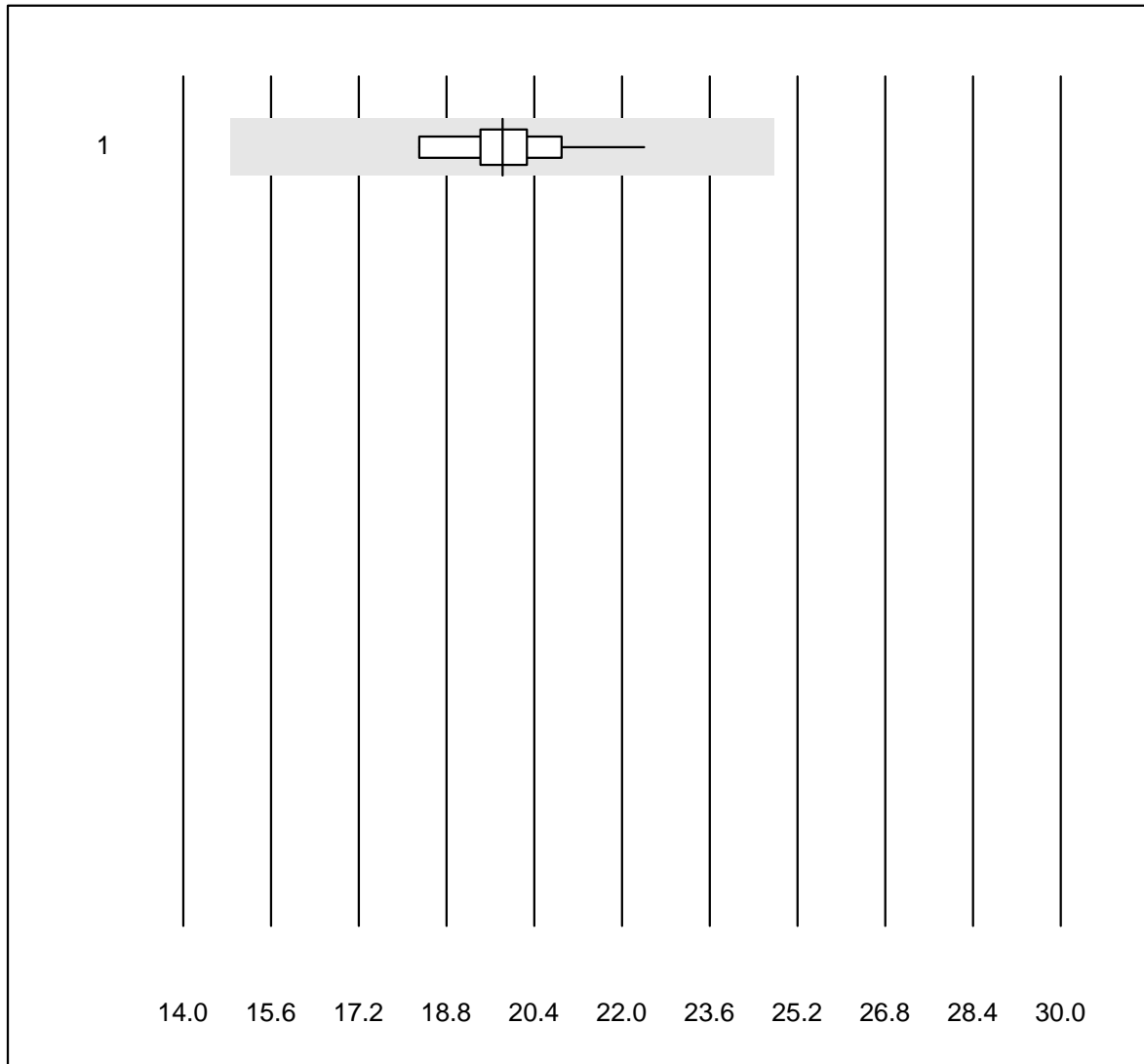
MQ tolerance : 25 %   AMH (pmol/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	all Participants	18	100.0	0.0	0.0	19.8	4.9	e

3 additional results were submitted but not published because the method groups were too small. (< results per group)
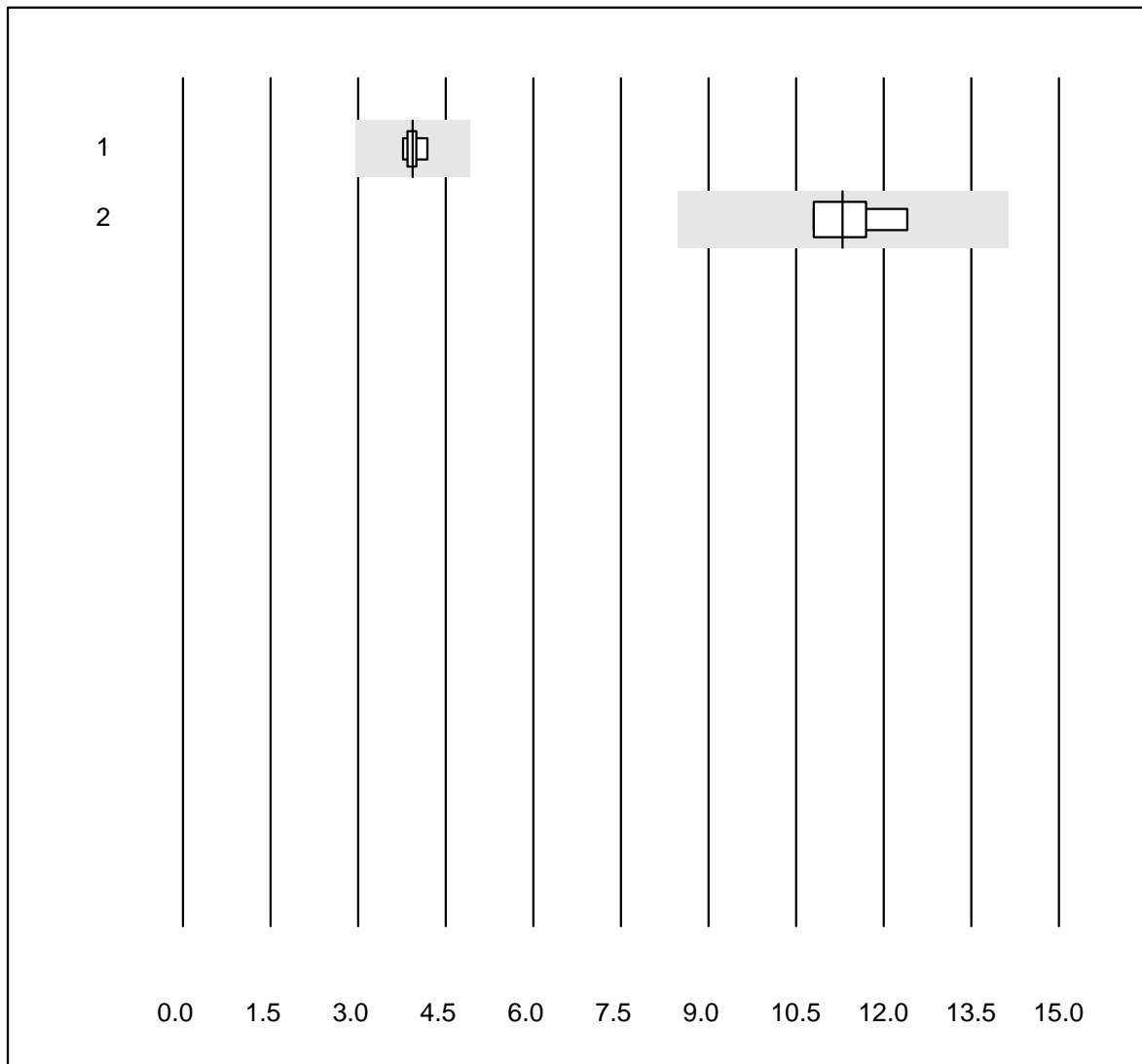
Inhibin B

```
          1
```

120   131   142   153   164   175   186   197   208   219   230

MQ tolerance : 25 %   Inhibin B (ng/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	all Participants	7	85.7	0.0	14.3	174.8	10.3	e*

Calcitonin

MQ tolerance : 25 %

Calcitonin (pmol/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Liaison	5	100.0	0.0	0.0	3.9	4.0	e
2	Other methods	7	100.0	0.0	0.0	11.3	5.0	e

IGF-BP3
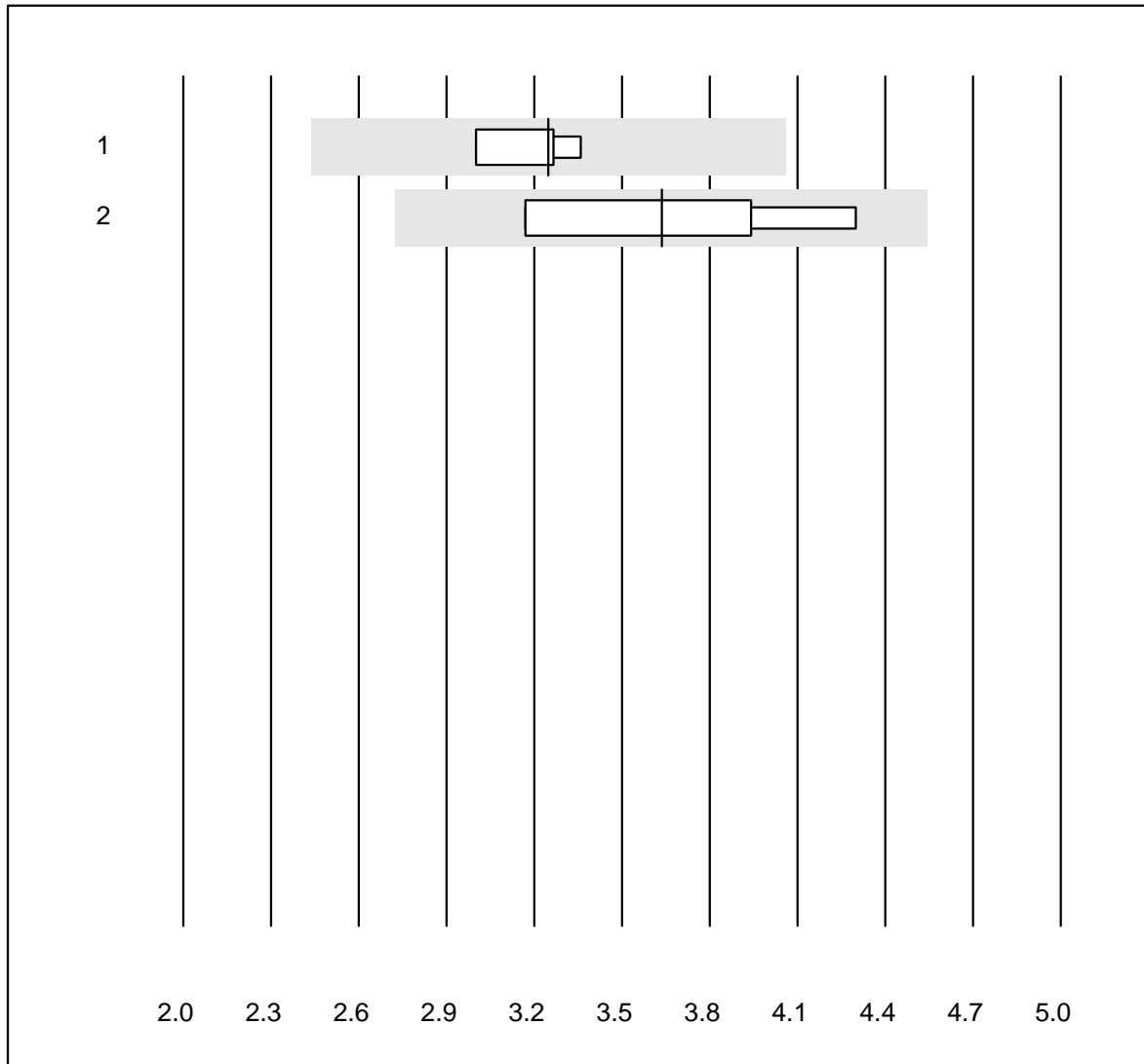
MQ tolerance : 25 %　　　　　IGF-BP3 (mg/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Cobas	4	100.0	0.0	0.0	3.25	4.8	e
2	all Participants	4	100.0	0.0	0.0	3.64	14.3	e*

Renin
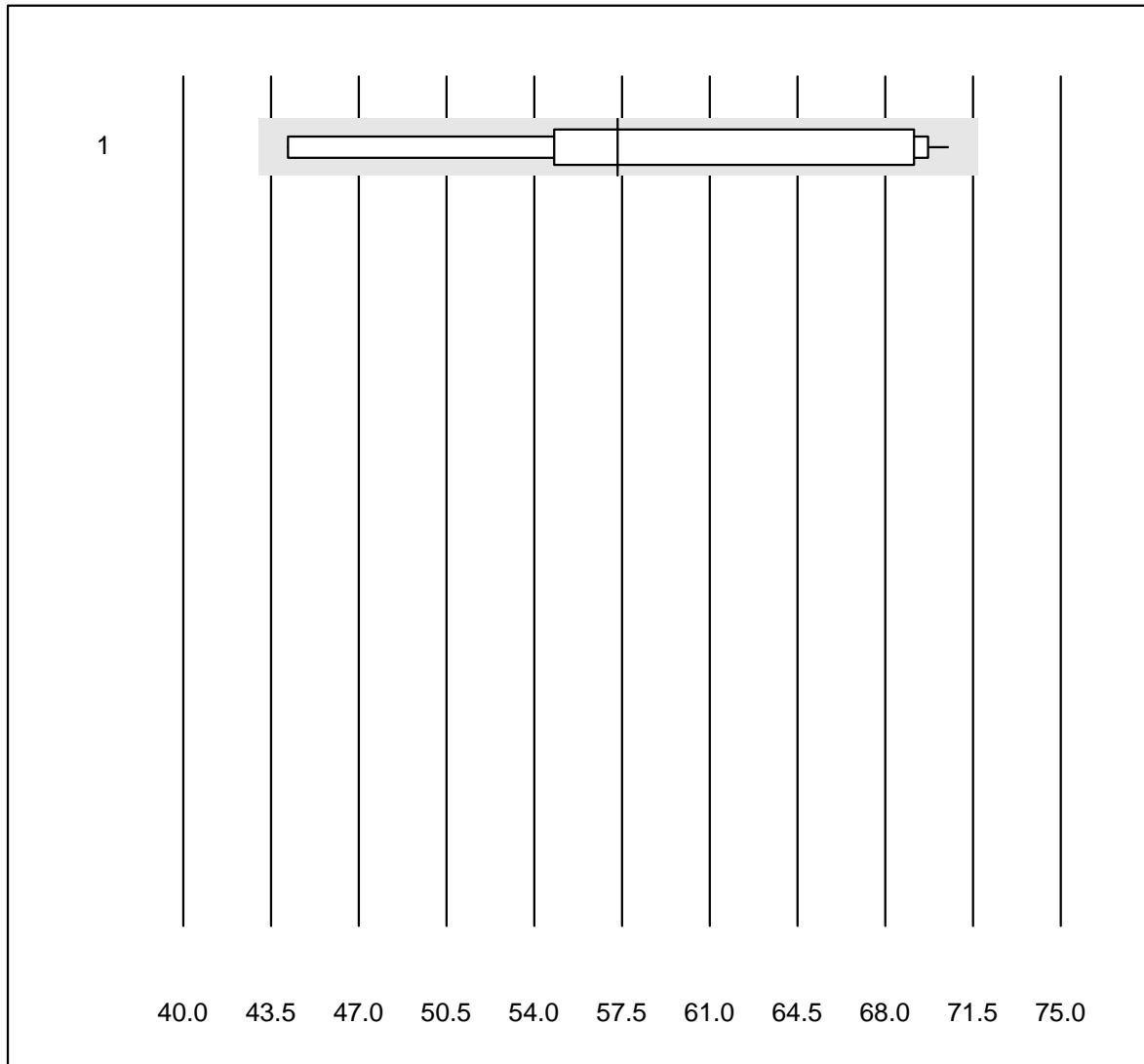
MQ tolerance : 25 %   Renin (mU/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Liaison	10	100.0	0.0	0.0	57.3	15.4	a

One result was submitted but not pubished because the method group was too small. (< 4 results per group)
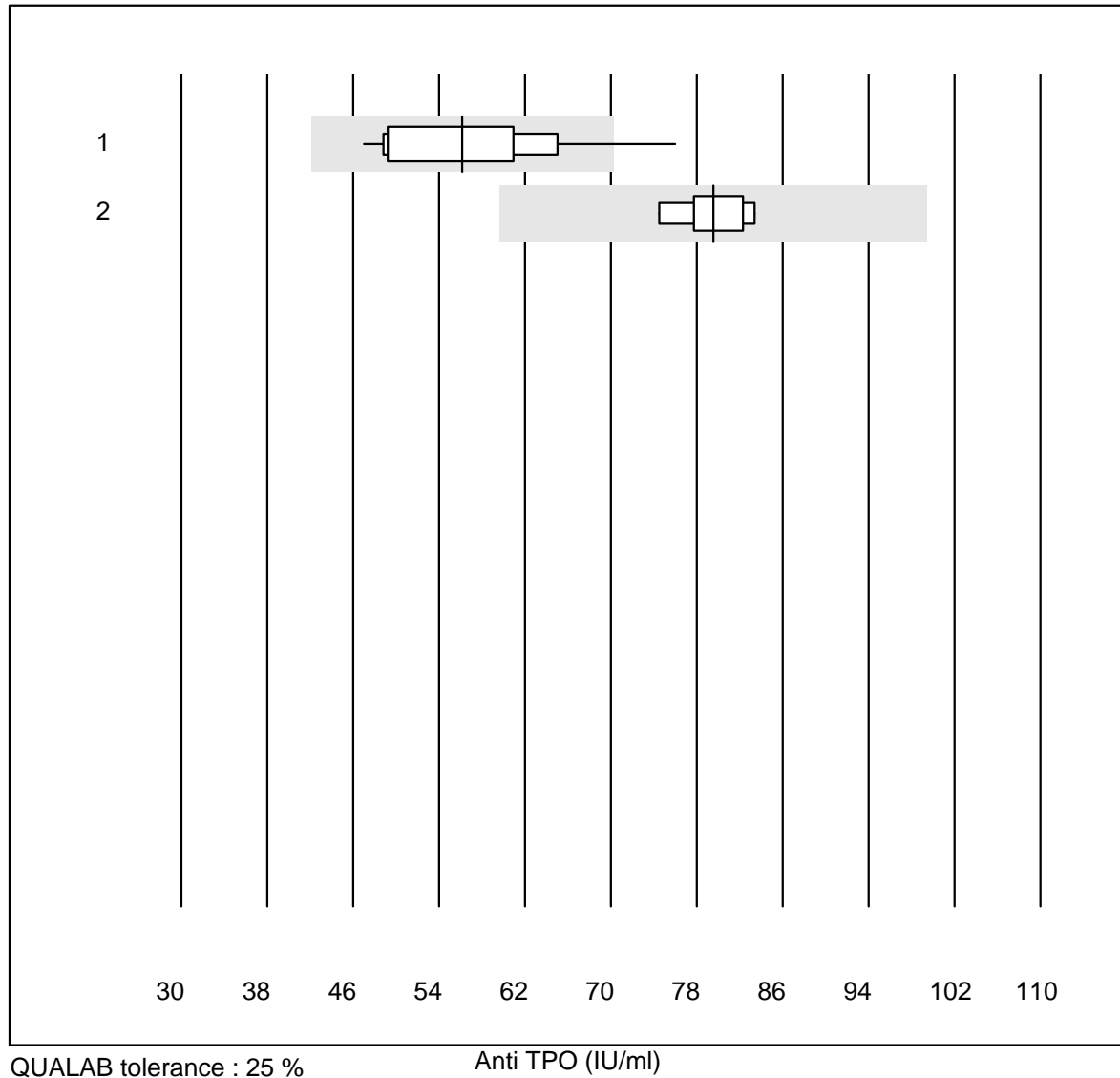
Anti Thyreoglobulin

Anti Thyreoglobulin (IU/ml)
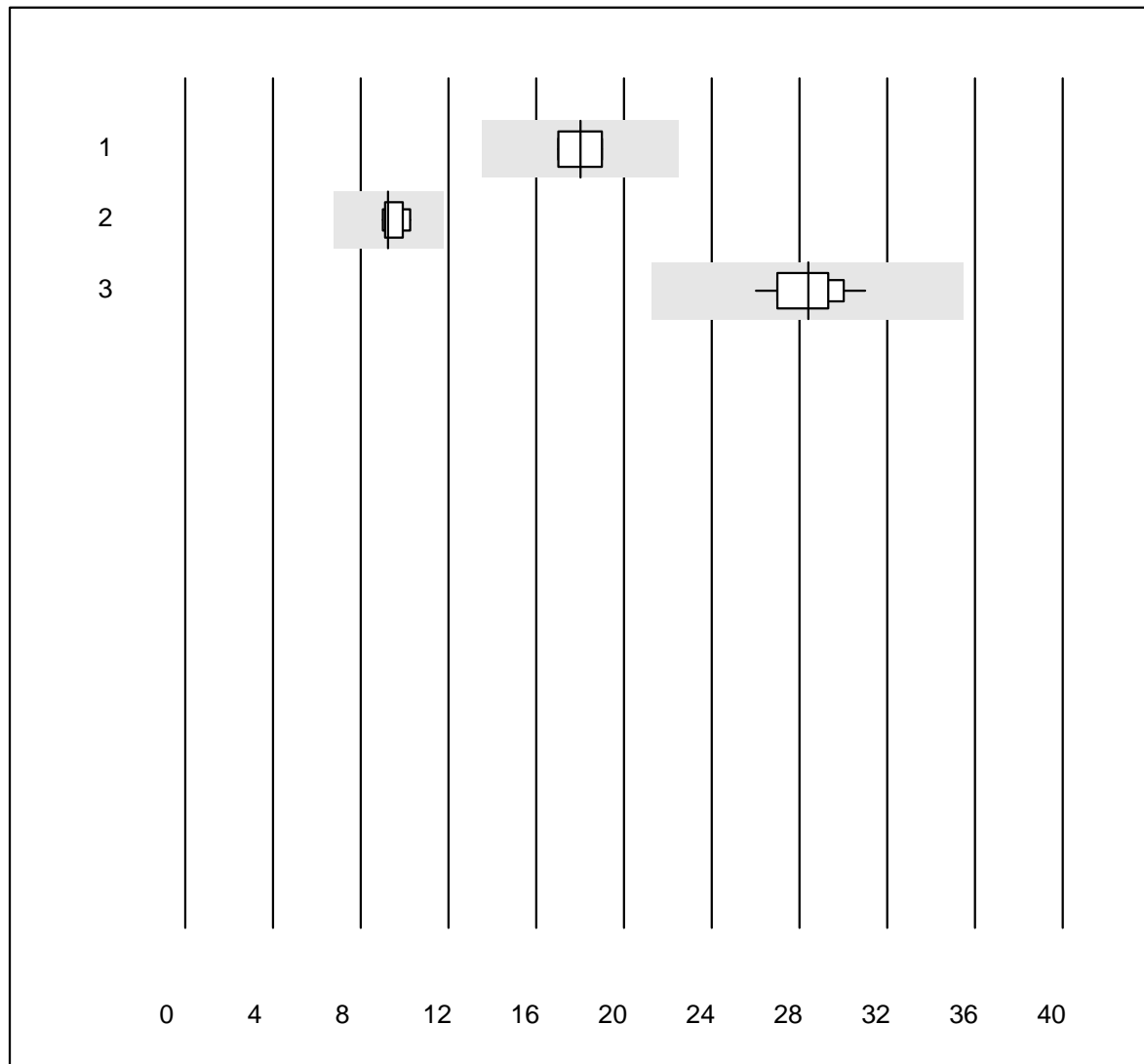
MQ tolerance : 25 %
(< 10: +/- 3 IU/ml)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Phadia	4	75.0	0.0	25.0	18	5.6	a
2	Alinity	6	100.0	0.0	0.0	9	5.3	e
3	Cobas	11	100.0	0.0	0.0	28	5.1	e

4 additional results were submitted but not published because the method groups were too small. (< results per group)
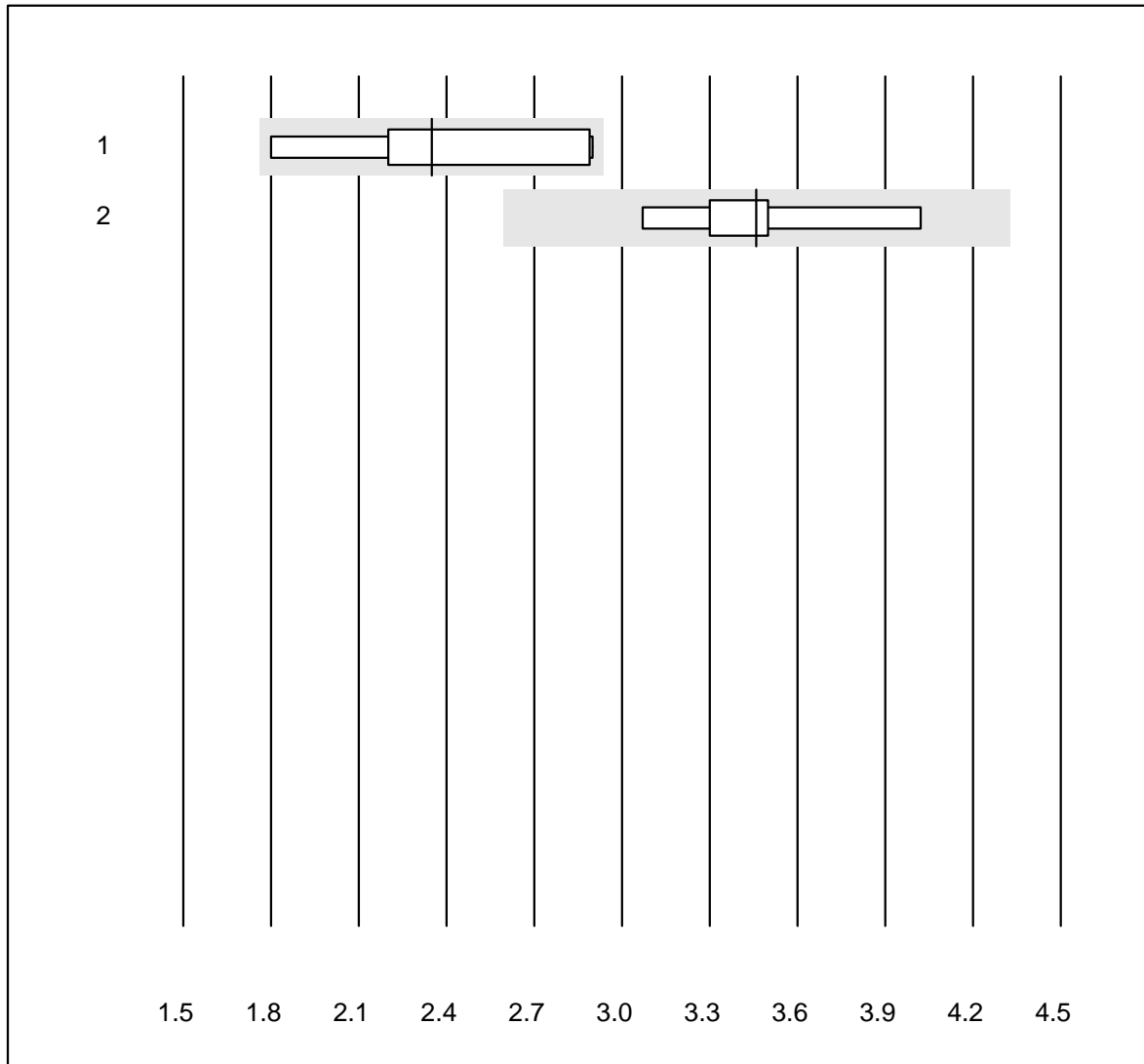
Anti TPO

30 38 46 54 62 70 78 86 94 102 110

QUALAB tolerance : 25 %

Anti TPO (IU/ml)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Cobas	13	84.6	7.7	7.7	56	14.8	e*
2	Abbott	6	100.0	0.0	0.0	80	4.0	e

6 additional results were submitted but not published because the method groups were too small. (< results per group)
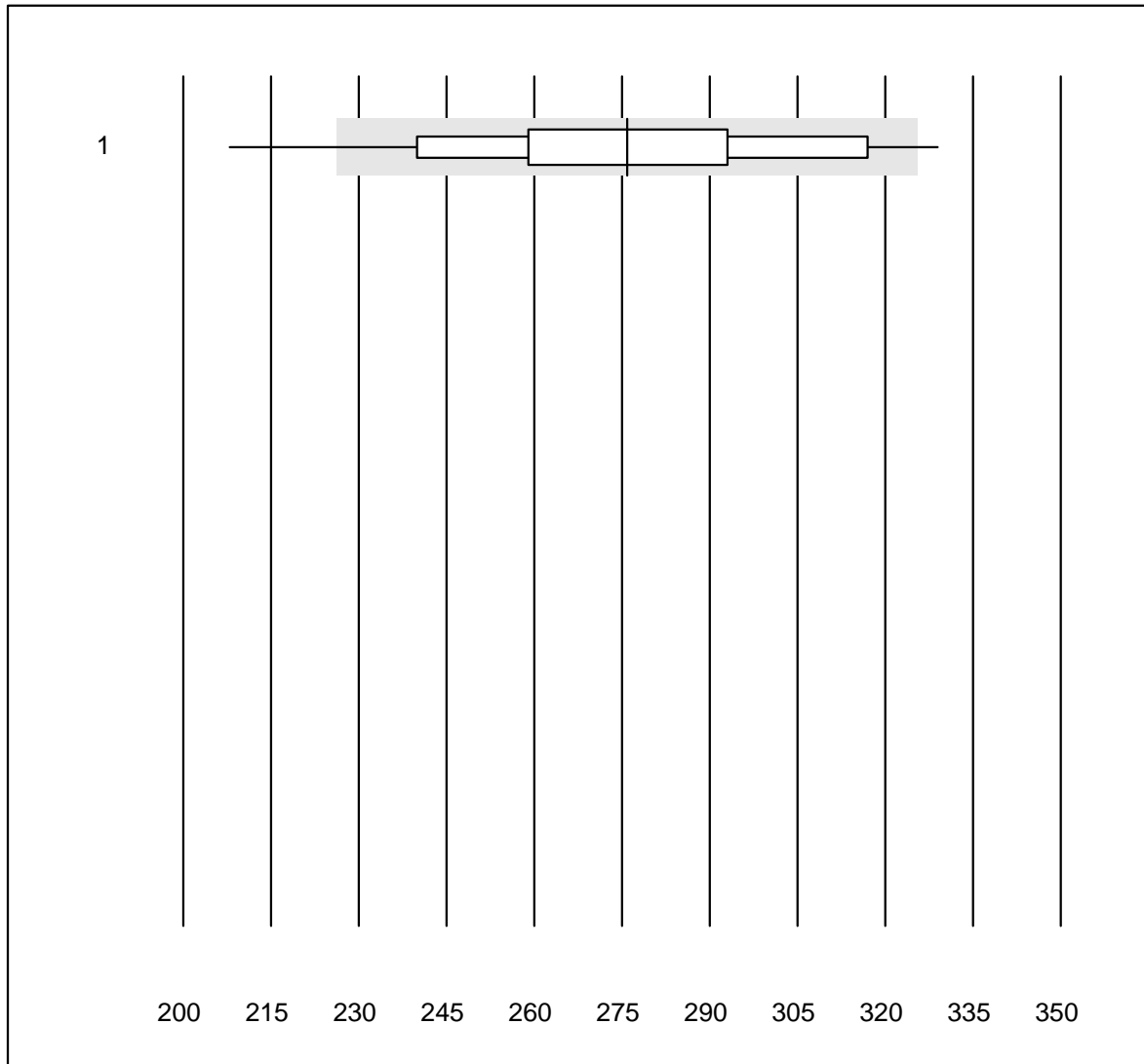
TRAK

MQ tolerance : 25 %

TRAK (IU/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Abbott	7	100.0	0.0	0.0	2.35	16.0	a
2	Roche, Cobas	9	100.0	0.0	0.0	3.46	8.2	e

4 additional results were submitted but not published because the method groups were too small. (< results per group)
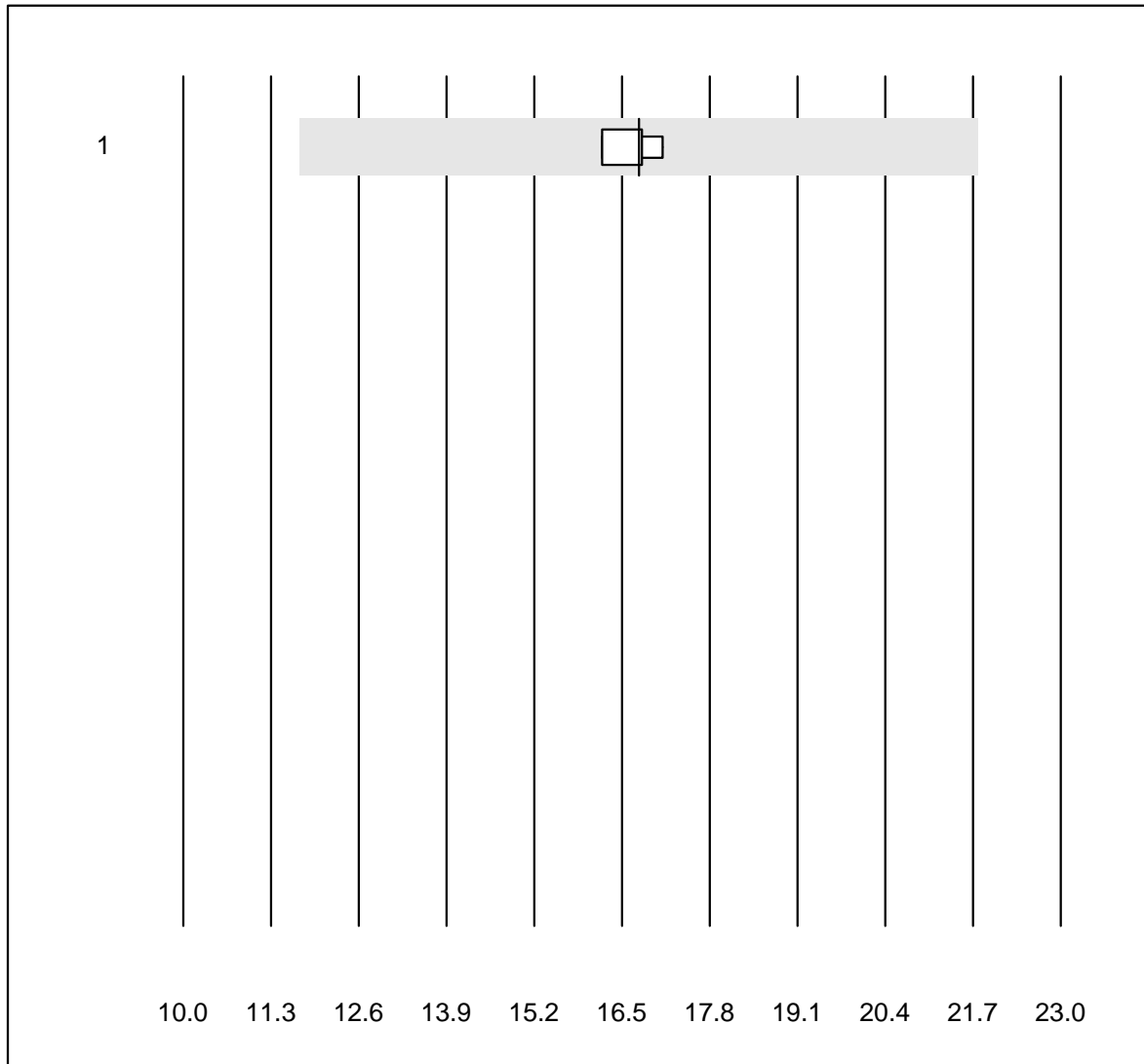
Creatinine WB

200　　215　　230　　245　　260　　275　　290　　305　　320　　335　　350

QUALAB tolerance : 18 %　　　　Creatinine WB (µmol/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Statsensor i / Nova	73	84.9	11.0	4.1	276	10.5	e

eGFR CDK-EPI WB

```
        1          [box plot marker near 16.5]

        10.0   11.3   12.6   13.9   15.2   16.5   17.8   19.1   20.4   21.7   23.0
```

MQ tolerance : 30 %   eGFR CDK-EPI WB ()

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Statsensor i / Nova	4	100.0	0.0	0.0	17	2.2	e

IL6

| | 250 | 285 | 320 | 355 | 390 | 425 | 460 | 495 | 530 | 565 | 600 |
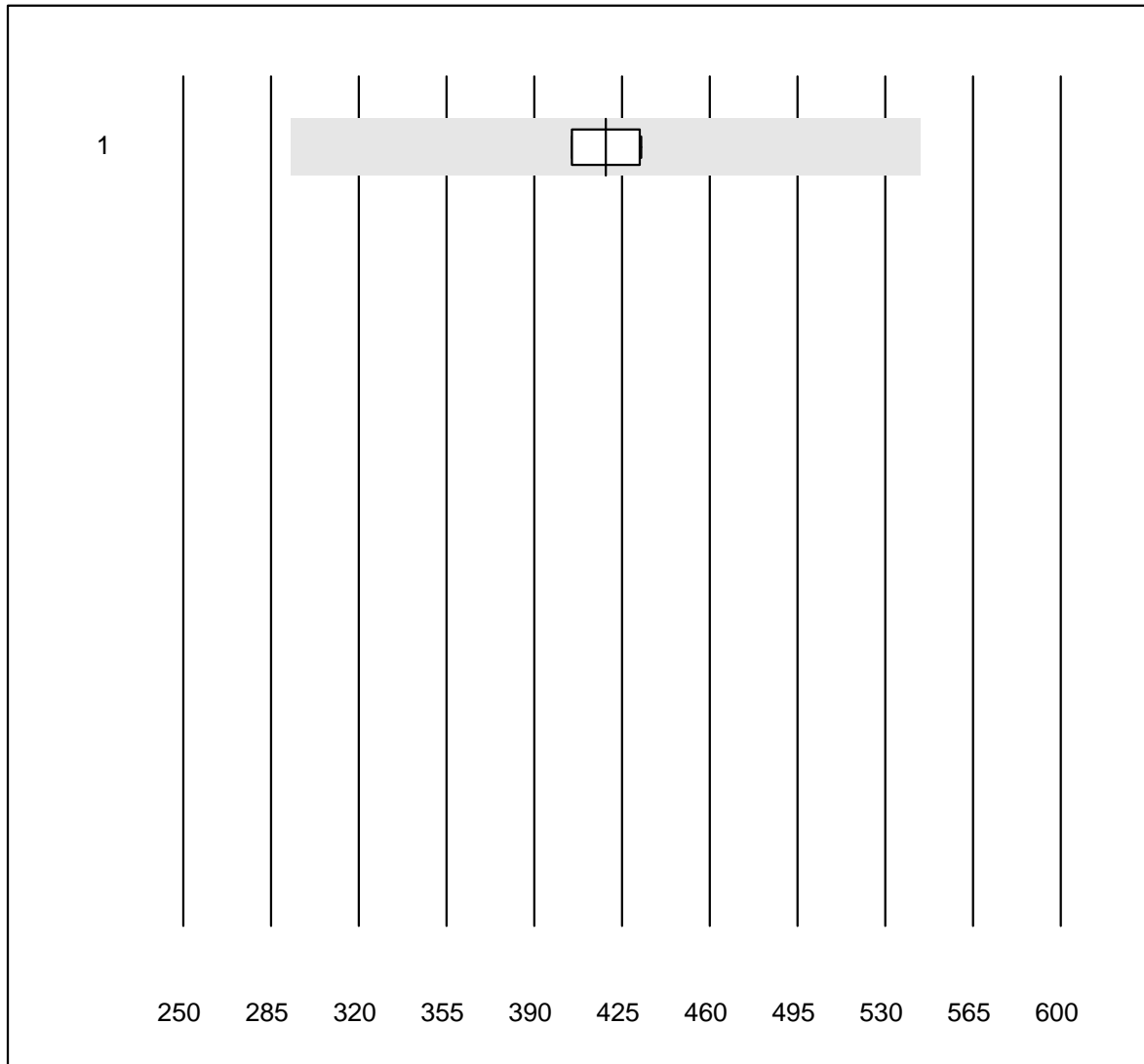
MQ tolerance : 30 %   IL6 (ng/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Roche, Cobas	4	100.0	0.0	0.0	418.5	3.8	e

Pankreas Elastase
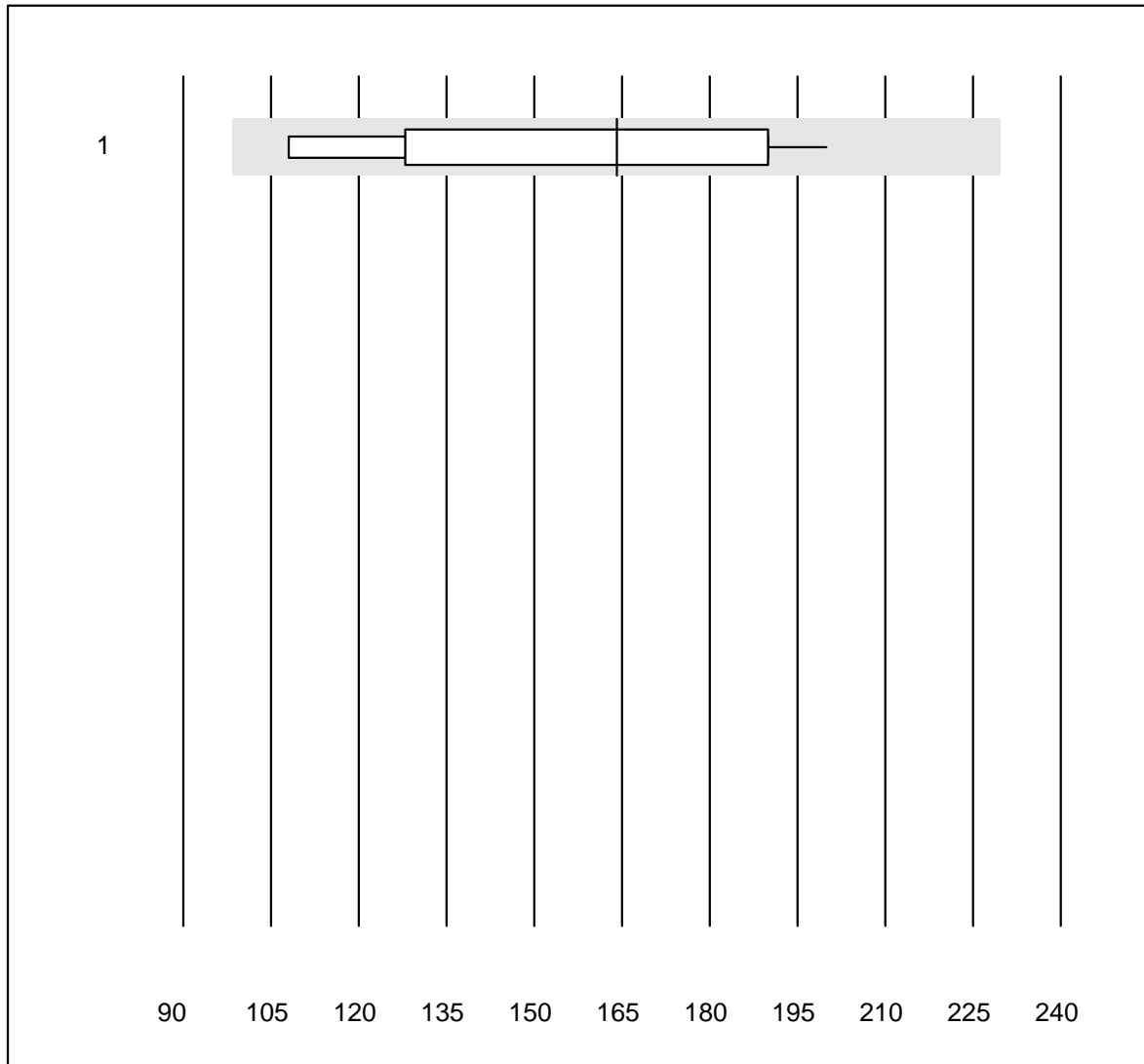
MQ tolerance : 40 %

Pankreas Elastase (ug/g)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Liaison	12	83.3	0.0	16.7	164	19.8	e*

Copeptin

| | 6.0 | 6.7 | 7.4 | 8.1 | 8.8 | 9.5 | 10.2 | 10.9 | 11.6 | 12.3 | 13.0 |
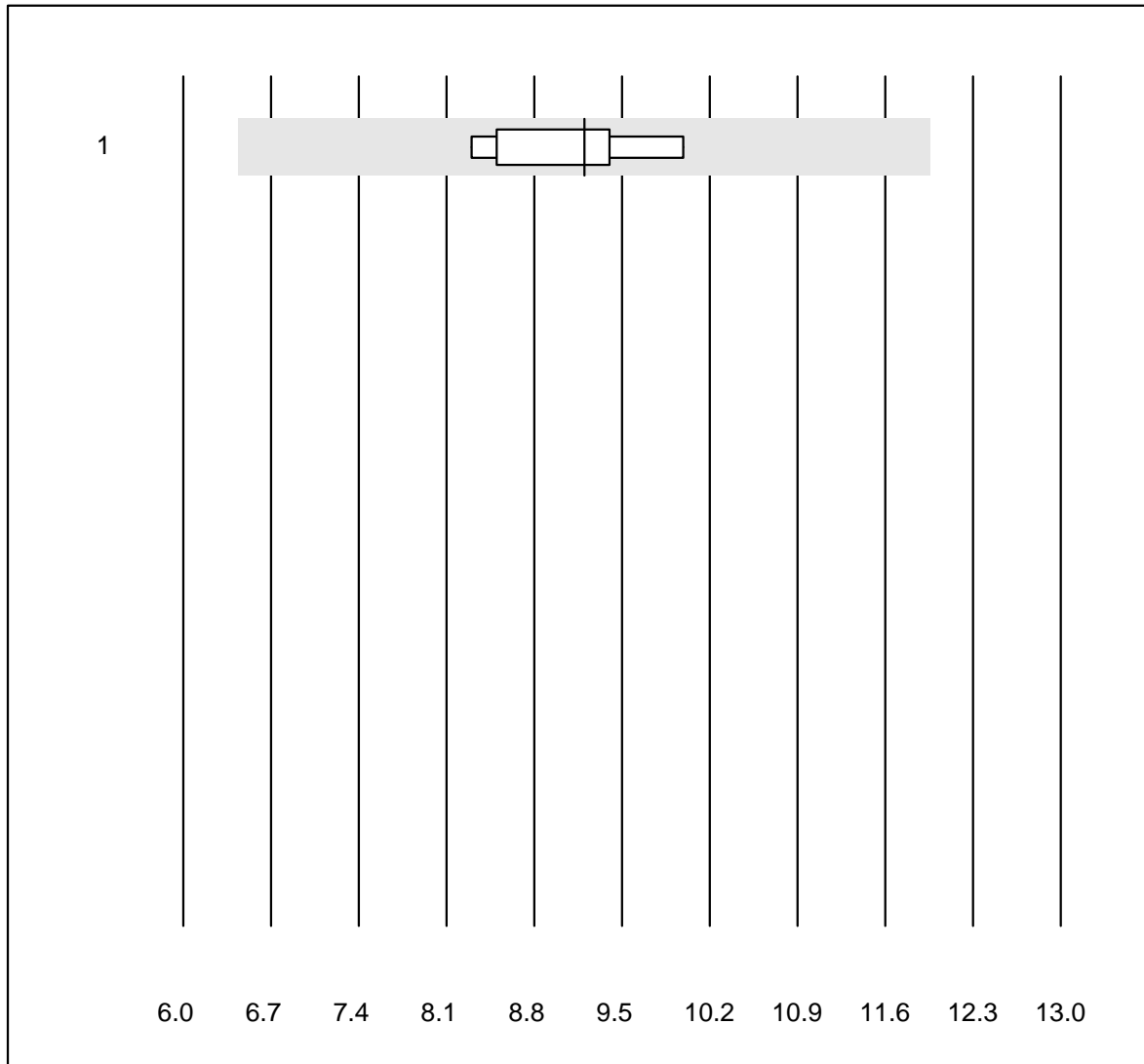
MQ tolerance : 30 %

Copeptin (pmol/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Kryptor	7	100.0	0.0	0.0	9.2	6.3	e

Occult blood qn
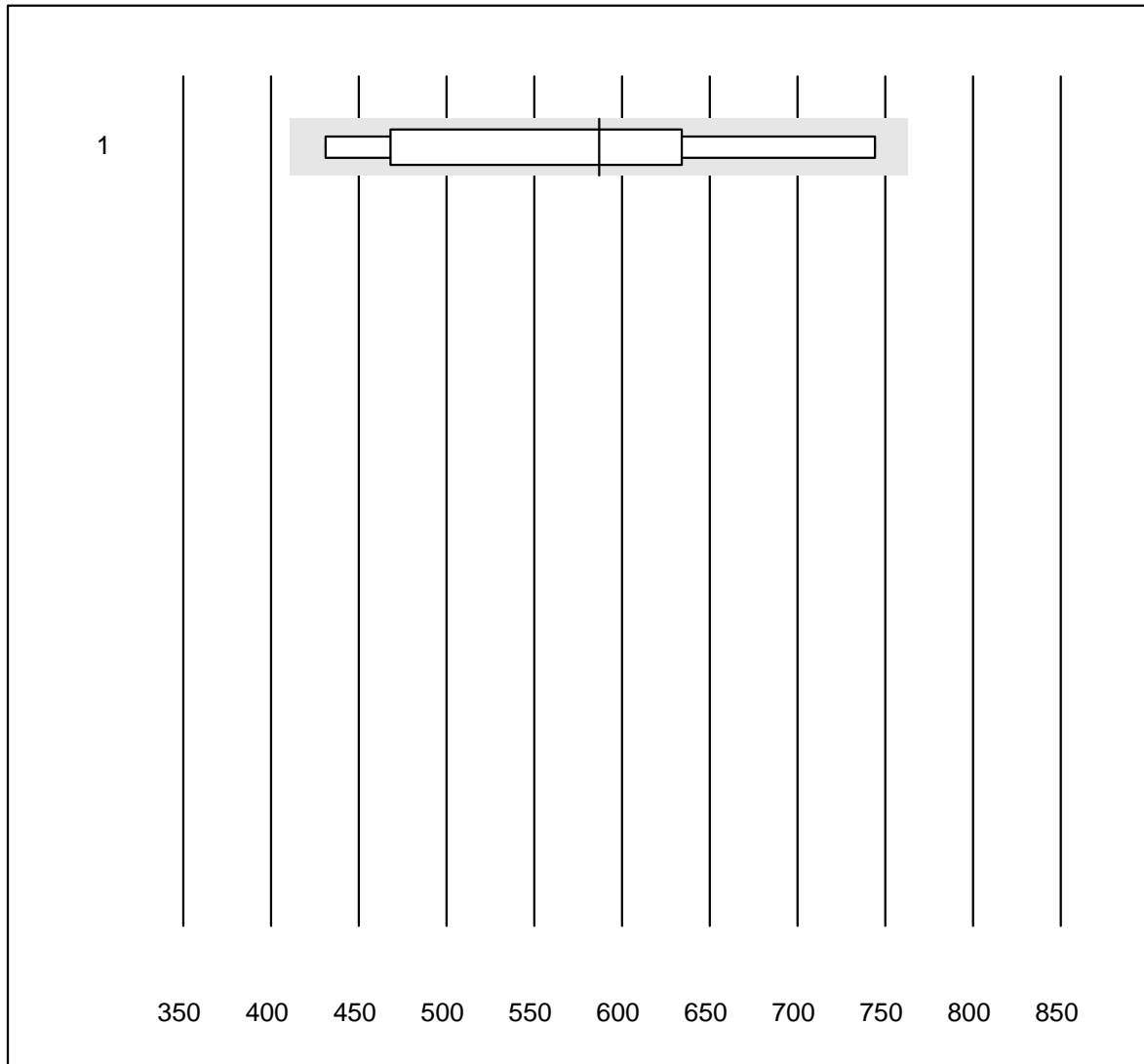
MQ tolerance : 30 %

Occult blood qn (ng/ml)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	OC-Sensor	8	100.0	0.0	0.0	587	19.7	e*

Amylase-Urine

70   77   84   91   98   105   112   119   126   133   140

Amylase-Urine (U/l)

MQ tolerance : 25 %

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	IFCC	6	100.0	0.0	0.0	108	5.8	e

Pancreatic Amylase-Urine

1

```
0    1    2    3    4    5    6    7    8    9    10
```
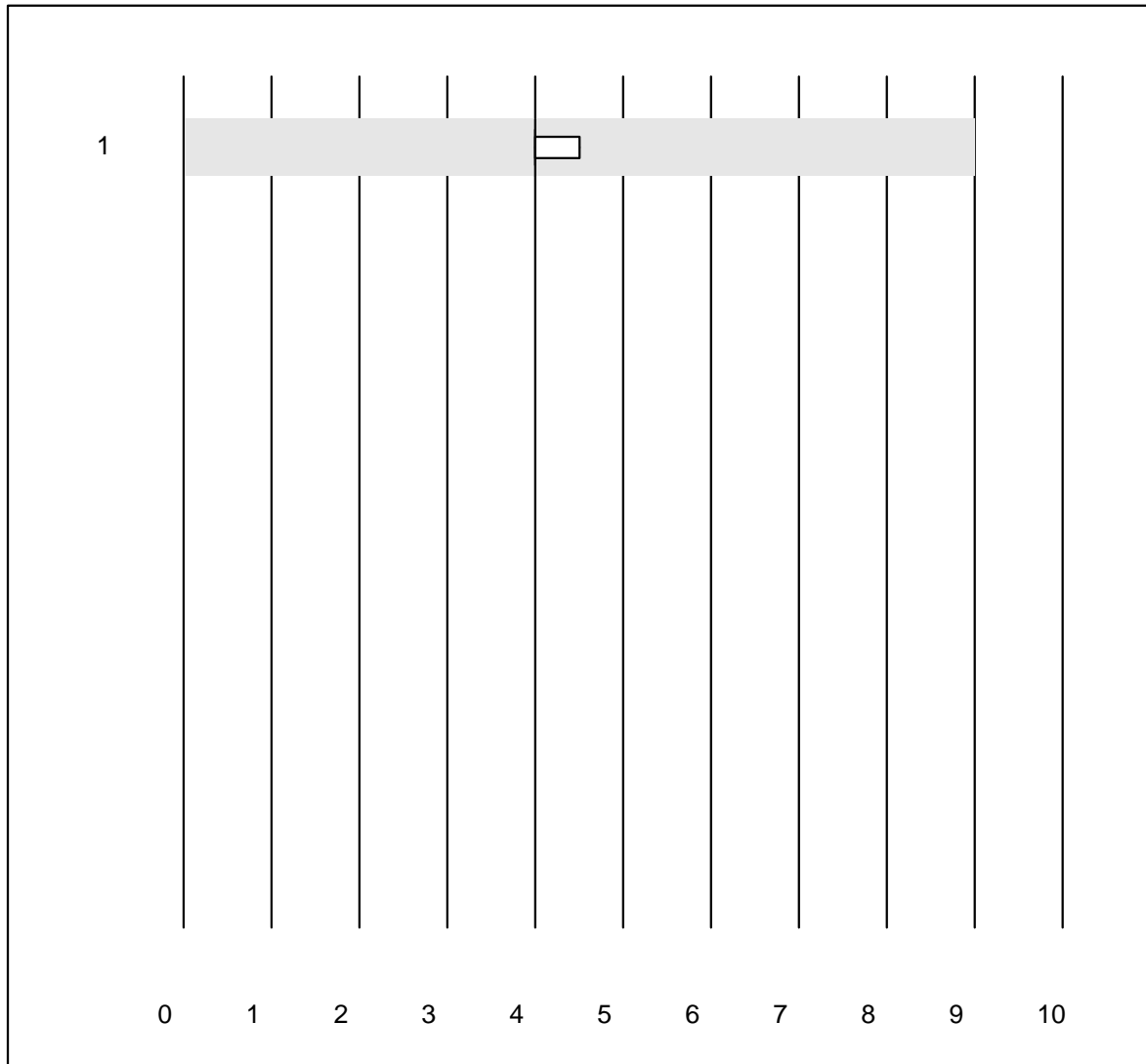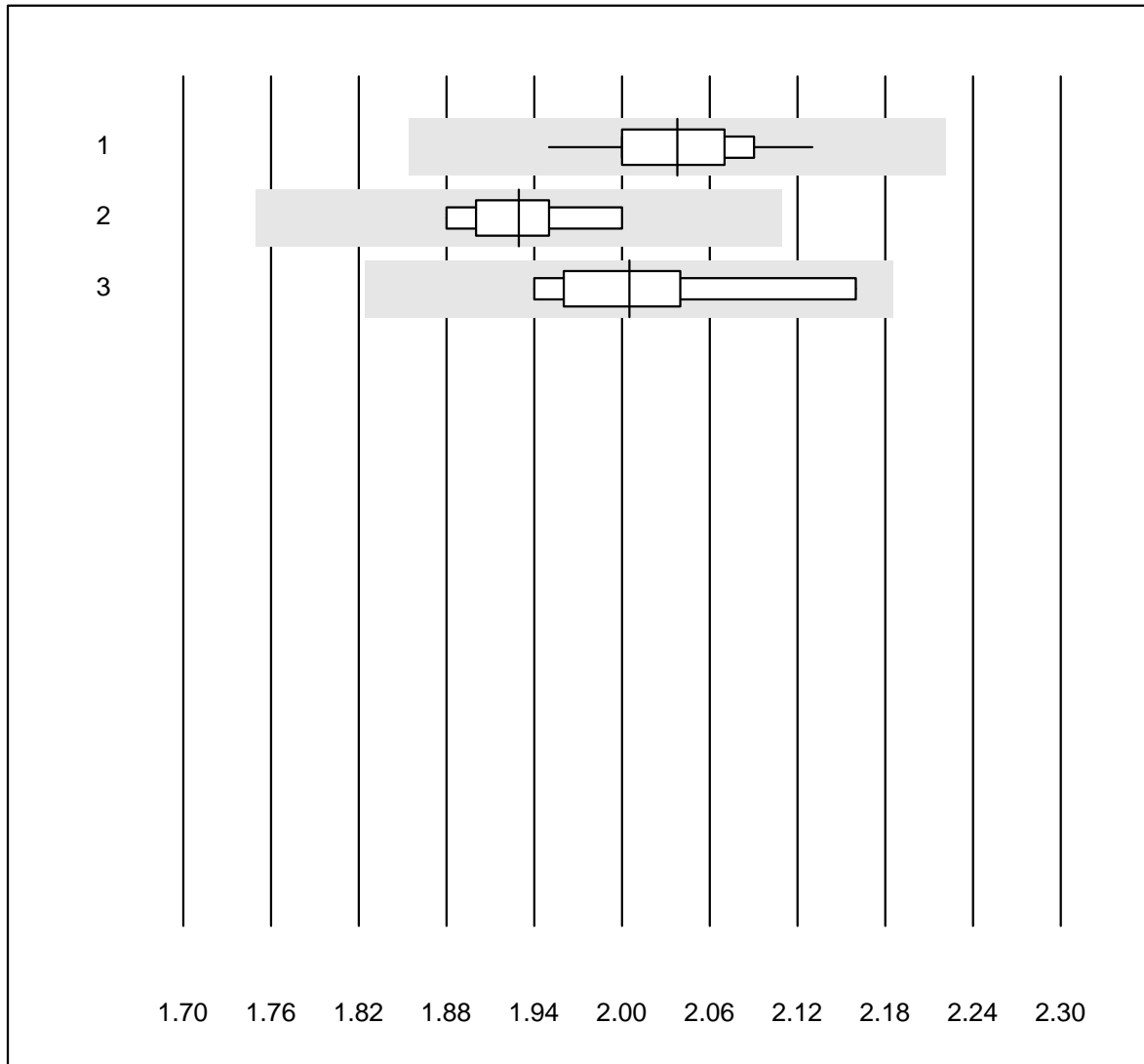
QUALAB tolerance : 18 %
(< 25.0: +/- 5.0 U/l)

Pancreatic Amylase-Urine (U/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	IFCC	4	100.0	0.0	0.0	4.0	6.1	e*

Calcium-Urine

Calcium-Urine (mmol/l)

MQ tolerance : 9 %
(< 2.00: +/- 0.18 mmol/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Roche, Cobas	13	100.0	0.0	0.0	2.04	2.4	e
2	Abbott	11	90.9	0.0	9.1	1.93	2.2	e
3	Other methods	6	100.0	0.0	0.0	2.01	3.9	e*

Chloride-Urine

100   105   110   115   120   125   130   135   140   145   150
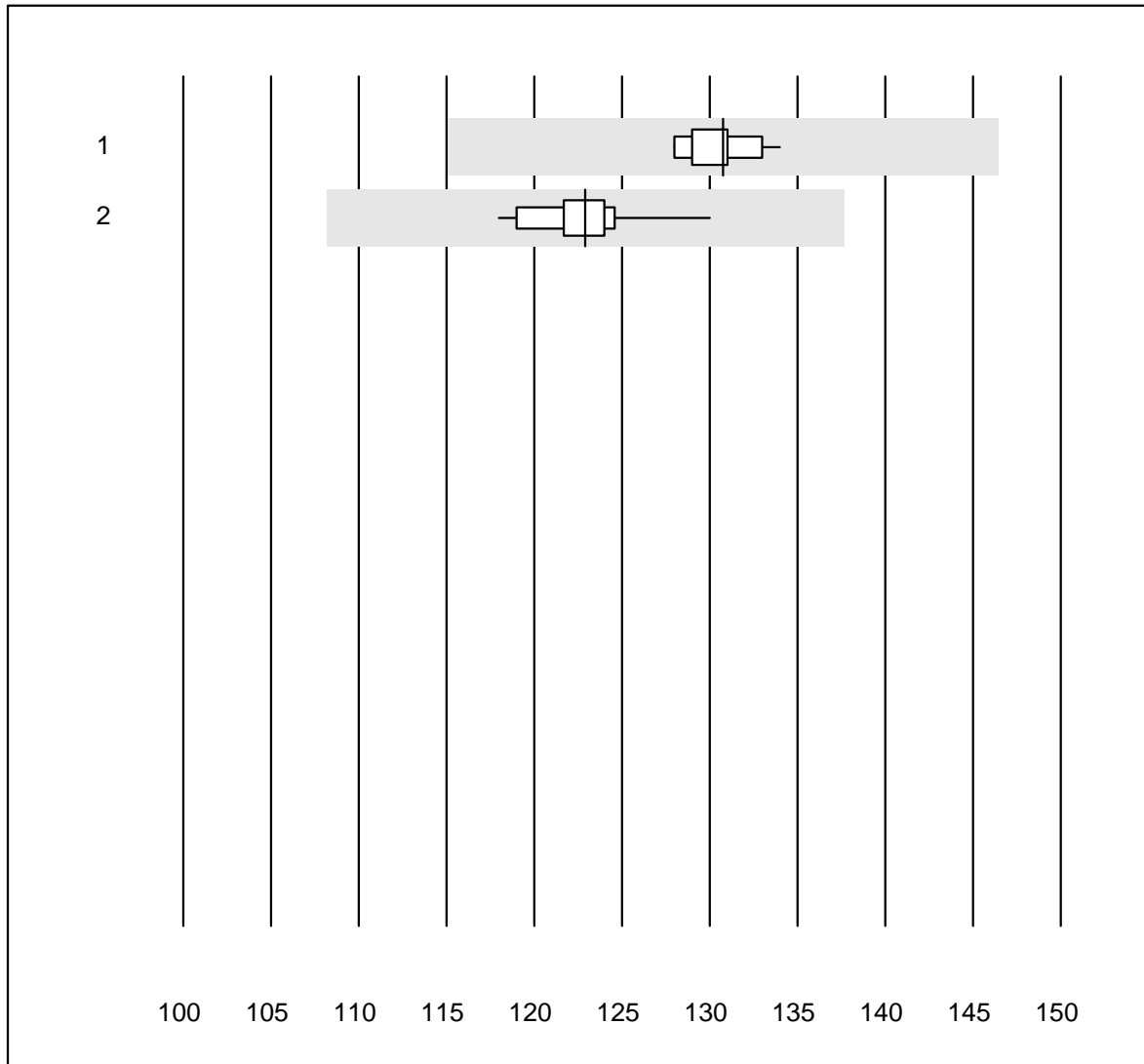
MQ tolerance : 12 %   Chloride-Urine (mmol/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Abbott	12	100.0	0.0	0.0	131	1.4	e
2	Roche, Cobas	13	100.0	0.0	0.0	123	2.4	e

2 additional results were submitted but not published because the method groups were too small. (< results per group)
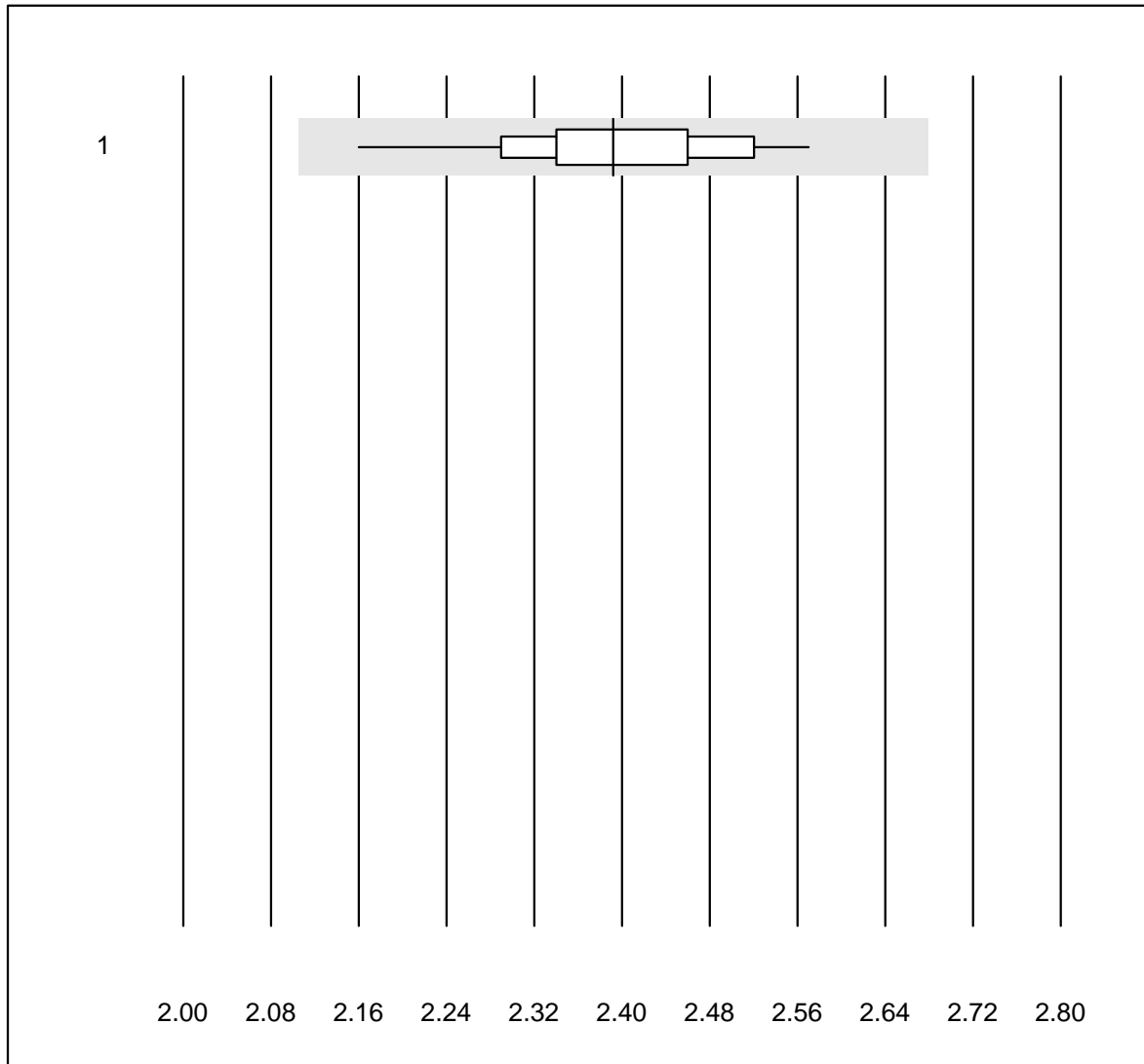
Glucose-Urine
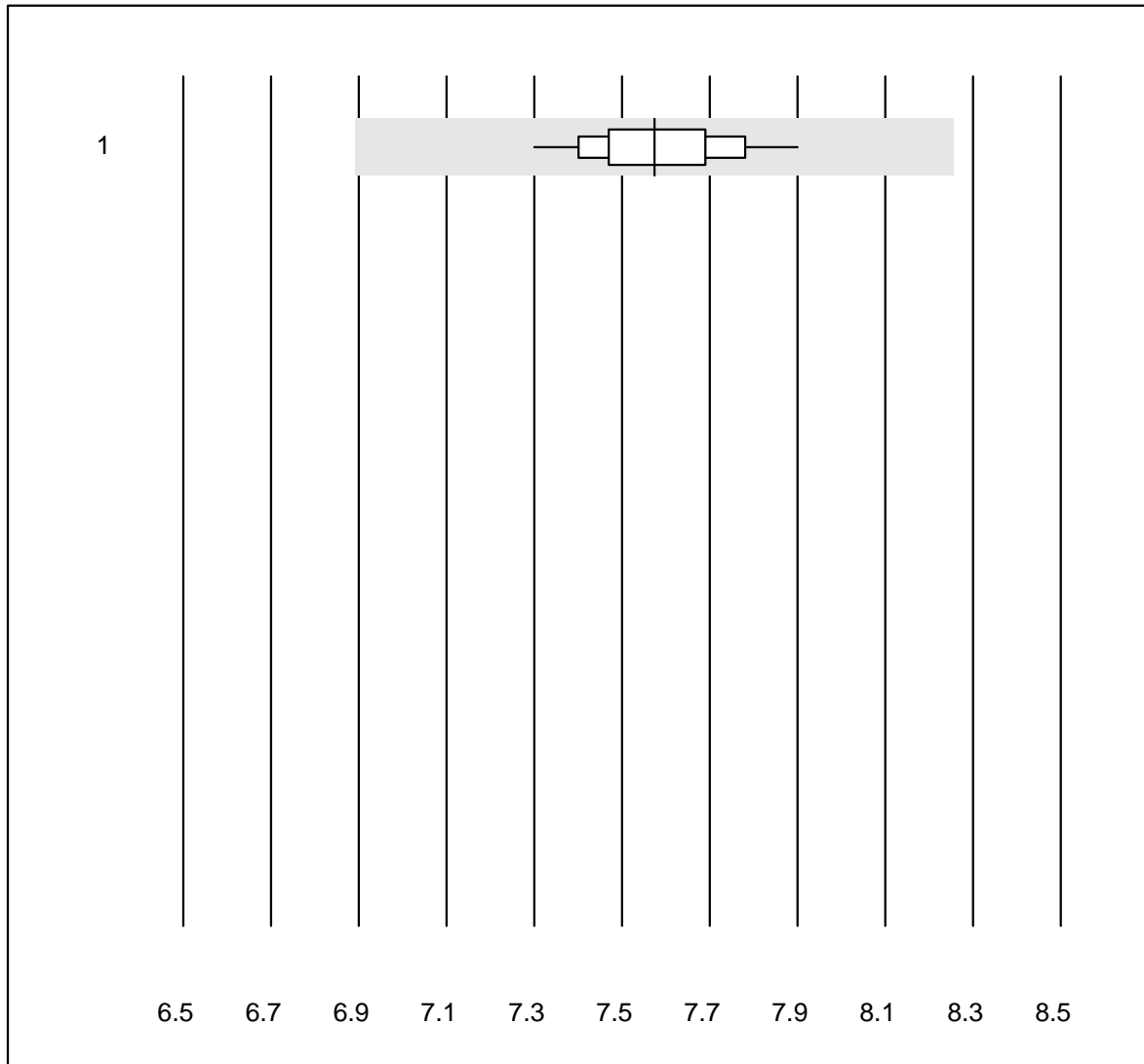
QUALAB tolerance : 9 %

Glucose-Urine (mmol/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Standard chemistry	27	100.0	0.0	0.0	7.6	1.8	e

Magnesium-Urine

| | 2.00 | 2.08 | 2.16 | 2.24 | 2.32 | 2.40 | 2.48 | 2.56 | 2.64 | 2.72 | 2.80 |

MQ tolerance : 12 %

Magnesium-Urine (mmol/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Standard chemistry	18	100.0	0.0	0.0	2.39	3.9	e

2 additional results were submitted but not published because the method groups were too small. (< results per group)
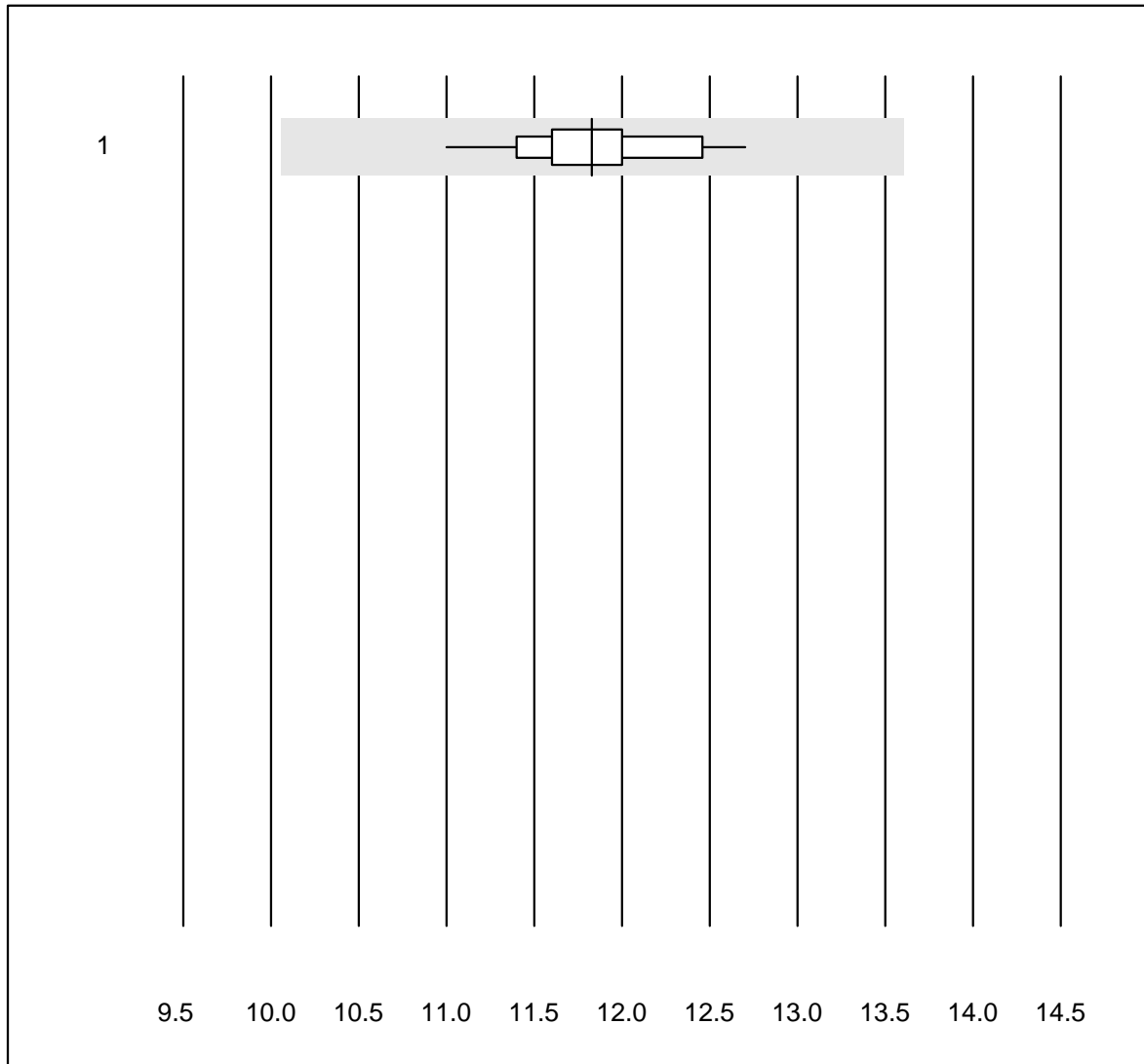
Osmolality-Urine

520   535   550   565   580   595   610   625   640   655   670
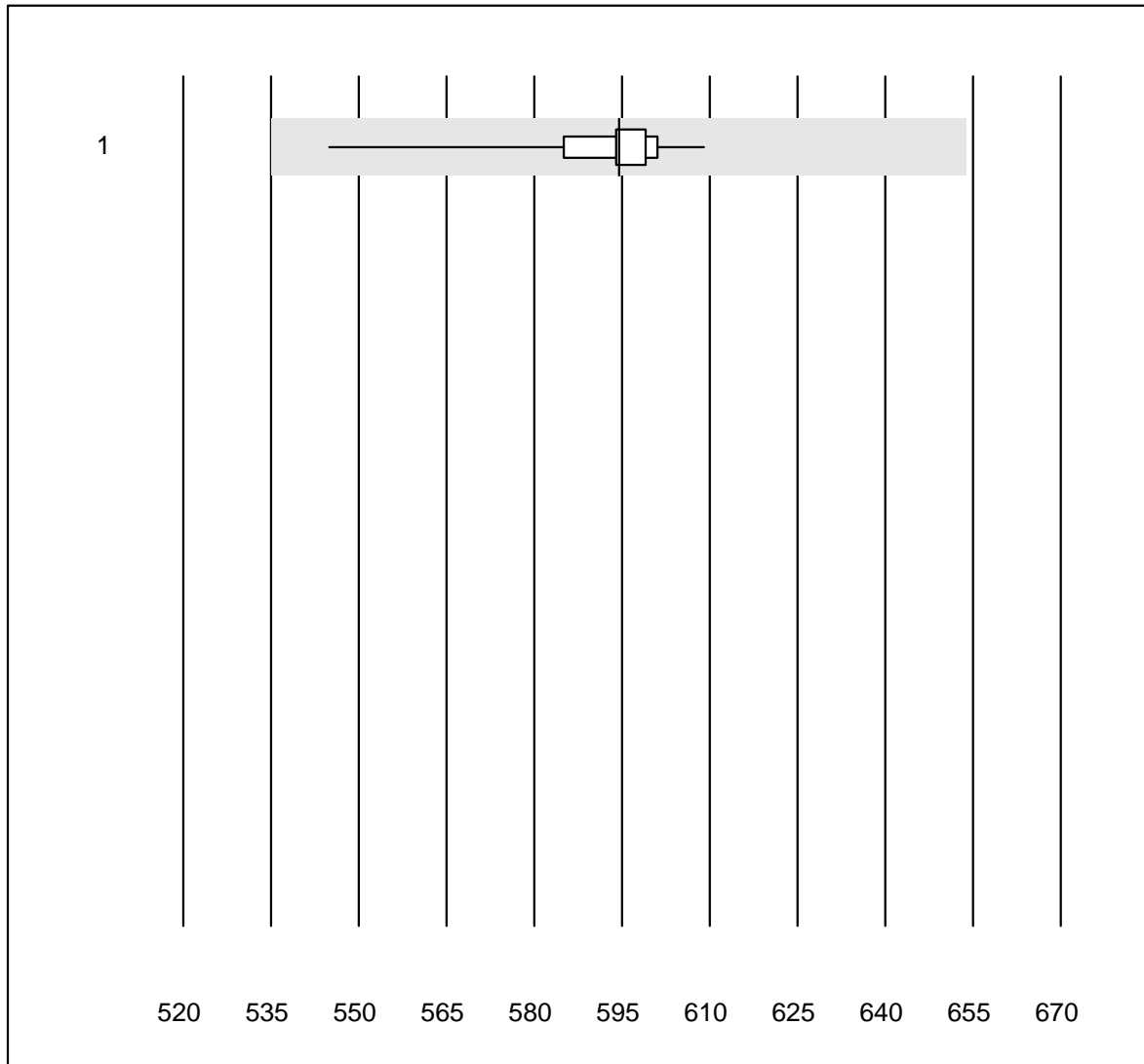
MQ tolerance : 10 %   Osmolality-Urine (mosm/kg)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Cryoskopy	20	100.0	0.0	0.0	594	2.1	e

Phosphate-Urine

MQ tolerance : 15 %   Phosphate-Urine (mmol/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Standard chemistry	28	100.0	0.0	0.0	11.8	3.1	e

Potassium-Urine

| 1 |

40.0 41.7 43.4 45.1 46.8 48.5 50.2 51.9 53.6 55.3 57.0
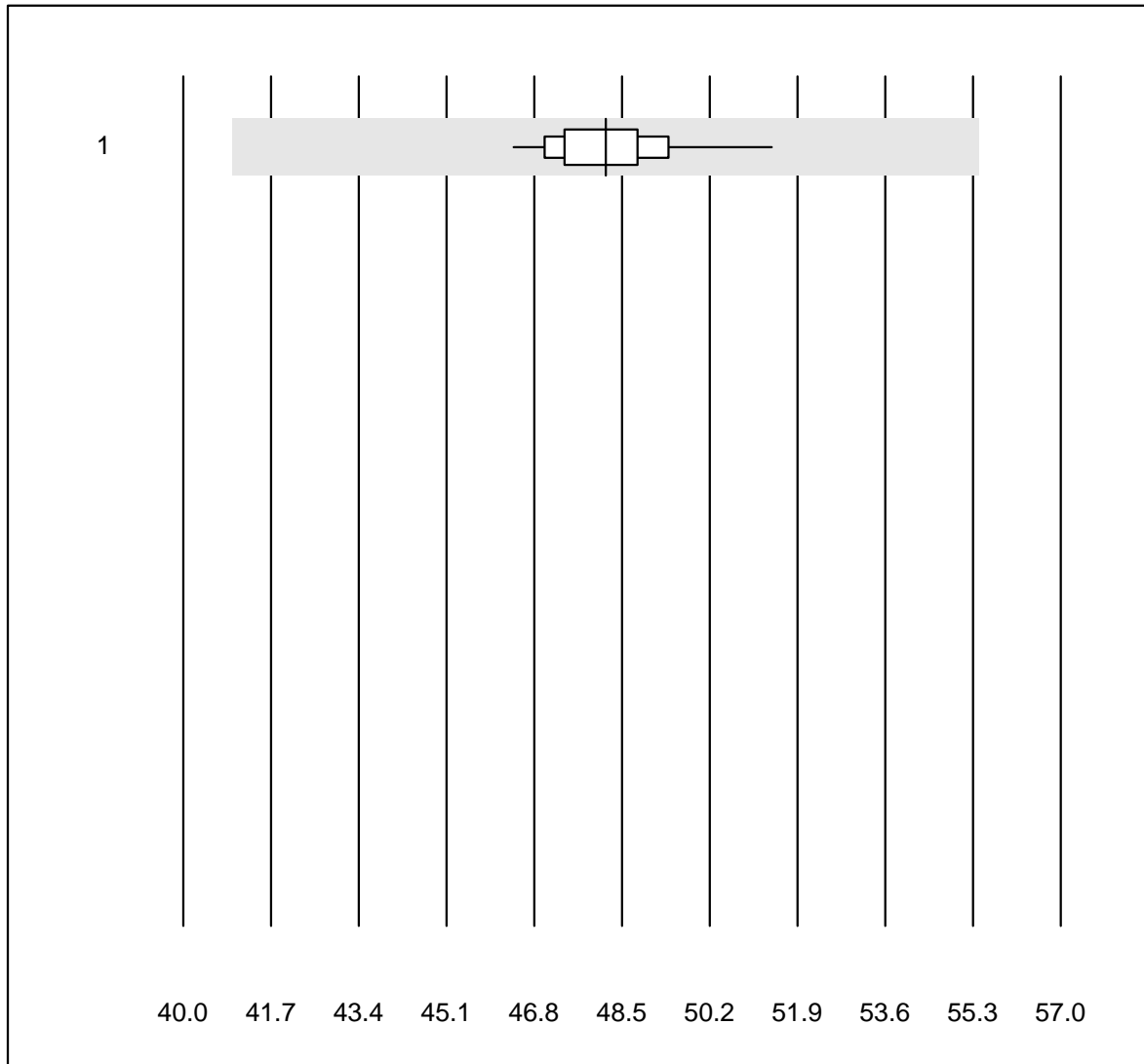
Potassium-Urine (mmol/l)

MQ tolerance : 15 %

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	all Participants	37	100.0	0.0	0.0	48	2.3	e

Protein-Urine
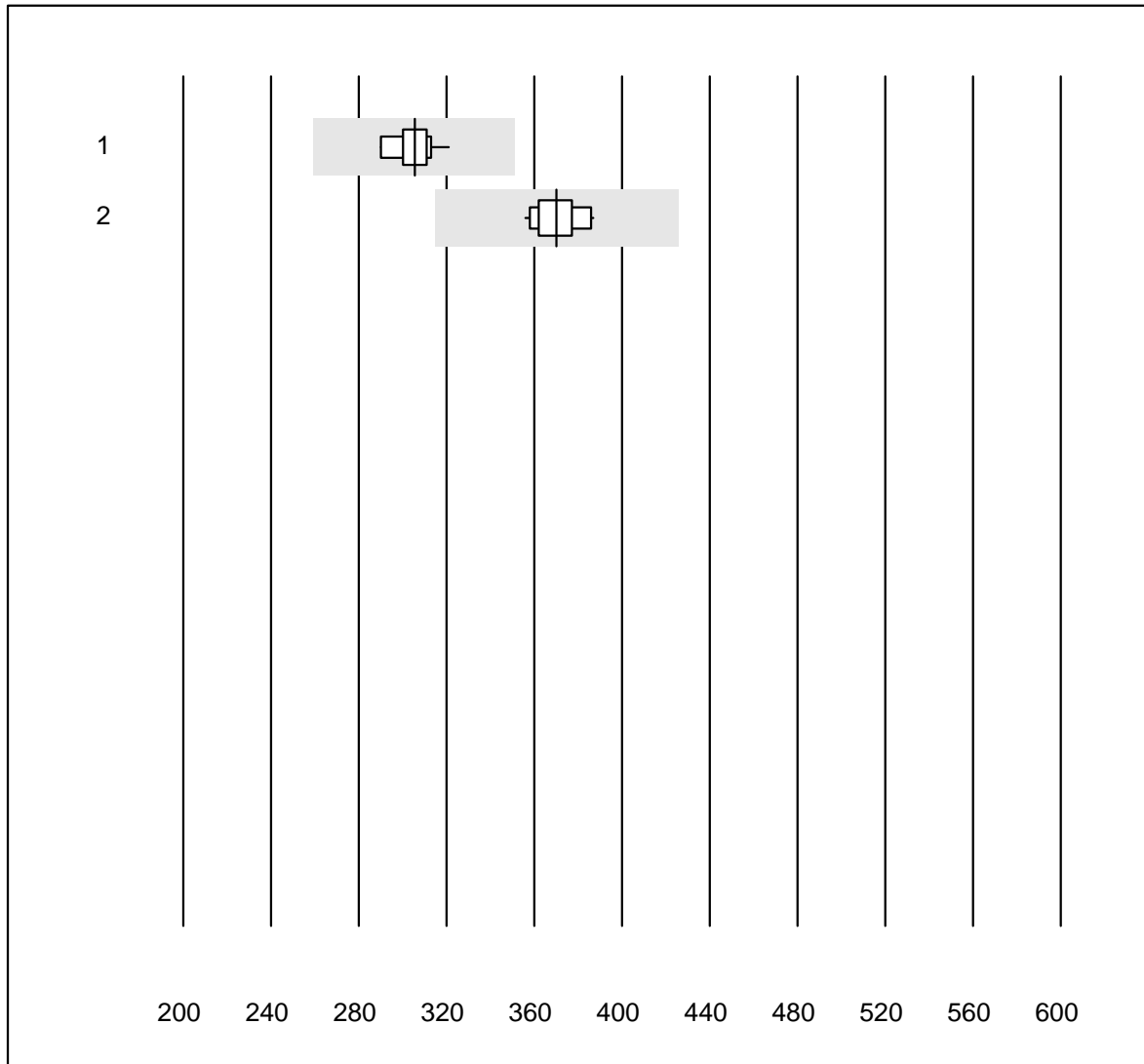
QUALAB tolerance : 15 %　　　Protein-Urine (mg/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Cobas/Roche	22	100.0	0.0	0.0	305.4	2.8	e
2	Abbott	16	100.0	0.0	0.0	370.0	2.7	e

4 additional results were submitted but not published because the method groups were too small. (< results per group)
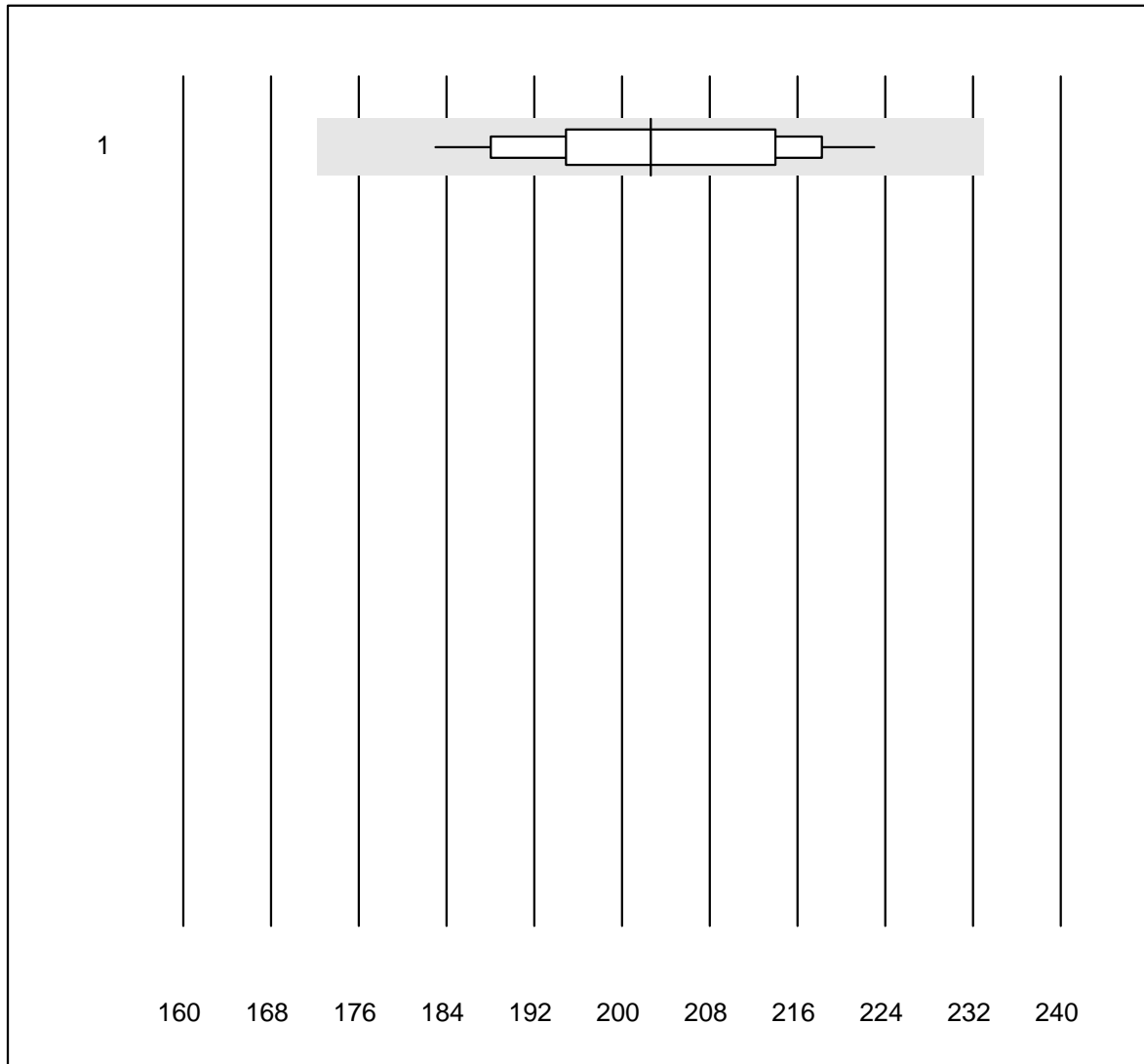
Sodium-Urine

90   95   100   105   110   115   120   125   130   135   140
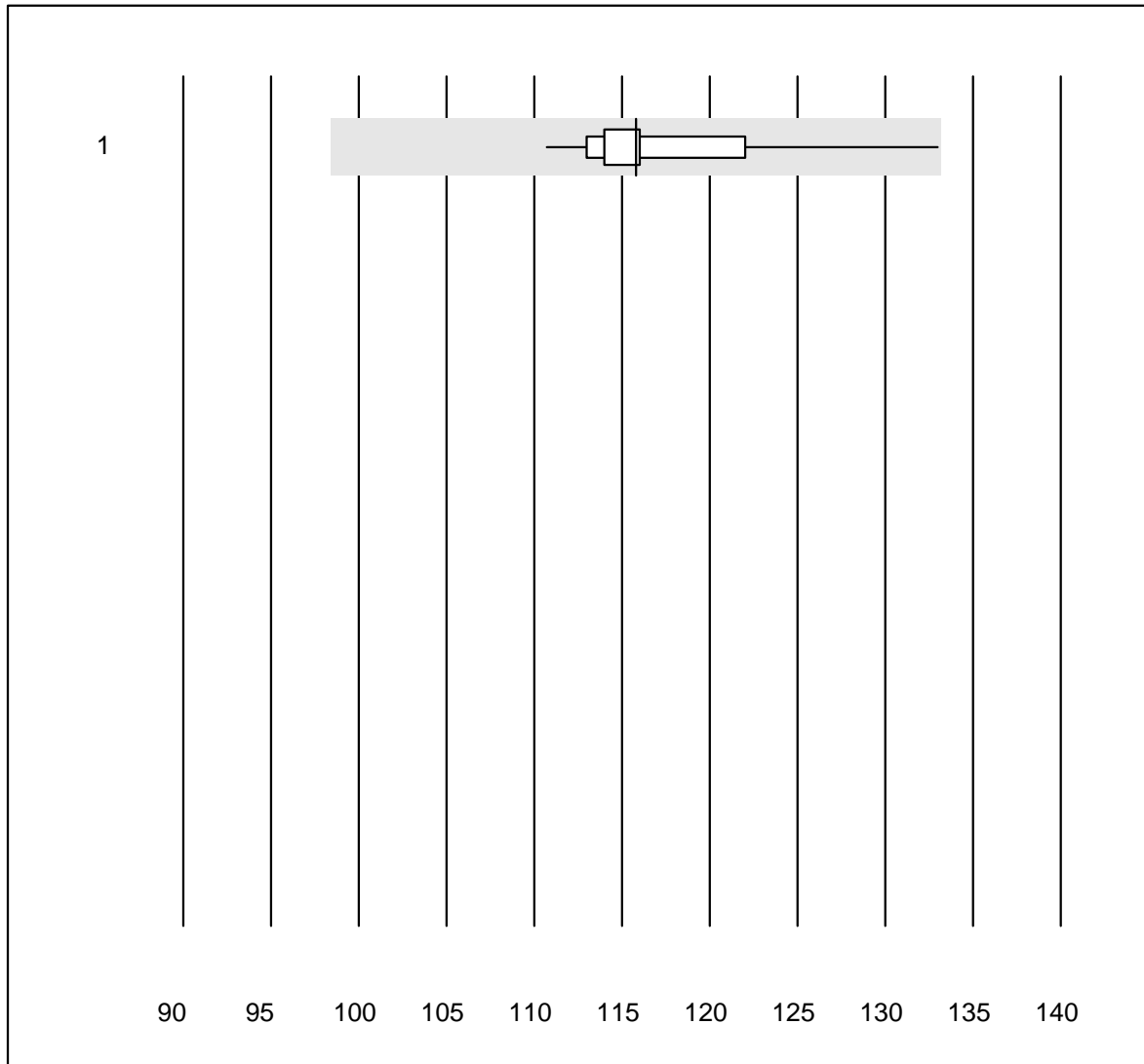
Sodium-Urine (mmol/l)

MQ tolerance : 15 %

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	all Participants	37	100.0	0.0	0.0	116	3.7	e

Urea-Urine

| | 160 | 168 | 176 | 184 | 192 | 200 | 208 | 216 | 224 | 232 | 240 |

MQ tolerance : 15 %   Urea-Urine (mmol/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Standard chemistry	35	100.0	0.0	0.0	203	5.5	e

Uric Acid-Urine

| | 0.65 | 0.68 | 0.71 | 0.74 | 0.77 | 0.80 | 0.83 | 0.86 | 0.89 | 0.92 | 0.95 |

MQ tolerance : 15 %

Uric Acid-Urine (mmol/l)
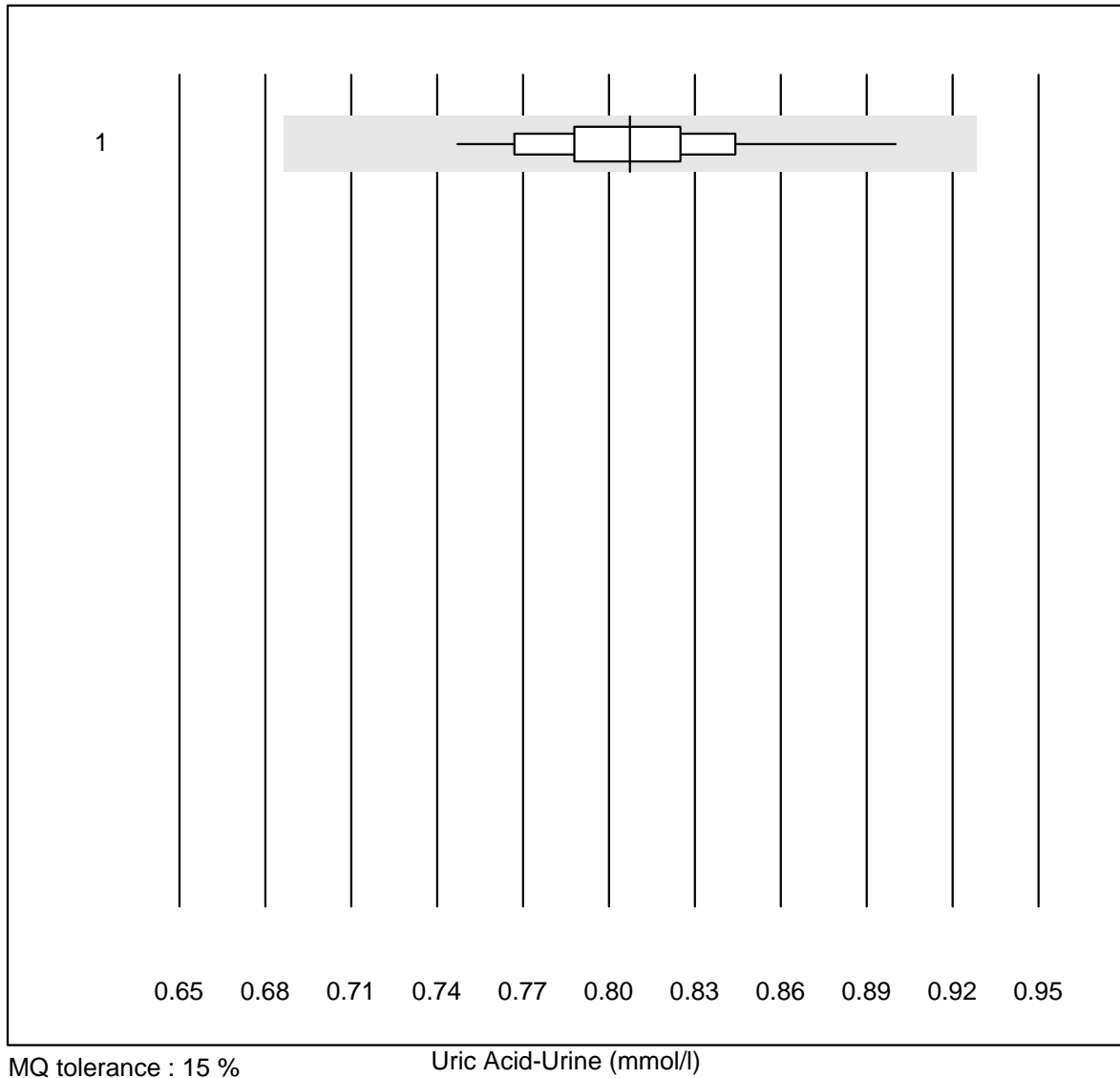
No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Standard chemistry	26	100.0	0.0	0.0	0.81	4.2	e

One result was submitted but not pubished because the method group was too small. (< 4 results per group)
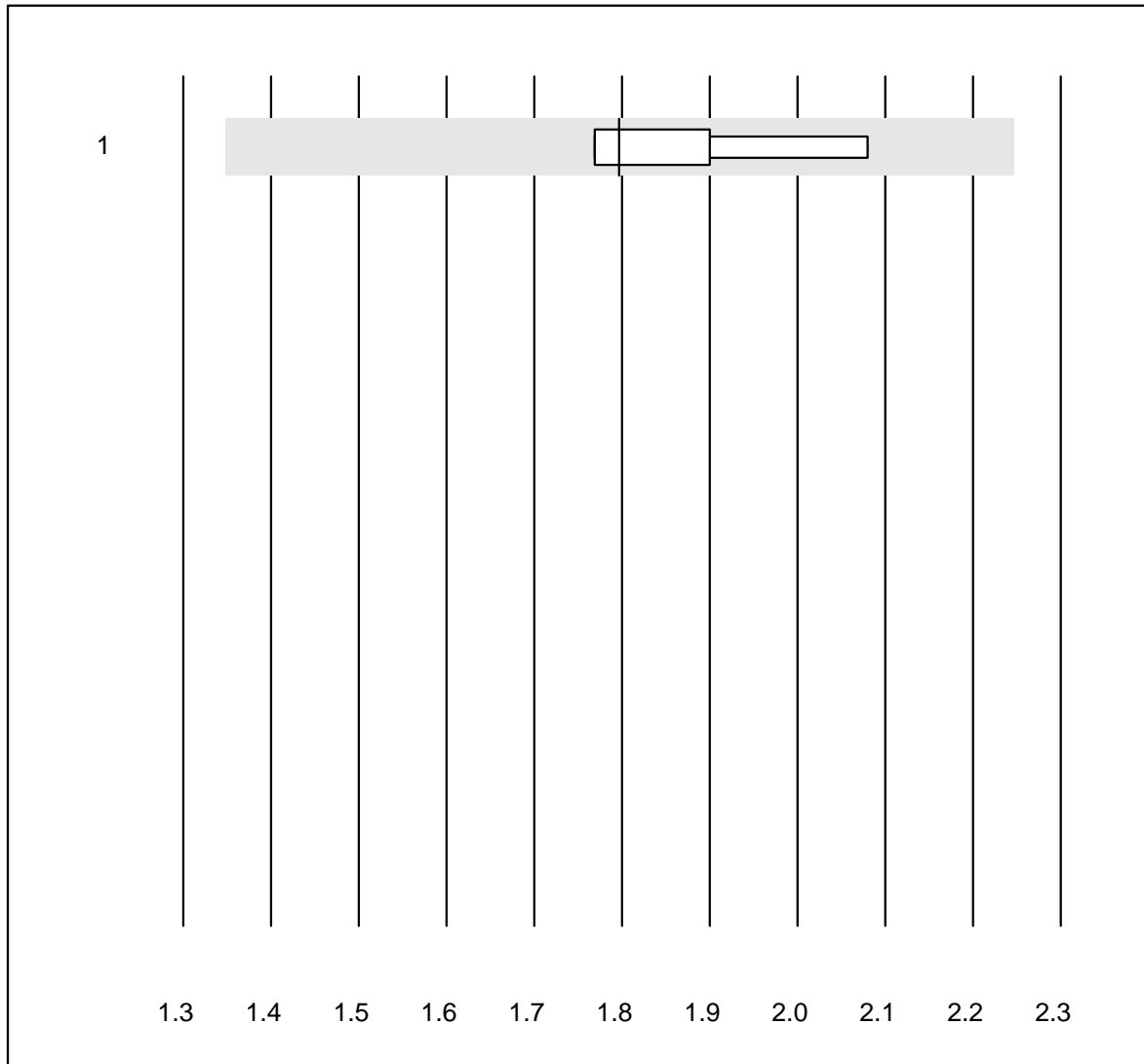
Specific Gravity-Urine

1

0.950 0.963 0.976 0.989 1.002 1.015 1.028 1.041 1.054 1.067 1.080
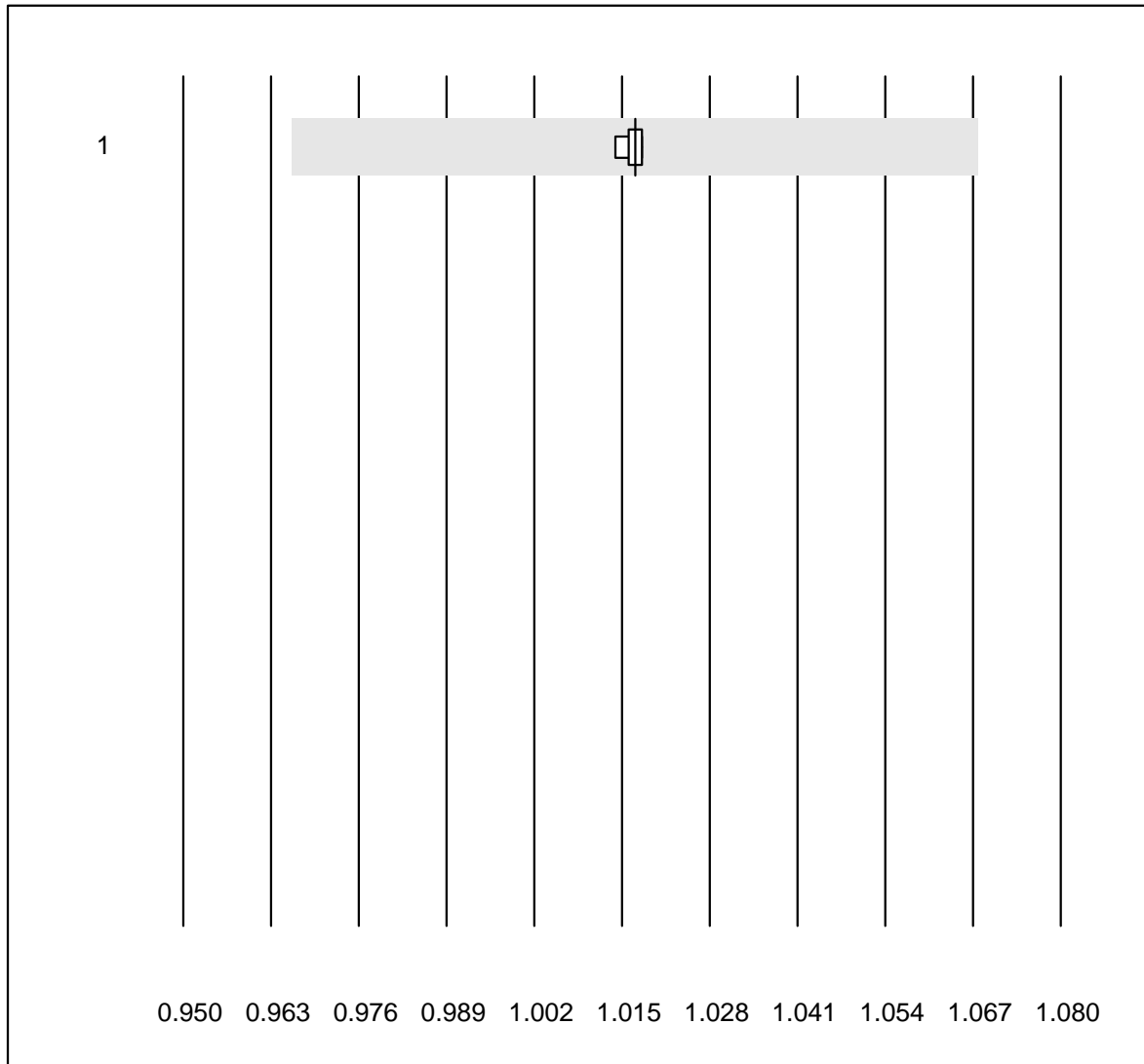
MQ tolerance : 5 %   Specific Gravity-Urine ()

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Refractometer	5	100.0	0.0	0.0	1.017	0.2	e

Ethylglucuronid

MQ tolerance : 25 %   Ethylglucuronid (mg/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	all Participants	5	80.0	0.0	20.0	1.80	7.5	e*

Creatinine U
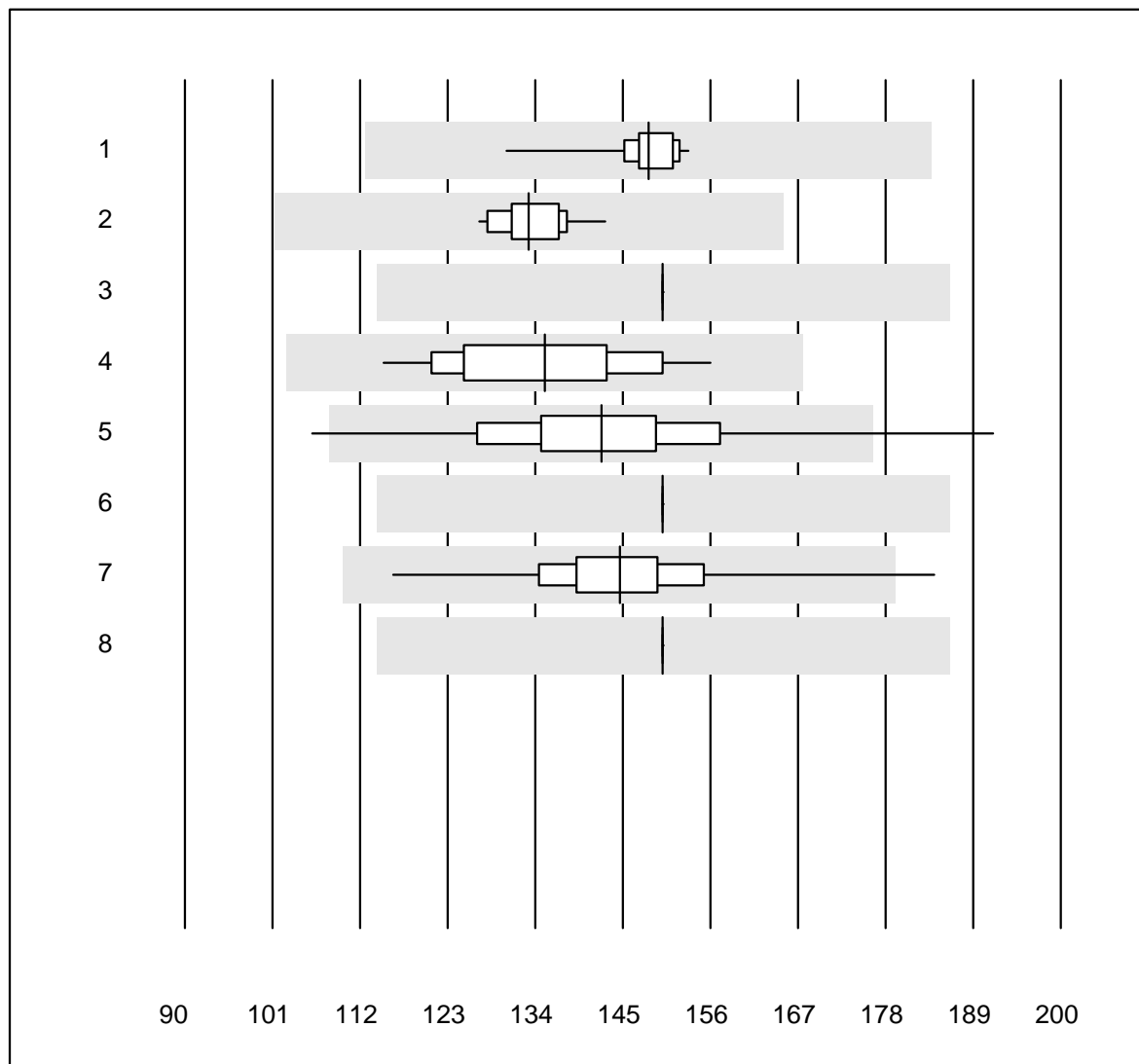
QUALAB tolerance : 24 %

Creatinine U (mg/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Abbott	14	100.0	0.0	0.0	148.2	3.8	e
2	Roche, Cobas	19	100.0	0.0	0.0	133.2	3.0	e
3	Aution	7	42.9	0.0	57.1	150.0	0.0	a
4	AFIAS	18	94.4	0.0	5.6	135.2	8.5	e
5	Afinion	503	95.4	1.6	3.0	142.3	8.6	e
6	Sysmex U	16	81.2	0.0	18.8	150.0	0.0	e
7	DCA2000/Vantage	153	92.1	0.7	7.2	144.6	6.2	e
8	Siemens Clinitek	25	64.0	0.0	36.0	150.0	0.0	e

8 additional results were submitted but not published because the method groups were too small. (< results per group)

Creatinin Urin
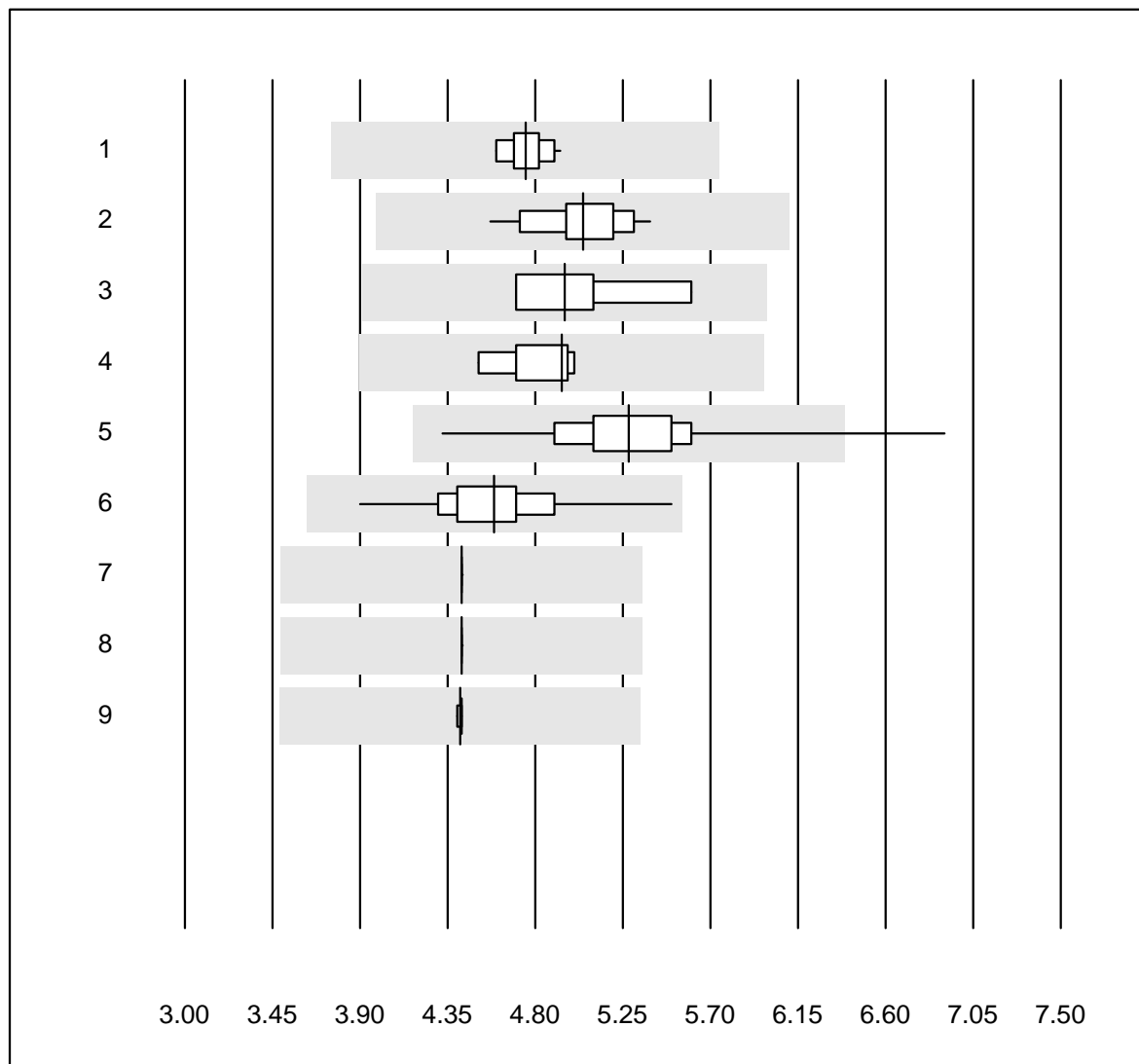
QUALAB tolerance : 21 % Creatinin Urin (mmol/l)

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	Abbott	13	100.0	0.0	0.0	4.7	2.3	e
2	Roche	26	100.0	0.0	0.0	5.0	4.0	e
3	Beckman	4	100.0	0.0	0.0	5.0	8.0	e*
4	Siemens	5	100.0	0.0	0.0	4.9	4.4	e
5	DCA2000/Vantage	151	90.0	0.7	9.3	5.3	6.1	e
6	Afinion	499	97.6	0.0	2.4	4.6	5.1	e
7	Sysmex U	14	85.7	0.0	14.3	4.4	0.0	e
8	Aution	7	57.1	0.0	42.9	4.4	0.0	e
9	Siemens Clinitek	23	73.9	0.0	26.1	4.4	0.2	e

8 additional results were submitted but not published because the method groups were too small. (< results per group)
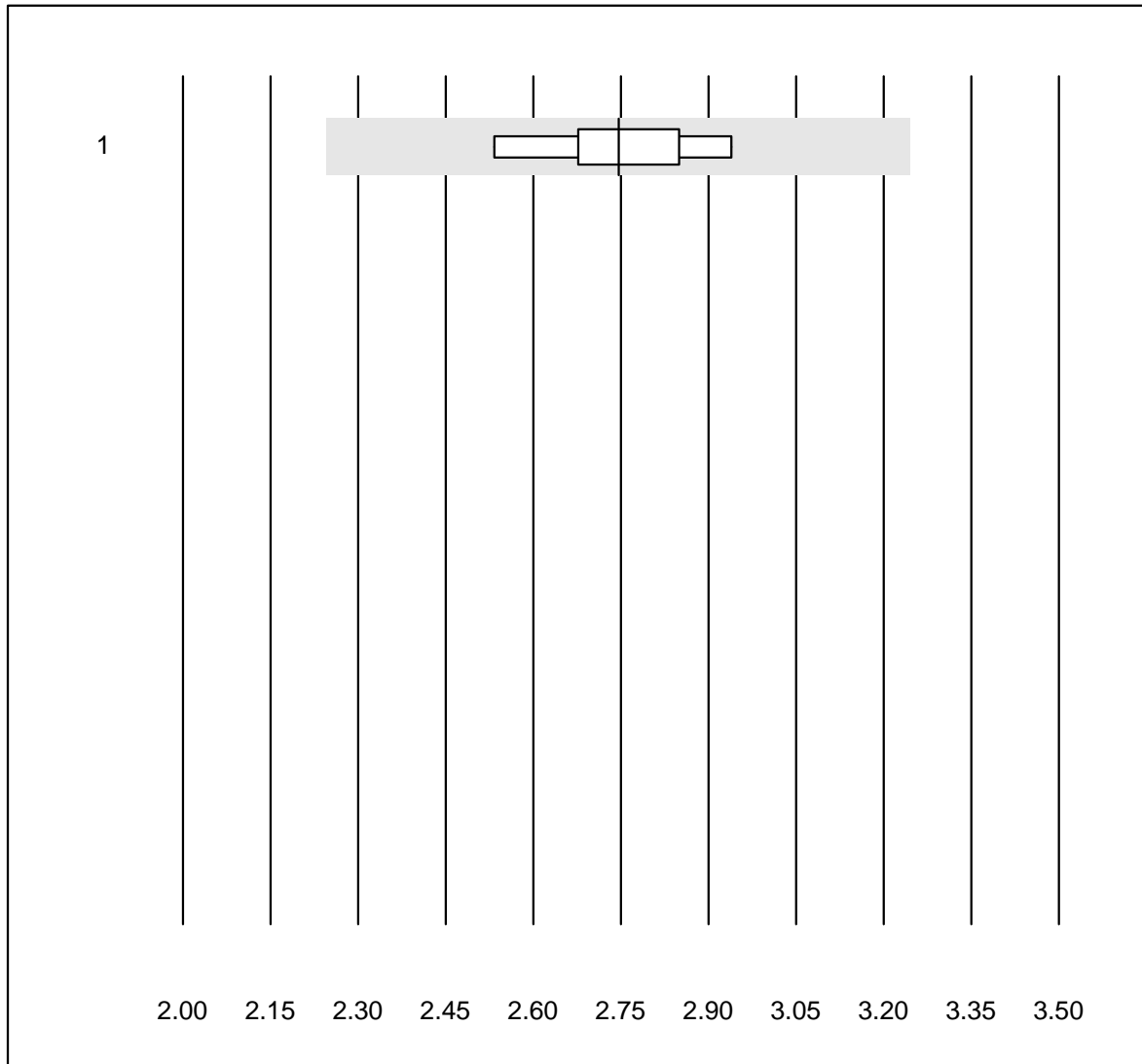
HBV NAT qn

```
1
```

2.90   3.02   3.14   3.26   3.38   3.50   3.62   3.74   3.86   3.98   4.10
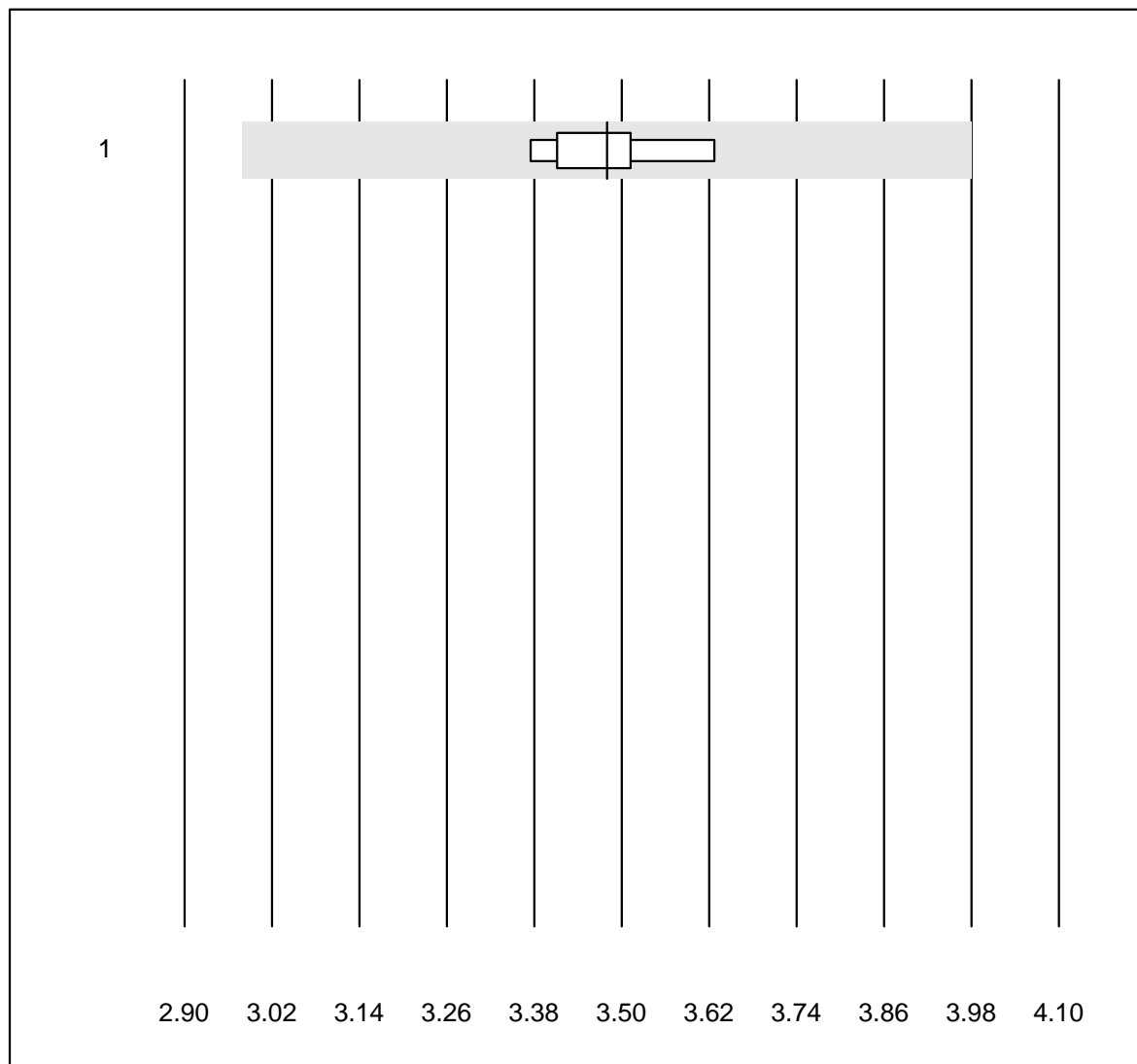
HBV NAT qn (Log10 IU/m)

QUALAB tolerance : +/- 0.50 Log10 IU/m

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	all Participants	8	100.0	0.0	0.0	3.48	2.3	e*

HCV NAT qn

HCV NAT qn (Log10 IU/m)

QUALAB tolerance : +/- 0.50 Log10 IU/m

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	all Participants	9	100.0	0.0	0.0	2.75	4.5	e*

HIV1 NAT qn

1

3.50 3.65 3.80 3.95 4.10 4.25 4.40 4.55 4.70 4.85 5.00
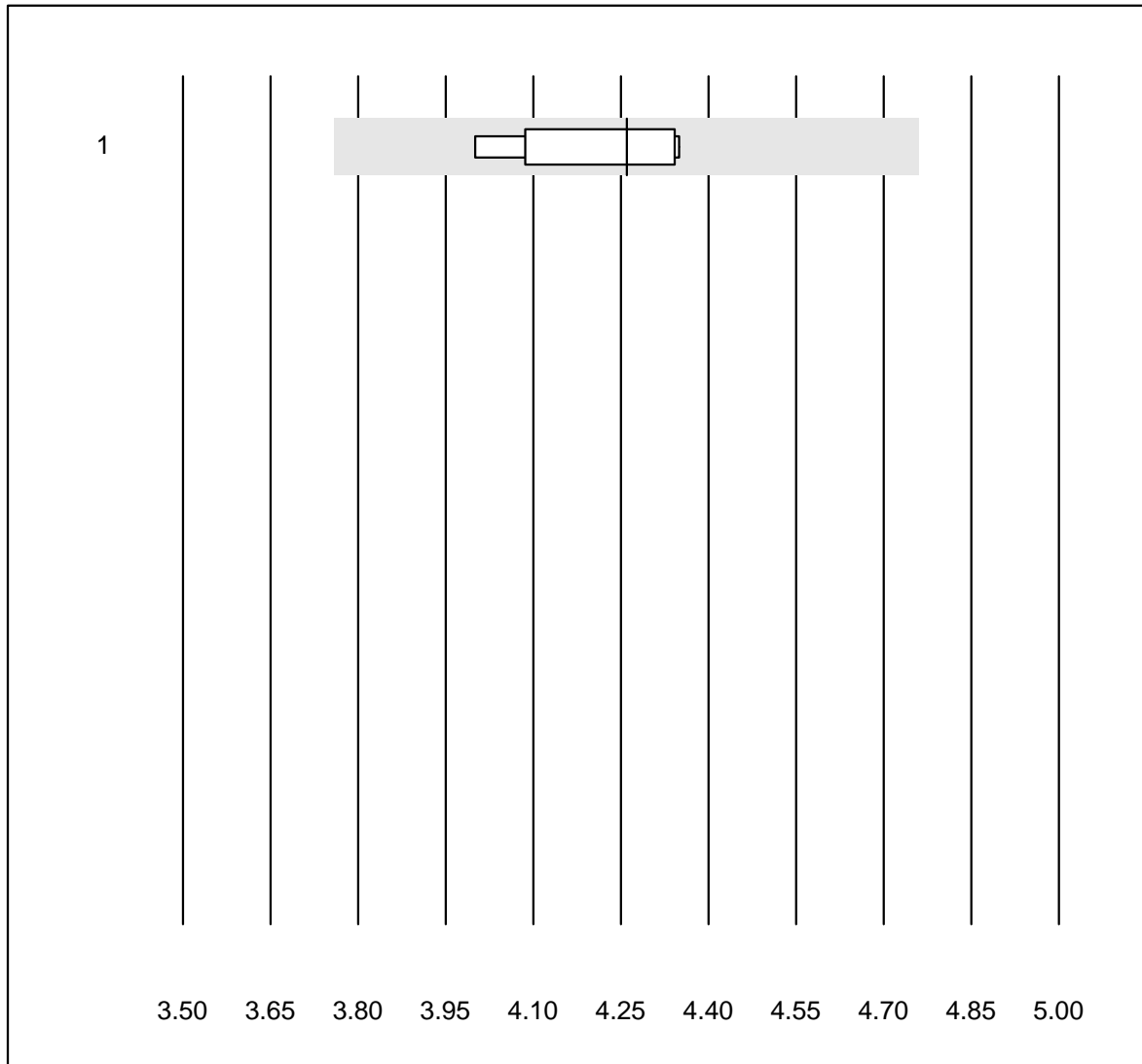
HIV1 NAT qn (Log10 cp/m)

QUALAB tolerance : +/- 0.50 Log10 cp/m

No.	Methode	Total	% OK	% insuff.	% outlier	Target	CV%	Type
1	all Participants	7	100.0	0.0	0.0	4.26	3.2	e*