

Summary statistics - quantitative results

(Groups: manufacturer of instrument)

Filter: minimal size of the groups n = 5

EQA round: ABR2/22 - Acid-base Status and Electrolytes

Deadline: 29.07.2022

RoM = robust average	AV = assigned value	Dmax = acceptable percent difference
SD = standard deviation	CRV = certified reference value	LL = lower limit
CV = coefficient of variation	RV = reference value	UL = upper limit
Ntot = total number of the participants	CVE = consensus value from experts	Neva = number of evaluated participants
Nout = number of results excluded before calculation	CVP = consensus value from all participants	Nsuc = number of successful participants
	CVPG = consensus value from participants groups	Srel = success (relative)
	U _{AV} = expanded uncertainty of the assigned value (k = 2)	

Test	[unit]	Comparability												
		RoM	SD	CV [%]	N _{tot}	N _{out}	AV	U _{AV}	D _{max}	LL	UL	N _{eva}	N _{suc}	S _{rel}
(131) pH					83							83	83	100%
Samples and groups	[-]													
Sample A		7,35	0,0070	10	83	CVP	7,35	0,0021	0,8%	7,29	7,41	83	83	100%
(60) Roche		7,36	0,0070	10	9	0						9		
(61) Radiometer		7,34	0,0060	0,08	63	0						63		
(179) Siemens		7,36	0,0190	0,26	6	0						6		
Other					5	0						5		
							2x 1, 1x 11, 1x 53, 1x 999							
Sample B		7,40	0,0070	0,09	83	CVP	7,4	0,0019	0,8%	7,34	7,46	83	83	100%
(60) Roche		7,40	0,0060	0,09	9	0						9		
(61) Radiometer		7,40	0,0050	0,07	63	0						63		
(179) Siemens		7,41	0,0140	0,19	6	0						6		
Other					5	0						5		
							2x 1, 1x 11, 1x 53, 1x 999							
(132) pCO2					83							83	80	96%
Samples and groups	[kPa]													
Sample A		6,06	0,20	3,3	83	CVP	6,06	0,0055	12%	5,33	6,79	83	82	99%
(60) Roche		6,38	0,096	1,5	9	0						9		
(61) Radiometer		6,04	0,15	2,5	63	1						63		
(179) Siemens		5,81	0,39	6,6	6	0						6		
Other					5	0						5		
							2x 1, 1x 11, 1x 53, 1x 999							
Sample B		5,40	0,18	3,3	83	CVP	5,4	0,0048	12%	4,75	6,05	83	81	98%
(60) Roche		5,66	0,074	1,3	9	0						9		
(61) Radiometer		5,38	0,14	2,6	63	0						63		
(179) Siemens		5,17	0,28	5,4	6	0						6		
Other					5	0						5		
							2x 1, 1x 11, 1x 53, 1x 999							
(133) pO2					82							82	82	100%
Samples and groups	[kPa]													
Sample A		14,6	0,94	6,4	82	CVP	14,6	0,025	17%	12,1	17,1	82	82	100%
(60) Roche		15,2	1,9	13	8	0						8		
(61) Radiometer		14,5	0,82	5,7	63	0						63		
(179) Siemens		13,9	0,83	6,0	6	0						6		
Other					5	0						5		
							2x 1, 1x 11, 1x 53, 1x 999							
Sample B		16,5	0,65	3,9	82	CVP	16,5	0,017	17%	13,6	19,4	82	82	100%
(60) Roche		16,8	1,2	7,4	8	0						8		
(61) Radiometer		16,4	0,50	3,1	63	0						63		
(179) Siemens		16,3	1,1	6,8	6	0						6		
Other					5	0						5		
							2x 1, 1x 11, 1x 53, 1x 999							
(134) Sodium cation (ISE)					63							63	61	97%
Samples and groups	[mmol/L]													
Sample A		135	1,5	1,1	63	CVP	135	0,046	5%	128	142	63	62	98%
(60) Roche		135	1,5	1,1	5	0						5		
(61) Radiometer		135	1,10	0,80	47	0						47		
(179) Siemens		132	4,7	3,5	6	0						6		
Other					5	0						5		
							2x 1, 1x 46, 1x 53, 1x 999							
Sample B		144	1,8	1,2	63	CVP	144	0,055	5%	136	152	63	62	98%
(60) Roche		143	2,0	1,4	5	0						5		
(61) Radiometer		144	1,20	0,86	47	0						47		
(179) Siemens		140	5,6	4,0	6	0						6		
Other					5	0						5		
							2x 1, 1x 46, 1x 53, 1x 999							
(135) Potassium cation (ISE)					64							64	63	98%
Samples and groups	[mmol/L]													
Sample A		3,29	0,092	2,8	64	CVP	3,29	0,028	8%	3,02	3,56	64	64	100%
(60) Roche		3,24	0,17	5,3	5	0						5		
(61) Radiometer		3,30	0,088	2,7	49	0						49		
(179) Siemens		3,27	0,037	1,1	5	0						5		
Other					5	0						5		
							2x 1, 1x 46, 1x 53, 1x 999							
Sample B		4,07	0,088	2,2	64	CVP	4,07	0,027	8%	3,74	4,4	64	63	98%
(60) Roche		4,05	0,16	4,0	5	0						5		
(61) Radiometer		4,07	0,074	1,8	49	0						49		

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Test	[unit]					Comparability							N _{eva}	N _{suc}	S _{rel}
		RoM	SD	CV [%]	N _{tot}	N _{out}	AV	U _{AV}	D _{max}	LL	UL				
(135) Potassium cation (ISE)	[mmol/L]				64								64	63	98%
Samples and groups															
Sample B		4,07	0,088	2,2	64	CVP	4,07	0,027	8%	3,74	4,4	64	63	98%	
(179) Siemens		4,04	0,059	1,5	5	0						5			
Other					5	0						5			
							2x 1, 1x 46, 1x 53, 1x 999								
(136) Chloride anion (ISE)	[mmol/L]				62							62	62	100%	
Samples and groups															
Sample A		94,8	1,9	2,0	62	CVP	94,8	0,60	7%	88,1	102	62	62	100%	
(60) Roche		96,1	4,7	4,9	5	0						5			
(61) Radiometer		94,7	1,7	1,8	48	0						48			
(179) Siemens		94,5	0,740	0,78	5	0						5			
Other					4	0						4			
							1x 46, 1x 53, 2x 999								
Sample B		104	1,9	1,9	62	CVP	104	0,60	7%	96,7	112	62	62	100%	
(60) Roche		105	5,8	5,5	5	0						5			
(61) Radiometer		104	1,6	1,6	48	0						48			
(179) Siemens		104	0,740	0,72	5	0						5			
Other					4	0						4			
							1x 46, 1x 53, 2x 999								
(137) Calcium cation (ISE)	[mmol/L]				72							72	70	97%	
Samples and groups															
Sample A		1,16	0,024	2,0	72	CVP	1,16	0,068	10%	1,04	1,28	72	71	99%	
(60) Roche		1,12	0,043	3,8	7	0						7			
(61) Radiometer		1,17	0,019	1,6	55	0						55			
(179) Siemens		1,15	0,037	3,2	5	0						5			
Other					5	0						5			
							2x 1, 1x 46, 1x 53, 1x 999								
Sample B		0,897	0,021	2,4	72	CVP	0,897	0,062	10%	0,807	0,987	72	70	97%	
(60) Roche		0,847	0,025	3,0	7	0						7			
(61) Radiometer		0,903	0,016	1,8	55	0						55			
(179) Siemens		0,885	0,022	2,5	5	0						5			
Other					5	0						5			
							2x 1, 1x 46, 1x 53, 1x 999								
(139) Glucose	[mmol/L]				56							56	53	95%	
Samples and groups															
Sample A		12,0	0,46	3,8	56	CVP	12	0,15	15%	10,2	13,8	56	54	96%	
(61) Radiometer		12,0	0,44	3,6	47	0						47			
Other					9	0						9			
							2x 1, 1x 53, 2x 60, 3x 179, 1x 999								
Sample B		8,82	0,32	3,7	56	CVP	8,82	0,11	15%	7,49	10,2	56	53	95%	
(61) Radiometer		8,79	0,30	3,4	47	0						47			
Other					9	1						9			
							2x 1, 1x 53, 2x 60, 3x 179, 1x 999								
(169) Lactate	[mmol/L]				57							57	54	95%	
Samples and groups															
Sample A		4,05	0,25	6,3	57	CVP	4,05	0,083	18%	3,32	4,78	57	55	96%	
(61) Radiometer		4,05	0,24	6,0	49	0						49			
Other					8	0						8			
							1x 53, 2x 60, 4x 179, 1x 999								
Sample B		2,81	0,19	6,7	57	CVP	2,81	0,062	18%	2,3	3,32	57	54	95%	
(61) Radiometer		2,81	0,16	5,8	49	0						49			
Other					8	0						8			
							1x 53, 2x 60, 4x 179, 1x 999								

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End of report

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