

Summary statistics - quantitative results

(Groups: manufacturer of instrument)

Filter: minimal size of the groups n = 5

EQA round: ABR2/21 - Acid-base Status and Electrolytes

Deadline: 23.07.2021

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					81							81	81	100%
Samples and groups	[-]													
Sample A		7,34	0,0090	1,2	81	CVP	7,34	,0025	0,8%	7,28	7,4	81	81	100%
(60) Roche		7,35	0,0070	1,0	11	0						11		
(61) Radiometer		7,34	0,0060	0,8	58	0						58		
(179) Siemens		7,35	0,0180	2,4	8	0						8		
Other					4	0						4		
							1x 11, 1x 38, 2x 53							
Sample B		7,42	0,0090	1,3	81	CVP	7,42	,0025	0,8%	7,36	7,48	81	81	100%
(60) Roche		7,42	0,0070	1,0	11	0						11		
(61) Radiometer		7,42	0,0070	0,9	58	0						58		
(179) Siemens		7,44	0,0150	2,0	8	0						8		
Other					4	0						4		
							1x 11, 1x 38, 2x 53							
(132) pCO2					81							81	79	98%
Samples and groups	[kPa]													
Sample A		6,24	0,19	3,1	81	CVP	6,24	0,052	12%	5,49	6,99	81	79	98%
(60) Roche		6,49	0,22	3,3	11	0						11		
(61) Radiometer		6,20	0,14	2,3	58	0						58		
(179) Siemens		6,19	0,16	2,6	8	0						8		
Other					4	0						4		
							1x 11, 1x 38, 2x 53							
Sample B		5,01	0,12	2,5	81	CVP	5,01	0,034	12%	4,4	5,62	81	81	100%
(60) Roche		5,16	0,17	3,3	11	0						11		
(61) Radiometer		5,00	0,099	2,0	58	0						58		
(179) Siemens		4,93	0,22	4,4	8	0						8		
Other					4	0						4		
							1x 11, 1x 38, 2x 53							
(133) pO2					81							81	77	95%
Samples and groups	[kPa]													
Sample A		15,0	1,0	6,8	81	CVP	15	0,28	17%	12,4	17,6	81	79	98%
(60) Roche		16,3	1,1	6,9	11	0						11		
(61) Radiometer		14,9	0,79	5,3	58	0						58		
(179) Siemens		14,4	1,1	7,5	8	0						8		
Other					4	0						4		
							1x 11, 1x 38, 2x 53							
Sample B		17,2	0,66	3,8	81	CVP	17,2	0,18	12%	15,1	19,3	81	78	96%
(60) Roche		17,6	0,79	4,5	11	0						11		
(61) Radiometer		17,2	0,56	3,2	58	0						58		
(179) Siemens		16,7	0,87	5,2	8	0						8		
Other					4	0						4		
							1x 11, 1x 38, 2x 53							
(134) Sodium cation (ISE)					55							55	55	100%
Samples and groups	[mmol/L]													
Sample A		135	1,8	1,3	55	CVP	135	0,58	5%	128	142	55	55	100%
(61) Radiometer		136	1,10	8,1	42	0						42		
(179) Siemens		133	2,9	2,2	6	0						6		
Other					7	0						7		
							1x 46, 2x 53, 4x 60							
Sample B		144	2,1	1,5	55	CVP	144	0,71	5%	136	152	55	55	100%
(61) Radiometer		144	1,6	1,1	42	0						42		
(179) Siemens		142	2,2	1,6	6	0						6		
Other					7	0						7		
							1x 46, 2x 53, 4x 60							
(135) Potassium cation (ISE)					56							56	55	98%
Samples and groups	[mmol/L]													
Sample A		3,30	0,0190	5,8	56	CVP	3,3	,0063	8%	3,03	3,57	56	55	98%
(61) Radiometer		3,30	0,0000	0,0	43	0						43		
(179) Siemens		3,22	0,089	2,8	6	0						6		
Other					7	0						7		
							1x 46, 2x 53, 4x 60							
Sample B		4,09	0,0250	6,2	56	CVP	4,09	,0083	8%	3,76	4,42	56	56	100%
(61) Radiometer		4,10	0,0000	0,0	43	0						43		
(179) Siemens		4,04	0,096	2,4	6	0						6		
Other					7	0						7		
							1x 46, 2x 53, 4x 60							

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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					
(136) Chloride anion (ISE)																
Samples and groups	[mmol/L]				55							55	55	100%		
Sample A						CVP										
(61) Radiometer		94,6	2,1	2,3	55		94,6	0,70	7%	87,9	102	55	55	100%		
(179) Siemens		94,5	2,1	2,3	42	0						42				
Other		95,5	0,74	0,78	5	0						5				
					8	0						8				
							1x 46, 2x 53, 4x 60, 1x 999									
Sample B						CVP										
(61) Radiometer		104	2,3	2,2	55		104	0,75	7%	96,7	112	55	55	100%		
(179) Siemens		103	2,1	2,0	42	0						42				
Other		104	0,74	0,72	5	0						5				
					8	0						8				
							1x 46, 2x 53, 4x 60, 1x 999									
(137) Calcium cation (ISE)																
Samples and groups	[mmol/L]				67							67	64	96%		
Sample A						CVP										
(60) Roche		1,19	0,023	1,9	67		1,19	,0067	10%	1,07	1,31	67	65	97%		
(61) Radiometer		1,13	0,009	0,85	9	0						9				
(179) Siemens		1,20	0,015	1,2	49	0						49				
Other		1,19	0,082	6,9	6	0						6				
					3	0						3				
							1x 46, 2x 53									
Sample B						CVP										
(60) Roche		0,933	0,018	1,9	67		0,933	,0054	10%	0,839	1,03	67	64	96%		
(61) Radiometer		0,870	0,015	1,7	9	0						9				
(179) Siemens		0,937	0,01	1,1	49	0						49				
Other		0,945	0,052	5,5	6	0						6				
					3	0						3				
							1x 46, 2x 53									
(139) Glucose																
Samples and groups	[mmol/L]				47							47	46	98%		
Sample A						CVP										
(61) Radiometer		12,1	0,23	1,9	47		12,1	0,083	15%	10,2	14	47	47	100%		
Other		12,1	0,20	1,6	42	0						42				
					5	0						5				
							2x 53, 1x 60, 2x 179									
Sample B						CVP										
(61) Radiometer		8,87	0,22	2,5	47		8,87	0,079	15%	7,53	10,2	47	46	98%		
Other		8,85	0,19	2,1	42	0						42				
					5	0						5				
							2x 53, 1x 60, 2x 179									
(169) Lactate																
Samples and groups	[mmol/L]				49							49	48	98%		
Sample A						CVP										
(61) Radiometer		4,08	0,21	5,2	49		4,08	0,074	18%	3,34	4,82	49	48	98%		
Other		4,05	0,18	4,6	43	0						43				
					6	0						6				
							2x 53, 1x 60, 3x 179									
Sample B						CVP										
(61) Radiometer		2,83	0,12	4,2	49		2,83	0,041	18%	2,32	3,34	49	48	98%		
Other		2,81	0,091	3,2	43	0						43				
					6	0						6				
							2x 53, 1x 60, 3x 179									

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End of report

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