

## Summary statistics - quantitative results

(Groups: manufacturer of instrument)

Filter: minimal size of the groups n = 5

## EQA round: ABR2/20 - Acid-base Status and Electrolytes

Deadline: 24.07.2020

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 <sub>AV</sub> = expanded uncertainty of the assigned value (k = 2)	

Test	[unit]						Comparability							
		RoM	SD	CV [%]	N <sub>tot</sub>	N <sub>out</sub>	AV	U <sub>AV</sub>	D <sub>max</sub>	LL	UL	N <sub>eva</sub>	N <sub>suc</sub>	S <sub>rel</sub>
<b>(131) pH</b>					73							73	72	99%
Samples and groups	[-]													
<b>Sample A</b>		7,17	0,0090	1,14	73	CVP	7,17	0,0028	0,8%	7,11	7,23	73	73	100%
(60) Roche		7,19	0,010	1,14	8	0						8		
(61) Radiometer		7,16	0,0050	0,07	55	0						55		
Other					10	0						10		
							1x 11, 1x 38, 1x 53, 4x 179, 3x 207							
<b>Sample B</b>		7,43	0,0060	0,08	73	CVP	7,43	0,0018	0,8%	7,37	7,49	73	72	99%
(60) Roche		7,43	0,0060	0,09	8	0						8		
(61) Radiometer		7,43	0,0050	0,07	55	0						55		
Other					10	0						10		
							1x 11, 1x 38, 1x 53, 4x 179, 3x 207							
<b>(132) pCO<sub>2</sub></b>					73							73	73	100%
Samples and groups	[kPa]													
<b>Sample A</b>		8,05	0,28	3,5	73	CVP	8,05	0,080	12%	7,08	9,02	73	73	100%
(60) Roche		8,56	0,25	2,9	9	0						9		
(61) Radiometer		7,98	0,23	2,8	56	0						56		
(179) Siemens		8,05	0,22	2,8	5	0						5		
Other					3	0						3		
							1x 11, 1x 38, 1x 53							
<b>Sample B</b>		4,84	0,13	2,7	73	CVP	4,84	0,037	12%	4,25	5,43	73	73	100%
(60) Roche		5,04	0,13	2,6	9	0						9		
(61) Radiometer		4,82	0,09	1,9	56	0						56		
(179) Siemens		4,67	0,12	2,5	5	0						5		
Other					3	0						3		
							1x 11, 1x 38, 1x 53							
<b>(133) pO<sub>2</sub></b>					70							0		
Samples and groups	[kPa]													
<b>Sample A</b>		6,35	0,96	15	70							0		
(60) Roche		9,77	1,6	17	8	2	CVPG	9,77	2,3	20%	7,81	11,8	0	
(61) Radiometer		6,30	0,33	5,3	54	11	CVPG	6,3	0,12	20%	5,04	7,56	0	
(179) Siemens		5,27	1,5	2,9	5	0	CVPG	5,27	4,4	20%	4,21	6,33	0	
Other					3	0						0		
							1x 11, 1x 38, 1x 53							
<b>Sample B</b>		16,5	0,60	3,6	70	CVP	16,5	0,18	17%	13,6	19,4	70	70	100%
(60) Roche		16,8	1,2	7,3	8	0						8		
(61) Radiometer		16,5	0,47	2,9	54	0						54		
(179) Siemens		15,8	0,59	3,7	5	0						5		
Other					3	0						3		
							1x 11, 1x 38, 1x 53							
<b>(134) Sodium cation (ISE)</b>					49							49	49	100%
Samples and groups	[mmol/L]													
<b>Sample A</b>		117	0,940	0,81	49	CVP	117	0,33	5%	111	123	49	49	100%
(61) Radiometer		117	0,840	0,72	41	0						41		
Other					8	0						8		
							1x 53, 3x 60, 4x 179							
<b>Sample B</b>		142	1,6	1,1	49	CVP	142	0,56	5%	134	150	49	49	100%
(61) Radiometer		143	1,40	0,98	41	0						41		
Other					8	0						8		
							1x 53, 3x 60, 4x 179							
<b>(135) Potassium cation (ISE)</b>					50							50	48	96%
Samples and groups	[mmol/L]													
<b>Sample A</b>		2,26	0,059	2,6	50	CVP	2,26	0,021	8%	2,07	2,45	50	48	96%
(61) Radiometer		2,27	0,052	2,3	42	0						42		
Other					8	1						8		
							1x 53, 3x 60, 4x 179							
<b>Sample B</b>		4,10	0,0090	0,23	50	CVP	4,1	0,0033	8%	3,77	4,43	50	50	100%
(61) Radiometer		4,10	0,000	0,00	42	0						42		
Other					8	0						8		
							1x 53, 3x 60, 4x 179							
<b>(136) Chloride anion (ISE)</b>					50							50	48	96%
Samples and groups	[mmol/L]													
<b>Sample A</b>		78,4	1,7	2,2	50	CVP	78,4	0,60	7%	72,9	83,9	50	48	96%
(61) Radiometer		78,2	1,6	2,1	41	0						41		
Other					9	0						9		
							1x 53, 3x 60, 4x 179, 1x 999							
<b>Sample B</b>		105	1,6	1,5	50	CVP	105	0,54	7%	97,6	113	50	50	100%

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Test	[unit]					Comparability							N <sub>eva</sub>	N <sub>suc</sub>	S <sub>rel</sub>
		RoM	SD	CV [%]	N <sub>tot</sub>	N <sub>out</sub>	AV	U <sub>AV</sub>	D <sub>max</sub>	LL	UL				
<b>(136) Chloride anion (ISE)</b>	[mmol/L]				50								50	48	96%
Samples and groups															
<b>Sample B</b>		105	1,6	1,5	50	CVP	105	0,54	7%	97,6	113		50	50	100%
(61) Radiometer		105	1,4	1,3	41	0							41		
Other					9	0							9		
1x 53, 3x 60, 4x 179, 1x 999															
<b>(137) Calcium cation (ISE)</b>	[mmol/L]				60								60	60	100%
Samples and groups															
<b>Sample A</b>		1,65	0,042	2,6	60	CVP	1,65	0,013	10%	1,48	1,82		60	60	100%
(60) Roche		1,54	0,076	5,0	6	0							6		
(61) Radiometer		1,66	0,036	2,1	48	0							48		
Other					6	0							6		
1x 38, 1x 53, 4x 179															
<b>Sample B</b>		0,938	0,023	2,4	60	CVP	0,938	0,0072	10%	0,844	1,04		60	60	100%
(60) Roche		0,898	0,012	1,3	6	0							6		
(61) Radiometer		0,943	0,017	1,7	48	0							48		
Other					6	0							6		
1x 38, 1x 53, 4x 179															
<b>(139) Glucose</b>	[mmol/L]				43								43	43	100%
Samples and groups															
<b>Sample A</b>		21,1	0,81	3,8	43	CVP	21,1	0,30	15%	17,9	24,3		43	43	100%
(61) Radiometer		21,0	0,80	3,8	40	0							40		
Other					3	0							3		
1x 53, 2x 179															
<b>Sample B</b>		8,84	0,30	3,3	43	CVP	8,84	0,11	15%	7,51	10,2		43	43	100%
(61) Radiometer		8,82	0,29	3,3	40	0							40		
Other					3	0							3		
1x 53, 2x 179															
<b>(169) Lactate</b>	[mmol/L]				45								45	43	96%
Samples and groups															
<b>Sample A</b>		6,19	0,37	6,0	45	CVP	6,19	0,14	18%	5,07	7,31		45	44	98%
(61) Radiometer		6,15	0,35	5,7	41	0							41		
Other					4	0							4		
1x 53, 3x 179															
<b>Sample B</b>		2,81	0,13	4,7	45	CVP	2,81	0,048	18%	2,3	3,32		45	43	96%
(61) Radiometer		2,80	0,12	4,3	41	0							41		
Other					4	0							4		
1x 53, 3x 179															

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End of report

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