

## EQA round: ABR3/23 - Acid-base Status and Electrolytes

Deadline: 24.11.2023

Setup: all data

RoM = robust average

SD = standard deviation

CV = coefficient of variation

N<sub>tot</sub> = total number of the resultsN<sub>out</sub> = number of the results removed before calculation

AV = assigned value

CVP = consensus of all participants

U<sub>AV</sub> = expanded uncertainty of the assigned value (k = 2)D<sub>max</sub> = acceptable difference

LL = lower limit

UL = upper limit

N<sub>eva</sub> = number of the results assessedN<sub>suc</sub> = number of successful resultsS<sub>rel</sub> = relative success

Test Sample Group	[unit]	RoM	SD	CV [%]	N <sub>tot</sub>	N <sub>out</sub>	Comparability					N <sub>eva</sub>	N <sub>suc</sub>	S <sub>rel</sub> [%]
							AV	U <sub>AV</sub>	D <sub>max</sub>	LL	UL			
<b>(135) Potassium cation (ISE)</b>	[mmol/L]				295							295	292	99
<b>Sample A</b>												295	293	99
All results		3,29	0,065	2	295	0	CVP	3,29	0,009	8%	3,02	3,56	295	
<b>Sample B</b>												295	293	99
All results		4,05	0,077	1,9	295	0	CVP	4,05	0,011	8%	3,72	4,38	295	
<b>(139) Glucose</b>	[mmol/L]				274							274	270	99
<b>Sample A</b>												274	272	99
All results		12,1	0,39	3,3	274	0	CVP	12,1	0,058	15%	10,2	14	274	
<b>Sample B</b>												274	271	99
All results		8,87	0,28	3,2	274	0	CVP	8,87	0,042	15%	7,53	10,3	274	
<b>(136) Chloride anion (ISE)</b>	[mmol/L]				273							273	271	99
<b>Sample A</b>												273	271	99
All results		94	2,5	2,7	273	0	CVP	94	0,38	7%	87,4	101	273	
<b>Sample B</b>												273	272	100
All results		103	2,4	2,3	273	0	CVP	103	0,35	7%	95,7	111	273	
<b>(169) Lactate</b>	[mmol/L]				275							275	271	99
<b>Sample A</b>												275	271	99
All results		10	0,71	7,1	275	1	CVP	10	0,11	18%	8,2	11,8	275	
<b>Sample B</b>												275	273	99
All results		7,11	0,44	6,2	275	0	CVP	7,11	0,065	18%	5,83	8,39	275	
<b>(132) pCO<sub>2</sub></b>	[kPa]				411							411	387	94
<b>Sample A</b>												411	392	95
All results		6,28	0,26	4,2	411	1	CVP	6,28	0,032	12%	5,52	7,04	411	
<b>Sample B</b>												411	397	97
All results		5,26	0,18	3,4	411	0	CVP	5,26	0,022	12%	4,62	5,9	411	
<b>(131) pH</b>	[-]				410							410	403	98
<b>Sample A</b>												410	405	99
All results		7,34	0,014	0,19	410	1	CVP	7,34	0,002	0,8%	7,28	7,4	410	
<b>Sample B</b>												410	405	99
All results		7,41	0,013	0,17	410	0	CVP	7,41	0,002	0,8%	7,35	7,47	410	
<b>(133) pO<sub>2</sub></b>	[kPa]				411							411	388	94
<b>Sample A</b>												411	396	96
All results		15,5	0,94	6	411	2	CVP	15,5	0,11	17%	12,8	18,2	411	
<b>Sample B</b>												411	397	97
All results		17,3	0,75	4,3	411	0	CVP	17,3	0,09	12%	15,2	19,4	411	
<b>(134) Sodium cation (ISE)</b>	[mmol/L]				293							293	289	99
<b>Sample A</b>												293	291	99
All results		135	2,1	1,6	293	0	CVP	135	0,3	5%	128	142	293	
<b>Sample B</b>												293	290	99
All results		143	2,4	1,7	293	0	CVP	143	0,35	5%	135	151	293	
<b>(137) Calcium cation (ISE)</b>	[mmol/L]				337							337	329	98
<b>Sample A</b>												337	334	99
All results		1,19	0,033	2,8	337	1	CVP	1,19	0,004	10%	1,07	1,31	337	
<b>Sample B</b>												337	331	98
All results		0,971	0,029	3	337	0	CVP	0,971	0,004	±0,1	0,871	1,08	337	