

## EQA round: ABR1/23 - Acid-base Status and Electrolytes

Deadline: 24.3.2023

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>	AV	U <sub>AV</sub>	Comparability			N <sub>eva</sub>	N <sub>suc</sub>	S <sub>rel</sub> [%]
									D <sub>max</sub>	LL	UL			
<b>(135) Potassium cation (ISE)</b>	[mmol/L]				283							283	277	98
<b>Sample A</b>												283	281	99
All results		4,31	0,038	0,88	283	0	CVP	4,31	0,006	8%	3,96	4,66	283	
<b>Sample B</b>												283	279	99
All results		5,97	0,11	1,9	283	1	CVP	5,97	0,016	8%	5,49	6,45	283	
<b>(139) Glucose</b>	[mmol/L]				264							264	262	99
<b>Sample A</b>												264	264	100
All results		10,6	0,33	3,1	264	0	CVP	10,6	0,049	15%	9,01	12,2	264	
<b>Sample B</b>												264	262	99
All results		15,4	0,47	3,1	264	1	CVP	15,4	0,072	15%	13	17,8	264	
<b>(136) Chloride anion (ISE)</b>	[mmol/L]				261							261	259	99
<b>Sample A</b>												261	260	100
All results		95,1	2,1	2,2	261	0	CVP	95,1	0,32	7%	88,4	102	261	
<b>Sample B</b>												261	260	100
All results		126	1,6	1,2	261	1	CVP	126	0,24	7%	117	135	261	
<b>(169) Lactate</b>	[mmol/L]				259							259	256	99
<b>Sample A</b>												259	258	100
All results		2,48	0,11	4,6	259	0	CVP	2,48	0,017	18%	2,03	2,93	259	
<b>Sample B</b>												259	257	99
All results		6,87	0,28	4,1	259	1	CVP	6,87	0,043	18%	5,63	8,11	259	
<b>(132) pCO<sub>2</sub></b>	[kPa]				400							400	379	95
<b>Sample A</b>												400	393	98
All results		5,64	0,23	4,1	400	0	CVP	5,64	0,028	12%	4,96	6,32	400	
<b>Sample B</b>												400	381	95
All results		2,97	0,13	4,5	400	2	CVP	2,97	0,016	12%	2,61	3,33	400	
<b>(131) pH</b>	[-]				400							400	393	98
<b>Sample A</b>												400	397	99
All results		7,41	0,012	0,16	400	0	CVP	7,41	0,002	0,8%	7,35	7,47	400	
<b>Sample B</b>												400	396	99
All results		7,6	0,016	0,21	400	1	CVP	7,6	0,002	0,8%	7,53	7,67	400	
<b>(133) pO<sub>2</sub></b>	[kPa]				400							400	382	96
<b>Sample A</b>												400	392	98
All results		14,3	1,1	7,7	400	0	CVP	14,3	0,14	17%	11,8	16,8	400	
<b>Sample B</b>												400	387	97
All results		18,5	0,66	3,6	400	1	CVP	18,5	0,081	12%	16,2	20,8	400	
<b>(134) Sodium cation (ISE)</b>	[mmol/L]				281							281	277	99
<b>Sample A</b>												281	280	100
All results		132	1,1	0,84	281	0	CVP	132	0,16	5%	125	139	281	
<b>Sample B</b>												281	278	99
All results		159	2	1,3	281	1	CVP	159	0,29	5%	151	167	281	
<b>(137) Calcium cation (ISE)</b>	[mmol/L]				325							325	315	97
<b>Sample A</b>												325	325	100
All results		1,1	0,037	3,4	325	0	CVP	1,1	0,005	10%	0,99	1,21	325	
<b>Sample B</b>												325	315	97
All results		0,519	0,048	9,3	325	2	CVP	0,519	0,007	±0,1	0,419	0,619	325	