

EQA round: ABR1/25 - Acid-base Status and Electrolytes

Deadline: 7.2.2025

Setup: minimal size of the groups n = 5

RoM = robust average	AV = assigned value	D _{max} = acceptable difference
SD = standard deviation	CVP = consensus of all participants	LL = lower limit
CV = coefficient of variation	U _{AV} = expanded uncertainty of the assigned value (k = 2)	UL = upper limit
N _{tot} = total number of the results		N _{eva} = number of the results assessed
N _{out} = number of the results removed before calculation		N _{suc} = number of successful results
		S _{rel} = relative success

Test Sample Group	[unit]	RoM	SD	CV [%]	N _{tot}	N _{out}	Comparability					N _{eva}	N _{suc}	S _{rel} [%]
							AV	U _{AV}	D _{max}	LL	UL			
(135) Potassium cation (ISE)	[mmol/L]				320							320	318	99
Sample A												320	320	100
All results		4,3	0,097	2,2	320	0	CVP	4,3	0,013	8%	3,95	4,65	320	
Sample B												320	318	99
All results		6,08	0,16	2,7	320	1	CVP	6,08	0,022	8%	5,59	6,57	320	
(139) Glucose	[mmol/L]				299							299	297	99
Sample A												299	299	100
All results		10,6	0,27	2,5	299	0	CVP	10,6	0,038	15%	9,01	12,2	299	
Sample B												299	297	99
All results		15,6	0,4	2,6	299	1	CVP	15,6	0,057	15%	13,2	18	299	
(136) Chloride anion (ISE)	[mmol/L]				299							299	297	99
Sample A												299	297	99
All results		95	1,6	1,7	299	0	CVP	95	0,23	7%	88,3	102	299	
Sample B												299	299	100
All results		128	1,4	1,1	299	0	CVP	128	0,2	7%	119	137	299	
(169) Lactate	[mmol/L]				295							295	294	100
Sample A												295	294	100
All results		2,47	0,11	4,6	295	0	CVP	2,47	0,016	18%	2,02	2,92	295	
Sample B												295	295	100
All results		6,94	0,27	3,8	295	0	CVP	6,94	0,038	18%	5,69	8,19	295	
(132) pCO₂	[kPa]				427							427	402	94
Sample A												427	419	98
All results		5,69	0,23	4	427	0	CVP	5,69	0,027	12%	5	6,38	427	
Sample B												427	404	95
All results		2,85	0,11	3,9	427	1	CVP	2,85	0,013	12%	2,5	3,2	427	
(131) pH	[-]				428							428	422	99
Sample A												428	428	100
All results		7,41	0,011	0,14	428	0	CVP	7,41	0,001	0,8%	7,35	7,47	428	
Sample B												428	422	99
All results		7,61	0,015	0,19	428	1	CVP	7,61	0,002	0,8%	7,54	7,68	428	
(133) pO₂	[kPa]				428							428	409	96
Sample A												428	420	98
All results		14,2	1	7,4	428	0	CVP	14,2	0,12	17%	11,7	16,7	428	
Sample B												428	414	97
All results		18,7	0,66	3,5	428	1	CVP	18,7	0,078	12%	16,4	21	428	
(134) Sodium cation (ISE)	[mmol/L]				318							318	315	99
Sample A												318	318	100
All results		133	1,2	0,9	318	0	CVP	133	0,16	5%	126	140	318	
Sample B												318	315	99
All results		161	2	1,3	318	1	CVP	161	0,28	5%	152	170	318	
(137) Calcium cation (ISE)	[mmol/L]				365							365	359	98
Sample A												365	363	99
All results		1,09	0,04	3,7	365	0	CVP	1,09	0,005	10%	0,981	1,2	365	
Sample B												365	360	99
All results		0,51	0,044	8,7	365	2	CVP	0,51	0,006	±0,1	0,41	0,61	365	