

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

Deadline: 7.2.2025

Setup: Slovakia; 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]				31							31	31	100
Sample A												31	31	100
All results		4,3	0,089	2,1	31	0	CVP	4,3	0,013	8%	3,95	4,65	31	
Sample B												31	31	100
All results		6,1	0,14	2,3	31	0	CVP	6,08	0,022	8%	5,59	6,57	31	
(139) Glucose	[mmol/L]				26							26	26	100
Sample A												26	26	100
All results		10,7	0,35	3,2	26	0	CVP	10,6	0,038	15%	9,01	12,2	26	
Sample B												26	26	100
All results		15,6	0,49	3,1	26	0	CVP	15,6	0,057	15%	13,2	18	26	
(136) Chloride anion (ISE)	[mmol/L]				31							31	31	100
Sample A												31	31	100
All results		95,1	1,5	1,6	31	0	CVP	95	0,23	7%	88,3	102	31	
Sample B												31	31	100
All results		127	1,3	1	31	0	CVP	128	0,2	7%	119	137	31	
(169) Lactate	[mmol/L]				26							26	26	100
Sample A												26	26	100
All results		2,53	0,13	5	26	0	CVP	2,47	0,016	18%	2,02	2,92	26	
Sample B												26	26	100
All results		7,03	0,32	4,5	26	0	CVP	6,94	0,038	18%	5,69	8,19	26	
(132) pCO₂	[kPa]				49							49	48	98
Sample A												49	49	100
All results		5,68	0,26	4,5	49	0	CVP	5,69	0,027	12%	5	6,38	49	
Sample B												49	48	98
All results		2,85	0,11	4	49	0	CVP	2,85	0,013	12%	2,5	3,2	49	
(131) pH	[-]				49							49	49	100
Sample A												49	49	100
All results		7,41	0,012	0,16	49	0	CVP	7,41	0,001	0,8%	7,35	7,47	49	
Sample B												49	49	100
All results		7,61	0,016	0,21	49	0	CVP	7,61	0,002	0,8%	7,54	7,68	49	
(133) pO₂	[kPa]				49							49	47	96
Sample A												49	49	100
All results		14,4	1,2	8,2	49	0	CVP	14,2	0,12	17%	11,7	16,7	49	
Sample B												49	47	96
All results		18,6	0,98	5,2	49	0	CVP	18,7	0,078	12%	16,4	21	49	
(134) Sodium cation (ISE)	[mmol/L]				31							31	30	97
Sample A												31	31	100
All results		133	1,5	1,1	31	0	CVP	133	0,16	5%	126	140	31	
Sample B												31	30	97
All results		160	1,7	1,1	31	0	CVP	161	0,28	5%	152	170	31	
(137) Calcium cation (ISE)	[mmol/L]				37							37	35	95
Sample A												37	36	97
All results		1,11	0,048	4,4	37	0	CVP	1,09	0,005	10%	0,981	1,2	37	
Sample B												37	36	97
All results		0,535	0,047	8,7	37	1	CVP	0,51	0,006	±0,1	0,41	0,61	37	