POC-DATA	Outcome: 30-day mortality[1] (n=6,465)				Outcome: hospital mortality[2] (n=5,173)			
Chloride category	**n**	**% outcome**	**Odds ratio (95% CI) vs. normochloremia**	**p-value**	**n**	**% outcome**	**Odds ratio (95% CI) vs. normochloremia**	**p-value**
Normochloremia	2.372	9.4%			1.879	24.6%		
Hypochloremia	311	11.9%	1.03 (0.69-1.60)	0.88	242	37.6%	1.24 (0.88-1.75)	0.22
Moderate hyperchloremia	1.586	9.5%	1.27 (0.97-1.66)	0.08	1.297	20.5%	1.09 (0.87-1.36)	0.46
Severe hyperchloremia	2.196	13.7%	1.58 (1.61-2.13)	0.003	1.755	27.0%	1.43 (1.10-1.85)	0.007
SIDa category	**n**	**% outcome**	**Odds ratio (95% CI) vs. intermediate SIDa**	**p-value**	**n**	**% outcome**	**Odds ratio (95% CI) vs. intermediate SIDa**	**p-value**
Intermediate SIDa	2.747	10.3%			2.210	22.1%		
Low SIDa	1.497	12.8%	1.02 (0.79-1.32)	0.87	1.164	26.5%	0.92 (0.74-1.15)	0.45
High SIDa	2.221	10.7%	1.10 (0.85-1.41)	0.47	1.799	27.7%	1.36 (1.10-1.68)	0.004
Sodium category	**n**	**% outcome**	**Odds ratio (95% CI) vs. normal sodium**	**p-value**	**n**	**% outcome**	**Odds ratio (95% CI) vs. normal sodium**	**p-value**
Normal sodium	4.312	9.9%			3.497	22.6%		
Hyponatremia	1.815	11.7%	1.28 (0.99-1.67)	0.06	1.395	28.0%	1.28 (1.03-1.58)	0.02
Hypernatremia	338	21.9%	1.21 (0.84-1.73)	0.31	281	40.6%	1.04 (0.75-1.44)	0.81
			Area under ROC 86.6%				Area under ROC 83.4%	
			Maximal VIF 2.70				Maximal VIF 2.72	
			Tolerance 0.67				Tolerance 0.67	

Table S3: Logistic regression models in the **general ICU population** excluding patients admitted after elective cardiac surgery. Point-of-care data for chloride and sodium were used as covariates and for the calculation of SIDa.

[1] Confounders adjusted for in the model: SAPS-3, admission reason, RIFLEcrea*, RIFLEurine, lactate, heart failure*, COPD*, pCO2* (low, normal, high), albumin, SIG, potentiometry type* (* = p > 0.05).

[2] Confounders adjusted for in the model: SAPS-3, admission reason, RIFLEcrea, RIFLEurine, lactate, heart failure, COPD, pCO2* (low, normal, high), albumin, SIG*, potentiometry type (* = p > 0.05).

SIDa = apparent strong ion difference (excl. lactate); ROC = Receiver under Operating Characteristics Curve; VIF = variance inflation factor