

## Online-only material

**Supplementary table 1.** Decision criteria for the definition of extracellular fluid (ECF) volume based on the diameter and collapsibility of the inferior vena cava (IVC) on ultrasound evaluation.

ECF volume	IVC diameter	Collapsibility index
Reduced	< 10 mm	
	10 - 21 mm	> 75%
Preserved	10 - 21 mm	20 - 75%
Increased	> 21 mm	
	10-21 mm	< 20%

**Supplementary table 2.** Association between degree of neurological symptoms related to plasma hypotonicity and severe hyponatremia at presentation to the emergency department.

Hypotonicity symptoms	Overall (n=84)	Severe hyponatremia (n=29)	Non-severe hyponatremia (n=55)	p-value
Absent, n	40	11	29	
Mild to moderate, n	35	12	23	
Severe, n	9	6	3	0.0503 for trend

**Supplementary table 3.** Association between the degree of hyponatremia and the class of diuretics administered to patients at home.

Diuretics	Overall (n=84)	Severe hyponatremia (n=29)	Non-severe hyponatremia (n=55)	p-value
No diuretics, n (%)	23 (27.4)	9 (31)	14 (25.4)	0.588
Thiazides monotherapy, n (%)	14 (16.7)	6 (20.7)	8 (14.5)	0.475
ENaC-i + HCT, n (%)	3 (9.5)	3 (10.3)	0 (0)	0.038
Loop diuretics monotherapy, n (%)	17 (20.2)	6 (54.5)	11 (20)	0.941
Loop diuretics + MRA, n (%)	24 (28.6)	4 (13.8)	20 (36.4)	0.031

**Legend.** ENaC-i, Epithelial sodium channel inhibitor; HCT, hydrochlorothiazide; MRA, mineralocorticoid receptor antagonist.

**Supplementary Table 4.** Causes of death of the 30 patients who died according to data from the National Institute of Statistics.

Causes of death	Overall (n, %)
Neoplastic cachexia	8 (26.7)
Heart failure	7 (23.3)
Respiratory failure	5 (16.7)
Senile cachexia	4 (13.3)
Septic shock	3 (10)
Acute myocardial infarction	1 (3.33)
Liver cirrhosis	1 (3.33)
Diabetes mellitus complications not specified	1 (3.33)

**Supplementary Table 5.** Association between extracellular fluid (ECF) volume on emergency room arrival and six-month mortality.

ECF	Overall (n=84)	Survivors (n=54)	Non-survivor (n=30)	p-value
Decreased, n (%)	28 (33.3)	17 (31.5)	11 (36.7)	
Preserved, n (%)	28 (33.3)	22 (40.7)	6 (20)	
Increased, n (%)	28 (33.3)	15 (27.8)	13 (43.3)	0.132

**Supplementary Table 6.** Association between the class of diuretic treatment prescribed at home and six-month mortality.

Diuretics	Overall (n=84)	Survivors (n=54)	Non-survivor (n=30)	p-value
No diuretics, n (%)	23 (27.4)	17 (56.7)	6 (11.1)	0.261
Thiazides monotherapy, n (%)	14 (16.7)	11 (20.4)	3 (10)	0.225
ENaC-i + HCT, n (%)	3 (9.5)	2 (0.4)	1 (3.3)	1
Loop diuretics monotherapy, n (%)	17 (20.2)	8 (14.8)	9 (30)	0.099
Loop diuretics + MRA, n (%)	24 (28.6)	14 (25.9)	10 (33.3)	0.474

**Legend.** ENaC-i, Epithelial sodium channel inhibitor; HCT, hydrochlorothiazide; MRA, mineralocorticoid receptor antagonist

**Supplementary Table 7.** Association between etiology of hypotonic hyponatremia and six-month mortality.

<b>Etiology</b>	<b>Overall (n=84)</b>	<b>Survivors (n=54)</b>	<b>Non-survivor (n=30)</b>	<b>p-value</b>
Primary polydipsia, n (%)	0 (0)	0 (0)	0 (0)	
Renal losses, n (%)	20 (23.8)	15 (27.8)	5 (16.7)	
Euvolemic, n (%)	11 (13.1)	8 (14.8)	3 (10)	
Extra-renal losses, n (%)	24 (28.6)	16 (29.6)	8 (26.7)	
Hypervolemia, n (%)	29 (34.5)	15 (27.8)	14 (46.7)	0.084

**Supplementary Figure 1.** Pairwise comparison of ROC curves between the copeptin/urinary sodium (u-Na) index and the u-Na cut-off >30 mmol/L in identifying a preserved extracellular fluid condition (difference between areas under the curves 0.177, 95% CI 0.037-0.381,  $p=0.013$ ).

