SUPPLEMENTARY MATERIAL

Table 1 of the supplementary material

Inclusion and exclusion criteria

Inclusion criteria	Exclusion criteria
• Presence of symptoms (dyspnea at rest or minimal exertion) and/or signs attributable to congestion (signs of congestion on chest radiography or presence of peripheral edema or ascites or jugular engorgement to 45° or crackles on lung auscultation) • NT-proBNP > 1000 pg/mL or BNP > 100 mg/dL at presentation • Serum creatinine ≥ 1.4 mg/dL on admission, with eGFR < 60 mL/min/1.73 m^2 • Intention to be treated with intravenous loop diuretics • Participants or their legal representatives are willing and able to give informed consent for participation in the study	• Life expectancy < 6 mo due to other comorbid conditions • Cardiogenic shock • Diagnosis of ACS in the previous 30 d • Pregnancy at the time of inclusion • Severe obstructive or restrictive lung disease • Previously known stage V CKD (eGFR <15 mL/min/1.73 m^2) or patient included in the dialysis program • Participation in another randomized trial at the time of inclusion • History of cancer within the last 2 y • Temperature ≥ 38°C or diagnosis of pneumonia

ACS, acute coronary syndrome; BNP, brain natriuretic peptide; CKD, chronic kidney disease; eGFR, estimated glomerular filtration rate; NT-proBNP, N-terminal pro-brain natriuretic peptide.

Table 2 of the supplementary material

Diuretic strategies

Conventional strategy	
Loop diuretic dosage according to the presence of signs and symptoms of systemic congestion	
CA125-guided strategy	
CA125 ≤ 35 U/mL	**CA125 > 35 U/mL**
• Initial dose of intravenous furosemide ≤ 80 mg/d • Removal of thiazides or chlorthalidone • After 24 h: dose adjustment based on clinical and/or laboratory criteria	• Initial dose of intravenous furosemide > 120 mg/d or 2.5 times the previous oral dose • If CA125 > 100 U/mL and/or concomitant unequivocal clinical signs of systemic congestion, dose > 160 mg/d • After 24 h: an increased dose of intravenous furosemide and/or the addition of chlorthalidone 25-50 mg/d will be recommended if diuresis < 3 L during the first 24 h

CA125, carbohydrate antigen 125.

Table 3 of the supplementary material

Sensitivity analysis according to UNa^+ at baseline

Outcome	Exposure	SHR	95%CI		*P*
* HF-related mortality	UNa^+ at baseline	0.49	0.29	0.83	.008
* CV mortality	UNa^+ at baseline	0.59	0.32	1.08	.087

* Model covariates: age, sex, randomization variable, prior admission for acute heart failure, ischemic heart disease, systolic blood pressure, glomerular filtration rate, blood urea nitrogen, N-terminal pro-brain natriuretic peptide, and furosemide equivalent dose prior to randomization (mg/24 h). These competing risk regression analyses used the standard error adjustment (also called the Huber/White/sandwich estimator) to account for any clustering effects of patients within centers. CI, confidence interval; CV, cardiovascular; HF, heart failure; SHR, subdistribution hazard ratio; UNa^+, urinary sodium.