

Supplementary material

Elias C, Oliveira D, Soares-Carreira M, et al. The ratio of furosemide dosage to urinary sodium concentration predicts mortality in patients with chronic stable heart failure. *Pol Arch Intern Med.* 2021; 131: 16083. doi:10.20452/pamw.16083

Please note that the journal is not responsible for the scientific accuracy or functionality of any supplementary material submitted by the authors. Any queries (except missing content) should be directed to the corresponding author of the article.

Table S1 Predictors of 5-year all-cause mortality: univariate Cox-regression analysis

	HR (95% CI)	P value
Male gender	1.02 (0.70-1.48)	0.92
Age (per 10 years)	1.61 (1.39-1.86)	<0.001
Arterial hypertension history	1.41 (0.98-2.03)	0.06
Diabetes mellitus	1.39 (0.99-1.96)	0.06
Severe left ventricular systolic dysfunction	1.16 (0.82-1.64)	0.40
Ischaemic HF	2.29 (1.62-3.24)	<0.001
NYHA class\geqII	2.82 (1.80-4.42)	<0.001
Systolic blood pressure (per 10mmHg)	0.93 (0.85-1.01)	0.10
Haemoglobin (per 1 g/dL)	0.86 (0.79-0.94)	0.001
Creatinine (per 1 mg/dL)	3.16 (2.26-4.42)	<0.001
Serum sodium (per 10 mEq/L)	0.65 (0.36-1.19)	0.17
B-type natriuretic peptide (per 100pg/mL)	1.05 (1.03-1.07)	<0.001
Beta blocker (per 6.25mg carvedilol equivalent)	0.92 (0.86-0.98)	0.01

ACEiorARB (per 5mg lisinopril equivalent)	0.75 (0.66-0.84)	<0.001
MRA (per 12.5mg spironolactone)	1.03 (0.86-1.23)	0.77
Furosemide (per 40mg pill)	1.43 (1.32-1.55)	<0.001
Furosemide\geq80mg/day	3.20 (2.20-4.66)	<0.001
UNa (per 10mEq/L)	0.85 (0.80-0.90)	<0.001
UNa\leq80mEq/L	2.82 (1.99-4.00)	<0.001
24h Una (per 20mEq)	0.87 (0.83-0.92)	<0.001
Furosemide:UNa ratio	1.24 (1.17-1.31)	<0.001
Furosemide:UNa ratio\geq0.8	3.93 (2.61-5.90)	<0.001
UNa\geq80mEq/L and furosemide$<$80mg/day (reference category)	1	
Remaining patients	2.13 (2.19-3.51)	<0.001
UNa$<$80mEq/L and furosemide\geq80mg/day	6.70 (4.12-10.89)	<0.01

ACEi: angiotensin converting enzyme inhibitors, ARB: Angiotensin receptor blockers; HF:

Heart Failure; MRA: mineralocorticoid receptor antagonists; NYHA: New York Heart

Association; SBP: systolic blood pressure; UNa: urinary sodium

Table S2 Association of furosemide:UNa ratio with 5-year mortality: multivariate Cox-regression analysis

	HR (95% CI)	P value
Furosemide:UNa ratio\geq0.8	2.85 (1.78-4.58)	<0.001
Age (per 10 years)	1.44 (1.20-1.72)	<0.001

B-type natriuretic peptide (per 100pg/mL)	1.02 (1.00-1.04)	0.03
ACEiorARB (per 5mg lisinopril equivalent)	0.83 (0.72-0.94)	0.005
Beta blocker (per 6.25mg carvedilol equivalent)	1.01 (0.94-1.10)	0.72
Arterial hypertension history	0.82 (0.52-1.27)	0.37
Diabetes <i>mellitus</i>	0.97 (0.66-1.42)	0.88
Ischaemic HF	1.40 (0.94-2.10)	0.10
NYHA class\geqII	1.16 (0.89-1.96)	0.57
Systolic blood pressure (per 10mmHg)	1.03 (0.93-1.13)	0.59
Haemoglobin (per 1 g/dL)	1.02 (0.91-1.30)	0.77
Creatinine (per 1 mg/dL)	1.47 (0.97-2.34)	0.07
Serum sodium (per 10 mEq/L)	0.48 (0.28-0.85)	0.01

ACEi: angiotensin converting enzyme inhibitors, ARB: Angiotensin receptor blockers; HF:

Heart Failure; MRA: mineralocorticoid receptor antagonists; NYHA: New York Heart

Association; SBP: systolic blood pressure; UNa: urinary sodium

Table S3 Cross-classification according to daily furosemide dose and urinary sodium

excretion and 5-year mortality: multivariate Cox-regression analysis

	HR (95% CI)	P value
UNa\geq80mEq/L and furosemide$<$80mg/day (reference category)	1	
Remaining patients	1.47 (0.84-2.58)	0.18
UNa$<$80mEq/L and furosemide\geq80mg/day	4.15 (2.31-7.45)	$<$ 0.001

Age (per 10 years)	1.41 (1.18-1.69)	<0.001
B-type natriuretic peptide (per 100pg/mL)	1.03 (1.01-1.05)	0.01
ACEiorARB (per 5mg lisinopril equivalent)	0.82 (0.71-0.93)	0.003
Beta blocker (per 6.25mg carvedilol equivalent)	1.04 (0.97-1.13)	0.27
Arterial hypertension history	0.87 (0.56-1.35)	0.54
Diabetes <i>mellitus</i>	1.07 (0.73-1.56)	0.74
Ischaemic HF	1.41 (0.94-2.12)	0.10
NYHA class\geqII	1.27 (0.77-2.09)	0.36
Systolic blood pressure (per 10mmHg)	1.08 (0.98-1.19)	0.15
Haemoglobin (per 1 g/dL)	1.03 (0.93-1.15)	0.56
Creatinine (per 1 mg/dL)	1.46 (0.98-2.20)	0.06
Serum sodium (per 10 mEq/L)	0.64 (0.36-1.11)	0.11

ACEi: angiotensin converting enzyme inhibitors, ARB: Angiotensin receptor blockers; HF:

Heart Failure; MRA: mineralocorticoid receptor antagonists; NYHA: New York Heart

Association; SBP: systolic blood pressure; UNa: urinary sodium