

Association between type-2 diabetes mellitus and post-discharge outcomes in heart failure patients: findings from the RICA registry

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PURPOSE

Heart failure (HF) and diabetes are common clinical conditions that usually coexist. The main objective was to analyze the impact of type-2 diabetes mellitus (T2DM) on prognosis in hospitalized patients with HF.

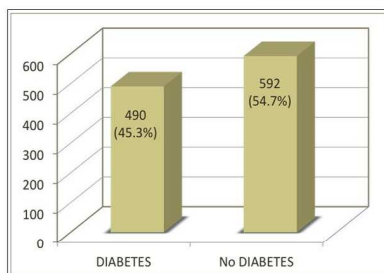
METHODS



- We evaluated the association between T2DM with all-cause mortality and readmissions in the RICA registry.
- This is a multi-center and prospective Spanish cohort study that includes patients admitted for decompensated HF.
- Study endpoint was all-cause mortality and hospital readmission.
- We determined the adjusted hazard ratio (HR) by multivariable Cox regression model.

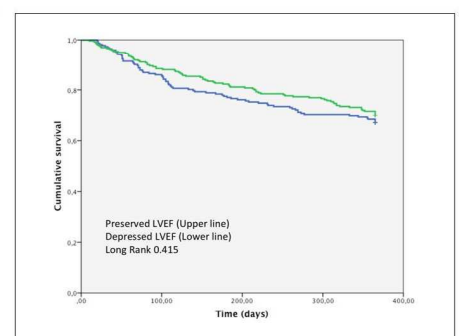
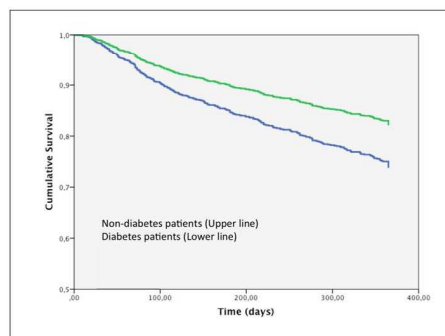
RESULTS

• RICA Registry: Patients: 1082; Mean age 77 (\pm 8.5); Diabetics 490 (45,3%)



During one year follow-up:

- 287 patients died (151 diabetic).
- 383 patients were readmitted (197 diabetic).



Preserved LVEF (EF > 50%)

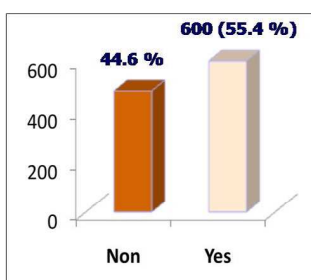


Table 2: Predictors of all-cause mortality at 1-year follow-up

N=1058	Univariate Analysis			Multivariable Analysis		
	HR	Confident Interval	p-value	HR	Confident Interval	p-value
Type-2 diabetes	1.49	1.19-1.87	<0.001	1.54	1.20-1.97	0.001
Age	1.04	1.03-1.06	<0.001	1.03	1.01-1.05	<0.001
Dementia	2.04	1.41-2.96	<0.001	1.58	1.06-2.35	0.024
PVD	1.58	1.19-2.11	<0.001	1.52	1.12-2.06	0.007
NYHA	1.88	1.59-2.32	<0.001	1.72	1.42-2.06	<0.001
GFR<60 ml/min/1.73 m ²	1.86	1.45-2.39	<0.001	1.36	1.04-1.79	0.024
Na ⁺ < 135 mEq/l	1.50	1.23-2.00	0.004	1.35	1.01-1.82	0.046
BMI	0.93	0.91-0.95	<0.001	0.93	0.91-0.95	<0.001
Anemia	1.66	1.31-2.10	<0.001	1.36	1.05-1.76	0.019
Previous stroke	1.45	1.08-1.95	0.013			NS
Treatments						
Beta-blockers	0.57	0.46-0.72	<0.001	0.63	0.49-0.79	<0.001
ACEI/ARB	0.46	0.36-0.60	<0.001	0.55	0.42-0.73	<0.001

CONCLUSION

T2DM is very common in patients hospitalized for HF. This condition was associated with a 50% increase in the risk of adverse outcome irrespective of ejection fraction.

Different diabetic strategies did not appear to influence post-discharge outcomes in this population.