## **Supplementary Materials:**

**Table S1.** Procedures during baseline assessment and follow-up (6, 12, 18 months after hospital discharge):

Procedures:	Timeline:	Description of Procedures:						
Clinical characteristics	Baseline	Age, sex, race, cardiovascular risk factors, prior cardiovascular events (coronary artery disease, peripheral artery disease, cerebrovascular disease), history of heart failure, duration of type 2 diabetes, history of retinopathy, history of kidney chronic disease, cardiovascular therapies, diagnosis at cardiology discharge.						
Anthropometric parameters	Baseline and follow- up	Weight, height, body mass index $^{\Phi}$ .						
Blood pressure	Baseline and follow- up	Systolic and diastolic blood pressure.						
Laboratory tests	Baseline and follow- up	Blood plasma (fasting plasma glucose (FPG), urea, creatinine, sodium, potassium, estimated glomerular filtration rate (eGFR) <sup>(P)</sup> Urine (albuminuria)						
Glycemic Profile	Baseline and follow- up	FPG, Glycated hemoglobin (%), glucose-lowering therapies.						
Adherence to the GLA regimen	Follow-up	Discontinuation (yes/no) and reason of discontinuation						
Clinical outcomes	Follow-up	Death from any cause. Cardiovascular death. Cardiovascular readmission (hospitalization).						
Safety outcomes	Follow-up	≥40% decrease in basal eGFR <sup>o</sup> with <60 ml/min/1.73 m <sup>2</sup> , end-stage renal disease, or death from renal cause. Hospitalization for renal cause.						

 $^{\circ}$  The body-mass index is the weight in kilograms divided by the square of the height in meters.  $^{\phi}$  Estimated glomerular filtration rate (eGFR): calculated by means of the Chronic Kidney Disease Epidemiology Collaboration equation. eGFR: estimated glomerular filtration rate; FPG: fasting plasma glucose.

Table S2: Detailed list of patients who died in the propensity-score matched cohort during follow-up.

Age (Years)	Sex	Prior History	LVEF (%)	GLD Treatment	Study Group	Survival Free of Death (Days)	Type of Death	Cause of Death
81	М	Inferior MI	60	Metformin DPP4i	Non- SGLT-2i	223	CV: non-HF	ACS
86	М	Anterior MI, AF	60	Metformin	Non- SGLT-2i	31	CV: non-HF	Sudden death
74	F	Ischemic dilated	35		Non-	474	CV: HF	HF

		cardiomyopathy		Metformin DPP4i Insulin	SGLT-2i			
61	М	Anterior MI	45	Metformin GLP1a	Non- SGLT-2i	62	CV: HF	HF
70	М	Stable angina, COPD	60	Metformin	Non- SGLT-2i	18	CV non-HF	Acute pulmonary embolism
83	М	Stable angina, AF	60	Metformin	Non- SGLT-2i	42	CV non-HF	ACS
60	М	Inferior MI	45	Metformin	Non- SGLT-2i	169	Non CV	Colorectal cancer
83	F	Stable angina, COPD	60	Metformin	Non- SGLT-2i	103	Non CV	Pneumonia
83	F	Ischemic dilated cardiomyopathy	25	Metformin	Non- SGLT-2i	87	CV: HF	HF

ACS: acute coronary syndrome, AF: atrial fibrillation, COPD: chronic obstructive pulmonary disease, CV: cardiovascular; DPP4i: dipeptidyl peptidase 4 inhibitors, F: female, HF: heart failure, M: male, MI: myocardial infarction, SGLT2i: sodium-glucose cotransporter-2 inhibitors.

 Table S3: Efficacy clinical outcomes for patients in the propensity-score matched cohort by groups (SGLT-2 inhibitors/non-SGLT-2 inhibitors).

Efficacy Clinical Outcome	SGLT-2 Inhibitors (N=38)	Non-SGLT-2 Inhibitors (N=38)	<i>p</i> -Value	
Any cause of death	0	9 (24%)	0.001	
Cardiovascular death	0	7 (18%)	0.005	
Non heart failure	0	4 (11%)	0.04	
Heart failure	0	3 (8%)	0.077	
Re-admission (all causes)	9 (24%)	15 (39%)	0.09	
Cardiovascular Re-admission • Hospitalization for	7 (18%)	10 (26%)	0.349	
myocardial infarction or ischemic stroke	6 (16%)	6 (16%)	1	
Hospitalization for heart failure	1 (2%)	4 (11%)	0.358	
Re-admission for renal cause	0	2 (5%)	0.16	
Combined clinical outcome *	7 (18%)	16 (42%)	0.02	

\* Combined clinical outcome was defined as rate of death or readmission for cardiovascular cause. CV: cardiovascular; SGLT2: sodium-glucose cotransporter-2.

Efficacy Clinical Outcomes	SGLT-2 Inhibitors, Baseline	SGLT-2 Inhibitors, Follow-Up	<i>p</i> -Value	Non-SGLT-2 Inhibitors, Baseline	Non-SGLT-2 Inhibitors, Follow-Up	<i>p</i> -Value
eGFR (ml/min/1.73 m²)	77.343 (+/- 18.148)	77.455 (+/- 21.315)	0.253	71.886 (± 21.351)	63.966 (+/- 25.29)	0.028
Systolic blood pressure (mmHg)	124.8 (+/- 16.3)	126.05 (+/-15.3)	0.731	125.19 (+/- 13.7)	127.5 (+/-15.2)	0.954
Diastolic blood pressure (mmHg)	69.9 (+/- 8.9)	70.5 (+/- 9.2)	0.766	68.6 (+/-13.15)	72.1 (+/- 11.6)	0.221
Weight (kg)	81.68 (+/-13.1)	79.1 (+/-12.4)	0.001	77.43 (+/- 17.4)	77.9 (+/- 16.4)	0.369
Glycated hemoglobin (%)	7.79 (+/-1.59)	7.20 (+/-0.94)	0.1	7.29 (+/- 1.62)	7.20 (+/-1.51)	0.818

**Table S4:** Other clinical outcomes during follow up by groups (SGLT-2 inhibitors group and Non-SGLT-2 inhibitors group).

eGFR: estimated glomerular filtration rate; SGLT-2: sodium-glucose cotransporter-2.