

Supplementary Material

Supplementary Table 1. Description of LRTI

LRTI description	Empagliflozin N =320	Placebo N =379	Total
Pneumonia	185	218	403 (57.6%)
Atypical pneumonia	1	1	2 (0.3%)
Infectious pleural effusion	1	1	2 (0.3%)
Infective COPD exacerbation	0	1	1 (0.1%)
Non-specified LRTI	18	12	30 (4.3%)
Bronchitis	108	137	245 (35.1%)
Tracheobronchitis	7	9	16 (2.3%)

Legend: LRTI, lower respiratory tract infection; COPD, chronic obstructive pulmonary disease.

Supplementary Table 2. Comparison of patient's characteristics with and without COVID-19

Characteristic	No COVID-19 n =5689	COVID-19 n =299	P-value
Total N =5988			
Age, yr	71.9 ± 9.4	71.3 ± 9.5	0.27
Age >75 yr	2214 (38.9%)	103 (34.5%)	0.12
Women	2539 (44.6%)	137 (45.8%)	0.68
Hosp. prev. 12 mo	1913 (33.6%)	89 (29.8%)	0.17
Diabetes	2791 (49.1%)	147 (49.2%)	0.99
BMI, Kg/m ²	29.8 ± 5.9	31.1 ± 5.8	<0.001
SBP, mmHg	131.8 ± 15.6	132.9 ± 16.1	0.21
Heart rate, bpm	70.3 ± 11.9	70.1 ± 11.6	0.70
AFib/Flutter	1984 (34.9%)	96 (32.1%)	0.33
NYHA III/IV	1043 (18.3%)	58 (19.4%)	0.64
LVEF, %	54.3 ± 8.8	53.7 ± 8.5	0.24
eGFR, ml/min	60.8 ± 19.8	57.4 ± 19.5	0.004
eGFR <60 ml/min	2811 (49.4%)	177 (59.2%)	0.001
Hemoglobin, g/dL	13.7 ± 1.6	13.9 ± 1.5	0.17
Potassium, mmol/L	4.6 ± 0.5	4.6 ± 0.5	0.51
ACEi/ARB	4625 (81.3%)	251 (83.9%)	0.25
MRA	2164 (38.0%)	127 (42.5%)	0.12
Beta-blocker	4927 (86.6%)	262 (87.6%)	0.61
Loop diuretic	3904 (68.6%)	197 (65.9%)	0.32
Statin	3953 (69.5%)	221 (73.9%)	0.10
UACR, mg/g	21 (8-72)	18 (6-68)	0.23
NTproBNP, pg/mL	979 (502-1730)	912 (461-1752)	0.32

Legend: BMI, body mass index; SBP, systolic blood pressure; AFib, atrial fibrillation; LVEF, left ventricular ejection fraction; eGFR, estimated glomerular filtration rate; ACEi/ARB, angiotensin converting enzyme inhibitor/angiotensin receptor blocker; MRA, mineralocorticoid receptor antagonist; UACR, urinary albumin-to-creatinine ratio. Categories with less than 10 patients were not presented.

Supplementary Table 3. Mortality risk after COVID-19

Outcome	No COVID-19	COVID-19	HR (95%CI)	P-value
ACM	782/5689 (13.8%)	67/299 (22.4%)	1.59 (1.24-2.04)	<0.001

Legend: ACM, all-cause mortality.

Notes: Of the 67 patients who had a COVID-19 and died, 64 (95.5%) died within 3 months after COVID-19.

Supplementary Table 4. Effect of empagliflozin on incident COVID-19

Event	Empagliflozin	Placebo	HR (95%CI)	P-value
COVID-19	143/2997 (4.8%)	156/2991 (5.2%)	0.91 (0.73-1.14)	0.43
Total COVID-19*	176/2997	182/2991	0.96 (0.75-1.23)	0.77

*Negative binomial model results expressed as incidence rate ratio.

Event-rate per 100 person-years =2.2, 95%CI 1.9-2.6 in empagliflozin group and =2.4, 95%CI 2.0-2.8 in placebo group.

Median follow-up time to COVID-19 =814 (575-1020) days.