

Supplemental Material

Appendix S1. ISIC Investigators

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Table S1. Participating centers and number of patients included in the substudy.

Institution	Number of patients included
University of Michigan in Ann Arbor, MI USA	1608
Rush University, Chicago, IL USA	105
University of Copenhagen at Hvidovre, Denmark	89
Attikon University Hospital in Athens, Greece	90
University Hospital of Dusseldorf, Germany	27
University of Thessaly, Greece	29
Charite de Berlin, Germany	78
University Hospital of Cologne, Germany	18
Total	2044

Table S2. In-hospital ACEi/ARB use and risk of death, need for mechanical ventilation, and need for renal replacement therapy in overall cohort (N=2,044).

	Death		Need for Mechanical Ventilation		Need for Renal Replacement Therapy	
	OR (95% CI)	P-value	OR (95% CI)	P-value	OR (95% CI)	P-value
Model 0	0.57 (0.41, 0.81)	0.002	0.75 (0.59, 0.96)	0.024	0.63 (0.42, 0.96)	0.03
Model 1	0.44 (0.30, 0.63)	<0.001	0.66 (0.50, 0.87)	0.003	0.64 (0.48, 0.87)	0.004
Model 2	0.45 (0.31, 0.66)	<0.001	0.67 (0.51, 0.88)	0.005	0.54 (0.34, 0.87)	0.012

Model 0: Unadjusted

Model 1: age, sex, race, BMI, diabetes mellitus, hypertension, coronary artery disease, congestive heart failure, admission GFR, and institution

Model 2: Model 1 + baseline mean arterial pressure

Overall cohort including patients taking an ACEi/ARB prior to hospitalization but were discontinued during hospitalization and those in whom an ACEi/ARB was initiated during hospitalization.

Figure S1. Study sample flow chart.

