

## Supplementary, Acute kidney injury and risk of cardiovascular outcomes

	Total cohort		Subcohort with proteinuria measurements	
	No AKI	AKI	No AKI	AKI
Patient admissions	525,487	39,569	221,068	18,750
Males (%)	242,481 (46.1)	19,976 (50.5)	107,874 (48.8)	9,964 (53.1)
Age (mean(SD))	71.8 (11.5)	74.7 (11.0)	72.6 (10.9)	74.4 (10.5)
eGFR [ml/min/1.73 m <sup>2</sup> ] (%)				
90+	135,212 (25.7)	8,800 (22.2)	50,650 (22.9)	3,637 (19.4)
60-89	273,455 (52.0)	17,368 (43.9)	113,527 (51.4)	8,065 (43.0)
30-59	105,120 (20.0)	11,345 (28.7)	50,351 (22.8)	5,809 (31.0)
15-29	11,700 (2.2)	2,056 (5.2)	6,540 (3.0)	1,239 (6.6)
Hypertension (%)	188,704 (35.9)	19,112 (48.3)	98,641 (44.6)	10,466 (55.8)
Diabetes (%)	85,308 (16.2)	9,811 (24.8)	62,933 (28.5)	7,235 (38.6)
CVD (%)	143,037 (27.2)	12,915 (32.6)	69,042 (31.2)	6,458 (34.4)
Ischemic heart disease (%)	38,691 (7.4)	2,934 (7.4)	19,693 (8.9)	1,593 (8.5)
Heart failure (%)	20,726 (3.9)	2,923 (7.4)	10,409 (4.7)	1,523 (8.1)
Stroke (%)	29,644 (5.6)	2,330 (5.9)	14,458 (6.5)	1,152 (6.1)
Atrial fibrillation/flutter (%)	50,388 (9.6)	4,907 (12.4)	24,240 (11.0)	2,448 (13.1)
COPD (%)	34,351 (6.5)	3,007 (7.6)	14,464 (6.5)	1,384 (7.4)
Cancer (%)	10,730 (2.0)	1,223 (3.1)	4,221 (1.9)	534 (2.8)
Liver disease (%)	751,71 (14.3)	6,278 (15.9)	28,204 (12.8)	2,690 (14.3)
Proteinuria (%)				
no	163,104 (31.0)	10,598 (26.8)	163,104 (73.8)	10,598 (56.5)
yes	57,964 (11.0)	8,152 (20.6)	57,964 (26.2)	8,152 (43.5)
unknown	304,419 (57.9)	20,819 (52.6)	0 (0.0)	0 (0.0)
Cholesterol (%)				
< 5 mmol/l	257,162 (48.9)	22,102 (55.9)	132,284 (59.8)	12,374 (66.0)
=> 5 mmol/l	197,210 (37.5)	12,006 (30.3)	78,222 (35.4)	5,522 (29.5)
unknown	71,115 (13.5)	5,461 (13.8)	10,562 (4.8)	854 (4.6)

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Anti-lipids	184,890 (35.2)	15,593 (39.4)	97,904 (44.3)	9,017 (48.1)
Loop diuretics (%)	79,890 (15.2)	11,690 (29.5)	37,509 (17.0)	5,763 (30.7)
Non-loop diuretics (%)	143,004 (27.2)	14,424 (36.5)	70,100 (31.7)	7,446 (39.7)
Calcium channel blockers (%)	113,552 (21.6)	10,318 (26.1)	59,267 (26.8)	5,786 (30.9)
Betablockers (%)	112,694 (21.4)	11,110 (28.1)	55,337 (25.0)	5,910 (31.5)
RASi (%)	200,459 (38.1)	20,416 (51.6)	107,329 (48.6)	11,361 (60.6)
Acetylsalicylic acid (%)	2330 (0.4)	170 (0.4)	879 (0.4)	69 (0.4)
NSAID (%)	87,859 (16.7)	6,754 (17.1)	36,159 (16.4)	3,080 (16.4)
Admission number (%)				
1	368,737 (70.2)	26,446 (66.8)	136,654 (61.8)	11,236 (59.9)
2	110,146 (21.0)	9,123 (23.1)	56,669 (25.6)	4,995 (26.6)
3-5	46,604 (8.9)	4,000 (10.1)	27,745 (12.6)	2,519 (13.4)
Speciality (%)				
medical	305,118 (58.1)	235,02 (59.4)	135,787 (61.4)	11,863 (63.3)
surgical	183,132 (34.8)	124,19 (31.4)	73,258 (33.1)	5,492 (29.3)
other	37,237 (7.1)	3,648 (9.2)	12,023 (5.4)	1,395 (7.4)
Length of stay (days) median[IQR]	2.0 [1.0, 5.0]	7.0 [3.0, 13.0]	2.0 [1.0, 5.0]	7.0 [3.0, 13.0]

Table S1. Baseline characteristics of hospitalized adult patients stratified by AKI of total cohort and subcohort with proteinuria measurements. (AKI, acute kidney injury; COPD, chronic obstructive pulmonary disease; eGFR, estimated glomerular filtration rate; IQR, interquartile range; NSAID, non-steroidal anti-inflammatory drug; RASi, Renin-angiotensin-aldosterone-receptor-system inhibitor; SD, standard deviation).

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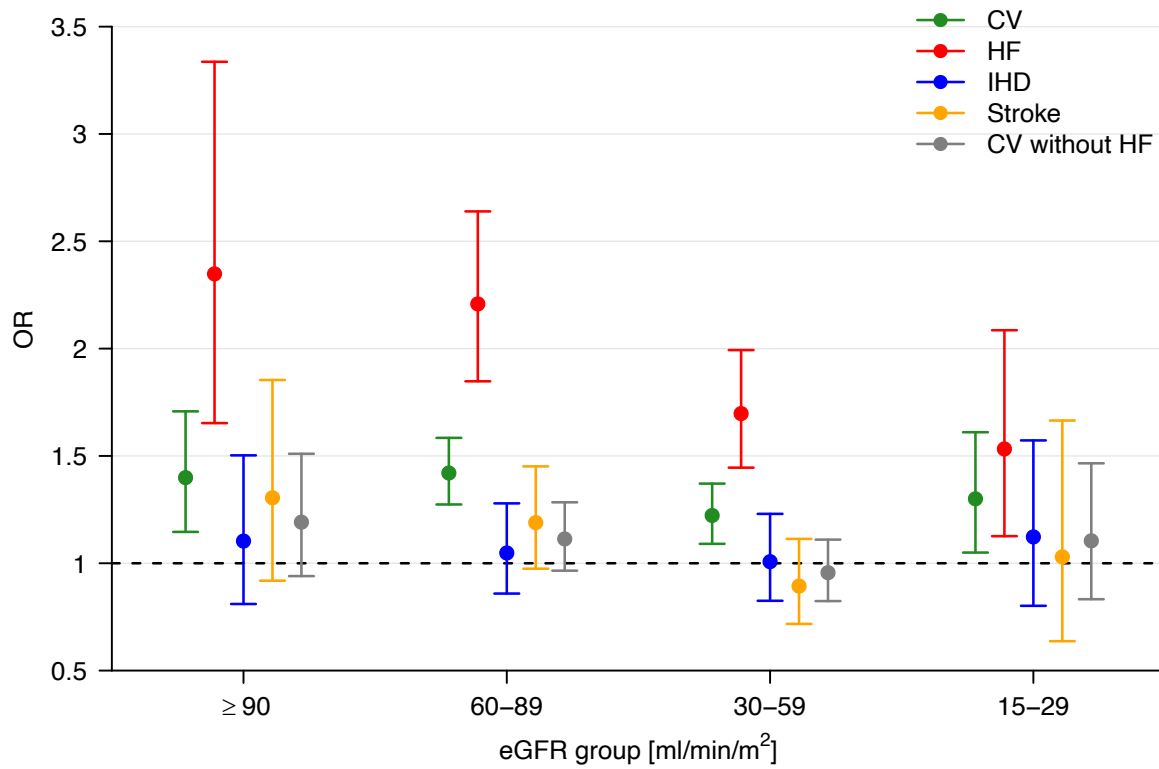


Figure S1. Adjustment for proteinuria. Plot shows one-year adjusted odds ratios of cardiovascular event/death, individual diagnosis of cardiovascular and cardiovascular without HF with 95% CI for AKI vs. no AKI in different intervals of baseline eGFR in the subcohort adjusted for proteinuria. (AKI, acute kidney injury; eGFR, estimated glomerular filtration rate; CV, cardiovascular; HF, heart failure; IHD, ischemic heart disease).

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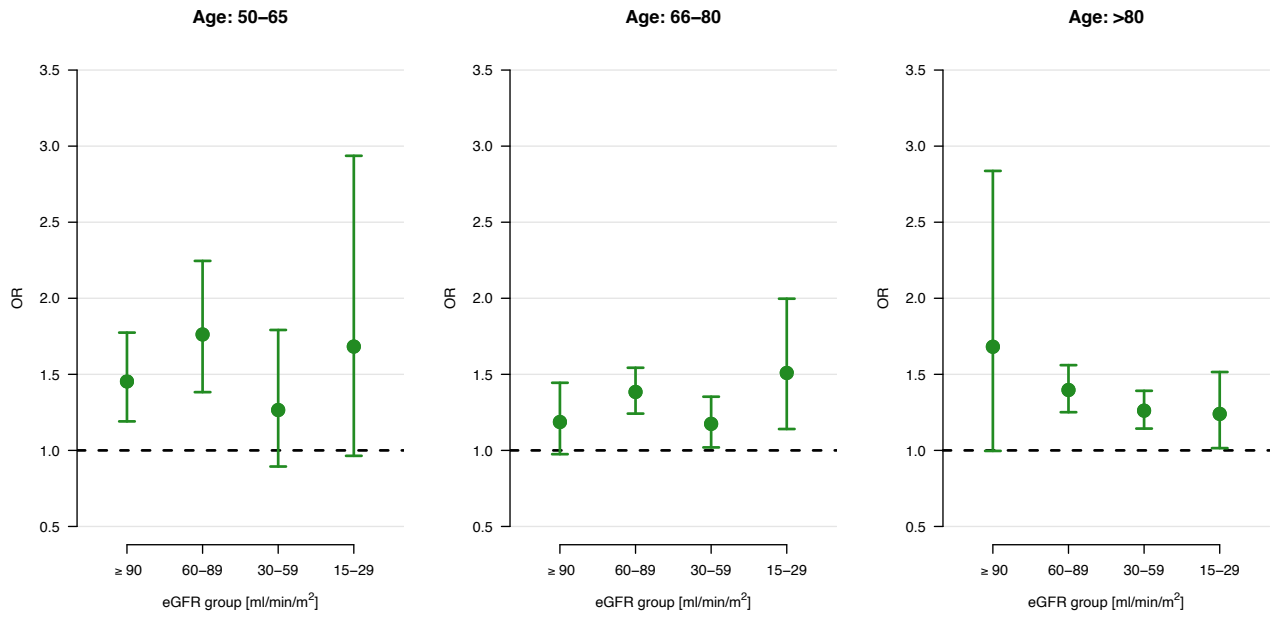


Figure S2. One-year adjusted odds ratios of cardiovascular event/death with 95% CI for AKI vs. no AKI in different intervals of eGFR in different age intervals. (AKI, acute kidney injury; eGFR, estimated glomerular filtration rate; CV, cardiovascular).

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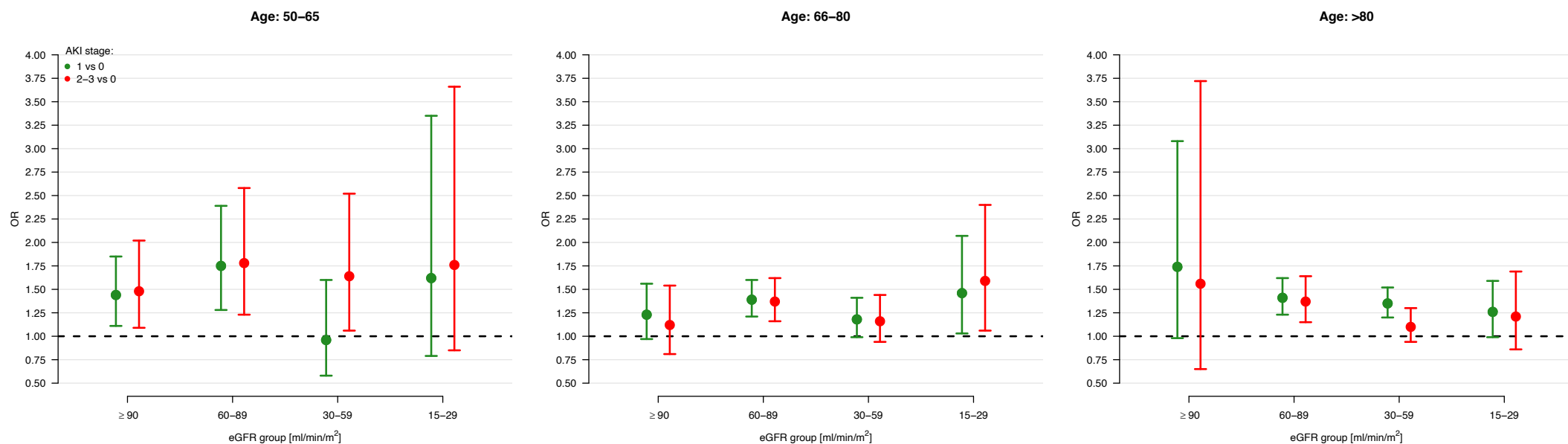


Figure S3. Strata of AKI-stages. Plots show one-year adjusted odds ratios of cardiovascular event/death with 95% CI for no AKI vs. AKI stage 1 and stage 2-3, respectively, at different intervals of eGFR in different age intervals. (AKI, acute kidney injury; eGFR, estimated glomerular filtration rate).

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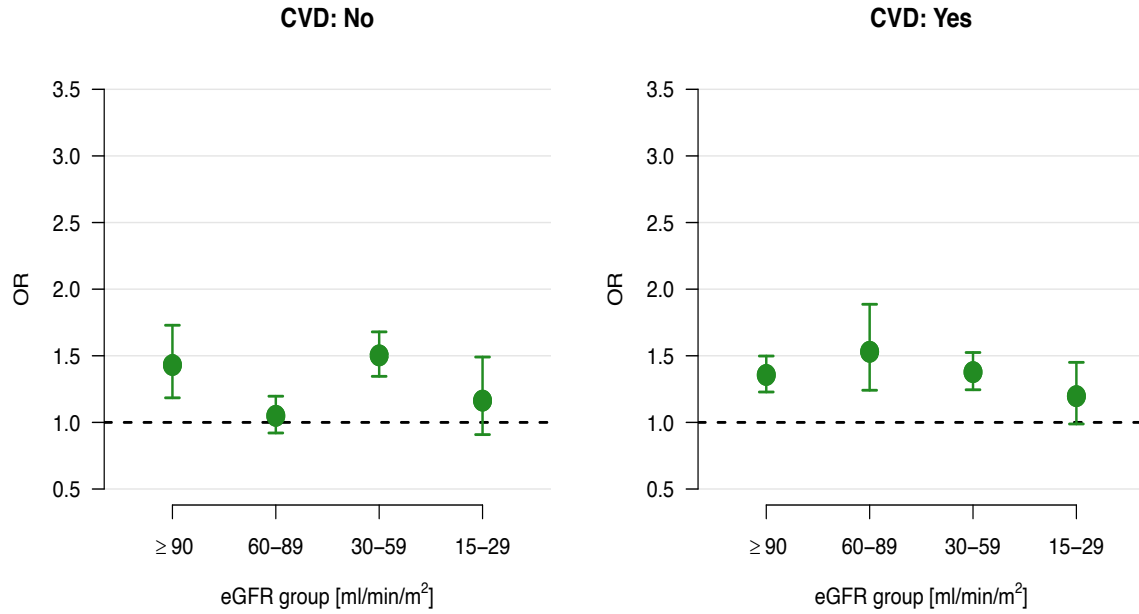


Figure S4. Interaction plot of prior cardiovascular disease. Plots show one-year adjusted odds ratios of cardiovascular event/death with 95% CI for AKI vs. no AKI in patients with or without prior cardiovascular disease in different intervals of eGFR. (AKI, acute kidney injury; CV, cardiovascular; eGFR, estimated glomerular filtration rate).

eGFR-level [ml/min/1.73m <sup>2</sup> ]	Odds ratio	Lower CI	Upper CI
≥ 90	2.12	1.39	3.24
60-89	3.16	1.64	6.08
30-59	3.63	1.85	7.15
15-29	6.13	1.39	27.12

Table S2. Sensitivity analysis of age group 18-49 years (not part of main study population). Results show one-year adjusted odds ratios of cardiovascular event/death with 95% CI for AKI vs. no AKI. (AKI, acute kidney injury; eGFR, estimated glomerular filtration rate).

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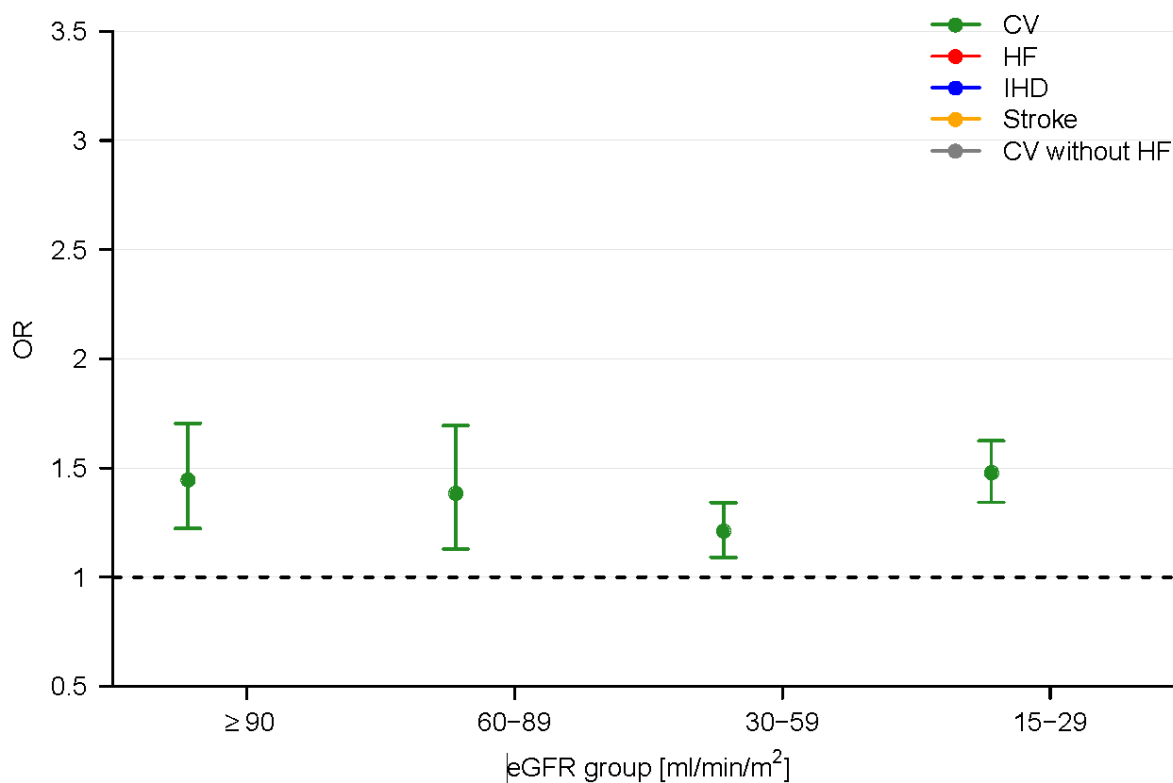


Figure S5. Sensitivity analysis of first-time admissions only. Plot show one-year adjusted odds ratios of cardiovascular event/death with 95% CI for AKI vs. no AKI in different intervals of eGFR. (AKI, acute kidney injury; CV, cardiovascular; eGFR, estimated glomerular filtration rate).

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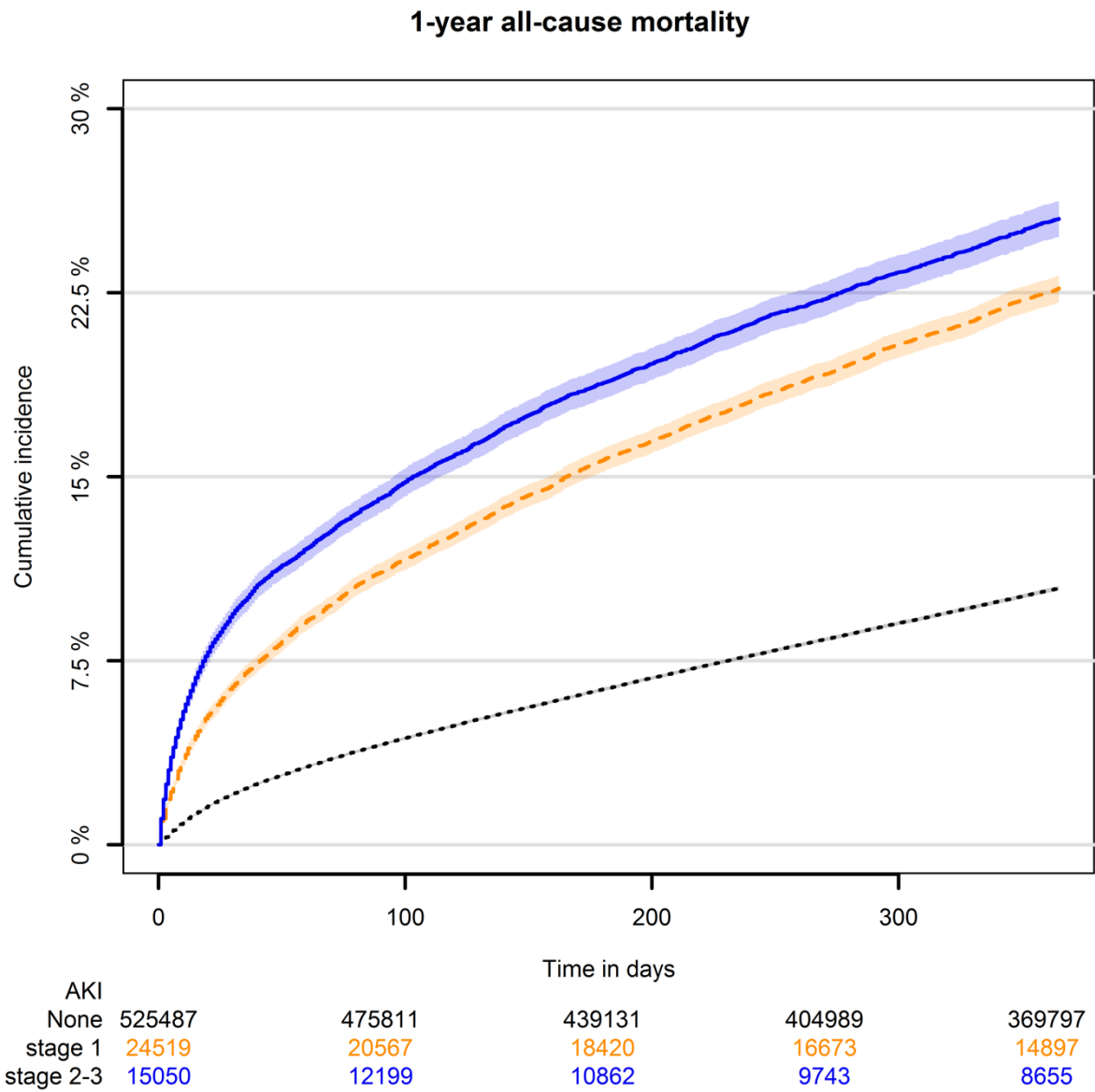


Figure S6. One-year cumulative incidence of all-cause mortality, stratified by AKI-stages, in discharged patients (AKI, acute kidney injury).



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Drug	ATC codes
ACE-inhibitors	C09AA
Acetylic acid	B01AC06, B01AC56, N02BA
Angiotensin-2 blockers	C09CA
Anti-diabetic agents	A10
Beta blockers	C07AA, C07AB
Calcium channel blockers	C08CA
Anti-hyperlipidemic agents	C10
Loop diuretics	C03EB
NSAID	M01A (except M01AX05)
Thiazides	C03A, C03B, C03EA

Table S3. Anatomical Therapeutic Chemical Classification System (ATC) codes.

Condition	ICD-10 codes	NCSP codes
Atrial fibrillation/flutter	DI48	
Cancer	DC00-41, DC45-96	
Chronic obstructive pulmonary disease	DJ44	
Diabetes melitus	DE1	
End stage renal disease	BJFD, DN185, DZ992	
Heart failure	DI42, DI50, DJ81	
Hypertention	DI10	
Ischemic heart disease	DI20-25	KFN
Liver disease	DB15-19, DC22, DD684C, DK70-77, DI982, DZ944	
Renal transplantation	DT816, DT817, DZ940	KKAS
Stroke	DI60-69, DG458, DG459	KAAL10, KAAL11

Table S4. 10th edition of the International Classification of Diseases (ICD-10) codes and Nordic Medico-Statistical Committee Classification of Surgical Procedures (NCSP) codes.