

Supplementary table 1. HA-AKI occurrence according the KDIGO CKD stages. Kidney disease improving global outcomes (KDIGO): KDIGO Stage 5-eGFR<15ml/min/1.73m²; KDIGO Stage 4-eGFR: 15-29ml/min/1.73m²; KDIGO Stage 3-eGFR: 30-59 ml/min/1.73m²; KDIGO Stage 2-eGFR: 60-89ml/min/1.73m²; KDIGO Stage 1-eGFR>90ml/min/1.73m². ORs were calculated with contingency tables using KDIGO-CKD stages 1+2 as reference.

CKD stages	No HA-AKI	HA-AKI	Odds Ratio (95%CI)
5	1558 (1.5)	1118 (13)	18.6 (17.1-20.2)
4	4311 (3.5)	1180 (14)	18.2 (16.5-20)
3	20842 (17.5)	2668 (31)	3.3 (3.1-3.5)
1+2	91119 (77)	3513 (41)	1

Supplementary table 2. ICD-10 diagnoses associated with HA-AKI

Occurrence indicates the number of times an ICD-10 diagnosis has been reported in the entire cohort (n=126.736 individuals). *P* value is calculated using the Fisher exact test with Bonferroni correction for multiple comparisons. Only the ICD10 codes associated with a *p* value < 3.3.10⁻⁵ are shown (n=251). OR is calculated as follow: in the whole population. [(ICD10+/ICD10-) in patients with HA-AKI] divided by [(ICD10+/ICD10-) in patients without HA-AKI].

Diagnosis	Name	<i>p</i> value	Occurrence	OR
I46	Cardiac Arrest	5E-330	1633	12.8
I50	Heart failure	5E-330	8858	4.8
J80	Adult respiratory distress syndrome	5E-330	1281	16.8
J96	Respiratory failure	5E-330	7672	6
N17	Acute kidney failure	5E-330	5568	15.9
N18	Chronic kidney disease	5E-330	8085	4.1
R40	Somnolence. stupor and coma	5E-330	1955	9
R57	Shock	5E-330	4777	14.4
Z48	Encounter for other postprocedural aftercare	5E-330	10734	3.4
Z99	Dependence on enabling machines and devices	5E-330	1800	9.1
J15	Bacterial pneumonia	4.44E-323	4081	5.3
Z09	Encounter for follow-up examination after completed treatment for conditions other than malignant neoplasm	4.81E-303	10460	0.1
B96	Other specified bacterial agents	4.83E-262	2871	5.6
A41	Other sepsis	1.43E-256	1948	7.1
I48	Atrial fibrillation	1.45E-249	9994	3
T81	Complications of procedures. not elsewhere classified	2.73E-174	2681	4.5
K72	Hepatic failure	3.43E-167	685	11.4
I25	Chronic ischemic heart disease	6.05E-166	14195	2.3
B95	Streptococcus and staphylococcus as the cause of diseases	1.25E-164	1552	6
I97	Post procedural disorders of the circulatory system	1.17E-149	937	8
R58	Hemorrhage. not elsewhere classified	2.23E-141	1031	7.1
D62	Acute post-hemorrhagic anemia	2.98E-137	1797	4.9
I21	Acute myocardial infarction	7.32E-127	2028	4.4
I67	Other cerebrovascular diseases	9.00E-127	5873	0.1
N99	Post-procedural disorders of the genitourinary system	1.15E-122	295	20.2
Z95	Presence of cardiac and vascular implants and grafts	1.66E-117	9247	2.3
I42	Dilated cardiomyopathy	1.29E-112	3365	3.2
Y95	Nosocomial condition	3.24E-112	512	10.3
Z49	Care involving dialysis	3.48E-111	386	13.2
G93	Other disorders of the brain	1.37E-110	520	10
J95	Post-procedural respiratory disorders	4.98E-108	791	7.1
R34	Anuria/Oliguria	1.90E-94	360	12
I71	Dissection of aorta	9.91E-85	3295	2.9
E87	Hyperosmolality and hypernatremia	5.07E-84	4133	2.6
Z82	Family history of certain disabilities and chronic diseases (leading to disablement)	2.44E-80	5419	0.2
D69	Purpura and other hemorrhagic conditions	1.38E-78	1013	4.9
Z13	Encounter for screening for other diseases and disorders	1.27E-76	3104	0.1

J18	Bronchopneumonia	2.63E-75	1886	3.4
E10	Type 1 diabetes mellitus with ketoacidosis without coma	4.99E-75	2419	3.1
C64	Malignant neoplasm of kidney. except renal pelvis	8.27E-72	824	5.2
I35	Nonrheumatic aortic valve disorders	8.55E-70	3618	2.6
J69	Pneumonitis due to solids and liquids	2.47E-69	918	4.8
I31	Other diseases of pericardium	5.06E-68	939	4.7
M62	Separation of muscle	4.01E-66	1231	4
K65	Peritonitis	7.51E-66	738	5.3
R41	Other symptoms and signs involving cognitive functions and awareness	8.67E-63	1096	4.1
K55	Vascular disorders of intestine	6.48E-61	717	5.1
Z56	Problems related to employment and unemployment	1.26E-57	1957	0.1
J81	Complications of procedures	2.19E-53	205	11.7
J90	Pleural effusion. not elsewhere classified	6.39E-51	1466	3.2
I49	Other cardiac arrhythmias	1.16E-50	1906	2.9
E78	Pure hypercholesterolemia	2.63E-50	25458	0.6
R26	Abnormalities of gait and mobility	4.10E-49	2088	2.7
K92	Hematemesis	7.71E-49	1520	3.1
D65	Disseminated intravascular coagulation	1.10E-48	217	10.2
Z86	Personal history of certain other diseases	1.59E-45	5743	0.4
R39	Other symptoms and signs involving the urinary system	4.17E-45	205	10
I70	Atherosclerosis	3.62E-43	13464	0.6
Z94	Transplanted organ and tissue status	4.72E-42	1432	3
I44	Atrioventricular block	6.95E-42	1756	2.7
I34	Nonrheumatic mitral valve disorders	2.33E-41	2072	2.5
A40	Streptococcal sepsis	5.83E-41	277	7.2
L89	Pressure ulcer	2.83E-40	1036	3.3
Z29	Encounter for other prophylactic measures	6.52E-40	2476	2.4
R73	Elevated blood glucose level	8.44E-40	1702	0.1
T88	Other complications of surgical and medical care	1.11E-39	791	3.8
T82	Complications of cardiac and vascular prosthetic devices. implants and grafts	2.39E-38	1137	3.1
R65	Systemic Inflammatory Response Syndrome	7.27E-38	441	5
Z71	Persons encountering health services for other counseling and medical advice	3.64E-37	2720	0.2
I33	Endocarditis	1.49E-36	406	5.2
E43	Unspecified severe protein-calorie malnutrition	2.79E-36	2080	2.4
R07	Pain in throat and chest	9.19E-34	5073	0.4
E14	Nondiabetic hypoglycemic coma	2.19E-33	2793	2.1
I47	Ventricular arrhythmia	8.22E-33	1712	2.5
K56	Ileus	4.51E-32	1530	2.6
S72	Fracture of femur	1.27E-31	2025	2.3
J13	Pneumonia due to Streptococcus pneumoniae	2.14E-31	416	4.6
S36	Injury of intra-abdominal organs	2.71E-31	621	3.7
Z92	Personal history of medical treatment	2.69E-30	11651	1.5
N30	Cystitis	5.50E-29	488	4.1
R45	Symptoms and signs involving emotional state	6.16E-29	364	4.8
I74	Embolus of abdominal aorta	2.13E-27	1928	2.2
I13	Hyp hrt & chr kdny dis w hrt fail and stg 1-4/unsp chr kdny	3.32E-27	1334	2.5
S27	Injury of other and unspecified intrathoracic organs	7.94E-27	1182	2.6

I08	Multiple valves disease	8.25E-27	424	4.2
K26	Duodenal ulcer	4.14E-26	373	4.4
J85	Abscess of lung and mediastinum	4.80E-25	245	5.5
B23	Imaging > Heart > Magnetic Resonance Imaging (MRI)	1.45E-24	1231	0.1
K25	Acute gastric ulcer	1.66E-24	684	3.2
J98	Other respiratory disorders	5.24E-24	607	3.3
T79	Certain early complications of trauma. not elsewhere classified	7.34E-24	290	4.8
I36	Nonrheumatic tricuspid valve disorders	1.25E-23	418	3.9
Z04	Encounter for examination and observation for other reasons	2.86E-23	1957	0.3
S35	Injury of blood vessels at abdomen. lower back and pelvis level	4.22E-23	138	7.7
I63	Cerebral infarction	7.84E-23	912	2.7
R33	Retention of urine	1.14E-22	1094	2.5
B37	Candidiasis	1.62E-22	297	4.6
Y83	Txplt of whole organ cause abn react/compl. w/o misadvnt	1.61E-21	407	3.8
J14	Pneumonia due to Haemophilus influenzae	2.75E-21	226	5.2
E26	Hyperaldosteronism	1.07E-20	1180	0.2
T68	Hypothermia	5.83E-20	87	9.9
R93	Abnormal findings on diagnostic imaging of other body structures	2.71E-19	853	0.1
I10	Essential (primary) hypertension	3.36E-19	34103	1.2
S32	Fracture of lumbar spine and pelvis	1.22E-18	962	2.4
E86	Dehydration	1.36E-18	633	2.9
R68	Other general symptoms and signs	1.42E-18	79	10.1
N39	Other disorders of urinary system	5.62E-18	1229	2.2
R56	Convulsions	6.74E-18	338	3.7
Z74	Problems related to care provider dependency	1.88E-17	1284	2.2
R18	Ascites	2.89E-17	596	2.8
I27	Other pulmonary heart diseases	3.41E-17	859	2.5
J44	Chronic obstructive pulmon disease	3.69E-17	2337	1.8
C90	Multiple myeloma not having achieved remission	4.33E-17	294	3.9
I20	Unstable angina	4.82E-17	4669	1.6
F00		5.39E-17	1320	2.1
I51	Complications and ill-defined descriptions of heart disease	1.09E-16	439	3.2
E21	Hyperparathyroidism and other disorders of parathyroid gland	3.02E-16	1092	0.2
S37	Injury of urinary and pelvic organs	5.86E-16	270	3.9
E44	Moderate protein-calorie malnutrition	1.21E-15	1869	1.9
S06	Intracranial injury	1.38E-15	859	2.4
N10	Acute tubulo-interstitial nephritis	2.25E-15	1279	2.1
R94	Abnormal results of function studies	3.56E-15	585	0.1
N20	Calculus of kidney and ureter	7.06E-15	1747	0.4
F03	Unspecified dementia	9.48E-15	875	2.3
E04	Other nontoxic goiter	1.12E-14	1024	0.2
E66	Morbid (severe) obesity due to excess calories	1.27E-14	12203	0.7
R17	Unspecified jaundice	2.30E-14	252	3.8
I61	Nontraumatic intrcbl hemorrhage hemisphere. subcortical	2.53E-14	359	3.2
D35	Benign neoplasm of other and unspecified endocrine glands	2.90E-14	1002	0.2
G81	Flaccid hemiplegia affecting unspecified side	4.20E-14	557	2.7
N41	Inflammatory diseases of prostate	4.20E-14	768	2.4

N13	Obstructive and reflux uropathy	4.43E-14	558	2.7
D70	Agranulocytosis	8.64E-14	162	4.8
D61	Constitutional (pure) red blood cell aplasia	1.33E-13	380	3.1
F05	Delirium due to known physiological condition	2.53E-13	333	3.2
E83	Disorder of copper metabolism. unspecified	3.26E-13	1568	0.4
T86	Failure and rejection of transplanted organs and tissues	3.27E-13	120	5.5
G41	Status epilepticus	4.75E-13	192	4.2
J94	Chylous effusion	5.27E-13	231	3.8
E41	Nutritional marasmus	1.41E-12	801	2.2
S22	Fracture of rib(s). sternum and thoracic spine	1.99E-12	1015	2.1
I23	Certain current complications following acute myocardial infarction	2.21E-12	77	7.2
D64	Hereditary sideroblastic anemia	3.08E-12	1348	1.9
N19	Unspecified kidney failure	5.06E-12	138	4.8
Z43	Encounter for attention to artificial openings	1.04E-11	716	2.3
K70	Alcoholic liver disease	1.24E-11	769	2.2
A48	Other bacterial diseases. not elsewhere classified	1.58E-11	102	5.6
R99	Other ill-defined and unspecified causes of mortality	4.02E-11	99	5.5
Z51	Encounter for other aftercare and medical care	7.51E-11	6501	1.4
T65	Toxic effect of other and unspecified substance	9.37E-11	1365	1.8
R80	Proteinuria	1.15E-10	596	0.2
S26	Injury of heart	1.17E-10	90	5.7
M96	Post-procedural musculoskeletal disorders. not elsewhere classified	1.31E-10	84	5.9
R03	Abnormal blood-pressure reading. without diagnosis	1.33E-10	502	0.1
B34	Adenovirus infection. unspecified	1.94E-10	359	2.8
C61	Malignant neoplasm of prostate	2.10E-10	1468	1.8
N08	Glomerular disorders in diseases classified elsewhere	2.44E-10	747	2.1
M81	Osteoporosis without current pathological fracture	2.75E-10	753	0.2
G82	Paraplegia. unspecified	4.54E-10	268	3.1
T46	Poisoning by agents primarily affecting the cardiovascular system	5.33E-10	42	9.5
D50	Iron deficiency anemia secondary to blood loss (chronic)	5.37E-10	2184	1.6
Z83	Family history of other specific disorders	8.81E-10	590	0.2
A04	Enteropathogenic Escherichia coli infection	1.32E-09	330	2.7
R64	Cachexia	2.07E-09	438	2.4
E11	Type 2 diab w hyposm w/o nonket hyprgly-hypros coma (NKHHC)	2.12E-09	7756	1.3
Z45	Encounter for adjustment and management of implanted device	2.67E-09	1698	1.7
R98	Unattended death	2.94E-09	76	5.7
I24	Other acute ischemic heart diseases	3.01E-09	309	2.8
T45	Poisoning	4.31E-09	313	2.7
K85	IPancreatitis	4.51E-09	679	2.1
M72	Fibroblastic disorders	6.53E-09	79	5.4
I11	Hypertensive heart disease with heart failure	7.86E-09	3340	1.4
E84	Cystic fibrosis with pulmonary manifestations	8.51E-09	212	3.2
K66	Peritoneal adhesions	1.05E-08	188	3.3
C78	Secondary malignant neoplasm of unspecified lung	1.29E-08	3026	1.5
R04	Hemorrhage from respiratory passages	1.31E-08	938	1.9
J10	Influenza with pneumonia. seasonal influenza virus identified	1.43E-08	89	4.9
R00	Abnormalities of heart beat	1.43E-08	1599	0.5

R51	Headache	1.45E-08	482	0.2
D59	Drug-induced autoimmune hemolytic anemia	2.77E-08	145	3.7
K63	Other diseases of intestine	2.97E-08	795	1.9
Q61	Cystic kidney disease	4.03E-08	189	3.2
G97	Postprocedural disorders of nervous system. not elsewhere classified	4.46E-08	80	5
K91	Intraoperative and postprocedural complications and disorders of digestive system	4.66E-08	257	2.8
F99	Mental disorder. not otherwise specified	8.29E-08	56	6.1
Z93	Artificial opening status	9.34E-08	442	2.2
C65	Malignant neoplasm of renal pelvis	3.38E-07	31	8.9
D25	Leiomyoma of uterus	3.96E-07	452	0.2
S33	Dislocation. sprain and strain of joints and ligaments of lumbar spine	4.11E-07	37	7.6
N11	Chronic tubulo-interstitial nephritis	4.49E-07	308	2.5
F17	Nicotine dependence	4.66E-07	9595	0.8
R09	Other symptoms and signs involving the circulatory and respiratory system	5.29E-07	131	3.5
B24	Ultrasonography	5.43E-07	413	2.2
I73	Raynaud's syndrome	9.17E-07	613	0.3
Z46	Encounter for fitting and adjustment of other devices	1.02E-06	95	4
I05	Rheumatic mitral stenosis	1.10E-06	526	2
G20	Parkinson's disease	1.11E-06	453	2.1
S25	Injury of blood vessels of thorax	1.15E-06	88	4.1
J41	Chronic bronchitis	1.16E-06	454	2.1
D63	Anemia in neoplastic disease	1.26E-06	954	1.7
X70	Intentional self-harm by hanging, strangulation and suffocation	1.33E-06	19	12.6
R60	Edema	1.38E-06	463	2.1
I22	Subsequent myocardial infarction	1.39E-06	60	5.1
A49	Bacterial infection. unspecified	1.53E-06	182	2.9
Y69	Unspecified misadventure during surgical and medical care	1.55E-06	35	7.3
K35	Acute appendicitis	1.80E-06	782	0.4
K90	Intestinal malabsorption	2.62E-06	365	0.2
K81	Cholecystitis	3.08E-06	371	2.2
G31	Malignant neuroleptic syndrome	3.44E-06	425	2.1
C50	Malignant neoplasm of the breast	3.67E-06	1722	0.6
Y57	Other and unspecified drugs and medicaments	6.64E-06	46	5.5
K50	Crohn's disease	6.81E-06	548	0.3
I26	Pulmonary embolism	7.53E-06	2474	1.4
E85	Non-neuropathic hereditary familial amyloidosis	7.56E-06	107	3.4
H35	Unspecified background retinopathy	7.68E-06	1000	0.5
Z52	Donors of organs and tissues	8.68E-06	196	2.6
I60	Nontraumatic subarachnoid hemorrhage	9.19E-06	134	3.1
E05	Thyrotoxicosis with diffuse goiter without thyrotoxic crisis	9.27E-06	852	0.5
K76	Other diseases of liver	9.48E-06	293	2.3
R91	Abnormal findings on diagnostic imaging of lung	9.48E-06	566	0.4
T84	Complications of internal orthopedic prosthetic devices, implants and grafts	9.82E-06	306	2.2
R53	Malaise and fatigue	1.07E-05	4581	1.3
T80	Complications following infusion, transfusion and therapeutic injection	1.32E-05	128	3.1
L02	Cutaneous abscess of face	1.42E-05	480	1.9
S42	Fracture of shoulder and upper arm	1.45E-05	863	1.7

T83	Complications of genitourinary prosthetic devices, implants and grafts	1.58E-05	112	3.2
I82	Other venous embolism and thrombosis	1.63E-05	322	2.2
E13	Oth diab w hyprosm w/o nonket hyprgly-hypros coma (NKHHC)	1.71E-05	157	2.8
J86	Pyothorax	1.80E-05	233	2.4
C66	Malignant neoplasm of ureter	2.17E-05	58	4.5
D12	Benign neoplasm of cecum	2.19E-05	525	0.4
I06	Rheumatic aortic stenosis	2.30E-05	388	2
S12	Fracture of cervical vertebra and other parts of neck	2.38E-05	242	2.4
L98	Pyogenic granuloma	2.55E-05	74	3.9
C67	Malignant neoplasm of trigone of bladder	2.74E-05	808	1.7
J38	Paralysis of vocal cords and larynx	2.77E-05	307	2.2
Z63	Other problems related to primary support group	2.88E-05	497	0.3
S48	Traumatic amputation of shoulder and upper arm	3.08E-05	11	16.7
Q79	Congenital malformations of musculoskeletal system	3.15E-05	260	0.2
I07	Rheumatic tricuspid stenosis	3.24E-05	100	3.3
E79	Hyperuricemia w/o signs of inflam arthrit and tophaceous dis	3.71E-05	369	0.3
F01	Vascular dementia	4.28E-05	453	1.9
I85	Esophageal varices	4.47E-05	147	2.7
D46	Refractory anemia without ring sideroblasts. so stated	4.87E-05	274	2.2
E16	Drug-induced hypoglycemia without coma	6.62E-05	132	2.8
J91	Pleural effusion	7.12E-05	340	2
Z75	Problems related to medical facilities and other health care	8.97E-05	2207	1.4
Z03	Encounter for medical observation for suspected diseases and conditions ruled out	9.39E-05	868	0.5
N04	Nephrotic syndrome	9.45E-05	475	1.8
N28	Other disorders of kidney and ureter	9.67E-05	454	1.9
Y40	Dx and monitoring gen hosp/persnl-use devices assoc w incdt	9.99E-05	66	3.8

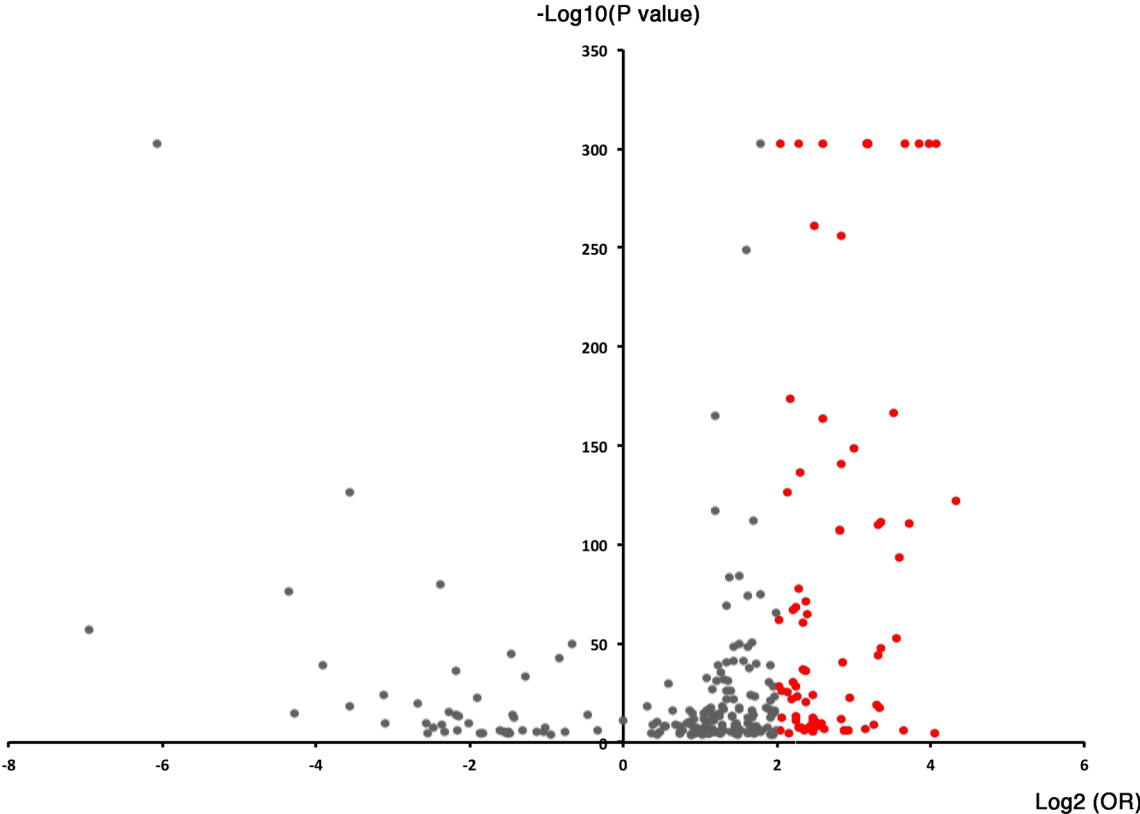
Supplementary table 3. ICD-10 diagnosis negatively associated with HA-AKI

Occurrence indicates the number of times an ICD-10 diagnosis has been reported in the entire cohort (n=126.736 individuals). OR is calculated as follow: in the whole population. [(ICD10+/ICD10-) in patients with HA-AKI] divided by [(ICD10+/ICD10-) in patients without HA-AKI]. P value is calculated using the Fisher exact test with Bonferroni correction for multiple comparisons. Only the diagnosis associated with a p value < $3.3 \cdot 10^{-5}$ and > 0.25 are shown.

ICD-10	Diagnosis	Occurrences	P Value	OR
Z09	Encounter for follow-up examination	10460	4.81E-303	0.01
I67	Other cerebrovascular diseases	5873	9.00E-127	0.08
Z82	Family history of certain disabilities and chronic diseases (leading to disablement)	5419	2.44E-80	0.19
Z13	Encounter for screening for other diseases and disorders	3104	1.27E-76	0.05
Z56	Problems related to employment and unemployment	1957	1.26E-57	0.01
R73	Elevated blood glucose level	1702	8.44E-40	0.07
Z71	Persons encountering health services for other counseling and medical advice	2720	3.64E-37	0.22
B23	Imaging > Heart > Magnetic Resonance Imaging (MRI)	1231	1.45E-24	0.12
E26	Hyperaldosteronism	1180	1.07E-20	0.16
R93	Abnormal findings on diagnostic imaging of other body structures	853	2.71E-19	0.08
E21	Hyperparathyroidism and other disorders of parathyroid gland	1092	3.02E-16	0.21
R94	Abnormal results of function studies	585	3.56E-15	0.05
E04	Other nontoxic goiter	1024	1.12E-14	0.22
D35	Benign neoplasm of other and unspecified endocrine glands	1002	2.90E-14	0.23
R80	Proteinuria	596	1.15E-10	0.17
R03	Abnormal blood-pressure reading. without diagnosis	502	1.33E-10	0.12
M81	Osteoporosis without current pathological fracture	753	2.75E-10	0.25
Z83	Family history of other specific disorders	590	8.81E-10	0.19
R51	Headache	482	1.45E-08	0.18
D25	Leiomyoma of uterus	452	3.96E-07	0.22
K90	Intestinal malabsorption	365	2.62E-06	0.2
Q79	Congenital malformations of musculoskeletal system	260	3.15E-05	0.17

Supplementary figure 1

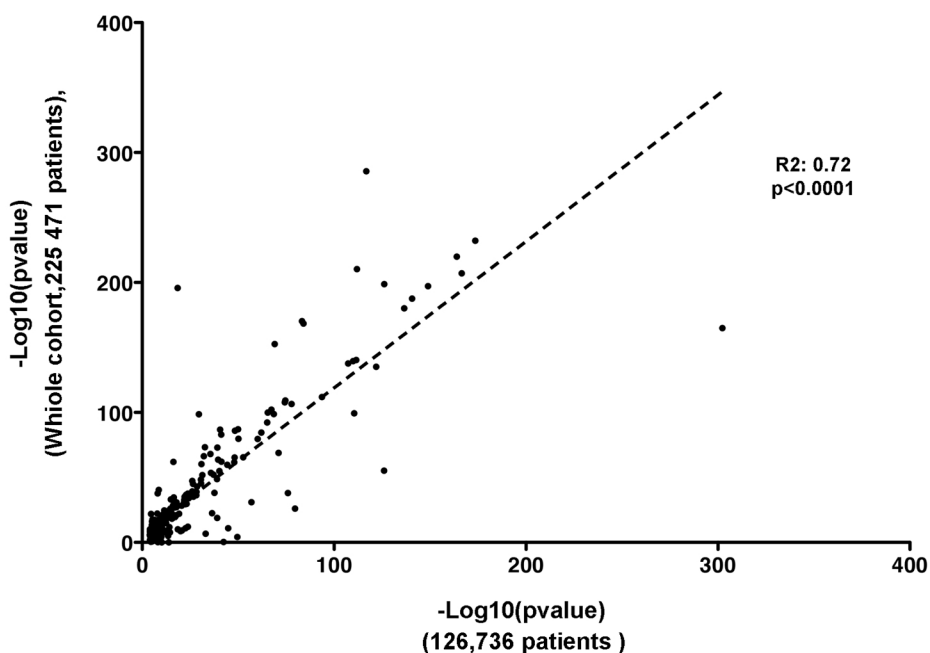
Scatter (volcano) plot of the 251 ICD-10 diagnoses associated with HA-AKI ($p < 3.3 \cdot 10^{-5}$) according to their log transformed p values and ORs. Red dots denote diagnoses associated with $p < 3.3 \cdot 10^{-5}$ and $OR > 4$, and listed in the Table 2.



Supplementary figure 2

Assuming none of these 98 735 excluded patients had HA-AKI, we calculated the ORs for 251 ICD-10 diagnoses in the entire population and compared them with those found in the population made of 126,736 patients in which AKI has been evaluated . Overall, the levels of the associations between the 2 populations were well correlated, and a minimal bias was observed. Only 6 associations lost their significance: C61/Malignant neoplasm of the prostate; J38/Disease of vocal cord of larynx; L02/Cutaneous abscess; M72/Fibroblastic disorders; Z51/Encounter for other medical care; and Z52/Donors of organs.

Linear correlation plots between p values of the association of ICD10 codes with HA-AKI in the population in which AKI has been estimated with 2 plasma creatinine measurements, and the whole population admitted to the hospital during 2006 and 2015.



Bland-Altman plots of the Odds Ratio of the association of ICD10 codes with HA-AKI in the population in which AKI has been estimated with 2 plasma creatinine measurements, and the whole population admitted to the hospital during 2006 and 2015.

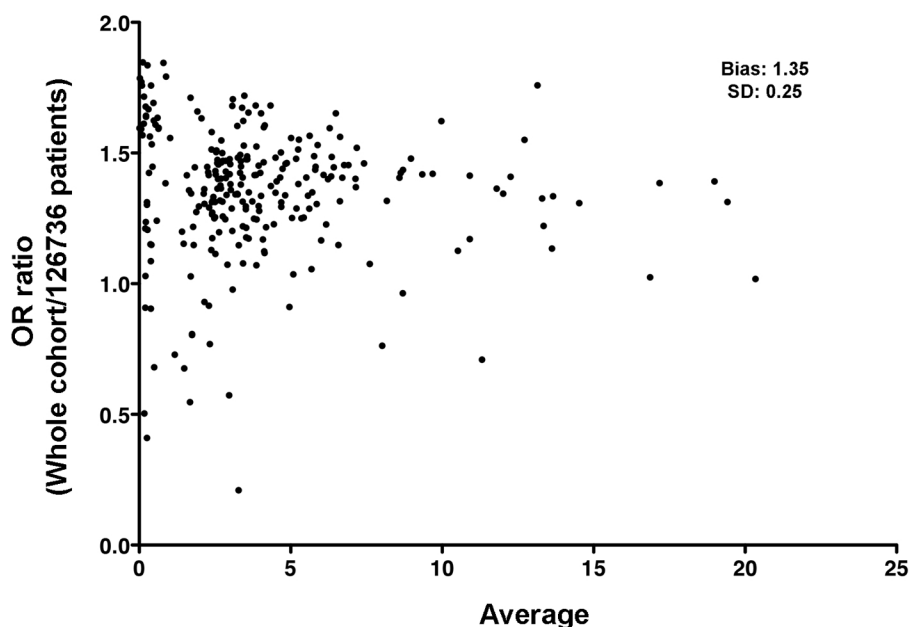
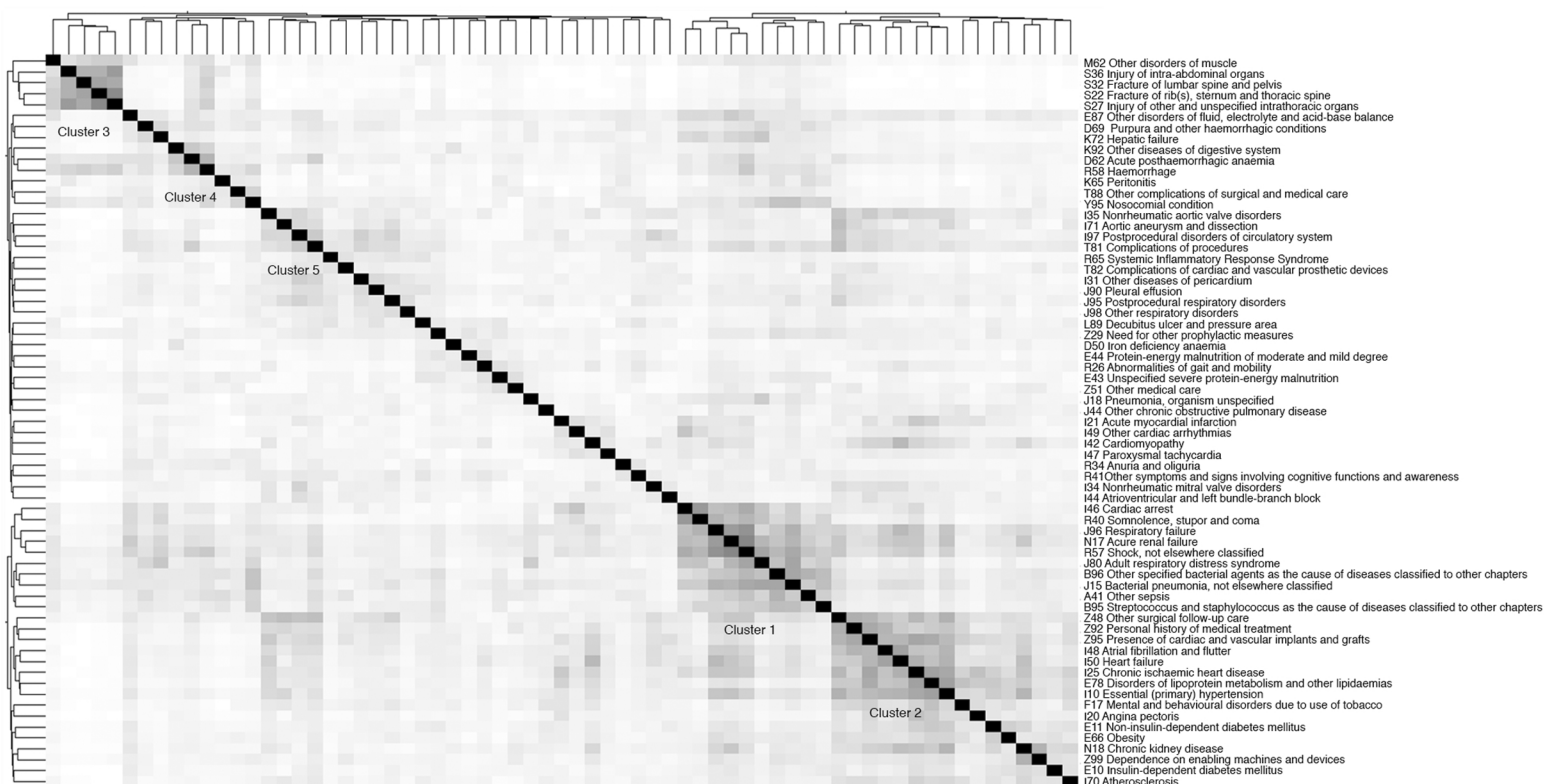
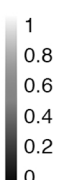


FIGURE 3



- M62 Other disorders of muscle
- S36 Injury of intra-abdominal organs
- S32 Fracture of lumbar spine and pelvis
- S22 Fracture of rib(s), sternum and thoracic spine
- S27 Injury of other and unspecified intrathoracic organs
- E87 Other disorders of fluid, electrolyte and acid-base balance
- D69 Purpura and other haemorrhagic conditions
- K72 Hepatic failure
- K92 Other diseases of digestive system
- D62 Acute posthaemorrhagic anaemia
- R58 Haemorrhage
- K65 Peritonitis
- T88 Other complications of surgical and medical care
- Y95 Nosocomial condition
- I35 Nonrheumatic aortic valve disorders
- I71 Aortic aneurysm and dissection
- I97 Postprocedural disorders of circulatory system
- T81 Complications of procedures
- R65 Systemic Inflammatory Response Syndrome
- T82 Complications of cardiac and vascular prosthetic devices
- I31 Other diseases of pericardium
- J90 Pleural effusion
- J95 Postprocedural respiratory disorders
- J98 Other respiratory disorders
- L89 Decubitus ulcer and pressure area
- Z93 Need for other prophylactic measures
- D50 Iron deficiency anaemia
- E44 Protein-energy malnutrition of moderate and mild degree
- E25 Abnormalities of gait and mobility
- E43 Unspecified severe protein-energy malnutrition
- Z51 Other medical care
- J19 Pneumonia, organism unspecified
- J44 Other chronic obstructive pulmonary disease
- I21 Acute myocardial infarction
- I49 Other cardiac arrhythmias
- I42 Cardiomyopathy
- I47 Paroxysmal tachycardia
- R34 Anuria and oliguria
- R41 Other symptoms and signs involving cognitive functions and awareness
- I34 Nonrheumatic mitral valve disorders
- I44 Anterior and left bundle-branch block
- I46 Cardiac arrest
- R40 Somnolence, stupor and coma
- J96 Respiratory failure
- N17 Acute renal failure
- R57 Shock, not elsewhere classified
- J80 Adult respiratory distress syndrome
- B96 Other specified bacterial agents as the cause of diseases classified to other chapters
- J15 Bacterial pneumonia, not elsewhere classified
- A41 Other sepsis
- B95 Streptococcus and staphylococcus as the cause of diseases classified to other chapters
- Z48 Other surgical follow-up care
- Z92 Personal history of medical treatment
- Z95 Presence of cardiac and vascular implants and grafts
- I48 Atrial fibrillation and flutter
- I50 Heart failure
- I25 Chronic ischaemic heart disease
- E78 Disorders of lipoprotein metabolism and other lipidaemias
- I10 Essential (primary) hypertension
- F17 Mental and behavioural disorders due to use of tobacco
- E11 Non-insulin-dependent diabetes mellitus
- E98 Obesity
- N18 Chronic kidney disease
- Z99 Dependence on enabling machines and devices
- E10 Insulin-dependent diabetes mellitus
- I70 Atherosclerosis



Cluster 1:

- I46/Cardiac arrest
- R40/Somnolence, stupor and coma
- J96/Respiratory failure
- N17/Acute renal failure
- R57/Shock
- J80/Adult respiratory distress syndrome
- B96/Other specified bacterial agents as the cause of diseases
- J15/Bacterial pneumonia
- A41/Other sepsis
- B95/Streptococcus and staphylococcus as the cause of diseases

Cluster 2

- Z48/Other surgical follow-up care
- Z92/Personal history of medical treatment
- Z95/Presence of cardiac and vascular implants and grafts
- I48/Atrial fibrillation and flutter
- I50/Heart failure
- I25/Chronic ischaemic heart disease
- E78/Disorders of lipoprotein metabolism
- I10/Essential hypertension

Cluster 3

- M62/Other disorders of muscle
- S36/Injury of intra-abdominal organs
- S32/Fracture of lumbar spine and pelvis
- S22/Fracture of rib(s), sternum and thoracic spine
- S27/Injury of intrathoracic organs

Cluster 4

- K72/Hepatic failure
- K92/Other diseases of digestive system
- D62/Acute posthemorrhagic anemia

Cluster 5

- I35/Nonrheumatic aortic valve disorders
- I71/Aortic aneurysm and dissection
- I97/Postprocedural disorders of circulatory system
- T81/Complications of procedures