

**Table E1: Clinical diagnoses and exposures used for propensity score matching and predicting acute kidney injury**

Category	Included diagnoses or drugs
Kidney disease, congenital	Autosomal dominant polycystic kidney disease, autosomal recessive polycystic kidney disease, multicystic dysplastic kidney, renal agenesis, renal dysplasia, renal hypoplasia, vesicoureteral reflux
Kidney disease, acquired	Acute glomerulonephritis, chronic glomerulonephritis, chronic kidney disease, chronic tubulointerstitial nephritis, nephrectomy, nephritis, nephropathy, nephrotic syndrome, obstructive uropathy, proteinuria, small kidney of unknown cause
Vasopressor	Dobutamine, dopamine, epinephrine, norepinephrine, vasopressin
Nephrotoxin-Antibiotic	Acyclovir, ambisome, amikacin, amphotericin B, cefotaxime, ceftazidime, cefuroxime, cidofovir, colistimethate, dapsone, foscarnet, ganciclovir, gentamicin, naftcilin, pentamidine, piperacillin, piperacillin-tazobactam, tenofovir, ticarcillin-clavulanic acid, tobramycin, valacyclovir, valganciclovir, vancomycin
Nephrotoxin-Antihypertensive/Diuretic	Captopril, chlorthalidone, enalapril, enalaprilat, hydrochlorothiazide, lisinopril, losartan, valsartan
Nephrotoxin-Analgesic	Aspirin, celecoxib, ibuprofen, indometheacin, ketorolac, mesalamine, naproxen, sulfasalazine
Nephrotoxin-Other	Carboplatin, cisplatin, cyclosporine, ifosfamide, lithium, methotrexate, mitomycin, pamidronate disodium, sirolimus, tacrolimus, topiramate, zoledronic acid, zonisamide

Included diagnoses are derived from the International Classification of Diseases [10th Revision]. Included drugs are derived from the Nephrotoxic Injury Negated by Just-in-time Action collaborative.

**Table E2: Summary of covariates used for propensity score matching for the iodinated contrast material exposed and unexposed patient samples before matching. Statistically significant *P* values in bold and italics. Parentheses contain percentages.**

Variables	Pre-Imaging eGFR < 60 mL/min/1.73 m <sup>2</sup>			Pre-Imaging eGFR ≥ 60 mL/min/1.73 m <sup>2</sup>		
	CT	US	P value	CT	US	P value
Total no. patients	36	106	—	1101	955	—
Age (years)	2.2 ± 4.9	3.1 ± 5.6	0.39	8.1 ± 6.1	7.4 ± 6.3	<b>0.013</b>
Female sex	21 (58.3)	68 (64.2)	0.53	590 (53.6)	490 (51.3)	0.30
BMI (kg/m <sup>2</sup> )	16.1 ± 4.7	16.1 ± 5.9	0.97	19.3 ± 5.8	19.0 ± 5.2	0.22
LOS (days)	35.42 ± 92.8	31.0 ± 39.2	0.78	21.2 ± 42.5	20.7 ± 36.3	0.81
LOS, ICU (days)	32.5 ± 89.3	23.7 ± 32.8	0.57	8.2 ± 24.5	9.3 ± 25.0	0.35
Hemoglobin (g/dL)	12.3 ± 3.1	11.9 ± 2.7	0.42	11.2 ± 2.2	11.1 ± 2.3	0.54
Hypertension	10 (27.8)	36 (34.0)	0.49	480 (43.6)	339 (35.5)	<b>&lt;0.001</b>
Diabetes mellitus	3 (8.3)	4 (3.8)	0.27	83 (7.5)	61 (6.4)	0.31
Kidney disease, congenital*	8 (22.2)	24 (22.6)	0.96	59 (5.4)	46 (4.8)	0.58
Kidney disease, acquired*	11 (30.6)	39 (36.8)	0.50	160 (14.5)	132 (13.8)	0.65
Sickle cell disease	0	1 (0.9)	0.56	20 (1.8)	20 (2.1)	0.65
Congenital heart disease	30 (83.3)	66 (62.3)	<b>0.02</b>	288 (26.2)	223 (23.4)	0.14
Congestive heart failure	6 (16.7)	20 (18.9)	0.77	68 (6.2)	58 (6.1)	0.92
History of cardiac arrest	4 (11.1)	7 (6.6)	0.38	30 (2.7)	30 (3.1)	0.58

Shock	3 (8.3)	13 (12.3)	0.52	128 (11.6)	84 (8.8)	0.04
SIRS/sepsis	6 (16.7)	30 (28.3)	0.17	177 (16.1)	138 (14.5)	0.31
Mechanical ventilation	0	4 (3.8)	0.24	15 (1.4)	12 (1.3)	0.83
Vasopressor*	5 (13.9)	15 (14.2)	0.97	194 (17.6)	123 (12.9)	<b>0.003</b>
Blood transfusion	9 (25.0)	17 (16.0)	0.23	114 (10.4)	85 (8.9)	0.27
Nephrotoxin-antibiotic*	19 (52.8)	57 (53.8)	0.92	303 (27.5)	246 (25.8)	0.37
Nephrotoxin-antihypertensive/diuretic*	5 (13.9)	11 (10.4)	0.56	97 (8.8)	75 (7.9)	0.43
Nephrotoxin-analgesic*	6 (16.7)	12 (11.3)	0.40	240 (21.8)	150 (15.7)	<b>&lt;0.001</b>
Nephrotoxin-other*	4 (11.1)	13 (12.3)	0.85	148 (13.4)	90 (9.4)	<b>0.005</b>

eGFR = estimated glomerular filtration rate; BMI = body mass index; LOS = length of stay; ICU = intensive care unit; SIRS = systemic inflammatory response syndrome.

\* See Table E1 for list of included diagnoses or medications.