

Table S1. Bibliometric information of the other T100 articles in acute kidney injury which were not shown in Table 1

Rank	Authors	Title	Journal	Year	Times Cited (Web)	Citation Index (Web)	Times Cited (Scopus)
21	Palevsky, PM et al	Intensity of renal support in critically ill patients with acute kidney injury	New England Journal of Medicine	2008	510	63.75	607
22	Oliver, J et al	The pathogenesis of acute renal failure associated with traumatic and toxic injury; renal ischemia, nephrotoxic damage and the ischemic episode	Journal of Clinical Investigation	1951	498	7.66	NA
23	Hoste, EA et al	RIFLE criteria for acute kidney injury are associated with hospital mortality in critically ill patients: a cohort analysis	Critical Care	2006	491	49.10	652
24	Kelly, KJ et al	Intercellular adhesion molecule-1-deficient mice are protected against ischemic renal injury	Journal of Clinical Investigation	1996	471	23.55	501
25	Schrier, RW et al	Mechanisms of disease: Acute renal failure and sepsis	New England Journal of Medicine	2004	465	38.75	251

26	Liano, F et al	Epidemiology of acute renal failure: A prospective, multicenter, community-based study	Kidney International	1996	464	23.20	563
27	Lameire, N et al	Acute renal failure	Lancet	2005	439	39.91	569
28	Metnitz, PGH et al	Effect of acute renal failure requiring renal replacement therapy on outcome in critically ill patients	Critical Care Medicine	2002	438	31.29	534
29	Grossman, RA et al	Nontraumatic rhabdomyolysis and acute renal failure	New England Journal of Medicine	1974	433	10.31	215
30	Star, RA et al	Treatment of acute renal failure	Kidney International	1998	428	23.78	501
31	Schiffl, H et al	Daily hemodialysis and the outcome of acute renal failure	New England Journal of Medicine	2002	415	29.64	549
32	Hollenbe.NK et al	Acute oliguric renal failure in man: evidence for preferential renal cortical ischemia	Medicine	1968	409	8.52	105
33	Uchino, S et al	An assessment of the RIFLE criteria for acute renal failure in hospitalized patients	Critical Care Medicine	2006	407	40.70	475

34	Bonventre, JV et al	Recent advances in the pathophysiology of ischemic acute renal failure	Journal of the American Society of Nephrology	2003	401	30.85	448
35	Haase, M et al	Accuracy of Neutrophil Gelatinase-Associated Lipocalin (NGAL) in Diagnosis and Prognosis in Acute Kidney Injury: A Systematic Review and Meta-analysis	American Journal of Kidney Diseases	2009	394	56.29	479
36	Fouque, D et al	A proposed nomenclature and diagnostic criteria for protein-energy wasting in acute and chronic kidney disease	Kidney International	2008	392	49.00	454
37	Herget-Rosenthal, S et al	Early detection of acute renal failure by serum cystatin C	Kidney International	2004	384	32.00	488
38	Mueller, C et al	Prevention of contrast media-associated nephropathy - Randomized comparison of 2 hydration regimens in 1620 patients undergoing coronary angioplasty	Archives of Internal Medicine	2002	372	26.57	541
39	Morigi, M et al	Mesenchymal stem cells are renotropic,	Journal of the American	2004	369	30.75	433

helping to repair the kidney and improve function in acute renal failure Society of Nephrology

40	Bonventre, JV et al	Mechanisms of ischemic acute renal failure	Kidney International	1993	366	15.91	359
41	Kelly, KJ et al	Antibody to intercellular adhesion molecule 1 protects the kidney against ischemic injury	Proceedings of the National Academy of Sciences of the United States of America	1994	354	16.09	345
42	Devarajan, P et al	Update on mechanisms of ischemic acute kidney injury	Journal of the American Society of Nephrology	2006	351	35.10	370
43	de Mendonca, A et al	Acute renal failure in the ICU: risk factors and outcome evaluated by the SOFA score	Intensive Care Medicine	2000	349	21.81	436
44	Abel, RM et al	Improved survival from acute renal failure after treatment with intravenous essential L-amino acids and glucose. Results of a prospective, double-blind study	New England Journal of Medicine	1973	345	8.02	133
45	Humes, HD et al	Epidermal growth factor enhances renal tubule cell regeneration and repair and accelerates the recovery of renal function	Journal of Clinical Investigation	1989	336	12.44	217

in postischemic acute renal failure

46	Bonventre, JV et al	Ischemic acute renal failure: An inflammatory disease?	Kidney International	2004	335	27.92	368
47	Schrier, RW et al	Acute renal failure: definitions, diagnosis, pathogenesis, and therapy	Journal of Clinical Investigation	2004	332	27.67	376
48	Kawaida, K et al	Hepatocyte growth factor prevents acute renal failure and accelerates renal regeneration in mice	Proceedings of the National Academy of Sciences of the United States of America	1994	329	14.95	309
49	Ricci, Z. et al	The RIFLE criteria and mortality in acute kidney injury: A systematic review	Kidney International	2008	325	40.63	374
50	Marenzi, G et al	N-acetylcysteine and contrast-induced nephropathy in primary angioplasty	New England Journal of Medicine	2006	323	32.30	402
51	Akcan-Arikan, A et al	Modified RIFLE criteria in critically ill children with acute kidney injury	Kidney International	2007	320	35.56	368
52	Ishani, Areef et al	Acute Kidney Injury Increases Risk of ESRD among Elderly	Journal of the American Society of Nephrology	2009	319	45.57	364
53	Mehta, RL et al	Spectrum of acute renal failure in the	Kidney International	2004	315	26.25	368

intensive care unit: The PICARD
experience

54	Rosner, Mitchell H et al	Acute kidney injury associated with cardiac surgery	Clinical Journal of the American Society of Nephrology	2006	310	31.00	341
55	Mehta, RL et al	A randomized clinical trial of continuous versus intermittent dialysis for acute renal failure	Kidney International	2001	309	20.60	401
56	Hakim, RM et al	Effect of the dialysis membrane in the treatment of patients with acute renal failure	New England Journal of Medicine	1994	307	13.95	287
57	Conlon, PJ et al	Acute renal failure following cardiac surgery	Nephrology Dialysis Transplantation	1999	304	17.88	395
58a	Nickolas, Thomas L et al	Sensitivity and specificity of a single emergency department measurement of urinary neutrophil gelatinase-associated lipocalin for diagnosing acute kidney injury	Annals of Internal Medicine	2008	303	37.88	344

58b	Anderson, RJ et al	Nonoliguric acute renal failure	New England Journal of Medicine	1977	303	7.77	157
59a	McCullough, Peter A et al	Contrast-induced acute kidney injury	Journal of the American College of Cardiology	2008	302	37.75	366
59b	Zager, RA et al	Rhabdomyolysis and myohemoglobinuric acute renal failure	Kidney International	1996	302	15.10	372
59c	Swann, RC et al	The clinical course of acute renal failure	Medicine	1953	302	4.79	2
60	Better, OS et al	Early management of shock and prophylaxis of acute renal failure in traumatic rhabdomyolysis	New England Journal of Medicine	1990	301	11.58	331
61	Miller, TR et al	Urinary diagnostic indices in acute renal failure: a prospective study	Annals of Internal Medicine	1978	298	7.84	163
62	Xue, Jay L et al	Incidence and mortality of acute renal failure in Medicare beneficiaries, 1992 to 2001	Journal of the American Society of Nephrology	2006	296	29.60	326
63	Bennett, Michael et al	Urine NGAL predicts severity of acute kidney injury after cardiac surgery: A	Clinical Journal of the American Society of Nephrology	2008	294	36.75	344

		prospective study					
64	Ostermann, Marlies et al	Acute kidney injury in the intensive care unit according to RIFLE	Critical Care Medicine	2007	288	32.00	324
65	Noiri, E et al	In vivo targeting of inducible NO synthase with oligodeoxynucleotides protects rat kidney against ischemia	Journal of Clinical Investigation	1996	277	13.85	272
66	Oken, DE et al	Glycerol-induced hemoglobinuric acute renal failure in the rat. I. Micropuncture study of the development of oliguria	Journal of Clinical Investigation	1966	275	5.50	65
67	Barrett, BJ et al	Preventing nephropathy induced by contrast medium	New England Journal of Medicine	2006	274	27.40	347
68	Parikh, C. R. et al	Urinary IL-18 is an early predictive biomarker of acute kidney injury after cardiac surgery	Kidney International	2006	267	26.70	309
69	Payen, Didier et al	A positive fluid balance is associated with a worse outcome in patients with acute renal failure	Critical Care	2008	265	33.13	309

70a	Ichimura, T et al	Kidney injury molecule-1: a tissue and urinary biomarker for nephrotoxicant-induced renal injury	American Journal of Physiology-Renal Physiology	2004	264	22.00	330
70b	Bouman, CSC et al	Effects of early high-volume continuous venovenous hemofiltration on survival and recovery of renal function in intensive care patients with acute renal failure: A prospective, randomized trial	Critical Care Medicine	2002	264	18.86	303
71a	Wagener, Gebhard et al	Association between increases in urinary neutrophil gelatinase-associated lipocalin and acute renal dysfunction after adult cardiac surgery	Anesthesiology	2006	263	26.30	312
71b	Koffler, A et al	Acute renal failure due to nontraumatic rhabdomyolysis	Annals of Internal Medicine	1976	263	6.58	117
72a	Chertow, GM et al	Prognostic stratification in critically ill patients with acute renal failure requiring dialysis	Archives of Internal Medicine	1995	262	12.48	282

72b	Schiffl, H et al	Biocompatible membranes in acute renal failure: prospective case-controlled study	Lancet	1994	262	11.91	242
73a	Birck, R et al	Acetylcysteine for prevention of contrast nephropathy: meta-analysis	Lancet	2003	260	20.00	388
73b	Byrd, L et al	Radiocontrast-induced acute renal failure: a clinical and pathophysiologic review	Medicine	1979	260	7.03	123
74a	Marenzi, G et al	Contrast-induced nephropathy in patients undergoing primary angioplasty for acute myocardial infarction	Journal of the American College of Cardiology	2004	259	21.58	297
74b	Ali, Tariq et al	Incidence and outcomes in acute kidney injury: A comprehensive population-based study	Journal of the American Society of Nephrology	2007	259	28.78	297
75a	Sharples, EJ et al	Erythropoietin protects the kidney against the injury and dysfunction caused by ischemia-reperfusion	Journal of the American Society of Nephrology	2004	257	21.42	287
75b	Dangas, G et al	Contrast-induced nephropathy after percutaneous coronary interventions in	American Journal of Cardiology	2005	257	23.36	309

		relation to chronic kidney disease and hemodynamic variables					
76	Thakar, CV et al	A clinical score to predict acute renal failure after cardiac surgery	Journal of the American Society of Nephrology	2005	254	23.09	304
77a	Mehta, RL et al	Diuretics, mortality, and nonrecovery of renal function in acute renal failure	JAMA- Journal of the American Medical Association	2002	253	18.07	290
77b	Coca, S. G et al	Biomarkers for the diagnosis and risk stratification of acute kidney injury: A systematic review	Kidney International	2008	253	31.63	351
77c	Bonventre, JV et al	Dedifferentiation and proliferation of surviving epithelial cells in acute renal failure	Journal of the American Society of Nephrology	2003	253	19.46	300
78	Norman, DJ et al	Myolysis and acute renal failure in a heart-transplant recipient receiving lovastatin	New England Journal of Medicine	1988	252	9.00	162
79	Tomita, K et al	Plasma endothelin levels in patients with acute renal failure	New England Journal of Medicine	1989	250	9.26	140

80	Lin, FM et al	Hematopoietic stem cells contribute to the regeneration of renal tubules after renal ischemia-reperfusion injury in mice	Journal of the American Society of Nephrology	2003	247	19.00	304
81	Sutton, TA et al	Microvascular endothelial injury and dysfunction during ischemic acute renal failure	Kidney International	2002	244	17.43	271
82a	Arendshorst, WJ et al	Pathogenesis of acute renal failure following temporary renal ischemia in the rat	Circulation Research	1975	243	5.93	285
82b	Parikh, CR et al	Urine IL-18 is an early diagnostic marker for acute kidney injury and predicts mortality in the intensive care unit	Journal of the American Society of Nephrology	2005	243	22.09	83
83a	Kay, J et al	Acetylcysteine for prevention of acute deterioration of renal function following elective coronary angiography and intervention - A randomized controlled trial	JAMA- Journal of the American Medical Association	2003	239	18.38	327

83b	Shusterman, N et al	Risk factors and outcome of hospital-acquired acute renal failure. Clinical epidemiologic study	American Journal of Medicine	1987	239	8.24	254
83c	Bonventre, Joseph V et al	Cellular pathophysiology of ischemic acute kidney injury	Journal of Clinical Investigation	2011	239	47.80	228
84a	Togel, Florian et al	Vasculotropic, paracrine actions of infused mesenchymal stem cells are important to the recovery from acute kidney injury	American Journal of Physiology-Renal Physiology	2007	237	26.33	284
84b	Burne, MJ et al	Identification of the CD4(+) T cell as a major pathogenic factor in ischemic acute renal failure	Journal of Clinical Investigation	2001	237	15.80	267
84c	Waikar, Sushrut S et al	Declining mortality in patients with acute renal failure, 1988 to 2002	Journal of the American Society of Nephrology	2006	237	23.70	254
85a	Melnikov, VY et al	Impaired IL-18 processing protects caspase-1-deficient mice from ischemic acute renal failure	Journal of Clinical Investigation	2001	236	15.73	253
85b	Cigarroa, RG et al	Dosing of contrast material to prevent	American Journal of Medicine	1989	236	8.74	282

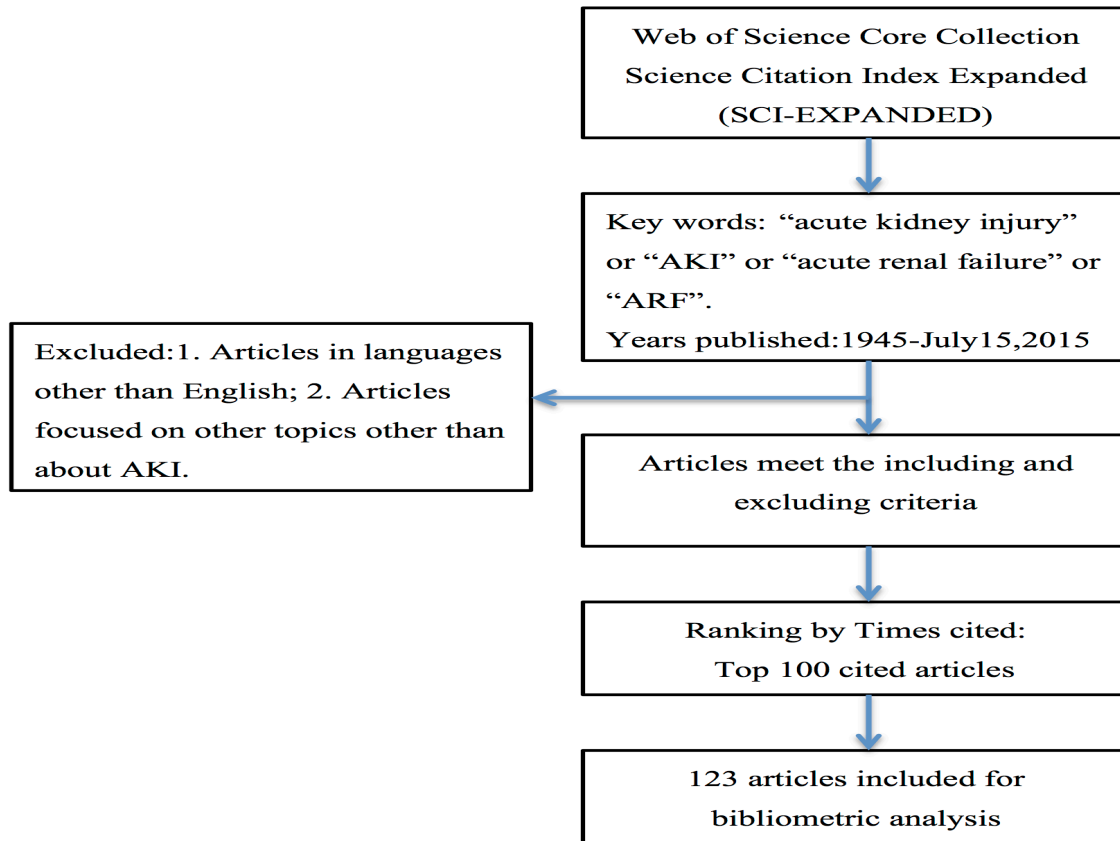
		contrast nephropathy in patients with renal disease					
86	Vinsonneau,Christophe et al	Continuous venovenous haemodiafiltration versus intermittent haemodialysis for acute renal failure in patients with multiple-organ dysfunction syndrome: a multicentre randomised trial	Lancet	2006	235	23.50	312
87	Thurau, K et al	Acute renal success. The unexpected logic of oliguria in acute renal failure	American Journal of Medicine	1976	234	5.85	121
88a	Firth, JD et al	Endothelin: an important factor in acute renal failure?	Lancet	1988	233	8.32	276
88b	Coca, Steven G et al	Long-term Risk of Mortality and Other Adverse Outcomes After Acute Kidney Injury: A Systematic Review and Meta-analysis	American Journal of Kidney Diseases	2009	233	33.29	110
89	Marenzi, G et al	The prevention of radiocontrast-agent-induced nephropathy	New England Journal of Medicine	2003	231	17.77	355

		by hemofiltration					
90	Zanardo, G et al	Acute renal failure in the patient undergoing cardiac operation. Prevalence, mortality rate, and main risk factors	Journal of Thoracic and Cardiovascular Surgery	1994	229	10.41	275
91a	Herrera, MB et al	Mesenchymal stem cells contribute to the renal repair of acute tubular epithelial injury	International Journal of Molecular Medicine	2004	228	19.00	273
91b	Bouchard, Josee et al	Fluid accumulation, survival and recovery of kidney function in critically ill patients with acute kidney injury	Kidney International	2009	228	32.57	264
92a	Vaidya, VS et al	Urinary kidney injury molecule-1: a sensitive quantitative biomarker for early detection of kidney tubular injury	American Journal of Physiology-Renal Physiology	2006	227	22.70	294
92b	Rich, MW et al	Incidence, risk factors, and clinical course of acute renal insufficiency after cardiac catheterization in patients 70 years of age or older. A prospective study	Archives of Internal Medicine	1990	227	8.73	283

92c	Stein, JH et al	Current concepts on the pathophysiology of acute renal failure	American Journal of Physiology	1978	227	5.97	64
93a	Bates, DW et al	Mortality and costs of acute renal failure associated with amphotericin B therapy	Clinical Infectious Diseases	2001	226	15.07	285
93b	Richards, WO et al	Acute renal failure associated with increased intra-abdominal pressure	Annals of Surgery	1983	226	6.85	213
94a	Supavekin, S et al	Differential gene expression following early renal ischemia/reperfusion	Kidney International	2003	225	17.31	242
94b	Diaz-Sandoval, LJ et al	Acetylcysteine to prevent angiography-related renal tissue injury (the APART Trial)	American Journal of Cardiology	2002	225	16.07	296
95	Bruno, Stefania et al	Mesenchymal Stem Cell-Derived Microvesicles Protect Against Acute Tubular Injury	Journal of the American Society of Nephrology	2009	224	32.00	230
96	Liangos, Orfeas et al	Urinary N-acetyl-beta-(D)-glucosaminidase activity and kidney injury molecule-1 level are associated with	Journal of the American Society of Nephrology	2007	222	24.67	260

		adverse outcomes in acute renal failure					
97	Kuitunen, A et al	Acute renal failure after cardiac surgery: Evaluation of the RIFLE classification	Annals of Thoracic Surgery	2006	221	22.10	255
98	Morcos, SK et al	Contrast-media-induced nephrotoxicity: a consensus report	European Radiology	1999	220	12.94	290
99	Ward, MM et al	Factors predictive of acute renal failure in rhabdomyolysis	Archives of Internal Medicine	1988	218	7.79	242
100	Heyman, SN et al	Acute renal failure with selective medullary injury in the rat	Journal of Clinical Investigation	1988	215	7.68	156

Supplementary figure 1



Supplement File: Flow diagram representing the study selection process