Supplementary Table, TS1 MOOSE checklist

Item No	Recommendation	Reported on page No
Reporting of background should include		
1	Problem definition	4
2	Hypothesis statement	4
3	Description of study outcome(s)	4
4	Type of exposure or intervention used	4
5	Type of study designs used	4
6	Study population	4-5
Reporting of search strategy should include		
7	Qualifications of searchers (eg, librarians and investigators)	5
8	Search strategy, including time period included in the synthesis and key words	4, Figure 1 (p. 19)
9	Effort to include all available studies, including contact with authors	4-5
10	Databases and registries searched	4
11	Search software used, name and version, including special features used (eg, explosion)	4-5
12	Use of hand searching (eg, reference lists of obtained articles)	4-5
13	List of citations located and those excluded, including justification	TS5 (p.10-12 in supplementary appendix)
14	Method of addressing articles published in languages other than English	4-5
15	Method of handling abstracts and unpublished studies	5
16	Description of any contact with authors	5
Reporting of methods should include		
17	Description of relevance or appropriateness of studies assembled for assessing the hypothesis to be tested	TS4 (p.7-9 in supplementary appendix)
18	Rationale for the selection and coding of data (eg, sound clinical principles or convenience)	4-5
19	Documentation of how data were classified and coded (eg, multiple raters, blinding and interrater reliability)	5
20	Assessment of confounding (eg, comparability of cases and controls in studies where appropriate)	5, TS3 (p.6-7 in supplementary appendix)
21	Assessment of study quality, including blinding of quality assessors, stratification or regression on possible predictors of study results	5
22	Assessment of heterogeneity	8
23	Description of statistical methods (eg, complete description of fixed or random effects models, justification of whether the chosen models account for predictors of study results, dose-	5-7

	response models, or cumulative meta-analysis) in sufficient detail to be replicated	
24	Provision of appropriate tables and graphics	15-21
Reporting of results should include		
25	Graphic summarizing individual study estimates and overall estimate	16-18
26	Table giving descriptive information for each study included	16-18, TS4 (p.7-9 in supplementary appendix)
27	Results of sensitivity testing (e.g., subgroup analysis)	6, Figure 2-3 (p.20-21)
28	Indication of statistical uncertainty of findings	6, Figure 2-3 (p.20-21)
Reporting of discussion should include		
29	Quantitative assessment of bias (e.g., publication bias)	6
30	Justification for exclusion (e.g., exclusion of non-English language citations)	TS5 (p.10-12 in supplementary appendix)
31	Assessment of quality of included studies	TS3 (p.6-7 in supplementary appendix)
Reporting of conclusions should include		
32	Consideration of alternative explanations for observed results	7-9
33	Generalization of the conclusions (ie, appropriate for the data presented and within the domain of the literature review)	11
34	Guidelines for future research	10
35	Disclosure of funding source	11

Supplementary Table, TS2 search string

Database	Search	Search string	Number of results
Pubmed March 9th, 2021	#1	"acute kidney injury"[Text Word] OR "acute renal injury"[Text Word] OR "acute renal insufficiency"[Text Word] OR "acute renal failure"[Text Word] OR "acute kidney failure"[Text Word]	68,727
	#2	"gynecological surgeries"[Text Word] OR "gynecological surgery"[Text Word] OR "Gynecologic Surgical Procedures"[Text Word] OR "gynecologic surgical procedure"[Text Word] OR "gynecological surgical procedures"[Text Word] OR "gynecologic surgery"[Text Word] OR "gynecologic surgeries"[Text Word] OR "non cardiac surgery"[Text Word] OR "elective surgical procedure*"[Text Word] OR "Gynecologic Surgical Procedures"[MeSH Terms]	104,237
	#3	(("acute kidney injury"[Text Word] OR "acute renal injury"[Text Word] OR "acute renal insufficiency"[Text Word] OR "acute renal failure"[Text Word] OR "acute kidney failure"[Text Word]) AND ("gynecological surgeries"[Text Word] OR "gynecological surgery"[Text Word] OR "Gynecologic Surgical Procedures"[Text Word] OR "gynecologic surgical procedure"[Text Word] OR "gynecological surgical procedures"[Text Word] OR "gynecologic surgery"[Text Word] OR "gynecologic surgeries"[Text Word] OR "non cardiac surgery"[Text Word] OR "elective surgical procedure*"[Text Word] OR "Gynecologic Surgical Procedures"[MeSH Terms])) NOT ("Animals"[MeSH Terms] NOT "humans"[MeSH Terms])	339
Embase March 9th, 2021	#1	exp acute kidney failure/	91,734
	#2	(acute kidney injury or acute renal injury or acute renal insufficiency or acute kidney insufficiency or acute renal failure or acute kidney failure).mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word]	109,150
	#3	1 or 2	109,150
	#4	exp gynecologic surgery/	158,136
	#5	(gynecological surgeries or Gynecologic Surgical Procedures or gynecologic surgical procedure or gynecological surgical procedures or gynecologic surgery or gynecologic surgeries or non cardiac surgery or elective surgical procedure).mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug	21,950

		manufacturer, device trade name, keyword, floating subheading word, candidate term word]	
	#6	4 or 5	162,129
	#7	3 and 6	648
Cochrane March 10th, 2021	#1	MeSH descriptor: [Acute Kidney Injury] explode all trees	1,492
	#2	(acute kidney injury or acute renal injury or acute renal insufficiency or acute kidney insufficiency or acute renal failure or acute kidney failure):ti,ab,kw	9,322
	#3	#1 or #2	9,344
	#4	MeSH descriptor: [Gynecologic Surgical Procedures] explode all trees	4,400
	#5	gynecological surgeries or Gynecologic Surgical Procedures or gynecologic surgical procedure or gynecological surgical procedures or gynecologic surgery or gynecologic surgeries or non cardiac surgery or elective surgical procedure	15,069
	#6	#4 or #5	18,119
	#7	#3 and #6	423

Supplementary Table, TS3 Risk of bias assessment (Newcastle–Ottawa Quality Assessment Scale)

	Selection (4)				Comparability (of cohorts on the basis of the design or analysis) (2)		Outcome (3)			Quality score (9)
Study	**Represen-tative of the exposed cohort**	**Selection of the non-exposed cohort**	**Ascer-tainment of exposure**	**Demonstration that the current outcome of interest was not present at the start of the study**	**The study controls for age, sex and marital status**	**Study controls for other factors (list)**	**Assessment of outcome**	**Was follow up long enough for outcome to occur**	**Adequacy of follow up cohorts**	
Chen (2020) (1)	1	0	1	1	0	0	1	1	0	5
Iyigun (2019) (2)	1	1	1	1	0	0	1	1	0	6
Li (2019) (3)	1	0	1	1	0	0	1	1	0	5
Hallqvist (2018) (4)	1	1	1	1	0	1	1	1	1	8
Maheshwari (2018) (5)	1	0	1	1	0	1	1	1	0	6
Russo (2018) (6)	1	1	1	1	0	1	0	1	0	6
Salmasi (2017) (7)	1	0	1	1	0	0	1	1	0	5
Srisawat (2018) (8)	1	0	1	1	0	1	1	0	0	5
Hunsicker (2017) (9)	1	0	0	1	0	0	1	0	0	3
O'connor (2017) (10)	1	0	1	1	0	1	1	1	1	7
Pourafkari (2017) (11)	1	0	1	1	0	0	1	1	0	5
Sun (2015) (12)	1	1	1	1	0	0	1	1	0	6
Wu (2015) (13)	1	1	1	1	0	0	1	1	1	7
Bell (2014) (14)	1	0	1	1	0	0	1	1	0	5
Biteker (2014) (15)	1	1	1	1	1	1	1	1	0	8
Vaught (2014) (16)	1	1	1	1	0	0	1	1	0	6
Kim (2020) (17)	1	1	1	1	1	1	1	1	0	8
Matsuo (2020) (18)	1	1	1	1	0	0	1	1	0	6
Sears (2020) (19)	1	1	1	1	0	0	1	0	0	5
Ramzan (2015) (20)	1	1	1	1	0	0	1	1	0	6
Ross (2018) (21)	1	1	1	1	0	0	1	1	1	7
Margulies (2019) (22)	1	1	1	1	0	1	1	1	0	7

Vernooji (2018) (23)	1	1	1	1	1	1	1	1	0	8

Supplementary Table, TS4 Inclusion and exclusion criteria of the included studies

Study	Inclusion criteria	Exclusion criteria	Quality score
Chen (2020) (1)	Age ≥ 65 years Gynecologic oncology Propofol induction	Preoperative hypotension Pre-existing renal failure and CKD	6
Iyigun (2019) (2)	Age > 40 years ASA-PS I - II Noncardiac surgery Hospitalization at least one night Preoperative creatinine <1,4 mg/dL	Cardiovascular, urological and transplantation surgeries Day case surgical procedures Emergency surgery Surgeries requiring only local or monitored anesthesia ASA physical status > II Previous renal surgery Pre-existing renal disease (requiring RRT) or preoperative s-creatinine > 1.4 mg/dL	7
Li (2019) (3)	Age > 18 years Noncardiac surgery Admitted to SICU High risk of postoperative AKI	CKD stage V or long-term dialysis Renal surgery Preoperative AKI Incomplete clinical data	7
Hallqvist (2018) (4)	Age > 18 years Major elective noncardiac surgery	Phaeochromocytoma surgery	7
Maheshwari (2018) (5)	Age > 18 years ASA physical status < V Inpatient noncardiac surgery	Surgical duration < 1 h Urological procedures CKD or eGFR < 60 Missing baseline values (perioperative s-creatinine) Inadequate arterial pressure data	8
Russo (2018) (6)	No comorbidities ASA-PS II Ovarian cancer with a laparoscopic PIV > 6 and received primary cytoreductive open abdominal surgery	Age < 18 and > 65 years BMI < 20 and > 30 kg/m^2 Surgical duration < 300 min	8
Salmasi (2017) (7)	Age > 18 years Inpatient noncardiac surgery Pre and postoperative s-creatinine within the seven postoperative days Blood pressure within 6 months before surgery	CKD (preoperative eGFR < 60 mL or patients who were on dialysis) Urologic procedures Anesthesia for < 60 min or missing baseline variables Unavailable data for > 10 consecutive minutes	8
Srisawat (2018) (8)	Age > 18 years ASA I - III Laparoscopic abdominal surgery > 2h	Pre-existing CKD (eGFR < 60) Patients on NSAID one week before surgery	6
Hunsicker (2017) (9)	Age > 18 years Laparotomy for cytoreductive surgery due to primary ovarian cancer	None given	8
O'connor (2017) (10)	Elective major noncardiac surgery Surgical duration > 1h	Age < 16 years Renal surgery CKD stage V (preoperative eGFR < 15) Nonrenal surgery Unavailable postoperative s-creatinine	7
Pourafkari (2017) (11)	Postoperative s-creatinine	Cardiac, vascular, ophthalmologic, urologic and podiatric surgery	7

		CKD stage V Missing data > 10% of the cases	
Sun (2015) (12)	Noncardiac surgery, Hospitalization > one day Invasive intraoperative BP monitoring	Baseline MAP < 65 mmHg Preoperative dialysis dependence Urologic surgery	8
Wu (2015) (13)	Age > 18 years Major surgery Admitted to the ICU department	Chronic dialysis, RRT ICU stay of 548 h Intravenous contrast within the first seven postoperative days AKI developed later than seven days postoperative No urine output record during AKI Admitted for other medical problems	7
Bell (2014) (14)	Age > 18 years Antibiotic prophylaxis prior to surgery Orthopedic, urology, vascular, gastrointestinal, and gynecological surgery	RRT Unavailable pre and postoperative s-creatinine	8
Biteker (2014) (15)	Age > 18 years Noncardiothoracic, nonvascular surgery Major gastrointestinal, urologic and gynecologic surgery	ASA-PS V Vascular and intrathoracic surgery Pre-existing renal dysfunction Surgeries requiring only local or monitored anesthesia Day case surgical procedures Emergent surgical cases	8
Vaught (2014) (16)	Age > 18 years Hospitalization > 24 h Gynecological procedure	CKD prior to admission Obstetric procedure	8
Kim (2020) (17)	Myomectomy for symptomatic fibroids	None given	8
Matsuo (2020) (18)	Early-stage ovarian cancer MIS oophorectomy	None given	6
Sears (2020) (19)	Benign hysterectomy (abdominal, vaginal or laparoscopic)	ASA > II Age < 19 years Concurrent non-gynecologic surgery, lymphadenectomy, radical hysterectomy or pre- or postoperative diagnostic code for malignancy, concomitant pelvic floor surgery Preoperative comorbidity except hypertension or smoking, Subjects with incomplete records,	5
Ramzan (2015) (20)	Endometrial cancer Hysterectomy based surgical staging	Sarcoma Endometrial hyperplasia Metastatic cancer	6
Ross (2018) (21)	Ovarian, fallopian tube, or primary peritoneal cancer Planned primary cytoreductive procedure	Preoperative ICU admission, A gynecologic oncologist not performing the procedure Preoperative plan for an ICU admission	7
Margulies (2019) (22)	Hysterectomy for benign indications	Age < 18 years Minor cases Return to the operating room related to a previous procedure	7
Vernooji (2018) (23)	Age ≥ 50 years In the UMCU, only patients aged ≥ 60 years Intermediate or high risk non-cardiac surgery General or spinal anaesthesia	Reoperations within 30 days or within the same hospital admission Surgery during another hospital admission at least 30 days after the first surgery Intraoperative BP measurements were not available	8

	Postoperative hospital stay of ≥ 24 hours	Anaesthesia duration was < 20 min	

CKD: chronic kidney disease, ASA-PS: american society of anesthesiologists physical status, eGFR: estimated glomerular filtration rate, NSAID: non steroid anti-inflammatory drugs, RRT: renal replacement therapy, ICU: intensive care unit, SICU: surgical intensive care unit, PIV: predictive index value, BP: blood pressure, MAP: mean arterial pressure, UMCU: the University Medical Center Utrecht

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