

Wallis CJD, et al. Diagnostic utility of axial imaging in the evaluation of hematuria: A systematic review and critical appraisal of the literature

APPENDIX. Search strategies

PRISMA chart content				
Database	Dates	Total	Unique	Duplicates
Cochrane (CDSR, CCTR, Economic Evaluation, Technology Assessment)	to August 31, 2016	385	347	38
Embase Classic+Embase	1947 to 2017 October 24	2747	1470	1277
HandSearches	Scholarly research	7		0
MEDLINE(R)	1946 to October Week 2 2017	2173	2150	23
Medline in process	October 24, 2017	14	14	0
Medline Epub-ahead-of-print	October 24, 2017	2	2	0
Total		5328	3990	1338

Search was run on the OvidSP search platform in the following databases on October 23, 2017:

Search strategies

The following tables record the search strategies and terms used in each of the databases. Search results were limited to study design methodology terms. There were no limits to age group or languages.

MEDLINE			
#	Searches	Results	Comment
1	*Hematuria/	5825	
2	(hematuric* or haematuria* or haematuric*).ti,ab.	4064	
3	or/1-2	8661	Hematuria terms
4	Ultrasonography/	176 655	
5	(ultrason* or ultrasound*).ti,ab,kf.	296 084	
6	radiographic image interpretation, computer-assisted/ or tomography, x-ray computed/ or four-dimensional computed tomography/ or positron emission tomography computed tomography/ or single photon emission computed tomography computed tomography/ or tomography, spiral computed/ or multidetector computed tomography/	390 324	

Wallis CJD, et al. Diagnostic utility of axial imaging in the evaluation of hematuria: A systematic review and critical appraisal of the literature

7	((electron adj2 beam) or computed or computerized or computerised or cine or "x-ray" or xray) adj2 (ct or cts or tomograph*)).ti,ab,kf.	232 210	
8	("cat scan*" or "ct scan*").ti,ab,kf.	79 723	
9	tomodensitometr*.ti,ab,kf.	925	
10	urography/	22 169	
11	(pyelogram* or pyelograph* or sonogram* or sonograph* or urogram* or urograph*).ti,ab,kf.	65 184	
12	cystography/ [***New MeSH 2017****]	21	
13	(cystograph* or cystogram*).ti,ab,kf.	2721	
14	Radiology/	22 431	
15	diagnostic imaging.fs.	1 084 710	
16	diagnosis.fs.	2 458 769	
17	Magnetic Resonance Imaging/ or (((("chemical shift" or "spin echo") adj2 imaging*) or mri or mris or nmr or "mr tomograph*" or "magnetic resonance imag" or "proton spin tomograph*" or zeugmatography or fmri).ti,ab,kf.	551 041	
18	Echo-Planar Imaging/ or ("echo planar imag*" or ("echo-planar" adj2 (mr or tomograph*)) or "echoplanar imag*").ti,ab,kf.	5613	
19	Fluorine-19 Magnetic Resonance Imaging/ or "19f mri".ti,ab,kf.	151	
20	Diffusion Magnetic Resonance Imaging/ [***All textwords under MRI****]	16 751	
21	Magnetic Resonance Imaging, Cine/ [***All textwords under MRI****]	6494	
22	or/4-21	3 908 517	Diagnostic intervention terms
23	3 and 22	4156	Base clinical set general
24	carcinoma, renal cell/	30 695	
25	((renal or kidney* or nephro or "collecting duct" or hypernephroid or nephroid or grawitz*) adj2 (adenocarcinoma* or carcinoma* or cancer* or neoplas* or tumour* or tumor* or carcinogen*)) or hypernephroma*).ti,ab,kf.	55 318	
26	Carcinoma, Transitional Cell/	19 456	
27	urinary bladder neoplasms/ or ((bladder or urinary) adj2 (cancer* or carcinoma* or neoplas* or tumour* or tumor*)).ti,ab,kf.	62 144	
28	kidney neoplasms/ or Ureteral Neoplasms/ or ((ureteral or ureter) adj2 (cancer* or carcinoma* or neoplas* or tumour* or tumor*)).ti,ab,kf.	71 440	
29	"upper tract urothelial carcinoma*".ti,ab,kf.	530	

Wallis CJD, et al. Diagnostic utility of axial imaging in the evaluation of hematuria: A systematic review and critical appraisal of the literature

30	((renal or kidney* or nephro) adj2 mass*).ti,ab,kf.	6690	
31	or/24-30	146 677	Renal cell carcinoma terms
32	3 and 22 and 31	1028	Renal carcinoma results
33	evaluation studies.pt. or evaluation studies as topic/	370 368	
34	validation studies.pt. or validation studies as topic/	93 716	
35	"sensitivity and specificity"/ or predictive value of tests/ or roc curve/	522 600	
36	diagnostic errors/ or false negative reactions/ or false positive reactions/ or observer variation/	114 604	
37	likelihood functions/	21 289	
38	(likelihood or likelihood ratio:).tw.	107 056	
39	or/33-38	1 074 487	MEDLINE Diagnosis filter
40	23 and 39	418	Diagnosis filter results
41	cohort studies/ or longitudinal studies/ or follow-up studies/ or prospective studies/	1 295 007	
42	case-control studies/ or retrospective studies/ or cross-sectional studies/	1 190 520	
43	observational study.pt. or observational study as topic/	49 184	
44	registries/	76 541	
45	seer program/ [****US Cancer registry****]	6141	
46	odds ratio/ or risk/ or risk assessment/ or risk factors/	1 065 656	
47	causality/ or precipitating factors/ or risk factors/	763 974	
48	Poisson Distribution/ or Logistic Models/ or Multivariate Analysis/	226 576	
49	Asymptomatic Diseases/	4251	
50	(risk: or cause or causal or causation or relative risk).mp.	2 769 524	
51	or/41-50	4 359 811	MEDLINE Sensitive risk filter
52	23 and 51	1432	Risk filter sensitive results
53	cohort studies/ or longitudinal studies/ or follow-up studies/ or prospective studies/	1 295 007	
54	case-control studies/ or retrospective studies/ or cross-sectional studies/	1 190 520	

Wallis CJD, et al. Diagnostic utility of axial imaging in the evaluation of hematuria: A systematic review and critical appraisal of the literature

55	observational study.pt. or observational study as topic/	49 184	
56	registries/	76 541	
57	seer program/ [****US Cancer registry****]	6141	
58	prognosis/ or disease-free survival/ or medical futility/ or pregnancy outcome/ or treatment outcome/ or treatment failure/	1 394 615	
59	disease progression/	143 653	
60	morbidity/ or incidence/ or prevalence/ or comorbidity/	571 532	
61	mortality/ or cause of death/ or fatal outcome/ or hospital mortality/ or infant mortality/ or maternal mortality/ or survival rate/	355 614	
62	survival analysis/ or disease-free survival/ or kaplan-meier estimate/ or proportional hazards models/	263 414	
63	early diagnosis/ or early diagnosis of cancer/	42 090	
64	treatment outcome/ or "early termination of clinical trials"/ or treatment failure/ or watchful waiting/	908 816	
65	natural histor???.tw.	41 857	
66	predictive value of tests/	188 887	
67	or/53-66	3 798 983	MEDLINE Prognosis filter sensitive
68	23 and 67	1312	Prognosis sensitive results
69	32 or 40 or 52 or 68	2422	Combined final results
70	limit 69 to humans	2370	Human limit

MEDLINE In-process and other non-indexed citations			
#	Searches	Results	Comment
1	(hematuria* or hematuric* or haematuria* or haematuric*).ti,ab.	1861	Hematuria terms
2	(ultrason* or ultrasound*).ti,ab.	36 142	
3	((electron adj2 beam) or computed or computerized or computerised or cine or "x-ray" or xray) adj2 (ct or cts or tomograph*)).ti,ab.	29 346	
4	("cat scan*" or "ct scan*").ti,ab.	8687	
5	tomodensitometr*.ti,ab.	35	
6	(pyelogram* or pyelograph* or sonogram* or sonograph* or urogram* or urograph*).ti,ab,kf.	3751	
7	(cystograph* or cystogram*).ti,ab.	144	

Wallis CJD, et al. Diagnostic utility of axial imaging in the evaluation of hematuria: A systematic review and critical appraisal of the literature

8	(radiolog* or diagnosis or diagnostic).ti,ab.	171 680	
9	((("chemical shift" or "spin echo") adj2 imaging*) or mri or mris or nmr or "mr tomograph*" or "magnetic resonance imag" or "proton spin tomograph*" or zeugmatography or fmri).ti,ab.	54 436	
10	("echo planar imag*" or ("echo-planar" adj2 (mr or tomograph*)) or "echoplanar imag*").ti,ab.	216	
11	"19f mri".ti,ab.	15	
12	or/2--11	260 599	Diagnostic intervention terms
13	1 and 12	927	Base clinical set general
14	((((renal or kidney* or nephro or "collecting duct" or hypernephroid or nephroid or grawitz*) adj2 (adenocarcinoma* or carcinoma* or cancer* or neoplas* or tumour* or tumor* or carcinogen*)) or hypernephroma*).ti,ab,kf.	5781	
15	((bladder or urinary) adj2 (cancer* or carcinoma* or neoplas* or tumour* or tumor*).ti,ab,kf.	3863	
16	((ureteral or ureter or kidney) adj2 (cancer* or carcinoma* or neoplas* or tumour* or tumor*).ti,ab,kf.	1232	
17	"upper tract urothelial carcinoma*".ti,ab,kf.	144	
18	((renal or kidney* or nephro) adj2 mass*).ti,ab,kf.	800	
19	or/14-18	10 005	Renal cell carcinoma terms
20	1 and 12 and 19	267	Renal cell carcinoma results
21	(evaluation adj2 (studies or study)).ti,ab,kf.	1282	
22	(validation adj2 (studies or study)).ti,ab,kf.	1897	
23	("sensitivity and specificity" or (predictive adj2 value adj2 (test or tests or testing or tested)) or "roc curve").ti,ab,kf.	12 159	
24	((((diagnostic or diagnosis) adj2 error*) or ("false negative*" or "false -negative*" or "false positive*" or "false-positive*") or (observer* adj2 variat*)).ti,ab,kf.	5382	
25	(likelihood adj2 (function* or ratio*).ti,ab,kf.	1629	
26	or/21-25	20 835	MEDLINE Diagnosis filter
27	13 and 26	29	Diagnosis filter results
28	((cohort* or longitudinal or "follow-up" or prospective) adj2 (study or studies)).ti,ab,kf.	48 740	
29	((("case-control*" or retrospective* or "cross-sectional*") adj2 (study or studies)).ti,ab,kf.	56 218	

Wallis CJD, et al. Diagnostic utility of axial imaging in the evaluation of hematuria: A systematic review and critical appraisal of the literature

30	((observational or observation) adj2 (study or studies)).ti,ab,kf.	13 633	
31	(registry or registers or registries).ti,ab,kf.	12 280	
32	"seer program*".ti,ab,kf.	80	
33	("odds ratio*" or ((risk or risks or percipitat*) adj2 (assess* or factor*))).ti,ab,kf.	74 309	
34	("Poisson Distribution*" or (Logistic* adj2 Model*) or (Multivariate adj2 Analy*)).ti,ab,kf.	23 917	
35	"Asymptomatic Disease*".ti,ab,kf.	87	
36	(risk: or cause or causal or causation or relative risk).mp.	265 815	
37	or/28-36	352 166	MEDLINE Sensitive risk filter
38	13 and 37	257	Risk filter sensitive results
39	((cohort* or longitudinal or "follow-up" or prospective) adj2 (study or studies)).ti,ab,kf.	48 740	
40	((("case-control*" or retrospective* or "cross-sectional*") adj2 (study or studies)).ti,ab,kf.	56 218	
41	((observational or observation) adj2 (study or studies)).ti,ab,kf.	13 633	
42	(registry or registers or registries).ti,ab,kf.	12 280	
43	"seer program*".ti,ab,kf.	80	
44	(prognosis or prognostic or "disease-free surviv*" or (medical* adj2 futi*) or "pregnancy outcome*" or "treatment outcome*" or "treatment failure*").ti,ab,kf.	59 936	
45	(disease* adj2 progress*).ti,ab,kf.	11 678	
46	(morbidity* or comorbid* or incidence* or prevalence*).ti,ab,kf.	149 337	
47	(mortalit* or (cause* adj2 death*) or "fatal outcome*" or "hospital mortalit*" or "infant mortalit*" or "maternal mortalit*" or ((survival or survivor*) adj2 rate*)).ti,ab,kf.	80 132	
48	("survival analy*" or "kaplan-meier" or "proportional hazard*").ti,ab,kf.	11 890	
49	"early diagnos*".ti,ab,kf.	8379	
50	("early termination of clinical trials" or "watchful waiting").ti,ab,kf.	279	
51	"natural histor*".ti,ab,kf.	3651	
52	(predictive adj2 value adj2 (test or tests or testing or tested)).ti,ab,kf.	75	
53	or/39-52	326 017	MEDLINE Prognosis filter sensitive

Wallis CJD, et al. Diagnostic utility of axial imaging in the evaluation of hematuria: A systematic review and critical appraisal of the literature

54	13 and 53	288	MEDLINE Prognosis sensitive results
55	20 or 27 or 38 or 54	564	Combined final results
56	55 and (human or humans).ti,ab.	14	Human limit

MEDLINE Epub-ahead-of-print (search history sorted by search number ascending)			
#	Searches	Results	Comment
1	(hematuria* or hematuric* or haematuria* or haematuric*).ti,ab. [****Hematuria terms****]	216	Hematuria terms
2	(ultrason* or ultrasound*).ti,ab.	6152	
3	((((electron adj2 beam) or computed or computerized or computerised or cine or "x-ray" or xray) adj2 (ct or cts or tomograph*))).ti,ab.	5189	
4	("cat scan*" or "ct scan*").ti,ab.	1439	
5	tomodensitometr*.ti,ab.	1	
6	(pyelogram* or pyelograph* or sonogram* or sonograph* or urogram* or urograph*).ti,ab,kf.	734	
7	(cystograph* or cystogram*).ti,ab.	11	
8	(radiolog* or diagnosis or diagnostic).ti,ab.	30 326	
9	((("chemical shift" or "spin echo") adj2 imaging*) or mri or mris or nmr or "mr tomograph*" or "magnetic resonance imag" or "proton spin tomograph*" or zeugmatography or fmri).ti,ab.	10 304	
10	("echo planar imag*" or ("echo-planar" adj2 (mr or tomograph*)) or "echoplanar imag*").ti,ab.	92	
11	"19f mri".ti,ab.	7	
12	or/2-11	46 595	Diagnostic intervention terms
13	1 and 12	111	Base clinical set general
14	((((renal or kidney* or nephro or "collecting duct" or hypernephroid or nephroid or grawitz*) adj2 (adenocarcinoma* or carcinoma* or cancer* or neoplas* or tumour* or tumor* or carcinogen*)) or hypernephroma*).ti,ab,kf.	1132	
15	((bladder or urinary) adj2 (cancer* or carcinoma* or neoplas* or tumour* or tumor*)).ti,ab,kf.	773	
16	((ureteral or ureter or kidney) adj2 (cancer* or carcinoma* or neoplas* or tumour* or tumor*)).ti,ab,kf.	251	
17	"upper tract urothelial carcinoma*".ti,ab,kf.	36	
18	((renal or kidney* or nephro) adj2 mass*).ti,ab,kf.	112	

Wallis CJD, et al. Diagnostic utility of axial imaging in the evaluation of hematuria: A systematic review and critical appraisal of the literature

19	or/14-18	1948	Renal cell carcinoma terms
20	1 and 12 and 19	36	Renal cell carcinoma results
21	(evaluation adj2 (studies or study)).ti,ab,kf.	268	
22	(validation adj2 (studies or study)).ti,ab,kf.	466	
23	("sensitivity and specificity" or (predictive adj2 value adj2 (test or tests or testing or tested)) or "roc curve").ti,ab,kf.	2767	
24	((((diagnostic or diagnosis) adj2 error*) or ("false negative*" or "false -negative*" or "false positive*" or "false-positive*")) or (observer* adj2 variat*)).ti,ab,kf.	1215	
25	(likelihood adj2 (function* or ratio*)).ti,ab,kf.	467	
26	or/21-25	4878	MEDLINE Diagnosis filter
27	13 and 26	7	Diagnosis filter results
28	((cohort* or longitudinal or "follow-up" or prospective) adj2 (study or studies)).ti,ab,kf.	12 727	
29	((("case-control*" or retrospective* or "cross-sectional*") adj2 (study or studies)).ti,ab,kf.	11 712	
30	((observational or observation) adj2 (study or studies)).ti,ab,kf.	3216	
31	(registry or registers or registries).ti,ab,kf.	3154	
32	"seer program*".ti,ab,kf.	31	
33	("odds ratio*" or ((risk or risks or percipitat*) adj2 (assess* or factor*))).ti,ab,kf.	17 417	
34	("Poisson Distribution*" or (Logistic* adj2 Model*) or (Multivariate adj2 Analy*)).ti,ab,kf.	6547	
35	"Asymptomatic Disease*".ti,ab,kf.	17	
36	(risk: or cause or causal or causation or relative risk).mp.	57 606	
37	or/28-36	77 813	MEDLINE Sensitive risk filter
38	13 and 37	38	Risk filter sensitive results
39	((cohort* or longitudinal or "follow-up" or prospective) adj2 (study or studies)).ti,ab,kf.	12 727	
40	((("case-control*" or retrospective* or "cross-sectional*") adj2 (study or studies)).ti,ab,kf.	11 712	
41	((observational or observation) adj2 (study or studies)).ti,ab,kf.	3216	
42	(registry or registers or registries).ti,ab,kf.	3154	
43	"seer program*".ti,ab,kf.	31	

Wallis CJD, et al. Diagnostic utility of axial imaging in the evaluation of hematuria: A systematic review and critical appraisal of the literature

44	(prognosis or prognostic or "disease-free surviv*" or (medical* adj2 futi*) or "pregnancy outcome*" or "treatment outcome*" or "treatment failure*").ti,ab,kf.	13 445	
45	(disease* adj2 progress*).ti,ab,kf.	2264	
46	(morbidity* or comorbid* or incidence* or prevalence*).ti,ab,kf.	29 005	
47	(mortality* or (cause* adj2 death*) or "fatal outcome*" or "hospital mortality*" or "infant mortality*" or "maternal mortality*" or ((survival or survivor*) adj2 rate*)).ti,ab,kf.	16 996	
48	("survival analy*" or "kaplan-meier" or "proportional hazard*").ti,ab,kf.	3428	
49	"early diagnos*.ti,ab,kf.	1173	
50	("early termination of clinical trials" or "watchful waiting").ti,ab,kf.	71	
51	"natural histor*.ti,ab,kf.	704	
52	(predictive adj2 value adj2 (test or tests or testing or tested)).ti,ab,kf.	13	
53	or/39-52	68 682	MEDLINE Prognosis filter sensitive
54	13 and 53	42	MEDLINE Prognosis sensitive results
55	20 or 27 or 38 or 54	80	Combined final results
56	55 and (human or humans).ti,ab.	2	Human limit

Embase Classic+Embase			
#	Searches	Results	Comment
1	*hematuria/	7453	
2	(hematuric* or haematuria* or haematuric*).ti,ab.	7810	
3	or/1-2	13 602	Hematuria terms
4	echography/	281 497	
5	(ultrason* or ultrasound*).ti,ab.	452 855	
6	((electron adj2 beam) or computed or computerized or computerised or cine or "x-ray" or xray) adj2 (ct or cts or tomograph*).ti,ab.	305 275	
7	computer assisted tomography/ or exp computer assisted emission tomography/ or electron beam tomography/ or four dimensional computed tomography/ or high	804 180	

Wallis CJD, et al. Diagnostic utility of axial imaging in the evaluation of hematuria: A systematic review and critical appraisal of the literature

	resolution computer tomography/ or micro-computed tomography/ or spiral computer assisted tomography/ or exp x-ray computed tomography/		
8	x-ray computed tomography/ or dual energy computed tomography/	15 632	
9	("cat scan*" or "ct scan*").ti,ab.	136 503	
10	tomodensitometr*.ti,ab.	987	
11	urography/ or exp cystourethrography/	26 913	
12	(pyelogram* or pyelograph* or sonogram* or sonograph* or urogram* or urograph*).ti,ab.	90 112	
13	(cystograph* or cystogram*).ti,ab.	4327	
14	diagnostic imaging/	144 718	
15	di.fs.	2 953 793	
16	nuclear magnetic resonance imaging/ or diffusion weighted imaging/ or functional magnetic resonance imaging/	717 757	
17	((("chemical shift" or "spin echo") adj2 imaging*) or mri or mris or nmr or "mr tomograph*" or "magnetic resonance imag" or "proton spin tomograph*" or zeugmatography or fmri).ti,ab.	534 088	
18	echo planar imaging/ or ("echo planar imag*" or ("echo-planar" adj2 (mr or tomograph*)) or "echoplanar imag*").ti,ab.	6055	
19	fluorine magnetic resonance imaging/ or "19f mri".ti,ab.	432	
20	cine magnetic resonance imaging/	247	
21	or/4-20	4 350 758	Diagnostic intervention terms
22	3 and 21	5445	Base clinical set general
23	kidney carcinoma/	60 639	
24	((((renal or kidney* or nephro or "collecting duct" or hypernephroid or nephroid or grawitz*) adj2 (adenocarcinoma* or carcinoma* or cancer* or neoplas* or tumour* or tumor* or carcinogen*)) or hypernephroma*).ti,ab.	81 298	
25	transitional cell carcinoma/	23 348	
26	bladder tumor/ or ((bladder or urinary) adj2 (cancer* or carcinoma* or neoplas* or tumour* or tumor*).ti,ab.	67 891	
27	kidney tumor/ or exp ureter tumor/ or ((ureteral or ureter) adj2 (cancer* or	38 799	

Wallis CJD, et al. Diagnostic utility of axial imaging in the evaluation of hematuria: A systematic review and critical appraisal of the literature

	carcinoma* or neoplas* or tumour* or tumor*).ti,ab.		
28	"upper tract urothelial carcinoma*".ti,ab.	1220	
29	((renal or kidney* or nephro) adj2 mass*).ti,ab.	10 980	
30	or/23-29	190 193	Renal cell carcinoma terms
31	3 and 21 and 30	1303	Renal cell carcinoma results
32	Evaluation study/ or (evaluation adj2 (study or studies)).ti,ab.	45 238	
33	validation study/ or (validation adj2 (study or studies)).ti,ab.	76 926	
34	"sensitivity and specificity"/	287 069	
35	diagnostic error/ or false negative result/ or false positive result/	82 381	
36	"prediction and forecasting"/ or prediction/	322 047	
37	observer variation/	18 722	
38	receiver operating characteristic/ or roc curve/	88 418	
39	laboratory diagnosis/ or abnormal laboratory result/	48 443	
40	predictive validity/ or predictive value/	129 142	
41	(likelihood adj2 (function* or ratio*)).ti,ab.	18 219	
42	or/32-41	937 578	EMBASE diagnosis filter
43	22 and 42	378	Diagnosis filter results
44	cohort analysis/ or longitudinal study/ or prospective study/	766 194	
45	case control study/ or hospital based case control study/ or population based case control study/ or retrospective study/	719 241	
46	observational study/ or (observational adj2 (study or studies)).ti,ab.	183 496	
47	Register/ or cancer registry/	130 252	
48	risk/ or attributable risk/ or genetic risk/ or high risk patient/ or high risk population/ or low risk patient/ or low risk population/ or population risk/ or recurrence risk/ or risk factor/ or risk management/ or risk reduction/	1 612 071	
49	Odds ratio/ or (odds adj2 ratio:).ti,ab.	270 183	
50	cardiovascular risk/	167 361	
51	fall risk/ or fall risk assessment/	4128	
52	high risk behavior/	22 533	
53	high risk infant/ or high risk pregnancy/	12 135	

Wallis CJD, et al. Diagnostic utility of axial imaging in the evaluation of hematuria: A systematic review and critical appraisal of the literature

54	infection risk/	73 215	
55	Causality/	885	
56	(precipitat* adj2 factor*).ti,ab.	6852	
57	Poisson distribution/ or statistical model/ or multivariate analysis/	290 357	
58	asymptomatic disease/	9738	
59	(risk: or cause or causal or causation or relative risk).ti,ab.	3 616 604	
60	or/44-59	5 283 158	EMBASE risk sensitive filter
61	22 and 60	1592	Risk sensitive filter results
62	cohort analysis/ or longitudinal study/ or prospective study/	766 194	
63	case control study/ or hospital based case control study/ or population based case control study/ or retrospective study/	719 241	
64	observational study/ or (observational adj2 (study or studies)).ti,ab.	183 496	
65	Register/ or cancer registry/	130 252	
66	cancer recurrence/ or cancer regression/ or cancer relapse/ or disease duration/ or disease exacerbation/ or prognosis/ or recurrent disease/ or reinfection/ or relapse/ or remission/ or tumor recurrence/ or tumor regression/ or survival/ or cancer survival/ or disease free survival/ or overall survival/ or survival rate/ or survival time/	1 873 735	
67	prognosis/	551 600	
68	incidence/ or cancer incidence/ or familial incidence/	354 756	
69	morbidity/ or comorbidity/ or comorbidity assessment/ or maternal morbidity/ or perinatal morbidity/ or newborn morbidity/	508 388	
70	mortality/ or cancer mortality/ or childhood mortality/ or embryo mortality/ or fetus mortality/ or infant mortality/ or maternal mortality/ or prenatal mortality/ or surgical mortality/ or perinatal mortality/ or newborn mortality/	897 829	
71	death/ or "cause of death"/ or dying/ or heart death/ or sudden death/ or child death/ or newborn death/	443 793	
72	prevalence/	568 361	

Wallis CJD, et al. Diagnostic utility of axial imaging in the evaluation of hematuria: A systematic review and critical appraisal of the literature

73	treatment outcome/ or disease free interval/ or treatment failure/ or drug treatment failure/	861 707	
74	(natural adj2 history).ti,ab.	59 835	
75	or/62-74	5 183 153	EMBASE prognosis sensitive filter
76	22 and 75	1487	Prognosis sensitive filter results
77	31 or 43 or 61 or 76	3077	Combined results
78	limit 78 to human	2799	Human limit
79	remove duplicates from 78	2747	Unique results

Cochrane			
ID	Search	Hits	Comment
#1	Hematuria:kw	1092	
#2	hematuric* or haematuria* or haematuric*	376	
#3	#1 or #2	1361	Hematuria terms
#4	Ultrasonography:kw or (ultrason* or ultrasound*)	27343	
#5	radiographic image interpretation, computer-assisted:kw or tomography, x-ray computed:kw or four-dimensional computed tomography:kw or positron emission tomography computed tomography:kw or single photon emission computed tomography computed tomography:kw or tomography, spiral computed:kw or multidetector computed tomography:kw	8508	
#6	((electron near/2 beam) or computed or computerized or computerised or cine or "x-ray" or xray) near/2 (ct or cts or tomograph*))	14994	
#7	"cat scan*" or "ct scan"	3843	
#8	tomodensitometr*	51	
#9	urography:kw or (pyelogram* or pyelograph* or sonogram* or sonograph* or urogram* or urograph*)	3081	
#10	cystography:kw or (cystograph* or cystogram*)	71	
#11	Radiology:kw or diagnostic	55522	
#12	Magnetic Resonance Imaging:kw or (((("chemical shift" or "spin echo") near/2 imaging*) or mri or mris or nmr or "mr tomograph*" or "magnetic resonance imag" or "proton spin tomograph*" or zeugmatography or fmri)	18897	
#13	Echo-Planar Imaging:kw or ("echo planar imag*" or ("echo-planar" near/2 (mr or tomograph*)) or "echoplanar imag*")	235	

Wallis CJD, et al. Diagnostic utility of axial imaging in the evaluation of hematuria: A systematic review and critical appraisal of the literature

#14	Fluorine-19 Magnetic Resonance Imaging:kw or "19f mri"	0	
#15	Diffusion Magnetic Resonance Imaging:kw or Magnetic Resonance Imaging, Cine:kw	1185	
#16	{or #4-#15}	96881	Diagnostic terms
#17	#3 and #16	385	Base clinical set

Sentinel article verification

MEDLINE		
70	Morgan AE.au. and hematuria.ti. and "1160".pg.	1
71	Loo RK.au. and hematuria.ti. and "129".pg.	1
72	Jung H.au. and hematuria.ti. and "1698".pg.	1
73	Edwards TJ.au. and haematuria.ti. and "247".pg.	1
74	Edwards TJ.au. and haematuria.ti. and "301".pg.	1
75	or/70-74 [****Sentinel articles****]	5
76	69 and 75 [***Sentinel article verification****]	5

MEDLINE In-process		
56	Lippmann QK.au. and hematuria.ti. and "American journal of obstetrics and gynecology".jn.	0
57	Chen CY.au. and hematuria.ti. and "AJR. American journal of roentgenology".jn.	0
58	or/56-57 [****Sentinel articles - non-indexed in MEDLINE****]	0

MEDLINE Epub-ahead-of-print		
56	Lippmann QK.au. and hematuria.ti. and "American journal of obstetrics and gynecology".jn.	0
57	Chen CY.au. and hematuria.ti. and "AJR. American journal of roentgenology".jn.	0
58	or/56-57 [****Sentinel articles - non-indexed in MEDLINE****]	0