

Supplemental file 1: Complete search strategy

MEDLINE	
1	Osteoarthritis, Knee/
2	Osteoarthritis, Hip/
3	((Osteoarthr* adj3 knee) or (arthr* adj3 knee) or gonarthr* or gon arthr* or femorotibial arthr* or (osteoarthr* adj3 hip) or (arthr* adj3 hip) or coxarthr* or cox arthr*).ti,ab.
4	1 or 2 or 3
5	diagnostic imaging/
6	Magnetic Resonance Imaging/
7	Ultrasonography/
8	Ultrasonics/
9	exp Tomography/
10	X-Rays/
11	Radiography/
12	Ultrasonography/
13	(radiograph* or radiolog* or x ray* or mr* or magnetic resonance or ct* or computed tomography or sonograph* or echograph* or ultrasound or ultrasonography).ti,ab.
14	5 or 6 or 7 or 8 or 9 or 10 or 11 or 12 or 13
15	(((singl* or doubl* or treb* or tripl*) adj (blind*3 or mask*3)) or (allocated adj2 random)).tw. or (clin* adj25 trial*).ti,ab. or (clinic* adj trial*1).tw. or (double-blind* or random*).af. or clinical trial.pt. or clinical trials as topic.sh. or controlled clinical trial.pt. or double blind method.sh. or single blind method.sh. or double-blind method.sh. or single-blind method.sh. or drug therapy.fs. or exp clinical trials as topic/ or exp research design/ or placebo*.tw. or placebos.sh. or practice guideline.pt. or random allocation.sh. or random*.tw. or random.af. or randomized controlled trial.pt. or randomized controlled trials as topic.sh. or randomized.ab. or randomly allocated.tw. or randomly.ab. or single-blind method.sh. or trial.ab. or trial.ti.) not (case report.tw. or letter.pt. or historical article.pt. or review of reported cases.pt. or multicase review.pt.)
16	4 and 14 and 15
EMBASE	
1	knee osteoarthritis/
2	hip osteoarthritis/
3	knee arthritis/
4	((Osteoarthr* adj3 knee) or (arthr* adj3 knee) or gonarthr* or gon arthr* or femorotibial arthr* or (osteoarthr* adj3 hip) or (arthr* adj3 hip) or coxarthr* or cox arthr*).ti,ab.
5	1 or 2 or 3 or 4
6	diagnostic imaging/

7	exp nuclear magnetic resonance imaging/
8	exp knee arthrography/
9	echography/
10	ultrasound/
11	knee radiography/
12	hip radiography/
13	dual energy computed tomography/
14	X ray/
15	radiography/ or computer assisted radiography/ or digital radiography/ or joint radiography/
16	exp nuclear magnetic resonance/
17	computer assisted tomography/
18	exp x-ray computed tomography/
19	(radiograph* or radiolog* or x ray* or mr* or magnetic resonance or ct* or computed tomography or sonograph* or echograph* or ultrasound or ultrasonography).ti,ab.
20	6 or 7 or 8 or 9 or 10 or 11 or 12 or 13 or 14 or 15 or 16 or 17 or 18 or 19
21	((singl* or doubl* or treb* or tripl*) adj (blind*3 or mask\$3)) or (allocated adj2 random)).tw. or (clin* adj25 trial*).ti,ab. or (clinic: adj trial\$1).tw. or (double-blind* or random*).af. or exp "clinical trial (topic)"/ or exp double blind procedure/ or exp single blind procedure/ or exp triple blind procedure/ or placebo*.tw. or exp placebo/ or exp randomization/ or Random.af. or Random*.tw. or exp "randomized controlled trial (topic)"/ or randomized.ab. or randomly allocated.tw. or randomly.ab. or trial.ab. or trial.ti. or exp "controlled clinical trial (topic)"/ or randomized controlled trial/ or "randomized controlled trial (topic)"/ or exp "controlled clinical trial"/
22	5 and 20 and 21
COCHRANE	
1	MeSH descriptor: [Osteoarthritis, Knee] explode all trees
2	MeSH descriptor: [Osteoarthritis, Hip] explode all trees
3	"Osteoarthr* NEAR/2 knee" or "arthr* NEAR/2 knee" or gonarthr* or "gon arthr*" or "femorotibial arthr*" or "osteoarthr* NEAR/2 hip" or "arthr* NEAR/2 hip" or coxarthr* or "cox arthr*"
4	#1 OR #2 OR #3
5	MeSH descriptor: [Diagnostic Imaging] this term only
6	MeSH descriptor: [Magnetic Resonance Imaging] this term only
7	MeSH descriptor: [Ultrasonography] this term only
8	MeSH descriptor: [Ultrasonics] this term only
9	MeSH descriptor: [Tomography] explode all trees
10	MeSH descriptor: [X-Rays] this term only
11	MeSH descriptor: [Ultrasonography] this term only

12	MeSH descriptor: [Radiography] this term only
13	(radiograph* or radiologic* or x-ray* or mr* or "magnetic resonance" or ct* or "computed tomography" or sonograph* or echograph* or ultrasound or ultrasonography):ti,ab,kw (Word variations have been searched)
14	#5 OR #6 OR #7 OR #8 OR #9 OR #10 OR #11 OR #12 OR #13
15	#4 AND #14