



Supplementary Material

10.1302/2046-3758.1111.BJR-2022-0181.R1

Table i. Search algorithms for each search.

Variable	Database	
	PubMed	Scopus
Fractures		
Acetabulum fractures	((fracture*[Title] OR injur*[Title])) AND acetabu*[title] AND (incidence[Title] OR prevalence[Title] OR epidemiolog*[Title]))	((fractur* or injur*) AND acetabu* AND (incidence OR prevalence OR epidemiolog*))
Ankle fractures	(fracture*[Title] AND ankle[title] AND (incidence[Title] OR prevalence[Title] OR epidemiology[Title]))	(fracture* AND ankle AND (incidence OR prevalence OR epidemiology))
Calcaneus fractures	((fracture*[Title] OR injur*[title]) AND (calcane*[title] OR heel[title]) AND (incidence[Title] OR prevalence[Title] OR epidemiolog*[Title]))	((fracture* OR injur*) AND (calcane* OR heel) AND (incidence OR prevalence OR epidemiolog*))
Carpal fractures	((fracture*[Title] OR injur*[title]) AND (carp*[title]) AND (incidence[Title] OR prevalence[Title] OR epidemiolog*[Title]))	((fracture* OR injur*) AND carp* AND (incidence OR prevalence OR epidemiolog*))
Clavicle fractures	((((fracture*[Title] OR injur*[Title])) AND clavic*[Title]) AND (incidence[Title] OR prevalence[Title] OR epidemiolog*[title])))	((fracture* OR injur*) AND clavic*) AND

		(incidence OR prevalence OR epidemiolog*)
Distal radius fractures	((fracture*[Title] OR injur*[Title])) AND ((distal[title] AND (radius[Title] OR radial[title])) OR wrist[title]) AND (incidence[Title] OR prevalence[Title] OR epidemiolog*[Title]))	((fracture* OR injur*) AND ((distal AND (radius OR radial)) OR wrist) AND (incidence OR prevalence OR epidemiolog*))
Femoral shaft fractures	((fracture*[Title] OR injur*[Title])) AND (diaphysis[title] OR diaphyseal[title] OR shaft[title]) AND (femur[Title] OR femoral[title]) AND (incidence[Title] OR prevalence[Title] OR epidemiolog*[Title]))	((fracture* OR injur*) AND (diaphysis OR diaphyseal OR shaft) AND (femur OR femoral)) AND (incidence OR prevalence OR epidemiolog*)
Distal femoral fractures	((fracture*[Title] OR injur*[Title])) AND (distal[title] AND (femur[Title] OR femoral[title])) AND (incidence[Title] OR prevalence[Title] OR epidemiolog*[Title] OR trends[title]))	((fracture* OR injur*) AND (distal AND (femur OR femoral))) AND (incidence OR prevalence OR epidemiolog* OR trends)
Finger fractures	((fracture*[Title] OR injur*[Title])) AND finger*[title] AND (incidence[Title] OR prevalence[Title] OR epidemiolog*[Title]))	((fracture* OR injur*) AND (finger* OR digit*)) AND (incidence OR prevalence OR epidemiolog*)
Foot fractures	(fracture*[Title] AND foot[title] AND (incidence[Title] OR epidemiolog*[Title]))	(fracture* AND foot AND (incidence OR epidemiolog*))
Hip fractures	fracture*[Title] AND hip[Title] AND (incidence[Title] OR epidemiolog*[title])	fracture* AND hip AND (incidence OR epidemiolog*)
Humerus fractures	((fracture*[Title] OR injur*[Title])) AND (humerus[title] OR humeral[title]) AND (incidence[Title] OR prevalence[Title] OR epidemiolog*[title]))	((fracture* OR injur*) AND (humerus OR humeral) AND (incidence OR prevalence OR epidemiolog*))
Lisfranc injuries	((fracture*[Title] OR injur*[title]) AND (lisfranc[title] OR midfoot[title]) AND (incidence[Title] OR prevalence[Title] OR epidemiolog*[Title]))	((fracture* OR injur*) AND (lisfranc OR midfoot) AND (incidence OR prevalence OR epidemiolog*))
Metacarpal fractures	((fracture*[Title] OR injur*[title]) AND (metacarp*[title]) AND (incidence[Title] OR prevalence[Title] OR epidemiolog*[Title]))	((fracture* OR injur*) AND (metacarp*) AND (incidence OR prevalence OR epidemiolog*))
Metatarsal fractures	((fracture*[Title] OR injur*[title]) AND (metatars*[title] OR midfoot[title]) AND (incidence[Title] OR prevalence[Title] OR epidemiolog*[Title]))	((fracture* OR injur*) AND (metatars* OR midfoot) AND (incidence OR prevalence OR epidemiolog*))
Patellar fractures	((fracture*[Title] OR injur*[Title])) AND (patella*[title] OR kneecap[title]) AND (incidence[Title] OR prevalence[Title] OR epidemiolog*[Title]))	((fracture* OR injur*) AND (patella* OR kneecap) AND (incidence OR prevalence OR epidemiolog*))

Pelvic fractures	(((((fracture*[Title] OR injur*[Title])) AND pelvic[Title]) AND (incidence[Title] OR prevalence[Title] OR epidemiolog*[Title])))	(((((fracture* OR injur*)) AND pelvic) AND (incidence OR prevalence OR epidemiolog*)))
Scaphoideum fractures	(((((fracture*[Title] OR injur*[Title])) AND scaphoid[title] AND (incidence[Title] OR prevalence[Title] OR epidemiolog*[Title])))	((fracture* OR injur*) AND scaphoid) AND (incidence OR prevalence OR epidemiolog*)
Scapula fractures	(fracture*[Title] OR injur*[Title]) AND (scapula*[title] OR (shoulder[title] AND (bone[title] OR blade[title]))) AND (incidence[Title] OR epidemiolog*[Title])	(fracture* OR injur*) AND (scapula* OR (shoulder AND (bone OR blade))) AND (incidence OR epidemiolog*)
Spine fractures	(fracture*[Title] OR injur*[Title]) AND spine*[title] AND (incidence[Title] OR prevalence[Title] OR epidemiolog*[Title])	(fracture* OR injur*) AND spine* AND (incidence OR prevalence OR epidemiolog*)
Proximal tibia fractures	(((((fracture*[Title] OR injur*[Title])) AND (tibia*[title] AND (proximal[title] OR plateau)) AND (incidence[Title] OR prevalence[Title] OR epidemiolog*[Title])))	(((((fracture* OR injur*)) AND (tibia* AND (proximal OR plateau)) AND (incidence OR prevalence OR epidemiolog*)))
Tibia shaft fractures	(((((fracture*[Title] OR injur*[Title])) AND (tibia*[title] AND (shaft[title] OR diaphy*[title])) AND (incidence[Title] OR prevalence[Title] OR epidemiolog*[Title])))	((fracture* OR injur*) AND (tibia* AND (shaft OR diaphy*))) AND (incidence OR prevalence OR epidemiolog*)
Toe fracture	(((((fracture*[Title] OR injur*[Title])) AND toe*[title] AND (incidence[Title] OR prevalence[Title] OR epidemiolog*[Title])))	((fracture* OR injur*) AND toe*) AND (incidence OR prevalence OR epidemiolog*)
Sprains and dislocations		
Ankle sprains	((injur*[Title] OR sprain*[TITLE]) AND ankle*[Title] AND (incidence[Title] OR epidemiolog*[title]))	((injur* OR sprain*) AND ankle* AND (incidence OR epidemiolog*))
Elbow dislocations	dislocation*[TITLE] AND elbow*[title] AND (incidence[Title] OR prevalence[Title] OR epidemiolog*[title])	dislocation* AND elbow* AND (incidence OR prevalence OR epidemiolog*)
Patellar dislocations	(dislocation*[TITLE] OR luxation*[TITLE]) AND (patell*[title] OR kneecap[title])AND (incidence[Title] OR prevalence[Title] OR epidemiolog*[title])	(dislocation* OR luxation*) AND (patell* OR kneecap) AND (incidence OR prevalence OR epidemiolog*)
Knee dislocations	dislocation*[TITLE] AND knee*[title] AND (incidence[Title] OR prevalence[Title] OR epidemiolog*[title])	dislocation* AND knee* AND (incidence OR prevalence OR epidemiolog*)
Shoulder dislocations	(dislocation*[TITLE] OR luxation*[TITLE]) AND (should*[title] OR glenohumer*[title]) AND (incidence[Title] OR prevalence[Title] OR epidemiolog*[title])	(dislocation* OR luxation*) AND (should* OR glenohumer*) AND (incidence OR prevalence OR epidemiolog*)
Ligament and tendon injuries		

Achilles ruptures	(injur*[Title] OR rupture*[TITLE] OR tear*[TITLE] OR avuls*[title] OR lesion*[title]) AND achille*[title] AND (incidence[Title] OR prevalence[Title] OR epidemiolog*[title])	(injur* OR rupture* OR tear* OR avuls* OR lesion*) AND achille* AND (incidence OR prevalence OR epidemiolog*)
Anterior cruciate ligament (ACL) ruptures	(injur*[Title] OR rupture*[TITLE] OR tear*[TITLE] OR avuls*[title] OR lesion*[title]) AND ((anterior[title] AND cruciate[title] AND ligament[title]) OR ACL[title]) AND (incidence[Title] OR prevalence[Title] OR epidemiolog*[title])	(injur* OR rupture* OR tear* OR avuls* OR lesion*) AND ((anterior AND cruciate AND ligament) OR ACL) AND (incidence OR prevalence OR epidemiolog*)
Distal biceps ruptures	((injur*[Title] OR rupture*[TITLE] OR tear[TITLE] OR avuls*[title] OR lesion*[title]) AND biceps*[Title] AND (incidence[Title] OR epidemiolog*[title]))	((injur* OR rupture* OR tear OR avuls* OR lesion*) AND biceps* AND (incidence OR epidemiolog*))
Hamstring ruptures	((injur*[Title] OR rupture*[TITLE] OR tear[TITLE] OR avuls*[title] OR lesion*[title]) AND hamstring*[Title] AND (incidence[Title] OR epidemiolog*[title]))	((injur* OR rupture* OR tear OR avuls* OR lesion*) AND hamstring* AND (incidence OR epidemiolog*))
Hand tendon ruptures	(fractur*[TITLE] OR injur*[TITLE] OR rupture*[TITLE] OR tear[TITLE] OR dislocation[TITLE] OR luxation[TITLE]) AND (tendon*[title] AND hand[title]) AND (incidence[Title] OR prevalence[Title] OR epidemiolog*[Title])	(fractur* OR injur* OR rupture* OR tear OR dislocation OR luxation) AND (tendon* AND hand) AND (incidence OR prevalence OR epidemiolog*)
Lateral collateral ligament	(fractur*[TITLE] OR injur*[TITLE] OR rupture*[TITLE] OR tear[TITLE] OR dislocation[TITLE] OR luxation[TITLE]) AND ((lateral[title] AND collateral[title] AND ligament[title]) OR LCL[title]) AND (incidence[Title] OR prevalence[Title] OR epidemiolog*[Title])	(injur* OR rupture* OR tear* OR avuls* OR lesion*) AND ((lateral AND collateral AND ligament) OR LCL) AND (incidence OR prevalence OR epidemiolog*)
Medial collateral ligament	(fractur*[TITLE] OR injur*[TITLE] OR rupture*[TITLE] OR tear[TITLE] OR dislocation[TITLE] OR luxation[TITLE]) AND ((medial[title] AND collateral[title] AND ligament[title]) OR MCL[title]) AND (incidence[Title] OR prevalence[Title] OR epidemiolog*[Title])	(injur* OR rupture* OR tear* OR avuls* OR lesion*) AND ((medial AND collateral AND ligament) OR MCL) AND (incidence OR prevalence OR epidemiolog*)
Posterior cruciate ligament ruptures	(injur*[Title] OR rupture*[TITLE] OR tear*[TITLE] OR avuls*[title] OR lesion*[title]) AND ((posterio*[title] AND cruciat*[title] AND ligament*[title]) OR PCL[title]) AND (incidence[Title] OR prevalence[Title] OR epidemiolog*[title])	(injur* OR rupture* OR tear* OR avuls* OR lesion*) AND ((posterio* AND cruciat* AND ligament*) OR PCL) AND (incidence OR prevalence OR epidemiolog*)
Ulnar collateral ligament	(fractur*[TITLE] OR injur*[TITLE] OR rupture*[TITLE] OR tear[TITLE] OR dislocation[TITLE] OR luxation[TITLE]) AND ((ulna*[title] AND collateral[title] AND ligament[title]) OR UCL[title]) AND (incidence[Title] OR prevalence[Title] OR epidemiolog*[Title])	(injur* OR rupture* OR tear* OR avuls* OR lesion*) AND ((ulna* AND collateral AND ligament) OR UCL) AND (incidence OR prevalence OR epidemiolog*)

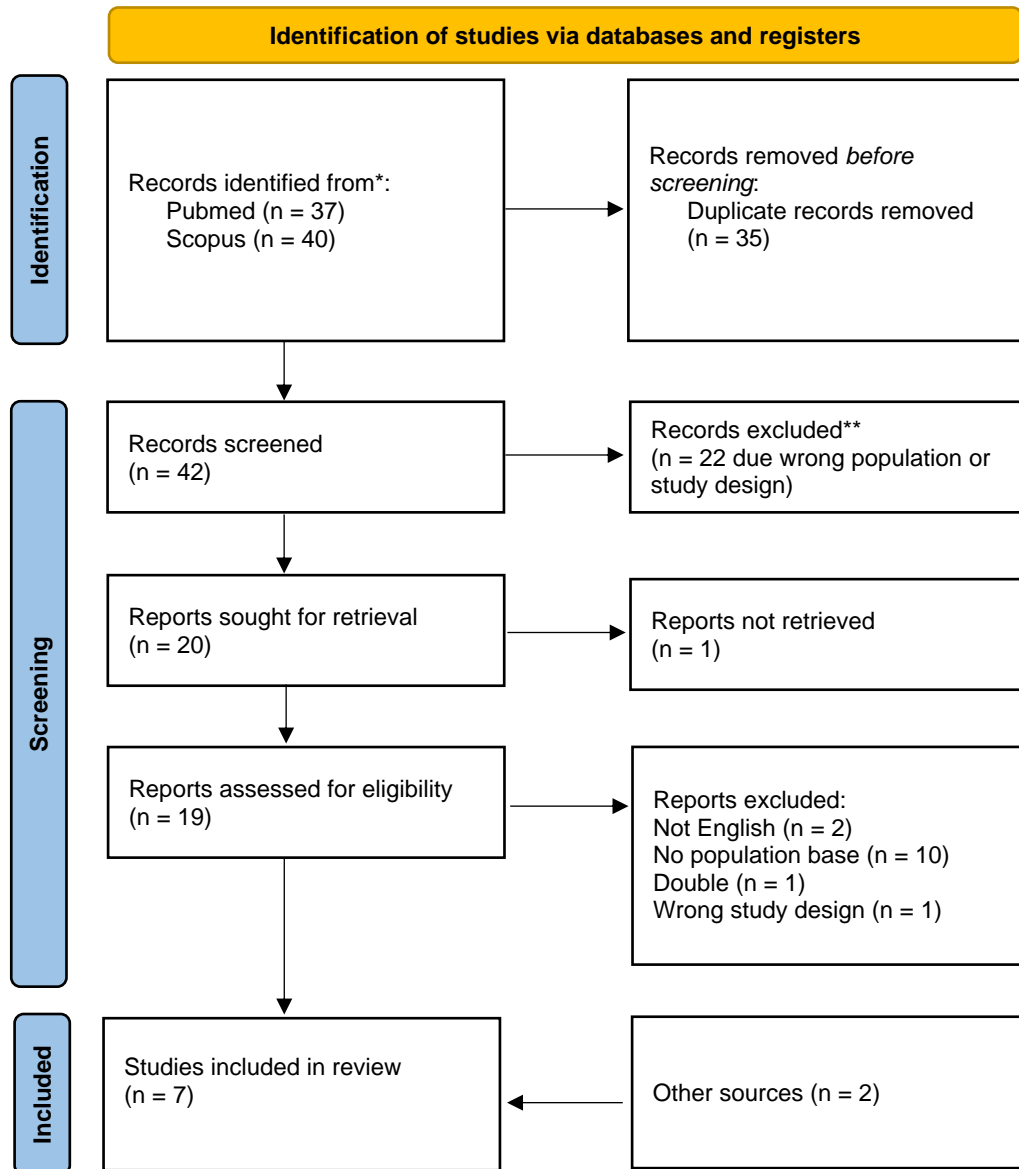
Quadriceps rupture	((injur*[Title] OR rupture*[TITLE] OR tear[TITLE] OR avuls*[title] OR lesion*[title]) AND quadriceps*[Title] AND (incidence[Title] OR epidemiolog*[title]))	((injur* OR rupture* OR tear OR avuls* OR lesion*) AND quadriceps* AND (incidence OR epidemiolog*))
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All searched were conducted between 8 June 2021 and 13 September 2021, except lateral collateral ligament (LCL), medial collateral ligament (MCL), ulnar collateral ligament (UCL) injuries, and metacarpal and carpal fractures which were added on 19 June 2022.

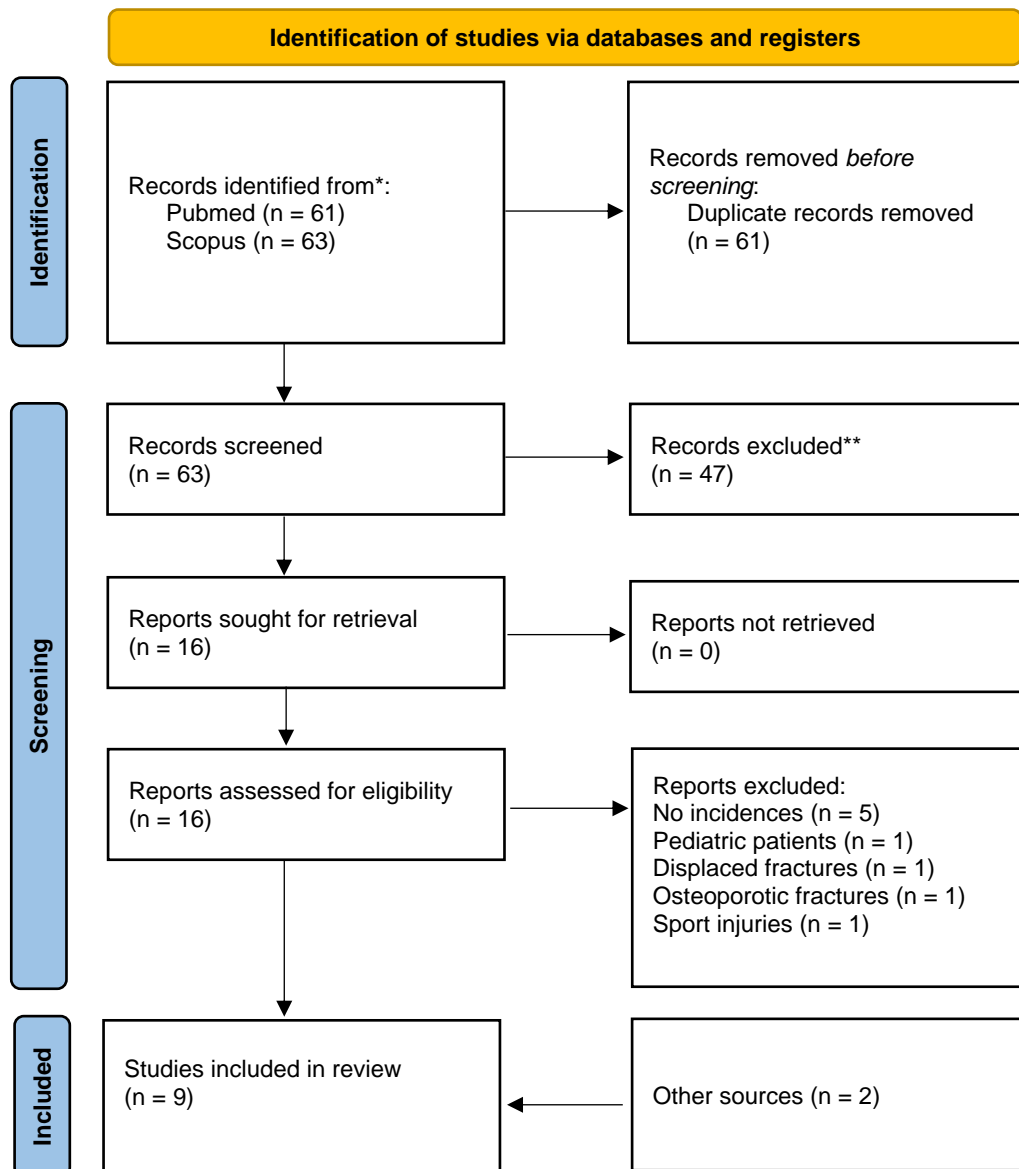
Fig a. PRISMA flow chart of study identification process of each review.

Fractures

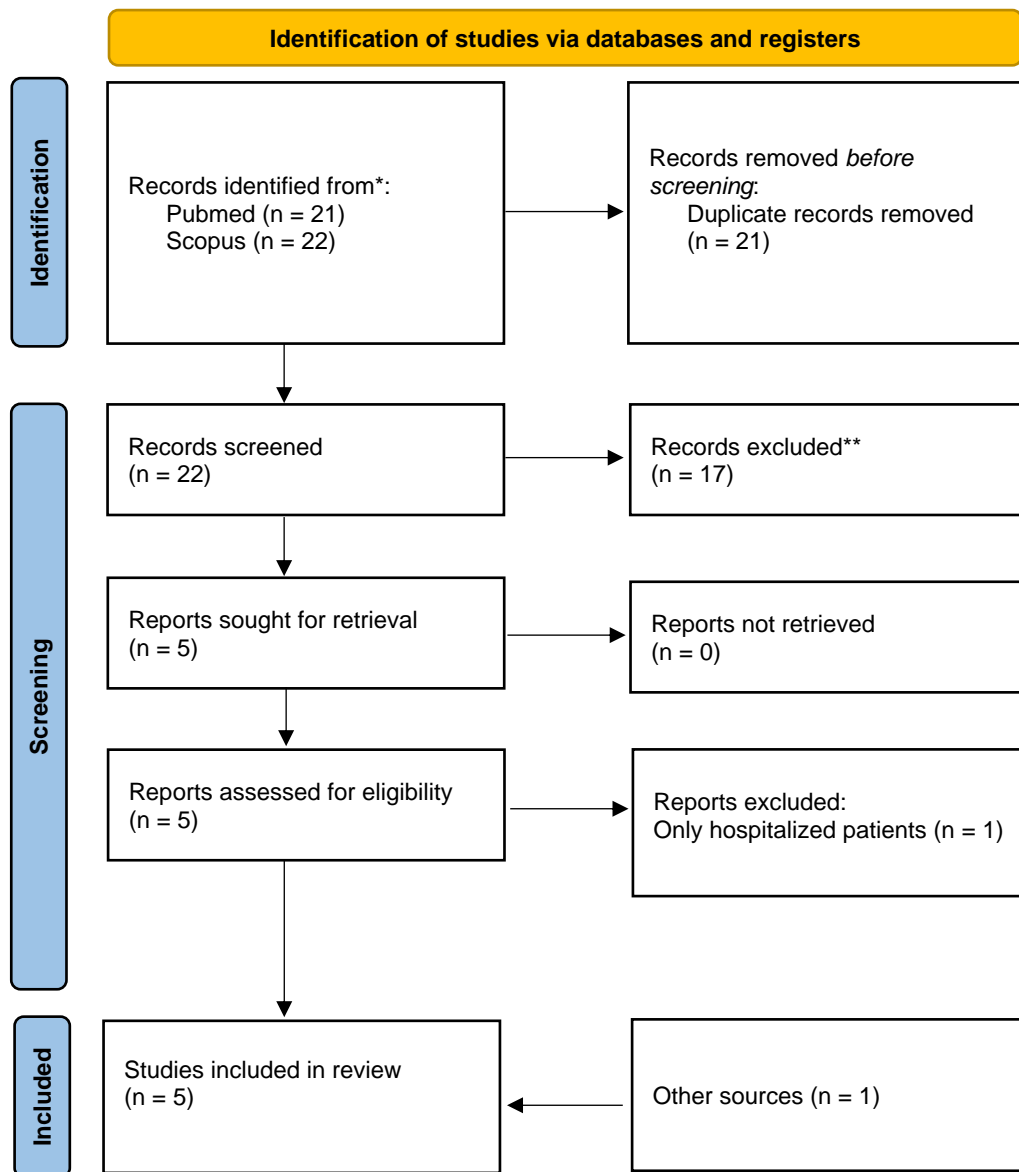
Acetabulum fractures



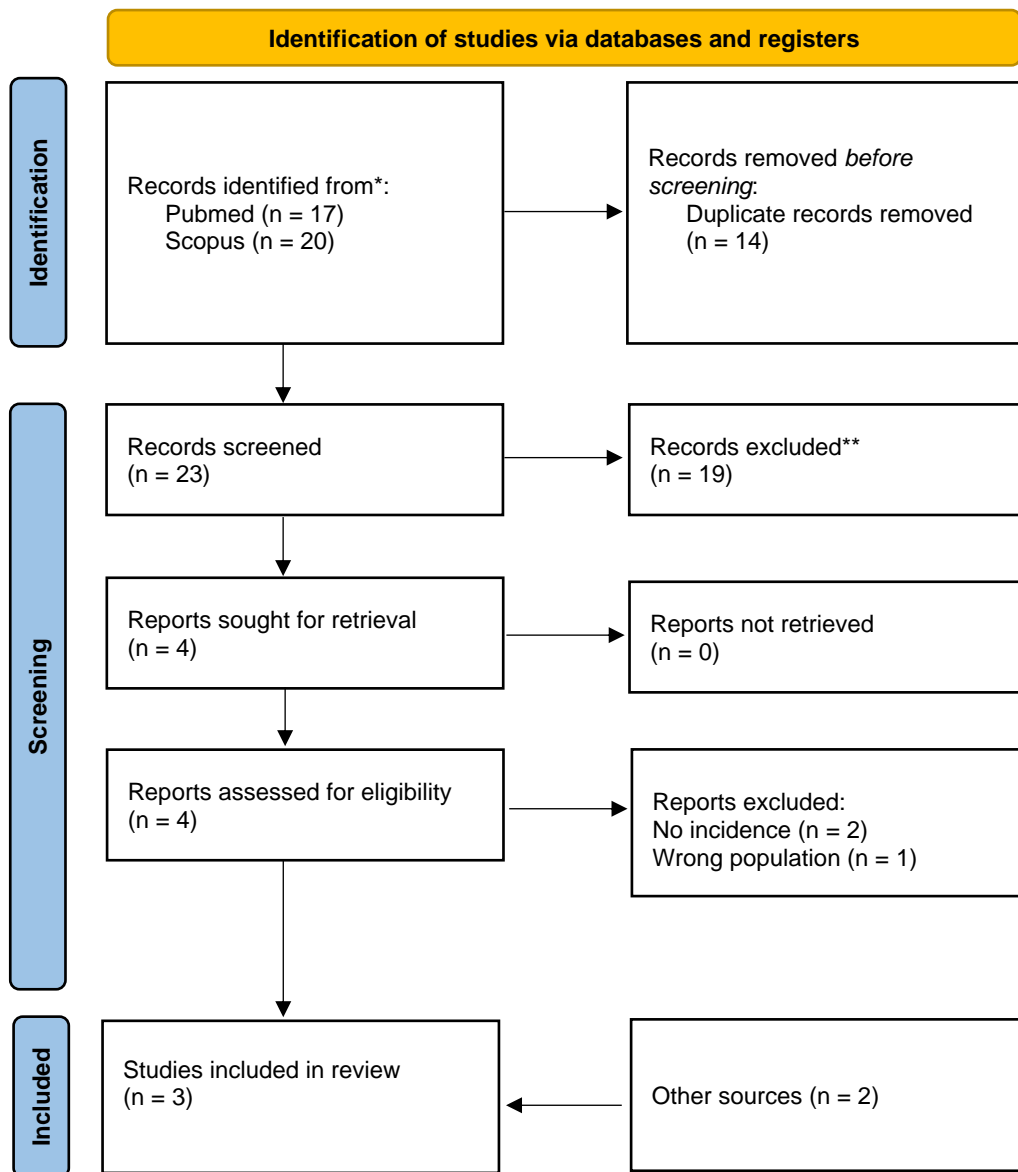
Ankle fractures



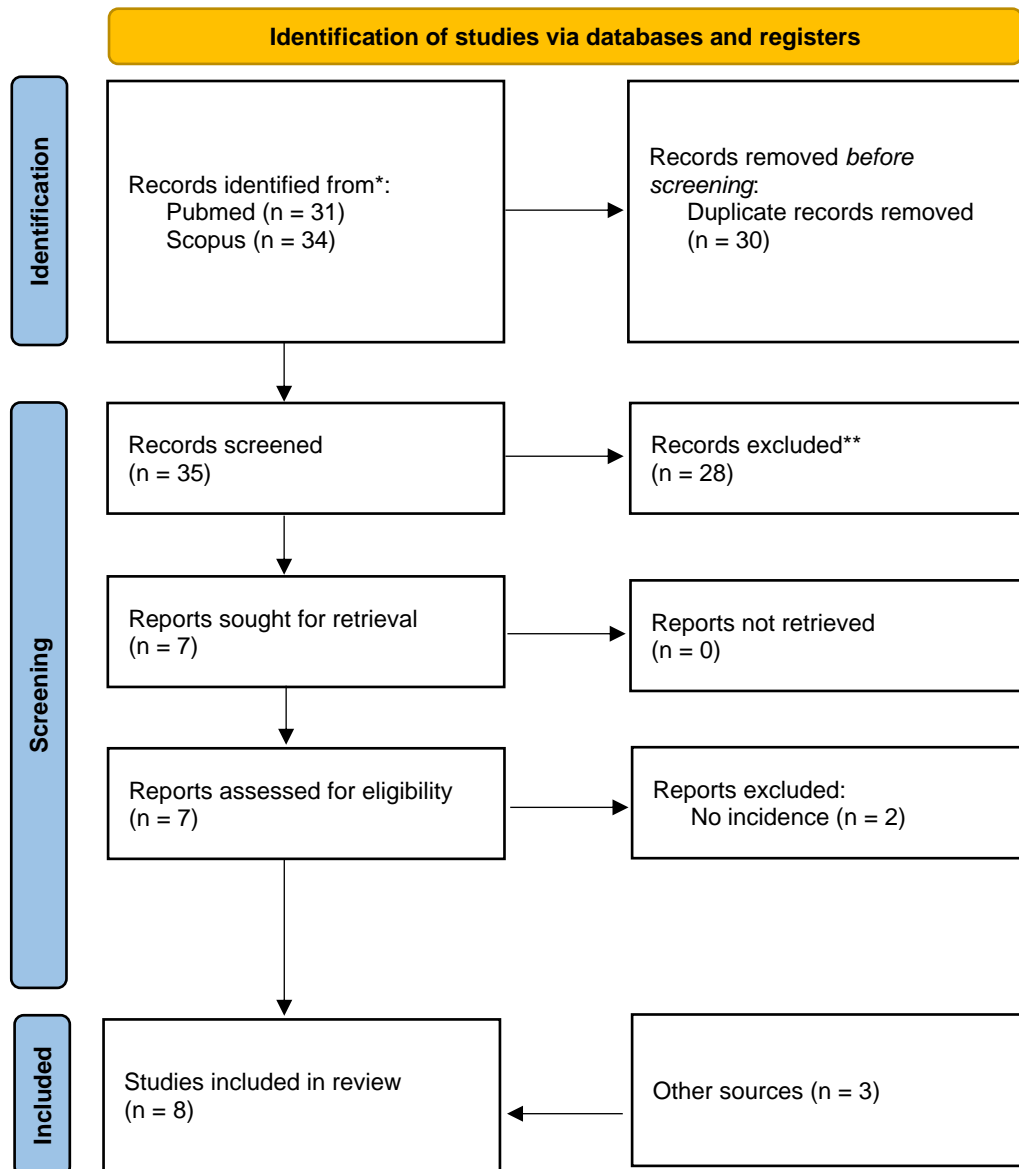
Calcaneus fractures



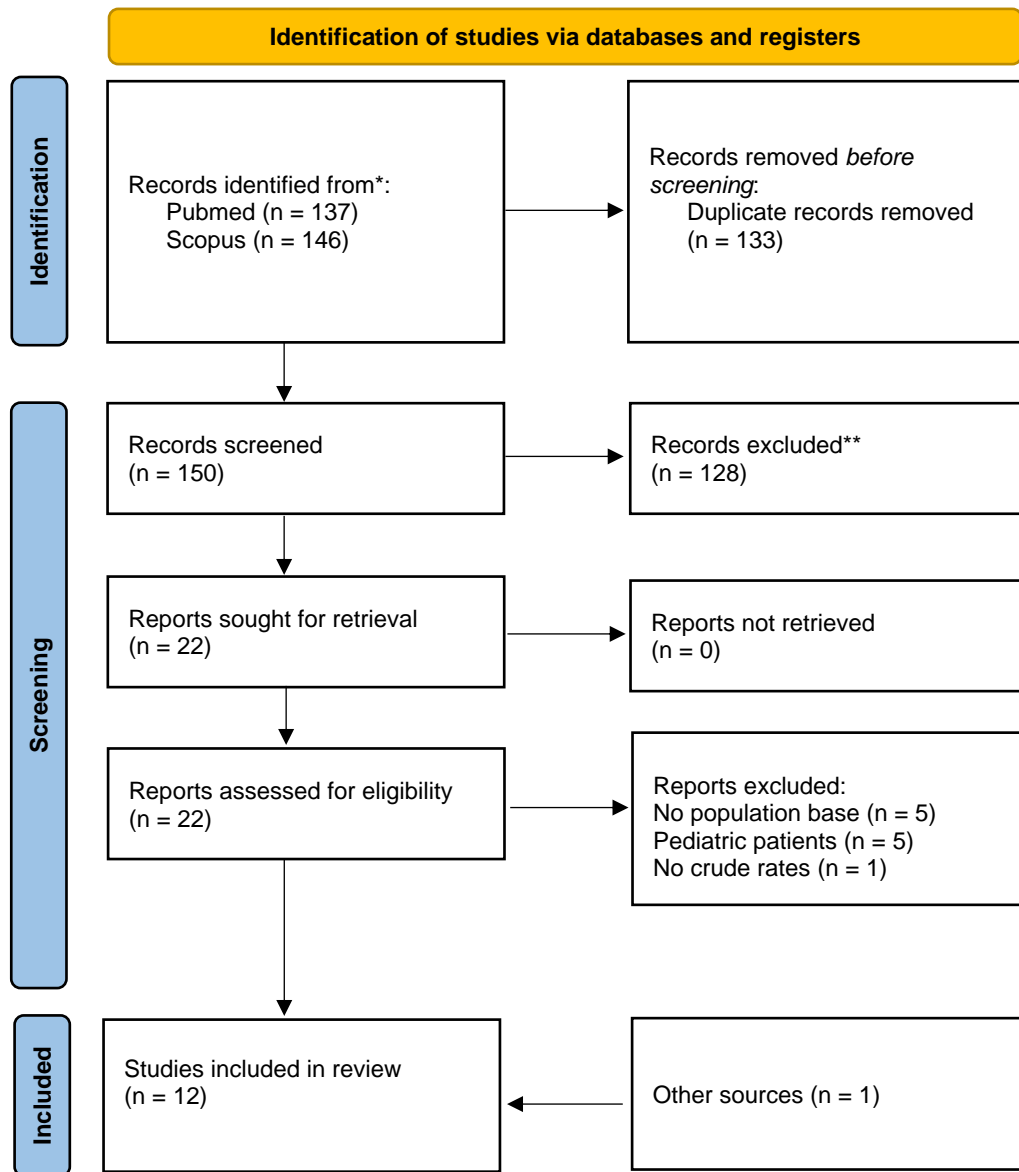
Carpal fractures



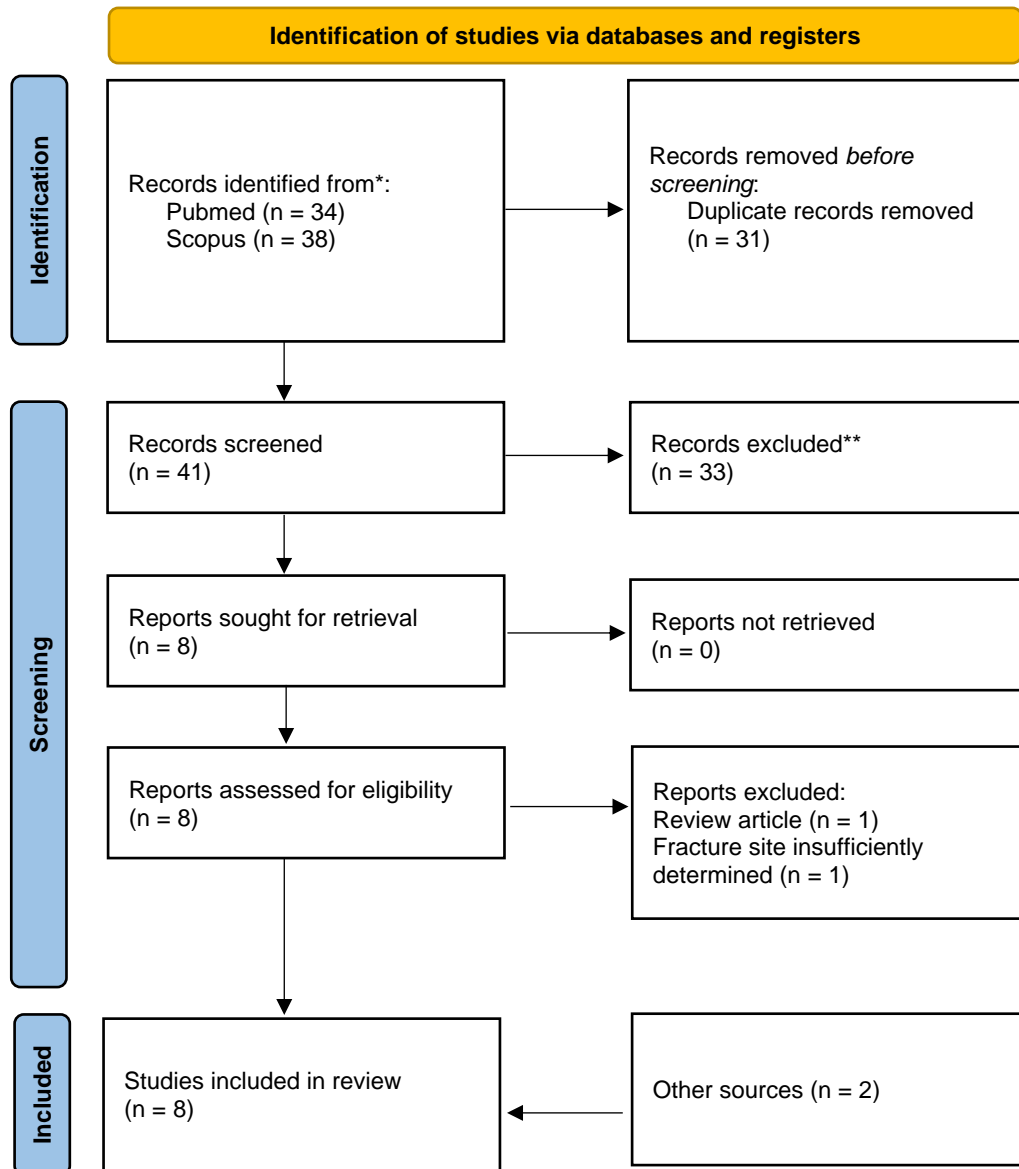
Clavicle fractures



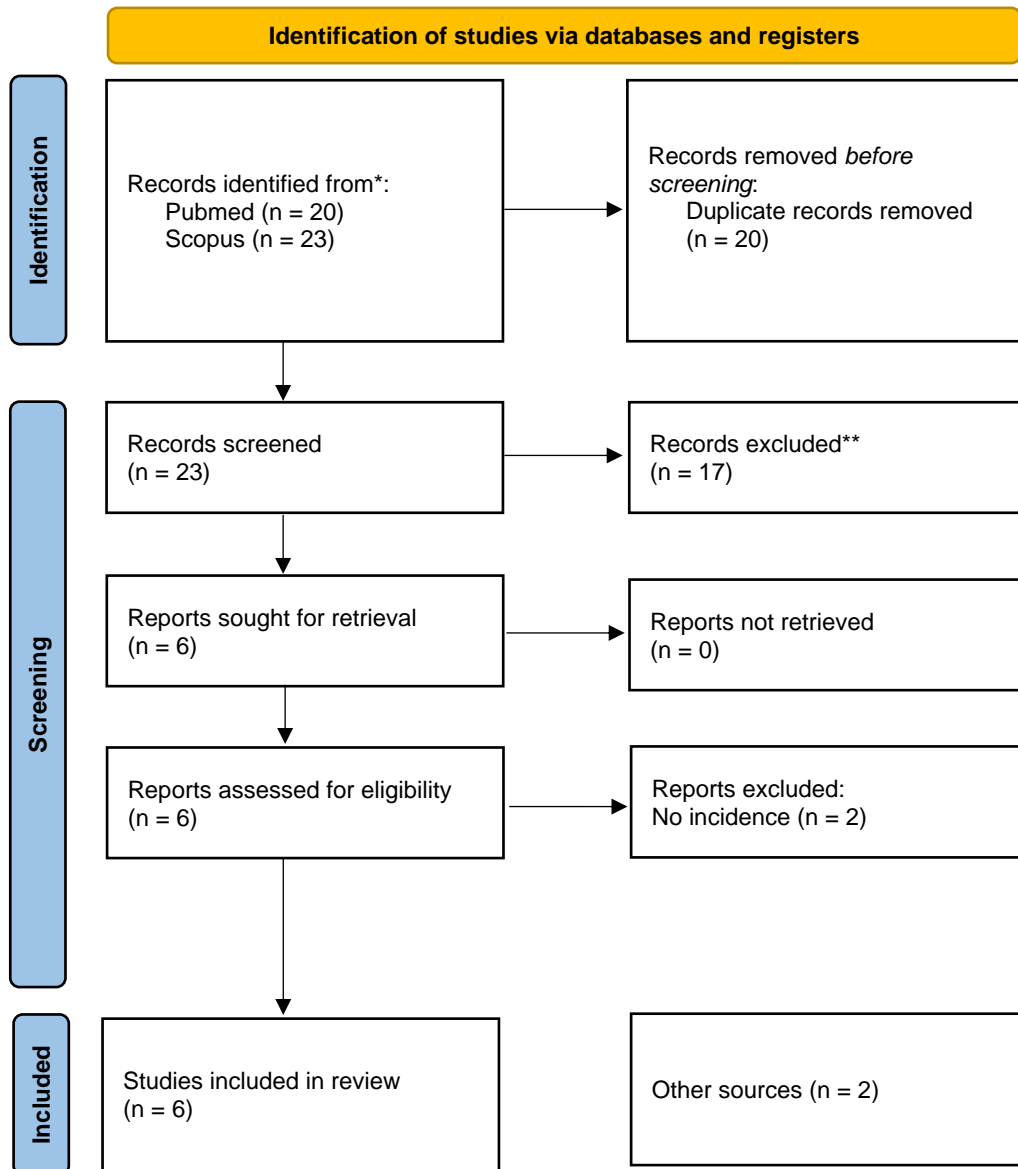
Distal radius fractures



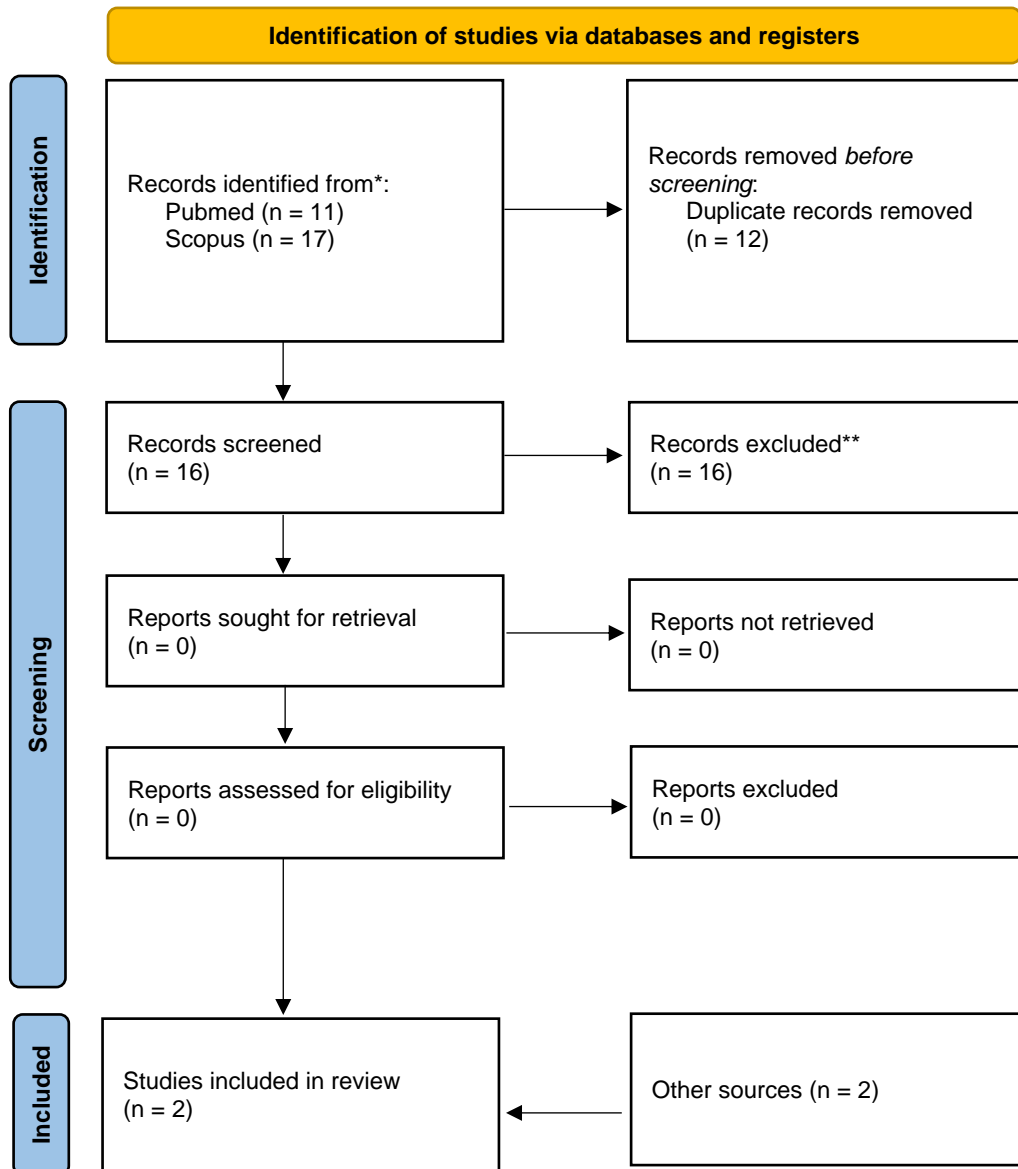
Femoral (diaphysis) fractures



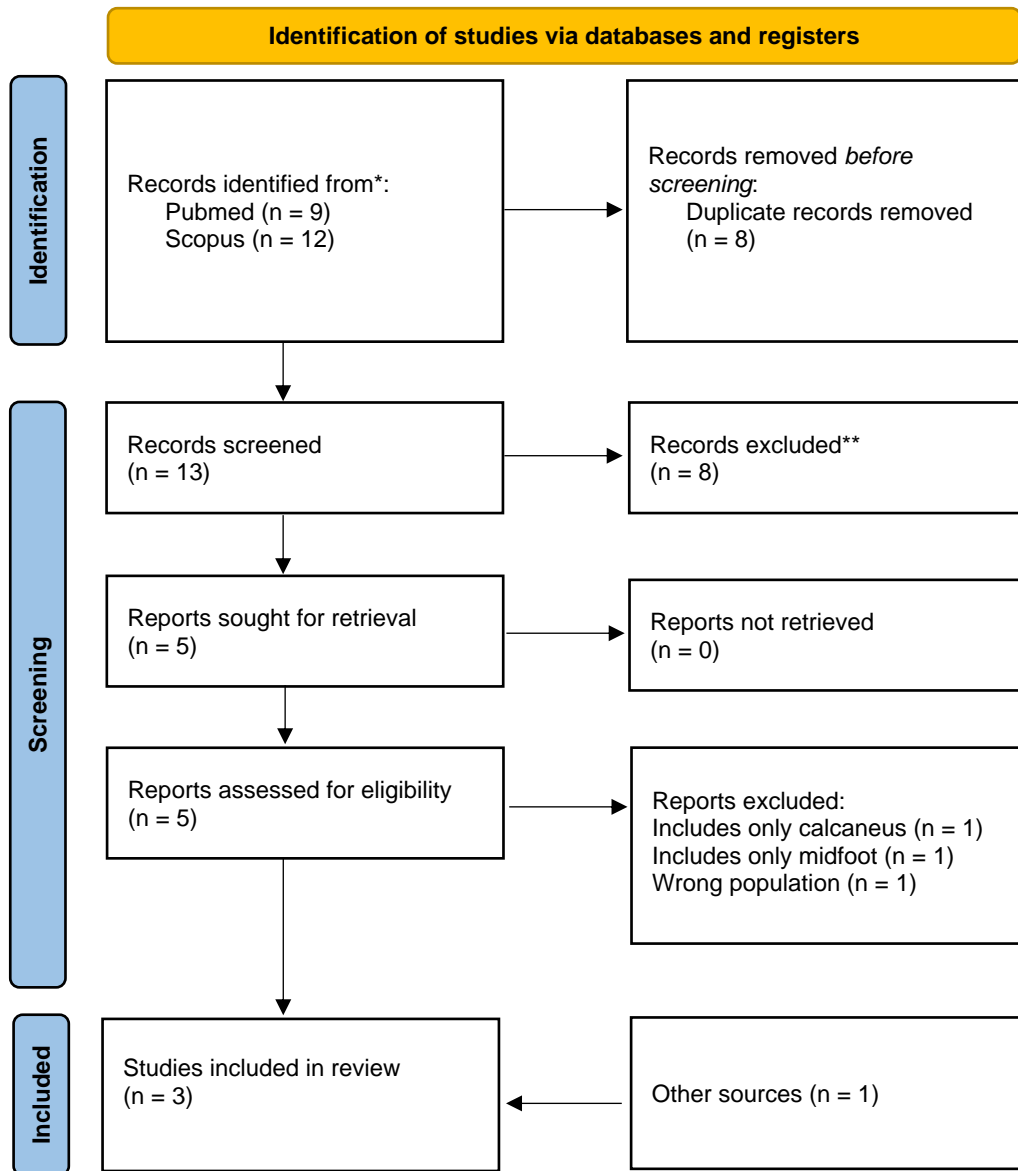
Femoral (distal) fractures



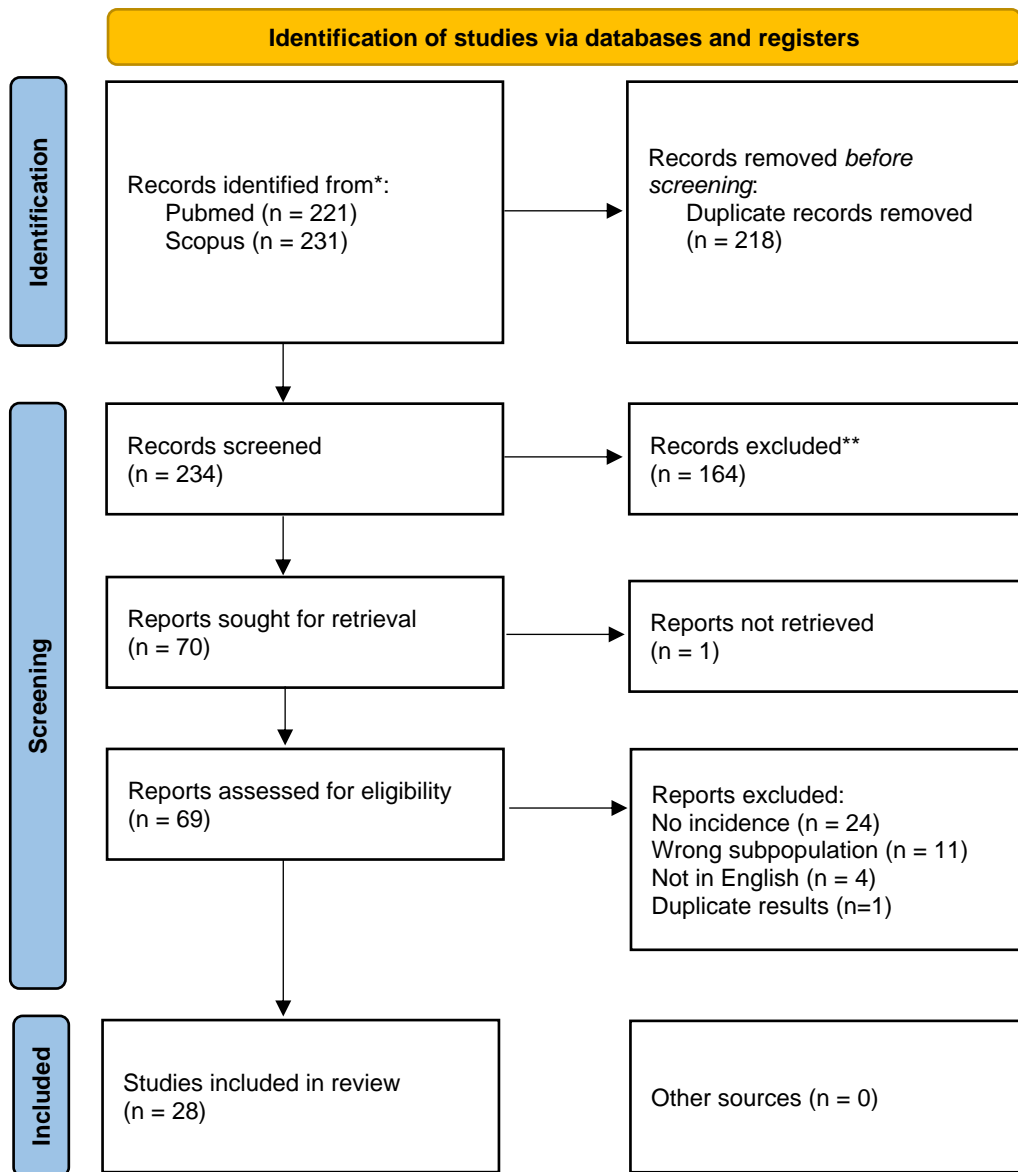
Finger fractures



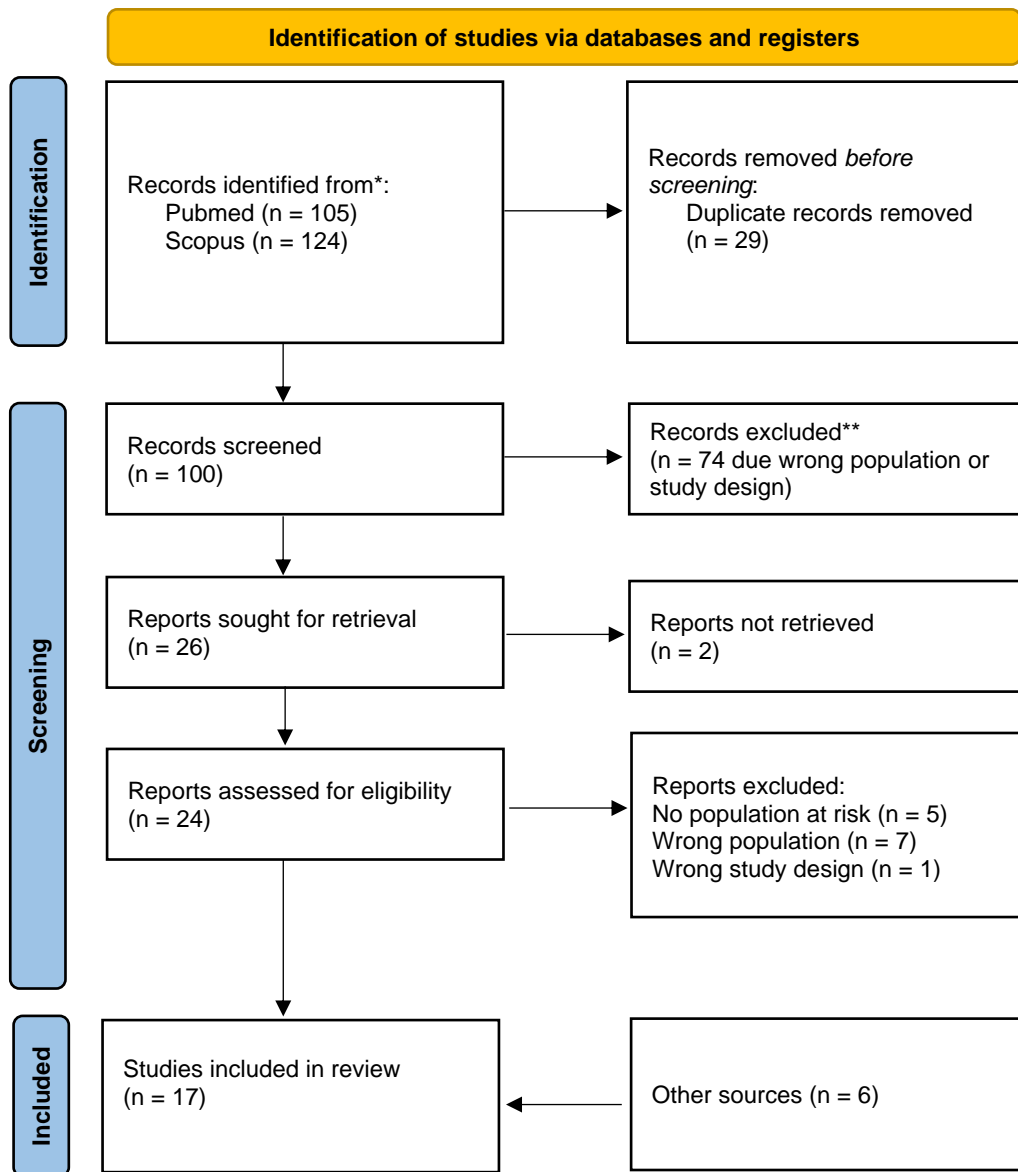
Foot fractures



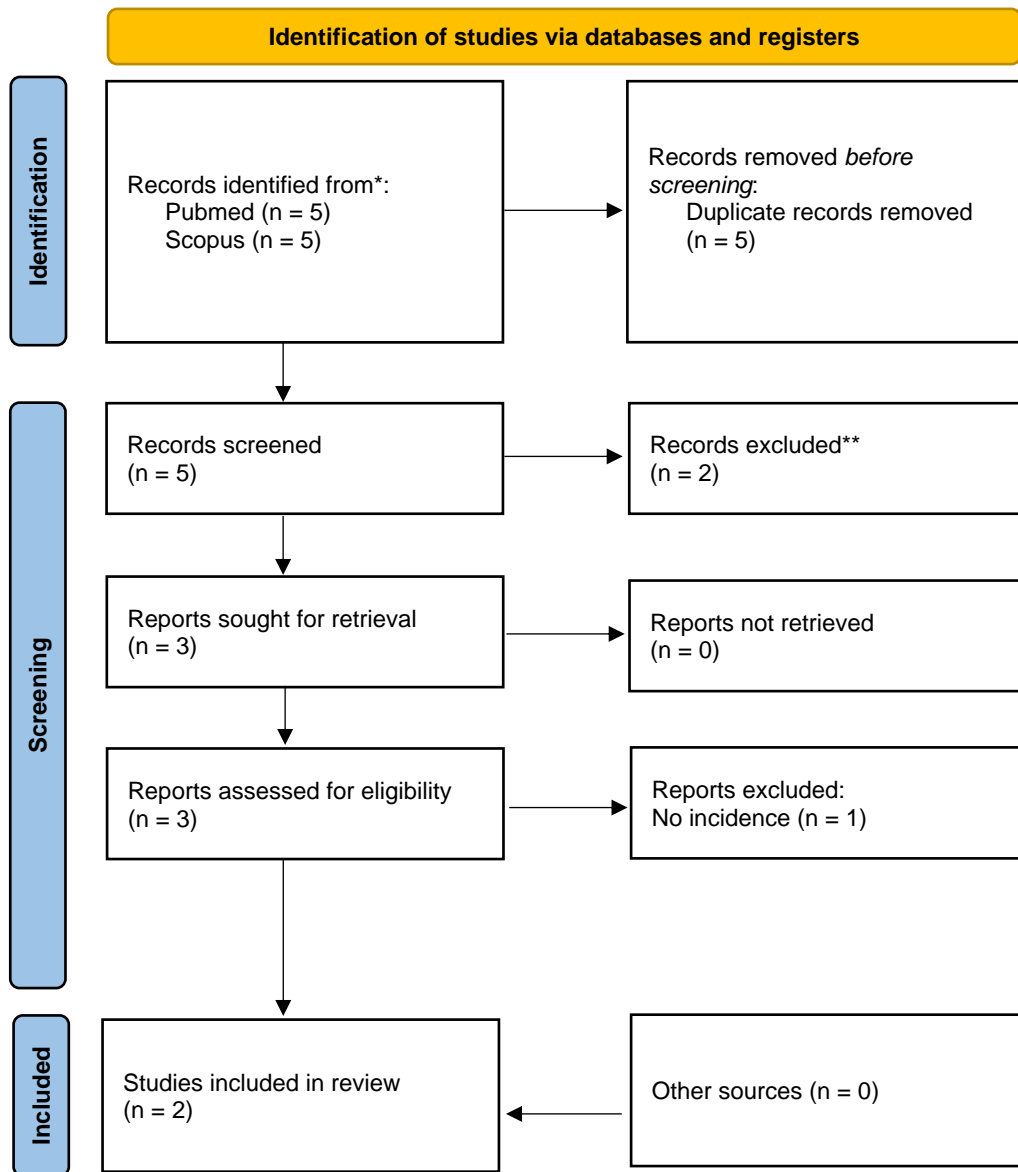
Hip fractures



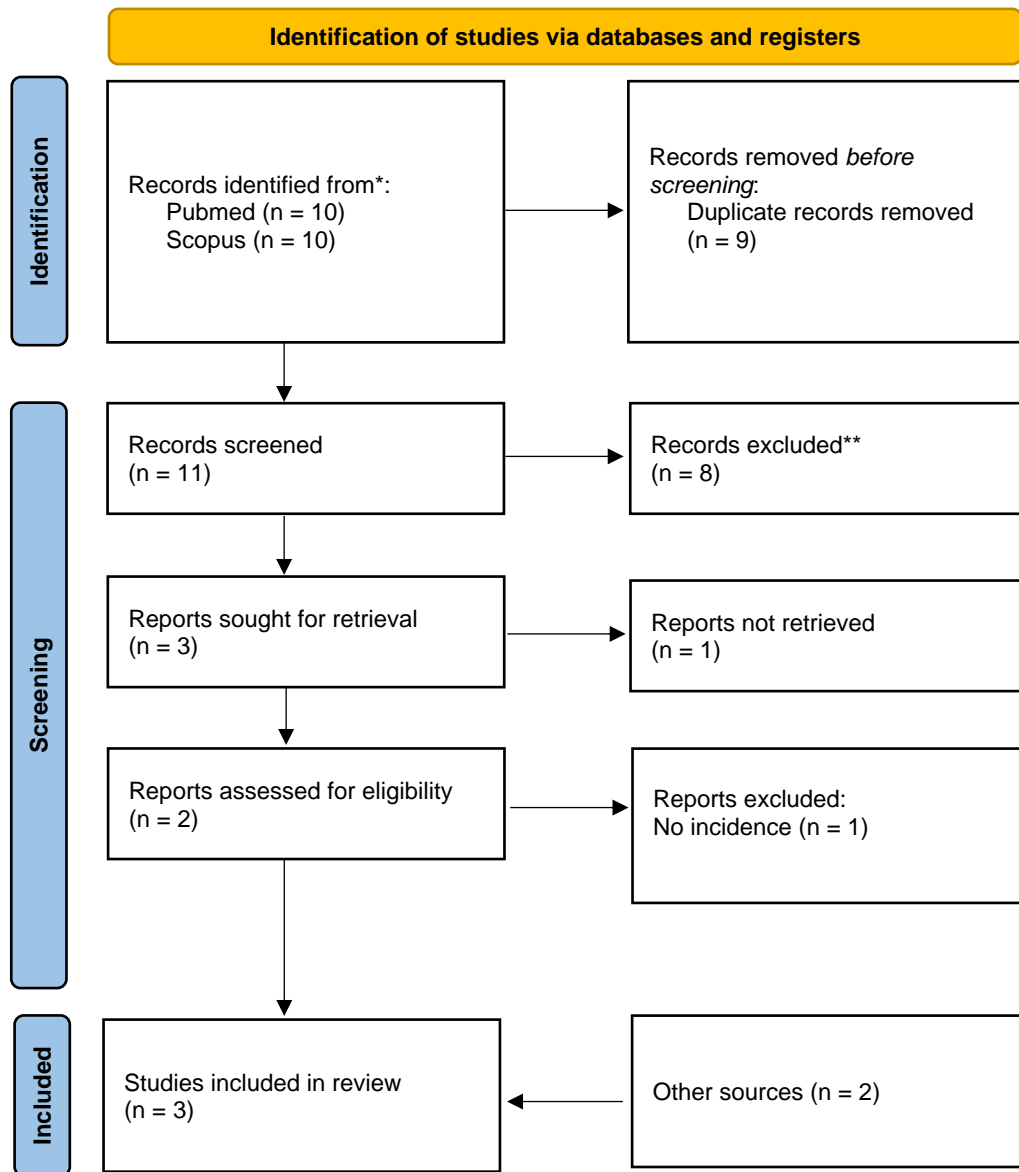
Humerus fractures



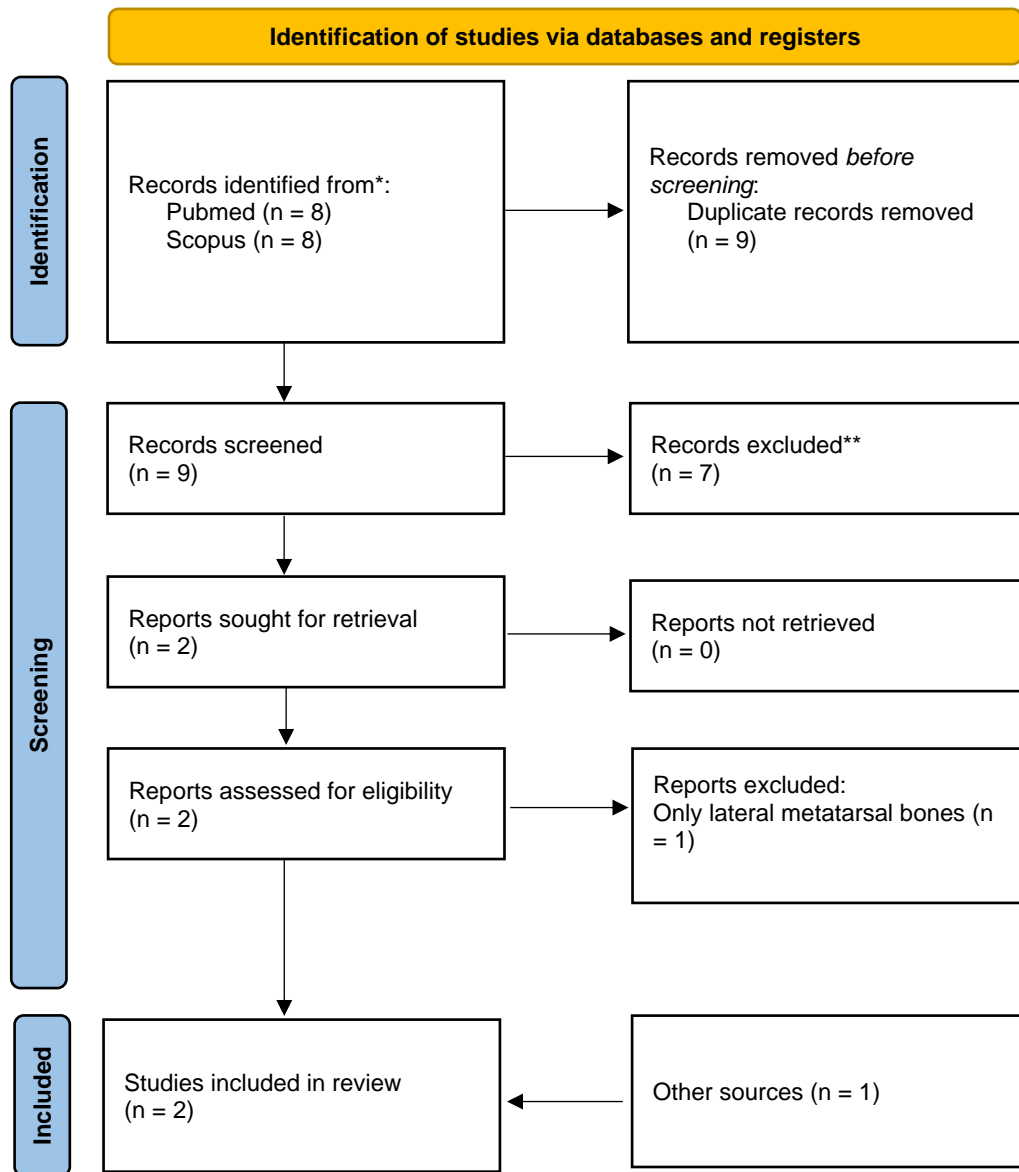
Lisfranc injuries



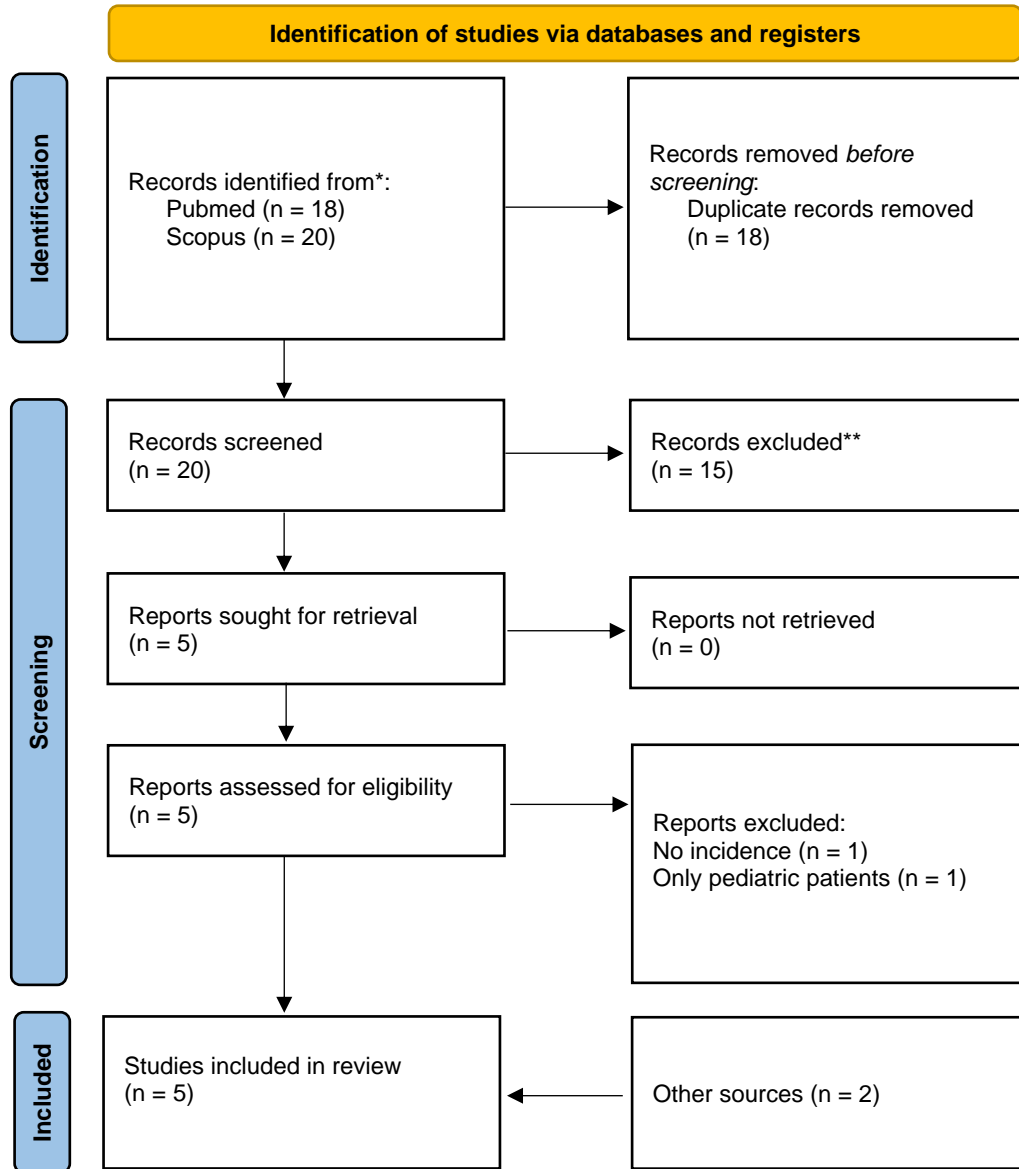
Metacarpal fractures



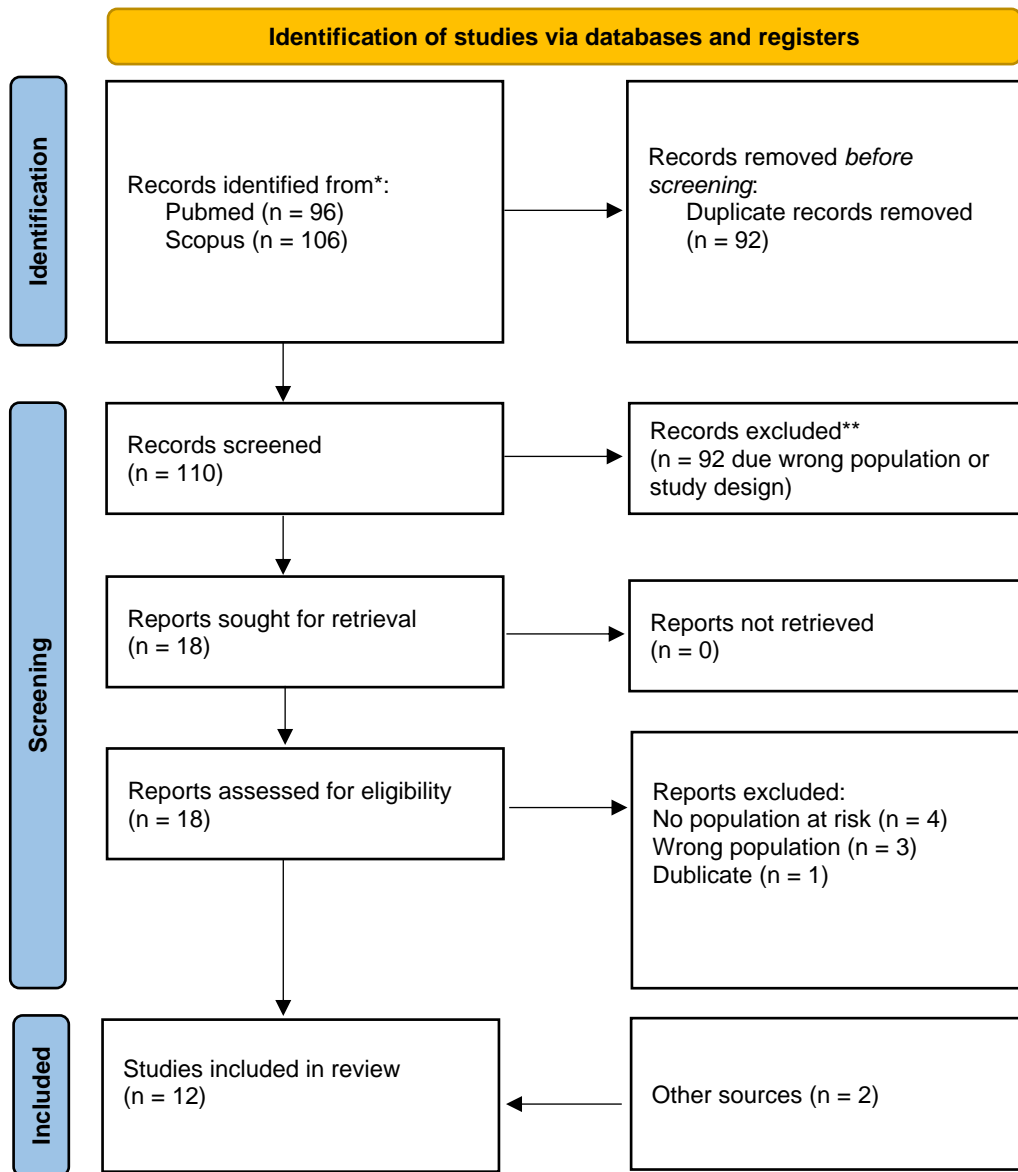
Metatarsal fractures



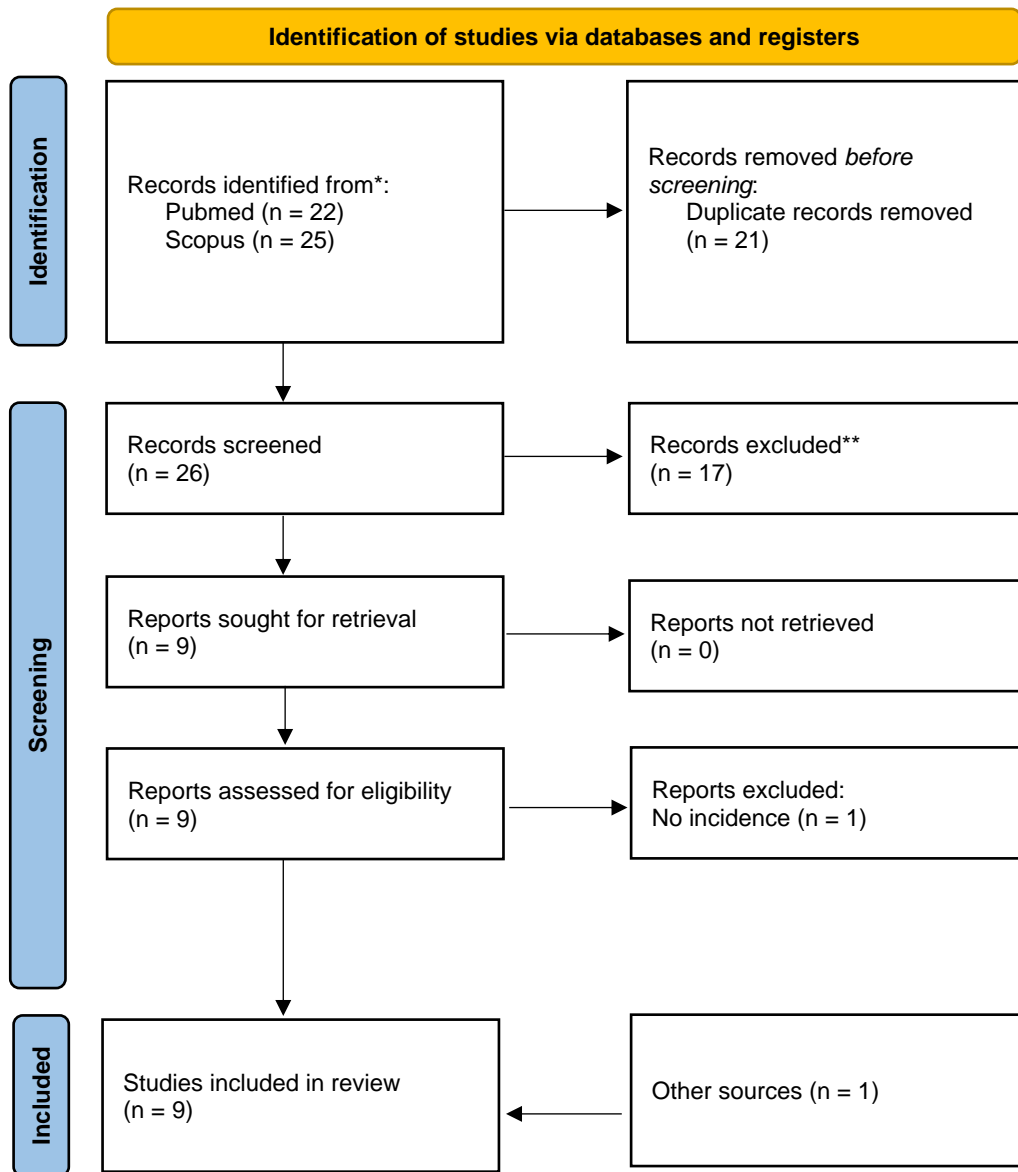
Patellar fractures



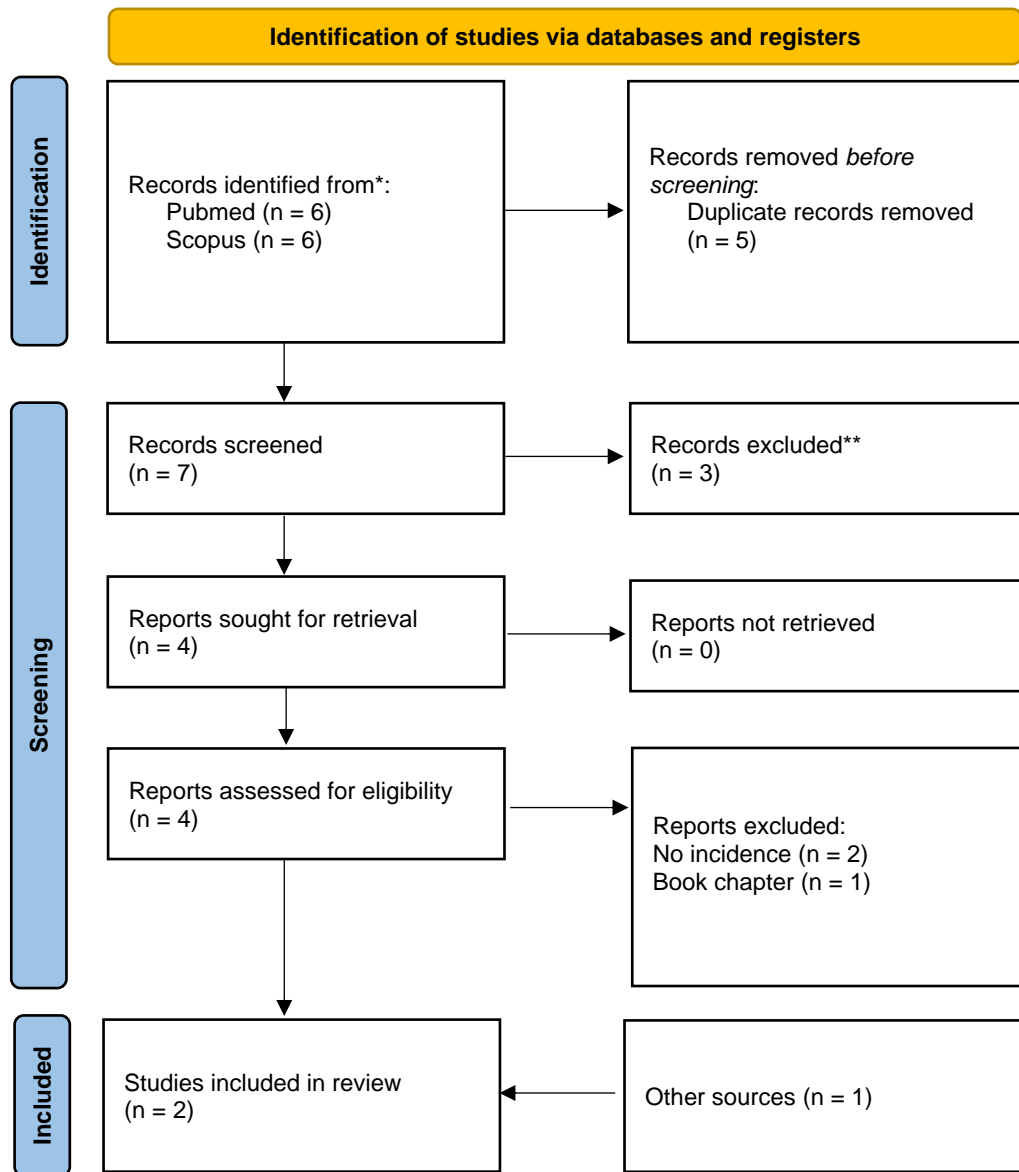
Pelvic fractures



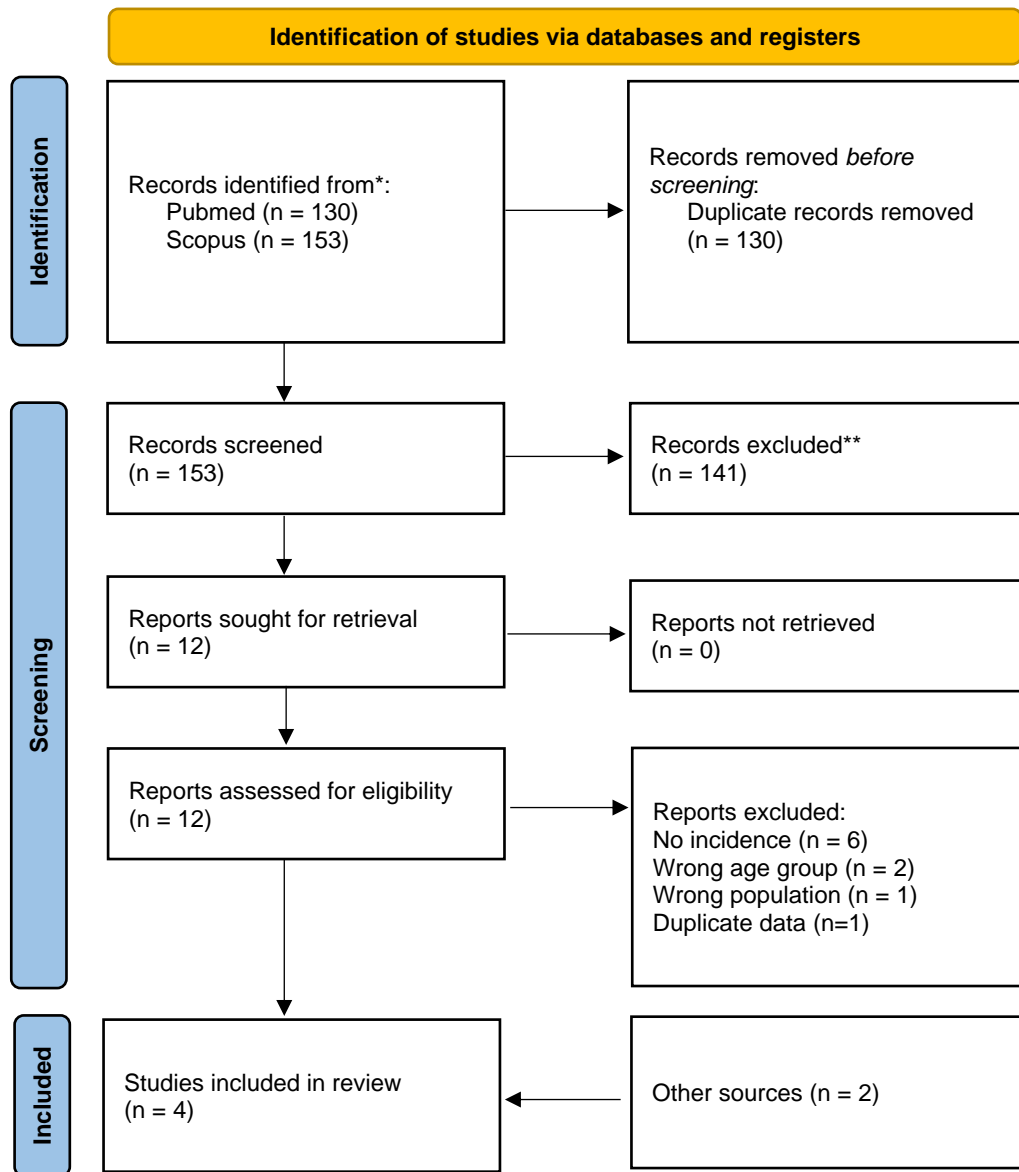
Scaphoid fractures



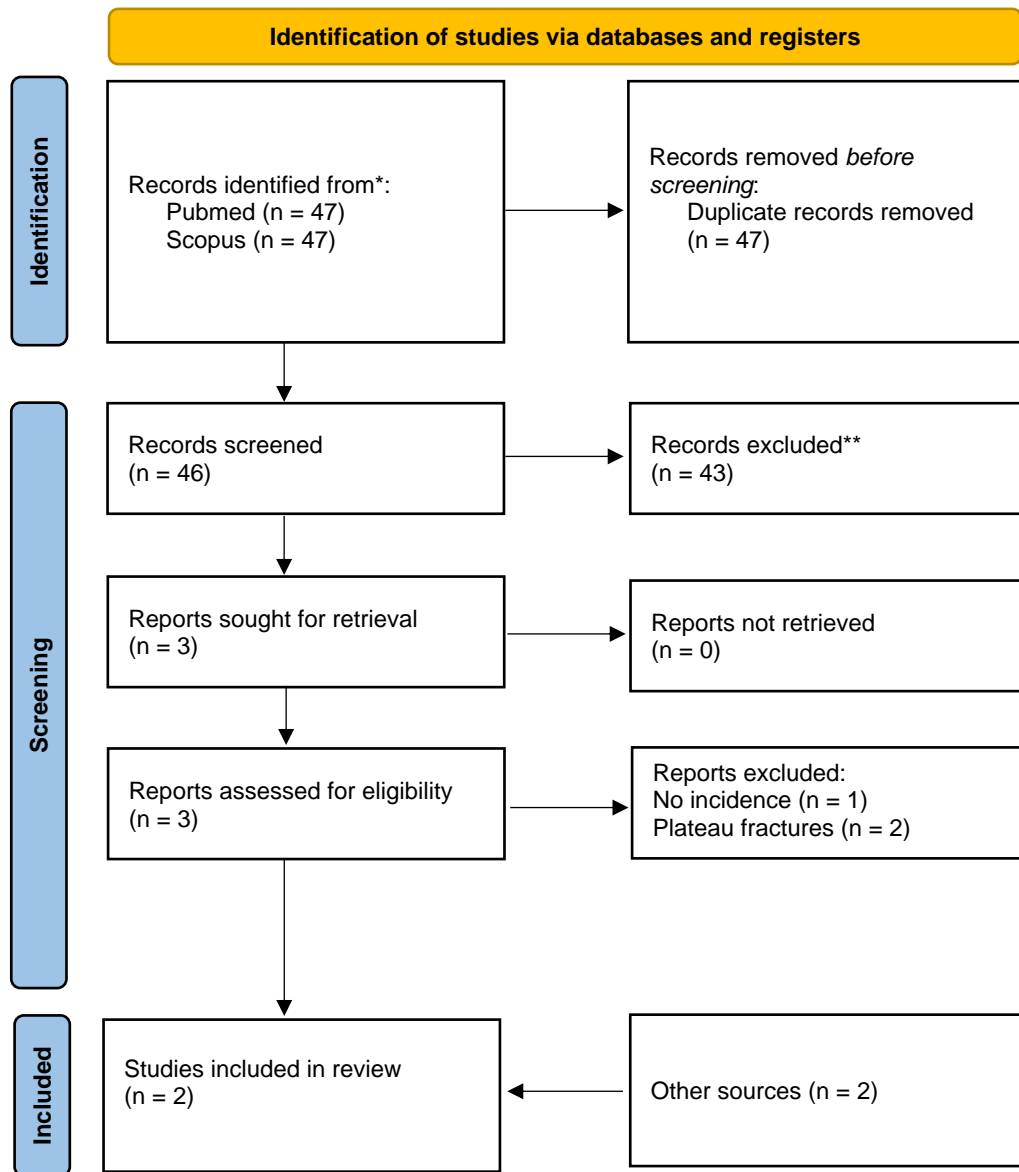
Scapula fractures



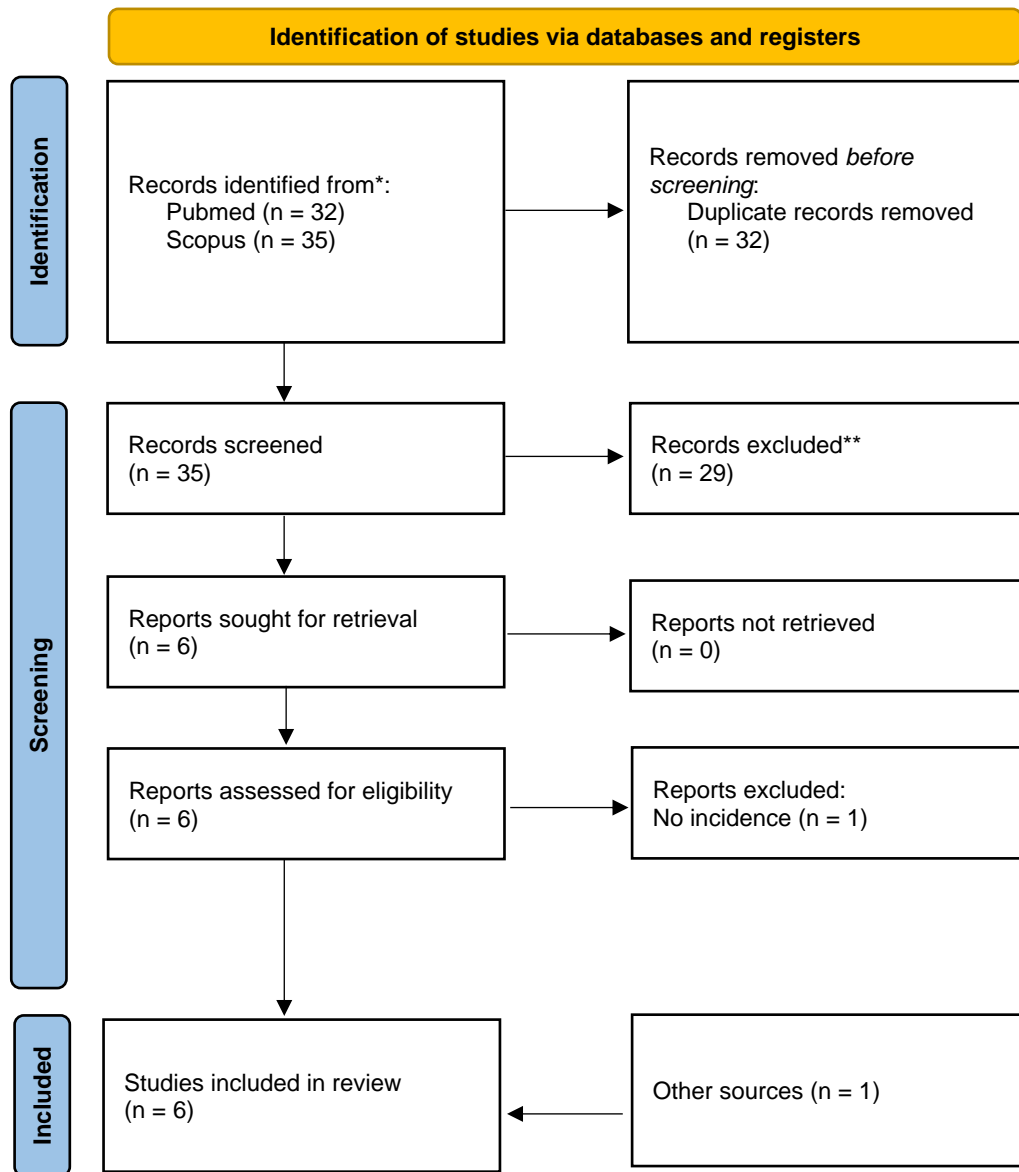
Spine fractures



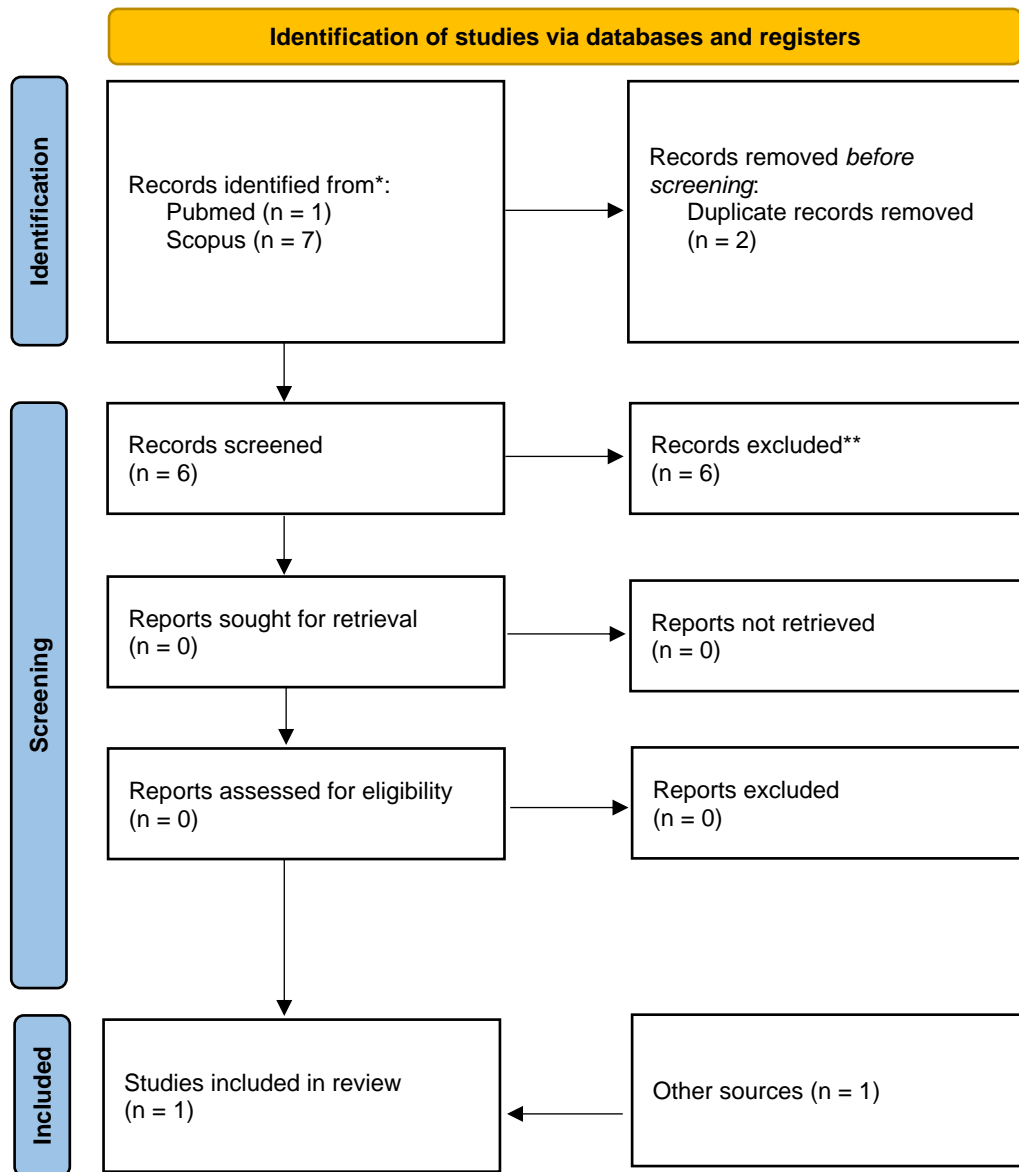
Tibia (proximal) fractures



Tibia (diaphysis) fractures

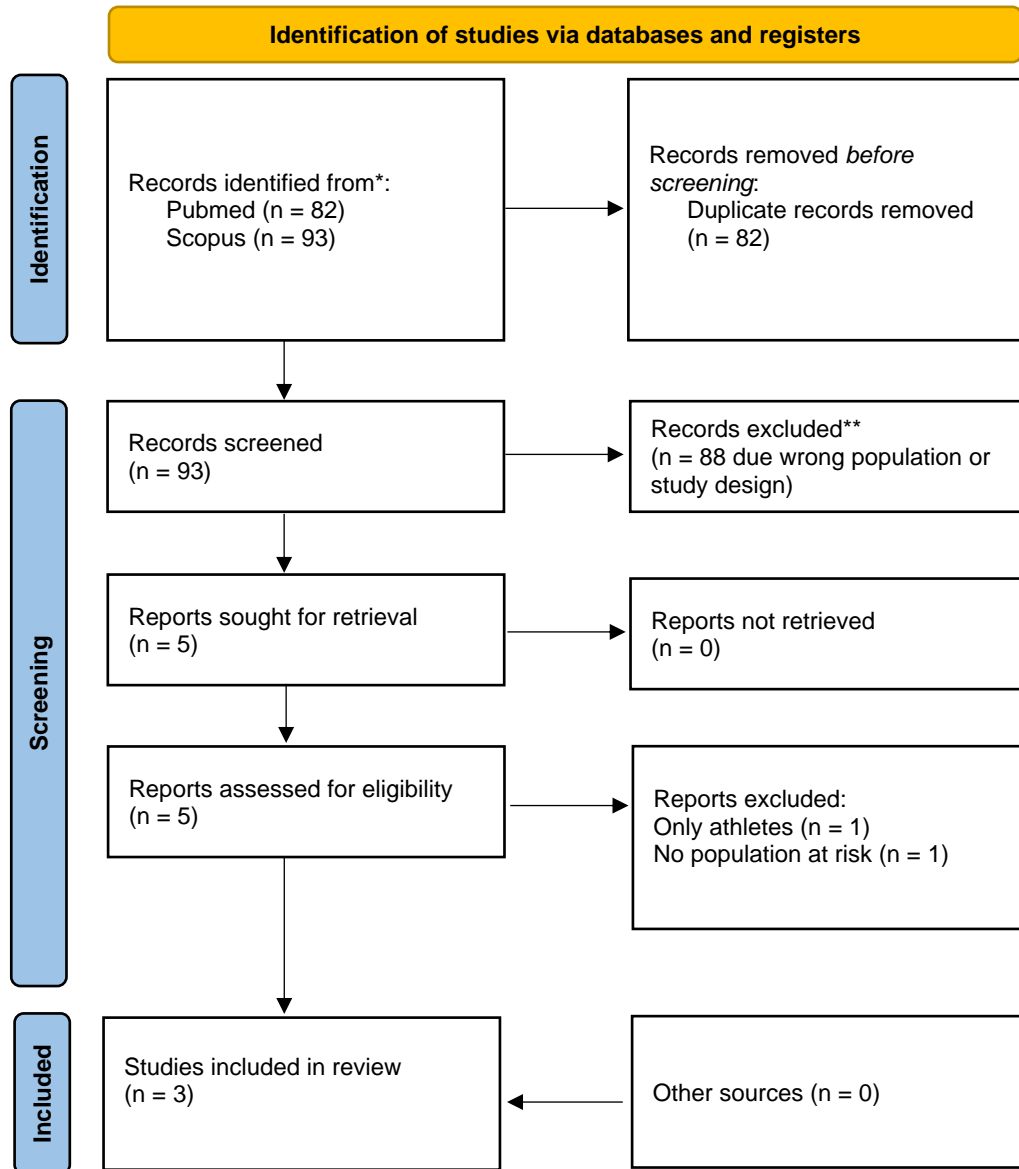


Toe fractures

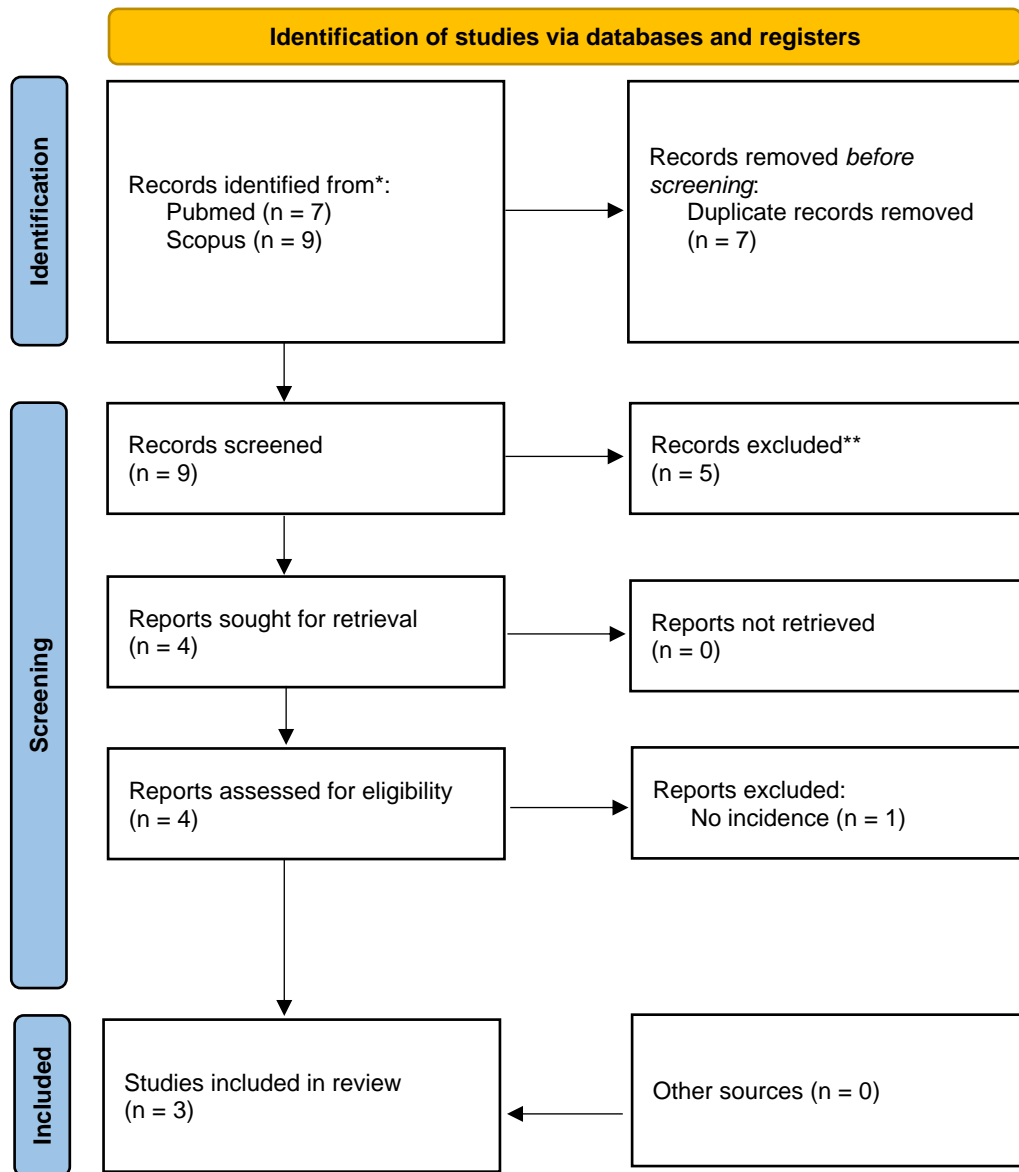


Sprains and dislocations

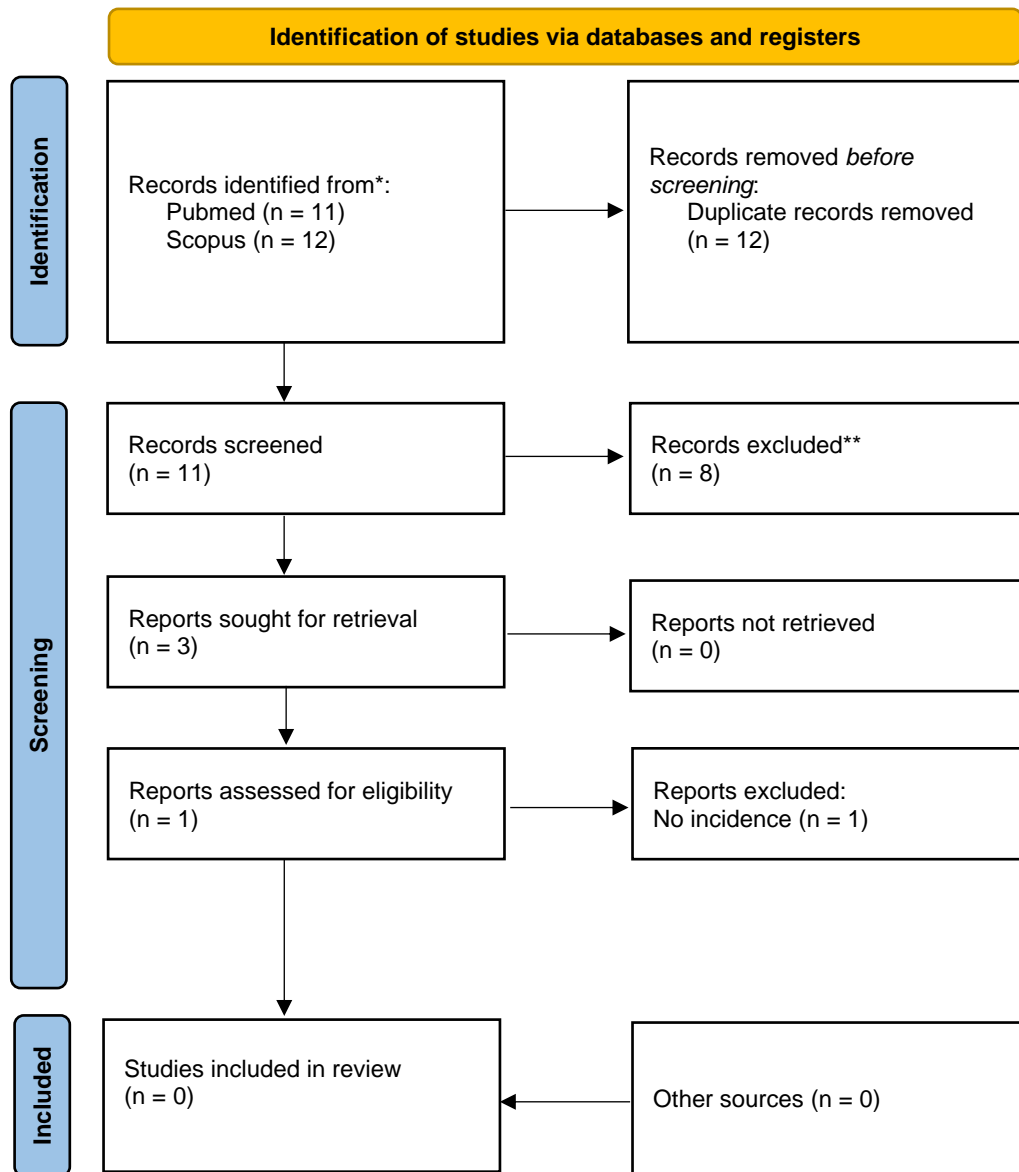
Ankle sprains



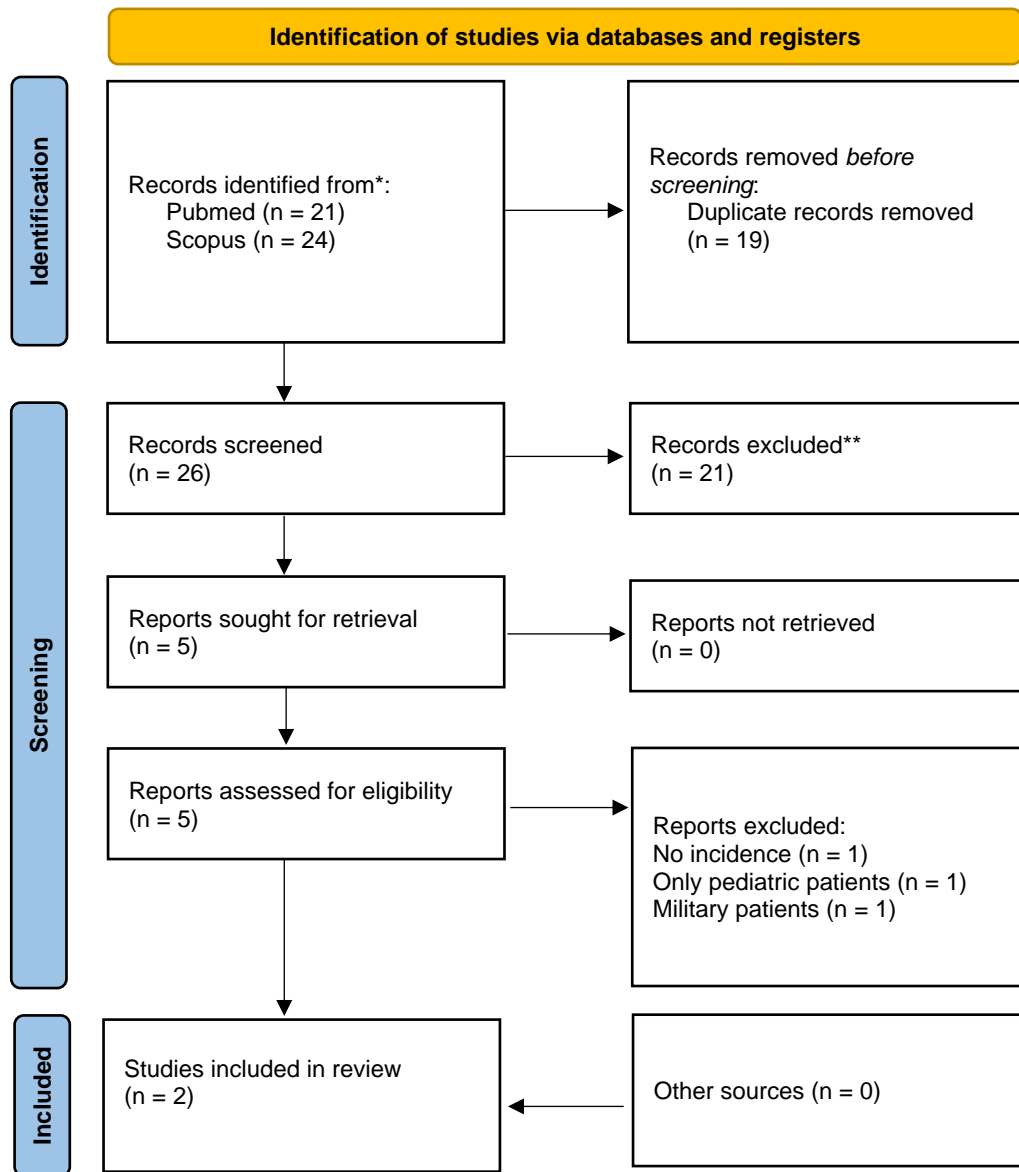
Elbow dislocations



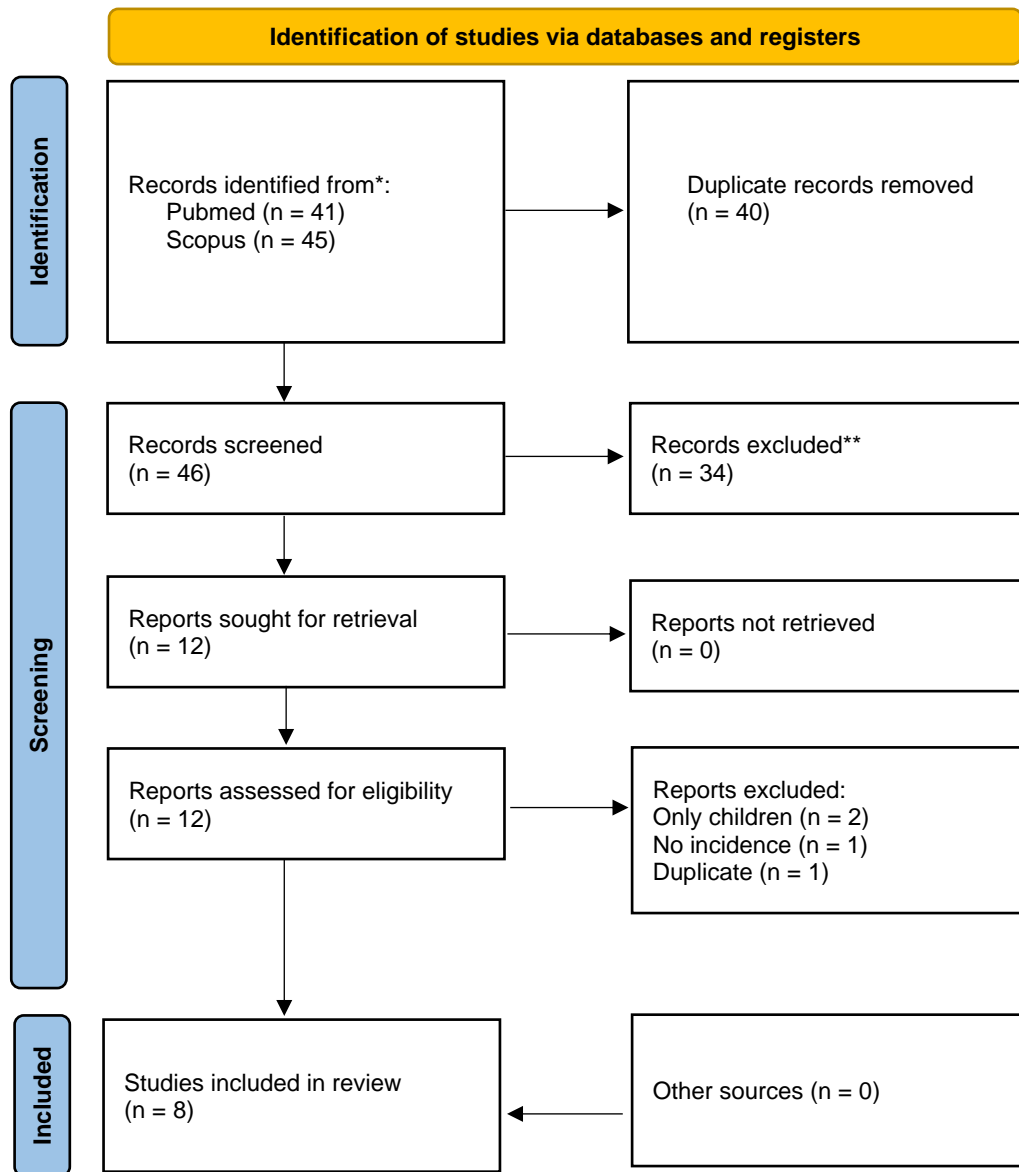
Knee dislocations



Patellar dislocations

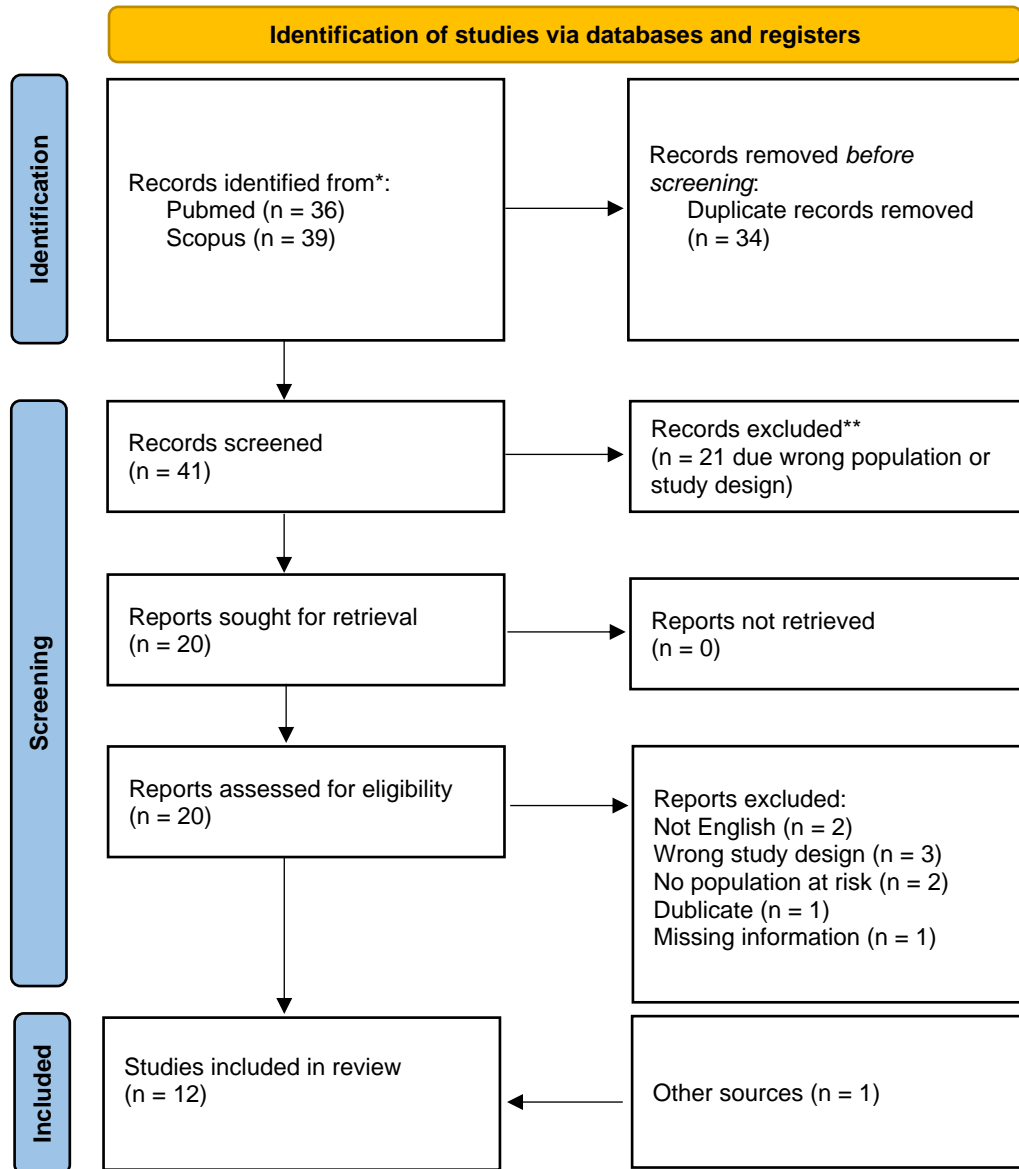


Shoulder dislocations

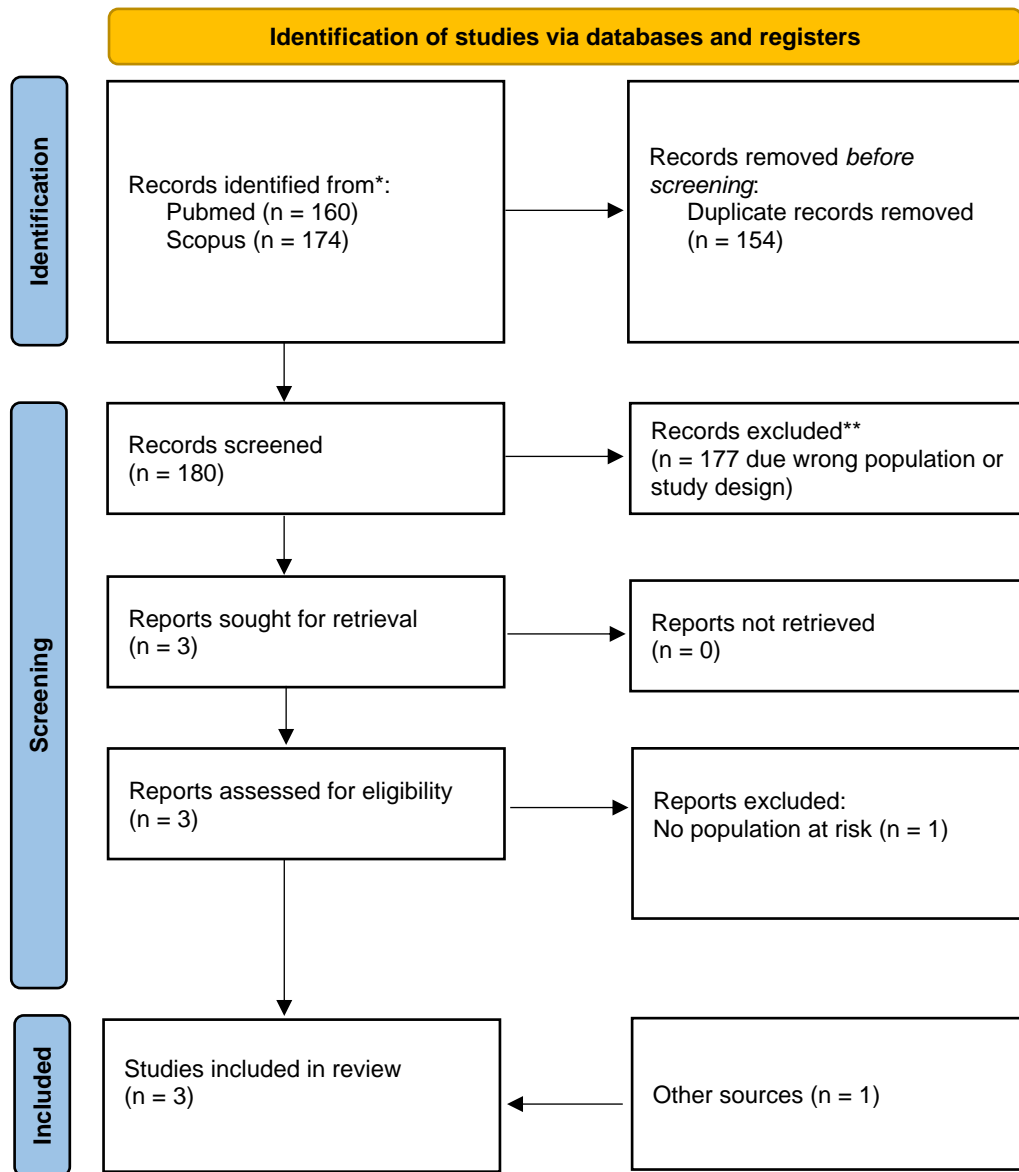


Ligament and tendon injuries

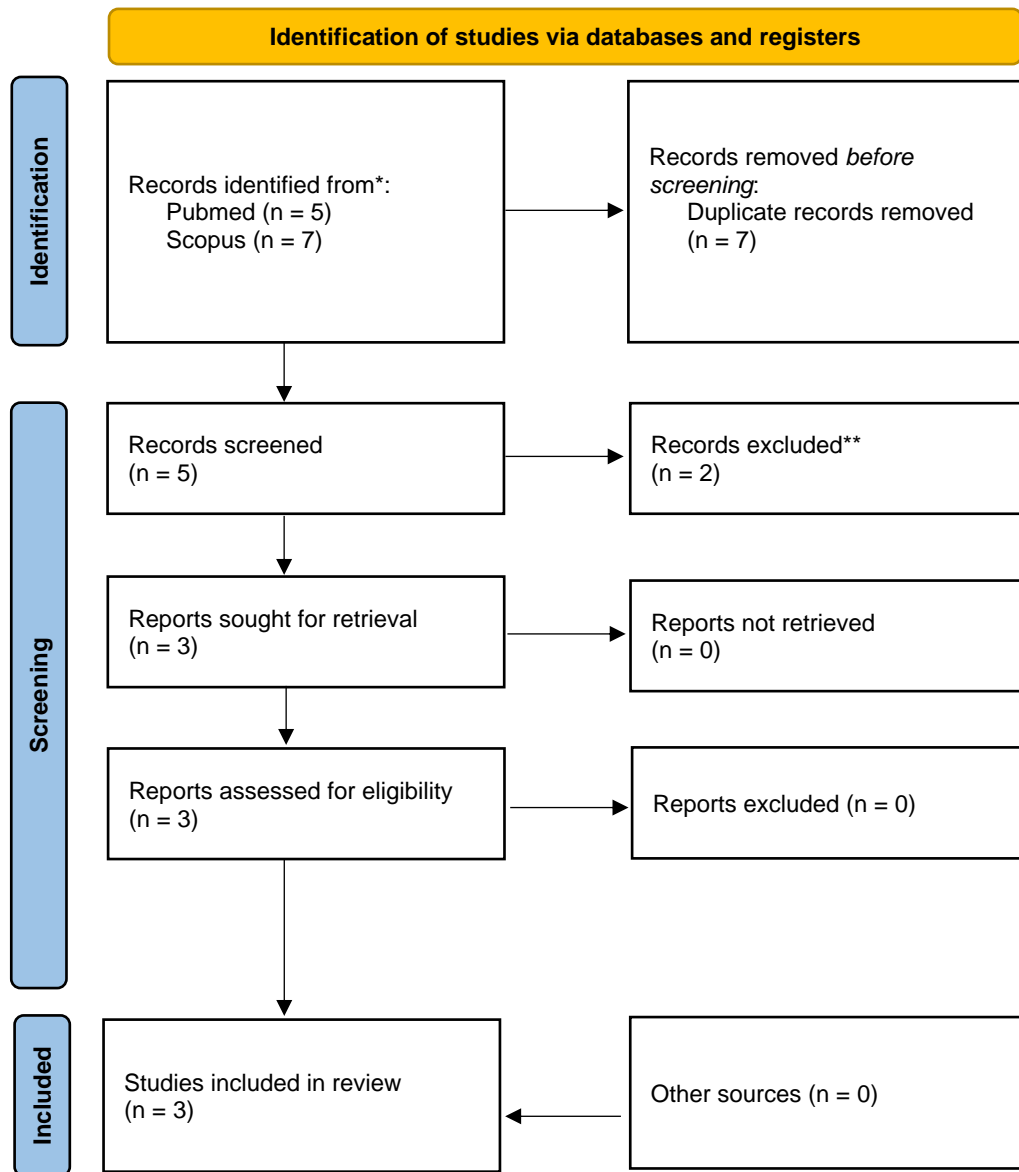
Achilles ruptures



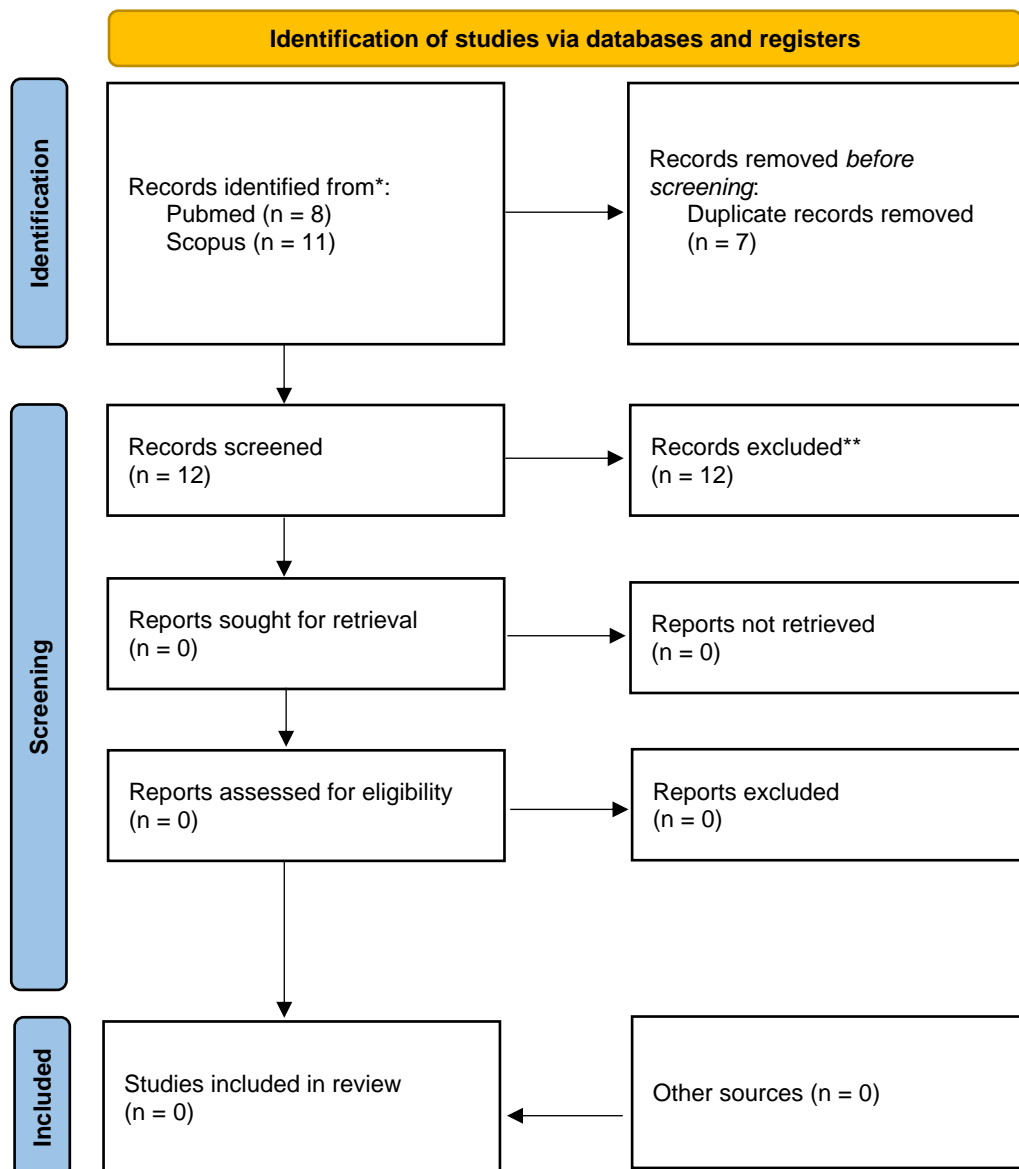
Anterior cruciate ligament ruptures



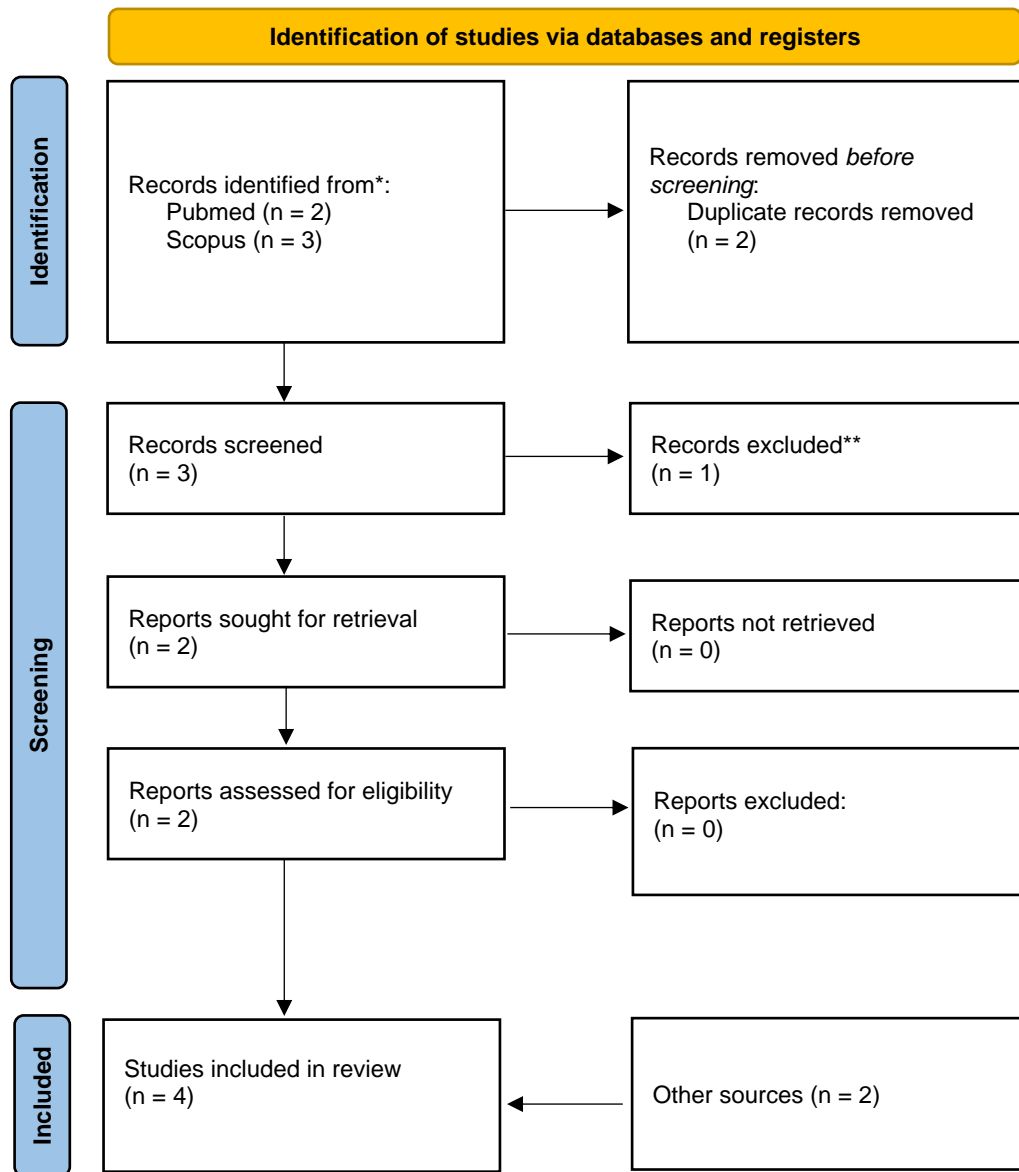
Distal biceps ruptures



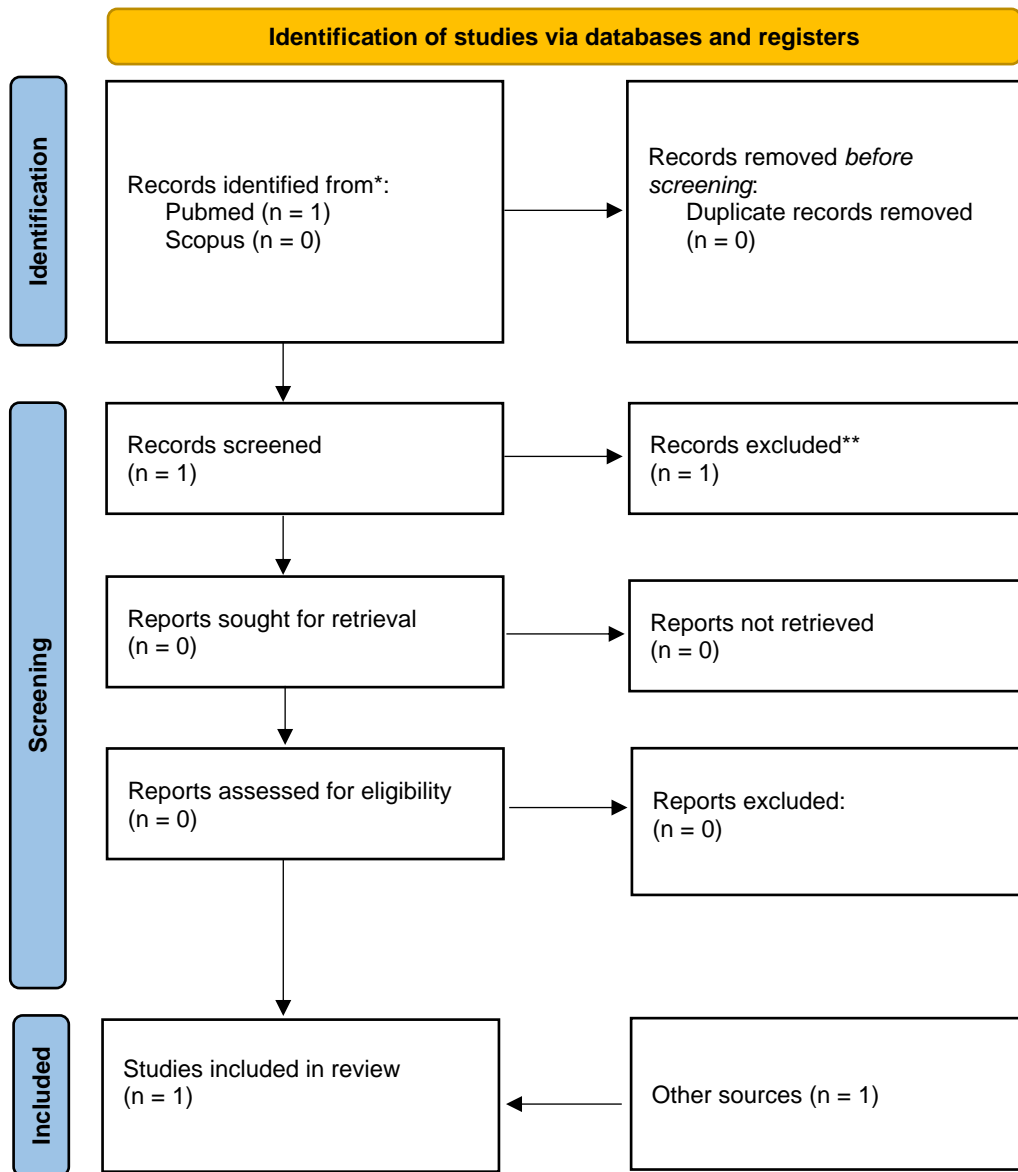
Hamstring ruptures



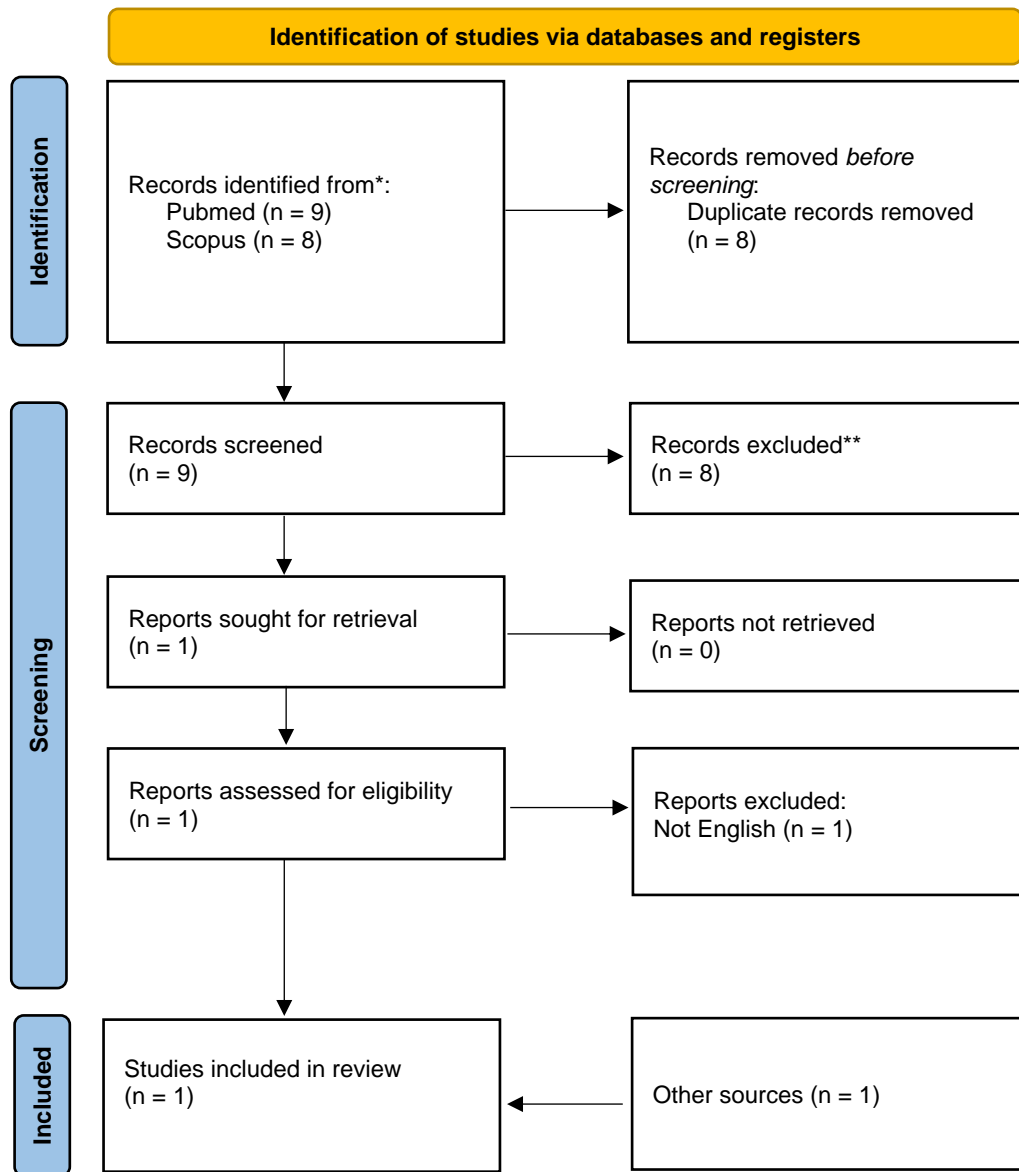
Hand tendon ruptures



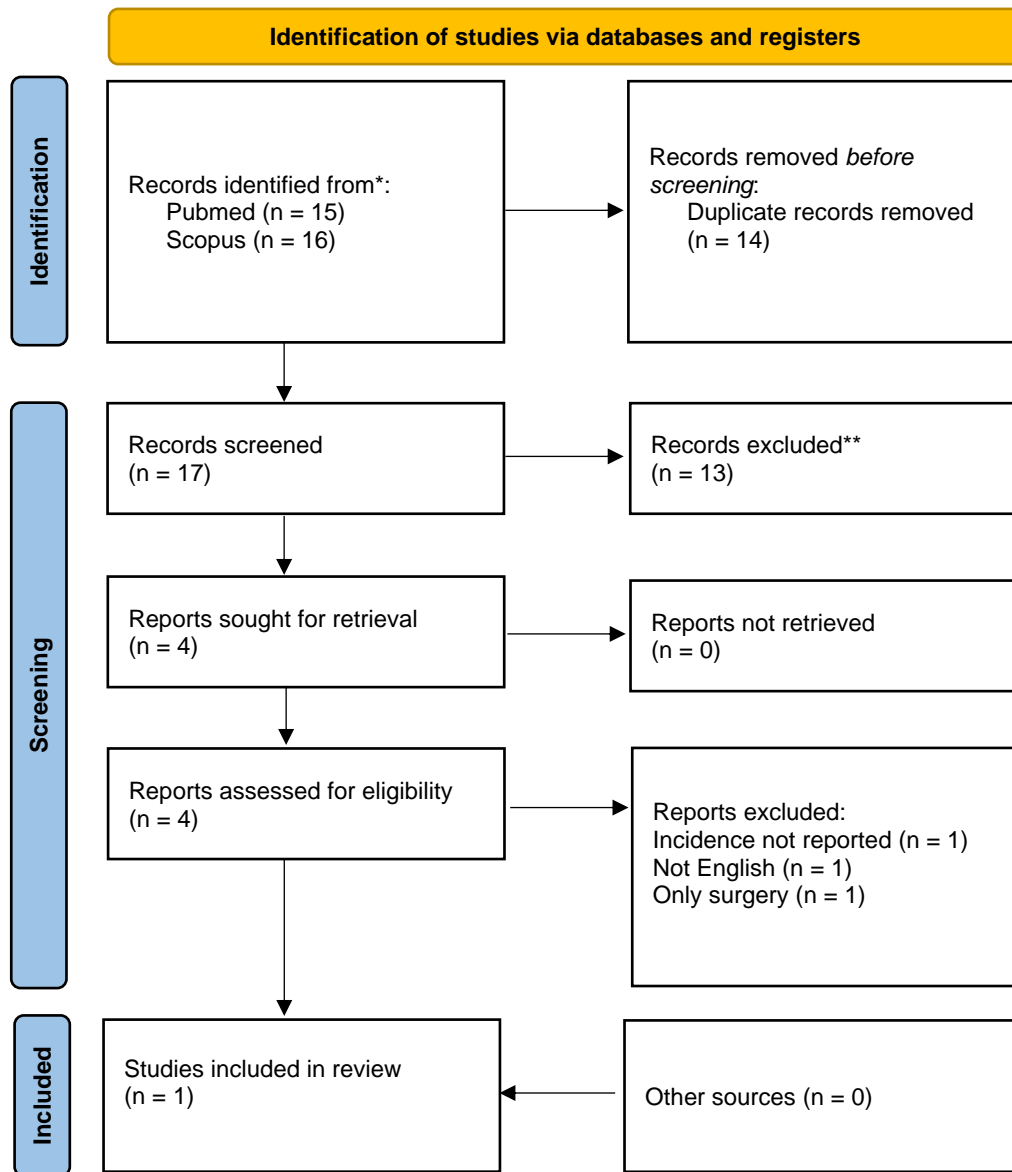
Lateral collateral ligament ruptures



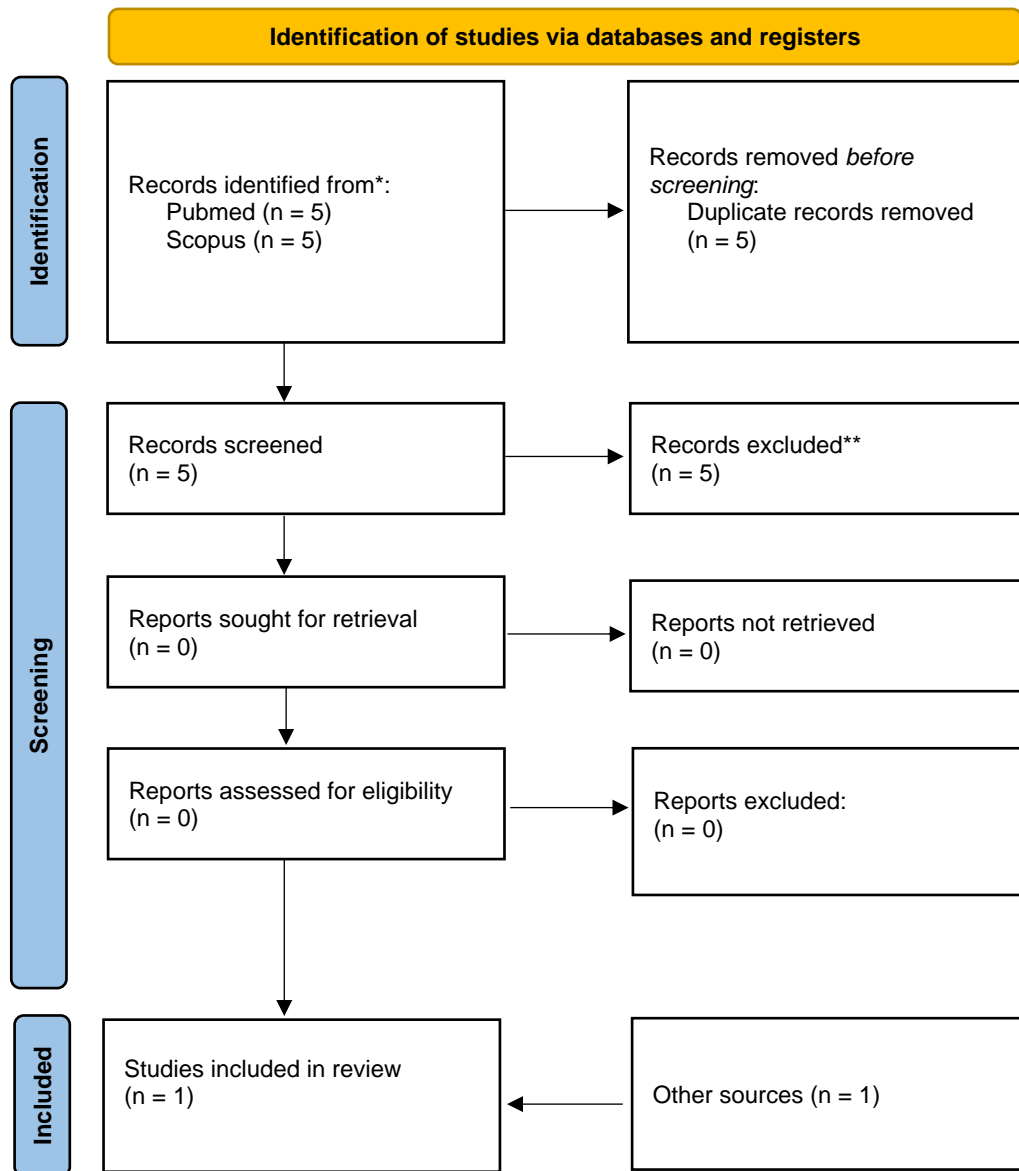
Medial collateral ligament ruptures



Posterior cruciate ligament ruptures



Ulnar collateral ligament



Quadriceps ruptures

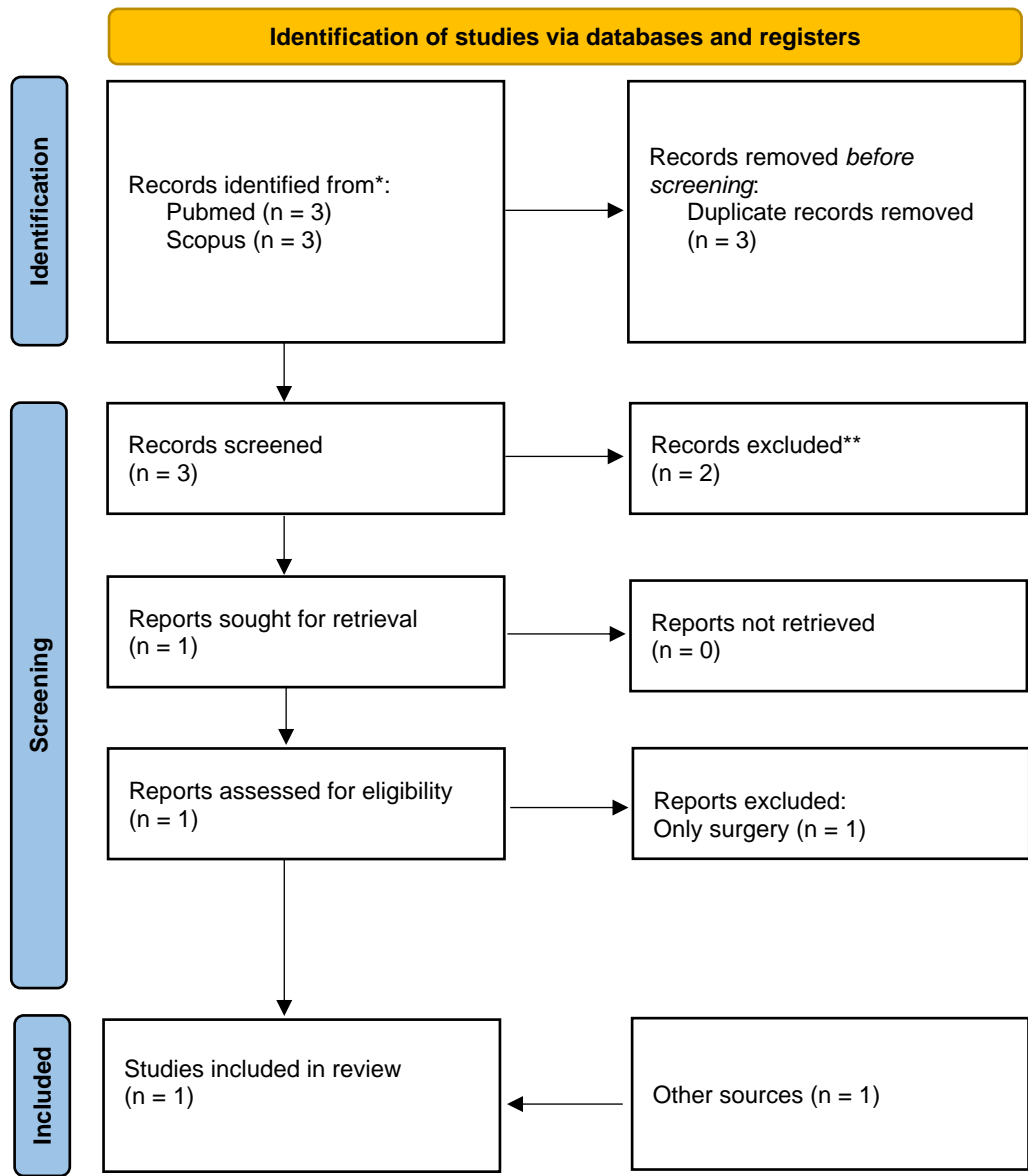


Table ii. The results of meta-regression analysis adjusted by the last year of data included in each study.

Injury	Number of studies	First year	Last year	Year difference	Beta*	95% CI
Acetabulum fracture	6	2003	2016	13	0.053	-0.054 to 0.160
Achilles rupture	12	1994	2013	19	0.066	0.038 to 0.095
Ankle fracture	9	1981	2016	35	-0.022	-0.052 to 0.008
Biceps rupture	4	1998	2016	18	0.062	-0.002 to 0.126
Calcaneus fracture	5	2000	2017	17	-0.04	-0.051 to -0.029
Clavicle fracture	8	1987	2015	28	-0.008	-0.071 to 0.056
Distal radius fracture	12	1981	2016	35	-0.015	-0.027 to -0.004
Femur (diaphysis) fracture	9	1983	2011	28	0.018	-0.002 to 0.037
Femur (distal) fracture	5	1984	2017	33	0.044	0.026 to 0.062
Hip fracture	10	2010	2019	9	-0.079	-0.190 to 0.032
Humerus (proximal) fracture	7	1983	2013	30	0.006	-0.026 to 0.038
Humerus (shaft) fracture	4	1999	2013	14	0.009	-0.012 to 0.029
Patellar fracture	5	2000	2017	17	0.033	-0.004 to 0.069
Pelvic fracture	10	1977	2016	39	0.01	-0.011 to 0.031
Scaphoideum fracture	9	1989	2016	27	0.018	-0.073 to 0.110
Scapula fracture	4	1995	2012	17	0.007	-0.054 to 0.068
Shoulder dislocation	5	1979	2015	36	0.035	0.010 to 0.060
Tibia (diaphysis) fracture	6	1983	2012	29	-0.045	-0.056 to -0.035

*Beta = regression coefficient.

CI, confidence interval.